# CHAPTER 19

# LOCAL GOVERNMENT

This chapter includes, in addition to information on the operation of local government authorities, information on the operation of certain semi-government authorities. The latter information is not comprehensive for this type of authority, and is included partly because of the association of the functions performed with those of local government authorities, and partly for convenience in preparation. Particulars of the activities of other semi-government authorities, e.g. transport, electricity and gas, and banking undertakings, for which only some financial statistics are given in this chapter, are included in the chapters relevant to those subjects.

# Coverage

# Local government authorities

In each State of the Commonwealth there exists a system of local government whose powers and responsibilities are in general similar, and cover such matters as the construction and maintenance of roads, streets and bridges, water, sewerage and drainage systems, and health and sanitary services, the supervision of building, and the administration of regulations relating to items such as weights and measures, slaughtering, the registration of dogs, etc. In addition to these obligatory functions, there are also many which may be performed by a local government authority either with or without the consent of the ratepayers or the Governor-in-Council. These include transport facilities, electricity, gas, and other business undertakings, hospitals, charitable institutions, recreation grounds, parks, baths, libraries, museums, etc.

The system is based on the principle of a grant of specific powers by the State legislatures to the local authorities, their autonomy, however, being more or less limited by the provision for general supervision by a department of the central government or by the Governor-in-Council. Otherwise, within the scope of the Acts under which they are constituted or which they have to administer, they are responsible only to the ratepayers. While the broad pattern of local government throughout the States of Australia is similar, the range of activities, election of officers, methods of valuation and rating powers, etc. differ considerably.

The areas over which local government bodies, numbering 900, exercise general control, are known in New South Wales as cities, municipalities and shires; in Victoria as cities, towns, boroughs and shires; in Queensland as cities, towns and shires; in South Australia as cities, corporate towns and district council areas; in Western Australia as cities, towns and shires; and in Tasmania as cities and municipalities. In New South Wales some local government authorities in an area have combined to provide services such as electricity, water, sewerage and drainage—e.g. the county councils. Within shires there are also some municipal units known as urban areas. Apart from the more thinly populated parts of New South Wales and South Australia, and the Commonwealth Territories (except for the City of Darwin), practically the whole of Australia comes within local government jurisdiction.

The financial statistics in the following section are classified under the headings of Ordinary Services and Business Undertakings. The former covers the obligatory and general functions referred to above. Business Undertakings include public utilities such as water supply, sewerage, electricity, gas, transport and hydraulic power undertakings, and other miscellaneous works such as abattoirs, quarries, ice works, cinemas, etc.

# Semi-government authorities

In addition to local government authorities, a large number of authorities have been set up to control specific activities, which are often identical with some of those performed by either, or both of the other classes of public authority—central government and local government—and a complete picture of any field of activity for a State of Australia as a whole cannot be obtained without reference to each class operating in that particular field. These semi-government authorities differ primarily from local government authorities in that their operations are restricted to the specific activity for which they were constituted—e.g. roads and bridges, water and sewerage, electricity and irrigation, harbours, or tramways, etc.—i.e. each dispenses a specific service throughout an area as distinct

from the general services of the local authority. In the sections which deal with debt, roads and bridges, water supply and sewerage, harbours, and fire brigades particulars are included of the more important of these authorities which operate within the range covered by this chapter.

### Roads, bridges, etc.

The construction and maintenance of roads, bridges and ferries are generally part of the functions of local authorities, but in each State there exists a central road authority or a government department whose duties relate to the construction, reconstruction and maintenance of 'main' and 'developmental' roads, the distribution of funds to local bodies, and the supervision and co-ordination of road construction and policy throughout the State. Owing to difficulty in obtaining complete particulars of receipts and expenditure of the various local governing bodies in respect of roads under their control, the details of receipts and expenditure given on pages 608–14 are those of central governments only, relating either to the supervisory board or commission in the State or to direct activities of a department. However, estimates of the aggregate net expenditure of all public authorities concerned with roads and bridges in Australia are given on page 607 of that section. On pages 600–3 some information is given of the revenue and expenditure of local government authorities in respect of roads.

# Water supply and sewerage

In the cities of Sydney, Melbourne and Perth the control of water supply and sewerage is in the hands of special boards, while in Adelaide these services are under the direct supervision of a government department. In most of the other cities and towns the municipal councils or, in some cases, water trusts are the controlling bodies, which either construct the works out of their own resources or take them over after they have been constructed by the government.

# Harbours

The majority of the harbours in Australia are managed by boards, the members of which are either elected by persons interested, or appointed by the government. In some instances, however, they are directly controlled by the government.

### Fire brigades

In all the States the management of fire brigades is undertaken by boards. These boards usually comprise members elected by the councils of municipalities and insurance companies within the districts placed under their jurisdiction, and one or more members appointed by the government. Occasionally volunteer or country fire brigades are represented.

# Local government authorities

# New South Wales

For purposes of local government the whole of the Eastern and Central land divisions and more than two-thirds of the sparsely populated Western division have been divided into cities, municipalities (most principal towns) and shires (mainly large rural areas, some of which include important towns). At the end of 1969 the area incorporated was 272,452 square miles, or nearly nine-tenths of the total-area of the State. All cities, municipalities and shires in the State are subject to the general provisions of the Local Government Act. Municipalities and shires may combine to form county councils for the establishment and conduct of services of joint benefit, e.g. electricity, water, gas, abattoirs. At 31 December 1969 there were fifty-three county councils, including the Sydney County Council (constituted under the Gas and Electricity Act).

### Victoria

Local government is established throughout the State, the various divisions being termed cities, towns, boroughs, or shires. The only unincorporated areas are French Island (41,600 acres) in Westernport Bay, Lady Julia Percy Island (653 acres) off Port Fairy, Bass Strait Islands (966 acres), part of Gippsland Lakes (81,920 acres), and Tower Hill (1,459 acres) adjacent to the Borough of Koroit. Melbourne and Geelong were incorporated under special statutes prior to the establishment of a general system of local government, but are now subject to several provisions of the Local Government Act.

# Queensland

The whole of the State (except certain islands along the coast) is incorporated into cities, towns and shires under the Local Government Act (City of Brisbane Act in the case of Brisbane).

### South Australia

The settled portion of South Australia is incorporated, being mostly under municipal corporations. in the larger cities and towns and district councils in the agricultural areas.

# Western Australia

Local government is established throughout the State, the divisions being cities, towns and shires.

#### Tasmania

The whole State is divided into municipal districts, Hobart, Launceston, and Glenorchy being incorporated as cities under separate Acts.

### Area, population, dwellings, and value of rateable property

The area, population, dwellings, and value of rateable property in the incorporated areas of each State are shown in the following table. The valuations relate to rateable property only and exclude government and other non-rateable property, whose value in the aggregate is considerable. In some cases councils rate on annual value, or unimproved capital value, or improved capital value, or partly on each of these bases of valuation. The amounts stated are the totals for the areas rated according to each basis of valuation. Particulars of dwellings are in accordance with the definition used in the 1966 census, and are compiled from information collected on the census schedules. For the purpose of the census a dwelling was defined as any habitation occupied by a household group living together as a domestic unit, whether comprising the whole or only part of a building. The term has, therefore, a very wide reference and includes, in addition to houses and flats, a great variety of dwellings ranging from a single-roomed shack to a multi-roomed hotel or institution. Unoccupied dwellings include vacant dwellings available for sale and renting, 'week-end' and holiday dwellings, and other dwellings temporarily unoccupied on the night of the Census. Dwellings being built are not included.

In the following table particulars of number, area, and value of rateable property refer to estimates made, where practicable, for the capital city statistical division and outside this division. Wherever the statistical boundary cuts across a local government area the estimates have involved either the inclusion or exclusion of the whole of the local government authority concerned in, or from, the capital city statistical division. Particulars of population refer to estimates made for capital city statistical division and outside this division in accordance with the definition of boundaries used in the 1966 census and exclude migratory population and population in unincorporated areas.

LOCAL GOVERNMENT AUTHORITIES: ARFA, POPULATION, DWELLINGS, AND VALUE OF RATEABLE PROPERTY, STATES, 1967-68

						Value o	j rateable pro	perty
				Dwellings		Unim-		
Location .	Number	Arca	Popula- tion	Occupied	Unoccu- pied	proved capital value	capita!	Annual valu <del>e</del>
		'(IIII) acres	'()()() (a)		No. (b)	\$'(1/1/1)	S'(KK)	
New South Wales(c) — Sydney Statistical Division . Other	39 185	974 173,383	2,647 1,723	730,877 458,069	39,701 61,577	3,834,995 1,627,533	9,298,530 n.a.	630.896 n.a.
Total, New South Wales	224	174,357	4,370	1,188,946	101,278	5,462,528	n.a.	n.a.
Victoria(d)— Melbourne Statistical Division Other(c)	.55 155	1,933 54,177	2,320 996	626,343 262,617	35,445 29,302	n.a. n.a.	8,716,000 4,425,235	450,804 228,930
Total, Victoria	210	56 770	3,316	888,960	64,747	n.a.	13,141,234	679,734
Queensland(a) Brisbane Statistical Division Other	9 122	2,073 424,153	813 913	215 669 232,752	10,777 30,945	518,996 756,604	n a. n.a.	n a. n.a.
Total, Queensland .	131	426,226	1.726	448,421	41,722	1,275,600	n a.	n.a.
South Australia(a) Adelaide Statistical Di- Vision Other	31 111	573 36,679	794 314	217,590 81,662	12,089 12,502	n a. n.a.	2,338 1,136	116,912 56,798
Total, South Australia .	142	37,252	1.108	200 252	24 (01	n a.	3,4~4	173,715
Western Australia(a) Perth Statistical Division Other	27 117	1,327 623,262	606 300	154,984 69,675	8.211 9,751	378,633 226,385	n.a. n.a.	28,007 5,915
Total, Western Australia	144	624,589	906	224,659	12,962	605,017	n.a.	33,922

For footnotes see next page.

# LOCAL GOVERNMENT AUTHORITIES: AREA, POPULATION, DWELLINGS, AND VALUE OF RATEABLE PROPERTY, STATES, 1967-68—continued

						Value o	f rateable pro	perty
				Dwellings		Unim-	Improved capital	Annual value
Location	Number	Area	Popula- tion	Occupied	Unoccu- pied	proved capital value		
Toomasin(s)		'000 acres	'000 (a)	No. (b)	No. (b)	\$'000	\$'000	\$'000
Tasmania(a)— Hobart Statistical Division Other	5 44	392 16,493	145 236	37,947 61 418	2,836 7,964	158,814 192,849	539,775 819,825	30,795 45,966
Total, Tasmania	49	16,885	381	99,365	10,800	351,664	1,359,600	76,761

<sup>(</sup>a) Year ended 30 June 1968. Total population less migratory and unincorporated. (b) Particulars as at Census 30 June 1966. (c) Year ended 31 December 1966. (d) Year ended 30 September 1968. (e) Excludes Yallourn Works Area under the jurisdiction of the State Electricity Commission.

# Local government finances

The following tables show the latest available financial statistics for local government authorities. The figures relate to the year 1967-68 except for New South Wales, where they relate to the year 1966. For further detail on local government finances see annual bulletin State, Territory and Local Government Authorities' Finance and Government Securities, issued by this Bureau.

Ordinary services. In the returns of revenue and expenditure in the following tables the proceeds from loans and expenditure thereof have been excluded. The financial operations of business undertakings controlled by the various local government authorities are given in the next paragraph. The profits resulting from the working of these undertakings, where taken into general revenue, have been included.

LOCAL GOVERNMENT AUTHORITIES: ORDINARY SERVICES—REVENUE AND EXPENDITURE, STATES, 1967-68
(\$'000)

			N.S.W.(a)	Vic.(b)	Qld(c)	S.A.(c)	W.A.(c)	Tas.(c)	Total
		RE	VENUE (	EXCLUDI	NG LOAN	RECEIPT	S)		
Taxation—			102.954	07.171	44.420	24.260	16.0003		
Rates (net) Penalties	•	•	123,854 1,196	87,171 359	44,439	24,369	16,888 }	9,638	307,915
Licences		:	2,917	596	741	232	348	147	4,980
Vehicle registration f	ees and						4,638		4,638
	•	•	• • •	••	••	••	1,050	••	.,
Total, taxaslon		•	127,967	88,126	45,180	24,601	21,873	9,785	317,533
ublic works and servi-	ces								
Sanitary and garbage	service	es.	10,271	3,815	8,720	347	1,519	57	24,730
Council properties .			10,875	(d)17,049	2,506	1,798	5,472	1,205	38,90
Street construction .			7,861	25,569		4.951	3.197	133	41,711
Other			14,227	4,701	2,714	410	1,117	311	23,480
Total, public wo	rks, etc		43,234	51,134	13,940	7,507	11,305	1,705	128,826
Government grants-									
Roads			37,865	969	5,513	(e)7,357	10,024	1,653	63,38
Other		٠	5,561	8,137	2.295	802	427	203	17,42
Total, governme	nt grani	ts.	43,425	9,106	7,808	8,159	10,451	1,856	80,800
Profits from business u	ndertak	ings		745		18			763
Fees and fines All other	•	•		1,368 1,557	(1)21.602	536{	1,154	686	27,26
Total revenue .	•		214,626	152,036	88,531	40,822	45.143	14,033	555,191

For footnotes see next page.

LOCAL GOVERNMENT AUTHORITIES: ORDINARY SERVICES—REVENUE AND EXPENDITURE, STATES, 1967-68—continued (\$'000)

	N.S.W.(a)	Vic.(b)	Qld(c)	S.A.(c)	W.A.(c)	Tas.(c)	Total
EXPE	NDITURE (	EXCLUDII	NG LOAN	EXPEND	ITURE)		
General administration  Debt services (excluding busines  undertakings) —	. 14,664	17,481	9,116	3,886	3,847	1,509	50,503
Interest Redemption Exchange	8,694 15,638	10,310 12,189	10,649 10,215 186	2,303 2,826	2,786 4,363	1,540 1,445	36,282 46,677 186
Other		63	86	••	• •	••	149
Total, debt, etc.	. 24,332	22,562	21,136	5,129	7,149	2,986	83,293
Public works and services—							
Roads, streets and bridges	92,489	50,908	23,290	21,513	14,578	5,144	207,922
Health administration .	. 5,692	1,360	4,598	716	773	350	13,488
Sanitary and garbage services		7,195	6,485	1,304	1,865	576	30,987
Street lighting	4,659	2,669	1,354	973	595	302	10,551
Council properties	. 29,852	(g)23,446	10,648	4,387	10,820	2,147	81.301
Other	. 10,375	10,318	821	1,074	4,254	92	26,934
Total, public works, etc.	. 156,630	95,896	47,196	29,967	32,885	8,610	371,184
Grants —							
Fire brigades	. 1,076	2,032	602	348	390	183	4,632
Hospitals and ambulances	654	396₹		835	36	121 ]	
Other charities		ι		.8 }	224 {	٠	16,013
Other	(h)7,313	(i) 1,680 ~	2,561	84 }	(	101 }	
Total, grants	9,043	6,108	3,163	1,275	651	405	20,545
All other	. 7,918	4,692	(j)14,984	6	417	309	28 325
Total expenditure .	. 212,587	146,738	95,595	40,263	44,949	13,819	553,959

(a) Figures for New South Wales relate to the year ended 31 December 1966, and are on an income and expenditure basis as distinct from those of other States which are on a cash basis. (b) Year ended 30 September 1968. Figures include transactions of Private Street Accounts. (c) Year ended 30 June 1968. (d) Includes \$7,667,000 reimbursement from Highways Department. (f) Includes the following reimbursements: \$6,312,000 from Main Roads Department, \$1,534,000 from other State Government Departments, and \$6,230,000 from other sources. (g) Includes \$1,709,000 plant and equipment. (h) To Main Roads Department. (j) Includes expenditure on work done for reimbursement: for Main Roads Department \$6,553,000; for other State Government Departments \$1,528,000; other \$6,208,000.

