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TRADE, TRANSPORT, AND COMMUNICATIONS

RETAIL TRADE

Census of Retail Establishments

Statistics of retail sales have been compiled for the years 1947-48, 1948-49, 1952-53, 1956-57, and 1961-62 from returns supplied by all retail establishments in Australia.

In general terms these Censuses have covered the trading activities of establishments which normally sell goods at retail prices to the general public from shops, rooms, kiosks, and yards. Particulars of retail sales obtained from these Censuses are designed principally to cover sales to the final consumer of new and second-hand goods generally used for household and personal purposes. For this reason, sales of building materials, farm and industrial machinery and equipment, earthmoving equipment, etc., have been excluded from the Censuses. For the same reason, and also because of difficulties in obtaining reliable and complete reporting, retail sales of builders' hardware and supplies, business machines and equipment, grain, feed, fertilisers and agricultural supplies, and tractors were excluded from the 1961-62 Census. Retail sales of motor vehicles, parts, etc., are included whether for industrial, commercial, farm, or private use.

A comparison of the results of the 1961-62 Retail Census with those of the 1956-57 Retail Census, which were modified to take into account the changes in scope mentioned above, was last published in the *Victorian Year Book* 1970 on pages 725-31.

Survey of Retail Establishments

During the period between Censuses, estimates of the value of retail sales are made on the basis of returns received from a representative sample of retail establishments. Sample returns are supplied by retail businesses which account for approximately 45 per cent of all retail sales in Australia. Estimated totals are calculated by methods appropriate to a stratified sample.

The following table shows the value of retail sales of goods in Victoria in each of the commodity groups specified for the years 1965-66 to 1969-70:

VICTORIA—VALUE OF RETAIL SALES (a)
(*\$m*)

Commodity group	1965-66	1966-67	1967-68	1968-69	1969-70
Groceries	302.7	324.4	349.8	375.0	399.0
Butchers' meat	168.7	175.6	187.4	188.0	202.4
Other food (b)	266.7	285.5	301.6	304.4	324.9
Total food and groceries	738.1	785.5	838.8	867.4	926.3
Beer, wine, and spirits (c)	198.6	217.8	240.7	256.4	277.8
Clothing and drapery	316.6	331.7	356.9	366.4	395.0
Footwear	54.8	60.6	63.5	65.5	70.1
Domestic hardware, china, etc. (d)	47.9	51.2	54.8	62.1	68.3
Electrical goods (e)	108.9	111.9	117.1	128.8	136.4
Furniture and floor coverings	87.6	91.8	97.6	104.6	114.2
Chemists' goods	95.8	102.1	109.3	123.7	134.5
Newspapers, books, and stationery	68.2	73.7	78.5	83.0	88.2
Other goods (f)	203.5	215.8	219.9	235.6	258.7
Total (excluding motor vehicles, parts, petrol, etc.)	1,920.0	2,042.1	2,177.1	2,293.5	2,469.5
Motor vehicles, parts, petrol, etc. (g)	657.8	680.2	760.1	795.0	871.8
GRAND TOTAL	2,577.8	2,722.3	2,937.2	3,088.5	3,341.3

(a) Compiled on a basis comparable with the 1961-62 Retail Census.

(b) Includes fresh fruit and vegetables, confectionery, soft drinks, ice cream, cakes, pastry, fish, etc., but excludes some delivered milk and bread.

(c) Excludes sales made by licensed clubs, canteens, etc.

(d) Excludes basic building materials, builders' hardware and supplies.

(e) Includes radios, television and accessories, musical instruments, domestic refrigerators.

(f) Includes tobacco, cigarettes, sporting goods, jewellery, etc.

(g) Excludes tractors, farm machinery and implements, earthmoving equipment, etc.

Retailing in Victoria since 1957, 1969

OVERSEAS AND INTERSTATE TRADE

Overseas trade: legislation and agreements

Of the three components of Victoria's trade, namely, transactions within the State, those with other Australian States, and those with countries outside Australia, the first two are, in practice, free of control or restriction; trade with overseas countries is subject to the customs laws of the Commonwealth Government.

By the Commonwealth of Australia Constitution Act, the power to make laws about trade and commerce with other countries was conferred on the Commonwealth Parliament, and by the same Act, the collection and control of customs and excise duties passed to the Executive Government of the Commonwealth on 1 January 1901.

The first Commonwealth Customs Tariff was introduced by Resolution on 8 October 1901, from which date uniform duties came into effect throughout Australia. The Australian Customs Tariff has been developed in conformity with the policy of protecting economic and efficient Australian industries, and of granting preferential treatment to specified imports from certain Commonwealth countries. Some goods, generally those of a luxury nature, are subject to duty for revenue purposes. Customs collections are a major source of revenue, and the protective character of the tariff has an important influence on the Australian economy.

