

MUNICIPAL STATISTICS.

Early
legislation.

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chiefly for local government in country districts, and the greater part of it remained in force until 1863, when it was repealed, and replaced by the Roads Districts and Shires Act.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

The laws relating to local government were amended and consolidated by the *Local Government Act* 1915. The councils of municipalities have power to levy rates, which, together with licence-fees, subsidies received from the State, market dues, rents, and sanitary charges, form their chief sources of income. Their principal functions are to make, maintain, and control streets, roads, bridges, ferries, culverts, sewers, drains, water-courses, and jetties within their respective boundaries; and, under proper by-laws, to control the traffic and regulate the markets, pounds, abattoirs, baths, and places of recreation; also to make arrangements for sewerage, lighting, water supply, and carrying on of noxious trades, and to act as local Boards of Health.

**Cities, towns,
boroughs, and
shires.**

Any portion of Victoria, not exceeding in area nine square miles, and having no point in such area distant more than six miles from any other point therein, which contains at least 500 inhabitant householders, and rateable property capable of yielding £300 per annum upon a rate of one shilling in the pound, may be constituted a borough. Any borough having during the preceding financial year a revenue of £10,000 may be declared a town; or, having a revenue of £20,000, may be declared a city. Any portion of Victoria containing rateable property capable of yielding £1,500 on a rate of one shilling in the pound may be constituted a shire. There are 56 cities, towns, and boroughs in Victoria, and 139 shires. The Governor in Council may unite any two or more boroughs which form one contiguous area so as to form one borough, notwithstanding that the area would exceed the limits above specified; may unite any number of municipalities, one of which is a shire, which form one contiguous area, so as to form one shire, and may sever any portion of a municipal district and attach it to another, annex an outlying district, subdivide any municipal district into any number of divisions not exceeding eight, alter the boundaries, or abolish the subdivisions.

Townships.

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

**Municipal
councillors.**

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

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 by the 10th June, is entitled to be enrolled as a voter. Plurality of votes is allowed upon the following scale :—

IN CITIES, TOWNS, AND BOROUGHES.

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

IN SHIRES.

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

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

Rateable property. All land situated in a municipal district is rateable property except the following :—Crown lands unoccupied or used for public purposes; lands dedicated by the trustees of agricultural colleges as sites for agricultural colleges or experimental farms; land used exclusively for commons, mines, public worship, mechanics' institutes, public libraries, cemeteries, primary free schools, technical schools subsidized by Government, and charitable purposes; land vested in or held by or in trust for any municipality or council thereof, or any authority under the *Water Act* 1915; and land vested in fee in the Railways Commissioners, Minister of Public Instruction, Board of Land and Works, Melbourne and Geelong Harbor Trusts Commissioners, Melbourne and Metropolitan Board of Works, and Geelong Waterworks and Sewerage Trust. The expression "land" includes, of course, all buildings and improvements thereon. For the purpose of rating the valuation of property is computed at its net annual value, that is to say, at the rent at which the same might reasonably be expected to let from year to year, free of all usual tenants' rates and taxes, and deducting therefrom the probable annual average cost of insurance and expenses (if any) necessary to maintain the property in a state to command such rent; provided that no rateable property shall be computed as of an

annual value of less than £5 per centum upon the fair capital value of the fee-simple thereof. A council may, however, with the consent of the ratepayers at a poll to be held, if demanded, levy rates on the basis of the unimproved capital value of the land. In the case of certain Crown lands occupied (other than under lease) for pastoral purposes only the provision that the annual value must not be less than 5 per cent. on the capital value does not apply, and the occupier is rated on the actual net annual value of the property.

Rates 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 must not exceed in any one year 3s. 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 3s. 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 separate 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 a sinking fund for a loan raised on the security of such rate.

A comparatively small number of municipalities in the State have from the year 1920-21 levied the general rate on the unimproved capital value of land instead of on the net annual value of property. Authority for this change was given by an Act passed on 3rd February, 1914, and amended on 6th January, and 14th September, 1920. These Acts were consolidated and amended by the *Rating on Unimproved Values Act 1922* (No. 3199) which was assented to on 28th November, 1922.

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

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

Building Permits Issued. According to building permits issued by the cities in the metropolitan area during 1927, Camberwell occupied first place as regards the number and value of private dwellings erected, in the year. Caulfield, Coburg, and Preston were ahead of other municipalities in the same period. The value of shops and factories, &c., erected was greater in Melbourne City than in any other municipality, followed by Richmond and Footscray. The following statement shows the particulars for metropolitan municipalities:—

**BUILDING PERMITS ISSUED FOR NEW BUILDINGS IN
GREATER MELBOURNE DURING THE YEAR 1927.**

Name of City.				Dwellings.		Other Buildings.	
				Number.	Value.	Number.	Value.
					£		£
Box Hill	..	..	..	199	158,312	106	19,040
Brighton	..	..	..	272	267,461	159	18,322
Brunswick	..	..	..	330	262,044	383	87,901
Camberwell	..	..	..	762	767,754	391	65,156
Caulfield	..	..	..	533	521,684	65	120,844
Coburg	..	..	..	615	503,010	343	52,590
Collingwood	..	..	..	27	17,461	98	82,989
Essendon	..	..	..	305	236,000	272	17,140
Fitzroy	..	..	..	13	10,838	37	39,517
Footscray	..	..	..	453	265,847	72	123,853
Hawthorn	..	..	..	135	166,393	153	19,805
Kew	..	..	..	239	270,057	184	23,849
Malvern	..	..	..	256	315,053	395	27,009
Melbourne	..	..	..	48	56,677	78	690,953
Northcote	..	..	..	203	134,198	202	22,607
Oakleigh	..	..	..	168	117,621	71	11,777
Port Melbourne	..	..	..	44	29,319	54	2,380
Prahran	..	..	..	96	204,785	210	93,115
Preston	..	..	..	651	421,162	471	31,752
Richmond	..	..	..	27	19,775	60	134,010
Sandringham	..	..	..	239	219,561	113	24,642
South Melbourne	..	..	..	18	37,200	104	103,380
St. Kilda	..	..	..	206	300,518	256	57,962
Williamstown	..	..	..	217	178,450	19	21,300
Total	..	..	..	6,056	5,481,180	4,296	1,891,893

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.

A portion of the Shire of Nunawading was excised on 26th May, 1925, and a new shire entitled Shire of **New Municipalities.** Blackburn and Mitcham was constituted. The remaining portion of the Shire of Nunawading was proclaimed a borough with the name of Box Hill Borough on 15th December, 1925, which was subsequently constituted a city on 28th April, 1927. A portion of the Shire of Shepparton was excised on 31st May, 1927, and a new borough entitled Borough of Shepparton created.

The Phillip Island Riding of the Shire of Phillip Island and Woolamai was excised on the 18th September, 1928, and proclaimed a separate shire entitled Shire of Phillip Island, and the name of the original shire was altered to Woolamai on the same date.

Municipalities: The total number of municipalities throughout the State in which local government was being administered at the end of the year 1927 was 195. Of these, 29 ranked as cities, 4 as towns, 23 as boroughs, and the remainder (139) as shires. The following is a statement 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 1927-28 :—

MUNICIPALITIES: 1923-24 TO 1927-28.

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—							
1923-24 ..	998,950	279,292	225,458	911	£ 264,693,364	£ 14,964,345	£ 3,354,343
1924-25 ..	1,031,670	291,910	233,400	1,689	288,230,793	16,388,842	3,768,378
1925-26 ..	1,072,510	314,386	244,164	2,061	314,333,446	17,778,661	4,191,063
1926-27 ..	1,106,010	319,568	252,611	1,917	339,221,826	19,020,312	4,435,764
1927-28 ..	1,144,380	326,412	260,648	2,460	362,432,238	20,220,172	..
Shires—							
1923-24 ..	627,420	213,317	144,845	1,714	235,274,597	11,816,074	1,646,410
1924-25 ..	635,340	221,345	148,717	1,887	250,480,405	12,588,177	1,815,707
1925-26 ..	632,550	246,161	148,546	1,703	257,350,043	12,933,459	1,921,483
1926-27 ..	643,950	254,403	151,568	1,730	267,100,576	13,426,424	2,086,507
1927-28 ..	647,860	265,265	153,537	1,852	274,314,322	13,780,660	..
Total—							
1923-24 ..	1,626,370	492,609	370,303	2,625	499,967,961	26,780,419	5,000,753
1924-25 ..	1,667,010	513,255	382,117	3,576	538,711,198	28,977,019	5,679,080
1925-26 ..	1,705,060	560,547	392,710	3,764	571,683,489	30,712,120	6,112,546
1926-27 ..	1,749,960	573,971	404,179	3,647	606,322,402	32,446,736	6,582,271
1927-28 ..	1,792,240	591,677	414,185	4,312	636,746,560	34,000,862	..

Increases in
value of
rateable
properties and
municipal
revenue.

It will be observed from the figures given below 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.		
				1927-28 over 1923-24.		1926-27 over 1923-24.
				Estimated Value of Rateable Property.		Revenue from all sources.
				Total.	Annual	
				£	£	£
Cities, Towns. and Boroughs	...	...	...	97,738,874	5,255,827	1,141,421
Shires	...	...	...	39,039,725	1,964,616	440,097
Total Increase	...	...	...	136,778,599	7,220,443	1,581,518

The number of ratepayers returned for 1927-28 was 591,677, and the total capital value of rateable property £636,746,560, which is equivalent to about 18·7 years' purchase on the basis of the annual value of £34,000,862.

Unimproved
Value of
Rateable
Property.

The estimated unimproved or ground value of rateable property in 1927-28 in cities, towns, and boroughs was £181,216,119, and in shires £182,876,214. Improvements are estimated at one-half in the case of urban and one-third in the case of rural properties, which are about the proportions that are found to prevail in New Zealand according to the valuations of the Valuer-General. A table showing the estimated annual, capital, and unimproved values in urban and rural districts in Victoria for a series of years appears on page 397 of the *Victorian Year-Book* for 1916-17.

Properties
rated in
municipalities.

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

NUMBER OF PROPERTIES RATED IN MUNICIPALITIES, 1923-24 TO 1927-28.

Year.	Properties Rated.		
	In Cities, Towns, and Boroughs.	In Shires.	Total.
1923-24	332,794	300,168	632,962
1924-25	343,462	310,250	653,712
1925-26	366,494	339,421	705,915
1926-27	374,095	353,632	727,727
1927-28	384,298	379,812	764,110

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 £ in each city, town, and borough in Victoria. The information relates to the municipal year, 1927-28, except as regards the items "revenue" and "annual endowment," the amounts of which are those for the year 1926-27 :—

CITIES, TOWNS, AND BOROUGHS, 1927-28.

Name.	Esti- mated Popula- tion.	Number of Rate- payers.	Amount of General Rate levied in the £.	Estimated Value of Rateable Property.		Total Revenue, 1926-27.	Annual Endow- ment pay- able by the Govern- ment.
				Total.	Annual.		
GREATER MELBOURNE.			<i>s. d.</i>	<i>£</i>	<i>£</i>	<i>£</i>	<i>£</i>
Box Hill	12,410	7,642	2 8	4,710,820	235,541	64,605	..
Brighton	27,900	6,493	2 6	9,817,660	490,883	81,200	..
Brunswick	55,780	11,500	*0 7	10,353,647	629,403	189,965	..
Camberwell	42,590	18,000	*0 4½	14,627,539	816,342	175,088	..
Caulfield	67,660	18,755	*0 4½	18,328,184	1,023,076	159,807	..
Coburg	36,380	11,250	*0 5	7,812,820	390,641	131,922	..
Collingwood	33,400	7,632	2 6	10,198,760	509,938	65,950	..
Essendon	42,110	12,300	*0 5	10,490,392	646,040	104,288	..
Fitzroy	33,600	7,607	2 1	7,994,955	532,997	66,955	..
Footscray	46,600	13,275	2 6	12,028,020	601,401	176,566	..
Hawthorn	32,580	8,195	2 6	11,695,040	584,752	96,661	..
Kew	25,200	6,397	2 6	5,920,845	394,723	74,067	..
Malvern	44,800	12,615	2 6	17,013,360	850,668	152,274	..
Melbourne	103,700	32,790	2 1	94,306,540	4,715,327	1,352,048	..
Northcote	40,810	10,663	2 6	9,476,220	473,811	130,371	..
Oakleigh	10,200	3,968	*0 5	2,685,363	181,625	31,098	..
Port Melbourne	13,300	2,904	2 3	2,219,425	177,554	48,162	..
Prahran	52,370	13,302	1 11	14,044,000	1,172,000	131,548	..
Preston	26,910	16,000	2 6	6,946,100	347,305	103,830	..
Richmond	43,300	9,115	2 5	10,594,188	588,566	85,354	..
Sandringham	21,470	9,021	*0 3½	4,946,009	320,320	61,732	..
South Melbourne	47,500	10,041	2 6	17,272,660	863,633	139,010	..
St. Kilda	42,100	10,414	2 0	12,532,848	1,044,404	118,497	..
Williamstown	24,020	5,200	2 6	4,676,120	233,806	133,556	..
Total	926,690	265,079	..	320,711,515	17,824,756	3,874,554	..

* Levied on unimproved value of land.

CITIES, TOWNS, AND BOROUGHES, 1927-28—continued.

Name.	Esti- mated Popula- tion.	Number of Rate- payers.	Amount of General Rate levied in the £.	Estimated Value of Rateable Property.		Total. Revenue 1926-27.	Annual Endow- ment pay- able by the Govern- ment.
				Total.	Annual.		
OUTSIDE MELBOURNE.							
CITIES.			s. d.	£	£	£	£
Ballarat ..	37,900	9,017	2 9	5,702,670	380,178	85,418	..
Bendigo ..	26,400	6,426	2 9	4,124,670	274,978	64,891	..
Geelong ..	16,500	4,785	2 9	5,769,240	288,462	57,336	..
Mordialloc ..	9,110	4,354	*0 3½	2,648,798	139,010	45,282	..
Warrnambool ..	8,070	1,727	2 10	1,661,869	97,757	46,381	..
TOWNS.							
Geelong West ..	13,000	3,700	2 9	2,563,620	128,181	22,129	..
Mildura ..	6,000	1,233	3 0	1,351,440	67,572	32,665	..
Newtown and Chilwell ..	9,000	2,373	*0 5½	2,298,478	116,802	17,044	..
Sale ..	4,000	1,055	2 3	1,030,360	51,518	14,645	..
BOROUGHES.							
Ararat ..	5,100½	1,020	2 3	700,000	35,000	21,172	25
Carrum ..	7,000	4,919	*0 3½	2,075,729	103,623	28,753	50
Castlemaine ..	5,500	1,700	3 0	592,862	47,429	11,777	25
Clunes ..	1,230	472	1 6	77,063	11,009	3,317	38
Creswick ..	1,750	546	1 9	78,020	7,802	2,599	37
Daylesford ..	3,200	790	2 6	544,440	27,222	6,090	25
Eaglehawk ..	4,720	1,362	2 6	331,320	22,088	8,985	25
Echuca ..	4,050	900	3 0	872,000	43,600	10,240	25
Hamilton ..	5,230	1,190	2 6	1,305,580	65,279	12,946	25
Horsham ..	4,650	1,500	2 9	1,034,940	68,996	14,546	50
Inglewood ..	1,100	290	2 0	87,000	7,250	3,218	25
Koroit ..	1,860	418	2 6	452,900	22,645	6,032	25
Maryborough ..	4,900	1,236	2 9	399,750	39,975	17,108	25
Port Fairy ..	2,070	510	2 8	424,960	21,248	7,332	25
Portland ..	2,740	1,144	*0 4½	588,334	31,144	9,065	25
Queenscliffe ..	3,100	711	2 9	478,300	23,915	5,979	50
Ringwood ..	3,600	2,084	2 0	1,205,700	60,285	15,819	50
Sebastopol ..	1,910	479	2 9	192,400	9,620	2,408	40
Shepparton ..	5,000	1,200	3 0	1,200,000	60,000	..	..
St. Arnaud ..	3,350	862	3 0	297,460	29,746	9,745	25
Stawell ..	4,700	1,020	2 9	310,820	31,082	19,120	25
Wangaratta ..	4,000	995	3 0	840,000	42,000	9,607	25
Wonthaggi ..	6,900	1,315	3 0	480,000	40,000	9,561	46
Total ..	1,144,380	326,412	..	362,432,238	20,220,172	4,495,764	711

* Levied on unimproved value of land.