LOCAL GOVERNMENT AUTHORITIES: ORDINARY SERVICES—REVENUE AND EXPENDITURE, STATES, 1963-64 TO 1967-68
(\$'000)

Year		N.S.W.(a)	Vic.(b)	Qld(c)	S.A.(c)	W.A.(c)	Tas.(c)	Total
Revenue(d)—								
1963-64 .		169,130	103,289	61,846	31,836	28,036	10,478	404,615
1964-65 .		187,689	116,405	66,088	32,360	34,921	10,930	448,393
1965-66 .		194,387	125,017	73,655	36,190	34,274	11,818	475,340
1966-67 .		214,626	137,232	78,514	40,314	39,716	12,850	523,252
1967-68 .	•	(c)	152,036	88,531	40,822	45,143	14,033	(e)
Expenditure(d)-	-							
1963-64		165,695	103,320	64,337	32,018	28,476	10,282	404,128
1964-65		181,265	119,013	70,730	33,147	31,588	11,278	447,022
196566		193,004	130,392	77,713	37,136	35,400	11,585	485,230
1966-67 .		212,587	136,984	83,150	39,280	40,334	12,411	524,745
1967-68 .		(e)	146,738	95,595	40.263	44,949	13.819	(e)

(a) Years ended previous 31 December.

(b) Years ended 30 September. Figures include transactions of Private

(c) Years ended 30 June.

(d) Excludes loan receipts or expenditure.

(e) Not yet available.

Business undertakings. The tables following show particulars of the revenue and expenditure, other than loan, of business undertakings under the control of local government authorities. These particulars are not included in the foregoing tables.

LOCAL GOVERNMENT AUTHORITIES: BUSINESS UNDERTAKINGS—REVENUE AND EXPENDITURE, STATES, 1967-68
(\$'000)

N.S.W.(a)Vic.(b) Old(c)S.A.(c)W.A.(c)Tas.(c) Total REVENUE (EXCLUDING LOAN RECEIPTS) Water supply and sewerage-(d)14.878240 4,712) Rates 10,851) Charges for services and sales of 43.652 684 2,613 9,022 1 25 90 626 products 35 Other (including grants) . 7.358 (e)4,5291.869 835 51,010 Total, water supply, etc. . 17,994 719 25,769 1 354 6,173 Electricity and gas-1,270) 17 Rates . . 51,747 310,851 Charges for services and sales of 1,132 282 3,068 218,874 34,743 products Other (including grants). 373 (e)8,1323,575 12,362 323,213 Total, electricity, etc. 228,276 52,119 38,335 1,414 3,068 Railways, tramways and omnibuses-Charges for services and sales 8,306 328 8,306 328 of products Other (including grants) . . . . . . . . Total, railways, etc. . 8,634 8.634 Other-(f) 26 (g) (h) 22 (i) (j) (k) 48 . . products . . . Other (including grants) . 2,349 529 398 540 19,032 13,582 1,229 46 62 347 65 14,837 20,829 Total, other 2,412 2,002 594 398 586 74,740 2,009 3,820 6,759 403,686 Grand total 261,107 55,251 EXPENDITURE (EXCLUDING LOAN EXPENDITURE) Water supply and sewerage Working expenses . 6,862 - 261 6,916 469 7.810 241 3,411 18,794 1 Depreciation Debt charges 60 153 -201 16,788 130 2,719 6,871 Other (including transfers to general revenue and construc-tion). 4 3,970 15 3,990 . . Total, water supply, etc. 13,517 372 6,145 39,371 686 18.651 1 Electricity and gas-Working expenses . Depreciation 185,802 4,409 47,737 28,088 1,248 2,118 264,992 404 6.129 Debt charges 27,461 7,110 62 459 36,887 Other (including transfers to general revenue and construc-tion) 3.089 169 3,845 586 Total, electricity, etc. 217,672 51,434 38,288 1,478 2,981 311,853 Railways, tramways and omnibuses— Working expenses 8,514 1,126 8,514 1,126 Debt charges . . Other (including transfers to general revenue and construction) 324 324 . . . . ٠. Total, railways, etc. . 9,964 9.964 . . Other-Working expenses . (g) 1,957 (f) 13,702 (h) 735 (i) 635 (j) 286 17,753 438 253 156 Depreciation 393 1,492 Debt charges
Other (including transfers to 12 1.208 116 general revenue and construction) . 252 1,145 1 1,402 . . . . Total, other 15,049 2,619 1.996 640 286 451 21,040 382,229 Grand total 246,238 54,739 68,898 2,120 3,638 6,596

<sup>(</sup>a) Year ended 31 December 1966. (b) Year ended 30 September 1968. (c) Year ended 30 June 1968. (d) Includes Sewerage and Cleansing Rates. (e) Includes Government grant: water supply and sewerage, \$3,425,000; electricity and gas, \$1.887,000; for part of cost of new works borne by Government. (f) Abattoirs. (g) Abattoirs, hydraulic power undertakings, quarries, iceworks, and reinforced concrete pipe and culvert works. (h) Off-street car parking, municipal markets, hostels, hotels and cinemas. (i) Quarries and hospitals. (j) Quarries, canteens and abattoirs. (k) Abattoirs. (l) Net balance after deducting charge for debt redemptions. The full amount of charge for debt redemption is included under debt charges.

LOCAL GOVERNMENT AUTHORITIES: BUSINESS UNDERTAKINGS -REVENUE AND EXPENDITURE, STATES, 1963-64 TO 1967-68

(\$'000)

Year	N.S.W.(a)	Vic.(b)	Qld(c)	S.A.(c)	W.A.(c)	Tas.(c)	Total
Revenue(d)—	 		· <del>-</del>		· - <del></del>		
1963-64	212,020	40,067	53,105	1,889	2,327	4,314	313,722
1964-65	226,234	45,352	58,500	1,621	2,364	5,320	339,392
1965-66	241,348	47,604	64,035	1,852	2,825	5,578	363,242
1966-67 .	261,107	50,884	69,341	2,174	3,295	6,226	393,026
1967-68 .	(e)	55,251	74,740	2,009	3,820	6,759	(e)
Expenditure(d)							
1963-64 .	199,171	39,883	50,167	1,745	2,142	4,372	297,481
1964-65	210,052	45,117	54,816	1,682	2,318	4,898	318.883
1965-66	226,466	47,962	61,193	1,806	2,773	5,500	345,700
1966-67	246,238	50,963	64,950	2,297	3,227	5,856	373,532
1967-68	(e)	54,739	68,898	2,120	3,638	6,596	(c)

<sup>(</sup>a) Years ended previous 31 December. (b) Years ended 30 September. (c) Years ended 30 June. (d) Excludes loan receipts or expenditure. (e) Not yet available.

Loan expenditure. The tables following show particulars of loan expenditure on works connected with the ordinary services and the business undertakings of local government authorities.

LOCAL GOVERNMENT AUTHORITIES: LOAN EXPENDITURE, STATES 1967-68 (\$'000)

	N.S.W.(a)	Vic.(b)	Qld(c)	S.A.(c)	W. 4.(c)	Tas.(c)	Tota
Ordinary services—							
Roads, bridges, streets, foot-							
paths, drainage, and sewerage	11,140	14,821	26,121	4,774	2,222	2,315	61,393
Council properties .	(d)10,142	(d)7,555	(d)2,460	1,843	(d)4,506	(d)1.269	27,776
Parks, gardens, and recreational							
reserves	2,338	3,075	2.643	588	1,626	555	10,826
Other	(e)2,460	1,341	2,647	124	249	293	7,114
Total, ordinary services	26,081	26,792	33,871	7,330	x 603	4,432	107,108
Business undertakings —							
Water supply.	7,521	78	13,553		99	2.184	23,435
Sewerage	4,148				19	2,747	6,914
Electricity and gas	22,080	2,610	4.343	137	1.087		30,257
Railways, tramways and omni-					- • • • • • • • • • • • • • • • • • • •		,
buses			1,617				1,617
Abattoirs	1,571	1.251					2,821
Other		1	14		* *		15
Total, business undertakings	35,320	3,940	19,526	137	1,205	4,932	65,060
Grand total	61,401	30,732	53,397	7,467	9.808	9,364	172,168

<sup>(</sup>a) Year ended 31 December 1966. (b) Year ended 30 September 1968. Figures include transactions of Private Street Accounts. (c) Year ended 30 June 1968. (d) Includes plant. (e) Includes advances for homes.

# LOCAL GOVERNMENT AUTHORITIES: LOAN EXPENDITURE STATES, 1963-64 TO 1967-68

(\$'000)

Year		N.S.W.(a)	Vic.(b)	Qld(c)	S.A.(c)	W.A.(c)	Tas.(c)	Total
Ordinary								
services—								
1963-64		22,725	21,056	32,426	5,383	5,576	4,289	91,455
1964-65		25,645	22,052	30,900	5,692	5,849	3,453	93,590
1965-66		25,817	24,280	30,959	6,219	7,143	3,655	98,073
1966-67		26,081	25,417	31,757	9,400	7,884	3,890	104,430
1967–68		(d)	26,792	33,871	7,330	8,603	4,432	(d)
Business								
undertakings	_							
1963-64		34,142	3,513	12,434	94	622	3,142	53,948
1964-65		36,697	3,508	15.042	22	977	2,900	59,146
1965-66		41,711	3,570	16,365	20	903	4,687	67,256
1966-67	•	35,320	4,013	18,359	60	765	4,201	62,718
1967-68		(d)	3,940	19,526	137	1,205	4,932	(d

<sup>(</sup>a) Years ended previous 31 December. (b) Years ended 30 September. Figures for Victoria now include transactions of Private Street Accounts. (c) Years ended 30 June. (d) Not yet available.

# Local government and semi-government authorities' debt

Statistics of local government and semi-government debt for 1963-64 to 1967-68 are given in the following paragraphs. The information covers all local government authorities (including New South Wales County Councils previously included with semi-government authorities) and those semi-government authorities responsible for the provision of the following services.

New South Wales. Water Supply, Sewerage and Drainage, Electricity and Gas Supply, Fire Brigades, Banking, Housing, Harbours, Grain Elevators, Roads and Bridges, Marketing, Industry Assistance, and Miscellaneous.

Victoria. Water Supply and Sewcrage, Irrigation and Drainage, Harbours, Transport, Electricity and Gas Supply, Roads and Bridges, Fire Brigades, Marketing (Buying and Selling), Industry Assistance, Grain Elevators, and Housing.

Queensland. Water Supply and Sewerage, Irrigation and Drainage, Harbours, Transport, Electricity Supply, Fire Brigades, University, Hospitals and Ambulances, Marketing (Buying and Selling and Agency), and Industry Assistance.

South Australia. Irrigation and Drainage, Transport, Electricity Supply, Fire Brigades, Hospitals and Ambulances, Marketing (Agency), Industry Assistance, Banking, Housing, University and Miscellaneous.

Western Australia. Water Supply and Sewerage, Harbours, Transport, Electricity Supply, Fire Brigades, Hospitals, Marketing (Agency), Housing, University, and Miscellaneous.

Tasmania. Harbours, Electricity Supply, Fire Brigades, Transport, Housing, Industry Assistance and Water Supply.

A detailed list of the athorities included is shown in the annual bulletin State, Territory and Local Government Authorities' Finance and Government Securities.

The following table provides a summary of new money loan raisings, provisions for debt redemption, debt outstanding and interest payable by local government and semi-government authorities for the year 1967-68. For greater detail see the annual bulletin State, Territory and Local Government Authorities' Finance and Government Securities.

LOCAL GOVERNMENT AND SEMI-GOVERNMENT AUTHORITIES: NEW MONEY LOAN RAISINGS, REDEMPTION, DEBT, AND INTEREST PAYABLE, STATES 1967-68

(\$'000)

<del></del>	N.S.W	. Vic.	Qld	S.A.	W.A.	Tas.	Total
	LOCAL	GOVERNM	ENT AUT	HORITIE	s		<b>-</b> -
New money loan raisings—	. 628	196	3,488	1.027	8	69	5.616
From government	79,144		40,490	7,365	11,318	8,114	178,244
Total loan raisings .	. 79,77.	2 32,391	43,977	8,392	11,326	8,183	184,040
Funds provided for redemption- Government loans . Loans due to public .			1,803 17,268	1,009 1,853	3 4,634	68 2,291	3,717 71,738
Total funds, redemptions	. 32,64	•	19,071	2,862	4,637	2,358	75,455
Accumulated sinking fund balance	. 38,826	5 12,909	27,810	138	103	1.394	81,179
Due to government Due to banks (net overdraft) Due to public creditor(a)	. 7,250 2,100 620,210	1,831	37,052 346,229	7,380 186 41,893	69 211 59,405	908 58,058	60,171 4,335 1,324,816
Total debt(a)	629,567	208,365	383,281	49,459	59,685	58,966	1,389,323
Maturing overseas(a)(b) .			3,557				3,557
Annual interest payable(a).	. (c	11,378	20,895	2,660	3,308	3,251	(c)
SEMI-GO	OVERNME	NT AND C	THER PU	BLIC AU	THORITIE	ES	
New money loan raisings— From government From public	. 30,926		1,183 35,934	29,051 15,478	20,482 15,488	29,254 8,341	164,315 246,164
Total loan raisings .	. 99,226	156,042	37,117	44,529	35,970	37,595	410,479
Funds provided for redemption-				4 507	2,587	2.918	20.42
Government loans			1,540	4,797			28,112
Government loans Loans due to public	16,889	30,621	10,901	502	2,547	1,583	63,042
Government loans Loans due to public  Total funds, redemptions	16,889	30,621				1,583 4,500	
Government loans Loans due to public	16,889	30,621 38,446	10,901	502	2,547	•	63,042
Government loans Loans due to public  Total funds, redemptions  Accumulated sinking fund balance Debt Due to government Due to banks (net overdraft)	. 16,889 . 25,333 . 110,545 . 565,801 . 1,303	30,621 38,446 51,838 719,791 491	10,901 12,441 20,366 55,849	502 5,299 3,003 417,485 289	2,547 5,134 5,276 258,047 4,946	4,335 313,303	63,042 91 154 195,363 2,330,275 7,029
Government loans Loans due to public  Total funds, redemptions Accumulated sinking fund balance Debtage Due to government	. 16,889 . 25,333 . 110,545 . 565,801	30,621 38,446 51,838 719,791 491 1,565,588	10,901 12,441 20,366	502 5,299 3,003 417,485	2,547 5,134 5,276 258,047	<b>4,</b> 500	63,042 91 154 195,363 2,330,275
Government loans . Loans due to public  Total funds, redemptions  Accumulated sinking fund balance Debte- Due to government Due to banks (net overdraft) Due to public creditor(a)	. 16,889 . 25,333 . 110,545 . 565,801 . 1,303 . 677,579	30,621 38,446 51,838 719,791 491 1,565,588	10,901 12,441 20,366 55,849 317,482	502 5,299 3,003 417,485 289 152,259	2,547 5,134 5,276 258,047 4,946 103,935	4,335 313,303 64,091	63,042 91 154 195,363 2,330,275 7,029 2,880,936

<sup>(</sup>a) Includes debt or interest payable in London and New York. Debt in London is payable in £ sterling which have been converted at the LM.F. rate of £Stg1 to \$A2.1428; New York debt is payable in U.S. dollars which have been converted at the LM.F. rate of \$US1.12 to \$A1. (b) Included in debt figures above. (c) Not yet available.

In the table above and the following table debt includes all liabilities for which arrangements have been made for repayment over a period of one year or more, and net overdrafts. Interest capitalised and amounts due for the capital cost of assets or for services rendered which are to be repaid over a period of one year or more are included. Current liabilities, such as interest accrued (but not capitalised), trade creditors, amounts held in trust, and other debts which are to be repaid in less than one year are not included. Net overdraft is the gross overdraft of all funds less all bank credit balances (including fixed deposits) which do not form part of a sinking fund to repay a loan. New loans raised during the year include new loan liabilities incurred during the year, loans raised from the public to repay indebtedness to the Government, and interest capitalised. Loans raised and redeemed within the year, increases in overdrafts, and loans raised for conversion or redemption of existing debt are excluded. Funds provided for redemption include instalments of principal repaid and amounts credited to sinking funds established for the purpose of repaying the debt on maturity. Amounts provided for redemption from loans raised for that purpose are excluded.