The present tariff provides for general and preferential rates of duty, and its structure is based on the "Brussels Nomenclature" which has its origins in the Convention on Nomenclature for the Classification of Goods in Customs Tariffs, signed in Brussels on 15 December 1950. Australia has operated a "Brussels-type" tariff since 1 July 1965.

Preferential rates apply to goods the produce or manufacture of the United Kingdom, Ireland, Canada, New Zealand, Papua and New Guinea, and certain goods, the produce or manufacture of specified countries, provided that such goods comply with the laws in force at the time affecting the grant of preference.

General rates apply to goods from all countries which do not qualify for preferential rates of duty under a particular tariff classification.

Primage duty

In addition to duties imposed by the Customs Tariff 1965, *ad valorem* duties at 5 per cent or 10 per cent are charged on some goods according to the type of goods and their origin. Goods produced or manufactured by New Zealand, Norfolk Island, Fiji, Cocos (Keeling) Islands, Christmas Island (Indian Ocean), and the Territory of Papua and New Guinea are exempt from primage duty.

Tariff Board

The Tariff Board is set up under the provisions of the Tariff Board Act to advise the Commonwealth Government on matters relating to the protection and encouragement of Australian industry.

Bilateral trade agreements

Australia has numerous trade agreements with overseas countries, the principal agreements being outlined below :

Country	Main features of agreement
United Kingdom	Dated 1956. Preservation of security for Australian exports in United Kingdom markets. Lowering of obligatory margins of preference which Australia extends to the United Kingdom.
Canada	Dated 1960. Mutual accord of preferential tariff treatment with certain specified exceptions as for 1931 Agreement plus concessions granted in 1932 and 1937.
New Zealand	Dated 1966. Provides for free trade in certain scheduled goods. Provision is made for addition of items to the schedule. The 1933 Agreement continues in force as part of the 1966 Agreement except as superseded or modified by it.
Rhodesia	Dated 1955. Exchange of preferential tariff treatment over a range of items. Since the unilateral declaration of independence by the Rhodesian Government in November 1965, this Trade Agreement has been inoperative.
Malaysia	Dated 1958. Agreement negotiated with the Federation of Malaya and applies only to that part of Malaysia formerly comprising the Federation. Records exchange of preferential treatment with special protection for Australia's wheat and flour markets in Malayan States, and for Malayan rubber and tin in Australia.

Country	Main features of agreement
Indonesia	Dated 1959. Records desirability of expanding trade between Australia and Indonesia. Gives recognition to importance of flour trade from Australia to Indonesia.
Japan	Dated 1963. Mutual exchange of most-favoured-nation treatment. Japan to accord preferential treatment to Australian wool and wheat as well as expanded opportunities for imports into Japan of other Australian primary produce and motor vehicles. Australia to consult Japan on temporary protection cases affecting Japanese products.
Philippines	Dated 1965. Provides for an exchange of non-discriminatory treatment while recognising existing preferences.
South Korea	Dated 1965. Provides for an exchange of non-discriminatory treatment with allowances for existing preferences. Both Governments undertake to endeavour to increase volume of trade with each other.
U.S.S.R.	Dated 1965. Provides for an exchange of non-discriminatory treatment and for consultation on request about any matter affecting the operation of the Agreement.
Poland and Bulgaria	Dated 1966. Provides for an exchange of non-discriminatory treatment with allowances for existing preferences. Both Governments undertake to endeavour to increase volume of trade with each other.
Romania and Hungary	Dated 1967. Provides for an exchange of non-discriminatory treatment with allowances for existing preferences.
Republic of China (Taiwan)	Dated 1968. Provides for an exchange of non-discriminatory treatment with allowances for existing preferences.

General Agreement on Tariffs and Trade (G.A.T.T.)

The General Agreement on Tariffs and Trade, to which Australia was one of the original contracting parties, is an international trade agreement which has been in operation since 1 January 1948. At the end of January 1970, seventy-six countries, whose foreign trade represented over 80 per cent of the total volume of world trade, were full contracting parties to the Agreement, two had acceded provisionally, and thirteen applied the Agreement on a *de facto* basis.

Six series of tariff negotiations have been conducted, as a result of which Australia has obtained tariff concessions on almost all the principal products of which Australia is an actual or potential exporter to the individual countries concerned.

Excise Tariff

The Excise Tariff applies to certain articles which can only be manufactured under licence and subject to certain conditions. The tariff relates to beer, spirits, amylic alcohol and fusel oil, saccharin, liqueurs, flavoured spirituous liquors, tobacco, cigars, cigarettes, snuff, coal, certain petroleum, shale, or coal tar distillates, playing cards, cigarette papers, matches, wine (certain types), and canned fruit.

