

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chiefly for local government in country districts, and the greater part of it remained in force until 1863, when it was repealed, and replaced by the Roads Districts and Shires Act.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 1859 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 it 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.

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

Cities, towns, boroughs, and shires.

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 141 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. Male persons 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, are qualified to hold the office of councillor. 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.

Municipal electors. 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, 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. The *Voting by Post Act* 1915 may be made applicable to the elections for any municipality on the petition of the councillors.

Rateable property. All land situated in a municipal district is rateable property except the following:—Crown lands; land used exclusively for commons, mines, public worship, mechanics' institutes, public libraries, cemeteries, primary free schools, and charitable purposes; land vested in or held by or in trust for any municipality, local governing body, or commissioners under the Water Acts; and land vested in fee in the Railways Commissioners, Minister of Public Instruction, Board of Land and Works, Harbor Trust Commissioners, and Melbourne and Metropolitan Board of Works. 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 other 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. In the case of certain Crown lands, held 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, but 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.

Improvement charge. 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 the 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
 Malmesbury, 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.

Municipalities: The total number of municipalities throughout the State 1911-12 to 1915-16. in which local government was being administered at the end of the year 1915 was 193. Of these, 18 ranked as cities, 7 as towns, 27 as boroughs, and the remainder (141) 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 1915-16.

MUNICIPALITIES : 1911-12 TO 1915-16.

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—							
1911-12 ..	742,070*	194,391	154,083*	4,682*	£ 119,400,893	£ 6,804,697	£ 1,149,044
1912-13 ..	777,696	200,679	..	..	127,743,501	7,270,972	1,259,569
1913-14 ..	802,479	203,773	173,646	2,895	137,649,219	7,790,654	1,329,545
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	..
Shires—							
1911-12 ..	568,494*	168,229	118,552*	6,549*	155,677,624	7,969,963	796,472
1912-13 ..	583,909	173,271	..	..	160,128,933	8,152,473	840,080
1913-14 ..	600,431	175,637	152,654	3,748	164,268,467	8,255,505	854,483
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	..
Total—							
1911-12 ..	1,310,564*	362,620	272,635*	11,231*	275,078,517	14,774,660	1,945,516
1912-13 ..	1,361,605	373,950	..	..	287,872,434	15,423,445	2,099,649
1913-14 ..	1,402,910	379,410	326,300	6,643	301,917,686	16,046,159	2,175,028
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	..

* Census figures.

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.		
	1915-16 over 1911-12.		1914-15 over 1911-12.
	Estimated Value of Rateable Property.		Revenue from all sources.
	Total.	Annual	
Cities, Towns, and Boroughs	£ 29,834,244	£ 1,530,856	£ 228,962
Shires	14,047,355	636,546	30,994
Total Increase	43,881,599	2,167,402	259,956

The number of ratepayers returned for 1915-16 was 393,133, and the total capital value of rateable property £318,960,116, which is equivalent to about 18½ years' purchase on the basis of the annual value of £16,942,062.

Properties rated in municipalities.

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

NUMBER OF PROPERTIES RATED IN MUNICIPALITIES, 1911-12 TO 1915-16.

Year.	Properties Rated.		
	In Cities, Towns, and Boroughs.	In Shires.	Total.
1911-12	227,327	222,348	449,675
1912-13	233,939	231,904	465,843
1913-14	240,077	241,923	482,000
1914-15	247,802	249,434	497,236
1915-16	248,100	255,958	504,058

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, 1915-16, except as regards the item "revenue," which is for 1914-15:—

CITIES, TOWNS, AND BOROUGHS, 1915-16.

Name.	Estimated Population.	Number of Ratepayers.	Amount of General Rate levied in the £1.	Estimated Value of Rateable Property.		Total Revenue 1914-15.	Annual Endowment payable by the Government under Act No. 2805.
				Total.	Annual.		
CITIES.							
			s. d.	£	£	£	£
Ballarat	21,402	5,861	2 3	2,619,645	174,643	37,594	..
Bendigo	26,606	6,608	2 0	2,960,972	211,498	41,750	..
Brunswick	38,880	9,027	2 4	5,155,880	257,794	41,096	..
Camberwell	17,520	5,333	2 0	3,950,420	197,521	27,811	..
Carlfield	23,400	3,890	2 4	4,500,937	264,761	40,282	..
Gollingwood	35,760	7,370	2 0	5,321,300	266,065	30,665	..
Essendon	30,800	8,900	2 0	4,845,100	242,255	29,698	..
Fitzroy ..	35,400	7,665	1 8	6,078,618	337,701	33,573	..
Footscray	29,270	6,439	2 4	4,338,340	216,917	40,391	..
Geelong	16,000	4,400	2 2	2,809,120	140,456	25,621	..
Hawthorn	25,300	5,802	2 0	5,615,800	280,790	31,642	..
Malvern	24,200	6,968	2 3	5,750,340	287,517	38,180	..
Melbourne	107,870	28,038	1 2	48,589,440	2,176,972	456,155	..
Northcote	24,100	6,500	2 3	3,274,910	168,746	27,528	..
Prahran	48,760	11,748	1 8	7,224,900	602,075	67,080	..
Richmond	41,300	9,156	2 1	5,785,794	321,433	40,080	..
South Melbourne	48,960	10,238	2 0	9,454,900	472,745	64,621	..
St. Kilda	30,030	6,847	2 0	4,429,464	369,122	42,168	..
TOWNS.							
Ballarat East	16,200	3,871	2 0	1,273,120	85,208	14,378	..
Brighton	16,800	3,601	2 3	3,484,240	174,212	22,677	..
Coburg	13,420	6,300	2 3	1,320,840	88,056	18,083	..
Kew	13,050	3,240	2 1	1,992,180	132,812	18,807	..
Port Melbourne	15,450	2,900	2 3	1,226,250	98,100	17,000	..
Warrnambool	7,300	1,669	2 0	1,217,900	60,895	20,987	..
Williamstown	17,250	6,300	2 3	1,652,426	123,932	17,962	..

CITIES, TOWNS, AND BOROUGH—continued.

Name.	Estimated Population.	Number of Rate-payers.	Amount of General Rate levied in the £1.	Estimated Value of Rateable Property.		Total Revenue 1914-15.	Annual Endowment payable by the Government under Act No. 2805.
				Total.	Annual.		
BOROUGH.							
Ararat ..	4,500	1,060	s. d. 2 6	£ 263,130	£ 26,313	£ 9,744	£ 25
Browns and Scarsdale ..	..	..	..	..	..	322	..
Buninyong ..	..	..	..	..	..	995	..
Carlsbrook ..	..	..	..	..	..	820	..
Castlemaine ..	5,600	1,396	2 0	454,887	36,887	6,303	25
Chewton ..	925	247	1 6	37,088	4,636	820	25
Clunes ..	1,800	413	1 6	63,609	9,087	2,748	37
Creswick ..	2,165	596	1 9	83,620	8,362	2,527	37
Daylesford ..	3,821	814	2 3	284,625	18,975	3,617	25
Dunolly ..	1,170	342	1 6	60,190	6,019	1,150	25
Eaglehawk ..	7,770	1,978	2 0	405,782	33,811	7,101	25
Echuca ..	4,000	1,074	2 0	311,000	24,880	6,661	25
Geelong West ..	8,655	1,930	2 4	1,012,460	50,603	10,005	25
Hamilton ..	4,300	1,162	2 3	742,840	37,142	7,317	25
Horsham ..	3,500	789	2 6	462,400	27,200	5,481	50
Inglewood ..	1,250	330	1 6	79,320	6,610	1,670	25
Koroit ..	2,442	404	2 0	323,740	16,187	3,240	25
Majorca ..	..	..	..	..	..	387	..
Malmsbury ..	..	..	..	..	..	699	..
Maryborough ..	5,100	1,000	1 3	268,490	26,840	5,883	25
Newtown and Chillwell ..	6,900	1,553	2 0	863,380	43,419	4,838	25
Oakleigh ..	4,690	1,913	2 3	793,940	39,697	7,306	50
Portland ..	2,240	610	2 0	379,320	18,966	4,247	25
Port Fairy ..	2,000	502	2 0	229,560	11,478	4,262	25
Queenscliff ..	1,630	538	2 0	246,520	12,326	2,197	50
Raywood ..	..	..	..	..	..	337	..
Rutherglen ..	1,200	346	1 3	123,700	12,370	2,101	40
Sale ..	3,504	973	1 9	397,080	19,854	7,847	25
Sebastopol ..	2,400	524	2 0	85,620	7,135	1,506	40
Smythesdale ..	..	..	..	..	..	233	..
Stawell ..	4,500	975	2 3	197,770	19,777	7,460	25
St. Arnaud ..	4,000	990	1 9	376,460	18,823	3,272	25
Talbot ..	..	..	..	..	..	880	..
Tarnagulla ..	..	..	..	..	..	591	..
Wangaratta ..	4,030	899	1 9	593,000	29,900	4,408	25
Wonthaggi ..	3,550	982	2 0	253,360	21,530	3,175	..
Total ..	824,170	208,759	..	149,235,137	8,335,553	1,378,006	779

Shires,
1915-16.

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

SHIRES, 1915-16.

Name.	Estimated Population.	Number of Rate-payers.	Amount of General Rate levied in the £1.	Estimated Value of Rateable Property.		Total Revenue 1914-15.	Annual Endowment payable by the Government under Act No. 2805.
				Total.	Annual.		
Alberton ..	5,300	1,245	s. d. 1 3	£ 1,680,100	£ 84,005	£ 8,890	£ 750
Alexandra ..	3,000	789	1 3	909,420	45,471	4,667	375
Arapiles ..	2,713	743	1 0	835,320	41,766	2,573	152
Ararat ..	7,700	2,040	1 0	3,238,560	161,923	10,570	650
Avoca ..	4,000	1,475	1 3	810,000	40,500	3,320	243
Avon ..	2,925	749	1 0	800,020	40,001	4,445	268
Bacchus Marsh ..	3,151	705	1 6	583,464	41,676	4,041	193
Bairnsdale ..	8,475	1,955	1 0	1,990,640	99,532	11,485	720
Ballan ..	4,000	1,060	1 3	725,300	36,265	3,455	288
Ballarat ..	4,500	778	1 0	1,213,760	60,688	4,552	338
Bannockburn ..	3,075	790	1 0	1,147,240	57,362	2,463	227
Barrabool ..	2,010	475	1 4	754,240	37,712	3,219	213
Beechworth ..	6,000	1,420	1 3	374,400	31,200	7,411	273
Belfast ..	2,620	670	1 4	1,053,140	52,657	4,576	325

SHIRES—continued.