Note. The considerable changes in the figures for New South Wales in the table above when compared with figures published in Official Year Books prior to No. 34 (1968) are due to the transfer of New South Wales County Councils from the semi-government division to that of local government authorities (reg previous page).

LOCAL GOVERNMENT AND SEMI-GOVERNMENT AUTHORITIES: NEW MONEY LOAN RAISINGS, REDEMPTION AND DEBT, AUSTRALIA, 1963-64 TO 1967-68 (\$'000)

		(*	,			
		1963-64	1964-65	1965-66	1966-67	1967–68
LO	CAL	GOVERNMI	ENT AUTHO	RITIES		
New money loan raisings					·	
From government		6,865	3,945	6,412	5,235	5,616
From public		137,652	136,762	136,148	157,610	178,424
Total loan raisings .		144,517	140,708	142,560	162,845	184,040
Funds provided for redemption—						
Government loans		4,812	4,278	4,281	3,919	3,717
Loans due to public		49,105	56,186	59,033	66,437	71,738
Total funds, redemptions		53,917	60,464	63,314	70,355	75,455
Accumulated sinking fund balance	e .	58,676	59,496	65,226	73,753	81,179
Due to government		55,783	55,301	57,342	58,339	60,171
Due to banks (net overdraft)		2,678	4,245	7,090	9,226	4,335
Due to public creditor(a) .		950,513	1,031,619	1,114,762	1,211,401	1,324,816
Total debt(a)		1,008,974	1,091,166	1,179,194	1,278,967	1,389,323
Maturing overseas(a)(b)		15,400	10,043	9,686	4,329	3,557
SEMI-GOVER	.NMI	ENT AND O	THER PUBL	IC AUTHOR	RITIES	
New money loan raisings—						
From government		147,492	142,131	142,445	143,074	164,315
From public		191,475	197,872	194,588	221,064	246,164
Total loan raisings .		338,967	340,003	337,034	364,138	410,479
Funds provided for redemption-						
Government loans		19,008	20,904	23,995	25,459	28,112
Loans due to public		33,656	40,006	42,395	43,082	63,042
Total funds, redemptions		52,664	60,910	66,389	68,541	91,154
Accumulated sinking fund balance Debt-	е.	128,881	141,926	159,463	177,944	195,363
Due to government		1,834,002	1,955,426	2,083,267	2,198,078	2,330,275
Due to banks (net overdraft)	•	1,318	1,125	652	7,462	7,029
Due to public creditor(a) .	:	2,140,402	2,311,699	2,481,444	2,680,589	2,880,936
Total debt(a)		3,975,722	4,268,250	4,565,363	4,886,130	5,218,239
Maturing overseas(a)(b)		15,722	14,718	12,858	11,810	5,837

(a) See footnote (a) page 605.

(b) Included in debt figures above.

# Roads and bridges

# Summary of roads open for general traffic

Tables showing road lengths in the several States and Territories classified according to class of road and surface of road may be found in Chapter 12, Transport, Communication, and Travel.

# Aggregate net expenditure on roads and bridges in Australia

In most States there are three classes of authorities concerned with roads and bridges, the State Government, the central road authority, and numerous local government bodies. The Commonwealth Government, in addition to the grants it makes to the States for road purposes, is concerned with roads in the Northern Territory and the Australian Capital Territory and roads of access to Commonwealth property in the various States. Some information relating to Commonwealth grants to the States for road purposes and particulars of the expenditure on roads and bridges by local government bodies and the central road authorities are given in later sections of this chapter.

Most of these authorities may expend money directly on road construction or indirectly by means of grants and payments to other authorities. These indirect payments, if included in an aggregate, would duplicate expenditure; this together with the fact that some authorities are unable to supply separate information concerning their road expenditure, makes it difficult to compile precise statistics of aggregate expenditure on roads and bridges.

The information in the following table, which is partly es imated and which excludes the main indirect payments, provides an approximate measure of the aggregate net expenditure by the three classes of authorities mentioned above on roads and bridges in Australia during each of the years ended 30 June 1965 to 1969. Expenditure on roads by those authorities whose primary activity is directed towards functions other than roads, e.g. electricity, forestry, housing, etc., authorities is not included. The figures cover expenditure on the construction, reconstruction and maintenance of roads and bridges, and direct administration but not debt charges. Because of the difficulties associated with the indirect payments mentioned above, it is not possible to give separate net details for each authority.

PUBLIC AUTHORITY NET EXPENDITURE ON ROADS AND BRIDGES STATES AND TERRITORIES, 1964 65 TO 1968-69

18	mi	Nia	n)

Year	· <b>-</b> .	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T. and A.C.T.	Aust.
1964-65.		149	112	71	38	34	18	10	432
196566.		159	121	71	41	39	21	15	467
1966-67.		164	129	79	47	47	20	12	497
196768.		170	145	88	50	48	19	18	537
1968-69.		183	166	92	50	4.3	20	23	578

### Commonwealth Government grants

The following table shows the allocations to the States under the several Commonwealth Aid Roads Acts for road construction, maintenance, repair and other works connected with transport for each of the years 1964-65 to 1968-69. After I July 1959, when the Commonwealth Aid Roads Act 1959 came into operation, the Commonwealth made separate provision for expenditure on strategic roads and the promotion of road safety practices. See also the chapter Public Finance, and Finance bulletins.

ROAD CONSTRUCTION, MAINTENANCE, ETC.: GRANTS UNDER THE COMMONWEALTH AID ROADS ACTS, STATES, 1964-65-TO-1968-69 (\$'000)

Year	_	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Total
1964-65		36,346	25,576	23,670	14,902	23,006	6,500	130,000
1965-66		39,191	27,508	25,538	16,024	24,739	7,000	140,000
1966 - 67		41,744	29,443	27,415	17,222	26,676	7,500	150,000
1967-68		44,467	31,286	29,266	18,384	28,597	8,000	160,000
1968 - 69		47,319	33,113	31.098	19,433	30,537	8,500	170,000

### New South Wales

Main roads administration is organised as a separate department under the control of a Commissioner. The activities of the Department of Main Roads include works on main, developmental, secondary and tourist roads throughout the State, all roads in the unincorporated portion of the Western Division, and certain associated works, principally bridges and vehicular ferries, constructed and maintained from government funds. The Department of Main Roads co-operates with the municipal and shire councils in the work of constructing and maintaining the main roads system.

In the County of Cumberland, which for the purposes of the Main Roads Act is deemed to include the City of Blue Mountains and small sections of other councils' areas on the boundary of the County of Cumberland, the full cost of main road and bridge construction, half the cost of secondary roads, and a proportion (in general, up to half) of the cost of tourist roads are met from the

funds of the Department of Main Roads. The Councils do not contribute directly to the cost of these works but are required to pay a levy of 0.2083 cents in the \$ on the unimproved capital value of rateable property within Council's area or at a uniform percentage determined annually by the Commissioner of between ten per cent and fifteen per cent of Council's total rate income, whichever is the less. In the former case the rate payable in respect of lands used principally for primary production is half the rate levied on other lands.

In country districts the Department meets the full cost of road and bridge works on State highways, the full cost of bridge construction works and three-quarters of the cost of road construction and road and bridge maintenance works on trunk roads, three-quarters of the cost of bridge construction works and two-thirds of the cost of road construction and road and bridge maintenance works on ordinary main roads, and, in most cases, up to half the cost of works on tourist roads. The cost of constructing developmental roads and works is borne in full by the Department of Main Roads, but local Councils are required to maintain them in a satisfactory condition.

The funds of the Department of Main Roads are derived principally from motor vehicle taxation, charges on heavy commercial goods vehicles under the Road Maintenance (Contribution) Act, 1958–1965, grants under Commonwealth Aid Roads Act (see page 607 and the Chapter, Public Finance), other grants from the State or Commonwealth Governments, and proceeds of a levy on municipal and shire councils in the County of Cumberland in accordance with the Main Roads Act, 1924–1967. The State Government also makes repayable advances for Main Roads Department works, and since 1963 the Commissioner for Main Roads has had the power (with the approval of the Governor on the recommendation of the Treasurer) to borrow moneys. The figures shown below represent the aggregate revenue and expenditure of five funds: the County of Cumberland Main Roads General and Special Purposes Funds, the Country Main Roads General and Special Purposes Funds, and the Developmental Roads Fund.

DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES: REVENUE AND EXPENDITURE, 1964-65 TO 1968-69 (\$'000)

						(\$ 000)				
					-	1964-65	1965-66	1966-67	1967-68	1968-69
						REVENUE	(a)			
Motor vehicle taxati	ion, r	egistr	atio	n and						
licence fees .						41,059	42,471	42,897	45,248	49,636
Commonwealth Aid	l Roa	ds Ac	ts			22,934	24,648	26,313	28,013	29,814
State and Commons	wealti	h gran	its			70	35	63		
Contributions by o	other	depa	rtme	ents :	and					
bodies .						97	377	893	846	350
Local authorities' c	ontri	butior	ıs—							
Under section 11	of M	1ain I	Roac	is Ac	t.	5,768	6,418	7,600	8,241	7,538
Other						91	157	250	38 <b>5</b>	262
Sydney-Newcastle I	Expre	ssway	To	11 .			356	7 <b>0</b> 6	892	1,530
Other	•			•	•	531	539	564	652	859
Total .		•	•		•	70,549	75,001	79,285	84,278	89,989
					EX	(PENDITUI	RE(b)			
Roads and bridges-	_									
Construction						56,153	61,714	62,590	64,534	67,950
Maintenance .						16,514	15,813	17,677	17,352	19,719
Administration .						3,425	3,757	4,296	4,816	5,379
Interest, exchange, e	etc., c	n deb	t			1,237	1,609	1,856	2,094	2,541
Other $(c)$ .					•	1,125	1,467	1,753	1,705	2,229
Total .						78,454	84,360	88,172	90,501	97,819

<sup>(</sup>a) Excludes repayable advances by the State Government and private loans (\$7,500,000 in 1964-65, \$5,005,000 in 1965-66, \$6,500,000 in 1966-67, \$8,750,000 in 1967-68 and \$12,900,000 in 1968-69), and transfers from Sydney Harbour Bridge Account for Expressway construction (\$2,360,000 in 1964-65, \$4,750,000 in 1965-66, \$3,743,000 in 1966-67, \$4,775,000 in 1967-68 and \$900,000 in 1968-69). Expenditure from these amounts is fully reflected in Expenditure. (b) Excludes debt redemption (\$210,000 in 1964-65, \$441,000 in 1965-66, \$346,000 in 1966-67, \$477,000 in 1967-68 and \$812,000 in 1968-69) and repayment of government advances (\$1,020,000 in 1964-65, and \$200,000 in 1965-66 and later years). (c) Mainly purchase of assets not subject to annual depreciation charge. The purchase of other assets is omitted here because the depreciation charge for them is reflected each year in 'Roads and bridges'.

Toll facilities operated by the Department of Main Roads include the Sydney Harbour Bridge and the three completed sections of the Sydney-Newcastle Expressway.

The Sydney Harbour Bridge was opened for traffic on 19 March 1932, and has a main span of 1,650 feet with clearance for shipping of 170 feet. The deck, 160 feet wide, carries eight road traffic lanes, two railway tracks and two footways. During 1968-69, 42,558,984 road vehicles (excluding buses and exempt vehicles), 24,958,330 rail passengers and 12,403,394 bus passengers crossed the bridge. Income from tolls during 1968-69 amounted to \$4,615,000, including road tolls \$4,303,000, rail passenger tolls \$284,000 and bus passenger tolls \$28,000.

The three sections of the Sydney-Newcastle Expressway now open to traffic provide 14.5 miles of expressway conditions through very difficult terrain north of Sydney from an interchange between Cowan and Berowra north across the Hawkesbury River to Calga. Total cost of the project to 30 June 1969 was \$28.7 million. Toll collections during the year ended 30 June 1969 amounted to \$1.530.000.

### Victoria

With the object of improving the main roads of the State, the Country Roads Board was established by legislation passed in 1912. The principal duties of the Board are to determine which roads should be declared in the various classifications; to supervise the construction, reconstruction and maintenance of these roads; to inquire into the State's resources in road materials and the most effective methods of road construction and maintenance; and to recommend deviations in existing roads or the construction of new roads in order to facilitate communications or to improve the conditions of traffic.

The funds of the Country Roads Board are derived principally from motor registration fees, two-thirds of additional registration fees (charged on initial registration or transfer), a proportion of drivers' licence fees, payments by the Commonwealth Government under the Commonwealth Aid Roads Acts, roads charges under the Commercial Goods Vehicles Act, repayments by municipalities and, since 1965, a share of the addition to registration fees paid to the Roads (Special Projects) Fund and a grant under the Public Works Loan Application Act. In addition, loans have been authorised from time to time under the Country Roads Acts for permanent works on main and developmental roads, State highways, tourists' roads and forest roads, while the State Government has provided, free of repayment, loan moneys for restoration of flood and bush fire damage. Finance for the elimination of level crossings and for improved approaches, signs, lighting and other work to reduce danger at level crossings is derived mainly from the one third of additional registration fees paid into the Level Crossings Fund, maintained by the Board.

COUNTRY ROADS BOARD, VICTORIA: RECEIPTS AND PAYMENTS 1964-65 TO 1968-69 (\$'000)

	196465 	1965-66 —-	1966-67	1967-68	1968-69 
	RECTIPT:	s ·			
Motor Car Act registration and licence					
fees (less cost of collection)	23,378	24,690	25,866	26,784	28,878
Municipalities' payments	1,690	1,691	1,824	1.845	1,931
Commonwealth Aid Roads Acts	25,182	27,175	29,050	30.895	32,723
Roads (Special Projects) Fund.		1,654	3,311	2,652	3,055
Loans from State Government	762	1,020	834	987	3,389
Road charges, Commercial Goods Vehicles					
Act	5,926	6,379	6,732	7,248	7.842
Public Works Loan Application Act	700	768	715	7(0)	784
Other	889	971	464	402	530
Total	58,527	64,348	68,796	71,513	79,132

# COUNTRY ROADS BOARD, VICTORIA: RECEIPTS AND PAYMENTS 1964-65 TO 1968-69—continued (\$'000)

					1964–65	1965-66	1966-67	1967-68	1968-69
					PAYMENT	rs			
Construction and mainted	enanc	e of i	roads	and					
State highways.					17,081	17,704	19,674	19,003	18,349
Main roads .	•	:	•	•	15,189	16,569	16,765	16,769	16,940
By-pass roads .	•	:	•	•	4,854	3,745	5,172	7,969	11,682
Tourist roads .	•	·	•	·	1,422	1,510	2.312	2,857	2.793
Forest roads .	•		•	·	714	699	737	658	678
Unclassified roads					11,131	12,709	12,798	13,739	14,248
Other					167	140	45	82	86
Plant purchase .					697	1,149	1,388	1,234	1,583
Interest, debt redemptio	n, etc	٠.			1,988	2,056	2,140	2,190	2,306
Office buildings, Kew-	capita	ıl cos	st.		71	12	31	8	59
Statutory payment to-									
Tourists' Resorts Fun	ıd				469	468	494	517	536
Transport Regulation		·d				178	383	404	435
Administration and other	er			٠	4,744	6,339	5,637	7,011	7,756
Total					58,525	63,278	67,575	72,443	77,452

The Melbourne and Metropolitan Board of Works bears the responsibility for carrying-out planning scheme proposals relating to metropolitan highways and bridges, and is now carrying out a programme of urgent highway works throughout the metropolitan area of Melbourne including the extension of the South-Eastern Freeway from Burnley to Tooronga (estimated cost \$18m) and the Tullamarine Freeway to serve the new Tullamarine airport (estimated cost \$20.7m). Expenditure on these projects up to 30 June 1969 was \$36.7m. Of this amount, \$15.2m was financed from the proceeds of the Board's Metropolitan Improvement Rate and \$21.5m was contributed by the Treasurer of Victoria from the Roads (Special Projects) Fund.

