

MUNICIPAL STATISTICS.

**Early
legislation.**

Amongst the various enactments which became law for Victoria on its separation from New South Wales was a provision in the Imperial Act authorizing the Governor to incorporate the inhabitants of every county, to form districts for the purpose of local government, and to establish elective District Councils with power to frame by-laws for making and maintaining roads, establishing schools, levying local tolls and rates, &c. Many of the provisions of the Act were found to be unworkable and expensive in the details, and the District Councils therefore discontinued their meetings and practical working under the Act. Improved legislation being required, an Act was passed in 1853, establishing a central Road Board for the whole Colony, with an Inspector-General and staff, and also providing for the creation of local Road Districts under the management of Road Boards. This Act made provision chiefly for local government in country districts, and the greater part of it remained in force until 1863, when it was repealed, and replaced by the Roads Districts and Shires Act. In the meanwhile suburban districts and towns were growing up, and in 1854 an Act was passed for the establishment of municipal institutions in Victoria. This Act also continued in force till 1863, when its chief provisions were merged into the Municipal Corporations Act. Further improvements and extensions have been made from time to time in the Acts dealing with local government, and such government is now practically universal throughout Victoria, the whole area of the State (except French Island) being divided into urban or rural municipal districts. The former are called cities, towns, and boroughs and the latter shires.

The laws relating to local government were amended and consolidated by the *Local Government Act* 1915. The councils of municipalities have power to levy rates, which, together with licence-fees, subsidies received from the State, market dues, rents, and sanitary charges, form their chief sources of income. Their principal functions are to make, maintain, and control streets, roads, bridges, ferries, culverts, sewers, drains, water-courses, and jetties within their respective boundaries; and, under proper by-laws,

to control the traffic and regulate the markets, pounds, abattoirs, baths, and places of recreation ; also to make arrangements for sewerage, lighting, water supply, and carrying on of noxious trades, and to act as local Boards of Health.

Cities, towns, boroughs, and shires. Any portion of Victoria, not exceeding in area nine square miles, and having no point in such area distant more than six miles from any other point therein, which contains at least 500 inhabitant householders, and rateable property capable of yielding £300 per annum upon a rate of one shilling in the pound, may be constituted a borough. Any borough having during the preceding financial year a revenue of £10,000 may be declared a town ; or, having a revenue of £20,000, may be declared a city. Any portion of Victoria containing rateable property capable of yielding £1,500 on a rate of one shilling in the pound may be constituted a shire. There are 52 cities, towns, and boroughs in Victoria, and 139 shires. The Governor in Council may unite any two or more boroughs which form one contiguous area so as to form one borough, notwithstanding that the area would exceed the limits above specified ; may unite any number of municipalities, one of which is a shire, which form one contiguous area, so as to form one shire ; and may sever any portion of a municipal district and attach it to another, annex an outlying district, subdivide any municipal district into any number of divisions not exceeding eight, alter the boundaries, or abolish the subdivisions.

Townships. On petition by twenty-five ratepayers resident in any portion, not exceeding three square miles in extent, of any shire, and distant more than ten miles from the City of Melbourne, the Governor in Council may proclaim such portion a township.

Municipal councillors. Each municipality existing at the commencement of the original Act, 29th December, 1854—now incorporated in the Act of 1915—is allowed the number of councillors then assigned to it ; but in other cases the number must be some multiple of three, not less than six nor more than 24. The number is usually nine. If the district is subdivided, the number of councillors is three for each subdivision. If at any time in any municipality there is no council or there are not enough councillors to form a quorum, a commissioner may be appointed by the Governor in Council to exercise the powers of the council. Every person of either sex liable to be rated in respect of property in the municipal district of the rateable annual value of £20 at least, whether consisting of one or more tenements, is qualified to hold the office of councillor, with the exception of (a) undischarged bankrupts or insolvents ; (b) persons attainted of treason or convicted of felony or perjury or any infamous crime ; (c) persons of unsound mind ; and (d) persons holding an office of profit under the council or participating directly or indirectly in a

contract with the council. The election of councillors takes place annually. One-third of the councillors retire each year by rotation, but retiring councillors may be re-elected. The councillors elect their own chairman; who, in the case of cities, towns, and boroughs, is called the mayor; in the case of shires, the president.

Every person (male or female) 21 years of age or upwards liable to be rated in respect of property within a municipal district, in respect of which all rates, made before 10th March of the year, have been paid by the 10th June, shall be entitled to be enrolled as a voter. Plurality of votes is allowed upon the following scale :—

IN CITIES, TOWNS, AND BOROUGHES.

Properties rated at an annual value of	under £50	..	..	One vote.			
"	"	"	"	£50 to £100	..	..	Two votes.
"	"	"	"	£100 and upwards	..	..	Three votes.

IN SHIRES.

Properties rated at an annual value of	under £25	..	..	One vote.			
"	"	"	"	£25 to £75	..	..	Two votes.
"	"	"	"	£75 and upwards	..	..	Three votes.

No person may be enrolled in respect of property rated under £5 a year, unless there is a house on the property, and he resides there. The occupier and the owner are not to be both enrolled in respect of the same property, the former having the prior right to enrolment. Corporations liable to be rated may nominate not more than three persons to be enrolled in their stead, and joint occupiers and owners, not exceeding three, are each entitled to be enrolled. If there be more than three, then the three standing first on the last rate valuation or return are so entitled. No "immigrant" within the meaning of the *Chinese Act* 1915 is entitled to be enrolled unless he is a naturalized or natural-born subject. The *Voting by Post Act* 1915 may be made applicable to the elections for any municipality on the petition of the councillors.

All land situated in a municipal district is rateable property except the following :—Crown lands unoccupied or used for public purposes; land used exclusively for commons, mines, public worship, mechanics' institutes, public libraries, cemeteries, primary free schools, technical schools subsidized by Government, and charitable purposes; land vested in or held by or in trust for any municipality or local governing body, or for commissioners under the *Water Acts*; and land vested in fee in the *Railways Commissioners*, Minister of Public Instruction, Board of Land and Works,

Melbourne and Geelong Harbor Trusts Commissioners, Melbourne and Metropolitan Board of Works, and Geelong Waterworks and Sewerage Trust. The expression "land" includes, of course, all buildings and improvements thereon. For the purpose of rating the valuation of property is computed at its net annual value, that is to say, at the rent at which the same might reasonably be expected to let from year to year, free of all usual tenants' rates and taxes, and deducting therefrom the probable annual average cost of insurance and expenses (if any) necessary to maintain the property in a state to command such rent; provided that no rateable property shall be computed as of an annual value of less than £5 per centum upon the fair capital value of the fee-simple thereof. A council may, however, with the consent of the ratepayers at a poll to be held, if demanded, levy rates on the basis of the unimproved capital value of the land and adopt the valuation made by the assessors under the *Land Tax Act* 1915. In the case of certain Crown lands occupied (other than under lease) for pastoral purposes only the provision that the annual value must not be less than 5 per cent. on the capital value does not apply, and the occupier is rated on the actual net annual value of the property.

**Rates—
general,
separate, &c.** Rates levied in municipal districts are of three kinds, viz.:—General, extra, and separate rates. General rates are levied at least once in each year by the council of every municipality, and shall not exceed in any one year 2s. 6d. in the pound of the net annual value, or be less than 6d. in the pound of such value. Every general rate is made and levied on the occupier of the property rated, or, if there be no occupier, or the occupier be the Crown or a public or local body, then upon the owner of the property. Extra rates may be levied in any one or more subdivisions of a district, on requisition by not less than two-thirds of the councillors for the subdivision, provided that both rates together in any subdivision do not exceed 2s. 6d. in the pound. Extra rates are levied on all properties alike in the subdivision; but, where any works or undertakings are for the special benefit of any particular portion of the municipal district, "a separate rate" may be levied, with the consent of a majority of the occupiers, and of one-third at least of the owners of the properties affected. The rates to be levied may be differential, according to the benefits to be received by different properties, and the amount of the rate must be such as will, in the opinion of the council, suffice to provide for the payment of interest, and periodical repayments of, or sinking fund for, the loan raised on the security of such rate.

**Recovery of
rates.** Under the provisions of the *Municipal Rates Recovery Act* 1916 power is given to any municipality to sell vacant land charged with rates unpaid for not less than 10 years and which has been unoccupied for more than 5 years. Prior to the sale the owner of the land must be informed by registered

letter, and notices must be posted on the land and at the municipal offices for not less than one month.

Where under any Act a council is empowered to execute any work at the cost of the owners, or to require such owners to do so, a special improvement charge may be made on the properties affected, on the security of which money may be borrowed for the carrying out of such work.

**Incorporation
of Melbourne
and Geelong.**

Melbourne and Geelong—the latter of which for many years ranked next in importance to the metropolis—having been incorporated under special statutes prior to the establishment of municipal government on a large scale throughout the State, are not subject to the Local Government Acts, except in a few comparatively unimportant particulars. Melbourne was incorporated as a town in 1842, and was ordained a city in 1847. Geelong was incorporated as a town in 1849, and proclaimed a city in 1910.

**Amalgamation
of
Municipalities.**

Under the provisions of the *Local Government Acts Amendment Act 1914* the following municipalities were united from 1st October, 1915 :—

BOROUGHS.

Majorca, united with Shire of Tullaroop.
 Carisbrook, united with Shire of Tullaroop.
 Raywood, united with Shire of Marong.
 Buninyong, united with Shire of Buninyong.
 Browns and Scarsdale, united with Shire of Grenville.
 Smythesdale, united with Shire of Grenville.
 Tarnagulla, united with Shire of Bet Bet.
 Malmsbury, united with Shire of Kyneton.
 Talbot, united with Shire of Talbot.

SHIRES.

Epping, united with Whittlesea.
 Mount Alexander, united with Newstead.
 Meredith, united with Bannockburn.
 Mount Franklin, united with Glenlyon.
 Templestowe, united with Doncaster.
 Merriang, united with Broadmeadows.

From 31st May, 1916, the undermentioned municipalities were united :—

BOROUGH.

Chewton, united with Shire of Metcalfe.

SHIRES.

Lancefield, united with Romsey.

Springfield, united with Romsey.

From 1st October, 1918, the Shire of Walhalla was incorporated with the Shire of Narracan, and from 31st May, 1919, the Shire of Howqua was dissolved and part of it united with the Mansfield Shire and part with the Upper Yarra Shire.

A portion of the Shire of Moorabbin was excised on 26th February, 1917, and constituted a separate municipality with the title of Borough of Sandringham. Portions of the Shires of Colac, Heytesbury, and Winchelsea were excised on 6th May, 1919, and constituted a separate shire entitled Cape Otway.

The total number of municipalities throughout the State in which local government was being administered at the end of the year 1918 was 191. Of these, 22 ranked as cities, 4 as towns, 26 as boroughs, and the remainder (139) as shires. The following is a summary of the estimated population, number of ratepayers, estimated number of dwellings (inhabited and uninhabited), total and annual value of rateable property, and annual revenue of cities, towns, boroughs, and shires in each of the five years ended 1918-19:—

MUNICIPALITIES: 1914-15 TO 1918-19.

Year.	Popula- tion.	Number of Rate- payers.	Estimated Number of Dwellings.		Estimated Value of Rateable Property.		Total Revenue.
			In- habited.	Unin- habited.	Total.	Annual.	
Cities, Towns, and Boroughs—							
1914-15 ..	825,078	209,276	180,410	3,725	£ 147,205,224	£ 8,218,040	1,378,006
1915-16 ..	824,170	208,759	182,445	3,293	149,235,137	8,335,553	1,407,021
1916-17 ..	829,368	213,520	184,417	3,377	154,105,571	8,587,302	1,487,426
1917-18 ..	844,970	219,076	189,459	3,265	158,777,843	8,912,303	1,598,643
1918-19 ..	859,470	224,757	194,273	2,542	164,306,704	9,227,807	..
Shires—							
1914-15 ..	608,828	181,480	134,349	3,530	167,405,523	8,517,938	827,466
1915-16 ..	617,587	184,374	137,799	3,619	169,724,979	8,606,509	847,206
1916-17 ..	619,696	187,894	138,801	3,196	172,309,539	8,732,116	875,940
1917-18 ..	613,380	186,551	138,366	2,716	172,558,872	8,735,794	927,901
1918-19 ..	622,260	188,032	139,338	2,262	176,297,529	8,922,859	..
Total—							
1914-15 ..	1,433,906	390,756	314,759	7,255	314,610,747	16,735,978	2,205,472
1915-16 ..	1,441,757	393,133	320,244	6,912	318,960,116	16,942,062	2,254,227
1916-17 ..	1,449,064	401,414	323,218	6,573	326,415,110	17,319,418	2,363,366
1917-18 ..	1,458,350	405,627	327,825	5,981	331,336,715	17,648,097	2,526,544
1918-19 ..	1,481,730	412,789	333,611	4,804	340,604,233	18,150,666	..

**Increases in
value of
rateable
properties and
municipal
revenue.**

It will be observed from the following figures that there has been a very substantial increase in the estimated value of rateable property and in the revenue of municipalities during the period covered by the foregoing table :—

INCREASE IN VALUE OF PROPERTIES AND IN MUNICIPAL REVENUE.