Customs (Import Licensing) Regulations

Import licensing, introduced at the beginning of the Second World War, was relaxed progressively after the war so that by March 1952 goods from the non-dollar area (except Japan, to which special conditions applied until 1957) were virtually free from import licensing controls. A fall in the price of wool and a large increase in imports in the year 1951-52 so endangered Australia's external financial position that in March 1952 the import restrictions were again intensified. The war-time regulations were subsequently replaced by regulations made under the *Customs Act 1901-1954*.

Between March 1952 and February 1960 import restrictions were varied broadly in line with Australia's balance of trade position.

After the changes made in February 1960 only about 10 per cent of imports remained subject to control. The remaining restrictions were removed in October 1962 for all commodities, with the exception of a small group which were retained under control for reasons of association with the protection of the Australian industries concerned.

Export controls and incentives

The Customs Act makes provision for the prohibition of exportation of certain goods from Australia either absolutely, or to a certain place, or unless prescribed conditions are complied with. The *Banking Act 1959* contains provisions to ensure that the full proceeds of exports are received into the Australian banking system in the currency and in the manner prescribed by the Reserve Bank of Australia.

The Commonwealth Government provides taxation concessions as financial incentives to export. A special income tax allowance, equal and additional to the ordinary allowable deduction in respect of specified expenses, is designed to encourage firms to incur promotion expenditure in advance of export sales. Rebates of pay-roll tax are granted to employers whose export sales have increased above their average annual level in a base period. Rebates are also available to employers who have supplied components embodied in the product exported.

Australian trade missions

During the last decade trade missions have become an integral part of the Commonwealth Department of Trade and Industry's campaign to develop and expand Australia's export trade. They have proved successful in creating an awareness, especially in new markets, of Australia as a producer of quality primary and secondary commodities, in establishing Australia as a source of supply, in establishing a basis for long-term business and in producing valuable export business from "on the spot" trading. Trade missions have been directly responsible for substantial and permanent increases in export earnings.

Trade missions may be of the survey or selling type. The general survey mission is designed to carry out a survey of a particular area, obtain market information, and assess the market potential for Australian products. The specialised survey mission undertakes a market survey on behalf of a particular industry or for specific commodities. A survey mission usually comprises about five members; the Government selects suitable specialists and

meets the full cost of the project. The mission reports back and recommends further appropriate trade promotional activity.

The general selling mission is a planned "hard sell" overseas visit of a group of businessmen whose products have market prospects in the countries to which the mission will travel. Membership is usually about twenty although numbers have been as high as forty and as low as seven members. The specialised selling mission is similar to the general selling mission in relation to the responsibilities of members and the facilities provided by the Government, but differs in that it is concerned with specific industries, is normally smaller, and is sometimes backed up by small displays at selected centres to give additional impact.

As members of a selling mission, businessmen pay their own fares and accommodation and contribute towards the cost of mission entertainment. The Government meets the costs of a leader and manager, determines the itinerary, makes all necessary arrangements in Australia, and through Trade Commissioners in the countries being visited, organises government and business contacts, press receptions, and supporting advertising and publicity for the mission while it is away. A report on the mission's findings and recommendations is published and distributed.

Since 1954 Australia has sent overseas fifty-two trade and survey missions and five trade ships. The areas visited include Africa, South-east Asia, New Zealand, India and Ceylon, North America and Canada, the Pacific Islands, the Middle East and Mediterranean, South America and the Caribbean, and Britain and Northern Europe.

Victoria's pattern of trade, 1964

Overseas trade : recorded value of imports and exports

The recorded value of goods imported is the actual money price paid plus any special deduction or the current domestic value of the goods, whichever is the higher, plus all charges ordinarily payable for placing the goods free on board (f.o.b.) at the port of export. When the invoiced value of the imported goods is in a currency other than Australian, the equivalent value in Australian currency is recorded. The recorded value of exports, if sold before export, is equivalent to the f.o.b. value of the goods. If shipped on consignment, the value recorded is the Australian f.o.b. equivalent of the current price offering for similar goods of Australian origin in the principal markets of the country to which the goods are consigned for sale. With regard to wool shipped on consignment, the f.o.b. equivalent of the current price ruling in Australia approximates sufficiently to the f.o.b. equivalent of the price ultimately received. For information about the law relating to exports, see page 572 of the *Victorian Year Book* 1968.

Overseas trade of Victoria

Statistics of Australia's overseas trade passing through Victorian ports are compiled from documents obtained under the Customs Act and are presented in the following series of tables.