The Lower Yarra Crossing Authority was incorporated in October 1965 as a company limited by guarantee and given powers under the Lower Yarra Crossing Authority Act 1965 to construct, operate and maintain a toll crossing over the lower reaches of the River Yarra. The estimated cost of the bridge and approaches is to be \$42m. The bridge will provide eight traffic lanes and will have an overall length of 8,472 feet, the bridge structure being 2,782 feet with a main span of 1,102 feet; clearance is to be 176 feet. The bridge will be operated by the Authority for up to 40 years, after which it will be surrendered to the State of Victoria.

### Queensland

The Department of Main Roads was constituted in February 1951 with the Commissioner of Main Roads as its permanent head. The duties of the Commissioner are to carry out surveys and investigations necessary to determine State highways, main developmental, and secondary roads; and the responsibility for building and maintaining these declared roads is largely that of the Commissioner. Roads of purely local importance are constructed and maintained by local authorities. In many cases construction is financed by the State Government by means of Treasury loans. Other roads may be built by the Public Estate Improvement Branch of the Lands Department in order to open up areas of previously inaccessible or undeveloped country.

The funds of the Department of Main Roads are obtained chiefly from motor vehicle registration and collection, fees, etc., under the Transport Acts, contributions under the Commonwealth Aid Roads Acts, and loans, grants and advances from the State Government. The total receipts and payments during each of the years 1963-64 to 1967-68 are shown below.

# DEPARTMENT OF MAIN ROADS, QUEENSLAND: RECEIPTS AND PAYMENTS 1963-64 TO 1967-68 (\$'000)

(# 000)				
1963-64	1964-65	1965-66	1966-67	1967-68
RECEIPTS	5			
13,664	15,531	15,704	18,645	20,664
1,046	1,039	1,330	1,127	672
				2,420
				3,918
				33,075
				1,400
				3,908
2,126	2,043	2,066	2,755	2,895
49,439	54,388	56,590	64,701	68,952
PAYMENT	'S			
34.345	39,993	35,356	40,141	41,931
6,507	6,466	6,876	8,310	9,095
3,351	3,735	4,418	3,716	4,407
132	203			338
				954
4,828	5,618	7,104	9,000	10,706
49,829	56,712	54,462	61,864	67,431
	13,664 1,046 260 2,558 24,877 1,586 3,322 2,126 49,439 PAYMENT 34,345 6,507 3,351 132 666 4,828	13,664 15,531 1,046 1,039 260 2,558 3,027 24,877 27,919 1,586 1,125 3,322 3,704 2,126 2,043 49,439 54,388  PAYMENTS  34,345 39,993 6,507 6,466 3,351 3,735 132 203 666 697 4,828 5,618	13,664 15,531 15,704 1,046 1,039 1,330 260 586 2,558 3,027 3,142 24,877 27,919 29,188 1,586 1,125 1,125 3,322 3,704 3,449 2,126 2,043 2,066 49,439 54,388 56,590  PAYMENTS  34,345 39,993 35,356 6,507 6,466 6,876 3,351 3,735 4,418 132 203 276 666 697 432 4,828 5,618 7,104	1963-64         1964-65         1965-66         1966-67           RECEIPTS           13,664         15,531         15,704         18,645           1,046         1,039         1,330         1,127           260          586         1,785           2,558         3,027         3,142         3,592           24,877         27,919         29,188         31,707           1,586         1,125         1,125         1,125           3,322         3,704         3,449         3,898           2,126         2,043         2,066         2,755           49,439         54,388         56,590         64,701           PAYMENTS           34,345         39,993         35,356         40,141           6,507         6,466         6,876         8,310           3,351         3,735         4,418         3,716           132         203         276         301           666         697         432         396           4,828         5,618         7,104         9,000

(a) Includes grants to local authorities for road purposes.

# South Australia

The Highways Department is administered by the Commissioner of Highways, who is empowered, subject to the approval of the Minister of Roads and Transport, to undertake the construction, maintenance and protection of the principal roads of the State, allocate grants to councils for roadworks and supervise the expenditure of these grants, and assist Councils to purchase road-making plant and to defray the cost of roadworks. In addition, the Commissioner advises Councils on technical questions concerning the construction, maintenance or repair of roads. Funds of the Department are derived mainly from the Highways Fund, into which are paid the proceeds from motor vehicle registration and drivers' licences (less cost of collection), appropriations from loan funds, repayments of advances made to Councils, and contributions by the Municipal Tramways Trust, and from contributions under the Commonwealth Aid Roads Acts.

The following table shows particulars of receipts and payments, during the years 1964-65 to 1968-69, of funds controlled by the Highways Department.

# HIGHWAYS DEPARTMENT, SOUTH AUSTRALIA RECEIPTS AND PAYMENTS, 1964-65 TO 1968-69 (\$'000)

1964-65	1965-66	1966-67	1967-68	1968-69
RECEIPT	s			
10,731	11,206	11,506	11,858	12,536
2,696	3,340	17,223 3,496	18,384 3,693	19,433 3,799
28,330	30,570	32,225	33,934	35,767
PAYMENT	rs			
18,409	20,912	22,834	20,799	23,837
5,198	5,375	6,000	7,128	8,211
1,164	1,167	514	518	522
1,126	1,376	1,091	1,386	1,253
		1,000	240	
919	1,214	1,792	2,866	- 105
26,816	30,044	33,231	32,936	33,718
	RECEIPTS  10,731 14,903 2,696 28,330  PAYMENT  18,409 5,198 1,164 1,126	RECEIPTS  10,731	RECEIPTS  10,731 11,206 11,506 14,903 16,024 17,223 2,696 3,340 3,496  28,330 30,570 32,225  PAYMENTS  18,409 20,912 22,834 5,198 5,375 6,000 1,164 1,167 514 1,126 1,376 1,091 1,000 919 1,214 1,792	RECEIPTS         10,731       11,206       11,506       11,858         14,903       16,024       17,223       18,384         2,696       3,340       3,496       3,693         28,330       30,570       32,225       33,934         PAYMENTS         18,409       20,912       22,834       20,799         5,198       5,375       6,000       7,128         1,164       1,167       514       518         1,126       1,376       1,091       1,386          1,000       240         919       1,214       1,792       2,866

<sup>(</sup>a) Includes reimbursement works for Commonwealth Government. (b) Includes administration expenses. (c) Represents gross repayments less recoveries by charges to works on account of depreciation and materials used.

# Western Australia

Work connected with road construction and maintenance and associated projects in Western Australia is undertaken by the State Government, through the Main Roads Department, and by local government authorities throughout the State. The Department operates under the *Main Roads Act*, 1930–1969, and is administered by a Commissioner of Main Roads responsible to the Minister for Works. The Act makes provision for the construction and maintenance of public roads in the categories of main roads, controlled-access roads and developmental roads. An additional category, that of important secondary roads, is used by the Department in determining its works programme. Within its own district each local government authority is reponsible for the provision and upkeep of roads other than those provided by the Main Roads Department. In addition, the local authority is required by the Main Roads Act to maintain any developmental road situated in its district.

The funds of the Main Roads Department are derived principally from allocations made under the Commonwealth Aid Roads Act 1969 under which Western Australia has been allotted grants totalling \$200,400,000 for the five-year period commencing 1 July 1969. During the five years ended 30 June 1969 Western Australia received \$133,555,000 under the Commonwealth Aid Roads Act of 1964 of which \$121,961,000 was made available to the Main Roads Department. In addition special Commonwealth assistance is given for the improvement of roads used for the transport of beet cattle in the Kimberley District. For the six-year period ended 30 June 1967 grants totalling \$8,400,000 were received from the Commonwealth for this purpose, and were matched by a corresponding State contribution. In a further seven-year period to 30 June 1974 grants totalling a maximum of \$9,500,000 are to be distributed, including \$1,400,000 received in 1967-68 and \$1,451,000 received in 1968-69. Other sources of income include a portion of vehicle licence fees collected by local government authorities and the Commissioner of Police, overload permit fees and an allocation from drivers' licence fees. Further moneys for expenditure on road maintenance are available under the Road Maintenance (Contribution) Act 1965 administered by the Commissioner of Transport. Receipts and payments for the years 1964-65 to 1968-69 are shown in the following table.

# MAIN ROADS DEPARTMENT, WESTERN AUSTRALIA: RECEIPTS AND PAYMENTS, 1964-65 TO 1968-69 (\$'000)

(\$ 000)

	1964-65	1965-66	1966-67	1967-68	1968-69
	RECEIPT	S	_		
Motor vehicle registration, licence fees, etc.	3,370	4,054	3,820	3,868	4,435
Commonwealth Aid Roads Acts	21,945	22,618	23,475	24,307	25,148
Commonwealth Aid Roads Acts matching					
grants		463	763	1,202	2,040
Western Australia Grant (Beef Cattle Roads)					
Act	1,500	1,500	1,500		
State Grants (Beef Cattle Roads) Act				1,400	1,451
Road Maintenance (Contribution) Act		392	2,540	2,873	3,210
Recoups from other authorities	1,455	917	1,821	1,469	2,488
Other	52	(a)2,024	176	272	299
Total	28,322	31,968	34,095	35,391	39,071
	PAYMENT	rs			
Construction and reconstruction of roads					
and bridges(b)	18,110	21,012	26,009	24,846	27,456
Maintenance of roads and $bridges(b)$ .	2,196	1,856	3,010	3,294	4,452
Recoups to local authorities(c).	2,939	3,501	3,518	4,307	
Transfer to State Consolidated Revenue .	195	253	258	258	258
Plant, machinery, etc	1,587	1,709	1,789	2,046	516
Other( $b$ )	1,530	1,861	1,678	1,642	3,760
Total	(d)26,557	30,192	36,262	36,393	36,442

<sup>(</sup>a) Includes \$1,896,000 transferred from an Overhaul Account previously administered by the Public Works Department. (b) Includes administration and expenditure on hire and maintenance of road construction plant, etc., and on purchase of materials. (c) Consists of payments to local authorities for work carried out on behalf of the Main Roads Department. For 1968-69 these payments have been included in 'Construction and reconstruction of roads and bridges' and 'Maintenance of roads and bridges'. (d) Excludes \$1,000,000 refund of advance from State Treasury.

### Tasmania

Under the Road Construction (Transfer of Functions) Act 1951, the control of the construction and maintenance of roads and certain road making plant was vested in the Minister for Lands and Works. Works authorised by the Minister in respect of roads classified as State highways, tourist and developmental roads are constructed by the Department of Public Works and financed from the State Highways Trust Fund, into which are paid the proceeds from Commonwealth Aid Roads grants, motor vehicle registration fees and taxes, licence fees for drivers and public transport, and other moneys made available by Parliament. In addition, provision was made under the Road Construction (Transfer of Functions) Act for certain works authorised by the Transport Commission to be carried out and constructed by the Department. Except in special cases, municipal councils bear the cost of maintaining country roads and a proportion of the cost of main and secondary roads.

The table following shows particulars of the receipts and payments of the combined Road Funds for the years 1964-65 to 1968-69.

ROAD FUNDS,	TASMANIA:	RECEIPTS	AND	PAYMENTS,	1964-65	TO	1968-69
		(\$'0	00)				

	1964–65	1965–66	1966-67	1967–68	1968-69
	RECEIPTS	3			
Motor vehicle taxation and registration,					
licences, fees, fines, etc	3,153	3,425	3,961	4,396	4,587
Commonwealth Aid Roads and Works Acts	6,500	7,000	7,500	8,000	8,500
Recoups from local authorities, etc	16	18	38	32	70
State Loan Fund	3,468	4,446	1,693	1,188	739
Hire of plant and workshop charges .	3,329	3,732	3,824	4,170	4,129
Other	(a)1,295	220	262	565	304
Total	17,761	18,842	17,279	18,350	18,329
	PAYMENT	S			
Construction and reconstruction of roads					
and bridges	11,420	11,591	9,445	10,214	9,434
Maintenance of roads and bridges	2,552	3,141	3,167	3,436	3,540
Other works connected with transport .	76	62	45	48	73
Grants to local authorities	15	35	37	46	54
Purchase, maintenance and operation of					<b>-</b>
plant	3,402	3,751	3,884	4,276	4,392
Other	383	300	759	346	339
Total	17,848	18,881	17,337	18,367	17.833

(a) Includes Commonwealth Employment Stimulation Grant, \$14,946.

# Water supply, sewerage and drainage

The information in this section relates primarily to the metropolitan areas and provincial cities and towns. For information on water supply and irrigation in rural areas see Chapter 24, Water Conservation and Irrigation.

# New South Wales

The two largest domestic water supply and sewerage systems are controlled by statutory boards each consisting of a president and a vice-president appointed by the State Government, and five members elected by local councils. These are (a) the Metropolitan Water, Sewerage and Drainage Board, which administers the systems in the County of Cumberland, i.e. in Sydney and in the surrounding districts, and, in addition, has jurisdiction over territory extending along the South Coast beyond Wollongong to Lake Illawarra, Shellharbour and Kiama, and (b) the Hunter District Water Board serving the Newcastle-Maitland-Cessnock areas. At Broken Hill and Cobar similar boards include representatives of the mining companies. Other systems, apart from irrigation projects and water storage systems administered by the State Government, are controlled by county, municipal or shire councils.

Metropolitan and Hunter District water supply. The storage reservoirs of the metropolitan water supply system with a combined available capacity of 574,335 million gallons, drain catchment areas of 3,890 square miles (including Warragamba, 3,480 square miles, Upper Nepean, 347 square miles, and Woronora, 29 square miles). The development of a water supply system on the Warragamba River was completed with the official opening of the Warragamba Dam in October 1960. This dam, constructed in concrete, has a storage capacity of 452,505 million gallons. Its safe net draught is estimated to be 274 million gallons a day. At 30 June 1969 there were 175 service reservoirs in use with a combined capacity of 706 million gallons. Rating for water for 1968-69 was 3.75 cents in the \$ of 'assessed annual value'. The payment of the rate entitled the user to an amount of water calculated at 1,000 gallons per 30 cents. For water in excess of this allowance a further charge of 30 cents per 1,000 gallons was made. Fluoridation of the metropolitan water supply commenced in April 1968.

The water supply of the *Hunter District system* is drawn principally from three sources; the Chichester Reservoir, with a storage capacity of about 3,902 million gallons and draining a catchment of 76 square miles, the Tomago Sandbeds, which extend northerly along the coast towards Port Stephens, and the Grahamstown Water Supply Scheme which is still being developed. Another source of supply is provided by the Nelson Bay-Anna Bay Scheme. Service reservoirs and tanks distributed throughout the water supply district have a total storage capacity of 126 million gallons.

The following tables show, for the Metropolitan and Hunter District systems, the number of properties, the estimated population supplied, and other details.

METROPOLITAN WATER SUPPLY(a). NEW SOUTH WALES: SERVICES, 1964-65 TO 1968-69

					Average consumpt				
Year	Improved properties for which water mains available	Estimated popu- lation supplied	Average daily con- sumption	Total con- sumption for the year	Pcr property	Per head of estimated popu- lation	Length of mains	Number of meters	
		.000	mill gal	mill gal	gallons	gallons	miles		
1964-65	693,185	2,660	290	105.892	418	109	7,649	479,321	
1965-66	712.059	2,723	230	83,802	323	84	7,972	495,850	
1966-67	735,360	2,756	234	85,383	318	85	8,105	515,653	
196768	756,063	2,816	270	98,981	357	96	8,325	532,859	
196869	775,548	2,885	302	110,347	389	106	8,534	550,017	

<sup>(</sup>a) County of Cumberland, City of Greater Wollongong, Shellharbour and Kiama Municipalities, and parts of Colo and Wollondilly Shires.

# HUNTER DISTRICT WATER SUPPLY(a): SERVICES, 1964-65 TO 1968-69

Length of mains	•	Average of consumpti							
	Per head of estimated population	Per property	Total con- sumption for year	Average daily con- sumption	Estimated population supplied	Properties supplied			Year
miles	gallons	gallons	mill gal	mill gal			-	_	
1,623	131	443	15,139	41.5	316,625	93,646			1964 - 65
1,673	102	346	11,970	32.8	320,451	94,779			1965-66
1,702	96	326	11,521	31.6	327,514	96,755			1966-67
1,740	111	377	13,675	37.4	335,565	99,066			1967-68
1,786	124	421	15,513	42.5	342,167	100,941			1968 -69

<sup>(</sup>a) Newcastle, Maitland and Cessnock areas.