					Increase.		
					1918-19 over 1914-15.		1917-18 over 1914-15.
					Estimated Value of Rateable Property.		Revenue from all sources.
					Total.	Annual	
					£	£	£
Cities, Towns, and Boroughs	...	...	...	...	17,101,480	1,009,767	220,637
Shires	...	...	...	...	8,892,006	404,921	100,435
Total Increase	...	...	...	...	25,993,486	1,414,688	321,072

The number of ratepayers returned for 1917-18 was 412,789, and the total capital value of rateable property £340,604,233, which is equivalent to about 18½ years' purchase on the basis of the annual value of £18,150,666.

**Unimproved
Value of
Rateable
Property.**

The estimated unimproved or ground value of rateable property in 1918-19 in cities, towns, and boroughs was £82,153,352, and in shires £117,531,686. Improvements are estimated at one-half in the case of urban and one-third in the case of rural properties, which are about the proportions that are found to prevail in New Zealand, according to the valuations of the Valuer-General. A table showing the estimated annual, capital, and unimproved values in urban and rural districts in Victoria for a series of years appears on page 397 of the *Victorian Year-Book* for 1916-17.

Properties
rated in
municipalities.

The number of properties upon which the municipalities have levied rates during the past five years has steadily increased, as is shown in the following statement :—

NUMBER OF PROPERTIES RATED IN MUNICIPALITIES, 1914-15 TO 1918-19.

Year.	Properties Rated.		
	In Cities, Towns, and Boroughs.	In Shires.	Total.
1914-15	247,802	249,434	497,236
1915-16	248,100	255,958	504,058
1916-17	251,050	260,297	511,347
1917-18	258,614	257,528	516,142
1918-19	261,253	258,976	520,229

The following is a statement of the estimated population, number of ratepayers, total and annual value of rateable property, annual endowment payable by the Government, total revenue, and amount of rate levied in the £1 in each city, town, and borough in Victoria. The information relates to the municipal year, 1918-19, except as regards the items "revenue" and "annual endowment," the amounts of which are those for 1917-18 :—

CITIES, TOWNS, AND BOROUGHES, 1918-19.

Name.	Estimated Popula- tion.	Number of Rate- payers.	Amount of General Rate levied in the £1.	Estimated Value of Rateable Property.		Total. Revenue 1917-18.	Annual Endow- ment pay- able by the Govern- ment.
				Total.	Annual.		
CITIES.							
			s. d.	£	£	£	£
Ballarat ..	20,080	5,419	2 3	2,601,435	173,429	36,344	..
Bendigo ..	25,000	6,467	2 2	2,807,056	200,504	40,827	..
Brighton ..	20,500	5,300	2 3	4,073,640	203,682	25,516	..
Brunswick ..	39,910	9,600	2 4	6,015,580	300,779	54,914	..
Camberwell ..	19,680	6,008	2 3	4,927,440	246,372	42,169	..
Caulfield ..	29,500	10,571	2 3	6,405,858	355,881	45,822	..
Collingwood ..	35,550	7,657	2 0	4,982,016	298,921	35,257	..
Essendon ..	34,000	9,150	2 2	5,172,660	258,663	37,510	..
Fitzroy ..	35,300	7,715	1 8	6,462,162	359,009	34,530	..
Footscray ..	30,750	9,000	2 4	5,178,320	258,916	51,991	..
Geelong ..	14,810	4,300	2 4	2,861,880	143,094	29,202	..
Hawthorn ..	28,150	6,747	2 3	6,217,380	310,869	37,111	..
Malvern ..	29,000	7,500	2 3	7,046,640	352,332	48,588	..
Melbourne ..	107,480	29,123	1 2	45,914,360	2,295,718	519,217	..
Northcote ..	26,390	7,000	2 3	3,707,820	185,391	64,432	..
Port Melbourne ..	13,000	2,900	2 3	1,292,500	103,400	23,389	..
Prahran ..	49,480	11,900	1 9	7,832,352	652,696	64,574	..
Richmond ..	41,200	9,383	2 3	6,206,472	344,804	44,287	..
South Melbourne ..	48,700	10,254	2 0	10,026,980	501,349	64,306	..
St. Kilda ..	33,800	7,968	2 0	5,594,724	466,227	55,063	..
Warrnambool ..	7,400	1,654	2 3	1,220,420	61,021	25,805	..
Williamstown ..	18,800	6,200	2 4	2,044,170	136,278	23,690	..
TOWNS.							
Ballarat East ..	15,340	3,780	2 3	1,263,180	84,212	15,226	..
Coburg ..	15,120	6,475	2 3	1,613,910	107,594	18,158	..
Kew ..	14,480	3,850	2 1	2,297,505	153,167	18,857	..
Sandringham ..	8,250	3,989	2 0	1,077,936	89,828	13,325	..

CITIES, TOWNS, AND BOROUGHES, 1918-19—continued.

Name.	Estimated Popula- tion.	Number of Rate- payers.	Amount of General Rate levied in the £1.	Estimated Value of Rateable Property.		Total. Revenue 1917-18.	Annual Endow- ment pay- able by the Govern- ment.
				Total.	Annual.		
BOROUGHES.							
			s. d.	£	£	£	£
Ararat ..	4,500	1,060	2 6	262,700	26,270	12,598	25
Castlemaine ..	6,000	1,385	2 0	457,512	36,601	6,176	25
Clunes ..	1,550	488	1 6	56,287	8,041	2,567	38
Creswick ..	1,850	587	1 9	73,890	7,389	2,487	38
Daylesford ..	3,800	785	2 3	272,115	18,141	3,641	25
Dunolly ..	1,070	319	1 6	53,740	5,374	1,042	25
Eaglehawk ..	7,300	1,800	2 0	345,684	28,807	7,072	25
Echuca ..	4,000	1,090	2 3	297,500	23,800	6,366	25
Geelong West ..	8,790	2,311	2 2	1,046,860	52,343	8,657	25
Hamilton ..	4,700	1,166	2 3	730,640	36,532	7,289	25
Horsbarn ..	4,000	793	2 6	453,900	26,700	6,029	50
Inglewood ..	1,300	330	1 6	78,120	6,510	1,836	25
Koroit ..	2,240	402	2 6	324,800	16,240	4,123	25
Maryborough ..	4,950	1,171	1 6	253,950	25,395	4,370	25
Newtown and Chilwell ..	6,900	1,743	2 2	979,040	48,952	6,227	25
Oakleigh ..	5,130	1,973	2 6	833,980	41,699	8,533	50
Portland ..	2,500	644	2 4	380,040	19,002	4,400	25
Port Fairy ..	2,000	496	2 0	282,440	14,122	4,366	25
Queenscliff ..	1,720	579	2 0	255,600	12,780	2,642	50
Rutherglen ..	1,300	325	1 6	109,420	10,942	2,291	40
Sale ..	3,660	974	1 9	398,640	19,932	8,536	25
Sebastopol ..	2,300	470	2 0	79,032	6,586	1,257	40
Stawell ..	4,410	900	2 3	185,570	18,557	5,367	25
St. Arnaud ..	3,800	950	1 9	358,440	17,922	2,987	25
Wangaratta ..	4,030	906	1 10	580,000	29,000	4,454	25
Wonthaggi ..	4,000	1,100	2 0	312,408	26,034	3,220	..
Total ..	859,470	224,757	..	164,306,704	9,227,807	1,598,643	756

Shires,
1918-19.

The next table contains a list of the shires, and similar particulars to those shown for the cities, towns, and boroughs:—

SHIRES, 1918-19.

Name.	Estimated Popula- tion.	Number of Rate- payers.	Amount of General Rate levied in the £1.	Estimated Value of Rateable Property.		Total. Revenue 1917-18.	Annual Endow- ment pay- able by the Govern- ment.
				Total.	Annual.		
			s. d.	£	£	£	£
Alberton ..	5,200	1,318	1 3	1,677,260	83,863	7,164	701
Alexandra ..	3,000	702	1 6	1,014,440	50,722	6,236	390
Arapiles ..	2,710	682	1 4	837,280	41,864	3,186	153
Ararat ..	6,600	1,700	1 3	3,217,320	160,866	12,447	645
Avoca ..	4,000	1,470	1 3	797,440	39,872	3,520	240
Avon ..	3,000	800	1 0	831,080	41,554	3,053	302
Bacchus Marsh ..	3,250	727	1 6	843,180	42,159	4,218	204
Bairnsdale ..	8,350	1,953	1 6	1,999,160	99,958	10,586	709
Ballan ..	3,800	1,020	1 3	720,320	36,016	3,158	286
Ballarat ..	4,500	890	1 0	1,210,980	60,549	4,271	286
Bannockburn ..	2,800	736	1 3	1,044,040	52,202	4,397	202
Barrabool ..	2,000	450	1 6	754,360	37,718	3,483	211
Beechworth ..	6,000	1,495	1 4	349,092	29,091	7,713	271
Belfast ..	2,600	651	1 6	1,120,240	56,012	4,638	323

SHIRES, 1918-19—continued.

Name.	Estimated Population.	Number of Rate-payers.	Amount of General Rate levied in the £1.	Estimated Value of Rateable Property.		Total. Revenue 1917-18.	Annual Endowment payable by the Government.
				Total.	Annual.		
			s. d.	£	£	£	£
Bellarine ..	4,900	1,653	1 3	1,036,340	51,817	4,138	240
Benalla ..	9,050	2,800	1 3	2,507,920	125,396	16,230	719
Berwick ..	8,000	2,690	1 6	1,912,260	95,613	8,622	496
Bet Bet ..	4,600	1,103	1 3	653,400	32,670	2,667	211
Birchip ..	2,010	537	1 0	1,030,500	51,525	3,824	199
Borong ..	5,750	1,305	1 0	1,958,040	97,902	7,841	493
Braybrook ..	3,200	2,250	1 3	894,560	44,728	4,750	130
Bright ..	4,800	1,350	1 7	684,100	34,205	4,535	372
Broadford ..	2,100	465	1 6	383,700	19,185	1,871	149
Broadmeadows ..	3,340	1,955	1 3	1,156,880	57,844	4,503	253
Bulla ..	2,600	400	1 3	614,680	30,734	4,190	173
Bulu Bulu ..	4,800	1,420	1 7	1,247,440	62,372	6,785	620
Bungaree ..	4,500	1,133	1 9	634,260	31,713	3,732	397
Buninyong ..	6,360	1,670	1 6	1,260,760	63,038	6,016	298
Charlton ..	3,350	732	1 3	1,059,960	52,998	4,118	273
Chiltern ..	3,150	830	1 0	475,170	31,678	2,886	217
Colac ..	14,500	3,377	1 3	5,291,380	264,569	25,010	595
Corio ..	3,070	1,018	1 6	1,400,200	70,010	6,175	257
Cranbourne ..	7,430	1,827	1 6	1,460,300	73,015	6,285	347
Creswick ..	5,000	998	1 0	1,100,760	55,038	4,094	385
Dandenong ..	7,500	4,800	2 0	1,720,000	86,000	14,028	261
Deakin ..	3,300	985	1 0	1,284,380	64,218	3,749	221
Dimboola ..	5,000	1,223	1 6	1,706,660	85,333	8,962	307
Donald ..	3,250	795	1 6	926,000	46,300	6,028	307
Doncaster ..	2,450	820	1 9	644,860	32,243	3,538	195
Dundas ..	3,030	1,114	1 3	2,061,400	103,070	7,754	521
Dunmunkle ..	5,000	1,090	1 0	2,332,780	116,639	8,093	616
East Loddon ..	1,720	500	1 3	922,800	46,140	3,812	273
Eltham ..	3,500	1,450	1 7	805,800	40,290	4,388	209
Euroa ..	5,300	1,136	1 6	1,114,420	55,721	6,859	323
Ferntree Gully ..	6,300	3,100	2 6	1,185,060	59,253	8,570	446
Flinders ..	3,600	2,900	1 6	999,320	49,966	4,860	129
Frankston and Hastings ..	3,650	2,336	1 9	865,580	43,279	5,122	211
Gisborne ..	2,300	700	1 6	591,340	29,567	3,557	169
Glenelg ..	5,820	1,546	1 3	2,457,580	122,879	8,582	595
Glenlyon ..	5,380	1,142	1 3	319,450	31,945	2,828	225
Gordon ..	3,800	850	1 3	1,037,600	51,880	4,937	367
Goulburn ..	3,000	564	1 0	669,260	33,463	3,124	173
Grenville ..	5,750	1,450	1 3	822,345	54,823	4,628	301
Hampden ..	9,700	2,100	1 6	5,510,320	275,516	29,288	372
Healesville ..	2,200	862	2 6	468,800	23,440	3,950	238
Heidelberg ..	12,500	5,850	1 6	2,571,860	128,593	37,927	247
Heytesbury ..	4,800	1,168	1 6	1,707,580	85,379	7,585	546
Howqua ..	1,000	289	2 0	79,760	3,988	1,150	100
Huntly ..	3,500	969	1 0	917,680	45,884	3,265	199
Kara Kara ..	4,200	1,321	1 6	1,198,040	59,902	5,218	336
Karkaroc ..	5,500	1,375	1 0	2,315,620	115,781	9,061	471
Keilor ..	1,000	620	1 4	470,780	23,539	1,825	50
Kerang ..	10,000	2,233	1 3	3,001,780	150,089	18,012	496
Kilmore ..	1,870	536	1 6	204,460	20,436	2,739	137
Korong ..	6,400	1,396	1 6	1,087,760	54,388	6,202	323
Kowree ..	3,890	1,303	1 0	1,347,872	84,242	5,668	432
Kyneton ..	7,800	2,048	1 6	1,355,100	67,753	10,900	367
Lawloit ..	3,390	630	1 6	549,765	36,651	3,111	197
Leigh ..	1,500	589	1 3	1,025,240	51,262	3,700	274
Lexton ..	1,850	584	1 3	815,860	40,793	2,861	199
Lilydale ..	6,800	2,900	1 9	1,512,440	75,622	9,385	397
Lowan ..	4,100	1,250	2 0	807,160	40,358	5,389	298
Maffra ..	4,500	1,100	1 3	1,423,840	71,192	7,794	485
Maldon ..	3,600	1,230	1 3	704,820	35,241	3,045	186
Mansfield ..	3,520	990	2 0	1,185,820	59,291	8,186	446
Marong ..	6,920	2,192	1 3	1,787,920	89,396	7,597	456
Melton ..	1,700	410	1 3	579,480	38,632	3,048	146
Metcalfe ..	3,710	1,040	1 0	739,860	36,993	2,920	163
Mildura ..	8,390	1,511	1 9	2,421,620	121,081	16,865	236
Minhamite ..	2,000	572	1 0	1,340,600	67,030	6,024	323

SHIRES, 1918-19—continued.

