

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chiefly for local government in country districts, and the greater part of it remained in force until 1863, when it was repealed, and replaced by the Roads Districts and Shires Act.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 53 cities, towns, and boroughs in Victoria, and 139 shires. The Governor in Council may unite any two or more boroughs which form one contiguous area so as to form one borough, notwithstanding that the area would exceed the limits above specified; may unite any number of municipalities, one of which is a shire, which form one contiguous area, so as to form one shire; and may sever any portion of a municipal district and attach it to another, annex an outlying district, subdivide any municipal district into any number of divisions not exceeding eight, alter the boundaries, or abolish the subdivisions.

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

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

Every person (male or female) 21 years of age or upwards, liable to be rated in respect of property within a municipal district in respect of which all rates, made before 10th March of the year, have been paid by the 10th June, 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.

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

annual value of less than £5 per centum upon the fair capital value of the fee-simple thereof. A council may, however, with the consent of the ratepayers at a poll to be held, if demanded, levy rates on the basis of the unimproved capital value of the land. 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.

Several 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.

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

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

Incorporation of Melbourne and Geelong.

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

Amalgamation of Municipalities.

The Town of Ballarat East was united with Ballarat City on 19th May, 1921, and the Borough of Dunolly was amalgamated with the Shire of Bet Bet on 1st November, 1921.

New Municipality.

A portion of the North-East and South-East Ridings of the Shire of Kerang was excised on 2nd March, 1922, and a new shire created entitled Shire of Cohuna.

Municipalities: 1917-18 to 1921-22.

The total number of municipalities throughout the State in which local government was being administered at the end of the year 1921 was 192. Of these, 23 ranked as cities, 2 as towns, 28 as boroughs, and the remainder (139) as shires. The following is a summary of the estimated population, number of ratepayers, estimated number of dwellings (inhabited and uninhabited), total and annual value of rateable property, and annual revenue of cities, towns, boroughs, and shires in each of the five years ended 1921-22:—

MUNICIPALITIES: 1917-18 TO 1921-22.

Year.	Population.	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—							
1917-18 ..	844,970	219,076	189,459	3,265	£ 158,777,843	£ 8,912,503	£ 1,598,643
1918-19 ..	859,470	224,757	194,273	2,542	164,806,704	9,227,807	1,857,884
1919-20 ..	877,880	228,518	197,753	1,394	172,838,636	9,687,320	2,053,584
1920-21 ..	886,030	237,037	202,581	865	193,947,624	10,804,184	2,314,017
1921-22 ..	914,455*	245,589	204,144*		210,501,055	11,869,636	..
Shires—							
1917-18 ..	613,380	186,551	138,366	2,716	172,558,872	8,735,794	927,901
1918-19 ..	622,260	188,032	139,338	2,262	176,297,529	8,922,859	1,022,241
1919-20 ..	628,420	188,892	140,049	1,869	184,599,186	9,340,172	1,171,379
1920-21 ..	628,970	198,801	142,684	1,586	205,555,121	10,350,524	1,279,099
1921-22 ..	611,137*	201,956	141,842*		215,984,328	10,875,948	..
Total—							
1917-18 ..	1,458,350	405,627	327,825	5,981	331,336,715	17,648,097	2,526,544
1918-19 ..	1,481,730	412,789	333,611	4,804	340,604,233	18,150,666	2,380,125
1919-20 ..	1,506,300	417,410	337,802	3,263	357,437,822	19,027,492	3,224,963
1920-21 ..	1,515,000	435,838	345,265	2,451	399,502,745	21,214,708	3,593,116
1921-22 ..	1,525,592*	447,545	345,986*		426,485,383	22,745,584	..

* Census figures.

Increase in
value of
rateable
properties and
municipal
revenue.

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

INCREASE IN VALUE OF PROPERTIES AND IN MUNICIPAL REVENUE.

	Increase.		
	1921-22 over 1917-18.		1920-21 over 1917-18.
	Estimated Value of Rateable Property.		Revenue from all sources.
	Total.	Annual	
	£	£	£
Cities, Towns, and Boroughs	51,723,212	2,957,333	715,374
Shires	43,425,456	2,140,154	351,198
Total Increase	95,148,668	5,097,487	1,066,572

The number of ratepayers returned for 1921-22 was 447,575, and the total capital value of rateable property £426,485,383, which is equivalent to about 18 $\frac{3}{4}$ years' purchase on the basis of the annual value of £22,745,584.

Unimproved
Value of
Rateable
Property.

The estimated unimproved or ground value of rateable property in 1921-22 in cities, towns, and boroughs was £105,250,527, and in shires £143,989,552. 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.

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, 1917-18 TO 1921-22.

Year.	Properties Rated.		
	In Cities, Towns, and Boroughs.	In Shires.	Total.
1917-18	258,614	257,528	516,142
1918-19	261,253	258,976	520,229
1919-20	266,559	263,106	529,665
1920-21	278,357	279,731	558,088
1921-22	289,099	287,299	576,398

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, 1921-22, except as regards the items "revenue" and "annual endowment," the amounts of which are those for the year 1920-21:—

CITIES, TOWNS, AND BOROUGHS, 1921-22.

Name.	Enumerated Population, 4th April, 1921.	Number of Rate-payers.	Amount of General Rate levied in the £.	Estimated Value of Rateable Property.		Total Revenue 1920-21.	Annual Endowment payable by the Government.
				Total.	Annual.		
CITIES.							
Ballarat	34,672	9,240	2 6	4,254,645	283,643	60,594	..
Bendigo	25,693	6,390	2 3	3,079,944	219,996	51,140	..
Brighton	21,243	6,963	2 6	5,584,840	279,242	37,332	..
Brunswick	44,476	9,085	2 6	6,854,200	409,206	88,209	..
Camberwell	23,844	7,830	2 6	7,437,580	371,879	61,071	..
Canfield	40,692	12,400	*0 3½	10,805,999	585,174	81,351	..
Collingwood	34,243	7,611	2 3	5,804,716	348,283	39,533	..
Essendon	35,260	10,761	*0 4½	6,458,090	351,548	54,685	..
Fitzroy	34,938	7,676	1 10	7,296,156	400,342	36,127	..
Footscray	33,772	9,775	2 4	6,898,240	344,612	72,122	..
Geelong	14,818	4,330	2 7	3,378,820	168,941	35,662	..
Hawthorn	29,178	7,443	2 5	7,954,860	397,743	53,773	..
Kew	17,382	4,200	2 4	3,195,075	213,005	32,922	..
Malvern	32,308	8,480	2 6	10,121,020	506,051	75,365	..
Melbourne	103,269	30,849	2 0	52,247,400	2,612,370	802,247	..
Northcote	30,513	8,000	2 6	5,290,600	264,530	50,914	..
Port Melbourne	13,100	2,892	2 6	1,481,475	118,518	30,485	..
Prahran	50,288	12,496	1 10	10,183,656	848,638	86,345	..
Richmond	43,174	9,983	2 3	7,435,998	413,111	52,571	..
South Melbourne	46,879	10,452	2 6	12,059,560	602,978	78,977	..
St. Kilda	38,593	9,109	2 0	8,155,560	679,630	69,900	..
Warrnambool	7,739	1,669	2 6	1,412,456	80,149	36,789	..
Williamstown	19,445	4,576	2 6	2,304,600	153,640	51,832	..
TOWNS.							
Coburg†	18,112	7,516	*0 4	3,244,360	162,218	48,146	..
Sandringham	11,306	4,900	2 6	2,183,600	174,688	20,521	..

* Levied on unimproved value of land.

† Proclaimed a city on 29th March, 1922.

CITIES, TOWNS, AND BOROUGHES, 1921-22—continued.

Name.	Enumerated Population, 4th April, 1921.	Number of Rate-payers.	Amount of General Rate levied in the £.	Estimated Value of Rateable Property.		Total. Revenue 1920-21.	Annual Endowment payable by the Government.
				Total.	Annual.		
BOROUGHES.							
Ararat ..	4,657	986	s. d. 2 6	£ 261,940	£ 26,194	£ 15,288	£ 25
Carrum ..	5,216	3,448	*0 2½	1,457,013	72,094	9,014	..
Castlemaine ..	5,330	1,400	2 6	493,175	39,454	7,755	25
Clunes ..	1,228	480	1 9	56,000	8,000	2,070	37
Creswick ..	1,670	567	1 9	75,590	7,559	2,651	38
Daylesford ..	3,330	767	2 6	296,265	19,751	4,534	25
Dunolly ..	853	274	2 0	53,520	5,352	1,197	25
Eaglehawk ..	4,719	1,410	2 3	288,000	24,000	7,775	25
Echuca ..	3,745	1,200	2 6	484,964	31,288	9,243	25
Geelong West ..	9,638	2,463	2 8	1,292,960	64,648	11,641	25
Hamilton ..	5,098	1,245	2 3	786,660	39,333	8,569	25
Horsham ..	3,788	835	2 6	740,000	37,000	7,728	50
Inglewood ..	1,118	330	2 0	78,336	6,528	2,320	25
Koroit ..	1,761	414	2 6	418,700	20,935	5,710	25
Maryborough ..	4,747	1,187	2 0	283,750	28,375	5,666	25
Mentone and Mordialloc ..	5,670	1,941	2 6	1,176,500	58,825	9,976	..
Mildura ..	5,100	1,215	2 6	1,200,000	60,000	17,329	..
Newtown and Chilwell ..	7,233	1,787	*0 4½	1,294,180	64,709	9,235	25
Oakleigh ..	6,076	2,003	*0 3½	1,336,564	68,433	13,773	50
Portland ..	2,554	717	*0 3½	495,760	24,788	6,162	25
Port Fairy ..	1,987	502	2 3	381,480	19,074	5,503	25
Queenscliffe ..	2,490	620	2 6	274,000	13,700	2,980	50
Sale ..	3,768	881	1 9	520,720	26,036	10,386	25
Sebastopol ..	1,744	454	2 6	88,872	7,406	1,413	40
Stawell ..	4,411	958	2 3	266,300	26,630	11,598	25
St. Arnaud ..	2,721	823	2 0	452,180	22,609	3,184	25
Wangaratta ..	3,692	925	2 6	591,040	29,552	6,248	25
Wonthaggi ..	5,176	1,131	2 6	323,136	26,928	5,556	..
Total ..	914,455	245,589	..	210,501,055	11,869,636	2,314,017	715

* 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, 1921-22.