Name.	Estimated Population.	Number of Rate-payers.	Amount of General Rate levied in the £l.	Estimated Value of Rateable Property.		Total Revenue 1914-15.	Annual Endowment payable by the Government under Act No. 2805.
				Total.	Annual.		
			s. d.	£	£	£	£
Bellarine ..	4,820	1,810	1 3	1,037,720	51,886	4,143	243
Benalla ..	8,300	2,900	1 0	2,451,600	122,580	10,684	725
Berwick ..	7,400	2,500	1 6	1,624,200	81,210	8,313	500
Bet Bet ..	4,665	1,102	1 0	624,580	31,229	2,080	212
Birchip ..	1,900	515	1 0	1,041,740	52,087	2,129	200
Borong ..	6,000	1,330	1 0	2,519,180	125,959	8,780	540
Braybrook ..	2,800	2,150	1 3	980,700	49,035	4,001	160
Bright ..	5,600	1,400	1 3	712,680	35,634	4,785	375
Broadford ..	2,100	486	1 0	308,900	15,345	1,518	150
Broadmeadows ..	3,403	1,749	1 3	1,210,040	60,532	3,298	270
Bulla ..	2,600	417	1 3	611,460	30,573	3,986	175
Buln Buln ..	4,900	1,386	1 6	1,061,480	53,074	6,590	625
Bungaree ..	4,900	1,022	1 9	631,560	31,578	4,301	400
Buninyong ..	6,750	2,112	1 3	1,270,200	63,510	4,961	300
Charlton ..	3,300	514	1 0	1,056,660	52,333	3,617	275
Chiltern ..	2,650	753	1 0	223,970	22,397	2,536	115
Colac ..	14,500	3,247	1 3	5,234,200	264,210	23,612	600
Corio ..	3,000	904	1 6	1,213,560	60,678	5,212	250
Cranbourne ..	4,400	1,409	1 6	1,159,340	57,967	5,353	350
Creswick ..	5,000	1,081	1 0	1,108,320	55,416	4,341	388
Dandenong ..	6,000	4,220	2 0	1,402,320	70,116	11,067	263
Deakin ..	3,300	1,157	1 0	1,319,100	65,955	3,147	223
Dimboola ..	6,400	1,260	1 6	1,711,980	85,599	4,630	309
Donald ..	3,284	769	1 0	866,220	43,311	4,063	288
Doncaster ..	2,146	801	1 6	584,780	29,239	1,407	196
Dundas ..	3,525	1,134	1 0	2,032,460	101,623	8,109	525
Dunmunkie ..	5,050	1,014	1 0	1,716,440	85,822	5,710	600
East Loddon ..	1,700	527	1 3	920,680	46,034	3,576	275
Eltham ..	3,575	1,405	1 6	758,960	37,948	3,657	225
Epping ..	..	..	..	..	..	1,621	..
Euroa ..	5,500	1,136	1 3	1,126,220	56,311	6,126	375
FernTree Gully ..	5,000	2,350	2 0	926,400	46,320	6,615	450
Flinders ..	3,650	2,169	1 3	862,780	43,139	3,328	130
Frankston and Hastings ..	3,600	1,965	1 6	755,400	37,770	4,157	213
Gisborne ..	2,500	626	1 0	599,660	29,933	2,987	170
Glenelg ..	5,950	1,547	1 0	2,428,060	121,403	10,141	600
Glenlyon ..	5,378	1,178	1 3	326,570	32,657	1,531	227
Gordon ..	3,800	857	1 0	1,030,660	51,533	3,485	370
Goulburn ..	3,000	562	1 0	675,080	33,754	2,965	175
Grenville ..	5,995	1,675	1 3	726,795	48,453	4,413	302
Hampden ..	9,850	2,320	1 6	5,558,100	277,305	28,297	375
Healesville ..	1,960	814	2 0	325,140	16,257	2,974	225
Heidelberg ..	11,000	4,500	1 6	2,248,320	112,441	28,850	250
Hayesbury ..	5,000	1,165	1 6	1,696,380	84,819	8,740	550
Howqua ..	1,400	280	1 6	80,520	4,026	725	100
Huntly ..	3,500	1,009	1 0	906,300	45,340	3,031	200
Kara Kara ..	4,200	1,366	1 6	1,190,140	59,507	4,669	333
Karakooc ..	5,500	1,345	1 0	2,345,460	117,273	5,595	475
Keilor ..	1,025	545	1 3	420,760	21,038	1,622	50
Keerang ..	9,250	2,250	1 0	2,986,360	149,318	13,140	500
Kilmore ..	2,000	542	1 6	205,510	20,551	2,236	138
Korong ..	6,300	1,400	1 6	1,083,220	54,161	4,307	325
Kowree ..	3,800	1,321	1 0	1,355,520	84,720	5,560	435
Kyneton ..	7,820	2,132	1 0	1,389,440	69,472	8,746	367
Lancefield ..	1,000	309	1 3	261,820	13,091	1,149	76
Lawloit ..	3,300	624	1 3	545,130	36,342	3,190	198
Leigh ..	1,624	625	1 3	1,032,780	51,189	3,937	275
Lexton ..	1,900	578	1 0	365,020	40,251	3,179	200
Lilydale ..	6,650	2,466	1 9	1,365,120	68,256	8,756	400
Lowan ..	4,100	1,300	1 3	312,040	40,602	3,159	300
Maffra ..	4,250	1,095	1 0	1,446,140	72,307	7,519	500
Maldon ..	4,300	1,323	1 0	680,000	34,000	3,128	183
Mansfield ..	3,650	984	1 3	1,181,700	59,085	6,281	450
Marong ..	6,700	2,232	1 3	1,802,660	90,148	6,516	460
Melton ..	1,520	325	1 0	433,695	23,913	2,091	118
Meredith ..	..	..	..	..	..	2,017	..
Merriang ..	..	..	..	..	..	1,180	..
Metcalf ..	2,700	713	1 0	499,920	24,996	1,762	139

SHIRES—continued.

Name.	Estimated Population.	Number of Rate-payers.	Amount of General Rate levied in the £l.	Estimated Value of Rateable Property.		Total Revenue 1914-15.	Annual Endowment payable by the Government under Act No. 2805.
				Total.	Annual.		
Mildura ..	6,500	1,427	1 9	1,329,880	66,494	11,653	238
Minhamite ..	2,000	562	1 0	1,301,700	65,085	6,041	325
Mirboo ..	1,450	351	1 6	488,700	24,435	2,511	350
Moorabbin ..	15,500	6,400	2 0	3,084,160	154,208	32,131	300
Mornington ..	1,900	475	1 9	470,000	23,500	3,081	115
Mortlake ..	3,070	679	1 3	2,219,680	110,984	8,274	350
Morwell ..	3,200	867	1 3	915,860	45,793	4,752	450
Mount Alexander ..	..	..	..	..	..	943	..
Mount Franklin ..	..	..	..	..	..	1,566	..
Mount Rouse ..	2,470	700	1 0	1,571,480	78,574	5,768	200
Mulgrave ..	2,750	894	2 0	514,480	25,724	3,640	225
Melvor ..	4,200	1,141	1 0	751,820	37,591	3,195	225
Narracan ..	5,400	1,425	1 6	1,219,580	60,979	7,410	700
Newham and Woodend ..	2,500	546	1 6	425,840	21,292	2,328	150
Newstead ..	3,335	1,058	1 0	532,640	26,632	1,500	168
North Ovens ..	2,600	802	1 0	657,280	32,864	2,542	148
Numurkah ..	6,890	1,699	1 0	2,453,120	122,656	9,754	600
Nunawading ..	9,292	3,573	2 2	1,676,540	83,827	12,474	475
Omoo ..	3,200	1,405	1 6	854,480	42,724	5,923	350
Orbost ..	3,200	694	1 6	732,000	36,600	4,987	550
Oxley ..	4,670	1,063	1 0	1,084,200	54,210	4,271	375
Phillip Island and Woolamai ..	3,867	2,300	1 6	1,126,020	56,301	6,372	550
Poowong and Jeetho ..	7,500	1,595	1 3	1,829,980	91,499	10,962	1,000
Portland ..	5,300	1,926	1 0	1,729,500	86,475	7,492	500
Preston ..	7,109	2,897	2 0	1,122,000	56,100	10,850	325
Pyalong ..	1,150	350	1 0	424,000	21,200	1,867	115
Ripon ..	4,389	1,350	1 3	1,762,200	88,110	7,829	225
Rochester ..	5,051	1,539	1 0	1,260,600	63,030	5,877	250
Rodney ..	6,718	1,631	1 0	2,034,840	101,742	7,669	488
Romsey ..	2,000	478	1 3	432,360	24,118	2,256	137
Rosedale ..	4,000	1,078	1 0	1,545,200	77,260	6,632	500
Rutherglen ..	4,800	847	1 3	781,560	39,078	3,591	225
Seymour ..	4,100	1,107	1 0	826,440	41,322	4,443	425
Shepparton ..	5,300	1,700	1 0	2,117,200	105,860	9,329	425
South Barwon ..	2,860	1,312	1 9	562,630	28,134	4,132	138
South Gippsland ..	4,125	1,030	1 6	987,960	49,398	6,101	525
Springfield ..	700	183	1 3	269,400	13,470	1,277	94
Stawell ..	3,698	1,230	1 3	1,455,600	72,780	5,569	312
Strathfeldsaye ..	3,798	1,093	1 3	458,040	22,902	2,105	139
Swan Hill ..	6,800	2,600	1 1	2,186,920	109,346	7,056	275
Talbot ..	2,145	665	1 0	477,520	23,876	1,334	135
Tambo ..	3,100	1,014	1 9	673,480	33,674	4,460	447
Templestowe ..	..	..	..	..	..	1,249	..
Towong ..	6,500	1,600	1 0	1,910,060	95,503	8,810	900
Traralgon ..	3,300	822	1 6	982,920	49,146	6,215	446
Tullaroop ..	4,520	1,194	1 0	495,825	33,055	2,191	208
Tungamah ..	5,568	1,562	1 0	1,768,360	88,418	5,751	450
Upper Yarra ..	3,500	1,064	1 6	435,400	21,770	3,962	225
Violet Town ..	3,000	667	1 0	765,600	38,280	2,815	225
Walhalla ..	2,000	486	2 0	51,200	6,400	1,510	285
Walpeup ..	3,075	1,455	1 0	1,390,580	69,529	1,379	..
Wannon ..	2,700	752	1 0	1,975,960	98,798	6,801	431
Waranga ..	4,698	1,807	1 0	1,655,860	82,793	5,917	375
Warragul ..	4,000	1,165	1 7	1,173,180	58,605	5,931	900
Warrnambool ..	3,700	2,012	1 0	3,889,900	194,495	15,331	690
Warrnibee ..	4,800	3,900	1 6	1,565,460	78,273	8,213	300
Whitlessa ..	3,620	1,000	1 3	966,840	48,342	2,383	230
Wimmera ..	4,250	974	1 0	1,636,240	81,812	4,814	366
Winchelsea ..	4,325	1,366	1 3	1,469,000	73,456	6,374	425
Wodonga ..	2,100	576	1 3	497,540	24,877	2,238	144
Woorayl ..	4,555	1,228	1 9	1,333,740	66,687	9,067	1,000
Wycheproof ..	4,800	1,111	1 0	1,306,000	65,300	4,566	332
Yackandandah ..	4,004	758	1 3	757,620	37,881	3,659	466
Yarrowonga ..	3,310	802	1 0	757,060	37,863	4,861	285
Yea ..	2,520	721	1 3	877,340	43,867	4,004	400
Total ..	617,587	184,374	..	169,724,979	8,606,569	827,466	48,443