Name.	Estimated Population.	Number of Rate-payers.	Amount of General Rate levied in the £1.	Estimated Value of Rateable Property.		Total Revenue 1917-18.	Annual Endowment payable by the Government.
				Total.	Annual.		
			s. d.	£	£	£	£
Mirboo ..	1,460	300	1 6	489,060	24,453	2,669	357
Moorabbin ..	10,210	3,900	2 6	1,670,520	83,526	28,215	298
Mornington ..	2,000	798	1 9	471,400	23,570	3,955	115
Mortlake ..	2,940	690	1 3	2,240,800	112,040	8,167	348
Morwell ..	3,500	849	1 6	893,380	44,669	4,933	437
Mount Rouse ..	2,150	704	1 3	1,573,540	78,677	5,544	199
Mulgrave ..	2,970	990	2 0	597,540	29,877	3,636	223
McIvor ..	4,060	1,133	1 0	1,072,400	53,620	4,029	223
Narracan ..	7,000	1,686	1 6	1,495,360	74,768	7,427	645
Newham and Woodend ..	2,500	660	1 6	424,640	21,232	3,433	149
Newstead and Mt. Alexander ..	4,000	1,148	1 3	545,780	27,289	2,368	167
Numurkah ..	6,500	1,600	1 3	2,433,580	121,679	10,780	595
Nunawading ..	10,260	4,200	2 2	2,083,300	104,165	17,478	471
Omeo ..	2,710	1,348	1 6	878,920	43,946	5,092	842
Orbost ..	3,220	913	2 0	833,000	41,650	5,059	474
Oxley ..	4,620	992	1 6	1,075,440	53,772	4,984	372
Phillip Island and Woolamai ..	3,870	2,320	1 6	1,122,100	56,105	5,861	446
Poowong and Jeetho ..	7,700	1,719	1 6	1,964,280	98,214	11,740	990
Portland ..	5,250	1,940	1 3	1,715,160	85,758	7,511	496
Preston ..	8,080	3,569	2 3	1,418,060	70,903	14,957	323
Pyalong ..	1,150	342	1 6	422,760	21,138	1,783	114
Ripon ..	4,500	1,190	1 3	1,764,220	88,211	7,700	223
Rochester ..	5,350	1,601	1 0	1,278,860	63,943	5,512	248
Rodney ..	6,720	1,654	1 0	2,121,220	106,061	8,650	434
Romsey ..	3,700	841	1 3	1,235,200	61,760	4,811	322
Rosedale ..	4,000	1,100	1 3	1,583,580	79,179	6,433	540
Rutherglen ..	4,500	763	1 3	798,720	39,936	3,605	218
Seymour ..	4,000	1,038	1 6	939,820	46,991	4,078	422
Shepparton ..	8,300	1,704	1 3	2,154,240	107,712	10,022	471
South Barwon ..	3,000	1,360	2 0	649,020	32,451	3,484	138
South Gippsland ..	4,120	1,028	1 6	1,021,360	51,068	5,502	520
Stawell ..	3,700	1,230	1 3	1,455,420	72,771	5,507	310
Strathfieldsaye ..	3,760	1,069	1 6	473,420	23,671	2,300	138
Swan Hill ..	7,000	2,730	1 1	2,314,920	115,746	9,981	274
Talbot ..	2,000	580	1 4	466,760	23,338	2,721	135
Tambo ..	3,000	988	1 9	748,400	37,420	4,862	516
Tarawong ..	6,300	1,600	1 3	1,906,420	95,321	10,355	891
Traralgon ..	3,350	870	1 6	979,200	48,960	7,254	443
Tullaroop ..	4,200	1,150	1 0	570,195	38,013	2,903	207
Tungamah ..	5,470	1,562	1 0	1,758,000	87,900	7,086	446
Upper Yarra ..	3,600	1,080	2 0	533,380	26,669	4,253	223
Violet Town ..	3,200	694	1 3	763,460	38,173	3,143	223
Walhalla* ..	..	..	..	..	..	1,242	283
Walpeup ..	3,590	1,431	1 3	1,723,300	86,165	4,390	..
Wangaratta† ..	2,730	809	1 3	665,780	33,289	2,418	147
Wannon ..	2,770	804	1 0	2,016,260	100,813	6,336	428
Waranga ..	1,850	1,832	1 6	1,656,800	82,840	8,112	372
Warragul ..	4,000	1,065	2 0	1,191,860	62,951	7,921	891
Warrnambool ..	9,000	2,012	1 0	3,893,000	194,650	16,893	683
Werribee ..	5,000	4,000	1 6	1,599,860	79,993	10,481	298
Whittlesea ..	3,600	1,002	1 6	1,200,000	60,000	4,737	228
Wimmera ..	4,500	1,032	1 0	1,656,340	82,817	5,315	362
Winchelsea ..	4,370	1,384	1 6	1,483,060	74,153	7,029	422
Wodonga ..	2,990	584	1 6	504,520	25,226	2,924	170
Woorayl ..	4,500	1,240	1 9	1,337,800	66,890	7,871	1,039
Wycheproof ..	4,500	1,120	1 0	1,310,060	65,503	6,043	229
Yackandandah ..	4,150	903	1 6	717,780	35,889	3,816	339
Yarrawonga ..	3,320	810	1 0	749,680	37,484	5,117	283
Yea ..	2,560	695	1 6	877,440	43,872	4,997	379
Total ..	622,260	188,032	..	176,297,529	8,922,859	927,901	47,895

* Incorporated with Narracan Shire from 1st October, 1918.

† Formerly North Ovens.

The following is the number of cities, towns, and boroughs, and the number of shires in which rates were struck in each of the last five years at the amounts set down in the first column :—

RATINGS IN MUNICIPALITIES, 1914-15 TO 1918-19.

Amount levied in the £1.	Number of Cities, Towns, and Boroughs.					Number of Shires.				
	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.
<i>s. d.</i>										
0 6 ..	..	..	..	1	..	..	..	..	..	..
1 0 ..	6	..	..	..	..	67	58	53	38	24
1 1 ..	..	..	..	..	..	..	1	..	1	1
1 2 ..	1	1	1	1	1	..	..	..	..	..
1 3 ..	1	2	..	..	..	39	38	33	38	41
1 4 ..	..	..	..	..	..	2	2	4	5	4
1 6 ..	10	4	5	5	5	25	26	31	35	43
1 7 ..	..	..	..	..	..	..	1	..	2	3
1 8 ..	2	2	1	2	1	..	..	..	..	..
1 9 ..	3	4	5	3	4	7	7	8	8	8
1 10 ..	..	..	2	1	1	..	..	1	1	..
2 0 ..	22	19	17	16	10	6	7	7	7	9
2 1 ..	1	2	2	2	1	..	..	..	..	..
2 2 ..	1	1	1	4	4	1	1	1	1	1
2 3 ..	10	11	11	12	16	..	..	..	1	1
2 4 ..	2	4	4	3	5	..	..	..	..	..
2 6 ..	2	2	2	2	4	..	..	1	2	3
Total ..	61	52	51	52	52	147	141	139	139	138

The figures for the quinquennial period give an average rating of 1s. 11½d. in the £1 in cities, towns, and boroughs, and of 1s. 3¾d. in shires. The average rating in the urban districts is thus shown to be 8d. in the £1 more than in the rural districts. It will be observed that only one municipality during the last five years imposed the minimum rate allowed by law, viz., 6d., but that several reached the maximum of 2s. 6d. in the £1.

A table showing the proportionate number of properties at different rateable values in the years 1901-2, 1905-6, and 1909-10 appears on page 261 of the *Year-Book* for 1916-17.

**Municipal
revenue and
expenditure.**

The ordinary revenue and expenditure for each of the last three financial years were as follows :—

REVENUE AND EXPENDITURE OF MUNICIPALITIES, 1916 TO 1918.

Sources of Revenue.	1916.	1917.	1918.
Taxation —	£	£	£
Rates	1,346,439	1,395,723	1,462,640
Licences	105,772	108,651	109,916
Dog Fees	20,528	20,883	21,481
Government Endowment and Grants ...	74,372	68,364	62,460
Contributions for Streets, Footpaths, &c. ...	52,045	54,620	63,910
Market and Weighbridge Dues ...	63,812	67,726	71,737
Sanitary Charges	91,125	96,484	101,791
Rents	59,006	62,953	65,821
Other Sources	441,128	487,962	566,788
Total	2,254,227	2,363,366	2,526,544
Heads of Expenditure.			
Salaries, &c.	206,353	210,034	214,797
Sanitary Work, Street Cleansing, &c. ...	236,766	243,774	244,984
Lighting	95,420	97,685	98,511
Contributions to Fire Brigades ...	32,086	33,939	32,786
Public Works—			
Construction	238,773	200,151	232,977
Maintenance	847,505	897,136	1,046,474
Formation of Private Streets, &c. ...	68,024	63,499	75,474
Redemption of Loans	101,461	112,020	124,797
Interest on Loans	262,760	274,113	277,435
Charities	18,801	20,350	19,977
Other Expenditure	180,018	186,310	178,043
Total	2,287,967	2,339,011	2,546,255

As compared with 1917, the revenue of 1918 increased by £163,178, as follows :—Rates increased by £66,917, sanitary charges by £5,307, contributions for streets, footpaths, &c., by £9,290, rents by £2,868, licences by £1,265, dog fees by £598, market and weighbridge dues by £4,011, and “other sources” by £78,826. The revenue from Government endowment and grants decreased by £5,904. The expenditure was in excess of the amount for the previous year by £207,244. The following items showed increases :—Salaries, £4,763 ; sanitary work and street cleansing, £1,210 ; lighting, £826 ; formation of private streets, £11,975 ; public works construction, £32,826 ; public works maintenance, £149,338 ; redemption of loans, £12,777 ; and interest on loans, £3,322. There were decreases under the headings of contributions to Fire Brigades, £1,153 ; charities, £373 ; and “other expenditure,” £8,267.

Proportion of municipal revenue raised from different sources. Fifty-eight per cent. of municipal revenue in 1918 was derived from rates, 4 per cent. from licences of all kinds, 3 per cent. from market and weighbridge dues, 1 per cent. from dog fees, 2 per cent. from Government endowments and grants, 3 per cent. from contributions for streets, footpaths, &c., 4 per cent. from sanitary charges, 3 per cent. from rents, and 22 per cent. from all "other sources."

Salaries. In 1918 the salaries of the municipal officers amounted to £214,797, or 8½ per cent. of the entire revenue.

Local charities. A sum of £19,977, or less than 1 per cent. of the revenue, was devoted to the local charities; the greater part of this disbursement was in aid of hospitals, benevolent asylums and associations, and orphan asylums.

Assets and liabilities of municipalities. The assets of the municipalities are shown below under three heads—(1) Municipal Fund, (2) Loan Fund, (3) Property; and the liabilities under two heads—(1) Municipal Fund, (2) Loan Fund.

MUNICIPAL ASSETS AND LIABILITIES, 1916 TO 1918.

Assets.		1916.	1917.	1918.
		£	£	£
Municipal Fund—				
Uncollected Rates	...	146,491	138,617	132,217
Other Assets	...	392,876	442,388	427,046
Loan Funds—				
Sinking Funds—				
Amount at Credit	...	792,445	745,784	596,550
Arrears Due	...	834	1,732	5,054
Unexpended Balances	...	209,363	286,206	238,906
Property—				
Halls, Buildings, Markets, &c.	...	2,898,978	2,942,062	2,952,105
Waterworks	...	177,050	252,069	268,815
Gasworks	...	105,124	109,215	110,819
Electric Light Works...	...	851,969	906,258	919,127
Total Assets	...	5,575,130	5,824,331	5,650,639

Liabilities.		1916.	1917.	1918.
		£	£	£
Municipal Fund—				
Due on Current Contracts	...	73,005	98,538	78,115
Arrears due to Sinking Funds	...	834	1,732	5,054
Overdue Interest	...	14,456	24,425	6,920
Bank Overdrafts	...	252,130	233,160	317,410
Other Liabilities	...	221,183	233,189	269,947
Loan Funds—				
Loans Outstanding	...	5,869,260	6,030,343	5,764,050
Due on Loan Contracts	...	15,888	42,428	47,145
Total Liabilities	...	6,446,756	6,663,815	6,488,641

**Municipal
assets and
liabilities
compared.**

The total assets of municipalities in 1918 amounted to £5,650,639, and the total liabilities to £6,488,641. The aggregate of the current liabilities (Municipal Fund) was £677,446, against which there were assets amounting to £559,263. The gross liability on account of loan expenditure for works completed and in progress was £5,811,195, which, after deducting sinking funds and unexpended balances, was reduced to £4,970,685. If credit were taken for the value of municipal properties in markets, halls, buildings, gasworks, electric light works, waterworks, &c. (£4,250,866), the net burden on account of loan moneys would be £719,819.