Name.	Enumerated Population, 4th April, 1921.	Number of Rate-payers.	Amount of General Rate levied in the £.	Estimated Value of Rateable Property.		Total. Revenue 1920-21.	Annual Endowment payable by the Government.
				Total.	Annual.		
Alberton ..	5,629	1,288	s. d. 2 0	£ 2,069,760	£ 103,488	£ 12,190	£ 696
Alexandra ..	3,353	715	1 10	1,014,440	50,722	7,332	388
Arapiles ..	2,324	640	1 3	1,257,960	62,898	3,107	152
Ararat ..	5,958	1,675	1 6	3,252,280	162,614	15,750	640
Avoca ..	3,311	1,400	1 6	806,300	40,315	4,000	238
Avon ..	2,385	827	1 6	1,337,500	66,875	6,495	300
Bacchus Marsh ..	3,299	825	2 0	1,010,960	50,548	6,576	203
Bairnsdale ..	7,723	1,930	1 6	2,325,680	116,284	13,949	704
Ballan ..	3,081	1,205	1 6	1,109,680	55,484	5,191	284
Ballarat ..	3,953	902	1 6	1,221,600	61,080	5,186	284
Bannockburn ..	2,589	750	1 9	1,057,540	52,877	5,331	201
Barrabool ..	1,819	450	2 0	873,980	43,699	5,180	210
Beechworth ..	4,652	1,440	1 9	542,520	34,179	8,530	269
Belfast ..	2,489	672	1 6	1,454,160	72,708	6,951	321

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SHIRES, 1921-22—continued.

Name.	Enumerated Population, 4th April, 1921.	Number of Rate-payers.	Amount of General Rate levied in the £.	Estimated Value of Rateable Property.		Total Revenue 1920-21.	Annual Endowment payable by the Government.
				Total.	Annual.		
			s. d.	£	£	£	£
Bellarine ..	4,004	1,090	1 9	1,235,840	61,792	6,844	238
Benalla ..	7,598	2,880	1 6	2,570,000	128,500	21,017	714
Berwick ..	8,951	3,200	2 0	2,251,960	112,598	12,972	494
Bet Bet ..	2,675	937	1 6	639,400	31,970	2,675	210
Birchip ..	1,852	561	1 0	1,021,720	51,086	3,601	198
Borong ..	4,757	1,363	1 0	2,095,200	104,760	8,252	491
Braybrook ..	4,427	2,368	1 9	1,328,880	66,444	7,822	129
Bright ..	4,005	1,390	2 0	692,080	34,604	6,089	370
Broadford ..	1,332	368	1 9	385,260	19,263	2,590	148
Broadmeadows ..	5,420	2,736	1 9	1,222,920	61,146	6,315	251
Bulla ..	2,598	450	1 6	628,340	31,417	5,142	172
Bulu Bulu ..	5,875	1,500	2 1	1,252,860	62,643	8,190	616
Bungaree ..	3,013	908	1 9	652,740	32,637	3,793	395
Buninyong ..	5,057	1,752	1 9	1,275,100	63,755	6,936	296
Charlton ..	2,465	778	1 6	1,065,600	53,280	6,129	271
Chiltern ..	2,144	830	1 6	465,000	31,000	3,376	216
Colac ..	12,108	2,870	1 6	6,585,720	329,286	30,703	138
Corio ..	3,945	1,178	2 0	1,622,640	81,132	9,191	255
Cranbourne ..	5,682	1,823	2 0	1,734,140	86,707	9,479	342
Creswick ..	3,044	1,008	1 3	1,137,640	56,882	5,697	383
Dandenong ..	6,900	2,500	*0 2½	1,722,640	86,132	18,381	259
Deakin ..	3,927	1,133	1 6	1,293,040	64,652	5,371	219
Dimboola ..	6,269	1,355	1 6	2,499,300	124,965	13,963	305
Donald ..	3,240	842	1 6	1,498,040	74,902	8,294	323
Doncaster ..	2,585	861	1 9	876,660	43,833	4,669	194
Dundas ..	3,486	1,153	1 6	2,723,380	136,169	11,404	517
Dunmunkle ..	4,585	1,093	1 0	2,395,520	119,776	9,416	612
East Loddon ..	1,770	473	2 0	1,211,600	60,580	5,753	271
Eltham ..	4,071	1,473	2 6	889,140	44,457	7,687	208
Euroa ..	3,908	1,136	1 6	1,404,620	70,231	6,956	321
Ferntree Gully ..	7,005	4,340	2 6	1,753,240	87,662	13,143	444
Flinders ..	4,760	5,000	1 9	1,252,700	62,635	7,430	128
Frankston and Hastings ..	4,648	2,917	2 0	1,090,860	54,543	14,820	213
Gisborne ..	2,377	710	1 9	624,820	31,241	4,272	168
Glenelg ..	5,483	1,639	1 6	2,506,860	125,343	12,121	591
Glenlyon ..	3,420	1,091	1 6	640,360	32,018	3,234	223
Gordon ..	3,150	870	1 6	1,050,480	52,524	4,948	365
Goulburn ..	2,147	612	1 0	753,900	37,695	4,190	172
Grenville ..	3,121	1,200	1 6	780,630	52,042	4,400	299
Hampden ..	10,505	2,175	2 0	6,124,020	306,201	41,957	370
Healsville ..	3,423	955	2 6	628,820	31,441	5,137	236
Heidelberg ..	16,611	9,800	1 6	3,517,400	175,870	50,538	245
Heytesbury ..	4,450	1,017	2 0	2,014,440	100,722	10,129	530
Huntly ..	3,095	1,005	1 6	969,060	48,453	4,569	198
Kara Kara ..	3,046	1,258	2 0	1,132,720	56,636	6,575	316
Karkaroc ..	5,495	1,477	1 0	2,924,520	146,226	13,219	469
Kellor ..	1,190	683	1 6	487,080	24,354	1,777	49
Kerang ..	10,479	2,490	1 3	4,753,560	237,678	31,358	494
Kilmore ..	1,790	538	2 0	205,070	20,507	4,019	136
Korong ..	4,873	1,550	1 6	2,022,320	101,116	7,908	321
Kowree ..	3,303	1,324	1 6	1,348,688	84,293	7,675	430
Kyneton ..	6,975	2,140	1 6	1,678,980	83,940	13,316	365
Lawloit ..	2,164	632	1 9	751,650	50,110	4,748	196
Leigh ..	1,522	556	1 6	1,035,600	51,780	4,379	272
Lexton ..	1,624	608	1 6	825,600	41,280	3,618	198
Lillydale ..	9,412	3,600	2 0	2,236,120	111,806	15,472	395
Lowan ..	3,630	1,300	1 6	1,900,000	95,000	9,421	296
Maffra ..	5,653	1,180	1 6	2,814,660	140,733	14,558	483
Maldon ..	3,138	1,110	1 6	715,940	35,797	3,556	185
Mansfield ..	3,995	1,330	2 6	1,275,380	63,769	9,243	542
Marong ..	5,878	1,886	1 6	2,042,580	102,129	8,908	454
Melton ..	1,429	432	1 9	834,720	41,736	4,316	145
Metcalfe ..	2,675	1,033	1 6	757,300	37,865	3,533	162
Mildura ..	8,083	2,877	2 6	1,879,920	93,996	14,681	234
Minhamite ..	1,881	636	1 0	1,631,200	81,560	7,611	321

SHIRES, 1921-22—continued.

Name.	Enumerated Population, 4th April, 1921.	Number of Rate-payers.	Amount of General Rate levied in the £.		Estimated Value of Rateable Property.		Total Revenue 1920-21.	Annual Endowment payable by the Government.
			s.	d.	£	£		
Mirboo ..	1,539	320	2	6	512,000	25,800	4,241	355
Moorabbin ..	7,442	4,000	2	6	1,380,520	69,026	23,942	206
Mornington ..	2,200	999	2	3	591,780	29,589	5,443	114
Mortlake ..	2,913	701	1	3	3,541,680	177,084	12,093	346
Morwell ..	3,685	850	1	9	884,420	44,221	5,521	435
Mount Rouse ..	2,711	720	1	3	2,040,000	102,000	8,156	198
Mulgrave ..	3,206	1,162	2	6	923,820	46,191	4,959	221
McIvor ..	3,335	1,150	1	3	1,121,900	56,095	4,693	221
Narracan ..	6,920	1,350	2	0	2,000,000	100,000	13,132	920
Newham and Woodend ..	2,091	640	1	6	586,680	29,334	4,724	148
Newstead and Mt. Alexander ..	2,699	1,038	1	6	545,660	27,283	2,587	166
Numurkah ..	5,768	1,625	1	0	2,460,180	123,009	12,171	591
Nunawading ..	12,625	6,100	2	6	3,085,480	154,274	28,514	469
Omeo ..	2,369	803	2	3	875,120	43,756	6,413	836
Orbost ..	3,826	970	2	0	1,052,560	52,628	7,130	472
Otway ..	4,042	1,080	2	6	118,620	5,931	6,120	471
Oxley ..	3,951	1,001	1	6	1,446,260	72,313	4,729	370
Phillip Island and Woolamai ..	5,103	1,305	2	0	1,401,380	70,069	9,237	545
Poowong and Jeetho ..	7,185	1,936	1	9	2,555,400	127,770	17,070	982
Portland ..	5,277	1,849	1	6	1,759,420	87,971	7,553	494
Preston† ..	9,670	5,980	2	3	2,446,580	122,329	28,032	321
Pyalong ..	702	330	1	6	423,000	21,150	1,742	113
Ripon ..	3,429	1,200	1	6	1,818,940	90,947	8,768	221
Rochester ..	6,290	1,491	1	0	2,527,880	126,394	9,253	246
Rodney ..	7,402	1,712	1	6	3,142,660	157,133	15,672	432
Romsey ..	3,195	847	1	6	1,240,980	62,049	5,884	320
Rosedale ..	4,182	1,120	*0	1	2,800,000	140,000	7,793	537
Rutherglen ..	3,947	1,070	1	6	1,026,000	51,300	6,503	257
Seymour ..	3,807	977	1	6	1,021,400	51,070	5,233	420
Shepparton ..	7,714	1,742	1	6	2,608,040	130,402	10,070	469
South Barwon ..	3,170	1,504	2	6	783,480	39,174	5,359	137
South Gippsland ..	4,672	1,162	1	9	1,372,800	68,940	6,370	517
Stawell ..	3,352	1,226	1	6	1,442,100	72,105	5,378	308
Strathfieldsaye ..	3,378	992	1	6	502,660	25,133	2,469	137
Swan Hill ..	11,552	2,400	1	6	3,560,000	178,000	20,708	272
Talbot ..	1,382	550	1	4	460,160	23,008	2,602	134
Tambo ..	4,238	1,018	2	0	1,118,500	55,925	5,769	513
Towong ..	4,330	1,200	1	9	1,872,000	93,600	10,270	578
Traralgon ..	3,336	728	1	9	1,232,540	61,627	9,178	441
Tullaroop ..	2,578	946	1	0	556,920	37,128	2,658	206
Tungamah ..	4,509	1,585	1	0	2,564,000	128,200	9,183	444
Upper Murray ..	2,111	430	1	9	972,000	48,600	4,334	307
Upper Yarra ..	5,525	1,262	2	3	724,160	36,208	4,971	221
Violet Town ..	1,888	712	1	3	759,820	37,991	2,823	221
Walpeup ..	5,472	1,675	1	6	1,473,000	73,650	8,196	...
Wangaratta ..	2,387	902	1	6	681,360	34,068	3,223	146
Wannon ..	2,843	855	1	3	2,105,780	105,289	8,338	426
Warranga ..	5,366	1,860	1	6	1,657,040	82,852	8,537	370
Warragul ..	4,954	1,192	2	3	1,797,800	89,890	12,315	885
Warrambool ..	8,235	1,827	1	3	4,463,080	223,154	34,877	678
Warribee ..	7,035	4,420	2	6	2,102,700	105,135	13,574	296
Whittlesea ..	3,481	1,008	1	9	1,206,520	60,326	6,153	226
Wimmera ..	4,155	1,071	1	0	2,395,440	119,772	8,289	360
Winchelsea ..	4,310	1,420	2	0	1,770,360	88,515	11,335	413
Wodonga ..	2,556	598	1	6	689,800	34,490	3,814	169
Woorayl ..	5,972	1,416	2	3	1,994,580	99,729	10,798	1,030
Wycheproof ..	4,219	1,232	1	6	2,061,346	103,067	11,185	328
Yackandandah ..	2,926	963	1	6	791,420	39,571	4,089	337
Yarrawonga ..	2,620	835	1	0	1,211,860	60,593	7,038	281
Yea ..	2,696	820	*0	2	1,050,200	52,519	6,634	377
Total ..	611,137	201,956	..	..	215,984,328	10,875,948	1,279,099	47,835