Metropolitan and Hunter District sewerage and drainage systems. The metropolitan sewerage and drainage system serving Sydney and suburbs comprises 3 major sewerage systems and 9 minor systems, consisting of 7 outfalls discharging directly into the Pacific Ocean and 5 treatment works. There are also 8 centres outside the metropolitan area of which 5 (Camden, Campbelltown, St Mary's, Richmond and Warragamba township) are served by local treatment works and 3 (Bellambi, Port Kembla and Wollongong) discharge directly into the Pacific Ocean. Stormwater drainage channels under the control of the Metropolitan Water, Sewerage and Drainage Board at 30 June 1969 were 186 miles long.

The main sewerage system of the *Hunter District* serves the City of Newcastle and discharges into the Pacific Ocean at Burwood Beach. There are also local treatment works at Maitland, Cessnock and some of the outlying districts. Sewerage rates for 1968-69 were 5.0923 cents in the \$ of 'assessed annual value', and drainage rates (on certain areas served) 0.5208 cents in the \$.

The following table gives details of sewerage services and stormwater drains of the Metropolitan system.

# METROPOLITAN SEWERAGE AND DRAINAGE(a) NEW SOUTH WALES: SERVICES, 1965 TO 1969

Length of stormwater channels miles	Length of sewers	Estimated population served	Improved properties for which sewerage available		ne—	30 <b>J</b> ui
	miles	'000				
179	5,328	1,930	501,389			1965
181	5,585	2,000	524,225			1966
182	5,881	2,052	547,630			1967
184	6,166	2,135	574,847			1968
186	6,504	2,235	602,312			1969

<sup>(</sup>a) County of Cumberland, City of Greater Wollongong, Shellharbour and Kiama Municipalities, and parts of Colo and Wollondilly Shires.

At 30 June 1969, 80,911 premises had been connected to the Hunter District Water Board's sewerage system (Newcastle-Maitland-Cessnock areas). The total length of sewers under the Board's control was 1,116 miles, and the length of drains was 52 miles.

Metropolitan and Hunter District systems' finances. The following table shows the debt, revenue and expenditure of the Metropolitan Water, Sewerage and Drainage Board and the Hunter District Water Board for each of the services of water supply, sewerage and drainage during 1968-69, and for the three services combined for the years 1964-65 to 1968-69.

METROPOLITAN AND HUNTER DISTRICT WATER SUPPLY, SEWERAGE AND DRAINAGE, NEW SOUTH WALES: FINANCES, 1964-65 TO 1968-69 (\$'000)

				Expenditu	re			Surplu:
Year		Capital debt at 30 June	Revenue	Working expenses (a)	Interest and exchange	Debt redemp- tion	Total	oi defici (-)
			METRO	POLITAN	(b)			
1968-69—		,						
Water		331,483	42,913	21,587	15,794	5,522	42,903	+ 10
Sewerage		246,939	35,175	18,890	11,827	4,453	35,170	+ :
Drainage		12,447	2,118	1,388	595	130	2,113	+ (
Total, 1968-69		590,869	80,206	41,865	28,216	10,105	80,185	+ 21
1967-68		550,793	68,917	31,765	26,389	10,754	68,908	+ 9
1966-67		513,816	62,701	28,914	24,132	9,635	62,681	+ 20
1965-66		475,200	58,092	27,169	22,166	8,743	58,078	+ 14
1964–65	•	440,941	54,890	26,846	20,166	7,861	54,873	+ 17
			HUNTER	DISTRIC	T(c)			
1968-69				_				
Water		63,645	6,461	2,894	2,908	656	6,458	+ :
Sewerage		21,550	3,002	1,722	1,015	260	2,997	+ :
Drainage	•	989	159	106	50	9	165	- :
Total, 1968-69		(d)89,835	9.621	4,722	3,973	925	9,620	+ 3
1967–68		(d)84,698	8,651	4,106	3,740	843	8,688	- 3
1966-67		(d)79,497	7,928	3,786	3,254	765	7,805	+12
1965-66		(d)74,593	7,804	3,469	3,442	861	7,772	+ 33
1964–65		(d)69,705	6,508	3,099	2,808	701	6,607	- 9

<sup>(</sup>a) Includes provision for renewals, long service leave, etc. (b) County of Cumberland, City of Greater Wollongong, Shellharbour and Kiama Municipalities, and parts of Colo and Wollondilly Shires. (c) Newcastle-Maitland-Cessnock areas. (d) Includes General Fund indebtedness not dissected by services.

Local government country water supply and sewerage systems. At 31 December 1966, country water supply services were conducted or under construction by 48 municipalities, 92 shires and 6 county councils, and country sewerage services by 51 municipalities and 46 shires. The capital indebtedness of these schemes was \$103,776,000 at 31 December 1966, namely \$69,251,000 for water and \$34,525,000 for sewerage. Debt of the municipalities amounted to \$50,080,000, shires to \$41,200,000, and county councils to \$12,496,000. Government advances amounting to \$622,000 are included in these figures. Aggregate income and expenditure amounted to \$17,702,000 and \$13,510,000, respectively, in 1966.

Other country water supply and sewerage systems. The water supply and sewerage services for Broken Hill are operated by a statutory board, the Broken Hill Water Board. Its capital indebtedness at 31 December 1968 was \$5,858,000. In 1968, income (excluding subsidies, State Government \$204,000 and mining companies \$553,000) amounted to \$715,000 and expenditure (excluding debt redemption \$283,000) amounted to \$1,184,000. The Cobar Water Board was constituted in February 1964. At 31 December 1968 its capital indebtedness was \$2,332,000. The following country water supply systems—South-West Tablelands, Junee, and Fish River—are administered by the Department of Public Works. These supply water in bulk to municipalities and shires, the Electricity Commission of New South Wales, and other large consumers. Only a small quantity is sold direct to private consumers. The capital indebtedness of these systems was \$15,088,000 at 31 December 1968. The Mulwala Water Supply and Sewerage Service was constructed as an urgent war-time work for the Commonwealth, and the Bethungra Water Supply System is administered by the Department of Public Works in conjunction with the Junee supply.

# Victoria

Melbourne and Metropolitan Board of Works. The Board consists of a Chairman and fifty-two Commissioners elected to represent the municipalities which lie wholly or partly within the metropolitan area. The principal functions of the Board are: to control and manage the metropolitan water supply system; to provide the metropolitan area with an efficient main and general sewerage system; to deal with main drains and main drainage works; to control and manage the rivers, creeks and watercourses within the metropolitan area; and to carry out the functions of a permanent planning authority.

Metroplitan water supply. There are 6 storage reservoirs serving the metropolitan area — Yan Yean, 7,233 million gallons (available for consumption, 6,649 million gallons); Toorourrong, 60 million gallons; Maroondah, 6,289 million gallons (4,870 million gallons); O'Shannassy, 930 million gallons; Silvan, 8,853 million gallons (8,823 million gallons); and Upper Yarra, 45,400 million gallons (44,120 million gallons); total 68,765 million gallons (65,452 million gallons). Service reservoirs number 49, with a total capacity of 373 million gallons. The water rate levied by the Board in 1968-69 was 2.5 cents in the \$ on the net annual value of the properties served. The charge for water consumed in excess of the quantity which, at 20 cents per 1,000 gallons, would equal the assessed water rates on each property, was 20 cents per 1,000 gallons. The following table shows particulars of Melbourne metropolitan water supply services for the years 1964-65 to 1968-69.

# MELBOURNE WATER SUPPLY: SERVICES, 1964-65 TO 1968-69

						Average consump	•	Length of	
Year		Number of houses supplied	Esti- mated popu- lation supplied	Average daily con- sumption	Total con- sumption for the year	Per house	Per head of esti- mated popu- lation	aque- ducts, etc. mains and reticu- lation	Number of meters
			,000	mill gal	mill gal	gallons	gallons	miles	
1964-65		595,727	2.079	168.2	61,409	282	80.9	6.098	511.077
1965-66	·	612.844	2,120	178.7	65,218	292	84.2	6,280	536,093
1966-67		626,690	2,143	188.5	68,815	301	88.0	6,517	559,713
1967-68		642,039	2,170	139.0	50,876	216	64.1	6,791	577,713
1968-69		658,944	2,227	173.4	63,288	263	77.9	7,034	595,560

Metropolitan sewerage and drainage. Particulars of sewerage and drainage services for 1964-65 to 1968-69 are shown on the next page.

METROUDNE	SEWEDACE	AND	DDAINAGE	SEDVICES	1064_65_T()	1068-60

		Number	Esti- mated			Average pumping	•		
Year	of houses for which sewers are provided	houses lation or which for which sewers sewers Average are are daily	Average daily pumping	Total sewage pumped for the year	Per house	Per head of esti- mated popu- lation	Length of sewers, etc.	Length of main drains	
			'000	mill gal	mill gal	gallons	gallons	miles	miles
1964-65		453,078	1,491	93.6	34,152	206.5	62.8	4,113	218
1965-66		467,705	1,599	94.6	34,545	202.4	59.2	4,311	229
1966-67		484,798	1,629	98.1	35,793	202.3	60.2	4,554	233
1967-68		509,185	1,719	86.1	31,514	169.1	50.1	4,739	240
1968-69	•	528,983	1,788	96.7	35,300	182.8	54.1	4,906	250

The metropolitan sewerage system consists of the main system (serving an area of 115,751 acres) and 6 subsidiary systems—the Braeside system (serving an area of 6,589 acres), the Kew system (serving an area of 112 acres), the Maribyrnong system (serving an area of 182 acres), the Watsonia system (serving an area of 253 acres), the Lower Plenty system (serving an area of 1,400 acres), and the Heatherton system (serving an area of 1,136 acres). The Board of Works Farm, 26,809 acres in extent and situated about twenty-four miles south west of Melbourne beyond the township Werribee, serves to purify and dispose of approximately ninety-seven per cent of the sewerage flow of the metropolis before its discharge into Port Philip Bay.

Melbourne and Metropolitan Board of Works' finances. The following table provides for the year 1968-69 a summary of the financial operations of the water supply, sewerage and drainage services conducted by the Melbourne and Metropolitan Board of Works, and of the combined services for the years 1964-65 to 1968-69. The financial operations of the Board as the Authority responsible for metropolitan highways and bridges are referred to on pages 609-10.

MELBOURNE AND METROPOLITAN BOARD OF WORKS: FINANCES 1964-65 TO 1968-69 (\$'000)

			Capital cost of works and		Expenditui	re			Surplus
Service, etc.			buildings at 30 June (a)	Revenue	Working expenses	Interest and exchange	Debt redemp- tion	Total	(+) or deficit (-)
Water .			177,612	16,007	6,431	8,656		15,087	+920
Sewerage			221,502	21,503	6,990	11,071		18,061	+3,442
Drainage			35,654	4,471	1,903	1,457		3,360	+1,111
General(b)	•		14,565	••	2,436	• •	3,239	5.675	5,675
Total	<b>—196</b>	8–69	449,333	41,981	17,760	21,184	3,239	42,183	- 202
	196	7-68	411,221	35,587	14,989	19,258	2,685	36,932	1,345
	196	6-67	376,271	32,111	12,333	17,834	2,552	32,719	-608
	196	5-66	345.210	30,165	11,362	16,526	2,274	30,162	·+ 3
	196	4-65	314,972	25,307	9,308	14,856	1,960	26,124	-817

<sup>(</sup>a) Total loan indebtedness—1968-69, \$416,578,399. (b) Statutory and general expenditure not distributed over services.

State Rivers and Water Supply Commission. Water supply and conservation throughout Victoria (except for the area controlled by the Melbourne and Metropolitan Board of Works) is under the jurisdiction of the State Rivers and Water Supply Commission. The events leading to the establishment of the Commission, and its works in the spheres of irrigation, domestic and stock water supply to farms, drainage, flood protection, and river improvements, are described in the chapter, Water Conservation and Irrigation. This section is therefore confined to the Commission's functions in connection with urban water supply and sewerage.

Extra-metropolitan water supply. At 30 June 1969 the Commission provided a reticulated water supply from its own works to 148 cities and towns having a combined population of 235,000 persons. The principal systems operated by the Commission serve part of the Mornington Peninsula— Dandenong area (about 116,000 people supplied); Bendigo, Castlemaine, etc. (58,500); and about 8,700 people in the Western District. In addition, 14,000 persons in a number of towns in the Bellarine Peninsula receive supply through a Commission-operated distributory system from headworks controlled by the Geelong Waterworks and Sewerage Trust. The Bendigo-Castlemaine supply also provides for the irrigation of 9,000 acres as well as urban requirements in the area. Outside these areas the Commission supplies mainly small towns in the north of the State in areas where it also supplies farms with water for irrigation or domestic and stock purposes. Capital expenditure by the Commission on urban water supply at 30 June 1969 was divided between the several systems as follows: Mornington Peninsula, \$31,380,000, Bendigo-Castlemaine, \$10,918,000 (includes the cost of supplying a comparatively large rural system with water for irrigation, stock and domestic purposes); Bellarine Peninsula, \$3,576,000; Otway System (Western District), \$3,169,000; other \$3,199,000; total, \$52,243,000. This expenditure is net of redemption payments and includes expenditure on Lake Eppalock and Tarago Reservoir not yet charged to the water users. In addition to the towns supplied by the Commission there are some 671,000 people in 256 cities and towns throughout the State who get a reticulated water supply from works operated by local authorities.

All these authorities operate under the supervision of the State Rivers and Water Supply Commission, largely because the Government subsidises their capital expenditure. Most new works are financed from Government loan funds, but the Geelong Trust and in recent years some other local authorities borrowed money privately. In most cases the local authority controls both headworks and distribution system, but several towns draw their water from the State Rivers and Water Supply Commission and are concerned only with reticulation of the water. Together, therefore, the Commission and local authorities supply 404 urban centres containing some 907,000 people. Very few towns of any importance are now without reticulated water supply.

Extra-metropolitan sewerage systems. With the exception of the town of Eildon, whose sewerage system is controlled directly by the State Rivers and Water Supply Commission, the construction and management of sewerage works in Victoria's country cities and towns are the responsibility of local authorities supervised by the Commission. Except for the Geelong Waterworks and Sewerage Trust and the Latrobe Valley Water and Sewerage Board, which have special Acts dealing with their activities, all sewerage authorities operate under the Sewerage Districts Act. At 30 June 1969, 97 sewerage authorities had been constituted. Of these 73 had systems in operation and 12 had works under construction.

Expenditure on sewerage in Victorian country towns at 30 June 1969 was approximately \$86,308,000, of which some \$70,132,000 had been advanced by private lenders. The annual State subsidy on country sewerage in Victoria is currently about \$1,325,000, provided mainly in the form of subsidies on interest rates paid along the same lines as for town water supply.

The Geelong water supply scheme, operated by the Geelong Waterworks and Sewerage Trust, comprises two systems for gathering and storing water, the water in both systems being brought over fifty miles to Geelong. There are 8 storage reservoirs and 11 service basins whose total storage capacity is 13,446 million gallons. The length of water mains and reticulation is 569.4 miles. The total expenditure on water supply to 30 June 1969 was \$18,849,465. General fund expenditure for 1968-69 comprised \$505,443 for working expenses and \$1,274,377 for interest, redemption and reserves, while revenue from water rates amounted to \$1,761,809. The sinking fund appropriations at June 1969 amounted to \$1,318,581. The replacement and contingencies reserve amounted to \$1,479,048.

The Geelong Waterworks and Sewerage Trust sewerage scheme consists of a main outfall sewer to the ocean and 352.2 miles of main and reticulation sewers. The sewerage area is 21,220 acres, and the number of buildings connected within the sewered areas is 29,357. The total expenditure on sewerage works to 30 June 1969 was \$13,515,202. The revenue from sewerage rates in 1968-69 amounted to \$1,160,657, and the general fund expenditure comprised \$308,418 on working expenses and \$850,934 on interest, redemption, and reserves. Sinking fund appropriations at 30 June 1969 were \$668,414. Replacement and contingencies reserve amounted to \$1,393,910.