The following is the number of cities, towns, and boroughs, Ratings in municipalities, and the number of shires in which rates were struck in each of 1915. the last five years at the amounts set down in the first column:—

RATINGS IN MUNICIPALITIES, 1911-12 TO 1915-16.

Amount levied in the £1.	Number of Cities, Towns, and Boroughs.					Number of Shires.				
	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.
s. d.										
0 9	7	6	6	6	..	1	68	60	67	58
1 0	..	1	1	..	..	72	..	..	..	1
1 1	..	..	..	..	1	..	..	..	..	..
1 2	..	..	..	..	2	38	38	39	39	38
1 3	2	2	1	1	..	3	2	3	2	2
1 4	..	..	..	..	4	20	26	31	25	26
1 6	13	11	11	10	..	..	..	..	..	1
1 7	..	2	2	2	2	..	..	..	..	..
1 8	2	2	2	2	2	5	7	8	7	7
1 9	2	6	3	3	4	..	..	..	..	..
1 10	2	..	..	..	..	..	..	..	..	..
1 11	..	..	..	..	..	..	..	..	..	..
2 0	15	19	22	22	19	5	5	5	6	7
2 1	1	2	2	1	2	..	..	..	1	1
2 2	..	..	..	1	1	1	..	..	..	..
2 3	8	8	8	10	11	..	..	..	..	..
2 4	1	1	2	2	4	1	..	..	..	..
2 6	2	3	3	2	2	1	1	1	..	..
Total ..	61	61	61	61	52	146	147	147	147	141

These figures give an average rating of ls. 10d. in the £1 in cities, towns, and boroughs, and of ls. 3d. in shires. The rating in the urban districts is thus shown to be 7d. in the £1 more than in the rural districts. It will be observed that no 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.

The following return shows the proportion of properties at the different rateable values at three dates. It will be seen that there was very little alteration in the eight years intervening between the first and last dates:—

PROPORTION OF PROPERTIES AT DIFFERENT RATEABLE VALUES, 1901-2, 1905-6, AND 1909-10.

Rateable Values.	Number of Properties in every 100 Rated.								
	In Cities, Towns, and Boroughs.			In Shires.			In Victoria.		
	1901-2.	1905-6.	1909-10.	1901-2.	1905-6.	1909-10.	1901-2.	1905-6.	1909-10.
Under £25	72·6	72·9	70·1	63·1	64·6	63·9	67·8	68·8	67·0
£25 to £50	18·3	18·0	20·3	23·4	20·6	18·8	20·9	19·3	19·5
£50 " £75	4·2	4·2	4·9	5·6	6·2	7·3	4·9	5·2	6·1
£75 " £100	1·7	1·8	1·5	3·5	3·5	3·5	2·6	2·6	2·5
£100 " £200	2·0	2·0	2·0	3·1	3·6	4·6	2·5	2·8	3·3
£200 " £300	·6	·5	·5	·6	·7	1·0	·6	·6	·8
£300 " £400	·2	·2	·2	·2	·3	·3	·2	·2	·3
£400 " £500	·1	·1	·1	·1	·1	·2	·1	·1	·1
£500 and upwards	·3	·3	·4	·4	·4	·4	·4	·4	·4

Municipal
revenue and
expenditure.The ordinary revenue and expenditure for each of the
last three financial years was as follows:—REVENUE AND EXPENDITURE OF MUNICIPALITIES,
1913 TO 1915.

Sources of Revenue.	1913.	1914.	1915.
Taxation—	£	£	£
Rates	1,199,874	1,251,649	1,277,063
Licences	108,523	108,106	104,634
Dog Fees	21,483	21,807	20,168
Government Endowment and Grants ...	160,949	144,374	140,545
Contributions for Streets, Footpaths, &c. ...	59,172	63,260	52,472
Market and Weighbridge Dues	71,987	70,620	63,646
Sanitary Charges	80,194	83,982	85,971
Rents	78,016	76,803	72,133
Other Sources	324,496	354,427	388,850
Total	2,099,649	2,175,028	2,205,472
Heads of Expenditure.			
Salaries, &c.	187,180	192,066	199,872
Sanitary Work, Street Cleansing, &c. ...	203,757	206,271	225,919
Lighting	87,395	89,926	93,381
Contributions to Fire Brigades	27,101	28,361	30,277
Public Works—			
Construction	339,158	315,480	274,593
Maintenance	753,083	814,459	811,608
Formation of Private Streets, &c. ...	56,600	70,465	62,012
Redemption of Loans	70,506	80,576	92,738
Interest on Loans	224,479	239,737	252,912
Charities	16,429	18,026	19,406
Other Expenditure	126,376	151,613	174,945
Total	2,092,064	2,206,980	2,237,653

As compared with 1914, the revenue of 1915 increased by £30,444, as follows:—Rates increased by £25,414, sanitary charges by £1,989, and “other sources” by £34,423. The revenue from contributions for streets, footpaths, &c., decreased by £10,788; market and weigh-bridge dues by £6,974; Government endowment and grants by £3,829; licences by £3,472; rents by £4,670; and dog fees by £1,649. The expenditure was in excess of the amount for the previous year by £30,633. The following items showed increases:—Salaries, £7,806; sanitary work and street cleansing, £19,648; lighting, £3,455; contributions to Fire Brigades, £1,916; redemption of loans, £12,162; interest on loans, £13,175; charities, £1,380; and other expenditure, £23,332. There were decreases under the headings of public works construction, £40,887; public works maintenance, £2,851; and formation of private streets, £8,453.

Proportion of
municipal
revenue raised
from
different
sources.

Fifty-eight per cent. of municipal revenue in 1915 was derived from rates, 5 per cent. from licences of all kinds, 3 per cent. from market and weighbridge dues, 1 per cent. from dog fees, 6 per cent. from Government endowments and grants, 2 per cent. from contributions for streets, footpaths, &c., 4 per cent. from sanitary charges, 3 per cent. from rents, and 18 per cent. from all "other sources."

Salaries.

In 1915 the salaries of the municipal officers amounted to £199,872, or 9 per cent. of the entire revenue.

Local
charities.

A sum of £19,406, 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 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, 1913 TO 1915.

Assets.	1913.	1914.	1915.
Municipal Fund—	£	£	£
Uncollected Rates	108,686	120,200	147,886
Other Assets	582,451	652,530	760,685
Loan Funds—			
Sinking Funds—			
Amount at Credit	924,952	878,322	839,951
Arrears Due	438	1,327	1,326
Unexpended Balances	167,952	351,923	378,278
Property—			
Halls, Buildings, Markets, &c. ...	3,534,691	3,799,038	3,863,556
Waterworks	184,842	180,485	175,267
Gasworks	96,963	103,435	99,107
Total Assets	5,600,975	6,087,260	6,266,056
Liabilities.	1913.	1914.	1915.
Municipal Fund—	£	£	£
Due on Current Contracts	74,770	74,451	71,729
Arrears due to Sinking Funds	438	1,327	1,326
Overdue Interest	18,005	19,771	13,776
Bank Overdrafts	201,142	206,694	213,330
Other Liabilities	364,287	356,884	410,576
Loan Funds—			
Loans Outstanding	5,259,138	5,617,056	5,739,084
Due on Loan Contracts	128,051	69,181	237,765
Total Liabilities	6,045,831	6,345,364	6,687,586

Municipal
assets and
liabilities
compared.

The total assets of municipalities in 1915 amounted to £8,266,056, and the total liabilities to £6,687,586. The aggregate of the current liabilities (Municipal Fund) was £710,737, against which there were assets amounting to £908,571. The gross liability on account of loan expenditure for works completed and in progress was £5,976,849, which, after deducting sinking funds and unexpended balances, was reduced to £4,757,294. If credit were taken for the value of municipal properties in markets, halls, buildings, gasworks, electric light works, waterworks, &c. (£4,137,930), the net burden on account of loan moneys would be £619,364.

The valuation of municipal properties is probably an underestimate, 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 1906-7, 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 year 1915-16 it was reduced to £50,000 under the authority of Act No. 2805, assented to on 23rd December, 1915. 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 in the twelve months ended on the last day of September next preceding the financial year 1907-8, 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 does not come into operation until proclaimed by the Governor in Council, which proclamation may be made when the values of land made by assessors in the various parts of the State under the *Land Tax Act 1910* are available for adoption.