* Levied on unimproved value of land. † Declared a borough on 14th March, 1922, and a town on 16th May, 1922.

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

RATINGS IN MUNICIPALITIES, 1917-18 TO 1921-22.

Amount levied in the £.	Number of Cities, Towns, and Boroughs.					Number of Shires.				
	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
s. d.										
0 6 ..	1	..	..	..	..	..	..	..	..	..
1 0 ..	..	..	..	..	..	38	24	23	14	12
1 1 ..	..	..	..	..	..	1	1	1	..	..
1 2 ..	1	1	1	..	..	..	..	1	..	..
1 3 ..	..	..	..	..	..	38	41	27	16	9
1 4 ..	..	..	..	..	..	5	4	4	3	1
1 6 ..	5	5	4	3	..	35	43	50	60	55
1 7 ..	..	..	..	..	..	2	3	3	..	..
1 8 ..	2	1	1	1	..	..	..	..	..	..
1 9 ..	3	4	5	4	3	8	8	13	15	20
1 10 ..	1	1	..	..	2	1	..	..	1	1
2 0 ..	16	10	5	7	6	7	9	11	19	19
2 1 ..	2	1	1	..	..	..	..	..	..	1
2 2 ..	4	4	..	..	..	1	1	..	1	..
2 3 ..	12	16	17	9	7	1	1	3	1	6
2 4 ..	3	5	5	3	2	..	..	1	..	..
2 5 ..	..	..	1	..	1	..	..	1	..	..
2 6 ..	2	4	12	20	23	2	3	1	6	12
2 7 ..	..	..	..	..	1	..	..	..	..	..
2 8 ..	..	..	..	..	1	..	..	..	..	..
Total ..	52	52	52	47	46	139	138	138	136	136

The figures in this table for 1920-21 and 1921-22 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. 2d. in the £ in cities, towns, and boroughs, and of 1s. 6d. in shires. The average rating in the urban districts is thus shown to be 8d. in the £ more than in the rural districts. It will be observed that only one municipality during the last five years imposed the minimum rate allowed by law, viz., 6d., and that the highest rate imposed was 2s. 8d. in the £, which is 4d. less than the maximum of 3s.

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

**Municipal
revenue and
expenditure.**

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

**REVENUE AND EXPENDITURE OF MUNICIPALITIES,
1919 TO 1921.**

Sources of Revenue.	1919.	1920.	1921.
Taxation —	£	£	£
Rates	1,560,968	1,750,778	2,083,931
Licences	136,517	135,383	126,952
Dog Fees	21,074	22,575	23,682
Government Endowment and Grants	96,429	74,563	65,581
Contributions for Streets, Footpaths, &c.	93,900	73,182	84,936
Market and Weighbridge Dues	85,240	87,845	91,448
Sanitary Charges	101,996	116,096	133,244
Rents	69,845	85,517	92,717
Electric Light and Gas Works	385,727	487,481	599,010
Other Sources	328,429	391,543	291,615
Total	2,880,125	3,224,963	3,593,116
Heads of Expenditure.			
Salaries, &c.	226,692	246,851	284,158
Sanitary Work, Street Cleansing, &c.	248,956	306,775	345,834
Lighting	100,679	102,945	115,968
Contributions to Fire Brigades	35,120	39,637	46,512
Public Works—			
Construction	294,874	208,326	238,165
Maintenance	869,946	997,289	1,181,897
Electric Light and Gas Works	282,301	388,058	501,722
Formation of Private Streets, &c.	111,125	82,746	130,125
Redemption of Loans	137,688	128,664	133,786
Interest on Loans	257,057	264,147	276,065
Charities	21,103	25,031	29,468
Other Expenditure	332,347	313,650	315,085
Total	2,917,888	3,104,119	3,598,785

As compared with 1920, the revenue of 1921 increased by £368,153, as follows:—Rates increased by £333,153, sanitary charges by £17,148, rents by £7,200, dog fees by £1,107, electric light and gas works by £111,529, market and weighbridge dues by £3,603, and contributions for streets, footpaths, &c., by £11,754. The revenue from Government endowment and grants decreased by £8,982, from licences by £8,431, and from “other sources” by £99,928. The expenditure was in excess of the amount for the previous year by £494,666. All the items showed increases as under:—Salaries, £37,307; sanitary work and street cleansing, £39,059; lighting, £13,023; contributions to fire brigades boards, £6,875; public works construction, £29,839; public works maintenance, £184,608; electric light and gas works, £113,664; formation of private streets, &c., £47,379; redemption of loans, £5,122; charities, £4,437; interest on loans, £11,918; and other expenditure, £1,435.

Proportion of municipal revenue raised from different sources. Fifty-eight per cent. of municipal revenue in 1921 was derived from rates, 15 per cent. from electric light and gas works, 4 per cent. from licences of all kinds, 3 per cent. from market and weighbridge dues, 1 per cent. from dog fees, 2 per cent. from Government endowments and grants, 2 per cent. from contributions for streets, footpaths, &c., 4 per cent. from sanitary charges, 3 per cent. from rents, and 8 per cent. from all other sources.

Salaries. In 1921 the salaries of the municipal officers amounted to £284,158, or about 8 per cent. of the entire revenue.

Local charities. A sum of £29,468, or less than 1 per cent. of the revenue, was devoted to the local charities; the greater part of this disbursement was in aid of hospitals, benevolent asylums and associations, and orphan asylums.

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

MUNICIPAL ASSETS AND LIABILITIES, 1919 TO 1921.

Assets.	1919.	1920.	1921.
Municipal Fund—	£	£	£
Uncollected Rates	133,585	133,573	158,301
Other Assets	550,283	483,724	591,508
Loan Funds—			
Sinking Funds—			
Amount at Credit	465,132	489,332	523,834
Arrears Due	1,093	3,098	483
Unexpended Balances	204,761	221,405	331,561
Property—			
Halls, Buildings, Markets, &c.	2,955,345	2,993,337	3,117,266
Waterworks	271,581	270,147	256,169
Gasworks	114,505	117,704	123,454
Electric Light Works... ..	982,723	1,084,555	1,340,261
Total Assets	5,679,008	5,796,875	6,442,837
Liabilities.	1919.	1920.	1921.
Municipal Fund—	£	£	£
Due on Current Contracts	64,037	85,368	102,191
Arrears due to Sinking Funds	1,093	3,098	483
Overdue Interest	6,611	7,091	5,379
Bank Overdrafts	484,785	442,326	542,462
Other Liabilities	280,475	281,675	352,518
Loan Funds—			
Loans Outstanding	5,041,429	5,192,069	5,595,614
Due on Loan Contracts	129,192	220,188	158,009
Total Liabilities	6,007,622	6,231,815	6,756,656

**Municipal
assets and
liabilities
compared.**

The total of the assets of municipalities in 1921 was £6,442,837, and of the liabilities £6,756,656. The aggregate of the current liabilities (Municipal Fund) was £1,003,033, against which there were assets amounting to £749,809. The gross liability on account of loan expenditure for works completed and in progress was £5,753,623, which, after deducting sinking funds and unexpended balances, was reduced to £4,897,745. If credit were taken for the value of municipal properties in markets, halls, buildings, gasworks, electric light works, water works, &c., (£4,837,150), the net burden on account of loan moneys would be £60,595.