The total values of the overseas trade of Victoria for each of the five years 1965-66 to 1969-70 are set out below. Exports do not include the value of stores shipped at Victorian ports on board overseas ships.

**VICTORIA—OVERSEAS TRADE : RECORDED VALUES OF IMPORTS INTO
AND EXPORTS FROM VICTORIAN PORTS**
(\$'000 f.o.b.)

Year	Imports	Exports			Excess of imports
		Australian produce	Re-exports	Total	
1965-66	1,017,360	753,514	14,549	768,063	249,297
1966-67	1,072,514	785,462	15,725	801,187	271,327
1967-68	1,130,741	661,989	23,766	685,755	444,986
1968-69	1,182,747	688,402	19,177	707,579	475,168
1969-70	1,347,053	883,768	28,828	912,596	434,457

**VALUE OF AUSTRALIAN TRADE, AND PROPORTION
HANDLED AT VICTORIAN PORTS**

Year	Australian trade			Proportion of Australian trade handled at Victorian ports		
	Imports	Exports	Total	Imports	Exports	Total
		\$'000 f.o.b.			per cent	
1965-66	2,939,492	2,720,953	5,660,445	34.6	28.2	31.5
1966-67	3,045,341	3,023,925	6,069,266	35.2	26.5	30.9
1967-68	3,264,473	3,044,675	6,309,148	34.6	22.5	28.8
1968-69	3,468,505	3,374,263	6,842,768	34.1	21.0	27.6
1969-70	3,881,227	4,131,543	8,012,770	34.7	22.1	28.2

Classification of overseas imports and exports

From July 1965 imports have been classified according to the new Australian Import Commodity Classification. This classification is based on the Standard International Trade Classification, Revised (S.I.T.C.), which is closely related to the Brussels Tariff Nomenclature used in the new Australian Customs Tariff. A new Australian Export Commodity Classification based on S.I.T.C. was introduced in July 1966.

VICTORIA—CLASSIFICATION OF OVERSEAS IMPORTS AND EXPORTS
(\$'000 f.o.b.)

Division No.	Description	Imports		Exports	
		1968-69	1969-70	1968-69	1969-70
00	Live animals	639	1,836	533	1,395
01	Meat and meat preparations	322	736	73,477	127,469
02	Dairy products and eggs	2,069	2,672	56,614	68,948
03	Fish and fish preparations	8,202	8,198	4,759	4,248
04	Cereals and cereal preparations	3,310	1,449	47,165	77,443
05	Fruit and vegetables	7,984	8,910	56,299	52,140
06	Sugar and sugar preparations and honey	877	1,214	351	494
07	Coffee, tea, cocoa, spices and manufactures thereof	19,842	21,369	331	1,614
08	Feeding-stuff for animals (except unmilled cereals)	1,018	927	3,447	4,806
09	Miscellaneous preparations chiefly for food	898	1,277	1,405	947
11	Beverages	2,226	2,397	1,304	1,789
12	Tobacco and tobacco manufactures	14,790	15,189	298	470
21	Hides, skins and fur skins, undressed	1,204	1,173	32,524	38,467
22	Oil-seeds, oil nuts and oil kernels	593	697	143	199
23	Crude rubber (including synthetic and reclaimed)	14,309	15,484	212	360

VICTORIA—CLASSIFICATION OF OVERSEAS IMPORTS AND EXPORTS—*continued*
(\$'000 f.o.b.)