Any municipality may adopt the method of rating set forth in the Act, but two months before doing so must publish in the *Government Gazette* and twice in some newspaper circulating in the district a notice of its intention to take such 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.

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 so 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 has to be prepared showing receipts and expenditure relating to all operations undertaken during the previous year; also assets and liabilities.

COUNTRY ROADS BOARD.

With the object of improving the main roads of the State an Act was passed on 23rd December, 1912 (Consolidated **Country Roads Board.** 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 £800, and each of the other members a salary not exceeding £600.

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 Board 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 and maintenance, 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 with 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 1914-15, constructional work to the value of £342,681, and maintenance work involving an expenditure of £49,887, were undertaken.

A system for the continuous maintenance of all main roads is also gradually being 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.

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

Registration
of motors,
&c.

The following is a statement of receipts and expenditure during 1914-15 of the fund established under the Country Roads Act:—

COUNTRY ROADS BOARD FUND.

STATEMENT OF REVENUE AND EXPENDITURE FOR THE YEAR ENDED 30TH JUNE, 1915.

Revenue.			Expenditure.			
	£	s.	d.	£	s.	d.
Balance 1st July, 1914	—	..	77,352	11	4	
Motor Car Act No. 2702—						
Registration Fees	32,434	14	0			
Licence Fees	2,251	16	0			
Fines..	1,779	2	0			
	33,465	12	0			
Less Refunds and Costs of Administration	3,313	5	0			
			33,152	7	0	
Unused Roads and Water Frontages—						
Licence Fees	23,530	9	8			
Less Refunds and Costs of Administration	2,481	16	9			
			21,048	12	11	
Country Roads Act No. 2635—						
Registration Fees, &c., Traction Engines	578	19	0			
Less Refunds	3	8	0			
			575	16	0	
Contractors' Deposits forfeited	..	..	79	7	6	
Penalties on Contracts	..	..	1	0	0	
Sales of Plan and Material	..	..	96	15	6	
Plant Earnings	3,438	17	11			
Less Plant hired by Board	52	19	10			
			3,385	18	1	
Permanent Works—						
Contributions payable by Municipalities	..	..	2,466	12	6	
Interest Accrued on Apportionments Postponed	..	..	455	1	7	
			138,614	2	5	
						138,614 2 5
Maintenance of Main Roads			40,887	17	3	
Less Molety payable by Municipalities			24,943	18	8	
						24,943 18
Contributions to Sinking Fund	699	11	9			
Interest on Loans	2,098	15	3			
Plant Working, Oil, Fuel, and Repairs	353	8	7			
Plant Purchased	9,228	9	3			
Advertising	279	9	4			
Postage and Telegrams	291	14	11			
Printing and Stationery	718	2	7			
Office Furniture	71	17	3			
Salaries	5,933	4	6			
Wages	2,042	1	11			
Sundry Expenses	96	4	6			
Survey Instruments	61	14	6			
Travelling Expenses	674	19	9			
Plans	201	19	8			
Material for Bridges	39	18	0			
Insurance of Employees	78	12	0			
Storeyard	40	17	4			
Motor Car Expenses	481	0	7			
Horse and Vehicle Hire	181	3	4			
Camp Equipment	33	9	6			
Metal Investigation	57	13	3			
						23,714 7 9
Balance	..	..	89,955	16	1	

Loan receipts and expenditure.

The expenditure out of loan money on the construction of permanent works for the year ended 30th June, 1915, is shown below:—

COUNTRY ROADS BOARD LOAN ACCOUNT.

Receipts.			Expenditure.			
	£	s.	d.	£	s.	d.
To Balance	2,110	4	2			
„ Proceeds of Loans	273,860	0	10			
„ Advance from C.R.B. Fund	74,135	15	7			
Total	350,105	18	9			
By Permanent Works	342,680	19	0			
„ Balance	7,424	19	9			
Total	350,105	18	9			

LICENSING FUND.

The following is a statement of the receipts and expenditure of the Licensing Fund for the year ended 30th June, 1915:—

LICENSING FUND.—RECEIPTS AND EXPENDITURE,
1914-1915.

RECEIPTS.			EXPENDITURE.		
	£	s. d.		£	s. d.
Licences	89,068	0 0	Expenses of officers carrying out the Licensing Act ...	6,629	5 10
Fees	2,679	8 0	Equivalent to municipalities (see succeeding table) ...	77,170	0 0
Fines	2,246	13 6	Cost of taking poll of electors ...	140	4 10
Sale of confiscated liquor	49	2 10	Transferred to Police Superannuation Fund under section 313 of Act No. 2683	23,812	18 0
Club certificates and percentage fees ...	1,476	5 9			
Permits	1,950*	0 0			
Expenses of holding extended annual sitting of court ...	7	17 6			
Compensation assessments ...	10,275	1 1			
	£107,752	8 8		£107,752	8 8

In addition to the endowment of £100,000 the municipalities received from the Government in 1914-15 a sum of £77,170 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., 1914-15.

	£	s. d.
Paid to Cities	32,813	0 0
" Towns	4,995	0 0
" Boroughs	10,722	0 0
" Shires—		
1st Class	288	0 0
2nd "	11,849	0 0
3rd "	10,161	0 0
4th "	805	0 0
5th "	3,412	0 0
6th "	1,519	0 0
Total	£76,564	0 0
Deduct unpaid accounts of 1914-15	£278	0 0
Add payments on account of 1913-14	884	0 0
	606	0 0
Amount paid in 1914-15 ...	£77,170	0 0

MUNICIPAL LOANS.

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.

The total loan indebtedness of the municipalities at the end of their financial year was £5,739,084, due to the Government and the public respectively as follows:—

MUNICIPAL INDEBTEDNESS, 1915.

	Due to the Government.	Due to the Public.
	£	£
Cities, Towns, and Boroughs ...	175,647	4,669,133
Shires	87,425	806,879
	263,072	5,476,012
Total	5,739,084	

Municipal loan receipts and expenditure.

The succeeding statements show the loan receipts and expenditure:—

MUNICIPAL LOAN RECEIPTS AND EXPENDITURE, 1915.

	Cities, Towns, and Boroughs.	Shires.	Total.
	£	£	£
Receipts during the year	378,854	81,874	460,228
Balance unexpended from previous year ...	304,882	53,141	358,023
Expenditure during the year	336,349	103,624	439,973
Balance unexpended at the end of 1915 ...	347,387	30,891	378,278

Municipal loan expenditure 1911 to 1915.

The municipal expenditure of loan moneys during the year 1915 amounted to £439,973, of which £336,349 was spent by cities, towns, and boroughs, and £103,624 by shires.

MUNICIPAL LOAN RECEIPTS AND EXPENDITURE: RETURN FOR FIVE YEARS.

Year.	Receipts.	Expenditure.
	£	£
1911	101,918	191,530
1912	284,234	311,956
1913	276,544	407,477
1914	573,291	348,661
1915	460,228	439,973

Loans raised
by municipal-
ities,
1915.

The loan receipts for the year amounted to £460,228, of which £101,148 was obtained from the Government. The unexpended balance of loan moneys at the end of the year 1914-15 was £378,278—£347,387 to the credit of cities, towns, and boroughs, and £30,891 to the credit of shires. The following are the particulars:—

LOANS TO MUNICIPALITIES, 1915.

	Loans from—		Unexpended Balance of Loan Moneys.
	Government.	Public.	
CITIES, TOWNS, AND BOROUGHS—	£	£	£
Ararat	1,312	2,500	3,245
Ballarat	3,000	..	517
Ballarat East	2,000	..	762
Bendigo .. .. .	..	..	9,983
Brighton	3,000	..	1,052
Brunswick	14,000	10,000	16,148
Camberwell .. .. .	..	8,000	8,000
Caulfield	2,500	..	2,303
Coburg	3,960	..	..
Collingwood .. .. .	..	..	2,565
Dunolly .. .. .	..	..	66
Echuca	1,000	..	656
Essendon	1,600	..	1,249
Fitzroy .. .. .	..	..	876
Footscray .. .. .	..	..	4,398
Geelong	3,000	13,000	12,703
Geelong West	3,900	..	..
Hawthorn	750	17,500	18,143
Kew .. .. .	..	..	9,879
Malvern	204	55,000	27,700
Maryborough .. .. .	..	1,000	365
Melbourne .. .. .	..	150,000	158,570
Newtown and Chilwell	4,000	..	1,384
Northcote	4,048	9,300	790
Oakleigh	1,300	4,500	..
Port Fairy .. .. .	..	..	..
Portland .. .. .	..	2,000	1,180
Port Melbourne .. .. .	..	14,000	13,033
Prahran .. .. .	..	..	22,608
Queenscliff .. .. .	..	..	130
Richmond	7,000	16,000	16,204
South Melbourne	3,000	..	9,068
St. Arnaud	800	800	443
St. Kilda	9,000	2,500	3,347
Tarnagulla	580	..	..
Warrnambool	1,800	..	..
Williamstown	1,000	..	20
Wonthaggi .. .. .	..	..	..
Total	72,754	306,100	347,387

LOANS TO MUNICIPALITIES, 1915—continued.