The Ballarat water supply district comprises an area of about 65 square miles, containing a population of about 65,800. The total storage capacity of the 7 reservoirs is 5,435 million gallons and the catchment area is 24,182 acres. The capital cost of construction of the waterworks was \$6,284,703 to 31 December 1969. The liabilities amounted to \$3,933,070 at 31 December 1969, including loans due to the Government totalling \$3,569,387. The revenue from rates and metered sales for the year 1969 was \$521,016. Working expenses during 1969 amounted to \$276,073 and interest and other charges to \$244,902.

The Ballarat sewerage district comprises the City of Ballarat, the Borough of Sebastopol, and parts of the Shires of Ballarat, Bungaree and Grenville. There are more than 225 miles of sewers. The capital cost of sewerage construction works to 31 December 1969 was \$5,834,153. Assessments in the sewerage district numbered 20,590 while those in sewered areas numbered 19,100. There were 16,419 buildings connected. The liabilities on account of loans secured for construction at 31 December 1969 amounted to \$4,919,330, redemption payments at that date totalled \$978,497. House connections financed by the Authority numbered 4,674. Revenue from rates during 1969 amounted to \$538,553, and expenditure, which included \$345,074 for interest and redemption, was \$538,226.

The Latrobe Valley Water and Sewerage Board constructs and operates water supply works within the Latrobe Valley. The main construction activities have been centred on the new township of Churchill, the total capital cost of construction activities to 30 June 1969 being \$11,578,823. Liabilities amounted to \$12,260,365, including loans due to the Government totalling \$11,192,657. Revenue for the year was \$739,202. Expenditure during 1968-69 amounted to \$582,198 including interest on loans amounting to \$335,099. The Board does not strike a rate, but supplies consumers, including local water supply authorities, by measure. The quantity supplied during the year ended 30 June 1969 was 13,425 million gallons.

The Latrobe Valley sewerage system consists of a main outfall sewer, about 52 miles in length, to convey wastes to an area where they are disposed of on land for agricultural purposes. The capital cost of the sewerage construction works to 30 June 1969 was \$6,925,535. Liabilities amounted to \$7,561,811, including loans due to the Government totalling \$6,044,081. Revenue in 1968-69 was \$326,948 and expenditure totalled \$534,801, including interest on loans \$111,916. No sewerage rate is levied, but a charge is made by measure for wastes both from industries and public authorities.

# Queensland

The Brisbane City Council operates the water supply and sewerage systems of the City of Brisbane, and also supplies, in bulk, the whole of the water used by the City of Ipswich and a portion of that used by the City of Redcliffe and Albert Shire Council. Redcliffe supplements its supply from that of the Pine Rivers Shire Council, while Albert also draws on its own reservoirs. Storage facilities for Brisbane water supply comprise the following (available capacities are shown in parentheses): Somerset Reservoir, 200,000 million gallons (67,500 million gallons); Lake Manchester, 5,800 million gallons (5,720 million gallons); Brisbane River, Mount Crosby Weir, 540 million gallons (500 million gallons); Pure Water Reservoir, Holt's Hill, 11 million gallons (11 million gallons); Enoggera Reservoir, 1,000 million gallons (600 million gallons); Gold Creek Reservoir, 407 million gallons (400 million gallons). There are 23 service reservoirs with a capacity of approximately 69 million gallons. The Somerset reservoir is a dual purpose project with a designed total holding capacity of 200,000 million gallons, 67,500 million gallons to be for water storage and 132,500 million gallons for flood mitigation. The following table is a summary of operations of the complete Brisbane City Council system (Brisbane, Ipswich, Redcliffe, and portion of Albert Shire) for the years 1964–65 to 1968–69.

				Avaraga	Total	Average consump	•	Length of trunk
Year 		Services connected	Estimated population supplied	Average daily con- sumption	con- sumption for the year	Per service	Per head of estimated population	and reticu- lation mains
				mill gal	mill gal	gallons	gallons	miles
1964-65		193,471	703,258	61.4	22,409	317	87.3	2,564
1965-66		197,707	722,970	67.6	24,668	342	93.5	2,666
1966-67		202,886	740,332	66.1	24,110	326	89.2	2,735
1967-68		207,657	759,434	76.7	27,984	369	101.0	2,823
1968-69		213,445	772,356	85.4	31,170	400	110.6	2,834

<sup>(</sup>a) Includes Ipswich, Redcliffe and portion of Albert Shire.

The sewage treatment works of the *Brisbane sewerage scheme* is situated at Luggage Point at the entrance to the Brisbane River. The following table is a summary of operations of the Brisbane sewerage scheme for the years 1964-65 to 1968-69.

BRISBANE SEWERAGE: SERVICES, 1964-65 TO 1968-69

Length of main, branch, reticulation, etc. sewers	Total sewage pumped for the year	Estimated population served	Premises connected		Year —-
miles	mill gal				
1,222	7,190	312,243	84,390		1964-65
1,341	8,821	336,478	90,940		1965-66
1,472	9,042	377,629	102,062		1966-67
1,607	8,358	404,647	109,364		1967-68
1,824	8,619	453,953	122,690		1968 69

Brisbane City Council water supply and sewerage systems—finances. The following table shows particulars of the finances of the water supply and sewerage undertakings of the Brisbane City Council for the years 1964-65 to 1968-69.

BRISBANE WATER SUPPLY AND SEWERAGE: FINANCES, 1964-65 TO 1968-69 (\$1000)

		Gross		Expenditui	re .			
Service and year	(		Revenue	Working expenses	Interest, redemption, etc. charges	Total(a)	Surplus ( =- o deficit ( =-	
Water supply-→								
1964-65		49,768	7,030	2,827	2,436	5,889		141
1965-66		54,635	8,365	3,069	2,503	8,471		106
1966 - 67		59,947	8,977	3,414	2,630	8,803		174
1967-68		64,626	9,808	3,661	2,760	9.132		676
1968-69		69,719	10,214	3,994	2,835	9,334	:	880
Sewerage—								
1964-65		50,184	³,66 <b>4</b>	803	1,705	3,434		230
1965-66		55,858	4,829	882	1,829	4,172	:	657
1966-67		61,517	5,535	1,024	1,966	4,709	;	826
1967-68		69,264	7,237	1,105	2,225	6,619	;	6!8
1968-69		72,123	8,404	1,250	2,443	7,696	4.	708

(a) Total, including other expenditure.

Country towns. In addition to the City of Brisbane, there were at 30 June 1968, 233 cities and towns in Queensland provided with water supply systems controlled by municipal and shire councils. At 30 June 1968 there were 59 cities or towns in addition to Brisbane with sewerage systems. The receipts (other than loan and loan subsidy) of water undertakings controlled by the cities and towns referred to above amounted to \$9.532,643 in 1967-68. Expenditure amounted to \$9,522,082, including \$4,110,867 for debt charges. In addition, expenditure from loans and loan subsidy amounted to \$10,579,300. Finances of sewerage undertakings are incorporated in council general funds and are not available separately.

# South Australia

The water supply and sewerage systems in this State were constructed mainly, and are maintained by the Engineering and Water Supply Department, under the control of the Minister of Works. Works controlled by the Department are the Adelaide, Barossa, Beetaloo, Bundaleer, Moorook, Tod River, Warren, Yorke Peninsula, and other country water districts systems, the Morgan-Whyalla water supply system, the metropolitan and country sewerage systems, the Metropolitan Flood Waters

Scheme, and works on the River Murray constructed under the River Murray Waters Agreement. Several water supply schemes on the Murray River are administered by the Department of Lands in conjunction with irrigation works, and supplies to Woomera and Leigh Creek coalfield are controlled by the operating authorities.

Adelaide waterworks. At 30 June 1969 the Adelaide waterworks supplied districts covering 384 square miles of the metropolis and extending to near country areas. The capacity of reservoirs and storage tanks was 36,534 million gallons and there were 3,554 miles of metropolitan mains. The Mannum-Adelaide pipeline conveys water from the River Murray to Adelaide at a rate of up to 66 million gallons a day. Water is delivered to a terminal storage near Adelaide and hence to the metropolitan distribution system or alternatively it can be delivered into metropolitan reservoirs on the River Torrens or to reservoirs on the River Onkaparinga by further pumping. The pipeline also supplies various country areas along and extending from its route.

ADELAIDE WATERWORKS: FINANCES, 1964-65 TO 1968-69 (\$'000)

		formand and		Expenditu	re		
Year		Invested capital at 30 June (a)	Revenue	Working expenses (b)	Interest	Total	Surplus (+) or deficit (-)
1964–65		 92,872	8,417	4,222	3,907	8,129	+ 289
1965–66		98,056	9,521	5,292	4,248	9,540	19
1966-67		104,067	11,083	5,142	4,500	9,642	+ 1,441
1967-68		108,936	10,267	6,746	4,730	11,476	-1,209
1968-69		114,121	10,793	5,552	4,919	10,471	+ 322

<sup>(</sup>a) After deduction of depreciation.

Adelaide metropolitan sewerage system. The Adelaide metropolitan sewerage system, comprising the Adelaide, Glenelg, Port Adelaide, Christies Beach, and Salisbury-Elizabeth areas of 184 square miles in all, includes treatment works at Glenelg, Port Adelaide, Bolivar, and Christies Beach. Financial and other particulars for 1964-65 to 1968-69 are shown hereunder.

# ADELAIDE METROPOLITAN SEWERAGE: SUMMARY, 1964-65 TO 1968-69

			F		Expenditure	e		
Year	Length of sewers	Number of con- nections	Invested capital at 30 June(a)	Revenue	Working expenses (b)	Interest	Total	Surplus
	miles		\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
1964-65 .	1,854	204,128	47,127	5,513	2,363	1,380	3,743	1,769
<b>1965–66</b> .	1,952	213,375	56,235	6,386	2,614	1,561	4,175	2,211
1966-67 .	2,039	220,799	66,158	6,804	2,880	2,195	5,075	1,729
1957-68 .	2,125	227,489	74,808	7,156	3,375	2,822	6,197	959
1968-69 .	2,193	234,818	78,141	7,601	3,463	3,073	6,536	1,065

<sup>(</sup>a) After deduction of depreciation.

Country sewerage schemes. Sewerage schemes are operating at Port Lincoln, Naracoorte, Mount Cambier, Lobethal, Gumeracha, Nangwarry, Mount Burr, Myponga, Mannum, Whyalla and Angaston. At Port Lincoln and Mount Gambier the sewers discharge to ocean outfalls, and treatment works are used on the other systems. There are 248 miles of sewers and 12,939 connections in the country systems. Sewerage schemes for Murray Bridge and Millicent are under construction and operating in part.

<sup>(</sup>b) Includes debt redemption.

<sup>(</sup>b) Includes debt redemption.

Country water supply. Water districts systems at 30 June 1969 comprised an area of 14,037,000 acres. Supply came from reservoirs having a total capacity of 20,995 million gallons, from the River Murray, and from underground sources. Apart from local supplies, water from the River Murray is distributed over wide areas through the Mannum-Adelaide, Morgan-Whyalla, Swan Reach-Stockwell and Tailem Bend-Keith pipelines and branches of these pipelines. The principal areas of underground supplies are in the south-east of the State, where water from the Murray Basin can be had at moderate depths or from lakes, and from sand beds on Eyre Peninsula. In the year 1968-69 supplies made to Mount Gambier, Naracoorte and other towns amounted to 1,125 million gallons, and the Uley-Wanilla, Lincoln and Polda Basins contributed 499 million gallons to the Tod River Water District.

COUNTRY WATERWORKS, SOUTH AUSTRALIA: FINANCES, 1964-65 TO 1968-69 (\$'000)

		Invested		Expenditure			
Year		capital at 30 June(a)	Revenue	Working expenses (b)	Interest	Total	Deficit
1964-65		96,333	3,538	4,253	3,787	8,040	4,502
1965-66		103,772	3,872	4,553	4,128	8,681	4,809
1966 67		109,701	4,591	4,817	4,437	9,254	4,663
1967-68		117,541	4,340	5,262	4,954	10,216	5,876
1968-69		123,870	4,722	5,236	5,284	10,520	5,798

(a) After deduction of depreciation.

(b) Includes debt redemption.

Morgan-Whyalla water supply scheme. This scheme, which has 223 miles of main via Port Augusta and 176 miles of main via the Spencer Gulf undersea crossing, was officially opened on 31 March 1944, the capital invested to 30 June 1969 being \$35,500,000. Apart from supplying Whyalla, the mains have been used to allow expansion of reservoir supplies in the northern agricultural area of the State, and to meet new demands caused by industrial growth at Whyalla, Port Pirie and Port Augusta. During 1968-69 water used from the scheme amounted to 3,618 million gallons.

# Western Australia

The principal water supply systems of Western Australia are under the control of two State authorities, the Metropolitan Water Supply, Sewerage and Drainage Board and the Department of Public Works and Water Supply. The area which constitutes the territory administered by the Board encompasses approximately 1,270 square miles and extends from Perth southward to Rockingham and Serpentine, northward to Sorrento, and eastward to Sawyers Valley and Kalamunda, The Department of Public Works and Water Supply controlls the Goldfields and Agricultural Water Supply and the Great Southern Towns Water Supply as well as 114 local water supplies (see also Chapter 24, Water Conservation and Irrigation). Four independent town schemes are controlled by local Water Boards in country areas, and individual water supplies serve railways, timber mill towns, isolated mines, pastoral properties, stock routes, and agricultural areas, mainly from dams, tanks, wells and bores.

Metropolitan water supply, sewerage and drainage. The sources of the metropolitan water supply are Serpentine Reservoir and Serpentine Pipehead Reservoir, Canning Reservoir, Wungong Brook Diversion Weir, Churchman Brook Reservoir, and Victoria Reservoir. The largest of these sources are the Serpentine Reservoir and the Canning Reservoir, which have a capacity of 39,000 million gallons and 20,550 million gallons respectively. Water from storages on the Darling Range is conveyed to service reservoirs to serve the City of Perth and the metropolitan area. A limited quantity of water is drawn from Mundaring Weir to serve sections of Greenmount, and to meet the peak demands of summer consumption supplies are supplemented from artesian bores, which can provide a daily maximum of 19 million gallons. The amount of bore water used is rarely more than 10 per cent of the metropolitan consumption and is usually considerably less.

The following table shows particulars of the *metropolitan water supply services* for 1964-65 to 1968-69.

# METROPOLITAN WATER SUPPLY, WESTERN AUSTRALIA: SERVICES 1964-65 TO 1968-69

Year	Number of services (a)	Average daily consumption	Total consumption for year	Average daily consumption per service (b)	Length of mains	Number of meters
		mill gal	mill gal	gallons	miles	
1964-65 .	154,051	55.7	20,339	367	2,526	135,471
1965-66 .	158,675	59.5	21,707	380	2,654	139,435
1966-67 .	164,782	70.8	25,843	437	2,798	146,028
1967-68 .	173,068	68.2	24,958	403	2,923	152,603
1968-69 .	185,340	76.7	28,015	429	3,144	161,859

<sup>(</sup>a) Figures relate to 30 June. (b) Calculated from averages for the year.

Some particulars of the metropolitan sewerage and main drainage services for 1964-65 to 1968-69 are shown in the following table.

METROPOLITAN SEWERAGE AND MAIN DRAINAGE WESTERN AUSTRALIA: SERVICES 1964-65 TO 1968-69

Length of main drains	Length of sewers	Services			Year
miles	miles				
100	777	69,553	,		1964–65
102	816	70,283			1965-66
109	848	71,188			1966-67
118	886	72,177			1967-68
126	931	74,018			1968-69

Metropolitan Water Supply, Sewerage and Drainage Board—finances. The following table shows particulars of the finances of the Western Australian Metropolitan Water Supply, Sewerage and Drainage Board.