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

SHIRES, 1927-28.

Name.	Estimated Population.	Number of Rate-payers.	Amount of General Rate levied in the £.	Estimated Value of Rateable Property.		Total Revenue 1926-27.	Annual Endowment payable by the Government.
				Total.	Annual.		
			s. d.	£	£	£	£
Alberton ..	5,750	1,326	2 0	2,111,200	105,560	14,361	697
Alexandra ..	3,580	900	2 0	1,250,000	62,500	9,409	389
Arapiles ..	2,450	640	1 6	1,486,780	74,339	5,637	153
Ararat ..	6,060	1,700	1 6	4,318,700	215,935	24,462	653
Avoca ..	3,380	1,190	2 0	931,260	46,563	5,946	239
Avon ..	2,610	800	1 9	1,532,920	76,646	8,145	301
Bacchus Marsh ..	3,440	862	2 0	1,452,000	72,600	11,959	204
Bairnsdale ..	8,160	2,430	1 6	2,980,000	149,000	16,764	705
Balla ..	3,230	1,224	2 0	1,133,920	56,696	7,319	286
Ballarat ..	4,000	1,196	2 0	1,310,660	65,533	8,403	286
Bannockburn ..	2,700	735	2 0	1,060,400	53,020	6,460	203
Barrabool ..	1,970	870	2 0	1,192,260	59,613	7,197	212
Beechworth ..	4,540	1,388	2 0	607,136	37,946	12,154	271
Belfast ..	2,630	682	2 0	1,635,760	81,788	9,389	323
Bellarine ..	4,230	2,021	1 9	1,316,000	67,300	6,873	240
Benalla ..	8,200	3,236	1 9	3,355,700	167,785	24,461	715
Berwick ..	9,600	3,660	2 0	2,977,820	148,891	22,242	495
Bet Bet ..	3,570	1,240	1 6	839,420	41,971	5,278	236
Birchip ..	2,090	586	1 6	1,305,340	65,267	5,967	199
Blackburn and Mitcham ..	6,300	3,255	2 9	2,003,520	100,176	28,079	329
Borung ..	5,200	1,500	1 6	2,821,560	141,078	15,132	492
Braybrook ..	7,000	9,200	1 9	3,374,660	168,733	27,493	129
Bright ..	4,100	1,335	2 0	725,380	36,269	7,108	370
Broadford ..	1,420	469	1 9	515,600	25,780	3,706	148
Broadmeadows ..	4,950	13,851	1 9	2,370,700	118,535	18,964	251
Bulla ..	2,670	442	1 9	880,940	44,047	5,170	172
Bulu Bulu ..	6,060	1,600	2 7	1,447,860	72,393	15,622	616
Bungaree ..	3,210	976	2 0	817,800	40,890	6,030	395
Buninyong ..	5,160	1,649	1 9	1,461,800	73,090	7,168	296
Charlton ..	2,700	810	1 9	1,941,400	97,070	9,604	271
Chiltern ..	2,200	710	1 9	690,600	34,530	3,924	216
Cohuna ..	3,200	705	1 6	1,181,800	59,090	18,318	114
Colac ..	13,050	3,020	1 7	6,704,800	335,240	52,442	138
Corio ..	3,390	5,126	2 6	2,548,960	127,448	27,274	241
Cranbourne ..	6,100	1,950	2 6	2,455,100	122,755	18,239	342
Creswick ..	3,080	816	1 6	1,136,400	56,820	5,349	383
Dandenong ..	9,500	9,100	*0 2½	2,747,120	137,356	28,205	209
Deakin ..	4,320	1,210	1 6	1,996,460	99,823	10,072	219
Dimboola ..	6,600	1,512	1 6	3,469,200	173,460	23,672	305
Donald ..	3,660	1,050	1 9	2,221,560	111,078	17,745	323
Doncaster and Templestowe ..	3,000	1,548	2 3	1,140,000	57,000	9,353	194
Dundas ..	3,680	1,355	2 0	2,977,120	148,856	16,769	517
Dunmunkle ..	4,870	1,160	1 6	3,197,820	159,891	22,874	612
East Loddon ..	1,850	460	1 6	1,567,660	78,383	6,431	271
Eltham ..	4,500	3,180	2 6	1,209,400	60,470	14,750	208
Euroa ..	4,050	1,140	2 0	1,434,740	71,737	11,887	321
Ferntree Gully ..	9,300	6,450	3 0	3,020,000	151,000	30,246	444
Flinders ..	5,100	5,500	1 9	1,709,420	85,471	18,210	128
Frankston and Hastings ..	5,700	4,438	3 0	2,051,300	102,565	58,021	213
Gisborne ..	2,460	1,077	2 0	813,380	40,669	7,057	168
Glenelg ..	5,600	1,800	2 0	3,109,660	155,483	19,998	591
Glenlyon ..	3,650	1,466	1 9	884,600	44,230	4,877	223
Gordon ..	3,400	900	1 6	1,906,000	95,300	9,182	365
Goulburn ..	2,270	634	1 6	1,131,280	56,564	6,934	172
Grenville ..	3,320	1,205	1 9	954,435	63,629	7,409	299
Hampden ..	11,350	2,367	2 6	6,545,060	327,253	53,894	370
Healesville ..	3,790	1,130	3 0	896,260	44,813	14,110	382
Heidelberg ..	25,000	16,000	2 0	7,664,520	383,226	132,412	245
Heytesbury ..	4,570	1,089	2 4	2,235,080	111,754	14,022	530

* Levied on unimproved value of land.

SHIRES, 1927-28—continued.

Name.	Estimated Population.	Number of Rate-payers.	Amount of General Rate levied in the £.	Estimated Value of Rateable Property.		Total. Revenue 1926-27.	Annual Endowment payable by the Government.
				Total.	Annual.		
			s. d.	£	£	£	£
Huntly ..	3,200	1,278	1 6	1,268,320	63,416	6,190	198
Kara Kara ..	3,160	1,065	1 9	2,181,080	109,054	12,323	316
Karkaroc ..	5,800	1,300	1 6	4,605,240	230,262	23,362	469
Kellor ..	2,000	6,500	1 9	1,375,600	68,780	10,279	49
Kerang ..	9,000	2,278	1 6	3,803,380	190,169	32,389	380
Kilmore ..	1,810	549	2 0	412,170	27,478	5,643	136
Korong ..	5,030	1,566	1 9	2,038,820	101,941	12,334	321
Korumburra ..	7,700	2,055	2 0	2,721,960	136,098	19,787	982
Kowree ..	3,500	1,218	1 9	1,971,940	98,597	11,447	430
Kyneton ..	8,160	2,185	2 0	1,772,760	88,638	21,792	365
Lawloit ..	2,340	656	1 9	1,278,660	85,244	10,824	196
Leigh ..	1,570	497	1 6	1,251,640	62,582	5,916	272
Lexton ..	1,680	587	1 9	992,900	49,645	5,976	198
Lillydale ..	9,600	3,750	2 6	2,998,300	149,915	27,490	345
Lowan ..	3,850	1,300	2 3	2,080,000	104,000	19,036	296
Maffra ..	6,120	1,220	1 6	3,150,800	157,540	15,110	483
Maldon ..	3,100	1,065	1 6	703,300	35,165	4,028	185
Mansfield ..	4,110	1,340	2 6	1,708,860	85,443	14,049	542
Marong ..	5,940	1,400	2 9	2,030,360	101,518	12,805	454
Melton ..	1,480	460	1 0	1,095,980	54,799	5,695	145
Metcalfe ..	2,760	1,000	1 9	883,540	44,177	5,195	162
Mildura ..	9,100	3,000	2 0	2,895,580	144,779	24,765	184
Minhamite ..	2,030	782	2 0	1,862,220	93,111	12,818	321
Mirboo ..	1,650	425	3 0	676,760	33,838	7,787	355
Moorabbin ..	13,480	10,147	2 6	4,835,300	241,765	42,842	296
Mornington ..	3,150	2,379	2 0	1,350,520	67,526	15,351	114
Mortlake ..	3,100	830	1 9	3,588,340	179,417	16,822	346
Morwell ..	4,020	1,037	2 9	1,290,930	64,549	11,215	435
Mount Rouse ..	2,810	750	1 9	2,082,300	104,115	10,547	198
Mulgrave ..	4,300	3,993	2 6	1,570,640	78,532	14,416	221
Melvior ..	3,550	900	1 6	1,203,200	60,160	7,306	221
Narracan ..	7,140	1,450	2 0	2,189,280	109,464	13,863	920
Newham and Woodend ..	2,300	690	2 0	651,260	32,563	7,354	148
Newstead and Mt. Alexander ..	2,700	856	1 9	541,680	27,084	3,079	166
Numurkah ..	5,950	1,267	1 6	3,165,020	158,251	19,393	591
Omeo ..	2,530	763	2 3	973,000	48,650	7,666	836
Orbost ..	4,070	1,056	2 6	1,315,840	65,792	10,464	472
Otway ..	4,380	1,050	3 0	895,040	44,752	8,747	485
Oxley ..	4,000	1,032	2 0	1,418,760	70,938	9,609	370
Phillip Island and Woolamai ..	5,600	1,510	2 6	1,651,720	82,586	14,109	545
Portland ..	5,490	2,100	1 6	2,313,240	115,662	11,824	494
Pyalong ..	770	276	1 6	585,320	29,266	2,379	113
Ripon ..	3,650	1,100	1 9	2,482,480	124,124	15,327	221
Rochester ..	6,470	1,686	1 6	2,976,020	148,801	15,604	246
Rodney ..	8,300	1,970	2 3	3,906,280	195,314	24,357	432
Romsey ..	3,310	850	2 0	1,254,500	62,725	8,100	320
Rosedale ..	4,640	1,240	*0 1½	3,200,000	160,000	11,674	537
Rutherglen ..	4,130	1,130	1 9	1,146,620	57,331	6,467	257
Seymour ..	3,900	1,092	2 0	1,104,880	55,244	13,236	420
Shepparton ..	3,320	750	1 6	1,870,460	93,523	22,965	469
South Barwon ..	3,820	2,478	2 9	1,420,000	71,000	11,770	137
South Gippsland ..	4,810	1,142	2 9	1,399,200	69,960	10,375	517
Stawell ..	3,500	1,290	2 0	2,284,980	114,249	13,647	311
Strathfieldsaye ..	3,460	1,009	2 0	543,860	27,193	3,429	137
Swan Hill ..	12,800	4,055	1 6	5,602,200	280,110	39,234	272
Talbot ..	1,460	548	1 4	578,880	28,944	3,408	134
Tambo ..	4,350	1,087	2 9	1,507,600	75,380	10,581	513
Towong ..	4,520	1,205	2 0	1,813,320	90,666	14,830	578
Traralgon ..	3,500	744	2 3	1,346,000	67,300	13,251	441
Tullaroop ..	3,690	874	1 9	678,905	45,127	5,663	206
Tungamah ..	4,710	1,396	1 6	3,204,740	160,237	15,187	444
Upper Murray ..	2,350	516	2 0	1,071,420	53,571	6,329	307
Upper Yarra ..	5,800	1,431	2 6	919,200	45,960	8,054	221
Violet Town ..	1,970	757	1 9	1,078,220	53,911	6,465	221
Walpeup ..	5,800	1,695	1 6	2,564,000	128,200	14,726	300

* Levied on unimproved value of land.

SHIRES, 1927-28—continued.

Name.	Estimated Population.	Number of Rate-payers.	Amount of General Rate levied in the £.	Estimated Value of Rateable Property.		Total Revenue 1926-27.	Annual Endowment payable by the Government.
				Total.	Annual.		
			s. d.	£	£	£	£
Wangaratta ..	2,520	902	1 6	968,500	48,425	4,787	146
Wannon ..	3,250	1,050	1 6	2,544,500	127,225	12,803	426
Waranga ..	5,750	1,658	2 0	2,013,260	100,663	14,778	370
Warragul ..	5,200	1,289	2 6	1,946,660	97,333	18,486	885
Warnambool ..	8,500	1,784	1 9	4,749,040	237,452	31,401	678
Werribee ..	6,250	9,000	2 3	2,908,460	145,423	19,088	296
Whittlesea ..	3,610	1,045	2 0	1,520,000	76,000	10,112	226
Wimmera ..	4,340	1,070	1 6	3,936,000	196,800	15,156	360
Winchelsea ..	4,400	1,650	2 6	1,914,400	95,720	16,824	413
Wodonga ..	2,910	727	2 2	767,620	38,381	5,262	169
Woorail ..	6,310	1,800	2 9	2,193,580	109,679	23,561	1,030
Wycheproof ..	4,400	1,310	1 6	3,103,200	155,160	18,618	328
Yackandandah ..	3,020	954	2 0	1,217,560	60,878	8,493	337
Yarrawonga ..	2,750	800	1 6	1,220,020	61,001	7,790	281
Yea ..	2,840	698	* 0 2½	1,189,916	61,511	10,365	371
Total ..	647,860	265,265	..	274,314,322	13,780,690	2,086,507	47,716

* Levied on unimproved value of land.

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 the last five years at the amounts set forth in the first column :—

RATINGS IN MUNICIPALITIES, 1923-24 TO 1927-28.

Amount levied in the £.	Number of Cities, Towns, and Boroughs.					Number of Shires.				
	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.	1923-24.	1924-25.	1925-26.	1926-27.	1927-28.
s. d.										
0 6 ..	..	..	..	..	..	..	..	..	..	..
1 0 ..	..	..	..	..	..	5	4	3	1	..
1 1 ..	..	..	..	..	..	..	..	..	..	..
1 2 ..	..	..	..	..	..	..	..	..	..	..
1 3 ..	..	..	..	..	..	3	1	..	..	..
1 4 ..	..	..	..	..	..	2	2	1	1	1
1 6 ..	..	..	1	1	1	58	47	45	40	35
1 7 ..	..	..	..	..	..	2	1	1	1	1
1 8 ..	..	..	..	..	..	..	..	..	..	..
1 9 ..	3	2	1	1	1	18	24	27	25	30
1 10 ..	..	..	..	..	..	1	..	..	..	..
1 11 ..	..	1	1	1	..	..	..	..	..	..
2 0 ..	4	3	4	4	3	27	31	30	39	37
2 1 ..	..	1	..	..	2	1	..	..	..	..
2 2 ..	..	..	1	1	..	..	..	..	..	1
2 3 ..	8	6	6	3	3	6	7	7	7	6
2 4 ..	..	..	..	..	..	1	1	..	..	1
2 5 ..	1	..	..	1	1	..	..	..	..	..
2 6 ..	18	15	18	14	14	11	13	14	13	12
2 7 ..	1	4	2	..	..	..	..	..	..	1
2 8 ..	2	1	1	4	2	..	..	..	..	..
2 9 ..	5	7	6	8	9	..	1	4	4	6
2 10 ..	..	..	1	..	1	..	..	..	..	..
3 0 ..	2	3	4	6	7	1	4	4	5	5
Total ..	44	44	46	44	45	136	136	136	136	136

The particulars in this table for the five years ended 1927-28 are exclusive of those for the municipalities which levied the rate for the years mentioned on the unimproved value of land.