SHIRES—	Loans from—		Unexpended Balance of Loan Moneys.
	Government.	Public.	
	£	£	£
Ballarat	3,300	..	2,184
Beechworth .. .. .	..	..	84
Berwick .. .. .	..	800	..
Borong .. .. .	..	..	..
Braybrook	750	..	234
Bright	1,000	..	111
Buln Buln .. .. .	..	2,000	460
Buninyong .. .. .	..	..	..
Colac .. .. .	..	..	..
Corio .. .. .	..	300	1,000
Dandenong .. .. .	..	1,730	550
Donald .. .. .	..	4,500	806
Eltham .. .. .	..	6,400	2,267
Euroa .. .. .	..	600	..
Ferntree Gully .. .. .	..	2,400	1,358
Gisborne .. .. .	..	1,850	101
Healesville .. .. .	..	..	50
Heidelberg	5,800	4,000	11,388
Huntly .. .. .	..	..	1,024
Karkaroc .. .. .	..	5,000	680
Keilor .. .. .	..	..	16
Kyneton	650	..	328
Leigh .. .. .	..	..	..
Lexton	1,000	..	445
Lillydale .. .. .	..	..	766
Mansfield .. .. .	..	200	..
Melton .. .. .	..	..	200
Moorabbin	5,500	3,300	..
Mulgrave	1,000	..	206
Numurkah .. .. .	..	..	..
Nunawading	5,519	..	..
Phillip Island and Woolamai .. .. .	..	250	374
Preston	3,000	..	1,673
Rodney .. .. .	..	3,000	..
Rutherglen .. .. .	..	..	11
South Barwon	250	..	252
Swan Hill .. .. .	..	5,000	1,002
Tungamah .. .. .	..	2,900	329
Upper Yarra .. .. .	..	250	687
Walpeup .. .. .	..	..	1,107
Warragul	500	..	240
Werribee .. .. .	..	7,000	18
Wodonga .. .. .	..	1,000	940
Wycheproof	125	..	..
Yarrawonga .. .. .	..	500	..
Total	28,394	52,980	30,891

RECEIPTS AND EXPENDITURE OF THE CITIES OF MELBOURNE, BALLARAT, AND BENDIGO.

Particulars of the receipts and expenditure for 1915 of the City of Melbourne and of the principal cities in the country—Ballarat and Bendigo—are given in the following statements:—

Of the total revenue of the City of Melbourne in 1915, about 32 per cent. was derived from rates, 37 per cent. from the sale of electric light, 11 per cent. from the rental of city property—chiefly markets, and shops—9 per cent. from market and weighbridge fees, 4 per cent. from licences, and 7 per cent. from other sources. For public works maintenance, such as roads and bridges, markets, abattoirs, &c., about 24 per cent. of the total expenditure was incurred; for interest on loans and expenses, 21 per cent.; for payments to sinking funds and repayment of loans, 7 per cent.; for electric supply—depreciation and renewals fund, &c.—24 per cent.; for lighting, 5 per cent.; for street cleansing, 9 per cent.; for salaries, allowances, and commissions, 6 per cent.; and for miscellaneous expenditure, 4 per cent.

CITY OF MELBOURNE: REVENUE AND EXPENDITURE, 1915.

Heads of Revenue.	Amount.
Rates—	£
General	126,377
Lighting	18,032
Licences—	
Publicans—Equivalent for—From Licensing Act	11,976
Abattoirs—Slaughtering Dues and Meat Supervision Fees	3,700
Drays, Hackney Carriages, Trams, and Motors	1,822
Other Licences	383
Fees under Dog Act	974
City Baths	3,987
Market and Weighbridge Fees	40,367
Lighting—Sale of Electric Current and Rent of Meters, &c.	169,381
Fines and Costs	1,735
Rents—	
Abattoirs	9,198
Markets and Shops	36,602
Town Hall Premises and Rooms	3,945

CITY OF MELBOURNE: REVENUE AND EXPENDITURE, 1915—
continued.

Heads of Revenue.						Amount.
						£
Interest on Fixed Deposits, &c.	..	..	..	..	..	11,711
Miscellaneous—						
Desiccators	..	..	..	..	..	6,112
Public Conveniences, &c.	..	..	..	..	..	4,599
Fees under Building Act	..	..	..	..	..	965
Sundries	..	..	..	..	..	4,289
Total	..	..	..	..	..	456,155
Heads of Expenditure.						Amount.
						£
Salaries (including clerical assistance, expenses of audit, collection of statistics, making valuation, and commissions paid in lieu of salaries, &c.)	..	..	..	..	..	24,752
Allowance to Lord Mayor	..	..	..	..	..	1,500
Closet Cleansing and Sanitary Works	..	..	..	..	..	134
Street Cleansing, &c.	..	..	..	..	..	38,335
Lighting—Electric and Gas	..	..	..	..	..	20,452
Fire Brigades Board—Contribution	..	..	..	..	..	7,375
Public Works—Maintenance—						
Roads and Bridges	..	..	..	..	..	56,425
Markets and Weighbridges	..	..	..	..	..	16,666
Public Buildings (including Abattoirs, Baths, &c.)	..	..	..	..	..	23,580
Parks and Planting Trees in Streets	..	..	..	..	..	11,167
Interest on Loan from the Government	..	..	..	..	..	240
" " Loans from the Public	..	..	..	..	..	88,415
Repayment of Public Loans	..	..	..	..	..	12,250
" " Government Loan	..	..	..	..	..	210
Sinking Funds—Loans from the Public	..	..	..	..	..	16,853
Electric Supply—Depreciation and Renewal Funds, &c.	..	..	..	..	..	108,162
Expenses of paying Interest on Loans	..	..	..	..	..	3,045
Interest on Bank Overdrafts	..	..	..	..	..	438
Contributions to Charitable Institutions	..	..	..	..	..	1,400
" " Infectious Diseases Hospital	..	..	..	..	..	2,567
Law Costs	..	..	..	..	..	589
Printing, Advertising, and Stationery	..	..	..	..	..	2,216
Miscellaneous—						
Rat Destruction	..	..	..	..	..	670
Gas Conferences	..	..	..	..	..	163
Fees—Dog Act	..	..	..	..	..	517
Insurance and Guarantee Premiums	..	..	..	..	..	2,499
Elections	..	..	..	..	..	149
Sundries	..	..	..	..	..	3,507
Total	..	..	..	..	..	444,276

Of the total revenue received by the City of Ballarat in 1915, about 51 per cent. was obtained from rates, 8 per cent. from licences, 12 per cent. from sanitary rates, 8 per cent. from market and weighbridge dues, 4 per cent. from rents, and 17 per cent. from all other sources. The expenditure was incurred in connexion with the following services:—43 per cent. for public works, 10 per cent. for interest, sinking funds, and repayment of loans, 14 per cent. for sanitary work, 7 per cent. for lighting, 6 per cent. for salaries and allowances, 7 per cent. for street cleaning, &c., and 13 per cent. for all other items.

CITY OF BALLARAT: REVENUE AND EXPENDITURE FOR THE YEAR ENDED 30TH SEPTEMBER, 1915.

Revenue.	Amount.	Expenditure.	Amount.
	£		£
Special Grants—From Government	713	Salaries	1,569
General Rates	19,178	Allowance to Mayor	400
Licences—From Licensing Fund... ..	2,684	Sanitary Expenses	4,767
" Other	171	Street Cleaning, &c.	2,500
Market and Weighbridge Dues	2,841	Lighting	2,471
Contributions for Formation of Private Streets, Roads, Lanes, &c.	273	Fire Brigades Board—Contribution	527
Dog Fees	218	Public Works { Construction	1,660
Pound Fees	131	Maintenance	12,926
Closet Cleansing and Sanitary Rates and Fees	4,645	Repayments of Loans—To the Public	427
Rents	1,638	Payment to Sinking Funds—Loans from the Public	274
Interest	110	Interest—Government Loan	126
Botanic Gardens	271	" Loans from the Public	2,376
Other Sources	4,721	" Bank Overdraft	229
		Contributions to Charitable Institutions	357
		Printing, Advertising, and Stationery	347
		Other Expenditure	2,780
Total	<u>£37,594</u>	Total	<u>£33,736</u>

Revenue and expenditure of City of Bendigo, 1915.

In the City of Bendigo in 1915, the following were the proportions of total revenue obtained under the different headings:—General rates, 51 per cent.; licences, 11 per cent.; sanitary rates and fees, 15 per cent.; market and weighbridge dues, 6 per cent.; rents, 7 per cent.; and other sources, 10 per cent. The proportions of the total expenditure on various services were:—Public works, construction and maintenance, 41 per cent.; sanitary expenses, 16 per cent.; interest on loans and payments to sinking funds, 7 per cent.; salaries and

allowances, 6 per cent.; lighting, 8 per cent.; street cleansing, 10 per cent.; and miscellaneous expenditure, 12 per cent.

CITY OF BENDIGO: REVENUE AND EXPENDITURE FOR THE YEAR ENDED 30TH SEPTEMBER, 1915.

Revenue.	Amount. £	Expenditure.	Amount. £
Special Grants—From Govern- ment	1,574	Salaries	1,946
General Rates	21,114	Allowance to Mayor	400
Licences—From Licensing Fund	3,132	Sanitary Expenses	6,570
Other	1,577	Street Cleansing	4,006
Market and Weighbridge Dues	2,435	Lighting	3,382
Dog Fees	169	Fire Brigades Board—Contri- bution	568
Closet Cleansing and Sani- tary Rates and Fees	6,419	Public Works { Construc- tion	2,214
Rents	2,742	{ Mainte- { nance	14,702
Interest	674	Interest on Loans from the Public	2,686
Sports Grounds	249	Interest on Bank Overdraft	318
Other Sources	1,665	Contributions to Charitable Institutions	277
		Printing, Advertising, and Stationery	386
		Other Expenditure	3,663
Total	41,750	Total	41,118

MUNICIPAL OFFICERS' FIDELITY 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 rata* 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, 1903. Guarantee policies have been applied for and granted to the whole of the municipalities in the State. 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, 1914, municipalities obtain like guarantees for about £635 per annum, and similarly reduced rates will be charged in the case of waterworks authorities and Weights and Measures Unions. The amount to the credit of the fund on 30th September, 1915 (including amount invested in purchase of debentures and accrued interest, £6,061), was £6,262. The claims paid from the inception of the fund, to 30th September, 1915, amounted to £1,227 12s. 6d.

MELBOURNE HARBOR TRUST.

The Melbourne Harbor Trust is a corporate body, established in 1876 to regulate, manage, and improve the Port of Melbourne and portions of the Yarra and Saltwater Rivers adjacent, 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, the remuneration not to exceed £250 in any year. The borrowing power of the Trust is increased from £2,000,000 to £3,000,000. The payment to the Consolidated Revenue is not to be greater than £60,000 per annum for five years from 1st January, 1913. The following are particulars of the ordinary receipts

Melbourne Harbor Trust
—receipts and
expenditure.

and ordinary and capital expenditure during each of the last five years :—

MELBOURNE HARBOR TRUST.—RECEIPTS AND EXPENDITURE: 1911 TO 1915.