The valuation of municipal properties is probably an under-estimate, as the particulars furnished under this heading were not in every case complete.

**Endowment of
municipalities.**

An annual endowment to municipalities of £310,000 was authorized by the *Local Government Act* 1874, and it ceased to be payable in 1879. A subsidy, however, in lieu of such endowment, amounting to £310,000, was voted by Parliament annually, and this vote was gradually increased until £450,000 was reached in 1889-90 and 1890-91. Under the *Local Government Act* 1891, £450,000 was provided as an annual endowment for the municipalities. This amount was reduced to £405,000 per annum from 1st January, 1893; to £310,000 from 1st July, 1893; to £100,000 from 1st July, 1894; and to £50,000 from 1st July, 1902. Under Act No. 2025 it was increased to £75,000 for the year 1906-17, and from the 1st July, 1907, it was increased under Act No. 2129 to £100,000. Payments were made on the basis of this amount to 30th June, 1915, but for the financial years 1915-16, 1916-17, 1917-18, and 1918-19 it was reduced to £50,000 under the authority of Acts Nos. 2805, 2872, 2935, and 2965. The endowment is payable in equal moieties in March and September of each year, and no city or town is entitled to receive any part of it. The distribution amongst the boroughs and shires is based on the amount of general and extra rates received during the twelve months ended on the preceding 30th September, according to the following scale :—

To every borough or first-class shire	..	3s. in the £1.
„ second-class shire	.. ..	5s. „
„ third-class shire	.. ..	6s. „
„ fourth-class shire	.. ..	8s. „
„ fifth-class shire	.. ..	10s. „
„ sixth-class shire	.. ..	12s. „

RATING ON UNIMPROVED VALUES BY MUNICIPALITIES.

Rating on
unimproved
values.

An Act was passed by the State Parliament on 3rd February, 1914, to provide for optional rating by municipalities on the basis of the unimproved values of rateable property. This measure did not come into operation until 1st October, 1915.

Any municipality may adopt the method of rating set forth in the Act, but two months before doing so it must publish in the *Government Gazette* and twice in some newspaper circulating in the district a notice of its intention to take such a course. If one-tenth of the ratepayers in writing demand a poll the proposal must be submitted by the council to the ratepayers, and it shall not be deemed to be carried unless affirmed by a majority of the valid votes recorded, and unless the number of valid votes recorded forms at least one-third of the number of persons on the roll. Where a council of a municipality has not published a notice that it intends to adopt the Act one-tenth of the ratepayers may demand a poll. If a proposal is adopted or rescinded it cannot be again submitted to the ratepayers for three years. Special properties such as railways, tramways, waterworks, hydraulic works, electric light and power works, gas works, and any undertaking extending continuously beyond the boundaries of any municipal district which is subject to more than one separate valuation, although there is no actual separation of the different parts of the property, are not rateable on unimproved values.

WORKERS' DWELLINGS.

Workers'
dwellings.

An Act to enable municipal councils to provide workers' dwellings was passed by the State Parliament in February, 1914, and has been incorporated in the *Local Government Act 1915*.

The council of any municipality may purchase or take compulsorily any land in the municipal district regarded as suitable for the erection of dwelling-houses. The houses are to be leased to persons who are not owners of dwelling houses in Victoria or elsewhere and who are not in receipt of incomes of more than £200 a year. Sub-letting by tenants is not permitted. In fixing rents of dwelling houses account is to be taken of interest, depreciation, rates, repairs, and insurance. Before constructing new houses plans showing the classes of houses to be built are to be submitted for the approval of the Governor in Council. The amount that may be borrowed for the purposes of the Act by any one municipality is not to exceed £50,000. Power is given to increase the general rate to recoup advances from the municipal fund, but as far as practicable all advances are to be repaid out of the profits accruing from transactions under the Act. Once in every

year a balance-sheet must be prepared showing receipts and expenditure relating to all operations undertaken during the previous year, also assets and liabilities.

COUNTRY ROADS BOARD.

Country Roads Board. With the object of improving the main roads of the State an Act was passed on 23rd December, 1912 (Consolidated Act No. 2635), which empowers the Governor in Council to appoint a board to consist of three members. The chairman is to be paid an annual salary not exceeding £1,000, and each of the other members a salary not exceeding £700 (Act No. 2986).

Duties. The duties of the board are to ascertain by survey and investigation what roads are main roads; the nature and extent of the resources of Victoria in metals, minerals, and materials suitable for the purposes of road-making and maintenance, and the most effective and economical methods of dealing with the same, and of supplying and utilizing the material in any part of Victoria; the most effective methods of road construction and maintenance; what deviations (if any) in existing roads or what new roads should be made so as to facilitate communication and improve the conditions of traffic; and to record, publish, and make available for general information the results of all such surveys and investigations. The duty of furnishing information that may be required is imposed on the municipal authorities.

The construction of permanent works and the maintenance of main roads are likewise to be carried out by the municipalities to the satisfaction of the board, but power is reserved to the Governor in Council to direct that permanent works and maintenance shall be carried out by the board.

Finance. For the purpose of making permanent works, power is given to the Governor in Council to issue stock or debentures to the amount of £400,000 a year for five years, and the principal and interest are a charge upon the Consolidated Revenue of the State. The money so raised is to be placed to the credit of an account to be called "the Country Roads Loan Account," which will be debited with all payments made by the Treasurer towards the cost of permanent works. A sinking fund of 1 per cent. per annum on half the amount borrowed is authorized to be paid out of the Consolidated Revenue until half the amount borrowed is redeemed. The total cost of the works, in the first instance, is to be paid by the Treasury, but subsequently half the amount expended is to be refunded by the municipalities affected. In the case of expenditure on permanent works an annual payment to the Treasurer of 6 per cent. on the amount due by each municipality is provided for, and the cost of maintenance

allocated to each municipality must be paid out of the municipal fund before the 1st July in each year. A special rate not to exceed 6d. in the £1 on the net annual value of rateable property, to meet the cost of permanent works, may be levied in any ward or riding of a municipality as the council may direct. In the event of default of payment by a municipality the board may levy a rate to meet the amount owing. All fees and fines paid under the Motor Car Act, all moneys standing to the credit of the Municipal Fees and Fines Trust Fund, all fees paid on the registration or renewal of the registration of traction engines, and all fees received by the Crown after the 30th June, 1912, under the *Unused Roads and Water Frontages Act 1903* (incorporated in the *Local Government Act 1915*), are to be credited to the Country Roads Board Fund.

Since the appointment of the Board in March, 1913, the members have inspected the principal highways throughout the State. Every Shire Council and Borough Council with which the Board is likely to have dealings relating to the construction or maintenance of roads declared main roads under the Act, has been interviewed and the provisions of the Act have been explained to it.

During the year 1917-18 constructional work to the value of £226,599, and maintenance work involving an expenditure of £173,785, were undertaken.

A system for the continuous maintenance of all main roads has also been evolved, by which it is hoped that those that are now being constructed or reconstructed will be kept in good condition, while those that are in a fair state of efficiency will be kept up to that standard.

As soon as practicable after the termination of each year the board must present a report to the Minister setting forth its proceedings, the permanent works constructed, the mileage of the roads maintained, and an account of all moneys received and expended under the provisions of the Act.

**Registration
of motors,
&c.**

The rates of fees on registration or renewal of registration of motor cars, motor cycles, and traction engines are as follows:—The owners of motor cycles must pay an annual registration fee of 5s.; of traction engines, £3 3s.; and of motor cars, £1 ls. to £6 6s., according to the horse-power of the vehicles.

**Developmental
roads.**

Realizing that the scheme for dealing with the principal arteries of traffic only, in a young country that needed development, was inadequate, the Government in 1918 provided a further sum of £500,000 for a system of subsidiary or developmental roads (Act No. 2944). This sum was subsequently increased to £2,000,000 (Act No. 2985). Under this scheme the State provides the whole of the money and makes provision out of State Funds for liquidating the liability. The municipalities are required, however, to bear a proportion of the interest on the outlay during the period of the loan.

Ordinary
revenue and
expenditure.

The following is a statement of the revenue and expenditure during 1917-18 of the fund established under the Country Roads Act:—

COUNTRY ROADS BOARD FUND.

STATEMENT OF REVENUE AND EXPENDITURE FOR THE YEAR ENDED 30TH JUNE, 1918.

Revenue.			Expenditure.		
	£	s. d.		£	s. d.
By Balance 1st July, 1917 ..			To Maintenance Works General ..	86,290	8 0
.. Motor Car Act No. 2237—			.. Woods - Point Road ..	2,142	19 0
Registration Fees ..	56,649	17 0	.. Omeo-Glen Wills Road ..	151	4 7
Licence Fees ..	3,203	9 0	.. Omeo Road ..	156	1 7
Fines ..	2,301	10 6	.. Orbst-Genoa Road ..	964	10 4
	62,154	16 6	.. Genoa-Gipsy Point Road ..	9	16 4
Less Refunds and Costs of Administration ..	3,669	19 6	.. Walhalla Road ..	276	4 11
		58,484 17 0		3,700	16 9
Unused Roads and Water Frontages Act No. 1894—			Less Half Cost, to be borne by Fund	1,850	8 5
Licences ..	25,123	13 8		1,850	8 4
Less Refunds and Costs of Administration ..	1,387	18 5	.. Investigation Surveys ..	652	12 1
		23,735 15 3	.. Metal Investigation ..	49	2 6
.. Country Roads Board Act No. 2415—			.. Testing Materials ..	23	18 4
Traction Engine Licences ..		910 7 0	.. Wages ..	291	5 4
Forfeited Deposits ..		504 17 2	.. Interest on Loans ..	25,673	1 5
Contributions (Buln Buln Shire towards Quarry Road) ..		141 5 0	.. Contributions to Sinking Fund ..	8,557	13 10
Material, Sale of ..		11 16 11	.. Interest written back ..	5	15 10
Plant, Sale of ..		1,102 0 0	.. Instruments Account ..	7	9 6
Plant Earnings ..	3,554	8 8	.. Insurance of Employees ..	236	16 7
Less Working Costs ..	2,234	4 8	.. Legal Expenses ..	760	11 6
		1,320 4 0	.. Motor Expenses ..	443	2 3
Plans, Sale of ..		51 7 6	.. Office Furniture ..	23	14 0
Penalties Account ..		2 10 0	.. Office Expenses ..	49	5 4
.. Permanent Works—			.. Plant Purchased ..	651	0 5
Contributions payable by Municipalities ..		30,255 12 5	.. Plans Purchased ..	97	14 7
			.. Postage and Telegrams ..	284	9 4
			.. Printing and Stationery ..	464	11 11
			.. Salaries ..	7,413	14 11
			.. Storeyard Expenses ..	86	9 9
			.. Travelling Expenses ..	878	16 3
			.. Width of Tyres ..	1	2 3
			Balance ..		11,404 14 5
					60,622 18 10
					£195,416 3 1
					£195,416 3 1

Loan receipts
and
expenditure.

The expenditure out of loan money on the construction of permanent works for the year ended 30th June, 1918, is shown below :—

COUNTRY ROADS BOARD LOAN ACCOUNT FOR YEAR ENDED 30TH JUNE, 1918.

Receipts.			Expenditure:		
	£	s. d.		£	s. d.
To Balance, 1st July, 1917	5,869	10 2	By Permanent Works	226,599	2 2
„ Proceeds of Loans	197,832	19 1	„ Temporary Advances—Refund	17,821	3 8
„ Advance from Country Roads Board Fund	32,328	18 1			
„ Public Account Advances	8,185	6 0			
„ Country Roads Board Fund—Transfers	203	12 6			
	£244,420	5 10		£244,420	5 10

LICENSING FUND.

Licensing fund.

The following is a statement of the receipts and expenditure of the Licensing Fund for the year ended 30th June, 1918 :—

LICENSING FUND.—RECEIPTS AND EXPENDITURE, 1917-1918.

RECEIPTS.			EXPENDITURE.		
	£	s. d.		£	s. d.
Balance, 30th June, 1917	3,067	18 5	Salaries and expenses of Board and office, &c.	4,230	3 4
Proceeds of Redemption of Securities	8,000	0 0	Incidental Expenses	6,175	7 7
Licences	133,780	8 7	Equivalent to municipalities (see succeeding table)	71,512	0 0
Fees	2,045	0 6	Compensation	48,663	0 0
Fines	4,722	16 11	Transferred to Police Superannuation Fund under section 44 of Act No. 2855	23,000	0 0
Sale of confiscated liquor	24	13 6	Balance	1,213	0 4
Club certificates	2,554	0 0			
Permits—Extra Bars	590	0 0			
Expenses of holding extended annual sitting of court	3	11 0			
Sale of rolls	1	4 1			
Compensation assessments	—770	10 9			
Interest	549	9 0			
Cost of taking poll	225	0 0			
	£154,793	11 3		£154,793	11 3

Licence fees.