The figures for the quinquennial period give an average rating of 2s. 5½d. in the £ in cities, towns, and boroughs, and of 1s. 10¼d. in shires. The average rating in the urban districts is thus shown to be 7½d. in the £ more than in the rural districts. It will be observed that no municipality imposed during the last five years the minimum rate allowed by law, viz., 6d., and that the maximum rate of 3s. in the £ was imposed by only twelve municipalities.

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

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

REVENUE AND EXPENDITURE OF MUNICIPALITIES, 1925 TO 1927.

Sources of Revenue.	1925.	1926.	1927.
Taxation —	£	£	£
Rates	3,152,570	3,380,749	3,615,998
Licences	162,430	161,682	162,863
Dog Fees	27,836	28,131	29,332
Government Endowment and Grants ...	88,335	147,014	163,384
Contributions for Streets, Footpaths, &c. ...	264,996	320,582	352,733
Market and Weighbridge Dues	111,548	114,773	125,845
Sanitary Charges	185,091	202,360	206,351
Rents	133,623	137,941	138,977
Electric Light and Gas Works	986,101	1,057,596	1,163,851
Other Sources	466,550	561,718	622,937
Total	5,579,080	6,112,546	6,582,271
Heads of Expenditure.			
Salaries, &c.	381,815	407,009	437,921
Sanitary Work, Street Cleansing, &c. ...	457,885	454,107	474,125
Lighting	144,064	153,292	160,118
Contributions to Fire Brigades	58,250	64,508	69,058
Public Works—			
Construction	479,690	454,247	488,881
Maintenance	2,104,402	2,195,045	2,169,302
Formation of Private Streets, &c.	426,689	446,961	548,131
Electric Light and Gas Works	715,498	757,456	808,630
Redemption of Loans	211,152	229,913	262,110
Interest on Loans	457,669	513,222	589,101
Charities	30,187	35,469	34,096
Other Expenditure	433,154	581,493	724,142
Total	5,900,455	6,292,722	6,765,615

As compared with 1926, the revenue of 1927 increased by £469,725, as follows:—Rates increased by £235,249, sanitary charges by £3,991, rents by £1,036, dog fees by £1,201, electric light and gas works by

£106,255, contributions for streets, footpaths, &c., by £32,151, market and weighbridge dues by £11,072, licences by £1,181; Government endowment and grants by £16,370, and "other sources" by £61,219. The expenditure was in excess of the amount for the previous year by £472,893. Most of the items showed increases as under:—Salaries, £30,912; lighting, £6,826; contributions to fire brigades boards, £4,550; public works construction, £34,634; electric light and gas works, £51,174; formation of private streets, &c., £101,170; redemption of loans, £32,197; interest on loans, £75,879; sanitary work and street cleansing £20,018; and other expenditure, £142,649. Public works maintenance decreased by £25,743 and charities by £1,373.

Proportion of municipal revenue raised from different sources. Fifty-five per cent. of municipal revenue in 1927 was derived from rates, 18 per cent. from electric light and gas works, 3 per cent. from licences of all kinds, 2 per cent. from market and weighbridge dues, $\frac{1}{2}$ per cent. from dog fees, 2 per cent. from Government endowments and grants, 5 per cent. from contributions for streets, footpaths, &c., 3 per cent. from sanitary charges, 2 per cent. from rents, and $9\frac{1}{2}$ per cent. from all other sources.

Salaries. In 1927 the salaries of the municipal officers amounted to £437,921, or nearly 7 per cent. of the entire revenue.

Local charities. A sum of £34,096, or a little more than $\frac{1}{2}$ per cent. of the revenue, was devoted to the local charities; the greater part of this disbursement was in aid of hospitals, benevolent asylums and associations, and orphan asylums.

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

MUNICIPAL ASSETS AND LIABILITIES, 1925 TO 1927.

Assets.	1925.	1926.	1927.
Municipal Fund—	£	£	£
Uncollected Rates	282,495	286,338	333,086
Other Assets	1,390,966	1,049,190	1,292,763
Loan Funds—			
Sinking Funds—			
Amount at Credit	496,522	545,712	610,002
Arrears Due	724	210	209
Unexpended Balances	495,980	587,609	635,771
Property—			
Halls, Buildings, Markets, &c. ...	4,254,220	4,782,140	5,311,830
Waterworks	258,890	340,920	360,180
Gasworks	176,330	185,690	193,540
Electric Light Works... ..	1,966,810	2,060,140	2,232,760
Total Assets	9,322,937	9,837,949	10,970,141

MUNICIPAL ASSETS AND LIABILITIES, 1925 TO 1927—*continued.*

Liabilities.	1925.	1926.	1927.
Municipal Fund—	£	£	£
Due on Current Contracts	144,677	145,051	106,048
Arrears due to Sinking Funds	724	210	209
Overdue Interest	8,440	9,475	22,477
Bank Overdrafts	1,106,264	902,820	1,144,516
Other Liabilities	990,177	819,356	819,651
Loan Funds—			
Loans Outstanding	8,146,750	9,076,787	10,096,696
Due on Loan Contracts	256,794	359,496	252,331
Total Liabilities	10,653,826	11,313,195	12,441,928

Municipal assets and liabilities compared. The total of the assets of municipalities in 1927 was £10,970,141 and of the liabilities £12,441,928. The aggregate of the current liabilities (Municipal Fund) was £2,092,901, against which there were assets amounting to £1,625,849.

The gross liability on account of loan expenditure for works completed and in progress was £10,349,027, which, after deducting sinking funds and unexpended balances, was reduced to £9,103,045. If credit were taken for the value of municipal properties in markets, halls, buildings, gasworks, electric light works, water works, &c. (£8,098,310), the net burden on account of loan moneys would be £1,004,735.

The valuation of municipal properties is probably an under-estimate, as the particulars furnished under this heading were not in every instance 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 the endowment was increased to £75,000 for the year 1906–07, and from 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 the sum payable was reduced to £50,000 for the year ended 30th June, 1916, and was maintained at that amount in the twelve succeeding years under the authority of Acts passed periodically. The endowment is payable in March of each year, and no city or town is entitled to receive any part of it. The distribution amongst the boroughs and shires is as set out in the Second Schedule to the

Municipal Endowment Act 1907, No. 2129, but this has been altered from time to time by adjustments rendered necessary owing to various changes in municipalities.

The allocation of amounts paid to municipalities in 1926-27 is shown on pages 161 to 164 *ante*.

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. It did not come into operation until 1st October, 1915. Amendments were made by Act No. 3045, passed on 6th January, 1920, and Act No. 3060, passed on 14th September, 1920. The law on the subject has been consolidated and amended by the *Rating on Unimproved Values Act* 1922 (No. 3199), which was assented to on 28th November, 1922.

The Act may be adopted in any municipality by determination of the council or by a proposal for the adoption thereof being carried at a poll of the ratepayers. If the council, by special order, passes a resolution that it proposes to adopt this method of rating, a provisional valuation of all rateable properties within the municipal district (except "special rateable properties") computed at the unimproved capital value, the improved capital value and the net annual value thereof must be made. To the valuation must be added a statement setting forth the amount in the pound of the general rate last made on the basis of the net annual value of rateable properties, and the amount in the pound of a rate on the basis of the unimproved capital value of rateable properties which in its total revenue producing capacity corresponds with the amount in the pound of the said general rate. With respect to each rateable property a statement must be prepared showing the sum which would be leviable on the basis of the net annual value thereof under a general rate of the same amount in the pound as the general rate last made, and the sum which would be leviable on the basis of the unimproved capital value of the property. Notice must be given to each occupier or owner or in a newspaper circulating in the district that such valuation has been made and a statement containing particulars must be prepared, and must be open for inspection at the municipal offices during office hours by any ratepayer free of charge. After this has been done the municipality must publish in the *Government Gazette*, and in a newspaper generally circulating in the district, a notice that the council proposes to adopt the Act. If, within one month after the date of the last publication of the notice, 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 such votes forms at least one-third of the number of votes for which voters are inscribed 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 again be submitted to the ratepayers for three years.

Special rateable 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 rateable property, and other land, works or other rateable properties declared to be "special rateable properties" pursuant to the Act are not rateable on unimproved values.

New valuations showing the unimproved capital value, capital improved value, and net annual value are to be made at least once in every five years.

"Unimproved capital value" of land is defined as the sum which the land, if it were held for an estate in fee simple unencumbered by any mortgage, might in ordinary circumstances be expected to realize at the time of valuation if offered for sale on such reasonable terms and conditions as a *bonâ fide* seller might be expected to require and assuming that the improvements (if any) had not been made.

"Capital improved value" of land means the sum which the land, if it were held for an estate in fee simple unencumbered by any mortgage, might be expected to realize at the time of valuation if offered for sale on such reasonable terms and conditions as a *bonâ fide* seller might in ordinary circumstances be expected to require.

"Improvements" in land means all work actually done or material used thereon by the expenditure of capital or labour on or for the benefit of the land, but in so far only as the effect of such work done or material used is to increase the value of the land, and the benefit thereof is unexhausted at the time of the valuation; it does not include work done or material used on or for the benefit of land by the Crown, or by any statutory public body, unless such work has been paid for by the contribution of the owner or occupier for that purpose.

"Net annual value" of rateable property means the net annual value thereof computed as provided in the Local Government Acts, and (in the case of the city of Melbourne and the city of Geelong) includes the annual value thereof computed as provided in any Act or enactment relating to the city of Melbourne or the city of Geelong.

The number of municipalities which levied the general rate on the new system was 8 for 1920-21, 10 for 1921-22, 12 for each of the years 1922-23 to 1925-26 inclusive, 14 for 1926-27, and 14 for 1927-28.

The following table gives for these municipalities particulars of the capital value of land (improved and unimproved), the annual improved value, the rating, &c., for the year 1927-28 :-

RATING ON UNIMPROVED VALUES, 1927-28.

Municipality.	Capital Value.	Capital Unimproved Value.	Annual Improved Value.	Amount of Rate in the £ on Unimproved Value.	Equivalent Rate on Annual Improved Value.	Amount Collectible in 1928 on Unimproved Value.	Percentage Unimproved to Capital Value.
	£	£	£	s. d.	s. d.	£	
CITIES, TOWNS and BOROUGHES.							
<i>Greater Melbourne.</i>							
Brunswick City ..	10,353,647	3,004,128	629,403	0 7	2 9½	87,620	29·01
Camberwell City ..	14,627,539	5,356,492	816,342	0 4½	2 5½	100,434	36·62
Caulfield City ..	18,328,184	5,967,028	1,023,076	0 4½	2 2½	111,882	32·56
Coburg City ..	7,812,820	2,482,466	390,641	0 5	2 7½	51,718	31·77
Essendon City ..	10,490,392	3,442,597	646,040	0 5	2 2¾	71,721	32·82
Oakleigh City ..	2,685,363	1,061,302	181,625	0 5	2 5	22,110	39·52
Sandringham City ..	4,946,009	2,869,476	320,320	0 3½	2 7¼	41,846	58·02
<i>Outside Greater Melbourne.</i>							
Carrum Borough ..	2,075,729	1,052,848	103,623	0 3¼*	2 9	14,257	50·72
Mordialloc City ..	2,648,798	1,288,367	139,010	0 3½†	2 8	18,789	48·64
Newtown and Chilwell Town ..	2,298,478	723,849	116,802	0 5¼	2 8½	15,834	31·49
Portland Borough ..	588,334	238,175	31,144	0 4¼	2 8½	4,218	40·48
SHIRES.							
Dandenong ..	2,747,120	1,321,450	137,356	0 2½‡	2 0	13,765	48·10
Rosedale ..	3,200,000	1,752,600	160,000	0 1½§	1 1¾	9,128	54·77
Yea ..	1,189,916	602,392	61,511	0 2½||	2 0½	6,275	50·62

NOTE.—In addition, there is an extra rate in the £ of—

* ¼d. in the Centre and North Wards,

† ¼d. in the Mordialloc and Mentone Wards,

‡ 1½d. in the Centre Riding, and of ½d. in the South Riding.

§ 3d. in the township of Rosedale.

|| 4d. in the township of Yea.

HOUSING AND RECLAMATION ACTS 1920, 1922, AND 1927.

ERECTION OF DWELLING HOUSES BY STATE SAVINGS BANK COMMISSIONERS.

An Act (No. 3088) to provide dwellings for eligible persons, and for the reclamation and improvement of insanitary, low-lying or over-crowded areas was passed by the State Parliament on 24th December, 1920. Amending Acts (No. 3249 and 3545) were passed on 21st December, 1922, and 21st December, 1927, respectively. An eligible person is defined as one who is not the owner of a dwelling-house and is not in receipt of an income of more than £400 a year. Power is given to the Commissioners of the State Savings Bank to acquire land and to erect dwelling-houses thereon, the capital cost to the Commissioners of any dwelling-house, together with the land on which it is erected, not to exceed £1,000 for houses of wood, or £1,300 for brick, stone or concrete dwellings.

A person who purchases a dwelling-house from the Commissioners is permitted to occupy it as a weekly tenant, and is required to pay a rental at such rate per cent. per annum on the capital cost, or (where the Commissioners have required the payment of a deposit) on the difference between the capital cost and the amount of deposit paid, as may be determined by the Commissioners, also to pay all rates and taxes, and the cost of insurance, repairs and maintenance. An appropriation is made from the rent to cover interest on the amount of the capital cost outstanding, and the remainder of the rent is allotted towards payment of such capital cost.

When the purchaser has paid 20 per cent. of the purchase money and the amount due by him up to that time by way of instalments he may, if he so desires, execute a mortgage of the property in favour of the Commissioners. Payments in respect of purchase money are to be made in equal weekly, fortnightly, or monthly instalments in accordance with the contract of sale or mortgage entered into, but the period of repayment is not to exceed 28 years where the dwelling house is of wood or 35 years where such dwelling house is of brick, stone, or concrete.

The number of contracts entered into for the erection of dwellings has been—

For year ended 30th June, 1923	..	..	813
do. do. 1924	..	..	806
do. do. 1925	..	..	549
do. do. 1926	..	..	594
do. do. 1927	..	..	758
do. do. 1928	..	..	1,249

The position at 30th June, 1928, with regard to the erection of houses was—

Houses completed	4,860
In course of erection	524
Approved sites for which tenders had not then been accepted	367

Total number of applications approved	5,751
---------------------------------------	-------

ERECTION OF DWELLING HOUSES BY MUNICIPALITIES.