Heads of Revenue and Expenditure.	1911.	1912.	1913.	1914.	1915.
REVENUE.					
Wharfage and Quayage Rates	£ 312,616	£ 314,447	£ 312,151	£ 317,543	£ 272,279
Rents	17,336	19,001	20,424	22,833	23,834
Interest	2,039	2,375	665	2,284	1,293
Other Revenue	2,210	3,792	4,299	11,194	13,092
	334,201	339,615	337,539	353,854	310,498
Less Amount paid to Consolidated Revenue ..	65,413	68,344	60,960	60,000	60,000
Total	268,788	271,271	276,579	293,854	250,498
REVENUE EXPENDITURE.					
General Management and Expenses	20,841	27,453	28,622	34,163	36,067
Flotation and Redemption of Loans Expenses ..	..	..	..	5,289	5,936
Maintenance—Dredging ..	13,267	32,559	32,014	24,758	20,298
" Harbor ..	2,266	1,159	2,107	1,698	1,754
" Wharfs ..	12,489	17,350	20,583	13,370	25,469
" Approaches ..	9,430	11,666	9,207	10,835	7,999
Interest on Loans* ..	69,366	69,264	59,494	69,981	72,858
Depreciation, Renewals Account, and Sinking Fund	35,000	17,500	29,188	30,058	30,415
Total	162,659	176,951	181,215	190,152	200,796
Surplus on Revenue Account	106,129	94,320	95,364	103,702	49,702
CAPITAL EXPENDITURE.					
Land and Property ..	..	1,119	46,007	5,534	2,060
Deepening Waterways ..	31,531	21,845	49,620	96,198	93,615
Wharfs Construction ..	14,202	85,227	115,244	87,885	120,627
Approaches Construction..	454	9,854	16,354	7,029	10,921
Other Harbor Improvements	787	2,735	2,713	1,376	4,275
Floating Plant	16,721	72,078	9,744	33,451	3,112
General Plant	5,214	102	2,910	3,364	4,107
Stock Account	9,096	14,543	44,572	32,070	25,451
Total	78,005	207,503	287,164	266,907	264,168

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

GEE LONG HARBOR TRUST.

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 £500,000 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 three years, the expenditure from ordinary revenue being distinguished from loan expenditure:—

GEE LONG HARBOR TRUST—REVENUE AND EXPENDITURE.

	1913.	1914.	1915.
	£	£	£
REVENUE.			
Wharfage and Quayage Rates	15,182	13,495	10,200
Rents, Fees, and Licences	3,423	3,750	3,776
Sparrovale Farm	5,459	7,281	6,719
Corio Freezing Works and Abattoirs	5,592	12,404	9,543
Other Revenue	1,146	1,064	606
	30,802	37,994	30,835
Less Amount paid to Consolidated Revenue	619	..	..
Total	30,183	37,994	30,835
REVENUE EXPENDITURE.			
General Management and Expenses'	5,665	6,610	5,950
Maintenance—Wharfs and Approaches	1,663	2,101	196
" Harbor	685	831	587
" Floating Plant	161	326	82
" Other	480	676	992
Interest on Loans and Sinking Fund	17,091	19,167	21,870
Sparrovale Farm	4,927	6,221	5,786
Corio Freezing Works and Abattoirs	3,789	1,934	1,576
Corio Quay Power-house .. ..	..	2,548	1,805
Miscellaneous .. ..	..	894	211
Total	34,461	41,308	39,055
CAPITAL EXPENDITURE.			
Land and Property	13,919	19,611	2,224
Deepening Waterworks	10,619	11,970	15,882
Wharfs and Approaches Construction	11,026	7,303	6,617
Other Harbor Improvements	6,440	9,480	28,983
Floating and General Plant	1,702	2,137	1,358
Stock Account	567	455	..
Miscellaneous	2,219	696	2,030
Total	46,492	51,652	57,094

THE 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 Fitzroy, Richmond, St. Kilda, and Collingwood 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 watersheds, 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, two shires, and parts of three other municipalities, or twenty-five municipalities in all, embracing a total area of 109,009 acres. The Board also exercises control (by *Gazette* notices) for water supply purposes of 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 for bulk supplies of water. The total estimated population supplied with water on 31st December, 1915, was 679,000.

Board's borrowing powers and liability on loans. The Board is authorized to borrow £9,750,000, 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, 1915, was £1,559,786, and for loans raised by the Board, £10,425,160, a portion of which has been applied in repayment of Government loans falling due. The Board was at that date empowered to borrow £154,988 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

1914-15 was 7d. in the £1 on the annual value of property served. Assessments of £17 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 £6,577,338 in 1914-15.

Water rate receipts. In 1914-15 the water rate receipts were as follows:—

	£	s.	d.
Water rate (including arrears)	167,647	5	4
Meters	159,410	18	7
Special rates	4,248	9	7
Total	331,306	13	6

Revenue and expenditure of water supply system.

The total revenue amounted to £350,549, as against £332,930 in the previous year. The cost in 1914-15 of maintenance and management was £60,547, and of interest £130,268, the total charges being £190,815, compared with a cost in 1913-14 of £56,873 for maintenance and management, and of £128,292 for interest, or a total charge of £185,165. The net profit in 1914-15 was thus £159,734, being equivalent to 3·3 per cent. of the mean capital cost, as compared with £147,765, or 3·2 per cent. in 1913-14.

Cost of the Melbourne and Metropolitan waterworks system.

The total cost of the water supply system up to 30th June, 1915, was as follows:—

Original water supply works, tank pumping station, &c.	£84,885
Yan Yean system	632,121
Maroondah system	779,090
O'Shanassy system	429,277
Service reservoirs	248,142
Large mains	1,145,253
Reticulation	1,424,967
Total	£4,743,735

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 1915-16 is £7,268,204 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 present general sewerage rate is 1s. 1d. in the £1 in the sewered area. The total annual value of property assessed for sewerage purposes and liable to the 1s. 1d. rate was, in 1914-15, £6,041,458.

The receipts from the general sewerage rate in 1914-15 amounted to £333,288.

The sewerage revenue for 1914-15 was £382,458, as against £338,459 in the previous year. The cost in 1914-15 of management, working expenses, repairs, and renewals, was £72,030, and of interest, £316,788, the total charges being £388,818, compared with a cost in 1913-14 of £67,580 for management, working expenses, repairs, and renewals, and £314,126 for interest, or a total charge of £381,706.

The deficiency in 1914-15 was £6,360, as against £43,247 for the previous year.

Cost of the Melbourne and Metropolitan sewerage system. The cost of sewerage works and house connexions up to 30th June, 1915, was £7,149,379, divided as follows:—

Farm purchase and preparation	£542,659
Outfall sewer and rising mains	423,034
Pumping station buildings and engines	243,378
Main and branch sewers	2,084,772
Street reticulation	2,114,391
Reticulation of rights-of-way	956,973
House connexions branches	380,736
Cost of house connexions chargeable to capital	403,436
<hr/>	
Cost of sewerage system	£7,149,379
Householders' debts for house connexions	119,223
River improvements	3,681
<hr/>	
Total	£7,272,283

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 Range, 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.

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 northerly from the city, 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 1915 was 20 ft. 9 in. on 7th December, and the minimum depth 12 ft. 5 in. on 9th April. Its total capacity is 6,400,000 gallons, of which 5,400,000 gallons are available for consumption. In the year ended 31st December, 1915, the total intake of the Yan Yean Reservoir was 4,265,730,000 gallons, and the total output was 1,772,927,000 gallons exclusive of loss by evaporation. The mean evaporation from the surface is about 3 feet during the year.

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 $41\frac{1}{2}$ miles of open channels, tunnels, and syphons), which is capable of delivering 28,000,000 gallons daily.

O'SHANASSY AND UPPER YARRA SYSTEM.

O'Shanassy
and
Upper Yarra
watershed.

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 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.

Storage and
service
reservoirs.

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

STORAGE RESERVOIRS.

Description.	Capacity.	Reduced Level at By-wash.
	Gallons.	
Yan Yean	6,400,000,000*	602 feet above L.W.M.
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.	
Preston No. 1	13,500,000	326·50 feet
„ 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 „ „

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Aqueducts, &c. The following is the mileage return of aqueducts, &c., mains, and reticulation pipes up to the 30th June, 1915:—

	Miles	Chs.	Miles	Chs.
YAN YEAN SYSTEM—				
Aqueducts, &c., between watersheds and Yan Yeau Reservoir	23	62		
Aqueduct—Yan Yeau Reservoir to Morang	6	33½		
Total			30	15½
MARCOONDAH SYSTEM—				
Main Marcoondah Aqueduct	41	28		
Tributary Aqueducts	6	8		
Scours at Preston Reservoir	2	52½		
Total			50	8½
O'SHANASSY SYSTEM—				
O'Shanassy Weir to Surrey Hills Reservoir	48	52½		
Scour at Surrey Hills Reservoir	0	49		
„ Olinda Reservoir	0	32		
Total			49	53½
Grand Total, Aqueducts, &c.			129	76½
Large Mains, 64-in to 12-in. diameter (inclusive)			222	42*
Reticulation under 12-in. diameter			1,253	66½
Grand Total, Aqueducts, &c., Mains, and Reticulation			1,606	25½

The average number of people supplied with water during 1915 was 674,000, and the average daily consumption was 54.25 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 1915:—

TOTAL AND DAILY AVERAGE CONSUMPTION OF WATER IN MELBOURNE AND SUBURBS DURING EACH MONTH OF THE YEAR, 1915.

Month.	Total Consumption of Water.	Daily Average Consumption of Water.
	Gallons.	Gallons.
January	1,339,503,000	43,209,774
February	1,315,389,000	46,978,179
March	1,411,056,000	45,517,935
April	993,145,000	33,104,833
May	965,233,000	31,136,548
June	894,023,000	29,800,766
July	931,911,000	30,061,645
August	939,494,000	30,306,258
September	977,328,000	32,577,600
October	998,841,000	32,220,677
November	1,192,433,000	39,747,767
December	1,388,823,000	44,800,742
Total for the year	13,347,179,000	...
Daily average for the year		36,567,614

* Exclusive of O'Shanassy Main Pipe line.