Division No.	Description	Imports		Exports	
		1968-69	1969-70	1968-69	1969-70
24	Wood, timber and cork	8,927	9,447	78	95
25	Pulp and waste paper	8,303	10,420	62	27
26	Textile fibres and their waste	20,635	22,750	223,739	244,317
27	Crude fertilisers and crude minerals (except coal, petroleum, and precious stones)	19,251	17,948	246	338
28	Metalliferous ores and metal scrap	369	355	13,767	17,696
29	Crude animal and vegetable materials, n.e.s.	4,773	5,055	4,618	7,387
52	Coal, coke and briquettes	61	70	288	441
33	Petroleum and petroleum products	76,939	73,692	12,085	14,271
34	Petroleum gases and other gaseous hydrocarbons	6	18	(a)	(a)
41	Animal oils and fats	116	110	4,286	11,890
42	Fixed vegetable oils and fats	3,763	4,225	17	11
43	Animal and vegetable oils and fats, processed, and waxes of animal or vegetable origin	713	994	254	501
51	Chemical elements and compounds	31,821	36,631	2,367	3,233
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	1,117	1,590	1	1
53	Dyeing, tanning and colouring materials	8,691	10,562	1,432	1,718
54	Medicinal and pharmaceutical products	10,041	13,249	3,219	4,290
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	3,625	4,166	1,048	1,069
56	Fertilisers, manufactured	4,082	2,084	71	74
57	Explosives and pyrotechnic products	1,182	3,110	1,784	2,150
58	Plastic materials, regenerated cellulose and artificial resins	43,383	48,939	2,456	2,967
59	Chemical materials and products, n.e.s.	15,873	15,622	12,405	13,643
61	Leather, leather manufactures, n.e.s., and dressed fur skins	3,567	4,334	2,112	2,285
62	Rubber manufactures, n.e.s.	10,403	11,659	2,011	3,888
63	Wood and cork manufactures (except furniture)	4,871	5,598	527	634
64	Paper, paperboard and manufactures thereof	34,173	38,266	1,994	2,113
65	Textile yarn, fabrics, made-up articles and related products	112,477	123,666	5,782	7,682
66	Non-metallic mineral manufactures, n.e.s.	21,064	23,224	3,906	4,907
67	Iron and steel	40,101	36,333	1,648	2,697
68	Non-ferrous metals	8,550	9,508	7,909	23,345
69	Manufactures of metal, n.e.s.	28,287	33,078	11,719	15,519
71	Machinery (except electric)	206,697	232,626	21,035	26,135
72	Electrical machinery, apparatus and appliances	66,603	81,052	6,503	9,650
73	Transport equipment	159,505	212,439	35,180	51,070
81	Sanitary, plumbing, heating and lighting fixtures and fittings	1,962	2,420	380	551
82	Furniture	1,671	1,901	264	267
83	Travel goods, handbags and similar articles	1,388	1,530	22	31
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	10,830	13,184	3,110	3,123
85	Footwear, gaiters, and similar articles and parts therefor	4,234	6,634	105	200
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	36,502	44,940	6,016	7,601
89	Miscellaneous manufactured articles, n.e.s.	42,002	49,473	3,922	5,279

VICTORIA—CLASSIFICATION OF OVERSEAS IMPORTS AND EXPORTS—*continued*
(\$'000 f.o.b.)

Division No.	Description	Imports		Exports	
		1968-69	1969-70	1968-69	1969-70
9A	Commodities and transactions of merchandise trade, not elsewhere classified	38,949	42,860	(b)16,083	(b)17,512
	Total merchandise	1,175,785	1,339,291	693,312	891,393
9B	Commodities and transactions not included in merchandise trade	6,962	7,762	14,268	21,203
	Total	1,182,747	1,347,053	707,579	912,596

(a) Included in Division 9A.

(b) Includes Division 34.

Trade with countries

The value of trade with overseas countries from 1967-68 to 1969-70 is shown in the following table :

VICTORIA—OVERSEAS IMPORTS AND EXPORTS : COUNTRIES OF
ORIGIN AND CONSIGNMENT
(\$'000 f.o.b.)

Country	Imports			Exports		
	1967-68	1968-69	1969-70	1967-68	1968-69	1969-70
Belgium-Luxembourg	8,937	8,687	9,492	8,247	8,325	8,664
Canada	44,863	46,754	49,865	21,270	24,167	26,548
Ceylon	5,562	5,830	4,177	5,970	4,962	5,653
China (mainland)	7,837	9,550	10,811	13,508	19,609	33,613
China, Republic of (Taiwan)	3,233	4,723	6,429	3,271	5,091	6,849
Czechoslovakia	2,312	2,951	2,730	1,025	1,339	1,563
Finland	5,102	5,293	5,295	319	238	267
France	35,507	28,793	33,482	30,442	37,245	38,097
Germany (Federal Republic)	82,708	89,431	113,450	25,883	26,126	26,281
Greece	1,187	1,285	1,791	2,426	1,475	3,948
Hong Kong	13,706	14,358	19,092	9,876	17,594	21,308
India	11,012	10,054	10,591	13,038	5,584	9,100
Indonesia	7,079	6,697	2,911	5,548	5,259	8,535
Iran	7,494	1,731	1,937	3,224	3,614	5,270
Iraq	8,006	10,526	9,151	786	1,567	779
Italy	28,685	30,519	28,000	24,181	26,285	28,500
Japan	127,027	147,918	177,408	106,944	107,526	141,100
Kuwait	18,627	18,309	19,387	1,274	1,305	1,725
Malaysia	8,645	10,234	10,617	15,367	13,576	13,461
Mexico	1,510	722	1,228	5,937	7,694	5,318
Netherlands	15,300	17,460	22,369	7,673	9,128	15,056
New Zealand	19,960	23,108	26,736	45,068	45,516	58,820
Pakistan	5,277	5,291	6,209	2,511	1,045	8,746
Papua and New Guinea	3,934	5,475	6,307	11,813	11,771	14,118
Philippines	808	735	858	14,294	13,178	13,287
Poland	965	1,049	798	4,223	3,896	5,275
Qatar	2,054	12,556	11,039	154	102	134
Saudi Arabia	11,246	10,594	10,118	5,507	5,010	5,659
Singapore	1,333	2,627	3,008	13,155	16,024	24,538
South Africa	4,993	4,860	5,683	10,674	18,878	30,672
Sweden	18,642	18,504	18,692	2,304	2,076	3,426
Switzerland	15,243	14,443	21,094	880	781	1,309
Thailand	522	642	743	6,255	6,958	7,906