In addition to the endowment of £50,000 the municipalities received from the Government in 1917-18 a sum of £71,512 out of the Licensing Fund under Act No. 2683, section 313, this being the equivalent for (1) fees for licences; (2) fees for the registration of brewers and spirit merchants; and (3) fines, penalties, and forfeitures incurred under the *Licensing Act 1915*. The particulars of this payment are as follows :—

EQUIVALENT FOR LICENCE FEES, ETC., 1917-18.

	£	s.	d.
Paid to Cities	30,109	0	0
„ Towns	4,743	0	0
„ Boroughs	8,811	0	0
„ Shires—			
1st Class	288	0	0
2nd „	11,766	0	0
3rd „	9,781	0	0
4th „	633	0	0
5th „	3,324	0	0
6th „	1,503	0	0
Total	70,958	0	0
Add payments on account of 1916-17	785	0	0
Deduct unpaid accounts of 1917-18	231	0	0
Amount paid in 1917-18	71,512	0	0

MUNICIPAL LOANS.

Moneys may be borrowed by municipalities for permanent works or undertakings or to liquidate the principal moneys owing by the municipality on account of any previous loan. Permanent works include the construction or alteration of streets, roads, bridges, culverts, levees, ferries, jetties, sewers, and drains, the construction or purchase of waterworks, electric light works and gasworks, municipal offices, pounds, abattoirs, sheep dips, market places and houses, weighbridges, workers' dwellings, baths, pleasure grounds, libraries, museums, and places of public resort and recreation; the construction and establishment of hospitals, asylums, and other buildings for charitable purposes,

the construction and laying down of any track, way, or pavement of iron, steel, wood, or stone, the erection of machinery for the treatment of refuse or night-soil, or for quarrying or crushing stone, the works and undertakings connected with the reclamation and improvement of low-lying or over-crowded areas, and the purchase of land or any easement, term, or privilege in, over, or affecting land compulsorily taken for any of the foregoing purposes.

In connexion with loans raised by municipalities, section 375 of the *Local Government Act* 1915 provides that, when any municipality incurs a loan and the debentures are payable in different years, the Council shall obtain from the Auditor-General a certificate, in writing, that the amounts proposed to be provided in each year will be sufficient to pay all principal moneys and interest as they fall due. The repayments of principal have to be so provided for, that each year of the currency of the loan shall bear its full share towards liquidation.

Councils may borrow for not more than 40 years upon the credit of the municipality for permanent works or undertakings or to liquidate moneys owing on account of any previous loan.

The amount of money borrowed by any municipality is not to exceed ten times the average income of the municipality for the previous three years from general rates not exceeding 1s. 6d. in the £1. But, in addition, loans having a currency of not more than 30 years may be raised upon the security of certain income and not upon the credit of the municipality, by the issue of debentures or by mortgage. These loans are not to exceed five times the average amount of such income.

Power is given to any twenty persons whose names are inscribed on the municipal roll to demand the submission of any loan proposal to a poll of the ratepayers.

**Municipal
indebtedness.**

The total loan indebtedness of the municipalities at the end of their financial year was £5,764,050, which was due to the Government and the public respectively, as follows :—

MUNICIPAL INDEBTEDNESS, 1918.

		Due to the Government.	Due to the Public.
		£	£
Cities, Towns, and Boroughs	...	415,781	4,406,025
Shires	... ..	159,299	782,945
		575,080	5,188,970
Total	... ..	5,764,050	

Municipal loan receipts and expenditure. The succeeding statements show the loan receipts and expenditure :—

MUNICIPAL LOAN RECEIPTS AND EXPENDITURE, 1918.

	Cities, Towns, and Boroughs.	Shires.	Total.
	£	£	£
Receipts during the year	99,643	50,217	149,860
Balance unexpended from previous year ...	262,316	15,966	278,282
Expenditure during the year	147,046	43,138	190,184
Balance unexpended at the end of 1918 ...	214,913	23,045	237,958

Municipal loan expenditure, 1914 to 1918. The municipal expenditure of loan moneys during the year 1918 amounted to £190,184, of which £147,046 was spent by cities, towns, and boroughs, and £43,138 by shires.

The following return shows the loan receipts and expenditure for five years :—

MUNICIPAL LOAN RECEIPTS AND EXPENDITURE : RETURN FOR FIVE YEARS.

Year.	Receipts.	Expenditure.
	£	£
1914	573,291	348,661
1915	460,228	439,973
1916	500,312	549,714
1917	402,965	290,824
1918	149,860	190,184

Loans raised
by municipi-
palities,
1918.

The loan receipts for the year 1917-18 amounted to £149,860, of which £3,878 was obtained from the Government. The unexpended balance of loan moneys at the end of the year 1917-18 was £237,958—£214,913 to the credit of cities, towns, and boroughs, and £23,045 to the credit of shires. The following are the particulars :—

LOANS TO MUNICIPALITIES, 1918.

	Loans from—		Unexpended Balance of Loan Moneys.
	Government.	Public.	
CITIES, TOWNS, AND BOROUGHS—	£	£	£
Ballarat	444
Bendigo	1,531
Brighton	6,132
Brunswick	3,445
Camberwell	5,321
Caulfield	795
Clunes	400	..	208
Coburg	2,500	3,467
Collingwood	736
Dunolly	66
Echuca	183
Essendon	2,450
Fitzroy	876
Geelong	18,000	784
Geelong West	1,800	1,041
Hawthorn	8,850
Kew	8,281
Malvern	5,649
Maryborough	365
Melbourne	35,543*	120,060
Newtown and Chilwell	771
Northcote	3,500	194
Oakleigh	724
Portland	19
Port Melbourne	2,020
Prahran	14,091
Queenscliff	128
Richmond	2,000	243
Sandringham	3,100	1,686
South Melbourne	4,097
St. Kilda	13,000	14,576
Wangaratta	2,500	1,549
Warrnambool	1,300	..	809
Williamstown	16,000	3,322
Total	1,700	97,943	214,913

* Amount transferred from Electric Supply Depreciation and Renewals Fund to Loan and Capital Accounts.

LOANS TO MUNICIPALITIES, 1918—continued.

	Loans from—		Unexpended Balance of Loan Moneys.
	Government.	Public.	
SHIRES—	£	£	£
Avon	2,000	937
Benalla	368
Bright	4,500	3,110
Broadford	125	..
Colac	139
Corio	416
Dandenong	178	1,500	140
Dimboola	2,000	..
Eltham	1,500	599
Ferntree Gully	1,284	724
Frankston and Hastings	1,030	69
Healesville	50
Heidelberg	11,800	2,190
Kyneton	12
Lilydale	371
Maffra	6,000	2,359
Mansfield	1,000	652
Melton	200
Mildura	2,800	1,544
Mulgrave	73
Nunawading	4,000	670
Oxley	5,000	1,615
Phillip Island and Woolamai	196
Preston	2,000	..	527
Ripon	6
Rodney	153
Shepparton	2,000	1,721
South Barwon	219
Tungamah	27
Upper Yarra	237
Walpeup	1,500	1,696
Whittlesea	1,655
Yea	370
Total	2,178	48,039	23,045

CITY OF MELBOURNE: REVENUE AND EXPENDITURE, 1918—*continued.*

Heads of Expenditure.	Amount.
Salaries (including clerical assistance, expenses of audit, collection of statistics, making valuation, and commissions paid in lieu of salaries, &c.)	£ 30,145
Allowance to Lord Mayor	1,500
Closet Cleansing	174
Street Cleansing, &c.	38,542
Lighting—Electric and Gas	22,134
Fire Brigades Board—Contribution	8,059
Public Buildings—Construction	2,928
Public Works—Maintenance—	
Roads and Bridges	74,762
Markets and Weighbridges	14,143
Public Buildings (including Abattoirs, Baths, &c.)	31,105
Parks and Planting Trees in Streets	15,788
Interest on Loan from the Government	4,169
„ „ Loans from the Public	96,215
Repayment of Public Loans	10,000
„ „ Government Loan	1,411
Sinking Funds—Loans from the Public	15,685
Electric Supply—Maintenance, &c.	150,878
Expenses of paying Interest on Loans	481
Interest on Bank Overdrafts	338
Contributions to Charitable Institutions	1,410
„ „ Infectious Diseases Hospital	4,413
„ „ Heatherton Sanatorium	976
Law Costs	382
Printing, Advertising, and Stationery	2,527
Miscellaneous—	
Rat Destruction	629
Gas Conference	171
Fees—Dog Act	476
Insurance and Guarantee Premiums	2,597
Elections	99
Ceremonials	385
Ambulance Service	200
Sundries	2,448
Total	535,170

MUNICIPAL OFFICERS' FIDELITY GUARANTEE FUND.

Municipal Officers' Guarantee Fund. An Act was passed in 1907 (No. 2080) incorporating the Municipal Association of Victoria, and authorizing it to institute a "Municipal Officers' Fidelity Guarantee Fund," to which any municipality, any authority constituted under any Water Act or any Weights and Measures Union may contribute such sum as may be fixed by the association for a guarantee against loss by the dishonesty of its officers. The Act provided, however, that the fund could not be established until three-fifths of the municipalities in Victoria had agreed in writing to contribute and that the amount to be contributed for a guarantee must not be less than that payable in 1907 for a like guarantee to any incorporated company or society in Victoria. At any time after the fund has reached £3,500 the rates of contribution may be altered, so that it will be maintained at that sum, and, in the event of the amount at credit

being at any time insufficient to pay all the liabilities and expenses, the difference must be made up by payments from all the contributors, each paying *pro ratâ* to its contributions. If the association determines to discontinue business, the funds are to be divided proportionately to the sums contributed during the preceding five years. Payment of contributions is to be made within one month after a written notification has been sent by the secretary. Full and accurate accounts are to be kept of all moneys received and expended, and of the details of the transactions. A balance-sheet, made up to the 30th September of each year, must be prepared, exhibiting a true statement of receipts and expenditure and the balance to the credit of the fund.

More than the required number of municipalities agreed to co-operate, and the fund was inaugurated on 1st January, 1908. The operation of the fund was, at first, restricted by the association to guarantees in respect of municipal officers, but the rules have been altered, and since 1st October, 1914, they have permitted of guarantees being obtained by any waterworks authority or Weights and Measures Union; such authority or union is required, however, to make a preliminary payment into capital account. The premium revenue for the year ended 30th September, 1914, in respect of guarantees amounting to £198,320, was £1,115, but, under the reduced scale of premiums which came into force on 1st October of that year, guarantees for the year ended 30th September, 1918, amounting to £228,085, were obtained from the Association for £766. The amount to the credit of the fund on 30th September, 1918, was £8,139. The claims paid from the inception of the fund to 30th September, 1918, amounted to £1,769.

MELBOURNE HARBOR TRUST.

Melbourne
Harbor Trust
—receipts and
expenditure.

The Melbourne Harbor Trust is a corporate body, which was established in 1876 to regulate, manage, and improve the Port of Melbourne and portions of the Yarra and Saltwater Rivers adjacent thereto, for which purpose certain lands and properties are vested in Commissioners. On 31st December, 1912, an Act was passed by the State Parliament which altered the constitution of the Trust. Instead of seventeen Commissioners, of whom six were appointed by the municipalities concerned, three by the owners of ships registered at Melbourne, three by merchants and traders paying wharfage rates, and five by the Governor in Council, there are substituted five Commissioners to be appointed by the Governor in Council. Other than the chairman, one member is to be an owner of ships registered at some British port and trading at Melbourne, one a person engaged in the business of an exporter by sea of Victorian produce, one an importer by sea of goods into Victoria, and one identified with primary production in Victoria. The chairman's salary is not to exceed £1,500; and the attendance fees of the other Commissioners are fixed at £2 2s. per meeting, not more than £250 to be paid to any of these commissioners in any one year. The borrowing power of the Trust is increased from £2,000,000 to £3,000,000. The payment to the Consolidated Revenue

was not to be greater than £60,000 per annum for five years from 1st January, 1913. The following are particulars of the ordinary receipts and ordinary and capital expenditure for each of the last five years:—

**MELBOURNE HARBOR TRUST.—RECEIPTS AND
EXPENDITURE: 1914 TO 1918.**

Heads of Revenue and Expenditure.	1914.	1915.	1916.	1917.	1918.
REVENUE.					
	£	£	£	£	£
Wharfage and Tonnage Rates ..	317,543	272,279	273,731	267,739	259,175
Rents	22,833	23,834	30,360	27,989	30,678
Interest	2,284	1,293	170	31	123
Other Revenue	11,194	13,092	17,273	23,158	33,233
	353,854	310,498	321,534	318,917	323,209
Less Amount paid to Consolidated Revenue	60,000	60,000	60,000	60,000	62,305
Total	293,854	250,498	261,534	258,917	260,904
REVENUE EXPENDITURE.					
General Management and Expenses	34,163	36,067	40,994	38,363	30,568
Flotation and Redemption of Loans Expenses	5,289	5,936	..	1,005	5,404
Maintenance—Dredging ..	24,758	20,298	20,496	44,231	15,279
" Harbor	1,698	1,754	1,957	1,994	1,982
" Wharfs	13,370	25,469	20,928	15,780	11,778
" Approaches	10,835	7,999	9,994	8,107	6,667
Interest on Loans*	69,981	72,934	78,820	85,206	87,190
Depreciation, Renewals Account, and Sinking Fund	30,058	30,415	51,364	51,747	52,000
Total	190,152	200,872	224,553	246,433	210,868
Surplus on Revenue Account ..	103,702	49,626	36,981	12,484	50,036
CAPITAL EXPENDITURE.					
Land and Property	5,534	2,060	1,316	588	1,153
Deepening Waterways	96,198	93,615	82,429	50,871	108,037
Wharfs Construction	87,885	120,627	105,803	62,246	37,321
Approaches Construction ..	7,029	10,921	8,960	6,201	11,417
Other Harbor Improvements ..	1,376	4,275	35,946	26,923	7,352
Floating Plant	33,451	3,112	25,190	3,814	811
General Plant	3,364	4,107	2,853	1,728	130
Stock Account	32,070	25,451	21,784	4,686	..
Total	266,907	264,168	284,281	157,057	166,221

* Exclusive of interest on cost of plant debited to works carried out by day labour.