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 1915.

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.
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	38,569,666	63.83
1913 ...	628,430	140,351	126,103	41,642,926	66.27
1914 ...	651,000	147,442	131,168	40,778,344	62.64
1915 ...	674,000	150,825	138,108	36,567,614	54.25

DESCRIPTION OF SEWERAGE SYSTEM.

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.

Tenements
connected
with the
sewerage
system.

The first tenement was connected in Port Melbourne in August, 1897. On 31st December, 1915, 145,012 tenements had been gazetted as within sewerage areas, and applications received *re* 457 outside gazetted areas, making a total of 145,469 tenements. Out of this number 145,017 were provided with sanitary fittings which required to be connected with the sewerage system, and 141,139 had been connected, including the 457 outside gazetted areas. Of the remaining 3,878 tenements, 1,669 were in progress of connexion, while on 2,209 tenements connexions work had not been commenced.

The following statement shows the progress of house connexions to the 31st December, 1915 :—

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

Municipality.	No. of Tenements connected on 31st December, 1915.
Melbourne City	26,497
South Melbourne City	10,715
Prahran City	11,593
Fitzroy City	7,863
Richmond City	10,124
St. Kilda City	6,656
Collingwood City	8,300
Footscray City	6,031
Hawthorn City	6,070
Brunswick City	8,040
Essendon City	6,717
Malvern City	4,714
Caulfield City	3,635
Northcote City	4,595
Camberwell City	3,026
Brighton Town	3,403
Port Melbourne Town	2,982
Williamstown Town	3,231
Kew Town	2,501
Coburg Town	1,708
Heidelberg Shire	538
Preston Shire	844
Moorabbin Shire	1,153
Nunawading Shire	203
Total	141,139

PROGRESS REPORT OF SEWERAGE WORK.

On the 31st December, 1915, the sewerage system was practically completed in the following districts within the Board's Metropolitan area, viz. :—

Melbourne, South Melbourne, Port Melbourne, Collingwood, Fitzroy, Richmond, Prahran, St. Kilda, Moorabbin, Nunawading, and the thickly populated portions of Essendon and Malvern.

The system was nearly completed in Brighton, Hawthorn, and Footscray, and the thickly populated portions of Brunswick, Camberwell, Northcote, Preston, and Williamstown, together with the greater portions of Coburg and Kew, and, in a lesser degree, Caulfield. A fair proportion of the thickly populated portions of Heidelberg has also been completed.

During the past twelve months the work has progressed principally in Caulfield, Heidelberg Malvern, Northcote, Brunswick, and Preston, and, in a lesser degree, in Essendon, Footscray, and Hawthorn. Main and branch sewers have been extended in Brighton, Caulfield, Heidelberg, and Williamstown, to meet the requirements of the new reticulation areas.

Reticulation area contracts have been completed in Brunswick, Caulfield, Essendon, Hawthorn, Heidelberg, Malvern, Northcote, and Preston; also numerous reticulation extensions by contract and day labour have been carried out to provide for new buildings, or fresh subdivisions in various portions of the Metropolitan area, and reticulation area contracts and reticulation extensions by contract and day labour are now being carried out in Caulfield, Footscray, Hawthorn, and Malvern, Camberwell, Essendon, Prahran, South Melbourne, St. Kilda, &c.

The whole system was so far advanced that on the date mentioned above the sewage from 145,469 tenements could be collected, including those inside and outside gazetted areas, and 145,017 tenements could be connected. Of these, 141,139 tenements were connected, and work was in progress on 1,669 other premises. The total number of fittings connected with the system was as follows:—53 public conveniences and 80 public urinals, 163,116 water closets, 121,359 baths, 93,890 sinks, 91,886 sets of wash troughs, 44,182 lavatories, 15,635 stables, 9,324 urinals, 7,843 polluted areas and paved yards, 1,922 cellars, 1,047 slop hoppers, 295 latrines, and 325 dairies, there being also 452 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 $1;362\frac{2}{3}$ miles of reticulation and $150\frac{2}{3}$ miles of mains and branch sewers have been completed, making a total length of $1,513\frac{1}{3}$ miles.

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, picking up Brighton, 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, RISING MAINS, AND OUTFALL SEWER.

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-foot and one 4-foot 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 is effected by filtration and aeration through the natural soil of the Sewage Farm, which contains 11,153 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, enjoys an average rainfall of 18 inches, and 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 farm originally comprised 8,847 acres 0 roods 5½ perches of virgin unimproved land, which (together with a strip 11½ miles long, containing 168½ acres, on which the greater portion of the main outfall sewer from the pumping station to the farm is constructed) cost the Board £159,873 in 1892. By an Act of Parliament passed on 11th August, 1911, the Crown was authorised to sell to the Board at £2 per acre an area of 305 acres 3 roods 11 perches of low-lying Crown land along the foreshore of the bay adjoining the sewage farm. By another Act of Parliament, passed on 11th December, 1912, a further area of 815 acres 1 rood 8 perches of foreshore land was acquired from the Government at £2 per acre. This land, extending westerly to the mouth of the Little River, gave the Board a frontage to the bay, extending from that river to the Werribee River. An area of 252 acres 3 roods 7 perches of irrigable land adjoining the sewage farm on the south-west was acquired by private treaty at £15 per acre during 1913; 120 acres 2 roods 38 perches of private land adjoining the above area has since been acquired at £5 12s. 6d. per acre, and 811 acres 2 roods 16 perches at the north-east corner of the original farm area has been purchased from the Lands Purchase and Management Board at £25 per acre. The last two purchases were made in 1914. The acquirement of these areas has increased the size of the Sewage Farm to 11,153 acres 1 rood 5½ perches.

Before being required for sewage disposal the greater portion of the farm was leased by the Board to hay and grain growers, and proved highly productive under wheat, oats, and barley. The rents ranged up to about 30s. per acre, and for a number of years averaged over £1 per acre over the whole area let.

The method followed by the Board was to gradually resume the land from the tenants as it was required for sewage filtration purposes in order to keep pace with the progress of the sewerage house connexions work in the Metropolis. It has now all been resumed, but there is a considerable area yet to be brought under irrigation, preparation for which is carried on continuously.

The process of preparation generally followed is as follows:—After being divided by roads into rectangular blocks of 80 acres the blocks are again subdivided into paddocks of 20 acres (20 chains by 10 chains). The soil is broken up by steam ploughs, the bottom being subsoiled to a depth of about 2 ft. 6 in., and, where necessary, underdrained with agricultural pipes. The blocks are then graded into bays of about half an acre each, and commanded by distributing drains to facilitate rapid flooding—where the natural contour of the country is uneven it is found necessary to grade the blocks in small terraces; deep drainage channels are cut, the earth from same being thrown up to form embankments to carry the main supply carriers along the boundaries of these 20-acre blocks, which are at the same time securely fenced, and planted with trees for shelter and breakwinds. The main carriers and drains run parallel north to south through the farm being half a mile apart;

the sub-carriers and drains branch east and west every 10 chains. The available area of the 20-acre block is reduced to about 18 acres by the space occupied by the carriers, drains, roads, and plantations. The prepared blocks are generally sown with lucerne or perennial grasses (chiefly prairie or rye) or a mixture of lucerne and prairie grass, and in a few months are ready to be flooded with sewage. The resultant growth is very rapid, and (with the exception of a few hundred acres of lucerne reserved for hay) the irrigated lucerne and grasses are pastured with sheep, cattle, and horses; the practice being to keep the stock shifting from block to block (in flocks of about 500 sheep or an equivalent number of horses or cattle to each 18 acres) to eat the feed down in front of the sewage water. The filtered sewage is discharged into the bay by a series of main effluent channels running parallel north and south through the farm.

A large proportion of the farm lands will necessarily never be available for irrigation purposes. One hundred and twenty-nine acres have been devoted to sites for townships and manager's and workmen's cottages, of which last there are 57 on the farm. There are at present 441 acres of plantations and reserves, and the private roads and channels account for a further 456 acres; the area so utilized must of course increase as additional sections of the farm are brought under irrigation. These three items—cottage and township sites (129 acres), plantations and reserves (441 acres), and private roads and channels (456 acres)—at present account for 1,026 acres.

As each acre of properly prepared land under irrigation suffices to deal with the sewage of only 100 persons, and as there are upwards of 8,000 additional tenements connected with the sewerage system each year (in 1914-15 there were 6,940 additional tenements connected), it will be seen that it is only a matter of a few years before all the available land of the original purchase will be under intense irrigation; hence the necessity for the acquirement of the additional areas previously referred to.

The total area available for sewage disposal at 30th June, 1915, was 7,593 acres, and the average quantity of sewage delivered daily on to this area during the year 1914-15 was 29,521,144 gallons = 108½ acre-feet per day = 5½ feet per annum over the whole of the prepared part of the farm.

Of the area under irrigation, 349 acres were sown with maize for grain and 580 acres of lucerne were cut for hay, leaving 5,464 acres of grasses, and small areas under fodder crops of maize, oats, and rape (totalling 277 acres) to 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 the fattening of store sheep and cattle and the grazing of horses on agistment. The maximum stock carried in spring was 800 horses, 19,000 sheep, and 2,000 cattle, and the

minimum in winter 1,150 horses, 7,000 sheep, and 3,000 cattle, the general practice being to gradually reduce the stock from the spring maximum to the minimum in winter. The profits from transactions in sheep and cattle for the year 1914-15 were—from sheep, £5,954; from cattle, £16,099. The revenue from agistment (principally horses) was £6,851. The fat stock from the farm always excite keen competition from butchers and freezers, and command high prices.

The following are particulars of the sales for the year ended 30th June, 1915:—

	£	s.	d.
Lucerne (Chaff and Hay)	16,691	8	10
Barley (Grain and Straw)	2,348	2	3
Oaten Chaff	384	8	9
Maize	2,381	1	5
Potatoes	60	12	6
Total	21,865	13	9

Experiments are being carried on to ascertain the varieties of lucerne and maize best suited for growing on the sewage farm, and the varieties of grasses likely to flourish under the largest amount of winter irrigation.