Part XXVI. of the *Local Government Act* 1915 dealing with the erection of "workers' dwellings" by municipalities is repealed, but power is given to a municipality to purchase or take compulsorily any land in the municipal district regarded as suitable for the erection of dwelling-houses thereon for persons of small means. Power is also given to erect or purchase dwelling-houses at a cost not exceeding £800 including the cost of the land. These may be sold by the municipality to eligible persons under conditions similar to those existing in the case of the sales by the Savings Bank Commissioners referred to above. They may also be let upon such terms as the council of the municipality thinks fit. Sub-letting by tenants is not permitted.

For the purposes of any housing scheme the municipal council may, out of the municipal fund, advance any money required, if necessary increase the amount of the general rate to an extent not exceeding 6d. in the pound notwithstanding any statutory limit for such rate, and may borrow £100,000 over and above the amount authorized under the *Local Government Act* or any other Act. Once in every year a balance-sheet and statement of accounts must be prepared, setting out full particulars of the operations of the scheme.

Power is given to municipalities to borrow money for the reclamation and improvement of insanitary, low-lying or over-crowded areas. The amount that may be borrowed for this purpose by any one municipality is not to exceed £50,000. The cities of Melbourne and Geelong are separately dealt with as regards borrowing powers. The amounts that may be borrowed by them are as follows:—For housing schemes—City of Melbourne, £300,000; City of Geelong, £100,000: for reclamation schemes—City of Melbourne, £300,000; City of Geelong, £50,000.

When the council of any municipality desires to carry out any housing scheme or reclamation scheme it must prepare a general plan or description of the scheme, showing the character and extent of the works proposed, the mode in which it is proposed to obtain funds for the scheme, an estimate of the cost, the area affected, and a description of the betterment area (if any), *i.e.*, the area within which it is proposed to impose a betterment charge. Power is given to a

council to impose a betterment charge amounting to one-half of the amount of the enhanced market value derived by lands from reclamation after making all fair and proper deductions for rates, taxes, assessments and impositions on or in respect of such lands according to such enhanced value.

WAR SERVICE HOMES.

Under agreement with the Commonwealth of Australia, the State Savings Bank Commissioners are building dwellings for returned soldiers and other eligible persons under the War Service Homes Acts, the funds being provided by the Commonwealth Government. The dwellings erected or being erected under this agreement are based on the same plans as are used in accordance with the Housing Act, and, as nearly as possible, they are built under the same conditions.

Up to 30th June, 1928, the Bank had entered into contracts for the erection of 3,467 War Service Homes buildings, of which 3,311 have been completed. In addition, the Bank had made advances to 258 soldiers for purchase of existing dwellings or repayment of existing mortgages, and to 28 eligible applicants to enable them to build homes according to their own plans.

COUNTRY ROADS BOARD.

Country Roads Board. With the object of improving the main roads of the State an Act was passed on 23rd December, 1912 (Consolidated Act No. 2635), which empowered the Governor in Council to appoint a board to consist of three members. The chairman is paid an annual salary not exceeding £1,550, and each of the other members a salary not exceeding £1,200 (Act No. 3495).

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 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 was 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 were made a charge upon the Consolidated Revenue of the State. The money so raised was to be placed to the credit of an account called "The Country Roads Board Loan Account," which has been debited with all payments made by the Treasurer towards the cost of permanent works. Additional sums were made available as follow :—£500,000 under Act No. 3057 passed in September, 1920, which sum was to be raised in the two financial years 1920-21 and 1921-22 at the rate of £250,000 per annum; £500,000 under Act No. 3137 for expenditure during the two financial years commencing 1st July, 1922; £1,000,000 (by Act No. 3334) over a period of three years from 1st July, 1923, and £822,000 over five years commencing on 1st July, 1925. 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 paid by the Treasury, but subsequently half the amount expended is refunded by the municipalities affected. In the case of expenditure on permanent works an annual payment to the Treasurer of six per cent. ($4\frac{1}{2}$ per cent. interest and the balance sinking fund) on the amount due by each municipality is provided for, thus liquidating the liability in $31\frac{1}{2}$ years. A special rate not to exceed 6d. in the pound on the net annual value of rateable property, to meet the cost of permanent works, may be levied in any ward or riding of a municipality as the council may direct. In the event of default of payment by a municipality the board may levy a rate to meet the amount owing. By Act No. 3057 it is provided that, where any amount remains unpaid on the 1st day of July in any year, such amount, together with interest at 6 per cent. per annum, may be deducted by the Treasurer from any moneys that become payable by him to the municipality out of the Consolidated Revenue or on account of any fees, fines, penalties or the equivalent of licence fees.

All fees and fines paid under the Motor Car Act, all fees paid on the registration or renewal of the registration of traction engines, and all fees received by the Crown under the *Unused Roads and Water Frontages Act 1903* (incorporated in the *Local Government Act 1915*), all fees and fines paid under the *Motor Omnibus (Urban and Country) Act 1927* in respect of country motor omnibuses are credited to the Country Roads Board Fund for maintenance of main roads and state highways and other purposes; in addition thereto a sum of £10,000 is appropriated from Consolidated Revenue each year.

The amount of the municipal contribution towards the cost of maintenance works is one-third of the amount expended; the contribution is due on the first day of January following the financial year in which

the expenditure is incurred and it must be paid before the succeeding first day of July. Power is given by Act No. 2986 to reduce contributions in respect of maintenance where the Board is satisfied that the cost of maintenance is excessive and that such cost is due to motor traffic not of local origin, or to timber traffic.

During the year 1926-27 constructional work to the value of £398,859, and maintenance work involving an expenditure of £938,658 were undertaken.

The loan expenditure to 30th June, 1927, for permanent works was £3,863,463, and for developmental roads £4,352,329.

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

Registration of motor cars, motor cycles, and traction engines are as follows:—The rates of fees on registration or renewal of registration of motor cars, motor cycles, and traction engines are as follows:—The owners of motor cycles must pay an annual registration fee of £1; of trailers, fore-cars or side cars, 10s.; of traction engines, £6 to £15 according to weight; of motor cars, 3s. to 8s. 9d. for each power-weight unit according to the class of motor car; and of trailers attached to motor cars, £1 to £4 according to weight and type.

Realizing that a scheme for dealing with the principal arteries of traffic only, in a young country that needed development, was inadequate, the Government in 1918 provided a further sum of £500,000 for a system of subsidiary or developmental roads (Act No. 2944). This sum was subsequently increased to £2,000,000 by Act No. 2985, and by additional amounts not exceeding £2,000,000, £1,000,000 and £1,475,000 by Acts Nos. 3255, 3334 and 3,425 respectively. Under this scheme the State provides the whole of the money and makes provision out of State funds for liquidating the liability. The municipalities are required, however, to bear a proportion of the interest on the outlay during the period of the loan, and to maintain the roads when constructed. An amount of £224 was expended under Acts No. 2944 and 2985, and of £576,487 under Act No. 3255, during the year ended 30th June, 1927.

The *Highways and Vehicles Act* 1924, No. 3379, which came into operation on the 1st January, 1925, provides for the declaration of State Highways, the full cost of maintenance of which is charged against the moneys to the credit of the Country Roads Board Fund.

The following is a statement of the receipts and payments during 1926-27 of the fund established under the Country Roads Act:—

Ordinary receipts and payments.

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[illegible]

Loan receipts
and
expenditure.

The expenditure out of loan money on the construction of permanent works (main roads) for the year ended 30th June, 1927, is shown below :—

COUNTRY ROADS BOARD LOAN ACCOUNT, ACT No. 2635.

YEAR ENDED 30TH JUNE, 1927.

RECEIPTS.			PAYMENTS.					
	£	s. d.		£	s. d.	£	s. d.	
To Balance, 1st July, 1926 ..	22,627	11 11	By Permanent Works	402,521	18 6			
„ Proceeds of Loans ..	426,460	4 1	<i>Deduct</i> Refunds	3,662	12 3			
„ Advance from Country Roads Board Fund ..	402,106	15				398,859	6 3	
„ Direct Expenditure from Loan Account ..	415	3 5	„ Temporary Advance from Country Roads Board Fund—					
			Refunded	427,012	1 7			
			Adjustment	148	9 10			
						426,863	11 9	
			„ Balance, 30th June, 1927 ..			25,886	16 6	
	<u>£851,609</u>	<u>14 6</u>				<u>£851,609</u>	<u>14 6</u>	

Developmental
Roads Loan
Account.

The following statement shows, for the year ended 30th June, 1927, the expenditure out of loan funds on the construction of developmental roads, under the provisions of Acts Nos. 2944, 2985, 3255, and 3334 :—

DEVELOPMENTAL ROADS LOAN ACCOUNT—
(ACTS Nos. 2944, 2985, 3255, AND 3334).

YEAR ENDED 30TH JUNE, 1927.

RECEIPTS.			PAYMENTS.					
	£	s. d.		£	s. d.	£	s. d.	
To Balance, 1st July, 1926 ..	548,051	7 2	By Expenditure	579,213	3 6			
„ Proceeds of Loans ..	181,007	4 4	<i>Less</i> Refund	2,502	6 9			
						576,710	16 9	
			„ Balance, 30th June, 1927 ..			152,347	14 9	
	<u>£729,058</u>	<u>11 6</u>				<u>£729,058</u>	<u>11 6</u>	

LICENSING FUND.

Licensing
fund.

The following is a statement of the receipts and expenditure of the Licensing Fund for the year ended 30th June, 1927 :—

LICENSING FUND.—RECEIPTS AND EXPENDITURE,
1926-1927.

RECEIPTS.				EXPENDITURE.			
	£	s.	d.		£	s.	d.
Balance, 30th June, 1926	40,714	10	0	Salaries and expenses of Board, office, &c.	5,727	12	8
Fees	3,298	12	6	Incidental Expenses	14,477	3	9
Fines	10,248	2	10	Annual payment to municipalities	62,300	0	0
Sale of confiscated liquor	277	6	3	Compensation	81,070	0	0
<div>Licences.</div> <div> <div>Spirit Merchants and Grocers</div> <div>Victuallers</div> <div>Temporary</div> <div>Railway Refreshment Rooms</div> <div>Packet</div> <div>Australian Wine</div> <div>Billiard-table</div> <div>Brewers</div> <div>Vignerons</div> </div>	37,785 287,685 4,622 1,835 121 5,000 6,300 96 125	13 8 17 12 19 5 0 2 0	6 6 0 0 6 0 0 6 0	Transferred to Police Superannuation Fund under section 44 of Act No. 2855	23,000	0	0
Club certificates	7,569	8	6	Transferred to Revenue under section 39 of Act No. 3259	175,539	6	10
Permits—Extra Bars	1,670	0	0	Balance £401,714 10 0			
„ Extended Hours	1,284	0	0	Deduct			
Expenses of holding extended annual sitting of court	23	15	2	Investments			
Interest	14,170	0	0	in Stock	341,000	0	0
Total	£422,828	13	3		60,714	10	0
				Total	£422,828	13	3

Licence fees.

In addition to the endowment of £50,000 the municipalities received from the Government in 1926-27 a sum of £62,300 out of the Licensing Fund under Acts Nos. 2683, 2855, and 2995, 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., 1926-27.

	£
Paid to Cities	29,776
„ Towns	941
„ Boroughs	6,911
„ Shires—	
1st Class	228
2nd „	10,284
3rd „	9,108
4th „	743
5th „	3,132
6th „	1,177
Total Amount paid	62,300

MUNICIPAL LOANS.

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

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

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

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

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

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

Municipal indebtedness. The total loan indebtedness of the municipalities at the end of the financial year 1926-27 was £10,096,696, which was due to the Government and the public respectively, as follows:—

MUNICIPAL INDEBTEDNESS, 1927.

				Due to the Government.	Due to the Public.
				£	£
Cities, Towns, and Boroughs	...			878,062	7,302,784
Shires	...	...	...	147,618	1,768,232
Total	...	...	...	1,025,680	9,071,016

Municipal loan
receipts and
expenditure.

The succeeding statements show the loan receipts and expenditure :—

MUNICIPAL LOAN RECEIPTS AND EXPENDITURE, 1927.

	Cities, Towns, and Boroughs.	Shires.	Total.
	£	£	£
Receipts during the year	1,344,324	447,231	1,791,555
Balance unexpended from previous year ...	405,859	137,964	543,823
Expenditure during the year	1,243,966	455,641	1,699,607
Balance unexpended at the end of 1927 ...	506,217	129,554	635,771

Municipal loan
expenditure,
1923 to
1927.

The municipal expenditure of loan moneys during the year 1927 amounted to £1,699,607, of which £1,243,966 was spent by cities, towns, and boroughs, and £455,641 by shires. The following statement shows the loan receipts and expenditure for the last five years :—

MUNICIPAL LOAN RECEIPTS AND EXPENDITURE : RETURN FOR FIVE YEARS.

Year.	Receipts.	Expenditure.
	£	£
1923 ..	1,093,858	885,303
1924 ...	1,289,041	1,281,423
1925 ...	1,527,690	1,535,960
1926 ...	1,404,566	1,318,187
1927 ...	1,791,555	1,699,607

Loans raised
by municip-
alities,
1927.

The loan receipts for the year 1926-27 amounted to £1,791,555, and the loan expenditure to £1,699,607. The unexpended balance of loan moneys at the end of the year 1926-27 was £635,771—£506,217 to the credit of cities, towns, and boroughs, and £129,554 to the credit of shires. The following are the particulars :—

LOANS TO MUNICIPALITIES, 1927.

	Loans from Govern- ment.	Loans from Public.	Loan Expenditure.	Balance Unexpended at end of year—	
				1926.	1927.
CITIES, TOWNS AND BOROUGH—					
IN GREATER MELBOURNE—		£	£	£	£
Box Hill	35,000	36,485	1,485	..
Brighton	56,350	33,980	14,084	36,454
Brunswick	37,266	45,600	8,334
Camberwell	70,000	44,496	50,085	75,589
Caulfield	56,897	49,844	19,905	26,958
Coburg	58,000	23,660	5,828	40,168
Collingwood	12,860	16,610	3,750
Essendon	7,000	4,816	4,546	6,730
Fitzroy	1,117	2,366	1,249
Footscray	23,000	18,415	6,631	11,216
Hawthorn	12,000	16,395	23,258	18,863
Kew	9,000	16,962	23,982	16,020
Malvern	37,080	70,493	42,430	9,017
Melbourne	430,883*	430,883	..	..
Northcote	62,000	57,611	23,713	28,102
Oakleigh	10,900	9,330	5,014	6,584
Port Melbourne	34,250	6,549	971	28,672
Prahran	75,000	75,000	10,860	10,860
Preston	55,896	52,216	16,437	20,117
Richmond	49,500	45,850	7,137	10,787
Sandringham	41,898	15,424	..	26,474
South Melbourne	56,500	46,612	25,878	35,766
St. Kilda	18,972	33,260	14,288
Williamstown	24,500	8,115	2,492	18,877
Total	1,205,654	1,133,351	382,572	454,875

* Of this amount £97,941 was transferred from the Electric Supply Depreciation and Renewals Fund, and £33,728 from the General Depreciation and Renewals Fund to Loan Account. The amount of £299,214 due to Loan Account is also included.