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

**Endowment of
municipalities.**

An annual endowment to municipalities of £310,000 was authorized by the *Local Government Act* 1874, and it ceased to be payable in 1879. A subsidy, however, in lieu of such endowment, amounting to £310,000, was voted by Parliament annually, and this vote was gradually increased until £450,000 was reached in 1889-90 and 1890-91. Under the *Local Government Act* 1891, £450,000 was provided as an annual endowment for the municipalities. This amount was reduced to £405,000 per annum from 1st January, 1893; to £310,000 from 1st July, 1893; to £100,000 from 1st July, 1894; and to £50,000 from 1st July, 1902. Under Act No. 2025 it was increased to £75,000 for the year 1906-07, 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 for the seven succeeding financial years it was reduced to £50,000 under the authority of Acts passed periodically. The endowment is payable in equal moieties in March and September of each year, and no city or town is entitled to receive any part of it. The distribution amongst the boroughs and shires is based on the amount of general and extra rates received during the twelve months ended on the preceding 30th September, according to the following scale:—

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

RATING ON UNIMPROVED VALUES BY MUNICIPALITIES.

Rating on
unimproved
values.

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

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

By an amending Act (No. 3045), passed on 6th January, 1920, power is given to the municipalities to adopt the principle of rating on unimproved values, notwithstanding that an order has not been made under section 4 of the Principal Act, which requires that on adoption of such principle the valuations of land made by assessors under the *Land Act 1915* shall be the basis on which the taxation is levied. A further Act (No. 3069), passed on 14th September, 1920, provides that municipalities making valuations on the basis of the unimproved capital value shall also compute the capital improved value and the annual or net annual value of every rateable property. New valuations are to be made at least once in every five years.

Eight municipalities in the State levied the general rate for the year 1920-21 under the new system, and in 1921-22 two others adopted the method, making a total of ten. 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 1921-22.—

RATING ON UNIMPROVED VALUES, 1921-22.

Municipality.	Capital Improved Value.	Capital Unimproved Value.	Annual Improved Value.	Amount of Rate in the £ on Unimproved Value.	Equivalent Rate on Annual Value.	Amount Collectable in 1922 on Unimproved Value.	Percentage Unimproved to Capital Value.
	£	£	£	s. d.	s. d.	£	
Carrum Borough ..	1,457,010	783,163	72,094	0 2 $\frac{3}{4}$	2 6	8,974	53·8
Caulfield City ..	10,805,999	4,006,221	585,174	0 3 $\frac{1}{2}$	2 0	58,424	37·1
Coburg City ..	3,244,360	1,220,928	162,218	0 4	2 6	20,349	37·6
Essendon City ..	6,458,090	2,324,096	351,548	0 4 $\frac{1}{2}$	2 6	43,577	36·0
Newtown and Chilwell Borough ..	1,294,180	411,105	64,709	0 4 $\frac{1}{2}$	2 4 $\frac{1}{2}$	7,708	31·8
Oakleigh Borough ..	1,336,564	599,765	68,433	0 3 $\frac{1}{2}$	2 7	8,747	44·9
Portland Borough ..	495,760	206,484	24,788	0 3 $\frac{1}{2}$	2 5	3,011	41·6
Dandenong Shire ..	1,722,640	760,700	86,130	0 2 $\frac{1}{2}$*	..	..	44·2
Rosedale Shire ..	2,800,000	1,535,507	140,000	0 1	0 11	6,398	54·8
Yea Shire ..	1,050,200	659,992	52,510	0 2	2 1	5,500	62·8

* In addition, there are extra rates of 1d. in the Centre Riding, and of $\frac{1}{2}$ d. in the South Riding.

HOUSING AND RECLAMATION ACT 1920.**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 overcrowded areas was passed by the State Parliament on 24th December, 1920. An eligible person is defined as one who is not the owner of a dwelling-house in Victoria 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 £800.

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 the capital cost.

When the purchaser has paid 15 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. Advances not exceeding £650 may be made by the Commissioners upon the security of any land upon which a dwelling-house is about to be erected or upon which a dwelling-house has within six months before the application for the advance been erected.

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 £ 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.

COUNTRY ROADS BOARD.

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

Duties.

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

The construction of permanent works and the maintenance of main roads are 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 was debited with all payments made by the Treasurer towards the cost of permanent works. A further sum of £500,000 was made available under Act No. 3057, passed in September, 1920, to be raised in the two financial years 1920-21 and 1921-22 at the rate of £250,000 per annum, and again by Act No. 3137 an additional sum of £500,000 has been made available for expenditure during the two financial years commencing 1st July, 1922. A sinking fund of 1 per cent. per annum on half the amount borrowed is authorized to be paid out of the Consolidated Revenue until half the amount borrowed is redeemed. The total cost of the works, in the first instance, is to be paid by the Treasury, but subsequently half the amount expended is to be refunded by the municipalities affected. In the case of expenditure on permanent works an annual payment to the Treasurer of six per cent. on the amount due by each municipality is provided for, and the cost of maintenance allocated to each municipality must be paid out of the municipal fund before the 1st July in each year. A special rate not to exceed 6d. in the £ 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. For maintenance works an annual payment of £50,000 to the Country Roads Board Fund from the Consolidated Revenue is provided for by Act No. 2986, and power is given to reduce contributions of the municipalities in respect to the maintenance of main

roads 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. All fees and fines paid under the Motor Car Act, all moneys standing to the credit of the Municipal Fees and Fines Trust Fund, all fees paid on the registration or renewal of the registration of traction engines, and all fees received by the Crown after the 30th June, 1912, under the *Unused Roads and Water Frontages Act 1903* (incorporated in the *Local Government Act 1915*), are to be credited to the Country Roads Board Fund.

Since the appointment of the Board in March, 1913, the members have inspected the principal highways throughout the State. Every Shire Council and Borough Council with which the Board is likely to have dealings relating to the construction or maintenance of roads declared main roads under the Act has been interviewed and the provisions of the Act have been explained to it. A system for the continuous maintenance of all main roads has been evolved, by which it is hoped that those that are now being constructed or reconstructed will be kept in good condition, while those that are in a fair state of efficiency will be kept up to that standard.

During the year 1920-21 constructional work to the value of £271,869, and maintenance work involving an expenditure of £221,395, were undertaken.

The loan expenditure to 30th June, 1921, for permanent works was £2,177,245, and for developmental roads £1,058,210.

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

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

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 (Act No. 2985). Under this scheme the State provides the whole of the money and makes provision out of State funds for liquidating the liability. The municipalities are required, however, to bear a proportion of the interest on the outlay during the period of the loan, and to maintain the roads when constructed. The amount expended under Acts Nos. 2944 and 2985 during the year ended 30th June, 1921, was £693,309.

COUNTRY ROADS BOARD FUND.

STATEMENT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 30TH JUNE, 1921.

	RECEIPTS.			PAYMENTS.			Cr.		
	£	s.	d.	£	s.	d.	£	s.	d.
To Motor Car Act No. 2237—									
Registration Fees ..	93,516	10	0						
Licence Fees ..	6,221	1	6						
Fines ..	3,356	18	0						
	103,094	9	6						
<i>Less</i> Refunds and Costs of Administration ..	4,959	12	0						
				98,134	47	6			
„ Unused Roads and Water Frontages Act No. 1594—									
Licence Fees ..	23,012	11	5						
<i>Less</i> Refunds and Costs of Administration ..	1,571	18	0						
				21,440	13	5			
„ Country Roads Act No. 2635—									
Registration Traction Engines and Fines ..	1,065	6	0						
<i>Less</i> Refunds ..	3	3	0						
				1,062	3	0			
„ Municipalities Repayments—									
Permanent Works ..	50,036	7	1						
Maintenance Works ..	90,334	12	3						
				140,370	19	4			
„ Appropriation for Maintenance of Main Roads, Act No. 2986				50,000	0	0			
„ Hire of Plant ..	5,893	13	3						
„ Stores and Materials Issued	23,780	10	0						
„ Sundries ..	2,181	19	8						
				31,856	2	11			
				342,864	16	2			
„ Advances to Loan Account on account of Permanent Works Expenditure refunded ..				282,061	13	0			
„ Balance ..				46,656	0	5			
				£671,582	9	7			
							£671,582	9	7

Ordinary receipts and payments.

The following is a statement of the receipts and payments during 1920-21 of the fund established under the Country Roads Act :—

Municipal Statistics.

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Loan receipts
and
expenditure.

The expenditure out of loan money on the construction of permanent works (main roads) for the year ended 30th June, 1921, is shown below :—

COUNTRY ROADS BOARD LOAN ACCOUNT.

YEAR ENDED 30TH JUNE, 1921.

RECEIPTS.		PAYMENTS.		Cr.	
		£	s. d.	£	s. d.
To Balance, 1st July, 1920	..	5,804	13 10		
„ Proceeds of Loans	..	290,697	6 4	By Permanent Works	275,380 8 4
„ Transfer	..	19	8 8	Deduct refunds, &c.	3,511 3 11
„ Advances from Country Roads Board Fund	..	275,380	8 4		271,869 4 5
				„ Temporary Advances from Country Roads Fund refunded	282,061 13 0
				„ Balance	17,970 19 9
		£571,901	17 2		£571,901 17 2

Developmental
Roads Loan
Account.

The following statement shows, for the year ended 30th June, 1921, the expenditure out of loan funds on the construction of developmental roads, under the provisions of Acts Nos. 2944 and 2985 :—

DEVELOPMENTAL ROADS LOAN ACCOUNT.

YEAR ENDED 30TH JUNE, 1921.

RECEIPTS.		PAYMENTS.		Cr.	
		£	s. d.	£	s. d.
To Proceeds of Loans	..	749,478	0 0	By balance, 1st July, 1920	51,142 1 3
„ Public Account—Advance Account	..	42,860	2 6	„ Expenditure	694,651 1 11
„ Balance	..	71,336	6 6	Less Refunds, &c.	1,342 6 1
					693,308 15 10
				„ Public Account—Advance Account	119,223 11 11
		£863,674	9 0		£863,674 9 0

LICENSING FUND.

Licensing
fund.

The following is a statement of the receipts and expenditure of the Licensing Fund for the year ended 30th June, 1921 :—

LICENSING FUND.—RECEIPTS AND EXPENDITURE,
1920-1921.