The total capital cost of the farm for purchase and preparation was at 30th June, 1915, £542,659, and after paying interest on this sum and all charges in connexion with the disposal of the sewage the net profit resulting from the various farming operations and the receipts from rents of cottages, &c., for the year 1914-15 amounted to £7,601; the estimated population served by the sewerage system being 617,170. The profitableness of the farming and grazing operations is largely influenced by the climatic conditions of the State generally, and the net cost of sewage purification varies accordingly from year to year. The average for the five years 1910-11 to 1914-15 was 3·42d. per head per annum.

The sewage farm is supplied with water for stock and domestic purposes from the metropolitan water supply system.

Statistical details relating to the farm for the year 1914-15 or as at 30th June, 1915, are as follows:—

Total area of farm	Acres.
	11,153
Area sown with grasses	5,464
Area of settling pits under fodder crops other than lucerne or grasses—	
Maize, 164 acres; Oats, 18 acres; Rape, 95 acres	277
Total area of irrigated pasture available for grazing	5,741

			Acres.
Area under lucerne for hay	..	..	580
.. .. maize for grain	..	..	349
Total area under irrigation and intense culture			6,670
Area prepared for settling pits for winter sewage	..	..	928
Total area prepared for irrigation and sewage disposal			7,593
Area under preparation for irrigation	..	..	278
Total area prepared and under preparation for irrigation			7,871
Area under cereal crops (wheat, barley, and oats) not included above	..	..	676
Area under bare fallow	..	..	642
.. of swampy ground reserved for settling pits	..	..	938
Areas reserved for cottage sites (102 acres) and township sites (27 acres)	..	..	129
.. .. plantations and reserves	..	..	441
.. .. private roads and channels	..	..	456
Total area of farm			11,153
Lucerne hay—area cut	..	Acres	580
Total yield of lucerne hay for season	..	Tons	2,443
Maize for grain—area harvested	..	Acres	349
Average yield per acre	..	Bushels	29
Fodder crops (other than lucerne or grasses)—			Acres.
Maize	..	..	161
Oats	..	..	16
Rape	..	..	95
Total			277
Area sown with grasses	..	..	5,464
Portion of area under lucerne for hay	..	..	198
.. .. maize for grain	..	..	116
Total area available for stock			6,050
Acreage carrying sheep	..	..	2,000
.. .. cattle	..	..	3,000
.. .. horses (on agistment)	..	..	1,050
Total			6,050

Number of sheep and cattle purchased and sold for year ended 30th June, 1915—

	Horses.	Sheep.	Cattle.
Purchased	..	26,322	3,553
Sold	..	22,084	4,052
Stock carried—			
Maximum in spring—	800	19,000	2,000
Minimum in winter—	1,150	7,000	3,000
Profits from transactions in live-stock—			
Sheep	£5,954
Cattle	16,099
Total	£22,053
Agistment fees (principally horses)	£6,851
			No.
Men employed by Board on farm	169
Population resident on farm over 21 years of age	141
" " " under 21 years of age	150
Total	294
Houses on farm owned by Board	57
Horses owned by Board—			
Working horses—Draught	78
" " Light	23
Brood mares	21
Foals	18
Total	140

Progress of Construction Works.

	Acres.
Area steam ploughed for irrigation	7,218
" " " for plantations and reserves	188
" mole-drained by steam plant	1,145
" underdrained with pipes	619

	Miles.	Chains.
Length of main carrier embankments—cement lined	8	10
" " " " unlined ..	22	30
	<hr/>	
Total ..	30	40
	<hr/>	
Length of subsidiary carriers—		
C.I. flumes ..	15	62
C.C. flumes ..	4	72
Embankments unlined ..	38	66
	<hr/>	
Total ..	59	40
	<hr/>	
Length of main drains ..		
" subsidiary drains ..	31	35
" pipe drains ..	88	70
" agricultural pipes ..	27	1
	<hr/>	
Total ..	32	49
	<hr/>	
Length of water pipes laid—		
6-inch ..	2	25
" 4-inch ..	11	7
" 3-inch ..	0	7
" 2-inch ..	14	7
" 1½-inch ..	2	33
" 1-inch ..	3	53
	<hr/>	
Total ..	33	52
	<hr/>	
Length of roads formed ..		
" fencing erected ..	33	14
" " wire netted ..	314	23
	<hr/>	
	6	23
	<hr/>	
	No.	
Trees planted ..	210,000	
Average quantity of sewage delivered daily on to farm for year 1914-15 = in gallons ..		
= 108½ acre-feet per day = 5½ feet per annum	29,521,144	
over the total area available for sewage disposal, viz., 7,593 acres.		
Total capital cost of farm to 30th June, 1915 ..	£542,659	
	<hr/>	
Profit on sewage farm for year 1914-15 ..	£7,601	
Population served by sewerage system ...	617,170	

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 Brigades 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. The area vested in the Melbourne and Metropolitan Board of Works is included in this area, but the Metropolitan Fire Brigades Board has jurisdiction over portions of the shires of Wyndham, Braybrook, Keilor, Broadmeadows, Heidelberg, Templestowe, Nunawading, Mulgrave, and Moorabbin, within the 10-mile radius, which are not vested in the Melbourne and Metropolitan Board of Works. The Metropolitan Fire District includes the greater portion of the shire of Moorabbin, and it extends in a southerly direction as far as Moorialloc, that township being included.

The Metropolitan Fire 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.

Powers of the Board.

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, and control the formation of permanent and volunteer fire brigades, and schools of instruction, the maintenance of fire alarms, and the establishment of 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, 1915, the Board had fixed to its 222 miles 42 chains of leading mains and 1,253 miles 66½ chains of reticulation mains, 2,894 pillar hydrants, 121 Tregear patent hydrants, and 14,761 ball fire plugs, viz., 14,739 Bateman and Moore (of which 1,441 are with spring) and 22 Fowler patent—a grand total of 17,776. 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 the *Consolidated 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.

The Metropolitan Fire Brigades Board on 31st December, 1915, had, under its control the following:—Forty-six stations, 241 members of permanent staff, 35 members of special service staff, 7 members of clerical staff, 18 men engaged in the workshops, 130 partially paid firemen, 10 steam fire engines, 4 gasolene engines, 3 petrol motor fire engines, 1 motor salvage waggon and chemical engine combined, 2 motor combination appliances, 21 motor hose waggons, 2 motor cycles, 1 motor lorry, 1 Chief Officer's motor car, 34 horse hose reels, 28 hand hose reels, 8 extension ladders and fire escapes, 6 Pompier ladders, 10 exercise and supply carts, 1 salvage van, 47 horses, 118,071 feet of hose, 42 hand pumps, 6 smoke helmets, 2 smoke jackets, and 278 fire alarm circuits having 862 street fire-alarms, of which 840

Gift of the
Metropolitan
Fire Brigade.

contained telephones, and the remaining 22 were fire alarms only. There were also 507 auxiliary boxes and 19 automatic systems in public and other buildings, 136 direct telephone lines, 58 of which were acting as fire alarms to buildings, and 29 circuits to sprinkler installations, with 59 sprinkler call transmitting instruments. The total length of wire in use outside stations for fire alarms and telephones is about 689 miles.

During 1915 the cost of maintenance of the Metropolitan Fire Brigade was £39,819, 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 83d. in the £1 over an area wherein the property is valued at £7,365,249, and that of the insurance companies is equal to £5 1s. 8d. for every £100 of premiums on insured property. The premiums received in the Melbourne Fire District in 1914 amounted to £502,763, and the total of the payments made by the companies in 1915 for the maintenance of the fire brigade system was £25,565.

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 1915 was £16,073, which was obtained from the following sources:—(a) Government, £5,266; (b) municipalities, £5,433; (c) insurance companies, £5,338; and (d) other sources, £36. The expenditure for the year amounted to £16,470. There are 108 municipal councils and 66 insurance companies included in the operation of the Act. The premiums received by the insurance companies in country districts during the year 1914 amounted to £205,636, and the total of their contributions in 1915 for the up-keep of the brigades was £5,266. The total value of rateable property assessed within the Board's district in 1915 was £1,812,542. All brigades under the control of the Board are volunteer brigades, but in the large towns a few permanent stationkeepers and watchmen are also employed. There are 128 registered brigades, and one more is about to be registered. The number of registered firemen is 2,708, but in many brigades there is, in addition to the registered firemen, a number of "reserve members." The Chief Officer of the Board frequently inspects the brigades, and also pays them "surprise visits." He reports monthly to the Board as to the efficiency of the service, and in regard to the equipment necessary to be supplied. In 1915 the chief items of the plant consisted of 5 steam engines, 1 motor engine, 63 manual engines, 11 horse brakes, 61 apparatus carriages, 3 fire escapes, about 280 hose reels, and approximately 180,000 feet of canvas hose.

Particulars of receipts and expenditure of both Boards during the five years ended 30th June, 1915, are as follows:—

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

	1911.	1912.	1913.	1914.	1915.
	£	£	£	£	£ .
<i>Ordinary Receipts.</i>					
Contributions — Government, Municipal, and Insurance ...	69,837	78,206	82,540	85,036	93,831
Receipts for Services ...	3,106	5,172	5,941	8,241	6,634
Interest and Sundries ...	3,039	2,109	3,725	1,261	9,993
Total ...	75,982	85,487	92,206	94,538	110,458
<i>Ordinary Expenditure.</i>					
Salaries ...	40,939	48,798	50,426	54,285	56,104
Fire Expenses ...	3,297	3,183	3,233	3,312	3,261
Administrative Charges, &c.	13,874	16,517	15,584	19,515	24,056
Plant—Purchase and Repairs ...	4,185	7,176	4,592	4,112	4,224
Interest ...	5,806	5,995	5,928	7,217	8,833
Sinking Fund ...	2,000	2,000	2,430	2,215	2,735
Firemen's Accident Fund	500	550	550	650	604
Miscellaneous ...	6,456	6,243	4,580	4,624	6,467
Total ...	77,057	90,462	87,323	95,930	106,289
<i>Loan Expenditure.</i>					
Purchase of Land and Erection of Buildings, &c.	72	417	14,796	19,373	28,808