LOANS TO MUNICIPALITIES, 1927—*continued.*

	Loans from Government.	Loans from Public.	Loan Expenditure.	Balance Unexpended at end of year—	
				1926.	1927.
CITIES, TOWNS, AND BOROUGH— <i>continued.</i>					
OUTSIDE GREATER MELBOURNE—		£	£	£	£
Ararat	11,255	3,000	12,748	..	1,507
Ballarat .. ..	..	..	3,095	3,814	719
Bendigo .. ..	..	30,000	12,205	1,780	19,575
Carrum .. ..	..	10,900	9,827	173	1,246
Castlemaine .. ..	..	..	353	723	370
Daylesford .. ..	..	..	714	964	250
Echuca .. ..	..	1,000	1,610	960	350
Horsham .. ..	..	10,000	7,498	..	2,502
Inglewood	10,000	..	10,000	..	..
Maryborough .. ..	..	2,569	3,372	1,168	365
Mildura .. ..	..	..	1,839	2,521	682
Mordialloc .. ..	..	11,946	15,194	6,838	3,590
Newtown & Chilwell .. ..	..	9,000	7,818	..	1,182
Portland .. ..	..	..	..	62	62
Queenscliffe .. ..	..	3,000	1,267	1,367	3,100
Ringwood .. ..	..	22,500	10,916	575	12,159
Sale .. ..	..	..	7	27	20
St. Arnaud .. ..	..	5,000	5,691	860	169
Stawell .. ..	..	3,500	3,331	..	169
Wangaratta .. ..	..	2,000	1,363	245	882
Warrnambool .. ..	..	3,000	669	35	2,366
Wonthaggi .. ..	..	..	1,098	1,175	77
Total	21,255	117,415	110,615	23,287	51,342
Total Cities, Towns and Boroughs	21,255	1,323,069	1,243,966	405,859	506,217

LOANS TO MUNICIPALITIES, 1927—*continued.*

	Loans from Govern- ment.	Loans from Public.	Loan Expenditure.	Balance Unexpended at end of year—	
				1926.	1927.
SHIRES—		£	£	£	£
Bacchus Marsh	2,000	1,738	..	262
Bairnsdale	5,000	4,052	..	948
Beechworth	5,000	5,789	2,161	1,372
Bellarine	1,600	1,600	..	..
Benalla	3,500	3,500	..	..
Berwick	4,500	4,765	2,494	2,229
Blackburn and Mit- cham	10,500	6,497	..	4,003
Borong	3,403	3,403	..
Braybrook	10,500	8,212	135	2,423
Bright	1,266	1,702	436
Broadford	1,500	487	..	1,013
Buninyong	3,000	3,000	..	..
Colac	6,000	6,120	120	..
Corio	15,500	16,234	3,019	2,285
Cranbourne	1,784	2,092	308
Dandenong	12,250	12,219	985	1,016
Donald	147	147
Doncaster and Tem- plestowe	1,100	1,100	..	..
Eltham	141	141	..
Euroa	374	533	159
Ferntree Gully	975	2,571	1,596
Frankston and Hast- ings	2,426	4,133	1,707
Gisborne	3,000	2,175	..	825
Glenelg	18	83	65
Gordon	2,300	2,300	..	..
Healesville	3,000	3,000	..	..
Heidelberg	123,461	132,477	25,780	16,764
Heytesbury	93	93
Huntly	569	569
Kara Kara	259	259	..
Karkarooc	8,500	1,405	12	7,107
Keilor	145	169	24
Kerang	17,600	23,836	10,044	3,808
Korong	1,000	2,118	1,118	..
Kyneton	3,000	3,000	..	..
Lexton	429	429	..
Lillydale	20,750	15,597	8,873	14,026
Lowan	8,000	8,000	..	..
Maffra	4,500	4,180	..	320
Mansfield	4	4	..
Marong	8,000	7,068	..	932
Melton	383	587	204
Mildura	10,000	6,361	1,040	4,679
Moorabbin	52,920	48,126	10,804	15,598
Mornington	8,000	1,916	1,651	7,735
Mulgrave	5,728	6,414	686

LOANS TO MUNICIPALITIES, 1927—*continued*.

	Loans from Government.	Loans from Public.	Loan Expenditure.	Balance Unexpended at end of year—	
				1926.	1927.
SHIRES— <i>continued</i> .		£	£	£	£
Phillip Island and Woolamai	750	2,478	2,583	855
Ripon	4,600	4,600	..	..
Rochester	3,500	3,638	581	443
Rodney	10,000	707	2,758	12,051
Romsey	720	1,447	727
Rutherglen	4,500	4,500	..	..
Shepparton	15,000	12,307	1,912	4,605
South Barwon	6,000	5,353	654	1,301
South Gippsland	1,500	806	..	694
Stawell	2,066	3,306	1,240
Swan Hill	11,000	33,621	27,689	5,068
Traralgon	1,900	1,304	5	601
Tungamah	35	35
Walpeup	4,000	3,628	879	1,251
Wangaratta	52	87	35
Waranga	6,500	6,500	..	..
Warragul	98	98	..
Werribee	2,000	1,306	2,772	3,466
Whittlesea	95	201	106
Winchelsea	6,000	5,852	..	148
Wodonga	756	756
Woorayl	3,500	3,360	23	163
Wycheproof	10,000	7,330	..	2,670
Yea	500	1,113	613	..
Total Shires	447,231	455,641	137,964	129,554
Grand Total	21,255	1,770,300	1,699,607	543,823	635,771

MELBOURNE AND METROPOLITAN MUNICIPAL LOANS REDEMPTION FUND.

Under the provisions of the *Melbourne and Metropolitan Tramways Act* 1918, No. 2995, a redemption fund was established at the State Treasury, into which the surplus revenue accumulations of the Tramway Board, the municipalities' sinking funds held by the State Treasurer, and annual contributions (in most cases for twenty years) from the metropolitan municipalities concerned were made payable. The greater portion of the loan indebtedness of these municipalities was made a charge against this fund. The liability of the fund includes payments by the municipalities under the *Municipal Loans Act* 1915, No. 2591, and the *Municipalities' Loans Extension Act* 1898, No. 1552, except

interest to date of discharge. The repayment of the principal of certain other municipal loans (except those of the City of Melbourne) raised from the public, but excluding loans, the amounts of which were expended on tramways, gas works, electric light works, and markets, is also to be made from the fund. The liabilities and assets of the fund at the date of its establishment are shown in the *Year-Book* for 1920-21, pages 206 and 207.

The receipts and expenditure of this fund to the 30th June, 1927, are given hereunder :—

RECEIPTS AND EXPENDITURE OF THE FUND TO 30TH JUNE, 1927.

	Receipts.			Expenditure.	
	1926-27.	To 30th June, 1927.		1926-27.	To 30th June, 1927.
	£	£		£	£
Balance, 30th June, 1926 .. ..	..	..	Payment to the Treasurer of Victoria in reduction of the municipalities' liabilities for loan advances under—		
From the Tramway Fund .. ..	..	480,808	Act No. 1552 .. ..	..	309,138
From the Tramway Board — Surplus moneys, Act No. 2995 .. ..	..	170,512	Act No. 2591 .. ..	..	295,042
From the Tramway Board — Surplus moneys, Act No. 3023 .. ..	..	60,680	*Redemption of Municipal Loans—		
From the Tramway Board — Moneys recovered .. ..	..	115,000	Debentures matured ..	44,490	583,158
Contributions by municipalities ..	52,954	476,659	Redeemable in instalments ..	10,101	86,495
Stock realized ..	1,886	92,634	Ordinary loans .. ..	..	98,225
Other receipts ..	..	300	Interest due to the Treasurer of Victoria on account of municipalities' loan liability outstanding under Acts Nos. 1552 and 2591 ..	..	13,923
			Interest on debit balance of fund	249	10,602
			Sundries .. ..	..	10
			Balance, 30th June, 1927 ..	..	..
Total ..	54,840	1,396,593	Total	54,840	1,396,593

* Act No. 2995, section 71, sub-section 5, provides for redemptions being temporarily charged to the public account when moneys are not available in the Fund. The amount so charged at 30th June, 1927, was £146,117.

RECEIPTS AND EXPENDITURE OF THE CITY OF MELBOURNE.

City of Melbourne, revenue and expenditure under various heads. Particulars of the receipts and expenditure for 1927 of the City of Melbourne are given in the statement hereunder.

CITY OF MELBOURNE: REVENUE AND EXPENDITURE, 1927.

Heads of Revenue.						Amount.
Rates—						£
General and Lighting	..	..	..	..	..	482,689
Licences—						
Publicans'—Equivalent for—From Licensing Act	..	..	..	..	..	9,076
Abattoirs—Slaughtering Dues and Meat Supervision Fees	..	..	..	..	..	59,053
Drays, Hackney Carriages, and Motors	..	..	..	..	..	617
Other Licences	..	..	..	..	..	630
Fees under Dog Act	..	..	..	..	..	638
Street Parking Fees	..	..	..	..	..	5,696
Parks and Tree Planting Fees	..	..	..	..	..	7,694
Baths	..	..	..	..	..	8,375
Market and Weighbridge Fees	..	..	..	..	..	79,418
Lighting—Sale of Electric Current and Rent of Meters, &c.	..	..	..	..	..	527,351
Closet and Street Cleansing Charges	..	..	..	..	..	11,000
Fines and Costs	..	..	..	..	..	5,353
Rents—						
Markets and Weighbridges	..	..	..	..	..	65,962
Town Hall Premises and Rooms	..	..	..	..	..	1,570
Other	..	..	..	..	..	8,301
Interest on Fixed Deposits, &c.	..	..	..	..	..	5,892
Miscellaneous—						
Hydraulic Power	..	..	..	..	..	35,228
Desiccators—Sale of Manure	..	..	..	..	..	13,684
Fees under Building Act	..	..	..	..	..	3,893
Sundries	..	..	..	..	..	19,928
Total	..	..	..	..	..	1,352,048

Heads of Expenditure.						Amount.
Salaries (including clerical assistance, expenses of audit, collection of statistics, making valuation, and commissions paid in lieu of salaries, &c.)						£
..	..	..	..	..	..	58,331
Allowance to Lord Mayor	..	..	..	..	..	2,500
Closet Cleansing	..	..	..	..	..	1,260
Street Cleansing, &c.	..	..	..	..	..	88,225
Lighting—Electric and Gas	..	..	..	..	..	19,476
Fire Brigades Board—Contribution	..	..	..	..	..	14,374
Public Works—						
Roads and Bridges	..	..	..	..	..	189,605
Markets and Weighbridges	..	..	..	..	..	40,950
Public Buildings (including Abattoirs, Baths, &c.)	..	..	..	..	..	68,643
Parks and Planting trees in streets	..	..	..	..	..	58,574
Payments under provisions of the Tramway Act No. 2995	..	..	..	..	..	2,258
Interest on Loans from the Public	..	..	..	..	..	173,339
Sinking Funds—Loans from the Public	..	..	..	..	..	38,937
Repayment of Public Loans	..	..	..	..	..	10,000
Electric Supply—Maintenance, &c.	..	..	..	..	..	409,546
Expenses of paying Interest on Loans	..	..	..	..	..	285
Interest on Bank Overdrafts	..	..	..	..	..	2,112

CITY OF MELBOURNE: REVENUE AND EXPENDITURE, 1927—*continued.*

Heads of Expenditure— <i>continued.</i>						Amount.
						£
Contributions to Charitable Institutions	..	..	..	..	..	3,690
" " Infectious Diseases Hospital	..	..	..	..	..	7,425
" " Heatherton Sanatorium	..	..	..	..	..	1,607
Law Costs	..	..	..	..	..	1,153
Printing, Advertising, and Stationery	..	..	..	..	..	4,471
Miscellaneous—						
Rat Destruction	..	..	..	..	..	1,334
Hydraulic Power	..	..	..	..	..	28,454
Fees—Dog Act	..	..	..	..	..	718
Insurance and Guarantee Premiums	..	..	..	..	..	4,595
Libraries	..	..	..	..	..	325
Town Planning Commission	..	..	..	..	..	628
Street Parking	..	..	..	..	..	3,867
Band Performances	..	..	..	..	..	1,500
Milk Supply	..	..	..	..	..	738
Ceremonials	..	..	..	..	..	1,530
Ambulance Service	..	..	..	..	..	500
National War Memorial	..	..	..	..	..	5,000
Superannuation Fund Contribution	..	..	..	..	..	10,223
Retiring Allowance to Employees	..	..	..	..	..	7,220
Visit of Duke of York	..	..	..	..	..	14,170
Sundries	..	..	..	..	..	38,285
Total	..	..	..	..	..	1,315,848

Of the total revenue of the City of Melbourne in 1927, about 36 per cent. was derived from rates, 39 per cent. from the sale of electric light, 5 per cent. from the rental of city property—chiefly markets and shops—6 per cent. from market and weighbridge fees, 5 per cent. from licences, 3 per cent. from hydraulic power, and 6 per cent. from other sources. For public works such as roads and bridges, markets, abattoirs, &c., about 27 per cent. of the total expenditure was incurred; for interest on loans and on bank overdraft and expenses of paying interest, 13 per cent.; for payments to sinking funds and repayment of loans, 4 per cent.; for electric supply, 31 per cent.; for lighting, 1 per cent.; for street cleansing, 7 per cent.; for salaries, allowances, and commissions, 5 per cent.; and for miscellaneous expenditure, 12 per cent.

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

More than the required number of municipalities agreed to co-operate, and the fund was inaugurated on 1st January, 1908. Its operation was, at first, restricted by the association to guarantees in respect of municipal officers, but the rules have been altered, and since 1st October, 1914, they have permitted of guarantees being obtained by any Waterworks authority or Weights and Measures Union; such authority or union is required, however, to make a preliminary payment into capital account. The premium revenue for the year ended 30th September, 1914, in respect of guarantees amounting to £198,320, was £1,115, but, under the reduced scale of premiums which came into force on 1st October of that year, guarantees for the year ended 30th September, 1927, amounting to £288,435, were obtained from the Association for a contribution of £967. The amount to the credit of the fund on 30th September, 1927, was £15,470. The claims paid from the inception of the fund to 30th September, 1927, amounted to £3,131.

MELBOURNE HARBOR TRUST.

The Melbourne Harbor Trust is a corporate body, which was established in 1876 to regulate, manage, and improve the Port of Melbourne and portions of the Yarra and Saltwater Rivers adjacent thereto, for which purpose certain lands and properties are vested in Commissioners. On 31st December, 1912, an Act was passed by the State Parliament which altered the constitution of the Trust. For 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 were substituted five commissioners to be appointed by the Governor in Council. Of the commissioners other than the chairman, one must 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, and one an importer by sea of goods into Victoria, and one must be identified

Melbourne
Harbor Trust
—receipts and
expenditure.

with primary production in Victoria. The chairman's salary is not to exceed £1,500; and the attendance fees of the other commissioners are fixed at £2 2s. per meeting, not more than £250 to be paid to any of these commissioners in any one year. The borrowing power of the Trust is £4,000,000, and the amount of loans outstanding on 31st December, 1927, was £3,255,689. The following are particulars of the ordinary receipts and ordinary and capital expenditure for each of the last five years:—

MELBOURNE HARBOR TRUST.—RECEIPTS AND EXPENDITURE: 1923 TO 1927.