GEE LONG HARBOR TRUST.

Geelong Harbor Trust
—receipts and
expenditure.

An Act to provide for the construction of works in connexion with the harbor at Geelong was passed on 12th December, 1905. This measure made provision for the constitution of the Geelong Harbor Trust and the appointment of three commissioners, the chairman to receive £400 per annum, and each of the other commissioners £200 per annum. The management of the port and shipping is vested in the commissioners. Power is given to the Trust to borrow £591,000 and to issue debentures, which may be made payable in London or Melbourne. The following is a summary of the receipts and expenditure for the last five years, the expenditure from ordinary revenue being distinguished from loan expenditure :—

GEE LONG HARBOR TRUST—REVENUE AND EXPENDITURE.

	1914.	1915.	1916.	1917.	1918.
REVENUE.	£	£	£	£	£
Wharfage and Tonnage Rates ..	13,495	10,200	9,171	8,772	9,988
Rents, Fees, and Licences ..	3,750	3,776	4,113	3,829	5,488
Sparrowvale Farm ..	7,281	6,710	4,930	5,933	7,042
Corio Freezing Works and Abattoirs	12,404	9,543	9,777	10,683	15,180
Other Revenue	1,064	606	830	3,157	4,919
	37,994	30,835	28,821	32,374	42,617
REVENUE EXPENDITURE.					
General Management and Expenses	6,610	5,950	7,540	5,933	6,251
Maintenance—Wharfs and Approaches ..	2,101	196	755	555	1,336
„ Harbor ..	831	587	455	435	613
„ Floating Plant ..	326	82	182	383	1,202
„ Other	676	992	988	852	1,393
Interest on Loans and Sinking Fund	19,167	21,870	24,288	25,926	27,595
Sparrowvale Farm	6,221	5,786	6,447	4,317	4,869
Corio Freezing Works and Abattoirs	1,934	1,576	710	1,024	1,209
Corio Quay Power-house ..	2,548	1,805	3,055	1,947	3,557
Miscellaneous	894	211	608	883	753
Total	41,308	39,055	45,028	42,255	48,778
CAPITAL EXPENDITURE.					
Land and Property	19,611	2,224	22,992	33,638	21,965
Deepening Waterworks ..	11,970	15,882	8,804	52	..
Wharfs and Approaches Construction	7,303	6,617	365	25	314
Other Harbor Improvements ..	9,480	28,983	9,873	900	71
Floating and General Plant ..	2,137	1,358	..	209	..
Stock Account	455	..	..	..	..
Miscellaneous	696	2,030	832	1	..
Total	51,652	57,094	42,866	34,825	22,350

MELBOURNE AND METROPOLITAN BOARD OF WORKS.**Creation and constitution of Board.**

The Board was established by Act of Parliament No. 1197, which came into force on 20th December, 1890, and it entered upon its duties on 18th March, 1891.

It consists of 40 members, of whom one is the Chairman, who is elected every four years by the other members, the retiring Chairman being eligible for re-election. The other members must be also members of the respective councils which they represent, and are elected as follows:—Nine by the Melbourne City Council, four by the South Melbourne Council, three by the Prahran Council, two each by the Collingwood, Fitzroy, Richmond, and St. Kilda Councils, and one each by the other fifteen suburban municipal councils returning a representative, viz., Footscray, Hawthorn, Brunswick, Essendon, Malvern, Brighton, Northcote, Port Melbourne, Williamstown, Caulfield, Camberwell, Kew, Coburg, Heidelberg, and Preston.

Thirteen of the members retire annually in the month of February, but are eligible for re-election if they remain members of their respective councils.

Functions of the Board.

The functions of the Board are to control and manage the Metropolitan water supply system, including water-sheds, reservoirs, weirs, aqueducts, pipes, &c.; to provide the metropolis with an efficient system of sewerage and drainage; and to prevent the pollution of the River Yarra and other public streams and water-courses within the metropolis.

Area under Board's control, and population.

The sewerage area over which the Board exercises control consists of fifteen cities, five towns, one shire, and parts of five other municipalities, or twenty-six municipalities in all, embracing a total area of 90,821 acres. The Board exercises control (under Orders in Council) for water supply purposes over an additional 2,949 acres in four municipalities. The Board further supplies water to the Metropolitan Farm at Werribee and the outfall sewer area. Various other shires also arrange with it for bulk supplies of water. The total estimated population supplied with water on 31st December, 1918, was 749,709.

Board's borrowing powers and liability on loans.

The Board is authorized to borrow £10,750,000, exclusive of loans amounting to £2,389,934 contracted by the Government and taken over by the Board.

The liability for Government loans on 30th June, 1918, was £1,559,786, and for loans raised by the Board, £10,830,035, a portion of the latter amount having been applied in repayment of Government loans falling due. The Board was at that date empowered to borrow £750,113 before reaching the limit of its borrowing powers.

WATER SUPPLY FINANCE.**Water supply assessments and rates.**

By Act of Parliament the rate to be paid in respect of any lands and tenements for the supply of water for domestic purposes, otherwise than by measure, is limited to an amount not exceeding 8d. in the £1 on the annual

valuation of the lands and tenements served. The water rate levied in the year 1917-18 was 6d. in the £1 on the annual value of property served. Assessments of £20 and under are charged a minimum rate of 10s. per annum. There is a charge of 1s. per 1,000 gallons for water supplied by meter, with the assessed rate as a minimum. For shipping at Melbourne wharfs the charge is 3s. per 1,000 gallons, and at special berths at Melbourne wharfs, with fixed meters, it is 1s. 6d. per 1,000 gallons.

Water meters. Water meters may be hired from the Board at the following annual rentals, payable quarterly in advance:—
For a $\frac{1}{2}$ -in. meter, 5s.; $\frac{3}{4}$ -in., 6s.; 1-in., 8s.; $1\frac{1}{4}$ -in., 10s. 6d.; and $1\frac{1}{2}$ -in., 14s.

Garden rate. Areas not exceeding 100 square yards (including paths) are supplied with water without meters on payment of a special rate of 10s. per annum each.

Assessed value of property. The total annual value of property assessed for water supply purposes and liable to water rates was £7,270,091 in 1917-18.

Water rate receipts. In 1917-18 the water rate receipts were as follows:—

		£	s.	d.
Water rate (including arrears)	..	163,314	7	3
Meters	..	139,526	9	2
Special rates	..	3,678	7	8
Total	..	306,519	4	1

Revenue and expenditure of water supply system. The total revenue amounted to £331,955, as against £319,614 in the previous year. The cost in 1917-18 of maintenance and management was £60,714, and of interest £139,458, the total charges being £200,172, compared with a cost in 1916-17 of £54,566 for maintenance and management, and of £137,544 for interest, or a total charge of £192,110.

Cost of the Melbourne and Metropolitan waterworks system. The total cost of the water supply system up to 30th June, 1918, was as follows:—

Original water supply works, tank pumping station, &c.	..	£84,885
Yan Yean system	..	633,874
Maroondah system	..	792,174
O'Shanassy system	..	455,489
Service reservoirs	..	250,462
Large mains	..	1,192,225
Reticulation	..	1,479,712
Total	..	£4,888,821

SEWERAGE FINANCE.

Sewerage
assessments,
rates, and
receipts.

In 1891 the annual value of rateable property within the area then to be sewered was £6,866,313, of which about £1,000,000 related to vacant lands. The collapse of the land boom was followed by a heavy shrinkage in the value of rateable property. A recovery in values has since taken place, and the total of the sewerage assessments for 1918-19 is £7,941,834, inclusive of assessments on vacant lands.

By Act of Parliament the Board is empowered to levy a general sewerage rate not exceeding 1s. 2d. in the £1 in sewered areas. The sewerage rate for 1917-18 was 10d. in the £1 in the sewered area. The total annual value of property assessed for sewerage purposes and liable to the 10d. rate was £6,910,963 in 1917-18.

The receipts from the general sewerage rate in 1917-18 amounted to £290,061.

The sewerage revenue for 1917-18 was £327,399, as against £315,098 in the previous year. The outlay in 1917-18 for management, working expenses and repairs was £85,327, and for interest £345,521, the total charges being £430,848, compared with an outlay in 1916-17 of £72,658 for management, working expenses, and repairs, and of £329,176 for interest, or a total charge of £401,834.

Cost of the
Melbourne and
Metropolitan
sewerage
system.

The cost of sewerage works and house connexions up to 30th June, 1918, was £7,580,074, divided as follows:—

Farm purchase and preparation	£563,373
Outfall sewer and rising mains	423,572
Pumping station buildings and engines	245,219
Main and branch sewers	2,151,737
Street reticulation	2,296,570
Reticulation of rights-of-way	1,038,231
House connexions branches	421,409
Cost of house connexions chargeable to capital	439,963
Cost of sewerage system	£7,580,074
Householders' debts for house connexions	130,387
River improvements	3,977
Total	£7,714,438

DESCRIPTION OF WATER WORKS.

The Melbourne
and
Metropolitan
waterworks.

The metropolis is supplied with water from three independent sources—one known as the Yan Yean system, fed by the watershed of the Plenty River and Jack's Creek from the southern slopes of the Great Dividing Ranges, supplemented by the Wallaby and Silver Creeks, tributaries of the Goulburn, whose waters have been diverted over the range by means of weirs, aqueducts, and tunnels; a second, known as the Maroondah system, whose watershed is in the Healesville district, and which

takes in the water of the Maroondah or Watts River, the Graceburn, Donnelly's and Coranderrk Creeks, and other smaller streams; and a third, known as the O'Shanassy and Upper Yarra system, whose watersheds are in the Upper Yarra above Warburton. As regards the last-mentioned system, at present only the O'Shanassy River, a main tributary of the Upper Yarra, has been tapped.

Total catchment area. The total catchment area from which water is collected at present from the three systems is 102,000 acres, the whole of which is vested in the Board, and free from settlement or grazing.

Total daily supply. The total daily quantity of water which can be sent into Melbourne at present from the three systems is 90,000,000 gallons.

YAN YEAN SYSTEM.

Yan Yean system. The Yan Yean watershed embraces Silver and Wallaby Creeks, 12,000 acres; Plenty River and Jack's Creek, 12,000 acres; and the catchment areas of Yan Yean Reservoir, 5,000 acres, totalling 29,000 acres. The water is collected into the Toorourrong Reservoir, and taken thence to the Yan Yean Reservoir, where it is stored. This reservoir is an artificial lake situated 22 miles from the city in a northerly direction, and 602 feet above sea level. It is formed by the construction of an earthen bank 49 chains long, 30 feet high, and 20 feet wide on top, with a slope next the water of three to one and an outside slope of two to one. The reservoir when full covers an area of 1,360 acres, or $2\frac{1}{2}$ square miles, with a maximum depth of 26 feet, and an average depth of 18 feet. The maximum depth of water in the reservoir in 1918 was 25 ft. $7\frac{3}{4}$ in. on 29th December, and the minimum depth 24 ft. 1 in. on 21st April. Its total capacity is 6,400,000,000 gallons, of which 5,400,000,000 gallons are available for consumption. In the year ended 31st December, 1918, the total intake of the Yan Yean Reservoir was 4,403,703,000 gallons, and the total output was 4,080,172,000 gallons exclusive of loss by evaporation.

From this reservoir the water is forwarded to Morang Pipe Head Reservoir through an open aqueduct capable of delivering 33,000,000 gallons a day when full, and thence to Preston Reservoir, or to Melbourne direct, by a series of pipes.

High-level system. There is also a direct main, called the high-level system, from Yan Yean to Surrey Hills Reservoir, for supplying the high levels of the eastern suburbs of Melbourne in conjunction with the O'Shanassy and Upper Yarra System. It is capable of delivering 9,000,000 gallons a day.

MAROONDAH SYSTEM.

The Maroondah water is taken by means of small weirs from the watershed of 40,000 acres situated above Healesville, and it is thence conveyed to the Preston Service Reservoirs along an aqueduct (about $41\frac{1}{4}$ miles of open channels, tunnels, and syphons), which is capable of delivering 28,000,000 gallons daily.