RECEIPTS.		EXPENDITURE.	
	£	s.	d.
Balance, 30th June, 1920	755	17	6
Fees	3,011	9	0
Fines	6,251	0	7
Sale of confiscated liquor	64	10	1
Licences.	Spirit Merchants and Grocers	25,828	16 6
	Victuallers	197,883	0 11
	Temporary	3,280	6 4
	Railway Refreshment Rooms	2,683	5 6
	Packet	114	4 0
	Australian Wine	4,025	15 1
	Billiard-table	3,753	10 0
	Brewers	167	11 6
	Vignerons	100	0 0
	Club certificates	5,368	3 11
Permits—Extra Bars	766	13 4	
“ Extended Hours	842	10 0	
Expenses of holding extended annual sitting of court	28	11 0	
Interest	3,096	13 10	
Cost of taking Poll	25	0 0	
Compensation assessment	Dr. 3	0 0	
Total	£258,043	19	1
EXPENDITURE.			
		£	s. d.
Salaries and expenses of Board, office, &c.	4,973	13	2
Incidental Expenses	9,051	12	9
Annual payment to municipalities	66,002	0	0
Compensation	73,985	0	0
Cost of taking Poll	3,052	19	8
Transferred to Police Superannuation Fund under section 44 of Act No. 2855	23,000	0	0
Transferred to Investment Account	67,000	0	0
Balance £156,978	13	6	
Deduct			
Investments in Stock	146,000	0	0
		10,978	13 6
Total	£258,043	19	1

Licence fees.

In addition to the endowment of £50,000 the municipalities received from the Government in 1920-21 a sum of £66,002 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., 1920-21.

	£	s.	d.
Paid to Cities	32,208	0	0
„ Towns	180	0	0
„ Boroughs	8,284	0	0
„ Shires—			
1st Class	288	0	0
2nd „	11,144	0	0
3rd „	9,360	0	0
4th „	767	0	0
5th „	3,268	0	0
6th „	1,229	0	0
<hr/>			
Total	66,728	0	0
Add payments on account of 1919-20	90	0	0
Deduct unpaid accounts of 1920-21	816	0	0
<hr/>			
Amount paid in 1920-21	66,002	0	0
<hr/>			

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 1920-21 was £5,595,614, which was due to the Government and the public respectively, as follows :—

MUNICIPAL INDEBTEDNESS, 1921.

	Due to the Government.	Due to the Public.
	£	£
Cities, Towns, and Boroughs ...	1,162,072	3,448,151
Shires	184,122	801,269
Total	1,346,194	4,249,420

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

MUNICIPAL LOAN RECEIPTS AND EXPENDITURE, 1921.

	Cities, Towns, and Boroughs.	Shires.	Total.
	£	£	£
Receipts during the year	409,342	163,509	572,851
Balance unexpended from previous year ...	230,524	32,202	262,726
Expenditure during the year	370,636	133,380	504,016
Balance unexpended at the end of 1921 ...	269,230	62,331	331,561

Municipal loan expenditure, 1917 to 1921. The municipal expenditure of loan moneys during the year 1921 amounted to £504,016, of which £370,636 was spent by cities, towns, and boroughs, and £133,380 by shires. The following return shows the loan receipts and expenditure for the last five years :—

MUNICIPAL LOAN RECEIPTS AND EXPENDITURE: RETURN FOR FIVE YEARS.

Year.	Receipts.	Expenditure.
	£	£
1917	402,965	290,824
1918	149,860	190,184
1919	162,602	194,627
1920	275,708	259,498
1921	572,851	504,016

The loan receipts for the year 1920-21 amounted to £572,851, of which £23,850 was obtained from the Government. The unexpended balance of loan moneys at the end of the year 1920-21 was £331,561—£269,230 to the credit of cities, towns, and boroughs, and £62,331 to the credit of shires. The following are the particulars:—

LOANS TO MUNICIPALITIES, 1921.

	Loans from—		Unexpended Balance of Loan Moneys.
	Government.	Public.	
CITIES, TOWNS, AND BOROUGHS—	£	£	£
Bendigo	42
Brighton	1,350
Brunswick	22,000	..	16,096
Camberwell	26,863
Caulfield	28,500	9,026
Coburg	32,000	10,678
Collingwood	817
Creswick	500	..	..
Dunolly	66
Essendon	1,219
Fitzroy	2,317
Geelong West	806
Hawthorn	21,437
Kew	14,526
Malvern	2,966
Maryborough	365
Melbourne	289,892*	80,754
Northcote	8,000	286
Oakleigh	6,500	1,163
Portland	454
Port Melbourne	1,211
Prahran	11,000
Queenscliffe	127
Richmond	36,635
Sandringham	9,900	4,370
South Melbourne	2,328
St. Kilda	10,043
Wangaratta	7,300	4,708
Warrnambool	3,400	2,334
Williamstown	5,243
Wonthaggi	1,350	..	..
Total	23,850	385,492	269,230

* Of this amount, £40,811 was transferred from the Electric Supply Depreciation and Renewals Fund, and £4,278 from the General Depreciation and Renewals Fund, to Loan Account.

LOANS TO MUNICIPALITIES, 1921—continued.

	Loans from—		Unexpended Balance of Loan Moneys.
	Government.	Public.	
SHIRES—	£	£	£
Bacchus Marsh	6,000	..
Bannockburn	2,000	1,350
Braybrook	4,000	2,332
Bright	1,381
Colac	25,200	10,210
Corio	1,507	1,611
Dandenong	11,700	1,450
Dimboola	2,500	..
Doncaster	4,000	748
Ferntree Gully	13,500	7,653
Frankston and Hastings	3,500	..
Goulburn	1,000	..
Healesville	10,000	2,023
Heidelberg	12,000	..
Huntly	930
Lillydale	4,000	1,599
Lowan	5,000	..
Maffra	1,606
Mansfield	400	13
Melton	200
Mildura	4,500	3,649
Mornington	2,000	306
Newham and Woodend	500	..
Numurkah	2,500	..
Nunawading	5,000	252
Preston	20,000	7,252
Rochester	2,500	594
Seymour	9,000	..
Shepparton	1,200	6,789
South Barwon	502	512
Tungamah	28
Walpeup	5,037
Wangaratta	87
Wannon	2,000	740
Werribee	1,000	..
Whittlesea	777
Winchelsea	4,500	3,125
Wycheproof	2,000	..
Yea	77
Total	163,509	62,331

**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 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, 1921, are given hereunder:—

**RECEIPTS AND EXPENDITURE OF THE FUND TO
30TH JUNE, 1921.**

	Receipts.			Expenditure.	
	1920-21.	To 30th June, 1921.		1920-21.	To 30th June, 1921.
	£	£		£	£
Balance, 30th June, 1920	332	..	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	65,280	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	60,680	*Redemption of Municipal Loans—		
From the Tramway Board — Moneys recovered .. ..	..	115,000	Debentures matured ..	8,000	294,200
Contributions by municipalities ..	52,988	158,945	Redeemable in instalments ..	18,692	54,591
Stock realized ..	45,940	67,065	Ordinary loans	63,334	82,034
Other receipts ..	..	300	Interest due to the Treasurer of Victoria on account of municipalities' loan liability outstanding under Acts Nos. 1552 and 2591 ..	1,287	13,923
			Interest on debit balance of fund	3,337	4,372
			Sundries	10	10
			Balance, 30th June, 1921 ..	..	..
Total	159,940	1,053,310	Total	159,940	1,053,310

* 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, 1921, was £131,391.

RECEIPTS AND EXPENDITURE OF THE CITY OF MELBOURNE.

Particulars of the receipts and expenditure for 1921 of the City of Melbourne are given in the statement hereunder.

Of the total revenue of the City of Melbourne in 1921, about 35 per cent. was derived from rates, 41 per cent. from the sale of electric light, 6 per cent. from the rental of city property—chiefly markets and shops—6 per cent. from market and weighbridge fees, 6 per cent. from licences,

City of Melbourne, revenue and expenditure under various heads.

and 6 per cent. from other sources. For public works maintenance, such as roads and bridges, markets, abattoirs, &c., about 30 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, 2 per cent.; for electric supply, 32 per cent.; for lighting, 3 per cent.; for street cleansing, 8 per cent.; for salaries, allowances, and commissions, 6 per cent.; and for miscellaneous expenditure, 6 per cent.

CITY OF MELBOURNE: REVENUE AND EXPENDITURE, 1921.

Heads of Revenue.		Amount.
Rates—		£
General	.. . . . .	256,303
Lighting	.. .. .	21,651
Licences—		
Publicans'—Equivalent for—From Licensing Act	.. .. .	9,876
Abattoirs—Slaughtering Dues and Meat Supervision Fees	.. .. .	34,765
Drays, Hackney Carriages, Trams, and Motors	.. .. .	301
Other Licences	.. .. .	1,439
Fees under Dog Act	.. .. .	680
Baths	.. .. .	5,419
Market and Weighbridge Fees	.. .. .	50,327
Lighting—Sale of Electric Current and Rent of Meters, &c.	.. .. .	330,287
Closet and Street Cleansing Charges	.. .. .	7,394
Fines and Costs	.. .. .	2,773
Rents—		
Markets and Weighbridges	.. .. .	37,570
Town Hall Premises and Rooms	.. .. .	6,186
Other	.. .. .	4,196
Interest on Fixed Deposits, &c.	.. .. .	766
Miscellaneous—		
Desiccators—Sale of Manure	.. .. .	13,757
Fees under Building Act	.. .. .	1,886
Sundries	.. .. .	16,671
Total	.. .. .	802,247
Heads of Expenditure.		Amount.
Salaries (including clerical assistance, expenses of audit, collection of statistics, making valuation, and commissions paid in lieu of salaries, &c.)		£
Allowance to Lord Mayor	.. .. .	44,528
Closet Cleansing	.. .. .	1,500
Street Cleansing, &c.	.. .. .	1,060
Lighting—Electric and Gas	.. .. .	67,212
Fire Brigades Board—Contribution	.. .. .	24,365
Public Works—Maintenance—		10,533
Roads and Bridges	.. .. .	129,920
Markets and Weighbridges	.. .. .	25,402
Public Buildings (including Abattoirs, Baths, &c.)	.. .. .	58,764
Parks and Planting trees in streets	.. .. .	33,397
Payments under provisions of the Tramway Act No. 2995	.. .. .	33,397
Interest on Loans from the Public	.. .. .	2,258
		102,110

CITY OF MELBOURNE: REVENUE AND EXPENDITURE, 1921--continued.