Heads of Revenue and Expenditure.	1923.	1924.	1925.	1926.	1927.
REVENUE.					
	£	£	£	£	£
Wharfage and Tonnage Rates ..	600,161	630,992	632,018	658,944	716,193
Rents	39,725	36,391	35,804	37,116	37,521
Interest	328	669	285	79	43
Other Revenue	46,194	56,391	64,363	60,111	63,287
	686,408	724,443	732,470	756,250	817,044
Less Amount paid to Consolidated Revenue	135,520	140,382	136,494	143,002	148,282
Total	550,888	584,061	595,976	613,248	668,762
REVENUE EXPENDITURE.					
General Management and Expenses	35,175	42,484	37,527	68,442	58,385
Flotation and Redemption of Loans Expenses	750	5	10	15	8
Maintenance—Dredging	39,774	74,564	96,759	81,128	74,884
" Harbor	4,613	4,478	4,027	4,240	6,357
" Wharfs	25,725	32,978	45,555	43,451	49,852
" Approaches	15,345	18,214	20,269	14,098	17,587
Interest on Loans*	112,659	119,526	151,891	140,318	144,513
Depreciation, Renewals Account, and Sinking Fund	213,000	213,000	213,000	213,000	213,000
Total	447,041	505,249	569,038	564,602	564,586
Surplus on Revenue Account ..	103,847	78,812	26,938	48,556	104,176
CAPITAL EXPENDITURE.					
Land and Property	33,407	560	37,699	30,962	20,144
Deepening Waterways	150,885	137,488	145,808	169,053	204,536
Wharfs Construction	67,360	194,318	285,072	129,382	246,587
Approaches Construction	7,519	25,483	46,130	15,412	35,619
Other Harbor Improvements	8,204	23,826	18,631	40,416	15,735
Floating Plant	632	3,192	97,354	9,221	125,690
General Plant	2,025	3,429	2,718	4,891	5,045
Total	270,032	388,296	633,412	399,337	653,356

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

GEELONG HARBOR TRUST.

**Geelong
Harbor Trust**
—receipts and
expenditure.

An Act to provide for the construction of works in connexion with the harbor at Geelong was passed on 12th December, 1905. This measure made provision for the constitution of the Geelong Harbor Trust and the appointment of three commissioners, the chairman to receive £400 per annum, and each of the other commissioners £200 per annum. The management of the port and shipping is vested in the commissioners. Power is given to the Trust to borrow £599,717 (the whole of which has been raised), and to issue debentures, which may be made payable in London or Melbourne. The following is a summary of the receipts and expenditure for the last five years, the expenditure from ordinary revenue being distinguished from loan expenditure :—

GEELONG HARBOR TRUST—REVENUE AND EXPENDITURE.

	1923.	1924.	1925.	1926.	1927.
REVENUE.					
Wharfage and Tonnage Rates ..	26,387	30,571	40,137	35,468	38,860
Rents, Fees, and Licences ..	4,563	5,487	5,589	5,559	5,646
Sparrovale Farm ..	8,952	6,799	4,880	5,381	4,558
Corio Freezing Works and Abattoirs	15,754	15,475	15,766	16,318	12,498
Other Revenue	3,024	3,024	19,958	4,347	4,069
Total	58,680	61,356	86,330	67,073	65,631
REVENUE EXPENDITURE.					
General Management and Expenses	8,362	6,368	6,239	6,657	7,413
Maintenance—Wharfs and Approaches ..	4,311	3,282	4,518	8,210	40,751
" Harbor ..	669	530	824	952	1,023
" Floating Plant ..	405	987	650	615	679
" Other	1,421	1,649	2,386	2,564	3,946
Interest on Loans and Sinking Fund	27,849	27,755	27,756	27,755	24,818
Sparrovale Farm	6,601	5,324	4,797	7,312	12,543
Corio Freezing Works and Abattoirs	3,361	4,599	7,969	6,622	4,682
Corio Quay Power-house ..	2,332	888	..	..	..
Miscellaneous	754	933	1,888	5,543	4,093
Total	56,065	52,315	57,027	66,230	99,948
CAPITAL EXPENDITURE.					
Land and Property	7,915	10,056	2,209	2,564	4,572
Deepening Waterworks ..	341	14,991	20,587	15,716	3,554
Wharfs and Approaches Construction	10	95	3,283	8,973	17,044
Other Harbor Improvements ..	..	746	810	955	938
Floating and General Plant ..	14	11	..	29	2,134
Miscellaneous .. ..	..	..	..	..	923
Total	8,280	25,899	26,889	28,237	29,165

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, called Commissioners, must also be members of the respective councils which they represent, and are each elected for three years in the following order of numbers, viz.:—Nine by the Melbourne City Council, four by the South Melbourne Council, three by the Prahran Council, two each by the Collingwood, Fitzroy, Richmond, and St. Kilda Councils, and one each by the other fifteen suburban municipal councils returning a representative, viz., Footscray, Hawthorn, Brunswick, Essendon, Malvern, Brighton, Northcote, Port Melbourne, Williamstown, Caulfield, Camberwell, Kew, Coburg, Heidelberg (part of), and Preston. The 39 Commissioners therefore represent 22 municipalities or part municipalities.

Thirteen of the members retire annually on the last day of 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 main and general sewerage; to provide for the commerce and recreation of the inhabitants of the metropolis in so far as the vesting powers of the Board's principal Act, together with the *Metropolitan Drainage and Rivers Act 1923*, relate to the bed, soil and banks of the River Yarra; to deal also with main drains and main drainage works; and to prevent the pollution of the River Yarra and certain other rivers, creeks, and water-courses within the metropolis, and for other purposes. The primary object of the creation of the Board was to provide the sewerage system mentioned, which, prior to the establishment of the Board, was a long-called-for and pressing want.

Area under Board's control, and population.

Under the provisions of section 3 of the *Melbourne and Metropolitan Board of Works Act 1915*, and with the consent of the Governor in Council, on 14th December, 1920, the land within 13 miles of the General Post Office (corner of Bourke and Elizabeth streets), was included in the metropolis for water supply and sewerage purposes (*vide Victoria Government Gazette*, 22nd December, 1920). This territory has an area of 434

square miles (277,760 acres) of land area, and on 31st December, 1927, comprised 24 cities and part of another city, also parts of 13 shires, or 38 municipalities in all. Sixteen of these municipalities—or part municipalities—are without representation on the Board. The whole of the city of Mordialloc and of the Shire of Moorabbin are included in the metropolis for water supply purposes, and the Board also exercises control (under Orders in Council) for these purposes over a portion of certain other municipalities outside the 13-mile radius, and supplies water to the Metropolitan Farm at Werribee, the Outfall Sewer area, and elsewhere. Various other shires also arrange with it for bulk supplies of water. The total estimated population supplied with water on 31st December, 1927, was 1,044,654.

**Snagging the
River Yarra.**

Under the provisions of the *Metropolitan Drainage and Rivers Act* 1923 during the year 1926-27 the river Yarra has been snagged and banks cleared a further nine miles, thus making safe for boating a stretch of about eleven miles between Dight's Falls and a point about two miles above Burke-road Bridge, extending the safe waterway an additional seven miles. From up stream above Fairfield 5,455 snags and two stone reefs have been removed, while approximately 400 tons of firewood (from snagging and clearing operations) have been carted to the Northcote storeyard for the Board's use. As snags are the primary cause of the majority of boating accidents on the Yarra, the Board's work in making the river safe for navigation so far up stream has been much appreciated by all users of the river.

**Metropolitan
Streams.**

The rivers and streams were patrolled by the Board's staff to prevent pollution, and over the Yarra there was regular supervision by the police for the control of river traffic.

The following streams were cleaned and cleared in those portions needing attention:—Elwood Canal, Bullen's Drain, Elster, Merri, Merlynston, Moonee Ponds, Melville's and Gardiner's Creeks.

**Dight's Falls
Pumping
Station.**

During the year the output of water, as a result of the extremely dry weather conditions, reached a total of 407 million gallons, this being the highest on record and 20 per cent. above the previous maximum. This water was chiefly used by the Botanical Gardens, and for the Albert Park Lake to replace loss by evaporation. The cost of pumping has been reduced by the old Austral Otis steam engine being replaced by a modern Crude Oil engine and Centrifugal Pump.

The necessary instruments to record the flow and the water level in the reservoir were installed, adjusted and calibrated, also a new type of fuel oil indicator, designed by the Board's officers.

Flood Gauges. Recording flood gauges were designed and installed at different points on the smaller streams, and an improved design is now under construction in order to gain further information on the maximum heights reached by floods.

**Board's
borrowing
powers and
liability on
loans.**

The Board is authorized to borrow £16,750,000, this amount being exclusive of loans amounting to £2,389,934 originally contracted by the Government for the construction of the waterworks for the supply of Melbourne and suburbs. These works were vested in and taken over by the Board on 1st July, 1891.

The liability under loans raised by the Board was £17,837,090 on 30th June, 1927. The Board was at that date empowered to borrow £1,302,844 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 houses for the supply of water for domestic purposes, otherwise than by measure, is limited to an amount not exceeding 8d. in the pound on the annual valuation of the lands and houses served. The water rate levied in the year 1926-27 was 6d. in the pound on the annual value of property served. Assessments of £20 and under are charged a minimum rate of 10s. per annum. There is a charge of 1s. per 1,000 gallons for water supplied by meter, with the assessed rate as a minimum. For shipping at Melbourne wharfs the charge is 3s. per 1,000 gallons, and at special berths at Melbourne wharfs, with fixed meters, it is 1s. 6d. per 1,000 gallons.

Water meters.

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

Garden rate.

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

**Assessed
value of
property.**

The total annual value of property assessed for water supply purposes and liable to water rates was £16,359,213 in 1926-27, and £17,486,799 in 1927-28.

Revenue and expenditure of water supply system.

The total revenue was £720,124, as against £664,926 in the previous year. The cost in 1926-27 of maintenance and management was £113,706, and the amount of interest was £367,363, the total charge being £481,069, as compared with a payment in 1925-26 of £105,597 for maintenance and management, and of £326,476 for interest, or a total charge of £432,073.

Cost of the Melbourne and Metropolitan waterworks system.

The total cost of the water supply system up to 30th June, 1927, was as follows:—

Original water supply works, station, &c.	tank	pumping	£
..	84,885
Yan Yean system	638,615
Maroondah system	1,540,331
O'Shanassy system	1,303,112
Service reservoirs	399,391
Large mains..	1,632,247
Reticulation	2,200,847
Total	£7,799,428

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 area. The total area from which water is collected at present from the three systems is 108,840 acres, the whole of which is vested in the Board, and free from settlement or grazing.

Total daily supply. The total daily quantity of water which can be sent into Melbourne at present from the three systems is 152,000,000 gallons.

YAN YEAN SYSTEM.

Yan Yeau system. The Yan Yeau system embraces Silver and Wallaby Creeks, Plenty River and Jack's Creek, 28,857 acres, and the catchment areas of Yan Yeau Reservoir, 5,105 acres, the total area being 33,962 acres. The water is collected into the Toorourrong Reservoir, and taken thence to the Yan Yeau Reservoir, where it is stored. This reservoir is an artificial lake situated 22 miles from the city in a northerly direction, and 602 feet above sea level. It is formed by the construction of an earthen bank, 49 chains long, 30 feet high, and 20 feet wide on top, with a slope next the water of three to one and an outside slope of two to one. The reservoir when full covers an area of 1,360 acres, or $2\frac{1}{8}$ 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 1927 was 17 ft. 7½ in. on 1st January, and the minimum depth, 10 ft. 11½ in. on 12th and 13th April. Its total capacity is 6,879,000,000 gallons, of which 6,251,000,000 gallons are available for consumption. In the year ended 31st December, 1927, the total intake of the Reservoir was 2,666,086,000 gallons, and the total output was 3,104,039,000 gallons exclusive of loss by evaporation.

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

High-level system. There is also a direct main, called the high-level system, from Yan Yeau 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 partly from the Maroondah storage reservoir and partly from small weirs, all of which are situated on the watershed of 40,000 acres near Healesville. The Maroondah Reservoir is formed by means of a cyclopean rubble concrete dam 135 feet high and 946 feet in length. The total capacity of the reservoir formed by

the dam is 6,274,000,000 gallons, and the total quantity of water available above lowest draw-off level is 4,855,000,000 gallons. The wall has a thickness at the base of 111 feet and is 16 feet thick at the top. The area of water surface at top water line is 486 acres. The length around the reservoir at top water line is $7\frac{1}{2}$ miles. The water from the Maroondah system is conveyed to the service reservoirs along an aqueduct which is capable of delivering 50,000,000 gallons daily.

O'SHANASSY AND UPPER YARRA SYSTEM.

O'Shanassy and Upper Yarra watershed. The watershed of the O'Shanassy River comprises 32,650 acres, situated near Warburton. The water is collected in a storage reservoir formed by the construction of an earthen embankment 110 feet high and 740 feet in length. The reservoir has a capacity of 930,540,000 gallons. The water is conveyed to Surrey Hills by way of Mitcham in an aqueduct and in tunnels, syphons, and a pipe line, of an aggregate length of $48\frac{3}{4}$ miles. The aqueduct is capable of delivering 60,000,000 gallons daily. The catchment area of Silvan Reservoir near Mount Dandenong is about 2,228 acres.

OUTPUT OF THE VARIOUS WATER SYSTEMS IN 1927.

Output of Water. The total output of water from the various sources of supply in 1927 was as follows :—

			Gallons.
From Yan Yean Reservoir	..	..	3,104,039,000
„ Maroondah Reservoir	..	..	10,152,808,000
„ O'Shanassy River ..	..	..	7,797,390,000
Total Output			21,054,237,000

Storage and service reservoirs. There are four storage reservoirs with a total capacity of 14,143,540,000 gallons and seventeen service reservoirs (including one at the Metropolitan Farm, Werribee), with a total capacity of 191,350,000 gallons, and it is proposed to have, in the immediate future, two other service reservoirs. The *Year-Book* for 1920-21 contains, on page 218, figures showing the then capacity of the reservoirs in gallons and their reduced level at by-wash.

Consumption of water in Melbourne and suburbs. The average number of people supplied with water during 1927 was 1,028,983, and the average daily consumption was 56.11 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 of the year 1927 :—

**TOTAL AND DAILY AVERAGE CONSUMPTION OF WATER
IN MELBOURNE AND SUBURBS DURING EACH MONTH
OF THE YEAR 1927.**

Month.	Total Consumption of Water.	Daily Average Consumption of Water.
	Gallons.	Gallons.
January	2,595,960,000	83,745,645
February	2,224,676,000	79,595,571
March	1,886,920,000	60,868,387
April	1,567,903,000	52,263,433
May	1,416,425,000	45,691,129
June	1,246,346,000	41,544,867
July	1,239,372,000	39,979,742
August	1,288,039,000	41,549,645
September	1,328,177,000	44,272,567
October	1,646,395,000	53,109,516
November	2,173,868,000	72,462,267
December	2,456,355,000	79,237,258
Total for the year	21,074,436,000	...
Daily average for the year		57,738,181

NOTE.—The maximum daily consumption for 1927 occurred on 16th December and the minimum daily consumption on 3rd July of that year. The consumption was 109,241,000 gallons on the former and 33,635,000 gallons on the latter of these two days.