O'SHANASSY AND UPPER YARRA SYSTEM.

The watershed of the O'Shanassy River comprises 33,000 acres, situated near Warburton. The water is diverted by means of a weir and conveyed to Surrey Hills by way of Mitcham in an aqueduct, and in tunnels, syphons, and a pipe line of an aggregate length of 48½ miles. The aqueduct is capable of delivering 20,000,000 gallons daily, but it has been completed in the tunnels and some other parts to a capacity of 60,000,000 gallons to provide for further diversions from the Upper Yarra and its tributaries.

There are two storage and thirteen service reservoirs (also four other service reservoirs proposed) as under:—

STORAGE RESERVOIRS.

Description.	Capacity.	Reduced Level at By-wash.
	Gallons.	Feet above L.W.M.
Yan Yean	6,400,000,000*	602
Toorourrong	60,000,000	747
Total (storage)	6,460,000,000	

* Of this quantity 5,400,000,000 gallons are available for consumption.

SERVICE RESERVOIRS.

Description.	Capacity.	Reduced Level at By-wash.
	Gallons.	Feet above L.W.M.
Preston No. 1	13,500,000	326·50
„ No. 2	24,500,000	326·50
„ No. 3	26,300,000	326·50
Essendon No. 1	1,000,000	209·25
„ No. 2	4,000,000	209·25
Caulfield	10,000,000	166·00
Kew	3,000,000	281·50
Surrey Hills No. 1	9,000,000	429·50
„ No. 2	15,000,000	429·50
Morang (Pipe Head)	3,000,000	485·00
Heidelberg	1,000,000	325·00
Notting Hill	10,000,000	332·50
Olinda	11,000,000	671·00
Total (service)	131,300,000	..
North Essendon (proposed provision for 10,000,000 gallons)	..	290·00 (approx.)
Mitcham (proposed provision for three reservoirs with a capacity of from 20 to 25 million gallons each)	..	515·00 „

**Aqueducts, &c.,
mains and
reticulation
pipes.**

The following is the mileage return of aqueducts, &c., mains, and reticulation pipes up to the 30th June, 1918 :—

YAN YEAN SYSTEM—

	Miles	Chs.	Miles	Chs.
Aqueducts, &c., between watersheds and Yan Yeau				
Reservoir	23	62		
Aqueduct—Yan Yeau Reservoir to Morang	6	33½		
Total			30	15½

MAROONDAH SYSTEM—

Main Maroondah Aqueduct	41	28		
Tributary Aqueducts	6	8		
Scours at Preston Reservoirs	2	52½		
Total			50	8½

O'SHANASSY SYSTEM—

O'Shanassy Aqueduct	22	68½		
O'Shanassy Pipe line	25	69¾		
Scour Channel at Warburton	0	36¾		
Scour at Olinda Reservoir	0	31		
Scour at Surrey Hills Reservoir	0	49		
Total			50	15

Grand Total—Aqueducts, &c.

130 38¾

*Large Mains, 54-in. to 12-in. diameter (inclusive)

230 23½

Reticulation under 12-in. diameter

1,333 58

Grand Total—Aqueducts, &c., Mains, and Reticulation .. 1,694 40½

The average number of people supplied with water during 1918 was 744,018, and the average daily consumption was 54.89 gallons per head. Some districts are supplied outside the Board's sewerage area. The total consumption and average consumption per day are shown hereunder for each month during 1918 :—

TOTAL AND DAILY AVERAGE CONSUMPTION OF WATER IN MELBOURNE AND SUBURBS DURING EACH MONTH OF THE YEAR, 1918.

Month.	Total Consumption of Water.	Daily Average Consumption of Water.
	Gallons.	Gallons.
January	1,506,504,000	48,596,903
February	1,362,229,000	48,651,035
March	1,398,027,000	45,097,645
April	1,198,632,000	39,954,400
May	1,126,239,000	36,330,290
June	973,818,000	32,460,600
July	991,922,000	31,997,483
August	1,026,993,000	33,128,806
September	1,146,073,000	38,202,433
October	1,245,359,000	40,172,870
November	1,400,216,000	46,673,867
December	1,530,157,000	49,359,903
Total for the year	14,906,169,000	...
Daily average for the year .. .. .	...	40,838,819

* Exclusive of O'Shanassy Pipe line and Maroondah Aqueduct syphons.

The following table shows for each year since the establishment of the Board in 1891 the daily average consumption of water, and the daily average per head :—

DAILY AVERAGE QUANTITY OF WATER CONSUMED IN
MELBOURNE AND SUBURBS, 1891 TO 1918.

Year.	Population supplied with Water to 30th June.	Houses supplied with Water to 30th June.	Tenements Connected with Sewerage System to 30th June.	Daily Average of Annual Consumption of Water to 31st December.	No. of Gallons of Water per Head Daily.
				Gallons.	
1891 ...	482,600	99,364	...	25,747,761	53·35
1892 ...	486,620	106,772	...	23,476,780	48·24
1893 ...	469,390	107,125	...	24,290,041	51·75
1894 ...	449,560	107,764	...	27,071,106	60·22
1895 ...	444,340	107,260	...	26,689,683	60·07
1896 ...	452,210	106,486	...	23,837,695	52·71
1897 ...	458,300	105,710	...	24,665,607	53·82
1898 ...	466,895	104,861	3,899	28,253,294	60·51
1899 ...	480,390	103,981	13,593	27,068,465	56·37
1900 ...	489,600	104,050	28,300	28,230,690	57·66
1901 ...	494,905	104,548	38,696	29,427,589	59·46
1902 ...	501,580	105,051	47,172	29,080,027	57·98
1903 ...	502,840	106,176	55,929	28,858,633	57·39
1904 ...	505,760	107,701	64,487	29,523,153	58·37
1905 ...	511,520	109,393	71,689	32,400,286	63·34
1906 ...	519,925	111,494	79,597	33,479,900	64·39
1907 ...	530,655	114,049	87,853	35,212,222	66·36
1908 ...	543,115	116,781	94,067	31,559,830	58·11
1909 ...	557,350	119,650	99,955	33,047,340	59·29
1910 ...	573,255	123,227	105,993	33,272,490	58·04
1911 ...	588,000	128,036	112,293	36,110,115	61·41
1912 ...	604,275	133,122	118,350	38,569,566	63·83
1913 ...	628,430	140,351	125,103	41,642,926	66·27
1914 ...	651,000	147,442	131,168	40,778,844	62·64
1915 ...	674,000	150,825	138,108	36,567,614	54·25
1916 ...	713,957	155,208	143,737	36,910,680	51·69
1917 ...	727,196	158,086	148,395	38,604,178	53·08
1918 ...	744,018	161,743	151,622	40,838,819	54·89

DESCRIPTION OF SEWERAGE SYSTEM.

While the Board took over from the State Government the branch which had the management of the Melbourne Water Supply, still the chief object of its creation was to carry out the long-called-for and pressing want of an efficient system of sewerage in the Metropolitan area. The plans and estimates of the cost of the Metropolitan sewerage scheme were originally prepared by the late Mr. James Mansergh, an expert civil engineer from England, and were furnished to the Board on its creation. The scheme recommended by the designer and selected by the Board's Engineer-in-Chief (the late Mr. William Thwaites) was estimated to cost £5,030,000,

but was modified by Mr. Thwaites, with the concurrence of the Board, so as to reduce the estimated cost to £3,451,000.

The original Act of Parliament contemplated only the construction of sewers in the streets, but this was altered by an Act passed in 1897, which added the duty of constructing sewers in rights-of-way and the branches from the sewers to the building line of each property, and in consequence has added considerably to the original estimate of cost.

The first tenement was connected in Port Melbourne in August, 1897. On 31st December, 1918, 155,620 tenements had been gazetted as within sewerage areas, and applications had been received *re* 173 outside gazetted areas, making a total of 155,793 tenements. Out of this number 155,354 were provided with sanitary fittings which required to be connected with the sewerage system, and 153,297 had been connected, including the 173 outside gazetted areas. Of the remaining 2,057 tenements, 1,484 were in progress of connexion, while on 573 tenements connexions work had not been commenced.

The following statement shows the progress of house connexions to the 31st December, 1918 :—

PROGRESS OF HOUSE CONNEXIONS WITH THE SEWERAGE SYSTEM IN MELBOURNE AND SUBURBS.

Municipality.	No. of Tenements connected on 31st December, 1918.
Melbourne City	26,902
South Melbourne City	10,770
Prahran City	11,859
Fitzroy City	7,976
Richmond City	10,269
St. Kilda City	7,699
Collingwood City	8,448
Footscray City	6,774
Hawthorn City	6,343
Brunswick City	8,818
Essendon City	7,298
Malvern City	5,816
Caulfield City	5,602
Northcote City	5,616
Camberwell City	3,367
Brighton Town	4,038
Port Melbourne Town	3,016
Williamstown Town	3,749
Kew Town	2,813
Coburg Town	1,958
Oakleigh Borough (part of)	Nil
Sandringham Borough (part of)	1,256
Heidelberg Shire (part of)	1,533
Preston Shire	1,131
Moorabbin Shire (part of)	Nil
Nunawading Shire (part of)	246
Total	153,297

PROGRESS REPORT OF SEWERAGE WORK WITHIN THE
BOARD'S METROPOLITAN AREA.

On the 31st December, 1918, the sewerage system was practically completed in the following municipalities :—Melbourne, South Melbourne, Port Melbourne, Collingwood, Fitzroy, Hawthorn, Richmond, Prahran, St. Kilda, and the thickly populated portions of Nunawading and Sandringham. The sewerage system was nearly completed in the municipalities of Brighton, Essendon, Footscray, Malvern, and the thickly populated portions of Camberwell, Brunswick, Northcote, Williamstown and Preston, together with the greater portion of Caulfield, Coburg and Kew.

During the past twelve months the work has progressed principally in Brunswick, Camberwell, Caulfield (East), Hawthorn, Malvern (East), Northcote and Sandringham. Branch and main sewers have been extended in Caulfield, Malvern, Northcote, and Sandringham to meet the requirements of new reticulation areas. Reticulation contracts have been completed in Brunswick, Camberwell, Caulfield (East), Hawthorn, Malvern (East), Northcote, and Sandringham. Reticulation extensions have been carried out principally in Caulfield, Malvern, and Brunswick, and, in a lessening degree, in St. Kilda, Brighton, Kew, Camberwell, Northcote, Melbourne, &c.

Work in progress.—Slow progress is being made with Gardiner's Creek main sewer which is being extended along the border of the municipalities of Malvern and Camberwell, while in Caulfield and Malvern the Murrumbeena branch and Darling branch are being constructed. Reticulation contracts are being carried out in Caulfield, Malvern and Melbourne (Travancore Estate). Day labour extensions to meet the requirements of new buildings or fresh sub-divisions are now being carried out in Caulfield, Footscray, Malvern, and Prahran, while house connexions branches are being provided as required in various other portions of the Board's Metropolitan area.

The whole system was so far advanced that on the date mentioned above the sewerage from 155,793 tenements could be collected, including those inside and outside gazetted areas, and 155,354 tenements could be connected. Of these, 153,297 tenements were connected, and work was in progress on 1,484 other premises. The total number of fittings connected with the system was as follows :—71 public conveniences and 85 public urinals, 179,405 water closets, 134,719 baths, 106,503

sinks, 104,639 sets of wash troughs, 53,536 lavatories, 16,636 stables, 10,247 urinals, 8,651 polluted areas and paved yards, 2,508 cellars, 1,166 slop hoppers, 300 latrines, and 359 dairies, there being also 439 tenements with no fittings to connect. The house connexions pipes join the 9-inch reticulation pipes, which are gradually collected into 12-inch, 15-inch, and 18-inch pipes, and then again into brick and concrete branch sewers, which join the sub-mains and mains. In all 1,459 $\frac{3}{4}$ miles of reticulation and 160 $\frac{1}{8}$ miles of mains and branch sewers have been completed, making a total length of 1,619 $\frac{7}{8}$ miles.

SEWERS AND PUMPING STATION.

**Main Sewers
and Subsidiary
Main.**

Particulars of the system are as follows :—

The sewage of the metropolis is delivered into two main sewers and a subsidiary main leading to the pumping station at Spotswood.

The two main sewers are—

1. The North Yarra main sewer (North Yarra system), which commences with Heidelberg, and thence takes up East Kew, Preston, Coburg, Northcote, Brunswick, the Clifton Hill part of Collingwood, also Fitzroy, and the North Carlton, North Melbourne, and Flemington and Kensington parts of Melbourne, together with Essendon and Footscray.

2. The Hobson's Bay main sewer (South Yarra system), which starts at Sandringham (the portion excised from Moorabbin), picking up Brighton, a small part of Oakleigh, Caulfield, Malvern, St. Kilda, Camberwell, and a small part of Nunawading, besides the remaining part of Kew, also Hawthorn, Prahran, South Melbourne, Port Melbourne, Richmond, and the remaining part of Collingwood, with East Melbourne, and other remaining parts of Melbourne.

The subsidiary main, which takes in Williamstown, joins the Hobson's Bay main before it enters the pumping station.