Heads of Expenditure--continued.	Amount.
	£
Sinking Funds--Loans from the Public	17,129
Electric Supply--Maintenance, &c.	263,704
Expenses of paying Interest on Loans	433
Interest on Bank Overdrafts	717
Contributions to Charitable Institutions	2,105
" " Infectious Diseases Hospital	6,559
" " Heatherton Sanatorium	1,273
Law Costs	672
Printing, Advertising, and Stationery	4,161
Miscellaneous--	
Rat Destruction	1,279
Gas Conference	157
Fees--Dog Act	676
Insurance and Guarantee Premiums	3,065
Elections	391
Influenza Epidemic	8,151
Band Performances	1,500
Baby Health Centres	781
Ceremonials	1,980
Ambulance Service	500
Sundries	3,413
Total	819,695

MUNICIPAL OFFICERS' FIDELITY GUARANTEE FUND.

An Act was passed in 1907 (No. 2080) incorporating the Municipal Association of Victoria, and authorizing it to institute a "Municipal Officers' Fidelity Guarantee Fund," to which any municipality, any authority constituted under any Water Act or any Weights and Measures Union may contribute such sum as may be fixed by the association for a guarantee against loss by the dishonesty of its officers. The Act provided, however, that the fund could not be established until three-fifths of the municipalities in Victoria had agreed in writing to contribute and that the amount to be contributed for a guarantee must not be less than that payable in 1907 for a like guarantee to any incorporated company or society in Victoria. At any time after the fund has reached £3,500 the rates of contribution may be altered, so that it will be maintained at that sum, and, in the event of the amount at credit being at any time insufficient to pay all the liabilities and expenses, the difference must be made up by payments from all the contributors, each paying *pro rata* to its 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, 1921, amounting to £243,070, were obtained from the Association for a contribution of £817. The amount to the credit of the fund on 30th September, 1921, was £9,869. The claims paid from the inception of the fund to 30th September, 1921, amounted to £2,548.

MELBOURNE HARBOR TRUST.

Melbourne
Harbor Trust
—receipts and
expenditure.

The Melbourne Harbor Trust is a corporate body, which was established in 1876 to regulate, manage, and improve the Port of Melbourne and portions of the Yarra and Saltwater Rivers adjacent thereto, for which purpose certain lands and properties are vested in Commissioners.

On 31st December, 1912, an Act was passed by the State Parliament which altered the constitution of the Trust. 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 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 was increased in 1912 from £2,000,000 to £3,000,000. 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: 1917 TO 1921.

Heads of Revenue and Expenditure.	1917.	1918.	1919.	1920.	1921.
REVENUE.					
	£	£	£	£	£
Wharfage and Tonnage Rates ..	267,739	259,175	255,234	310,805	415,737
Rents	27,989	30,678	33,740	35,238	37,445
Interest	31	123	193	45	43
Other Revenue	23,158	33,233	43,453	41,885	45,148
	318,917	323,209	332,620	387,973	498,373
Less Amount paid to Consolidated Revenue	60,000	62,305	62,460	75,554	96,224
Total	258,917	260,904	270,160	312,419	402,149
REVENUE EXPENDITURE.					
General Management and Expenses	38,363	30,568	31,622	31,802	36,852
Flotation and Redemption of Loans Expenses	1,005	5,404	12,455	300	30,140
Maintenance—Dredging ..	44,231	15,279	47,382	71,017	78,689
" Harbor	1,994	1,982	2,418	3,721	3,814
" Wharfs	15,780	11,778	17,121	19,018	23,383
" Approaches	8,107	6,667	10,845	11,391	14,526
Interest on Loans*	85,206	87,190	94,698	96,961	104,342
Depreciation, Renewals Account, and Sinking Fund	51,747	52,000	52,500	52,500	65,000
Total	246,433	210,868	269,041	286,710	356,746
Surplus on Revenue Account ..	12,484	50,036	1,119	25,709	45,403
CAPITAL EXPENDITURE.					
Land and Property	588	1,153	964	3,221	2,420
Deepening Waterways	50,871	108,037	68,746	80,720	81,699
Wharfs Construction	62,246	37,321	77,305	50,084	79,206
Approaches Construction ..	6,201	11,417	3,774	2,364	1,565
Other Harbor Improvements ..	26,923	7,352	3,068	2,936	14,099
Floating Plant	3,814	811	1,435	834	2,957
General Plant	1,728	130	509	883	991
Stock Account	4,686	..	..	..	..
Total	157,057	166,221	155,801	141,042	182,937

* 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 £591,000 and to issue debentures, which may be made payable in London or Melbourne. The following is a summary of the receipts and expenditure for the last five years, the expenditure from ordinary revenue being distinguished from loan expenditure:—

GEELONG HARBOR TRUST—REVENUE AND EXPENDITURE.

	1917.	1918.	1919.	1920.	1921.
REVENUE.					
Wharfage and Tonnage Rates ..	£ 8,772	£ 9,988	£ 13,004	£ 12,772	£ 17,415
Rents, Fees, and Licences ..	3,829	5,488	5,125	4,237	4,189
Sparrovale Farm	5,933	7,042	7,403	9,375	8,789
Corio Freezing Works and Abattoirs	10,683	15,180	20,999	19,548	15,042
Other Revenue	3,157	4,919	1,682	4,088	4,200
Total	32,374	42,617	48,213	50,020	49,635
REVENUE EXPENDITURE.					
General Management and Expenses	5,933	6,251	6,381	7,765	7,909
Maintenance—Wharfs and Approaches	555	1,336	670	3,393	2,733
" Harbor	435	613	701	493	874
" Floating Plant	383	1,202	1,204	278	467
" Other	852	1,393	1,397	1,972	1,213
Interest on Loans and Sinking Fund	25,926	27,595	27,755	25,540	25,501
Sparrovale Farm	4,317	4,869	4,894	6,511	6,507
Corio Freezing Works and Abattoirs	1,024	1,209	2,845	3,383	3,451
Corio Quay Power-house	1,947	3,557	9,826	10,109	3,755
Miscellaneous	883	753	533	1,181	1,194
Total	42,255	48,778	56,206	60,625	53,604
CAPITAL EXPENDITURE.					
Land and Property	33,638	21,965	22,911	16,896	5,707
Deepening Waterworks	52	..	..	..	..
Wharfs and Approaches Construction	25	314	270	113	135
Other Harbor Improvements	900	71	..	..	..
Floating and General Plant	209	..	48	260	..
Miscellaneous	1	..	..	..	..
Total	34,825	22,350	23,229	17,269	5,842

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

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

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

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

**Functions of
the Board.**

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

**Area under
Board's
control, and
population.**

Under the provisions of section 71 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 was included in the metropolis for water supply and sewerage purposes (*vide Victoria Government Gazette*, 22nd December, 1920). This land has an area of 434 square miles (277,760 acres), and on 31st December, 1921, comprised 18 cities, 3 towns, 1 borough and part of another, 1 shire, and parts of 13 other shires, or 37 municipalities in all. The whole of the Borough of Mentone and 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, 1921, was 802,831.

Board's borrowing powers and liability on loans.

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

The liability for Government loans on 30th June, 1921, was £938,182, and for loans raised by the Board, £12,075,979, a portion of the latter amount having been applied in repayment of Government loans falling due. The Board was at that date empowered to borrow £125,773 before reaching the limit of its borrowing powers.

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

By Act of Parliament the rate to be paid in respect of any lands and tenements for the supply of water for domestic purposes, otherwise than by measure, is limited to an amount not exceeding 8d. in the £1 on the annual valuation of the lands and tenements served. The water rate levied in the year 1920-21 was 6d. in the £ 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 £8,567,419 in 1920-21, and £9,682,391 in 1921-22.

Water rate receipts.

	£	s.	d.
Water rate (including arrears) ..	195,123	10	10
Meters	187,341	3	0
Special rates	3,455	18	4
Total	385,920	12	2

Revenue and expenditure of water supply system.

The total revenue was £407,093, as against £398,173 in the previous year. The cost in 1920-21 of maintenance and management was £78,755, and the amount paid in interest was £173,550, the total charge being £252,305, as compared with a payment in 1919-20 of £62,941 for maintenance and

management, and of £156,588 for interest, or a total charge of £219,529.

Cost of the Melbourne and Metropolitan waterworks system. The total cost of the water supply system up to 30th June, 1921, was as follows:—

Original water supply station, &c.	..	..	..	..	£84,885
Yan Yean system	..	..	..	..	635,493
Maroondah system	..	..	..	..	835,891
O'Shanassy system	..	..	..	..	479,751
Service reservoirs	..	..	..	..	251,286
Large mains..	..	..	..	..	1,195,639
Reticulation	..	..	..	..	1,597,397
Total	..	..	..	..	£5,080,342

DESCRIPTION OF WATER WORKS.

The Melbourne and Metropolitan waterworks. The metropolis is supplied with water from three independent sources—one known as the Yan Yean system, fed by the watershed of the Plenty River and Jack's Creek from the southern slopes of the Great Dividing Range, supplemented by the Wallaby and Silver Creeks, tributaries of the Goulburn, whose waters have been diverted over the range by means of weirs, aqueducts, and tunnels; a second, known as the Maroondah system, whose watershed is in the Healesville district, and which takes in the water of the Maroondah or Watts River, the Graceburn, Donnelly's and Coranderrk Creeks, and other smaller streams; and a third, known as the O'Shanassy and Upper Yarra system, whose watersheds are in the Upper Yarra above Warburton. As regards the last-mentioned system, at present only the O'Shanassy River, a main tributary of the Upper Yarra, has been tapped.

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

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

YAN YEAN SYSTEM.

Yan Yean system. The Yan Yean watershed embraces Silver and Wallaby Creeks, 12,000 acres; Plenty River and Jack's Creek, 12,000 acres; and the catchment areas of Yan Yean Reservoir, 5,000 acres, totalling 29,000 acres. The water is collected

into the Toorourrong Reservoir, and taken thence to the Yan Yean Reservoir, where it is stored. This reservoir is an artificial lake situated 22 miles from the city in a northerly direction, and 602 feet above sea level. It is formed by the construction of an earthen bank, 49 chains long, 30 feet high, and 20 feet wide on top, with a slope next the water of three to one and an outside slope of two to one. The reservoir when full covers an area of 1,360 acres, or $2\frac{1}{2}$ square miles, with a maximum depth of 26 feet, and an average depth of 18 feet. The maximum depth of water in the reservoir in 1921 was 26 ft. on 2nd January, and the minimum depth 22ft. on 13th May. Its total capacity is 6,400,000,000 gallons, of which 5,400,000,000 gallons are available for consumption. In the year ended 31st December, 1921, the total intake of the Yan Yean Reservoir was 5,635,656,000 gallons, and the total output was 4,616,976,000 gallons exclusive of loss by evaporation.