VICTORIA—OVERSEAS IMPORTS AND EXPORTS : COUNTRIES OF
ORIGIN AND CONSIGNMENT—*continued*
(\$'000 f.o.b.)

Country	Imports			Exports		
	1967-68	1968-69	1969-70	1967-68	1968-69	1969-70
Trucial States	10,488	3,509	5,711	370	682	818
United Kingdom	262,230	275,526	304,681	106,908	100,565	120,940
U.S.A.	270,072	267,149	315,965	81,320	83,942	112,906
U.S.S.R.	547	735	1,492	5,710	8,916	16,074
Yugoslavia	279	239	313	6,200	5,981	7,039
Other and unknown	57,809	63,880	67,393	62,200	54,549	79,294
Total	1,130,741	1,182,747	1,347,053	685,755	707,579	912,596

Interstate trade

Statistics of trade between Victoria and other Australian States are incomplete and relate mainly to seaborne trade. Although a substantial quantity of freight is carried by road and rail transport between Victoria and neighbouring States, no details of this traffic are available. A small tonnage of freight is carried interstate by air (see page 743).

Interstate trade by sea

In terms of quantity, the principal cargoes carried interstate by ship to and from Victorian ports are coal and briquettes, petroleum and petroleum products, steel, sugar and sugar preparations, and timber. However, there is also a considerable trade in foodstuffs, motor vehicles, and other manufactured goods, particularly through the Port of Melbourne. Details of the principal commodities in interstate shipments handled by the ports of Melbourne and Geelong during 1970 are shown below. For many commodities comparison with details for previous years is not possible because of changes in classification. In addition, details of exports from the Port of Melbourne are not comparable with those for previous years because of changes in the method of calculating tonnages. Some cargoes are recorded in tons weight, while others are recorded in tons measurement. In the statistics the measurement of 40 cu ft is taken as the equivalent of 1 ton.

Port of Melbourne

Interstate exports during 1970 totalled 1,844,568 tons. The principal commodities were transport equipment (including touring passenger cars), 401,734 tons; petroleum and petroleum products, 386,224 tons; fruit and vegetables, 38,961 tons; paper, paperboard, and manufactures thereof, 33,931 tons; iron and steel, 30,676 tons; and chemical elements and compounds, 14,500 tons.

Interstate imports during the same period totalled 2,494,432 tons, the principal commodities being petroleum and petroleum products, 456,456 tons; sugar and sugar preparations, 248,843 tons; iron and steel, 229,715 tons; paper, paperboard, and manufactures thereof, 215,011 tons; wood, timber, and cork, 206,530 tons; transport equipment (including touring passenger cars), 192,410 tons; crude fertilisers and crude minerals, 145,051 tons; chemical elements, 90,566 tons; and coal, coke, and briquettes, 38,785 tons.

Port of Geelong

Total interstate exports during 1970 amounted to 478,305 tons of which petroleum and petroleum products accounted for 436,202 tons. Total interstate imports amounted to 1,084,603 tons, and consisted mainly of petroleum and petroleum products, 591,768 tons; alumina, 192,658 tons; pig iron and steel, 137,934 tons; and coal, 115,461 tons.

Trade of Victoria with Western Australia and Tasmania

Details of trade between Victoria and other States are available only for trade with Western Australia and trade by sea with Tasmania.

Western Australia

Exports from Victoria to Western Australia are valued in terms of landed cost (i.e., c.i.f. basis) at port of entry. Imports from Western Australia are valued at the f.o.b. equivalent at the port of shipment of the price at which the goods were sold. The small proportion of goods received by rail is valued at the f.o.r. equivalent.

For the year 1969-70 the value of exports from Victoria to Western Australia totalled \$270.1m. Transport equipment (\$51.3m), clothing and clothing accessories (\$27.6m), machinery other than electric machinery (\$27.1m), tobacco and tobacco manufactures (\$14.0m), and rubber manufacturers (\$7.4m) were the main types of commodities included in this total.