**Pumping
station.**

When collected at Spotswood the two systems are dealt with in separate buildings, and are arranged to be worked either separately or unitedly. The sewage enters the pumping station at a level of 50 feet below low-water mark through straining wells, one of which is established on each system. The wells are of 22 feet internal diameter, and each contains two straining cages, one of which is always in position. The solid matter caught in them is transferred to a drier in the building over the wells, where it is subject to steam pressure and consequently to a high temperature, which renders the material innocuous. The material from the drier is of no manurial

value and is destroyed in a furnace. The sewage is raised by the pumps 125 feet through two 6-feet and one 4-feet wrought-iron rising mains—the three lengths running side by side, each 2·794 miles long (an aggregate length of 8·38 miles)—to the head of the outfall sewer, at Brooklyn, 75 feet above low-water mark, whence it gravitates to the Metropolitan Sewage Farm at Werribee in a partly-open and partly-closed channel 16 miles long, of 11 feet diameter, and having a grade of 2 feet to the mile. The full capacity of the outfall sewer is 18,000 cubic feet a minute.

METROPOLITAN SEWAGE FARM.

The purification of the sewage of Melbourne and Suburbs
Sewage farm. is effected by filtration and aeration through the natural soil of the Sewage Farm, which contains 11,402 acres 1 rood 5½ perches of land situated about 24 miles south-west of Melbourne and 4 miles south-west of the township of Werribee in open plain country, and had an average rainfall to 31st December, 1918, of 18·14 inches. The farm has the Werribee River for its eastern boundary, with a long frontage to Port Phillip Bay on the south (extending from the mouth of the Werribee River to the mouth of the Little River), to which the land gradually slopes from the north, the highest point being 44 feet above low-water mark. The head of the rising main at Brooklyn is, as has been mentioned, 75 feet above low-water mark and the sewage flows by gravitation from there to the farm, a distance of 16 miles, where the point of delivery is 37·25 feet above low-water mark.

To irrigate the portion of the farm above that level necessitates pumping, and in the meantime most of the high land is being used for dry farming, cereal crops being grown.

The land required for sewage filtration purposes is divided into 20-acre brocks (20 chains by 10 chains), which are graded into bays of about half-an-acre each, and commanded by distributing drains to facilitate rapid flooding. The sewage is distributed by means of main carriers and drains which run parallel north to south through the farm half-a-mile apart, and sub-carriers and drains which branch east and west every 10 chains. The filtered sewage is discharged into the bay by a series of main effluent channels running parallel, north and south, through the farm.

Of the area under irrigation in the year 1917-18, viz., 7,022 acres (including small areas under fodder crops and barley for grain), 234 acres were sown with maize for grain, 100 acres were under barley for grain, and 490 acres of lucerne were cut for hay, leaving 6,062 acres of grasses, and small areas under fodder crops of maize and rape, (totalling 136 acres). Of the 7,022 acres, 6,439 acres can be depastured with stock.

Notwithstanding the large quantity of sewage water required to be put on the pastures summer and winter alike, the effective filtration

of which must be the Board's first consideration, a considerable profit is derived from the farming and grazing operations. The principal sources of revenue are from breeding of beef cattle, fattening of sheep and cattle, and grazing of horses on agistment. The profits from transactions in sheep and cattle for the year 1917-18 were—from sheep, £2,352; from cattle, £19,822. The revenue from agistment (principally horses) was £3,879.

The following are particulars of the sales of produce for the year ended 30th June, 1918:—

	£
Lucerne (Chaff and Hay)	492
Maize	1,746
Wheat, Oats, and Barley	1,803
Other	56
Total	<u>4,097</u>

Statistical details relating to the farm for the year 1917-18, or as at 30th June, 1918, are as follows:—

Total area of farm	11,402 acres
Average quantity of sewage delivered daily on to farm for year 1917-18 = in gallons	36,186,687
= 133·30 acre-feet per day = 6·085 feet per annum over the total area available for sewage disposal, viz., 7,996 acres.	
Total capital cost of farm to 30th June, 1918 ..	£563,373
Profit on farm trading account for the year after charging up working expenses	£24,435
Cost of sewage distribution (after allowing for profit on farm and charging working expenses of sewage disposal and £22,374 interest on capital cost), 1917-18	<u>£7,595</u>
Population served by sewerage system	697,461
Net cost per head of sewage purification, 1917-18 ..	2·613d.
Average net cost per head per annum of sewage purification for the five years, 1913-14 to 1917-18	·409d.
Rainfall for year ended 30th June, 1918 ..	19·85 inches
Average rainfall for 26 years to 31st December, 1918	18·14 ..

Further details with respect to the farm are given in the *Year-Book* for 1916-17, on pages 290 to 297.

FIRE BRIGADES BOARDS.

Constitution of Fire Brigades Boards. Connected with the water service of the State generally is the service of water required for fire extinction.

Under the *Fire Brigades Act* 1915 there are constituted a metropolitan fire district, controlled by the Metropolitan Fire Brigades Board, and nine country fire districts, controlled by the Country Fire Brigades Board. The supervisors are the chief officers of the respective Boards, who are aided by deputies and other assistants.

The arrangements for fire extinction in the metropolis are closely allied to those for the Melbourne water supply, the service having been provided under the clauses of the *Fire Brigade Act* 1915 and its amendments.

The Metropolitan Fire District embraces the area included in the various municipalities within a radius of ten miles from the General Post Office, as well as the district outside of that area which is referred to below. The area vested in the Melbourne and Metropolitan Board of Works is included in the Metropolitan Fire District, but the Metropolitan Fire Brigades Board has jurisdiction over portions of the shires of Werribee, Braybrook, Keilor, Broadmeadows, Heidelberg, Doncaster, Nunawading, Mulgrave, and Moorabbin, within the 10-mile radius, which are not vested in the Melbourne and Metropolitan Board of Works. The Metropolitan Fire Brigade District includes the greater portion of the shire of Moorabbin, and it extends in a southerly direction as far as Mordialloc (16 miles from Melbourne), that township being included.

The Metropolitan Fire Brigades Board is composed of nine members, of whom three are appointed by the Governor in Council, three by the municipal councils, and three by the insurance companies.

Outfit of the Metropolitan Fire Brigade. The Metropolitan Fire Brigades Board on 30th June, 1919, had under its control the following:—Forty-one stations, 250 members of permanent staff; 49 members of special service staff, 7 members of clerical staff, 18 men engaged in the workshops, 102 partially paid firemen, 6 motor-drawn steam fire engines, 4 petrol motor fire engines, 2 motor salvage waggons and chemical engines combined, 4 motor combination appliances, 36 motor hose waggons, 2 motor cycles, 1 motor lorry, 1 Chief Officer's motor car, 2 extension ladders and fire escapes, 2 Pompier ladders, 1 inspection car, 1 instruction car, 100,872 feet of hose, 5 smoke helmets, 1 smoke jacket, and 321 fire alarm circuits having 1,132 street fire-alarms with telephones attached. There were also 623 auxiliary boxes and 18 automatic systems in public and other buildings, 144 direct telephone lines, 59 of which were acting as fire alarms to buildings, and 38 circuits to sprinkler installations, with 74 sprinkler call transmitting instruments.

During 1918-19 the cost of maintenance of the Metropolitan Fire Brigade was £85,648, one-third being contributed by each of the contributing bodies, viz., Government of Victoria, municipalities within the Metropolitan Fire District, and the insurance companies carrying on business in that district. The municipalities' contribution is equal to 847d. in the £1 over an area wherein the property is valued at £8,082,507, and that of the insurance companies is equal to £4 19s. for every £100 of premiums on insured property. The premiums received in the Melbourne Fire District in 1917 amounted to £619,292, and the total of the payments made by the companies in 1918 for the maintenance of the fire brigade system was £28,549.

Country Fire Brigades Board. The Country Fire Brigades Board consists of nine members. Three are appointed by the Governor in Council, two are elected by the municipal councils of the districts in which there are brigades registered under the Board, two are elected by the fire insurance companies carrying on business in such districts, and two by the registered fire brigades. The board annually elects one of its members as president. The tenure of the Board members is two years. The Board's revenue in 1918 was £13,986, which was obtained from the following sources:—(a) Government, £4,610; (b) municipalities, £4,571; (c) insurance companies, £4,610; and (d) other sources, £195. The expenditure for the year amounted to £14,704. There are 109 municipal councils and 71 insurance companies included in the operation of the Act. The premiums received by the insurance companies in country districts during the year 1917 amounted to £223,372, and the total of their contributions in 1918 for the upkeep of the brigades was £4,610. The total value of rateable property assessed within the Board's district in 1918 was £1,814,681. All brigades under the control of the Board are volunteer brigades, but in the large centres a few permanent stationkeepers and watchmen are also employed. There are 131 registered brigades, and the number of registered firemen is 2,995. The number of enlistments among registered firemen was 893, and of these 147 were killed in action. In many brigades there is, in addition to the registered firemen, a number of "reserve members." The Chief Officer and the Deputy Chief Officer of the Board frequently inspect the brigades, and also pay them "surprise visits." They report monthly to the Board as to the efficiency of the service, and in regard to the equipment necessary to be supplied. In 1918 the chief items of the plant consisted of 5 steam engines, 12 motor tenders, 63 manual engines, 9 horse brakes, 61 apparatus carriages, 3 fire escapes, about 280 hose reels, and approximately 180,000 feet of canvas hose.

Powers of the Boards. A section of the Fire Brigades Act provides that for the purpose of extinguishing any fire the chief officers of the fire brigades may in the areas under their respective control "cause water to be shut off from any main or pipe in order to obtain

a greater pressure and supply of water for the purpose of extinguishing any fire and no person or body having the management of any water supply shall be liable to any penalty or claim by reason of any interruption of the supply of water occasioned by compliance with the provisions of this section."

Another section of the Act provides that "each Board its officers and servants any local committee its officers and servants and any brigade registered under this Act shall have the use of all water mains water plugs valves pipes vested in or belonging to the Board of Land and Works or any public or municipal corporation or local body whatsoever and of all water therein or in any well or tank free of charge for the purpose of extinguishing any fire or for the purpose of drills competitions and practice conducted under the authority of either board or any local committee."

Local councils have the right, in the interests of fire prevention, with the approval of the Governor in Council, of making, altering, or repealing by-laws for the purpose of regulating the height of all buildings erected in their own municipality, or in any part of it, and also for providing means of escape from such buildings during a fire.

The general duties of the Fire Brigades Boards are defined to be those "of taking superintending and enforcing all necessary steps for the extinguishment of fires and for the protection of life and property in case of fire and the general control of all stations and of all fire brigades shall be vested in the Boards for the metropolis and country districts respectively." The Boards may purchase or lease property for fire brigade stations, control the formation of permanent and volunteer fire brigades and schools of instruction, maintain fire alarms, and establish communication, telephonic and other.

The Melbourne and Metropolitan Board of Works is bound to keep all its pipes, to which fire plugs are affixed, charged with water, unless prevented by unusual drought or other unavoidable cause, or during necessary repairs, and shall allow all persons at all times to take and use such water for extinguishing fires. On 30th June, 1918, the Board had fixed to its 230 miles $23\frac{1}{2}$ chains of leading mains and 1,333 miles 58 chains of reticulation mains 3,564 pillar hydrants, 48 Tregear patent hydrants, and 15,112 ball fire plugs, viz., 15,091 Bateman and Moore (of which 1,803 are with spring) and 21 Fowler patent—a grand total of 18,724. Except in case of accident, repairs, or cleaning, these mains are kept constantly full of water under pressure.

The Melbourne and Metropolitan Board of Works, under the water supply provisions of its Act of 1915, must, upon the request of any municipal council within its boundaries, fix proper fire plugs in the main and other pipes belonging to the Board, at convenient distances, and at such places as the Board may consider proper and convenient for the supply of water for extinguishing any fire which may break out within its limits. The cost of fixing fire plugs and notice boards,

together with the cost of their maintenance, must be defrayed by the municipal council within whose limits the fire plug is fixed. The Board may also fix fire plugs for private owners, provided they pay the cost and maintenance.

Receipts and expenditure. Particulars of receipts and expenditure of both Fire Brigades Boards for the five years ended 30th June, 1918, are as follows :—

**REVENUE AND EXPENDITURE OF FIRE BRIGADES BOARDS:
RETURN FOR FIVE YEARS.**

	1914.	1915.	1916.	1917.	1918.
<i>Ordinary Receipts.</i>	£	£	£	£	£
Contributions — Government, Municipal, and Insurance ...	85,036	93,831	102,215	96,874	98,272
Receipts for Services ...	8,241	6,634	7,595	5,589	6,645
Interest and Sundries ...	1,476	9,993	4,202	1,606	1,950
Total ...	94,753	110,458	114,012	104,069	106,867
<i>Ordinary Expenditure.</i>					
Salaries ...	54,285	56,104	59,162	57,511	63,114
Fire Expenses ...	3,312	3,261	3,331	3,325	3,343
Administrative Charges, &c.	19,515	24,056	21,476	22,620	19,843
Plant—Purchase and Repairs ...	4,112	4,224	5,309	7,560	7,934
Interest ...	7,217	8,838	9,871	10,567	9,927
Sinking Fund ...	2,215	2,735	3,526	2,604	1,644
Firemen's Accident Fund	650	604	311	250	250
Miscellaneous ...	4,624	6,467	5,801	3,308	3,454
Total ...	95,930	106,289	108,787	107,745	109,509
<i>Loan Expenditure.</i>					
Purchase of Land and Erection of Buildings, &c.	19,373	28,808	14,711	5,209	14,721