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

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

MAROONDAH SYSTEM.

The Maroondah water is taken by means of small weirs from the watershed of 40,000 acres situated above Healesville, and it is thence conveyed to the Preston Service Reservoirs along an aqueduct (about $41\frac{1}{2}$ miles of open channels, tunnels, and syphons) which is capable of delivering 28,000,000 gallons daily.

O'SHANASSY AND UPPER YARRA SYSTEM.

O'Shanassy and Upper Yarra watershed. The watershed of the O'Shanassy River comprises 33,000 acres, situated near Warburton. The water is diverted by means of a weir and conveyed to Surrey Hills by way of Mitcham in an aqueduct, and in tunnels, syphons, and a pipe line of an aggregate length of $48\frac{3}{4}$ miles. The aqueduct is capable of delivering 20,000,000 gallons daily, but it has been completed in the tunnels and some other parts to a capacity of 60,000,000 gallons to provide for further diversions from the Upper Yarra and its tributaries.

OUTPUT OF THE VARIOUS WATER SYSTEMS IN 1921.

The total output of water from the various sources of Output of Water. supply in 1921 was as follows :—

	Gallons.
From Yan Yean Reservoir	4,616,976,000
„ Maroondah Streams	7,552,612,000
„ O'Shanassy River	5,034,635,000
	<hr/>
Total Output	17,204,223,000

Storage and service reservoirs. There are two storage and thirteen service reservoirs, and it is proposed to have three other service reservoirs. The Year-Book for 1920-21 contains, on page 218, figures showing the 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 1921 was 787,160, and the average daily consumption was 59.88 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 1921 :—

TOTAL AND DAILY AVERAGE CONSUMPTION OF WATER IN MELBOURNE AND SUBURBS DURING EACH MONTH OF THE YEAR 1921.

Month.	Total Consumption of Water.	Daily Average Consumption of Water.
	Gallons.	Gallons.
January	1,724,652,000	55,633,935
February	1,709,710,000	61,061,071
March	1,695,314,000	54,687,548
April	1,449,624,000	48,320,800
May	1,281,463,000	41,337,516
June	1,117,104,000	37,236,800
July	1,136,758,000	36,669,612
August	1,234,918,000	39,836,065
September	1,309,695,000	43,656,500
October	1,415,561,000	45,663,258
November	1,513,345,000	50,444,833
December	1,616,353,000	52,140,419
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Total for the year	17,204,497,000	...
Daily average for the year	47,135,608

NOTE.—The maximum daily consumption for 1921 occurred on 10th February of that year when 73,343,000 gallons were used.

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, 1912 TO 1921.

Year.	Population supplied with Water to 30th June.	Houses supplied with Water to 30th June.	Tenements Connected with Sewerage System to 30th June.	Daily Average of Annual Consumption of Water to 31st December.	No. of Gallons of Water per Head Daily.
				Gallons.	
1912 ...	604,275	133,122	118,350	38,569,566	63·83
1913 ...	628,430	140,351	125,103	41,642,926	66·27
1914 ...	651,000	147,442	131,168	40,778,844	62·64
1915 ...	668,155	150,825	138,108	36,567,614	54·73
1916 ...	687,571	155,208	143,737	36,910,680	53·68
1917 ...	700,321	158,086	148,395	38,604,178	55·12
1918 ...	716,521	161,743	151,622	40,838,819	57·00
1919 ...	731,154	163,046	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

SEWERAGE FINANCE.

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 1921-22 was £10,012,170, inclusive of assessments on vacant lands.

By Act of Parliament the Board is empowered to levy a general sewerage rate not exceeding 1s. 2d. in the £ in sewered areas. The sewerage rate for 1920-21 was 11d. in the £ in the sewered area. The total annual value of property assessed for sewerage purposes and liable to the 11d. rate was £8,036,609 in 1920-21.

The receipts from the general sewerage rate in 1920-21 amounted to £375,656.

The sewerage revenue for 1920-21 was £411,177, as against £409,057 in the previous year. The outlay in 1920-21 for management, working expenses and repairs was £119,304, and for interest £378,023, the total charges being £497,327, compared with an outlay in 1919-20 of £95,287 for management, working expenses, and repairs, and of £373,925 for interest, or a total charge of £469,212.

Sewerage assessments, rates, and receipts.

Cost of the Melbourne and Metropolitan sewerage system.

The cost of sewerage works and house connexions up to 30th June, 1921, was £8,080,570, divided as follows:—

Farm purchase and preparation	£599,384
Outfall sewer and rising mains	423,820
Pumping station buildings and engines	265,059
Main and branch sewers	2,214,108
Street reticulation	2,488,252
Reticulation of rights-of-way	1,141,641
House connexions branches	470,043
Cost of house connexions chargeable to capital ..	478,263
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Cost of sewerage system	£8,080,570
Householders' debts for house connexions ..	130,588
River improvements	3,977
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Total	£8,215,135
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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 (North Yarra system) and the Hobson's Bay main sewer (South Yarra 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 OF SEWERAGE WORK WITHIN THE BOARD'S METROPOLITAN AREA UP TO 31ST DECEMBER, 1921.

On the 31st December, 1921, the sewerage system was practically completed in the following municipalities:—Melbourne, South Melbourne, Port Melbourne, Collingwood, Fitzroy, Hawthorn, Prahran, Richmond, and St. Kilda, and the thickly-populated portions of Essendon, Nunawading, and Sandringham. The sewerage system was nearly completed in the municipalities of Brighton, Caulfield, Footscray, Malvern, and the thickly-populated portions of Brunswick, Camberwell, Coburg, Kew, Northcote, Preston, and Williamstown. Considerable

progress had been made in the municipality of Heidelberg, and a commencement had been made in the municipality of Oakleigh.

During the twelve months ended December, 1921, work was carried out principally in Brighton, Brunswick, Camberwell, Caulfield, Coburg, Essendon, Footscray, Heidelberg, Kew, Malvern, Oakleigh, and Sandringham.

Mains and Branch Sewers.—Moreland-road branch sewer (Essendon, Brunswick, and Coburg) and Oakleigh branch sewer (Oakleigh and Caulfield) have been constructed to meet the requirements of new reticulation areas, while the North Yarra main, Heidelberg, has been extended to meet the requirements of new reticulation areas and the Austin Hospital reticulation extension. Reticulation contracts have been completed in Brighton, Brunswick, Camberwell, Coburg, Essendon, Footscray, Heidelberg, Kew, Malvern, Oakleigh, and Sandringham. Reticulation extensions have been carried out principally in Caulfield, Malvern, Camberwell, Brunswick, Hawthorn, Heidelberg, and, in a lesser degree, in other municipalities.

Work in Progress.—South Camberwell branch sewer (Camberwell) is now in course of construction, and reticulation contracts are being carried out in Caulfield, Coburg, Hawthorn, and Heidelberg, while contract and day labour reticulation extensions, to meet the requirements of new buildings or fresh subdivisions, are being carried out in Caulfield, Essendon, Northcote, South Melbourne, Williamstown, and other municipalities.

In all $1,565\frac{1}{16}$ miles of reticulation and $168\frac{7}{16}$ miles of main and branch sewers have been completed, making a total length of $1,733\frac{1}{2}$ miles.

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

The first house was connected in Port Melbourne in August, 1897. On 31st December, 1921, 167,678 houses had been gazetted as within sewerage areas, and applications had been received *re* 212 outside gazetted areas, making a total of 167,890 houses. Of this number 426 had no sanitary fittings to connect, leaving 167,464 which required to be connected with the sewerage system, the number connected was 164,143, including the 212 outside gazetted areas. Of the remaining 3,321 houses, 2,682 were in progress of connexion, while on 639 houses connexions work had not been commenced.

During the year 1920-21, 4,598 houses were erected in the metropolitan area, and 3,220 houses were connected with the sewerage system.

Tenements
connected
with the
sewerage
system.

The following statement shows the progress of house connexions to the 31st December, 1921 :—

NUMBER OF HOUSES FOR WHICH SEWERS WERE PROVIDED ON THE 31ST DECEMBER, 1921.

Municipality.	No. of Houses for which sewers were provided on 31st December, 1921.
Melbourne City	27,012
South Melbourne City	10,798
Prahran City	12,066
Fitzroy City	7,998
Richmond City	10,338
St. Kilda City	8,302
Collingwood City	8,504
Footscray City	6,946
Hawthorn City	6,813
Brunswick City	9,483
Essendon City	7,819
Malvern City	6,830
Caulfield City	9,122
Northcote City	6,402
Camberwell City	3,985
Brighton City	4,583
Port Melbourne City	3,013
Williamstown City	3,795
Kew City	3,191
Coburg City	2,241
Sandringham Town (part of)	1,450
Heidelberg Shire (part of)	1,816
Preston Shire*	1,357
Nunawading Shire (part of)	279
Total	164,143

*Declared a borough on 14th March, 1922, and a town on 16th May, 1922.

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 enters the pumping station at a level of 45 feet below low-water mark through straining wells, one of which is established on each system. The wells are of 22 feet internal diameter, and each contains two straining cages, one of which is always in position. Most of the solid *debris* and fibrous matter is caught in the straining cages, and is transferred to a drier. This is in the building over the wells, where it is subject to steam pressure, and, consequently, to a high temperature, which renders the

Pumping station.

material innocuous. The material from the drier is of no manurial value, and is carted away. There are ten steam pumping engines installed, of about 300 horse-power each, which are together capable of pumping a maximum of 80,000,000 gallons of sewage daily. In addition to these there are two electrical centrifugal pumping units installed, each of 18,000,000 gallons daily capacity, making a total capacity of 116,000,000 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 125 feet. The sewage is raised and forced through two 6-ft. and one 4-ft. wrought-iron and mild steel rising mains—the three lengths running side by side, each 2.794 miles long (an aggregate length of 8.38 miles). From Brooklyn it gravitates to the Metropolitan Sewage Farm at Werribee in a partly-open and partly-closed channel 16 miles long, of 11 feet diameter, and having a grade of 2 feet to the mile. The full capacity of the outfall sewer is 18,000 cubic feet a minute.