Imports from Western Australia during the same period were valued at \$50.4m. Petroleum and petroleum products (\$18.2m), inorganic chemical elements and compounds (\$8.8m), and iron and steel (\$3.2m) were the main types of commodities imported.

Detailed statistics of this trade appear in the publications *External Trade of Western Australia*, 1969-70 and *Interstate Trade of Western Australia*, 1969-70 issued by the Deputy Commonwealth Statistician, Perth.

Tasmania

Details of trade between Victoria and Tasmania are available only for trade by sea. Both exports and imports are valued on an f.o.b. basis.

In 1969-70 exports by sea from Victoria to Tasmania were valued at \$177.5m. Transport equipment (\$24.4m), petroleum products (\$16.7m), and tobacco and tobacco manufactures (\$11.7m) were the main types of commodities. The value of tourists' motor vehicles included in this total was approximately \$23.8m.

Imports from Tasmania during this period amounted to \$148.4m. Preserved vegetables (\$13.9m) and timber (\$13.8m) were the main commodities imported. The value of tourists' motor vehicles included in the total was approximately \$23.3m.

Additional details of trade by sea between Victoria and Tasmania are available from the Deputy Commonwealth Statistician, Hobart.

Customs and excise revenue

The total gross customs duties collected by the Commonwealth in Victoria in each of the three years 1967-68 to 1969-70 was \$107,976,098, \$121,260,549, and \$143,425,169, respectively. Collections include duty received on account of goods transferred to other States for consumption and exclude duty in respect of goods imported into other States but consumed in Victoria.

The principal commodities produced in Victoria on which the Commonwealth imposes excise duty are set out in the table below, together with the gross amount of duty collected on account of each item for each of the three years 1967-68 to 1969-70. As with customs duties, collections include duty levied on goods exported to other States for consumption and exclude duty in respect of goods produced in other States, but consumed in Victoria.

**VICTORIA—GROSS EXCISE DUTY COLLECTED
ON PRINCIPAL COMMODITIES**

Article and unit of quantity		Quantity on which duty was collected			Gross excise duty collected		
		1967-68	1968-69	1969-70	1967-68	1968-69	1969-70
		'000	'000	'000	\$'000	\$'000	\$'000
Spirits (potable)	proof gal	624	600	642	6,164	5,903	6,357
Tobacco	lb	1,770	1,674	1,495	3,967	3,750	3,348
Cigars and cigarettes	lb	19,522	20,275	17,933	81,950	85,329	75,260
Petrol	gal	556,528	616,031	643,179	68,453	75,772	79,111
All other articles (a)		..	..	..	109,065	113,464	115,142
Total		..	..	..	269,599	284,218	279,218

(a) Includes excise duty collected on beer, which is not available for separate publication.

The overseas trade and the gross revenue collected at Victorian ports during the year 1969-70 are shown in the following table:

**VICTORIA—OVERSEAS TRADE AND GROSS REVENUE COLLECTED AT
VICTORIAN PORTS, 1969-70
(\$'000)**

Particulars	Melbourne (a)	Geelong	Portland	Western Port	Total
Overseas trade—					
Imports	1,265,051	63,476	6,334	12,192	1,347,053
Exports	793,889	86,719	31,212	776	912,596
Total	2,058,940	150,195	37,546	12,968	2,259,649
Gross revenue—					
Customs	155,320	1,806	213	..	157,339
Excise	269,004	5,979	4,234	..	279,218
Total	424,324	7,785	4,447	..	436,557

(a) Includes Port of Melbourne, Essendon Airport, and parcels post.