The following table shows for each of the last ten years the daily average consumption of water, and the daily average per head :—

**DAILY AVERAGE QUANTITY OF WATER CONSUMED IN
MELBOURNE AND SUBURBS, 1918 TO 1927.**

Year.	Estimated Population supplied with Water to 30th June.	Houses sup- plied with water to 30th June.	Number of Houses for which Sewers were provided to 30th June.	Daily Average of Annual Consumption of Water to 31st December.	No. of Gallons of Water per Head Daily.
				Gallons.	
1918	716,521	161,743	151,622	40,838,819	57·00
1919 ...	731,154	165,046	155,238	42,455,225	58·07
1920 ...	755,536	170,550	158,735	45,187,536	59·81
1921 ...	787,160	177,998	161,955	47,135,608	59·88
1922 ...	817,127	184,453	166,871	48,351,005	59·17
1923 ...	867,230	195,763	175,379	50,691,134	58·45
1924 ...	918,485	207,333	182,987	50,187,508	54·64
1925 ...	954,558	215,476	191,318	55,633,000	58·28
1926 ...	990,561	223,603	199,918	53,403,863	53·91
1927 ...	1,028,983	232,276	208,003	57,738,181	56·11

These figures show that additional houses to the number of 8,673 were supplied with water during the year ended 30th June, 1927.

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 1927-28 was £17,811,688, inclusive of assessments on vacant lands, and unsewered area and undertakings.

By Act of Parliament the Board is empowered to levy a general sewerage rate not exceeding 1s. 2d. in the £1 in sewered areas. The sewerage rate for 1926-27 was 9d. in the £1 in the sewered area. The total annual value of property assessed for sewerage purposes and liable to the 9d. rate was £15,218,605 in 1926-27.

The receipts from the general sewerage rate in 1926-27 amounted to £583,390.

The sewerage revenue for 1926-27 was £633,165, as against £600,445 in the previous year. The outlay in 1926-27 for management, working expenses and repairs was £148,814, and for interest £560,539, the total charges being £709,353, compared with an outlay in 1925-26 of £133,988 for management, working expenses, and repairs, and of £520,508 for interest, or a total expenditure of £654,496.

Cost of the
Melbourne and
Metropolitan
sewerage
system.

The cost of sewerage works and house connexions up to 30th June, 1927, was £10,493,351, divided as follows:—

	£
Farm purchase and preparation	944,140
Outfall Sewer and Rising Mains	451,279
Pumping station buildings and engines	301,981
Main and branch sewers	2,484,827
Street reticulation	3,279,510
Reticulation of rights-of-way	1,718,895
House connexions branches	688,758
Cost of house connexions chargeable to capital	575,668
Sanitary depots	48,293
 Cost of sewerage system	 £10,493,351
Householders' debts for house connexions	371,024
River improvements	11,016
Main Drains	46,337
 Total	 £10,921,728

**Disposal of
Nightsoil from
Unsewered
Premises.**

The agreements entered into with 29 municipal councils for the collection and delivery by them of nightsoil from unsewered premises within their respective districts have continued in operation during 1926-27. The total number of pans cleaned was 1,409,583, and the nightsoil was disposed of by burial by the Board at its various depots at Brooklyn, Campbellfield, Janefield, Burwood and Moorabbin, though operations at Janefield ceased on 23rd March, 1927. Owing to the many difficulties placed in the way of the Board in carrying out the duties of nightsoil disposal imposed upon it by Parliament, the Sewerage Committee decided to visit Adelaide with the Engineer of Sewerage and inspect the septic tank installations there. This investigation took place from 10th to 15th June, 1927, with the result that it was decided to recommend that a Bill should be introduced into Parliament to enable the Board to compel the installation of septic tanks or other approved treatment and thus abolish the pan system with its attendant dangers.

**Main Sewers
and Subsidiary
Main.**

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 the North Yarra main sewer (Northern system) and the Hobson's Bay main sewer (Southern system). The subsidiary main, which takes in Williamstown, joins the Hobson's Bay main before it enters the pumping station. Further information regarding these is given in the *Year-Book* for 1920-21, page 222.

**PROGRESS REPORT OF SEWERAGE WORK WITHIN THE
BOARD'S METROPOLITAN AREA UP TO 31st
DECEMBER, 1927.**

On the 31st December, 1927, the Sewerage System was practically completed in the following municipalities:—Melbourne, South Melbourne, Port Melbourne, Collingwood, Fitzroy, Hawthorn, Prahran, Richmond, St. Kilda, and the thickly populated portions of Essendon.

The Sewerage System was nearly completed in the municipalities of Brighton, Brunswick, Caulfield, Malvern, the older parts of Footscray and Box Hill (the latter being formerly known as Nunawading), and the thickly populated portions of Camberwell, Coburg, Kew, Northcote, Preston and Williamstown, while considerable progress had been made in the municipalities of Heidelberg, Oakleigh and Sandringham.

A small portion of the municipality of Moorabbin had been completed, and the Five Mile Creek Branch Main had been extended through Essendon to Keilor.

During the twelve months ended 31st December, 1927, work has progressed more particularly in Camberwell, Coburg, Moorabbin, and Preston; also in Brighton, Caulfield, Essendon, Heidelberg Sandringham, &c.

Mains and Branch Sewers.—The Sandringham East Branch has been constructed in conjunction with Reticulation Area No. 502, Sandringham. The Ashburton Branch, Camberwell; Burleigh Street Branch, Williamstown; Essendon West Branch, Section 2, Essendon; Gilbert Road Branch, Sections 1 and 2, Coburg and Preston; and Merri Creek Main Section 5, Coburg; have been constructed to meet the requirements of new reticulation areas in the respective municipalities mentioned. A deviation of the Newell-street Branch, Footscray, has also been carried out.

Reticulation contracts have been completed chiefly in Camberwell, Coburg, Moorabbin, Preston, and Sandringham; also in Brighton, Caulfield, Essendon, Footscray, Heidelberg, Kew, Oakleigh and Port Melbourne. A reticulation area was also carried out by day labor in Brunswick, and another in Coburg. Day labor reticulation extensions have been carried out principally in Camberwell, Caulfield, Footscray, Hawthorn, Heidelberg, and Preston; and in a lesser degree, in Brighton, Brunswick, Coburg, Essendon, Malvern, Melbourne, Northcote, Prahran, Sandringham, and St. Kilda.

Work in progress—Mains and Branch Sewers.—The deviation of the North Yarra Main, Spotswood; Gardiner's Creek Main Section 4, Malvern and Camberwell; Gardiner's Creek Main Section 5, Mulgrave; Camberwell South Branch Section 4, Camberwell; Darebin Creek Branch Section 2, Northcote and Heidelberg; and Darebin Creek Branch Section 2A; Northcote, Preston, and Heidelberg; are now in course of construction. *Reticulation contracts* are now being carried out in Box Hill, Brunswick, Camberwell, Essendon, Malvern, Preston, and Williamstown; while a start has been made on Edgar's Creek Pumping Station, Preston. Contract and day labor reticulation extensions to meet the requirements of new buildings or fresh subdivisions are being carried out in Prahran, Camberwell, Coburg, Essendon, Footscray, Hawthorn, Heidelberg, Kew, Northcote, Oakleigh, Preston, and Sandringham.

In all 1,917 miles 50 chains of reticulation and 193 miles 18 chains of main and branch sewers have been completed, and adding the rising mains and outfall sewer (a length of 24 miles 43 chains), makes a total length of 2,135 miles 31 chains of sewers.

PROVISION FOR HOUSE CONNEXIONS WITH THE SEWERAGE SYSTEM IN MELBOURNE AND SUBURBS.

Number of
Houses for
which sewers
were provided
on 31st Decr.,
1927.

The first house was connected in Port Melbourne in August, 1897. On 31st December, 1927, the number of houses for which sewers were provided was 210,529, including 721 outside gazetted areas.

During the year 1926-27, 8,134 new houses were erected in the metropolitan area, and provision was made for the sewerage of 8,085 houses.

The following statement shows the progress of house connexions to the 31st December, 1927 :—

**NUMBER OF HOUSES FOR WHICH SEWERS WERE
PROVIDED ON 31ST DECEMBER, 1927.**

Municipality.	No. of Houses for which sewers were provided on 31st December, 1927.
Melbourne City	27,418
South Melbourne City	10,934
Prahran City	12,817
Fitzroy City	8,153
Richmond City	10,483
St. Kilda City	9,683
Collingwood City	8,721
Footscray City	9,097
Hawthorn City	8,121
Brunswick City	12,471
Essendon City	10,315
Malvern City	10,165
Caulfield City	14,615
Northcote City	9,758
Camberwell City	8,424
Brighton City	6,416
Port Melbourne City	3,103
Williamstown City	4,959
Kew City	4,977
Coburg City	5,512
Sandringham City	3,244
Preston City	4,263
Oakleigh City	1,934
Box Hill City	425
Heidelberg Shire (part of)	4,032
Moorabbin Shire (part of)	485
Werribee Shire (part of)	4
Total	210,529

In addition to the above, there is part of a city and there are parts of ten shires in which sewerage facilities for houses are not yet provided.

The house connexions pipes join the reticulation pipes, and these are gradually collected into branch sewers, which connect with the sub-mains and mains.

PUMPING STATION.

When collected at Spotswood the two systems are dealt with in separate buildings, and are arranged to be worked either separately or unitedly. The sewage from the two mains enters the pumping station at a level of 37 feet and 45 feet respectively 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. Most of the solid débris and fibrous

**Pumping
station.**

matter is caught in the straining cages, the bars of which are $1\frac{1}{2}$ inches apart. The matter collected in the cages is carted away and buried under earth, and in course of time it totally decomposes. There are seven steam driven reciprocating pumping engines installed of about 300 horse-power each, with a daily capacity of about 8,000,000 gallons. In addition to these there are five electrical centrifugal pumping units installed, three of 18,000,000 gallons and two of 12,000,000 gallons daily capacity, making a total capacity of 134,000,000 gallons daily. The sewage—relieved of the bulk of the solids in suspension—is raised by the pumps. The average difference in pumping levels is from 40 feet below low water mark at the pumping station to 67 feet above low water mark at the head of the outfall sewer at Brooklyn. The total equivalent head, however—including friction—is taken to be from 120 feet to 125 feet. The sewage is raised and forced through two 6-ft. rising mains (one of mild steel and one of wrought iron) and one 4-ft. rising main with $3\frac{3}{4}$ chains of concrete at the top end. The three mains run side by side, each about 2 miles $63\frac{1}{2}$ chains long. Only two of them are in use at the same time, the other one being kept as a stand-by. There are also two 6-ft. exterior by-pass rising mains laid north and south of the pumping station and having a total length of 14 chains 3 feet. These are provided so that the flow can be by-passed and cleaning and repairs effected to the mains and valves in the immediate vicinity of the pumping station. The total length of all the rising mains is 8 miles $44\frac{1}{2}$ chains. From Brooklyn the sewage 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 present maximum capacity of the outfall sewer (which is only half of the full amount) is 12,500 cubic feet a minute, or $112\frac{1}{2}$ million gallons of sewage per day. The total volume of sewage pumped during the year 1926-27 was 12,549,580,000 gallons—equal to 34,382,411 gallons per day, as against a total of 12,949,420,000 gallons, with a daily average of 35,477,863 for the previous year. In consequence of a decrease in pumping of 399,840,000 gallons, the unit cost of raising 1,000 gallons 100 feet was reduced from .511d. to .477d. the working expenses being £3,286 less.

METROPOLITAN SEWAGE FARM.

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 21,311 acres 2 roods and $12\frac{1}{2}$ perches (33.3 square miles) of land situated about 24 miles south-west of Melbourne and 4 miles south-west of the township of Werribee in open plain country, and had an average annual rainfall for the past 34 years to 31st December, 1927, of 17.67 inches. The farm has the Werribee River for its eastern boundary, and a frontage of about $13\frac{1}{2}$ miles to Port Phillip Bay on the south (extending 6 miles from the mouth of the Werribee River to the mouth of the Little River, and a

further $7\frac{1}{2}$ miles south-westward). It extends as far north as the main Geelong Road, the land gradually sloping from the north, and the highest point at which sewage is delivered on the land by pumping is 50 feet above low-water mark. The head of the outfall sewer at Brooklyn is, as has been mentioned, 67 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.

The land required for sewage filtration purposes is divided into 20-acre blocks (20 chains by 10 chains), which are graded into bays of about half-an acre each, and commanded by distributing drains to facilitate rapid flooding. The sewage is distributed by means of main carriers and drains which run parallel, north to south, through the farm half-a-mile apart, and sub-carriers and drains which branch east and west every 10 chains. The filtered sewage is discharged into the bay by a series of main effluent channels running parallel, north and south through the farm. Each of the hundreds of paddocks on the farm is supplied with water drawn from a main laid from Melbourne, which also feeds a storage reservoir, recently constructed, of 2,600,000 gallons capacity, to ensure an uninterrupted supply.

The area under irrigation in the year 1926-27 included 207 acres of lucerne (which were cut for hay, and yielded approximately 792 tons or about $3\frac{3}{4}$ tons to the acre) and 8,590 acres of irrigated pasture mainly used for grazing. The total area available for grazing live stock including unirrigated land, &c., was 17,170 acres.

			Acres.
Area carrying sheep	..	..	8,170
„ „ cattle	..	..	7,500
„ „ horses	..	..	1,500
Total	..	..	17,170

Notwithstanding the large quantity of sewage water required to be put on the pastures summer and winter alike, the effective filtration of which must be the Board's first consideration, a considerable profit is derived from the farming and grazing operations. The principal sources of revenue are from breeding of beef cattle, fattening of sheep and cattle, and grazing of horses on agistment. The transactions in sheep and cattle for the year 1926-27 were—from sheep, profit £4,879; from cattle, profit £21,909. The revenue from agistment (principally horses) was £8,665.

The following are particulars of the sales of produce for the year ended 30th June, 1927:—Lucerne hay, £3,981.

Statistical details relating to the farm for the year 1926-27, or as at 30th June, 1927, are as follows:—

Total area of farm	21,312 acres
Average quantity of sewage delivered daily on to farm for year 1926-27 = in gallons .. .	34,382,411
= 126·65 acre-feet per day = 4·717 feet per annum over the total area available for sewage disposal, viz., 9,801 acres.	
Total capital cost of farm to 30th June, 1927 ..	£944,140
Profit on farm trading account for the year after charging up working expenses of farm ..	£24,505
Net cost of sewage purification (after charging £20,784 working expenses of sewage disposal, and £48,650, interest on capital cost) ..	£44,929
Average net cost per head per annum of sewage purification for past 20 years	5·91d.
The cost per head this year, viz: 11·70d., being increased by interest charges on land purchased in the shire of Corio which has not yet become reproductive.	
Population served by sewerage system	921,453
Rainfall for year ended 30th June, 1927 ..	11·52 inches
" " " 31st December, 1927 ..	13·32 ..
Average rainfall for 34 years to 31st December, 1927	17·67 ..
Rainfall on newly acquired land at Murtcaim for year ended 30th June 1927	8·37 inches only

The low rainfall accompanied by drying winds produced a most unfavorable season for pastures on unirrigated country and for seeding new land. The Murtcaim area has in consequence been valueless as a grazing or revenue producing proposition, while a large area planted with lucerne failed to germinate, and will have to be re-sown. On the irrigated portions of the Farm, pastures generally were good throughout the year, and stock on them did well. Owing to the bad grass season around Melbourne the receipts for agistment of horses were again a record. The maximum number on agistment at one time during the year reached 1,650 in June. The drought also created a demand for lucerne hay, as the receipts show.

Main Drains.