METROPOLITAN SEWAGE FARM.

The purification of the sewage of Melbourne and Suburbs **Sewage farm.** is effected by filtration and aeration through the natural soil of the Sewage Farm, which contains 12,877 acres 2 roods 24½ perches of land situated about 24 miles south-west of Melbourne and 4 miles south-west of the township of Werribee in open plain country, and had an average annual rainfall to 31st December, 1921, of 18.174 inches. The farm has the Werribee River for its eastern boundary, and a long frontage to Port Phillip Bay on the south (extending from the mouth of the Werribee River to the mouth of the Little River), to which the land gradually slopes from the north, the highest point being 44 feet above low-water mark. The head of the rising main at Brooklyn is, as has been mentioned, 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. At present most of the high land is being used for dry farming, cereal crops being grown.

The land required for sewage filtration purposes is divided into 20-acre 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.

Of the area under irrigation in the year 1920-21, 300 acres were sown with maize for grain, and 36 acres with barley for grain, while 340 acres of lucerne were cut for hay, and there were 7,489 acres available for grazing live stock.

Notwithstanding the large quantity of sewage water required to be put on the pastures summer and winter alike, the effective filtration of which must be the Board's first consideration, a considerable profit is derived from the farming and grazing operations. The principal sources of revenue are from breeding of beef cattle, fattening of sheep and cattle, and grazing of horses on agistment. The transactions in sheep and cattle for the year 1920-21 were— from sheep, loss £1,305; from cattle, profit £17,569. The revenue from agistment (principally horses) was £2,771.

The following are particulars of the sales of produce for the year ended 30th June, 1921:—Lucerne (chaff and hay), £1,634; maize, £8,642; wheat, oats, and barley, £1,713; other, £175. Total, £12,164.

Statistical details relating to the farm for the year 1920-21, or as at 30th June, 1921, are as follows:—

Total area of farm	12,878 acres
Average quantity of sewage delivered daily on to farm for year 1920-21 = in gallons	37,846,292
= 139·412 acre-feet per day = 6·28 feet per annum over the total area available for sewage disposal, viz., 8,100 acres.	
Total capital cost of farm to 30th June, 1921	£599,384
Profit on farm trading account for the year after charging up working expenses of farm	£15,750
Net cost of sewage disposal (after charging working expenses of sewage disposal and £23,550 interest on capital cost), 1920-21	£23,369
Population served by sewerage system	717,460
Rainfall for year ended 30th June, 1921	20·29 inches
" " " 31st December, 1921	18·33 "
Average rainfall for 28 years to 31st December, 1921	18·174 "

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 Borough 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; £502,000 for sewerage undertaking; and £200,000 for sewerage installations to properties. The expenditure on these services to 30th June, 1922, was:—Water supply, £450,000; sewerage, £398,000; and sewerage installation, £130,000. The revenue for the year ended 30th June, 1922, amounted to £31,100 on account of waterworks, and £27,700 on account of sewerage.

The population supplied is about 36,000. The number of buildings situated within the "Drainage Area" is 8,800, the number within the "Sewered Areas" 7,200, and the number connected with the sewers 5,800.

The catchment area is about 16,000 acres. Particulars of the works and of the storage capacity of reservoirs are given in the *Year-Book* for 1920-21, pages 226 and 227. The total storage capacity of the reservoirs is 2,709,335,280 gallons.

Sewerage.—The sewerage scheme provides for 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. The drainage area is 8,081 acres, and includes the city of Geelong, the town of Geelong West, the borough of Newtown and Chilwell, and the suburban areas in the shires of Corio, South Barwon, and Bellarine.

Rating.—The water rate is 1s. 3d. in the pound on the net annual value of properties as certified to by the municipalities, with a minimum rate of £1 per annum for properties supplied.

The sewerage rates are—

- (a) A general sewerage rate of 1s. 6d. 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.
- (b) An additional rate of 6d. in the pound on the net annual value of all rateable properties within the drainage area which are now or may hereafter become sewered as mentioned under (a).
- (c) A rate of 6d. in the pound on the net annual value of all properties within the drainage area which are not sewered.

In addition to the general and additional sewerage rates, the Trust, to prevent or minimize the pollution of the River Barwon, has power to strike a differential or special rate on properties whose drainage flows into the River Barwon.

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 is Cr. D. Andrew, J.P. The permanent surveys, designs, and estimates for the proposed scheme have been made, and approved by the Governor in Council, and authority has been obtained to borrow £120,000 to sewer the central portion of the city—an area of 935 acres, called Sewerage Area No. 1—and to construct the main outfall sewer and treatment works. A loan of this amount has been obtained from the Commonwealth Bank at $5\frac{1}{2}$ per cent. It is secured by debentures repayable in twenty years on a 30 years' basis of half-yearly payment of sinking fund and interest. For the purpose of meeting the loan repayments a special rate of 2d. in the £1 of net annual value was struck on 22nd December, 1921, and levied upon all property within the Sewerage District for the financial year ending 30th September, 1922, the whole city being rated, although the present sewerage proposals are confined to the central area.

Construction of the main outfall sewer was begun on 30th January, 1921, and a length of 4,000 feet commencing at the lowest end had been completed by the end of April, 1922, 61 men being employed thereon.

This sewer will be 4 miles long, on a grade of 1 in 700, and the method of disposal will be by septic tanks and bacterial filters, with secondary land filtration if necessary; the effluent being available for growing fodder crops. The disposal site is surrounded by Crown lands and unimproved grazing lands, and is at Ironstone Hill, a mile west of Epsom-road, and 4 miles north of Bendigo Post Office. The Act provides for a sewerage rate not exceeding 1s. 6d. in the £1 on the annual value in sewered areas, and a special annual rate not exceeding 1s. in the £1 in sewered or 6d. in the £1 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 half-yearly instalments. The whole scheme is expected to cost about £250,000.

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 of that area.

The districts referred to are portions of the shires of Braybrook, Keilor, Broadmeadows, Heidelberg, Doncaster, Nunawading, Mulgrave, and Moorabbin, beyond the 10-mile radius. The Metropolitan Fire District includes the greater portion of the shire of Moorabbin, and it extends in a southerly direction as far as Mordialloc (16 miles from Melbourne), that township being included.

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

**Outfit of the
Metropolitan
Fire Brigade.**

The Metropolitan Fire Brigades Board on 30th June, 1922, had under its control the following:—Forty-one stations, 270 members of permanent staff, 50 members of special service staff, 7 members of clerical staff, 31 men engaged in the workshops, 100 partially paid firemen, 5 motor-drawn steam fire engines, 2 steam fire engines, 4 petrol motor fire engines, 2 motor salvage waggons, 7 combination hose carriages and pumps, 4 motor combination appliances, 35 motor hose waggons, 3 motor cycles, 2 motor lorries, 1 special service van, 1 Chief Officer's motor car, 6 extension ladders and fire escapes, 2 pompier ladders, 6 inspection cars, 1 instruction car, 96,397 feet of hose, 5 smoke helmets, 1 smoke jacket, and 363 fire alarm circuits having 1,092 street fire alarms, of which 1,072 were with telephones and 20 were fire alarms only. There were also 954 auxiliary boxes and 24 automatic systems in public and other buildings, 139 direct telephone lines, 59 of which were acting as fire alarms to buildings, and 49 circuits to sprinkler installations, with 90 sprinkler call-transmitting instruments.

During 1921-22 the cost of maintenance of the Metropolitan Fire Brigade was £125,695, 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 1.01665d. in the £ over an area wherein the property was valued at £9,894,861, and that of the insurance companies was equal to £4 12s. 7d. for every £100 of premiums on insured property. The premiums received in the Melbourne Fire District in 1920 amounted to £904,778, and the total of the payments made by the companies in 1921-22 for the maintenance of the fire brigade system was £41,898.

**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 the brigades registered under the Board, two are elected by the fire insurance companies carrying on business in such districts, and two by the registered fire brigades. The board annually elects one of its members as president. The tenure of the Board members is two years. The Board's revenue in 1921 was £19,995, which was obtained from the following sources:—(a) Government, £6,699; (b) municipalities, £6,334; (c) insurance companies, £6,699;

and (d) other sources, £263. The expenditure for the year amounted to £20,451. There are 113 municipal councils and 77 insurance companies included in the operation of the Act. The premiums received by the insurance companies in country districts during the year 1921 amounted to £286,605, and the total of their contributions in that year for the upkeep of the brigades was £6,699. The total value of rateable property assessed within the Board's district in 1921 was £2,051,786. All brigades under the control of the Board are volunteer brigades, but in the large centres a few permanent stationkeepers and auxiliaries are also employed. There are 135 registered brigades, and the number of registered firemen is 2,429. 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, 1921, the Board had fixed to its 230 miles $66\frac{1}{2}$ chains of leading mains and 1,421 miles $59\frac{3}{4}$ chains of reticulation mains 4,585 pillar hydrants, 36 Tregear patent hydrants, and 15,500 ball fire plugs, viz., 15,479 Bateman and Moore (of which 2,156 are with spring) and 21 Fowler patent—a grand total of 20,121. 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, 1921, are as follows :—

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

—	1917.	1918.	1919.	1920.	1921.
<i>Ordinary Receipts.</i>	£	£	£	£	£
Contributions — Government, Municipal, and Insurance	96,874	98,272	100,442	112,976	137,626
Receipts for Services	5,589	6,645	7,200	9,651	10,808
Interest and Sundries	1,606	1,950	3,180	4,658	12,059
Total	104,069	106,867	110,822	127,285	160,493
<i>Ordinary Expenditure.</i>					
Salaries	57,511	63,114	66,767	74,038	101,392
Fire Expenses	3,325	3,343	3,439	3,349	3,834
Administrative Charges, &c.	22,620	19,843	17,655	17,942	28,844
Plant—Purchase and Repairs	7,560	7,934	6,607	9,443	9,653
Interest	10,567	9,927	9,255	9,156	9,595
Sinking Fund	2,604	1,644	5,727	3,814	4,666
Firemen's Accident Fund	250	250	...	...	250
Miscellaneous	3,308	3,454	2,812	7,808	3,732
Total	107,745	109,509	112,262	125,550	161,966
<i>Loan Expenditure.</i>					
Purchase of Land and Erection of Buildings, &c.	5,209	14,721	8,344	7,046	23,782