METROPOLITAN WATER SUPPLY, SEWERAGE AND MAIN DRAINAGE WESTERN AUSTRALIA: FINANCES, 1964-65 TO 1968-69 (\$'000)

				Expenditur	e		Surplus (+ o deficit (- Tota	
Service and yea	r	Capital cost to 30 June	Revenue	Working expenses	Interest and debt redemption	Total		
Water supply-						-		
1964-65 .		54,334	4,370	1,653	2,641	4,294	+	76
1965-66 .		58,336	4,861	1,815	3,018	4,833	+	28
1966-67 .		62,137	5,551	2,307	3,061	5,368	+	183
1967-68 .		66,217	5,782	2,292	3,243	5,535	+	247
1968-69 .		74,078	7,162	2,322	3,510	5,832	+	1,331
Sewerage-								
1964-65 .		22,050	2,426	1,272	1,053	2,325	+	101
196 <b>5</b> -66 .		24,243	2,823	1,336	1,176	2,512	÷	310
1966-67 .		26,737	3,000	1,622	1,340	2,961	+	38
1967-68 .		29,286	3,198	1,689	1,474	3,164	+	34
1968-69 .		34,027	3,809	1,771	1,637	3,408	+	401
Main drainage-								
1964-65 .		5,641	342	191	238	429	_	87
1965-66 .		6,344	418	245	275	520	_	102
1966–67 .		6,956	629	298	319	617	+	12
1967-68 .		7,433	721	314	349	663	+	58
1968-69 .		8,657	872	327	375	702	+	170

Country water supplies. Information relating to country water supplies is included in Chapter 24, Water Conservation and Irrigation.

#### Tasmania

Waterworks. At the end of 1968-69 the capacity of reservoirs in Tasmania was approximately 3,936 million gallons, supplying approximately 115,000 properties which consumed almost 16,000 million gallons of water during the year. The North Esk Regional Water Supply Scheme is operated by the Rivers and Water Supply Commission as a State concern, supplying bulk water to the municipalities of St Leonards, George Town, Lilydale, and portion of Westbury. This scheme also supplies water to industries situated near the Tamar River. Also vested in the Commission is the West Tamar Water Supply Scheme which serves the Municipality of Beaconsfield, and is operated by the Beaconsfield Council as the agent of the Commission. The over-all control of water supply in the greater Hobart area, comprising the municipalities of Hobart, Clarence, Glenorchy, and Kingborough, is vested in the Metropolitan Water Board, but the municipalities retain primary responsibility for reticulation, The Board has constructed a large pumping station at Bryn Estyn, near New Norfolk, which supplies bulk water from the Derwent River to the metropolitan area and has a pipeline capacity of 20 million gallons a day. In addition, the Board also controls the Southern Regional Water Supply Scheme, which supplies water to Hobart's eastern shore and the towns of Cambridge, Midway Point, Sorell, Seven Mile Beach, Rokeby, Lauderdale, Margate, Snug, and Howden. During 1968-69, 2 half-million gallon reservoirs to serve the towns of Margate. Snug and Howden were completed.

Sewerage. At the end of 1968-69 the number of tenements connected to sewerage services was about 72,000; only about 50 per cent of sewerage discharge goes through treatment plants.

# Northern Territory

Information relating to water supply in the Northern Territory may be found in the chapter, Water Conservation and Irrigation.

### Australian Capital Territory

The water supply, sewerage and drainage systems in the Australian Capital Territory are under the control of the Commonwealth Department of Works. The sources of the water supply are: Cotter Dam (capacity 967 million gallons), Bendora Dam (2.360 million gallons) and Corin Dam (capacity 16,600 million gallons). Water is fed from Bendora Dam by gravity to 17 major reservoirs. The maximum daily supply is 45 million gallons. An alternative supply is available from 9 pumps at the Cotter Dam at a rate of 38.5 million gallons per day.

The total population served in the Australian Capital Territory, which during 1968-69 consumed 6,089.4 million gallons of water, was 119,000 (at 30 June 1969). In addition, the Canberra water supply system supplied 382.6 million gallons of water to Queanbeyan, New South Wales. The total number of water meters at 30 June 1969 was 31,283 and the total length of water lines was 633 miles.

The sewerage system for Canberra suburbs has three treatment works: the Weston Creek works provides for 101,500 persons, the Fyshwick works provides for 10,000 persons and the Belconnen works provides for 8,500 persons. There were 533.8 miles of sewerage, and 9 miles of sewer rising mains (at 30 June 1969). There were also 572.6 miles of storm-water drains.

# Harbour boards and trusts

The number and net tonnage of vessels which entered the major ports in each State during the years 1967-68 and 1968-69 are shown in Chapter 12, Transport, Communication and Travel (see page 344). Particulars of overseas and interstate cargo discharged and shipped are shown on page 355 of the same chapter.

# **New South Wales**

The Maritime Services Board of New South Wales exercises general control over intra-state shipping, including the survey and certification of vessels, the licensing of harbour craft and the examination and issue of certificates to officers. It is responsible for the provision of pilotage services, lights, beacons, buoys and other port facilities, imposes and collects rates and charges on goods and vessels, and is vested with the general control and management of the navigable waters and ports within the State. At the ports of Sydney, Newcastle and Botany Bay the Board is also responsible for the provision of adequate wharfage and channels and carries out all construction, maintenance and dredging work.

Port of Sydney. The entrance to Sydney Harbour, the principal port of New South Wales, is nearly a mile wide, and the depth of its navigable channel is not less than 80 feet. Between the entrance, known as 'The Heads', and the Harbour proper, a distance of four miles, there are two separate channels, each 700 feet wide, the Western Channel not less than 45 feet deep (low water ordinary spring tide) and the Eastern Channel 38 feet deep. The foreshores are 152 miles in length, and the total area of the port is 13,600 acres, of which about one-half has a depth of 30 feet or more at low water ordinary spring tide. The mean range of tides is 3 feet 6 inches.

The wharves are situated close to the business centre of the city, about four or five miles from the Heads. At 30 June 1969 there were 5 dolphin berths, 3,350 feet long, and 80 effective commercial cargo berths, with a total length of 40,655 feet, controlled by the Board. Accommodation for harbour craft amounts to 2,245 feet, while the length of other berths, including oil and private wharves, totals 27,727 feet. Depth of water at wharves is up to 38 feet. Special facilities for the storage and handling of products such as wheat, wool, coal, etc. are provided. Docking facilities are available for large vessels at the Captain Cook Graving Dock. Containers facilities became available in March 1969 with the opening of the eastern section of the Balmain container terminals to cellular container vessels.

Port of Newcastle. Shipping at Newcastle is concerned primarily with the coal, iron and steel and other heavy industries located in the district. However, facilities are available for the shipment of wool, wheat and frozen meat, and a wharf is available for timber. The area used by shipping is about 570 acres, excluding the entrance to the harbour and the inner basin, which together cover an area of 162 acres. The width of the harbour at the entrance is 1,200 feet, and the navigable channel, with a depth of 36 feet at low water, is 500 feet wide. Wharfage accommodation amounts to approximately 15,000 feet, including about 3,000 feet of privately owned wharfage. A floating dock of 15,000 tons capacity is available at the port and a coal loading plant capable of loading at the rate of 2,000 tons an hour is now operating. The bulk berth which recently became operative at Kooragang is equipped with two grab unloaders each with a nominal capacity of 650 tons an hour.

Botany Bay. The Maritime Services Board of New South Wales is the administrative and controlling authority. The port is primarily a discharging centre for the oil refinery at Kurnell, near Sydney, and four berths are available as well as three tanker mooring buoys. The entrance to the Bay is approximately one and a quarter miles wide, with a minimum depth of 50 feet and about 42 feet in the dredged swinging basin.

Port Kembla is the port of the southern coalfields and for the major industrial areas in and about Wollongong. The port has an area of approximately 340 acres, with depths ranging from 20 to 50 feet (low water ordinary spring tide), and wharfage accommodation totalling 9,000 feet is provided for large ocean-going vessels. No cargo sheds are available, as the nature of the trade at the port does not call for the provision of sheltered storage accommodation. The first stage of a developmental programme to provide wharfage in an inner harbour for the steelworks and for general cargo shipment has been completed; 2,550 feet of wharfage is available and facilities include a 2,000 tons per hour coal loader.

Other ports. In addition to the port of Sydney, Newcastle, Port Kembla, and Botany Bay, the Board controls 29 outports along the coastline of 609 miles. The shipping trade of these outports is relatively small.

Port charges. The port charges payable in respect of shipping and ships' cargoes in New South Wales are imposed by the Commonwealth Government in terms of the Lighthouses Act and the Navigation Act, and by the State authorities under the Navigation Act of New South Wales, the Harbour and Tonnage Rates Act, and the Sydney Harbour Trust Act. Since 1 February 1936 the State enactments have been administered by the Maritime Services Board. The gross collections by the State authorities amounted to \$30,168,000 in 1968-69. This figure includes the revenue for the ports of Sydney, Newcastle and Botany Bay.

Financial details relating to these three ports are shown in the following table.

# MARITIME SERVICES BOARD FUND: FINANCES OF THE PORTS OF SYDNEY NEWCASTLE AND BOTANY BAY, 1964-65 TO 1968-69 (\$'000)

	Revenuc				Expenditu	re(a)	<del></del>	
Year	Wharfage and tranship- ment rates	Tonnage rates and berthing charges	Other charges	Total	Adminis- tration and mainten- ance	Interest, debt redemp- tion, exchange, etc.	Total	Surplus
1964-65	 11,594	1,858	3,565	17,017	9,109	7,835	16,945	72
1965-66	10,711	1,832	3,980	16,523	9,512	6,916	16,428	95
1966-67	11,501	1,895	4,282	17,678	9,476	8,113	17,589	89
1967-68	12,664	2,024	5,645	20,333	10,830	9,451	20,280	53
1968-69	13,580	2,085	7,294	22,959	12,150	10,716	22,866	93

<sup>(</sup>a) Excludes capital expenditure but includes transfers to the Renewals Fund Reserve Account (\$5,080,000 in 1964-65, \$3,060,000 in 1965-66, \$3,975,000 in 1966-67, \$4,940,000 in 1967-68 and \$5,800,000 in 1968-69)

#### Victoria

The Port of Melbourne comes under the control of the Melbourne Harbour Trust Commissioners, an independent autonomous statutory organisation, with a full-time chairman and five part-time commissioners. The area of water and land under the control of the Trust is ten and a half square miles, with sheds available for cargo in transit totalling 22,928 feet in length and covering an area of about 43 acres. Three of the largest transit sheds on the Australian coast are in operation at Appleton Dock. The sheds are 600 feet long by 150 feet wide, each with a cargo stacking area of 81,000 square feet. The berths are used for conventional general cargo trade as well as the unit-load container handling for general cargo in the overseas trade. The total length of wharves, piers and jetties in the port is 61,550 feet, covering an area of about 59 acres with 56,940 feet of effective berthing space.

In line with world-wide changes in cargo handling methods, current planning and construction in the Port of Melbourne are almost exclusively devoted to facilities catering for container ships and cargo as well as for the multi-purpose unit-load container conventional ships and cargo. The port's first overseas container terminal, Swanson Dock, which has 1,050 feet of concrete wharf apron with 22.5 acres stacking area behind the berth, was officially opened on 7 March 1968. Of the two additional 800 feet long 'common user' container berths on the east side of Swanson Dock one was expected to be completed in November 1970 and the other in November 1971. Two roll-on roll-off container unit-load berths were completed in early 1969, one at North Wharf for the trans-Tasman trade to New Zealand, having a 830 feet wharf apron and 3.3 acre stacking area behind the berth and the other at the River Entrance Docks, with a 600 feet wharf apron and additional 11.3 acre stacking area for the eastern seaboard trade.

The depth of water (low water ordinary spring tide) from the main channels to the principal wharves is 31 to 39 feet.

The following table shows particulars of the financial operations of the Trust.

MELBOURNE HARBOUR TRUST: FINANCES, 1965 TO 1969 (\$'000)

				Expenditur	re			
	Gross loan	Revenue		Opera- tion, adminis-	Interest,	General reserve, deprecia- tion.		Surplus
	indebted-	Wharfage		tration	redemp-	renewals		(+)
	ness at 31	and tonnage		and mainten-	tion, exchange,	and insurance		or deficit
Year	December	rates	Total	ance	etc.	account	Total	(-)
1965 .	 30,473	7,058	11,434	6,451	2,393	2,382	11,226	i 208
1966 .	32,229	6,393	10,695	6,235	1,712	2,583	10,530	+ 165
1967 .	34,484	6,692	11,322	6,441	2,142	2,567	11,150	+ 172
1968 .	36,029	8,357	13,573	6,972	2,381	4,002	13,355	÷ 218
1969 .	37,888	8,901	14,321	7,903	2,127	4,049	14,079	+ 242

The *Port of Geelong* operated by the Geelong Harbour Trust, has available 18 effective berths, plus 2 berths at the Commonwealth Explosives Pier, Point Wilson, owned and operated by the Commonwealth. A modern dry bulk berth (Lascelles Wharf No. 1 berth) adjoining Kings Wharf (now named Lascelles Wharf No. 2 berth) will be operational in 1970 as well as a roll-on roll-off berth being constructed at an adjunct of Corio Quay South No. 1 berth. The Trust operates its own towage fleet of six tugs, the largest of 1,900 b.h.p. Eight berths have a depth of 36 feet at low water; all other berths (except Commonwealth Explosives Pier, Point Wilson and Point Henry Pier, 30 feet) have a depth of 32 feet at low water. Revenue for the year 1968 was \$3,365,368, and expenditure from revenue totalled \$2,441,668. At 31 December 1968 the value of the Trust's fixed assets was \$26,402,870 and loans outstanding amounted to \$7,933,519.

The *Port of Portland* provides unimpeded access for large ocean-going vessels to the entrance of a 250-acre harbour basin having a minimum depth of 36 feet of water under all tidal conditions. Since the new all-weather deep sea port was completed to operational standards during 1960 an oil tanker berth has been commissioned, a new berth completed for the handling of dry bulk commodities and a 1.25 million bushel bulk grain terminal erected. Foundations for an extension to double the storage capacity of the terminal were completed at the end of June 1969, whilst at the same time construction of a 1,600 h.p. ocean-going tug had reached the stage where it was ready for launching.

Operating revenue and expenditure for the year ended 30 June 1969 were \$585,056 and \$385,911 respectively. The value of the Trust's fixed assets, less depreciation, was \$18,932,022 at 30 June 1969, and loans and advances outstanding amounted to \$19,283,190.

#### Queensland

The ports of Queensland, except Brisbane and certain minor ports, are administered by harbour boards with members representing the towns and districts served by the ports. Brisbane and the minor ports are controlled by the State Treasury through the Department of Harbours and Marine, which supervises the engineering activities of the other ports.

Brisbane. Brisbane, in its dredged and improved river, accommodates comfortably the largest vessels in the Australian trade. The main centres for shipping, although further downstream than formerly because of the increasing size of vessels, are still within easy access of the city. Adequate dry-docking facilities are available. The finances of Brisbane Harbour for the years 1963-64 to 1967-68 are shown in the following table.

BRISBANE	HARBOUR:	FINANCES,	1963-64	TO	1967-68
		(\$'000)			

			Receipts		Payments	
Year		Loan indebtedness at 30 June	Harbour dues	Total	Working expenses(a)	Total
1963–64		5,032	1,859	2,500	3,346	3,837
1964-65		4,912	2,125	2,796	2,305	2,646
1965-66		4,787	2,094	3,121	2,157	2,498
1966-67		4,636	2,044	2,987	2,228	2,561
1967-68		4,504	2,019	3,475	3,039	3,376

(a) Excludes interest and redemption included in total.

In addition to Brisbane harbour, the Department of Harbours and Marine also controls the Brisbane Dry Dock, the Cairneross Dock, and 11 smaller harbours not administered by harbour boards.

Harbour boards. Harbour boards control the ports of Bowen, Bundaberg, Cairns, Gladstone, Mackay, Rockhampton, and Townsville. Finances for each port for the year ended 30 June 1968 are shown on page 629, together with a summary for the years ended 30 June 1964 to 1968.