A number of necessary amendments to the *Metropolitan Drainage and Rivers Act 1923* was passed in December, 1926, and though all the amendments desired by the Board were not included, it was decided that construction work should be proceeded with immediately. Early in 1927 a list of works was approved and before

the end of the year contracts amounting in all to £115,535 were let, the principal works being as follow :—

Cowderoy-street Main Drain, St. Kilda, £43,267.

Cruickshank-street Main Drain, Port Melbourne, £16,234.

Summerhill-road Main Drain, Footscray, £12,096.

Mitchell-street to Gooch-street Main Drain, Northcote, £35,038.

In addition, improvements are being carried out to the Hawthorn Main Drain at a cost of £6,396, and to the St. Kilda Main Drain at a cost of £2,504. Surveys and investigations have been proceeded with steadily by this branch during the year, with the result that most of the principal drainage areas in Melbourne and suburbs have now been accurately defined, and preliminary schemes prepared for dealing with the storm waters from a number of these areas.

Again no Metropolitan Drainage and River Improvement Rate was struck for the year.

THE BALLARAT WATER COMMISSION AND THE BALLARAT SEWERAGE AUTHORITY.

The Ballarat Water Commission was constituted on 1st July, 1880, by Act 44 Vict. No. 656 (Consolidated Act No. 2747). The Ballarat Sewerage Authority was constituted under the provisions of the *Sewerage Districts Act* 1915 by Order in Council, dated 30th November, 1920, which provides that the members of the Water Commission shall be the Sewerage Authority. The Commissioners number seven; three (one of whom is chairman) being appointed by the Government, and four being elected by the Council of the City of Ballarat.

Water Supply.—The Water Supply District embraces an area of about 27 square miles, including the city of Ballarat, the borough of Sebastopol, and portions of the shires of Ballarat, Buninyong, and Bungaree, and it contains a population of about 43,000. The works comprise six reservoirs, two of which (the Upper Gong Gong and Kirks) are situated about $4\frac{1}{2}$ miles north-east of Ballarat, and are service reservoirs. The two last-mentioned are connected with three of the other basins by an open aqueduct about 8 miles long, which is lined with masonry and concrete. The sixth reservoir (the Moorabool) situate $4\frac{1}{2}$ miles north-east of Wallace, was completed on 12th August, 1915, and is connected to the aqueduct before mentioned by a reinforced concrete gravity pipe line having a diameter of 2 feet and about 5 miles long. The total storage capacity of the six reservoirs is 2,215,558,327 gallons.

Finance.—The capital cost of construction of the waterworks is £640,000. The liabilities are loans due to the Government, amounting to £308,128 as at 31st December, 1927. The annual revenue is £35,372.

Rating.—The water rate is 1s. in the £ on the net annual value of properties, with a minimum rate of £1 per annum for properties supplied.

Sewerage.—The actual construction of sewerage works for the city began in December, 1922. The main and outfall sewers have been completed, and progress has been made with branch and reticulation sewers and with the treatment or disposal works. The scheme in

its initial stages will provide for about 38,000 persons, and eventually for not less than 90,000 persons. The method of disposal of sewage is by sedimentation, oxidation and sludge digestion. The main and outfall sewers have been completed, the latter being 3 ft. 3 in. in diameter, and about 1 mile long, while the former is about 2 1-10th miles long. Branch and reticulation sewers have been constructed to the extent of about 27½ miles. Thirty-one sewered areas have been declared, as at 1st July, 1928, comprising 3,579 tenements. The service was put into action in July, 1925, when the first house connexion was made.

Finance.—The scheme is being financed by loans from financial institutions, £226,333 having been provided up to 31st December, 1927, for constructional works, and £50,000 for house connexions.

Rating.—To provide for preliminary administration and interest charges, the rating has been as follows:—1922, 2d. in the £; 1923, 3d. in the £; 1924–25–26, 6d. in the £; 1927–1928, 4d. in the £ on the net annual value of all rateable property within the sewerage district. In the years 1927 and 1928 the rate on sewered properties was ½d. in the £ in addition to the before-mentioned rate of 4d. in the £.

GEELONG WATERWORKS AND SEWERAGE TRUST.

This Trust was constituted under the *Geelong Municipal Water Act* 1907, and gazetted on 15th January, 1908. It was reconstituted under the *Geelong Waterworks and Sewerage Act No. 2230* (Consolidated Act No. 2661).

The Commissioners number five. Two of these represent the city of Geelong, one the town of Geelong West, one the town of Newtown and Chilwell, and one the shires of Bellarine, Corio, and South Barwon.

The amount of loans which may be raised is limited to £725,000 for water supply undertaking, £710,000 for sewerage undertaking, and £220,000 for sewerage installations to properties under deferred payment conditions. The expenditure on these services to 30th June, 1927, was:—Water supply, £596,739; sewerage, £556,143; and sewerage installation, £217,045. The annual revenue for the year ended 30th June, 1927, was £53,340 on account of waterworks and £41,690 on account of sewerage.

The population supplied is about 44,000. The number of buildings situated within the "Drainage Area" is 11,000; the number within the "Sewered Areas," 10,500; and the number connected with the sewers, 10,299.

Water Supply.—The catchment area is about 16,000 acres. Particulars of the works and storage capacity of the various reservoirs are given in the *Year-Book* for 1920–21, pp. 226 and 227. The total storage capacity of the reservoirs and service basins is 2,738,119,808 gallons.

Sewerage.—The sewerage scheme consists of a main outfall sewer, 4 ft. 3 in. by 3 ft. 3 in., to the ocean at Black Rock, a distance of about 9 miles from Geelong. The drainage area is 9,489 acres and includes the city of Geelong, the town of Geelong West, the town of Newtown and Chilwell, and the suburban areas in the shires of Corio, South Barwon, and Bellarine.

Rating.—The water rate is 1s. 1d. in the pound on the net annual value of properties as certified to by the municipalities, with minimum rates of £1 per annum for properties supplied and 5s. for vacant land.

The sewerage rate is :—

A general sewerage rate of 1s. 4d. in the pound on the net annual value of all rateable properties within the drainage area which are now sewered or may become sewered during the period for which such rate is made.

In addition to the general and additional rates, the Trust, to prevent or minimize the pollution of the River Barwon, has power to strike a differential or special rate on properties which drain into that river.

BENDIGO SEWERAGE AUTHORITY.

The Bendigo Sewerage Authority was constituted under the *Sewerage Districts Act* 1915 (No. 2761) on 20th November, 1916, and the Sewerage District proclaimed. This District includes the whole area of the City of Bendigo, and the members of the Bendigo City Council constitute *ipso facto* the Bendigo Sewerage Authority. The Chairman for 1928 is Cr. W. Wilkie, J.P. Permanent surveys, designs, and estimates for the proposed scheme were made, and approved by the Governor in Council, and authority was obtained to borrow £120,000 to sewer the central portion of the city—an area of 935 acres, comprising 3,300 tenements, which was called Sewerage Area No. 1—and to construct the main outfall sewer and treatment works. A loan of this amount was obtained from the Commonwealth Bank at 5½ per cent. In 1924 an additional amount of £50,000 was borrowed from the Commonwealth Bank at 6½ per cent. for sewer extensions. These loans are secured by debentures, and the former is repayable in twenty years, and the latter in ten years on a 30 years' basis of half-yearly payments of sinking fund and interest. A further amount of £80,000 for extensions in hand has been borrowed, the interest rate being 5½ per cent., with repayment in 20 years on a 30 years' basis of equal half-yearly payments. These loans have been used for sewer extensions into suburban areas. The sewerage of Quarry Hill and Kennington is completed and Golden Square begun. For the purpose of meeting the loan repayments a special rate of 3d. in the pound of net annual value is levied upon all property within the Sewerage District, the whole city being rated, although the present sewerage proposals are confined to the central area. A sewerage rate of 1s. 6d. in the pound on properties actually sewered was struck on the 2nd March, 1928.

Construction of the main outfall sewer was begun on 30th January, 1921, and completed on 18th January, 1923. Its length is 4 miles, with a grade of 1 in 700. It includes two aqueducts, 42 feet and 80 feet long, respectively. The main sewer has been completed to the end of sewerage area No. 1, a length of $1\frac{1}{2}$ miles, and is now being extended into area No. 3, Golden Square. Branch sewers have been laid within the city, having an aggregate length of over 53 miles, and providing for the connexion of over 4,000 tenements. The first house was connected on 31st March, 1923; and by 30th June, 1928, 3,365 houses had been connected, while 113 others were in course of being sewered.

The method of disposal of the sewage is by liquefying tanks, with land filtration, the effluent being used for growing grass and fodder crops. The disposal site is surrounded by Crown lands and unimproved grazing lands, and is at Ironstone Hill, a mile west of Epsom, and $4\frac{1}{2}$ miles north of Bendigo Post Office.

The Act provides for a sewerage rate not exceeding 2s. in the pound on the annual value in sewered areas, and a special annual rate not exceeding 1s. in the pound in sewered or 6d. in the pound in unsewered areas. The Act further provides for the Sewerage Authority sewerage tenements at the request of the owners, repayment of the cost being made in 40 quarterly instalments. For this purpose borrowing powers to the extent of £100,000 were granted to the authority. Arrangements have been made to borrow up to this amount as required from the Commonwealth Bank of Australia at 6 per cent. The deferred repayment provision has been availed of to the extent of £125,235, of which amount £51,625 has already been repaid, the interest chargeable being limited by Act of Parliament to 1 per cent. more than the Authority pays. The whole scheme is expected to cost about £500,000.

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, provision for the service being made by the *Fire Brigades Act* 1915.

The Metropolitan Fire District embraces the area included in the various municipalities within a radius of 10 miles from the Elizabeth-street Post Office, as well as certain districts outside that area. The districts referred to are the Borough of Ringwood, Shire of Blackburn and Mitcham, and portions of the Shires of Braybrook,

Keilor, Broadmeadows, Heidelberg, Lilydale (Croydon), Doncaster and Templestowe, Mulgrave and Moorabbin, beyond the 10-mile radius. The Metropolitan Fire District includes the greater portion of the shire of Moorabbin, and extends in a southerly direction as far as Mordialloc (16 miles from Melbourne), that township being included.

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

Outfit of the Metropolitan Fire Brigade. The Metropolitan Fire Brigades Board on 30th June, 1928, had under its control the following:—Forty-one stations, 291 members of permanent staff, 78 members of special service staff, 9 members of clerical staff, 66 men engaged in the workshops, 15 employees engaged in the tailoring department, 170 partially paid firemen, 7 petrol motor fire engines, 2 motor salvage wagons, 40 combination hose carriages and pumps, 4 motor combination appliances, 21 petrol motor hose wagons, 4 motor cycles, 3 motor lorries, 3 special service vans, 1 Chief Officer's motor car, 1 Deputy Chief Officer's motor car, 3 extension ladders and fire escapes, 4 pompier ladders, 12 inspection cars, 114,741 feet of hose, 12 smoke helmets, 1 smoke jacket, and 490 fire alarm circuits having 1,544 street fire alarms, all of which were with telephones. There were also 1,228 auxiliary boxes and 273 automatic systems in public and other buildings, 192 direct telephone lines, 64 of which were acting as fire alarms to buildings, and 109 watchmen's clock systems.

During 1927-28 the cost of maintenance of the Metropolitan Fire Brigade was £225,404, one-third being contributed by each of the contributing bodies, viz., Government of Victoria, municipalities within the Metropolitan Fire District, and the fire insurance companies carrying on business in that district. The municipalities' contribution was equal to 793d. in the pound over an area wherein the property was valued at £17,902,810, and that of the insurance companies was equal to £5 12s. 0½d. for every £100 of premiums on insured property. The premiums received in the Melbourne Fire District in 1925 amounted to £1,010,896, and the total of the payments made by the companies in 1926-27 for the maintenance of the fire brigade system was £56,651.

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 by the fire insurance companies carrying on business in such districts, and two by the registered fire brigades. The board elects one of its members as president each year. The tenure of the Board members is two years. The Board's revenue for the year ended 30th June, 1927, was £31,139, which was obtained from the following sources:—(a) Government, £10,082; (b) municipalities, £10,039;

(c) insurance companies, £10,082; and (d) other sources, £936. The expenditure for the same year amounted to £29,948. There are 116 municipal councils and 99 insurance companies included in the operation of the Act. The premiums received by the insurance companies in country districts during the year 1925 amounted to £357,257. The total value of rateable property assessed within the Board's district in 1926 was £2,915,278. All brigades under the control of the Board are volunteer brigades, but in the large centres a few permanent stationkeepers and auxiliaries are employed. There are 144 registered brigades, and the number of registered firemen is 2,523. In many brigades there are, in addition to the registered firemen, a number of "reserve" members.

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

Water Supply. 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 must allow all persons at all times to take and use such water for extinguishing fires. On 30th June, 1927, the Board had fixed to its 285 miles $30\frac{3}{4}$ chains of leading mains and 1,874 miles $37\frac{1}{2}$ chains of reticulation mains, 6,869 pillar hydrants, 29 Tregear patent hydrants, and 17,586 ball fire plugs [viz., 17,565 Bateman and Moore, (of which 4,108 are with spring), and 21 Fowler patent]—a grand total of 24,484. Except in case of accident, repairs, or cleaning, these mains are kept constantly full of water under pressure.

The Melbourne and Metropolitan Board of Works, under the water supply provisions of its Act of 1915, must, upon the request of any municipal council within its boundaries, fix proper fire plugs in the main and other pipes belonging to the Board, at convenient distances, and at such places as the Board may consider proper and convenient for the supply of water for extinguishing any fire which may break out within its limits. The cost of fixing fire plugs and notice boards, together with the cost of their maintenance, must be defrayed by the municipal council within whose limits the fire plug is fixed. The Board may also fix fire plugs for private owners, provided they pay the cost of installation and maintenance.

Particulars of receipts and expenditure of both Fire
 Receipts and
 expenditure. Brigades Boards for the five years ended 30th June, 1927,
 are as follows :—

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

	1923.	1924.*	1925.	1926.	1927.
	£	£	£	£	£
<i>Ordinary Receipts.</i>					
Contributions — Govern- ment, Municipal, and Insurance ...	144,587	148,576	175,977	186,613	200,330
Receipts for Services ...	14,028	16,486	20,138	21,180	24,224
Interest and Sundries ...	9,778	9,881	12,120	17,567	21,014
Total ...	168,393	174,943	208,235	225,360	245,568
<i>Ordinary Expenditure.</i>					
Salaries ...	103,416	105,749	130,723	139,087	147,262
Fire Expenses ...	4,205	2,196	4,133	4,315	4,425
Administrative Charges, &c.	29,699	28,433	32,282	39,676	35,859
Plant—Purchase and Re- pairs ...	9,394	17,383	16,950	19,551	18,983
Interest ...	7,468	7,746	7,753	8,823	10,146
Repayment of Loans ...	2,959	3,115	3,946	4,185	5,133
Firemen's Accident Fund	...	...	...	...	500
Superannuation Fund ...	4,684	3,900	4,880	5,046	8,540
Miscellaneous ...	7,737	3,095	4,230	7,904	9,025
Total ...	169,562	171,617	204,897	228,587	239,873
<i>Loan Expenditure.</i>					
Purchase of Land and Erection of Buildings, &c.	1,443	1,201	19,047	14,236	40,823

* The figures relating to the Country Fire Brigades Board included in this column are for a period of six months to 30th June, 1924.