# HARBOUR BOARDS, QUEENSLAND: FINANCES, 1963-64 TO 1967-68 (\$'000)

		Revenue		Expenditure (excluding loa	in)	
<b>Harbour</b> board	Loan indebtedness at 30 June	Wharfage and harbour ducs	Total	Working expenses	Total including interest and redemption (a)	Surplus (+) or deficit (+)
Bowen .	5.15	23	36	20		. 12
Bundaherg						72
Cairns						53
Gladstone		752	3,785	208		212
Mackay	4,165	475	1,553	328	1,264	- 289
Rockhampton	3,492	112	204	51	215	11
Townsville	8,362	858	1,443	587	1,744	301
Total, 1967-68	36,571	3,479	9,302	2,080	9,120	- 182
1966-67 .	36,384	3,109	8,372	1,876	8,201	- 171
1965-66 .	35,436	2,524	8,862	1,792	9,088	226
1964-65 .	4,165     475     1,553     328     1,264       3,492     112     204     51     215       8,362     858     1,443     587     1,744       57-68     36,571     3,479     9,302     2,080     9,120       56-67     36,384     3,109     8,372     1,876     8,201       55-66     35,436     2,524     8,862     1,792     9,088       54-65     33,824     2,412     6,337     1,398     6,169	168				
1963-64 .	28,369	2,329	5,419	1,362	5,402	

(a) Includes expenditure on capital works from accumulated revenue.

#### South Australia

Department of Marine and Harbors. All South Australian harbours are controlled by the Department of Marine and Harbors, which is responsible to the Minister of Marine for the discharge of its duties and functions. The most important ports are the five deep-sea ports of Port Adelaide, Port Pirie, Wallaroo, Port Lincoln, and Thevenard. In South Australia there are also eight privately-owned and operated ports. The principal of these are Whyalla, Ardrossan, Rapid Bay, and Proper Bay (Broken Hill Pty Co. Ltd), Port Augusta (Commonwealth Railways) and Port Stanvac (Petroleum Refineries (Aust.) Pty Ltd). Maximum depths of water (low water) at the wharves of the main ports range from 27 feet at Port Pirie to 35 feet at Port Adelaide. The following table shows the finances of the Department for 1964-65 to 1968-69.

DEPARTMENT OF MARINE AND HARBOURS, SOUTH AUSTRALIA: FINANCES 1964-65 TO 1968-69 (\$'000)

		m revenue	Expenditure fro					
Surplus 614 519 907	Total	Interest	Working expenses	Revenue	Loan indebtedness at 30 June			Year
61-	5,587	1,679	3,908	6,201	41,393	٠	_	1964-65
51	5,675	1,734	3.941	6,194	43,172			1965-66
90	5,827	1,807	4,019	6,734	44,264			1966-67
35	6,065	1,869	4,196	6,418	45,478			196768
33	6.322	1.957	4.365	6,653	47,614			1968-69

## Western Australia

The Port of Fremantle is operated and controlled by the Fremantle Port Authority. The port covers an extensive water area of some 180 square miles and comprises an inner and an outer harbour. The inner harbour includes 20 deep-water land-backed berths, providing more than 665,450 square feet of covered storage space and 12,787 feet of wharf berth accommodation. All inner harbour berths are dredged to a low water depth of 36 feet. The outer harbour includes 3 main anchorages, Gage Roads, Owen Anchorage and Cockburn Sound. Deep-water jetties, including the oil refinery jetty in Cockburn Sound, are available in the outer harbour. Ocean-going deep draft ships enter the Sound by means of a channel dredged through Success and Parmelia Banks to a low water depth of 45 feet and a bottom width of 500 feet. In the outer harbour there are 3 tanker berths each with a low water depth of 44 feet at the Kwinana oil refinery, 2 berths at the nearby steelworks jetties with a low water depth of 38 feet, 1 berth at the alumina works jetty with a low water depth of 40 feet and 1 berth at the bulk cargo jetty with a low water depth of 44 feet. There is also a special

berth for the handling of explosives. Total effective berth accommodation in the outer harbour is 7,530 feet. Gross earnings for 1968-69 amounted to \$10,009,346, working expenses to \$7,455,044, interest charges on loan capital \$891,567, and loan indebtedness totalled \$21,249,139.

The *Port of Albany* is controlled by the Albany Port Authority. The depth of water in the entrance channel is 33 feet, at one arm of the jetty 31 feet and at the other arm 33 feet. In the approaches to wharf berths the depth is 33 feet. Berthing accommodation totals 3,615 feet, comprising 1,115 feet at the wharf berths and 2,500 feet at the Deepwater Jetty. Gross earnings for the year 1968-69 amounted to \$517,573, working expenses \$345,192, interest and sinking fund charges \$240,918, and loan indebtedness totalled \$4,449,515.

The Port of Bunbury is controlled by the Bunbury Port Authority. The depth of water in the harbour is 30 feet and berthing accommodation is 4,808 feet. Gross earnings for the year 1968-69 amounted to \$807,513, working expenses \$287,865, interest on loan capital \$354,790, and loan indebtedness totalled \$7.244.557.

The Esperance Port Authority was established by the Esperance Port Authority Act 1968. Three berths provide a total length of 1,720 feet with a minimum depth alongside of 31 feet 6 inches. Bulk handling facilities are provided for petroleum products, grain, and minerals, including salt, nickel and copper. Gross earnings from 14 March to 30 June 1969 were \$96,667, working expenses \$79,738, and interest charges \$44,954. Loan indebtedness was \$3,044,018 at 30 June 1969.

The Geraldton Port Authority was established by the Geraldton Port Authority Act 1968. Four land-backed berths have a total length of 2,238 feet with a minimum depth alongside of 30 feet and a tide rise of 4 feet. The grain terminal provides storage for 5,000,000 bushels and permits ships to be loaded at the rate of 800 tons per hour. The iron ore berth is associated with a privately-operated ore stockpile and automatic conveyor system with a rated capacity of 1,500 tons per hour. Gross earnings from 14 March to 30 June 1969 were \$235,264, working expenses \$47,552 and interest charges \$77,858. Loan indebtedness stood at \$5,261,165 at 30 June 1969.

Other ports. The following ports are controlled by the State Government Harbour and Light Department: Broome, Busselton, Carnarvon, Derby, Onslow, Point Samson, Port Hedland, and Wyndham. Ports privately controlled comprise Yampi and Dampier, both operated by iron ore mining companies, and Exmouth, the port serving the communications installation at North West Cape. A private buoyed sea terminal is operated at Barrow Island for the shipment of crude oil, and private interests ship salt at Useless Loop in Shark Bay and from Cape Cuvier.

## Tasmania

1965-66

There are nine port authorities: the marine boards of Hobart, Devonport, Burnie, Circular Head (Stanley), King Island (Currie), Strahan and Flinders Island (Whitemark); also the Port of Launceston Authority and the Smithton Harbour Trust. The ports at Hobart, Launceston, Burnie and Devonport are terminals for overseas shipping. Port Latta in Circular Head's area is a specialised port for the shipment overseas of iron ore pellets, the loading point lying a mile out to sea in over 50 feet of water.

AUTHORITIES CONTROLLING PORTS, TASMANIA: FINANCES 1965-66 TO 1968-69 (\$'000)

Expenditure (revenue account) Loan Receipts indebtedness (revenue Works Surplus (+) Loan Total at 30 June account) and Loan. Total Services charges deficit (-) expenditure Authority (a) (b) 2,760 1,791 963 331 1,583 Hobart 208 300 4,399 1.974 849 336 2,018 44 Launceston. 891 5.766 1.074 406 490 1,007 67 1.401 Devonport . + 791 1,470 1,243 227 1,844 Burnie 10,782 544 Circular Head 438 64 10 45 68 4 25 King Island 87 53 24 52 1 57 12 9 39 Strahan 144 18 109 8 1 15 ÷ Flinders Island 18 3 2 Smithton 1 1 1 6,274 2,817 2,011 6,253 21 4,574 Total, 1968-69 24,376 1,921 5,953 2,272 5,433 520 2,395 1967-68 22,249 1966-67 20,361 5,628 2,711 1,646 5,333 295 2,184

2.557

1,504

5.147

+ 394

1.846

5,541

18,622

<sup>(</sup>a) The total of new loans raised during 1968-69 was \$2,836,500, of which Hobart raised \$300,000, Launceston \$1,186,500, Devonport \$700,000, Burnie \$500,000, Circular Head \$20,000, and Strahan \$130,000.

(b) Includes other expenditure.

# Fire brigades

### **New South Wales**

A Board of Fire Commissioners, consisting of five members, one appointed by the State Government (President) and one each representing insurance companies, local government authorities, volunteer firemen, and permanent firemen, operates under the Fire Brigades Act, 1909-1965, and 163 fire districts had been constituted at the end of 1968. The cost of maintenance of fire brigades is borne in proportions of local councils and the Government each one-eighth, and the insurance companies three-quarters. The Board's borrowing power is limited to \$2,000,000.

At 31 December 1968 the actual strength of the Fire Brigade throughout the fire districts of New South Wales was 465 officers and 1,354 permanent and 2,805 volunteer firemen. Corresponding figures for the Sydney Fire District were 382, 1,182 and 280. The revenue for the year 1968 was \$11,061,000, as follows; from the Government \$1,365,000; municipalities and shires, \$1,365,000; fire insurance companies and firms, \$8,193,000; and from other sources, \$138,000. The disbursements for the year \$11,201,000. The Board of Fire Commissioners provides the fire protection services for Canberra, in the Australian Capital Territory, and the cost of these services is reimbursed by the Commonwealth Government.

Under the Bush Fires Act, 1949-1965 a Bush Fire Fighting Fund exists from which finance is provided for the prevention and fighting of bush fires. Contributions to the Fund by the Government, councils and insurance companies are in the proportion of one-quarter, one-quarter and one-half, respectively. At 30 June 1969 Volunteer Brigades equipped by means of this fund numbered 2,500 with an active membership of about 65,000 persons. The approved expenditure from the Fund for equipment, up to 30 June 1970, amounted to \$11,940,000.

#### Victoria

In Victoria, fire brigades are controlled by the Metropolitan Fire Brigades Board consisting of ten members, including an employees' representative, and the Country Fire Authority consisting of eleven members.

Metropolitan Fire Brigades Board. The Metropolitan Fire Brigades Board receives contributions from the municipalities and the insurance companies in the proportion of one-third and two-thirds respectively. On 30 June 1969 the Board had under its control 45 stations, 1,175 permanent staff, and 254 special service and clerical, etc. staff. The total receipts for 1968-69 were \$7,285,315, comprising contributions \$6,221,188, receipts for services \$687,827, and interest and sundries \$376,300. The expenditure was \$7,846,592.

Country Fire Authority. This authority is responsible for the prevention and suppression of fires in the 'country area of Victoria', which embraces the whole of the State outside the Metropolitan Fire District, excluding State forests, National Parks and certain Crown lands. The country area has been divided into twenty-five fire control regions, four of which (Ballarat, Bendigo, Geelong and the Dandenong, Chelsea and Frankston areas) are wholly urban and the remainder mixed urban and rural. The Country Fire Authority receives contributions in the proportion of two-thirds from insurance companies and one-third from the Treasury, At 30 June 1969 the Country Fire Authority Act applied to 192 insurance companies and 209 urban and 1,050 rural fire brigades. The effective registered strength of the brigades was 118,569 members. Income for the year 1968-69 amounted to \$3,213,467. Total expenditure other than loan redemption and capital expenditure amounted to \$3,054,436.

# Queensland

There are two controlling bodies responsible for fire fighting services throughout Queensland. The State Fire Services Council controls brigades set up under *The Fire Brigades Acts* 1964 to 1966, and the Rural Fires Board under provisions of *The Rural Fires Act*, 1946 to 1968 administers Bush Fire Brigades. In addition a Local Authority may establish a fire fighting brigade of its own as do some major establishments such as the State Forestry Department and private companies whose activities involve fire hazards.

Fire districts are constituted under 'The Fire Brigades Acts, 1964 to 1966'. For each district, there must be a Fire Brigades Board consisting of seven members, and the cost of maintenance of each brigade is proportioned as follows: Treasury one-eighth, insurance companies three-quarters, and local authorities one-eighth. The insurance companies' contribution is paid to the State Government and thence to fire brigades.

At 30 June 1969 there were 84 Fire Brigades Boards. The number of stations was 177 and full-time staff numbered 1,145, including 50 administrative, 289 officers and 806 firemen. Volunteers numbered 18. Part-time staff numbered 1,341 including 85 administrative, 126 officers and 1,130

firemen. The total revenue for the year 1968-69 was \$5,705,554, received mainly from the following sources: Government \$682,670, local authorities \$682,670, insurance companies \$4,096,008. Loan receipts (Government and other) were \$569,945. The total expenditure for the year was \$5,758,808, the chief items being salaries and wages \$4,152,881, and interest and redemption of loans \$579,628.

The Rural Fires Board consists of a chairman and nine members all, except the one representing the United Graziers Association, are appointed by the Governor-in-Council from Government Departments and the Minister of Lands has power to add up to three additional members from the community as a whole. For administrative purposes the State is divided into Rural Fire Districts under the control of a Chief Fire Warden and in these districts Fire Wardens are appointed to assigned areas. These officers co-ordinate and control the Bush Fire Brigades on a voluntary basis. At 30 June 1969 there were 165 Rural Fire Districts with over 1,500 voluntary Fire Wardens and Bush Fire Brigades numbered 942. Expenditure by the State Government during 1968-69 amounted to \$62.242.

# South Australia

The Fire Brigades Act, 1936-1958 provides for a board of five members, that the expenses and maintenance of brigades are defrayed in the proportion of two-ninths by the Treasury, five-ninths by insurance companies and two-ninths by the municipalities concerned, and that when the Treasury proportion exceeds its statutory contribution of approximately \$29,000, the excess is borne five-sevenths by insurance companies and two-sevenths by the municipalities. At 30 June 1969 there were altogether 37 fire brigade stations, of which 15 were metropolitan and 22 country.

The strength of the permanent staff at 30 June 1969 was 517, including 390 officers and men, 90 country auxiliary firemen and 37 other employees (including maintenance workers). The total revenue for the year 1968-69 was \$1,801,685, including contributions of \$1,546,614 made up as follows: insurance companies \$930,835, Treasury \$243,444 and municipalities \$372,334. The Treasury contribution includes a special grant of \$214,082.

## Western Australia

By the provisions of the Fire Brigades Act, 1942-1966 certain local government areas are constituted fire districts under the control of the Western Australian Fire Brigades Board. There were 59 fire districts at 30 June 1969. The contribution to the Board is made in the proportion of 16 per cent from the Government, 20 per cent from local government authorities, and 64 per cent from insurance companies. The number of local government authorities and insurance companies who contributed numbered 79 and 183 respectively. The brigades throughout the State controlled by the Western Australian Fire Brigades Board at 30 June 1969 numbered 78, with a staff of 1,820 including 380 permanent officers and firemen and 1,440 volunteer brigade officers and firemen. The revenue for the year ended 30 June 1969 was \$2,507,471 and the expenditure \$2,542,563.

Under the Bush Fires Act, 1954-1965 a Bush Fires Board, consisting of thirteen members, six of whom are nominated by the Country Shire Councils' Association, was set up to advise the Minister for Lands on bush fire control and to administer the Bush Fires Act. The Act also provides for the registration of bush fire control officers, who numbered 2,295 at 30 June 1969, and the establishment of bush fire brigades, 947 at 30 June 1969. Many individual brigades are large organisations with numerous self-contained sections.

## Tasmania

The Fire Brigades Act 1945 provided for the creation of the Fire Brigades Commission of Tasmania to co-ordinate the activities of existing fire brigade boards, while leaving the responsibility for individual control and management with the boards. The Commission consists of two persons nominated by the Minister, one person elected by the City or Municipal Councils' representatives, one person nominated by the Chairman of the Rural Fires Board and three persons elected by the insurance representatives of the Fire Brigades Boards. Contributions towards the cost of operations are on the basis of 22.5 per cent each from the Treasury and the municipalities and 55 per cent from the insurance companies concerned. The cost for the year 1968-69 amounted to \$962,741. There were, at 30 June 1969, 22 boards controlling 37 stations, and their aggregate staffs numbered 647 (officers and firemen), including 210 permanent firemen, 397 part-time firemen and 40 volunteers; the volunteers all operate under the Hobart Board in the forested and mountainous Fern Tree area.