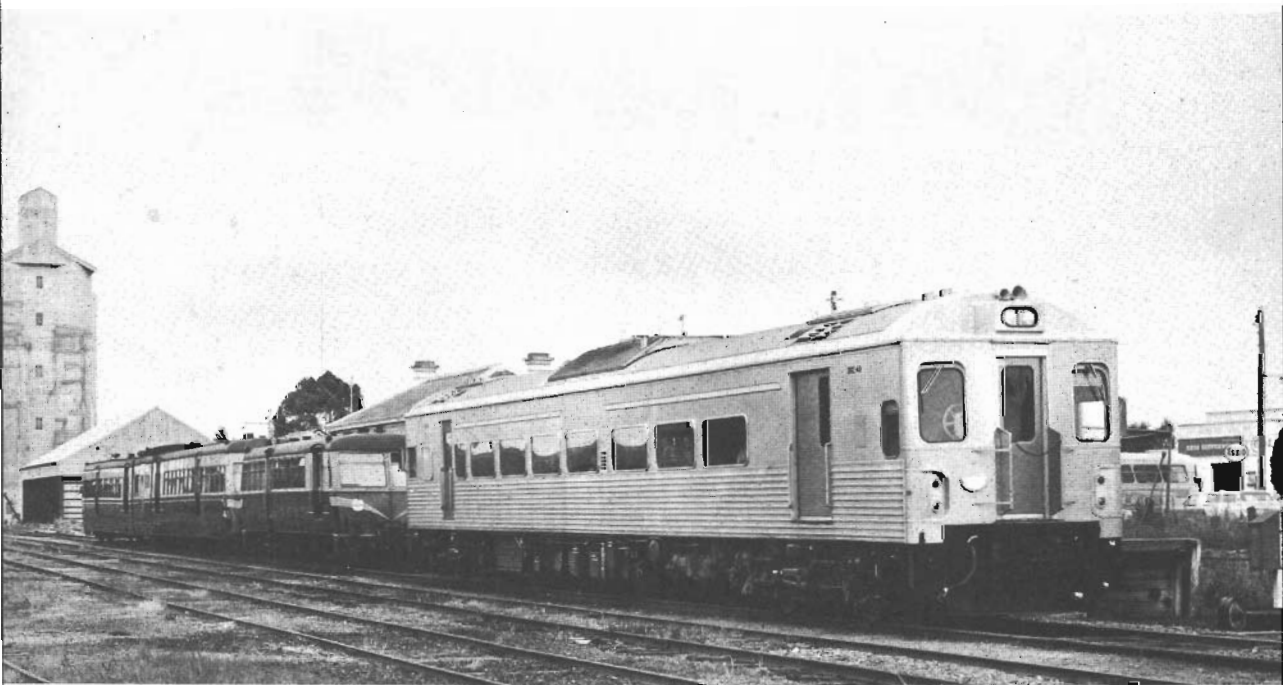
**AUSTRALIA—VALUE OF OVERSEAS TRADE, GROSS CUSTOMS, AND EXCISE
DUTY COLLECTED BY STATES, 1969-70
(\$'000)**

State	Imports	Exports	Excess of exports	Gross duty collected	
				Customs	Excise
New South Wales	1,707,445	1,158,603	—548,842	210,809	359,467
Victoria	1,347,053	912,596	—434,457	157,339	279,218
Queensland	294,114	773,519	479,405	30,437	122,585
South Australia	201,223	417,031	215,808	22,990	80,455
Western Australia	242,299	675,027	432,728	24,649	76,637
Tasmania	46,998	143,470	96,472	3,607	23,835
Northern Territory	39,829	49,725	9,896	2,391	4,103
Australian Capital Territory	2,267	1,571	—696	145	20
Australia	3,881,227	4,131,543	250,316	452,367	946,320

NOTE. Minus (—) sign denotes excess of imports.



An overseas container ship coming into the Swanson Dock at Yarraville.
Melbourne Harbor Trust



A new air-conditioned rail-car meets its predecessor at Willaura, in the western wheat and wool growing area of Victoria.

Victorian Railways



The Bell Street interchange on the Tullamarine Freeway in the City of Broadmeadows.

Country Roads Board

The *City of Melbourne*, the first Boeing 747 Jumbo jet delivered to Qantas, Australia's overseas airline.

Qantas



TRANSPORT

Shipping*Coastal trade*

In the post-war years, particularly since 1959, significant changes have taken place in the carriage of goods by sea around the Australian coast. The Port of Melbourne, the principal sea terminal for Victoria, which is the centre of the coastal trade routes around the mainland coast and to Tasmania, has been experimenting with new methods of cargo handling and "packaging" and the introduction of new specialised ships. In the years following the Second World War Australian shipowners revised their trading practices in the face of vigorous competition from the land-based transport operators. As a result the entire coastal trade by sea was transformed, and ships modified to make them more useful as a means of transportation around the coast.

One of the results of this was the expansion of the bulk cargo trade in which more goods (such as sugar and a variety of oils and oil products) began to be carried in bulk. Later, single bags, boxes, and packages began to be packed into unit loads and containers which facilitated handling on ship and shore by means of new and improved mechanical cargo handling equipment. These new methods led to the specialised ship, exclusively designed and equipped to meet the requirements of the particular trade. These were the roll-on roll-off stern loading ships for cargo packed on road vehicles which travelled in the vessel, and the container ship designed for containerised cargo and other unit loads. The first roll-on roll-off ship in Australia was introduced in 1959 between Melbourne and Devonport in northern Tasmania.

Australia's first specially designed container ship came into service between Melbourne and Launceston in 1961, and was followed in 1964 by a larger container ship for the Melbourne-Fremantle trade. By then, between 7,000 and 8,000 containers were in transit between all States on these ships as well as on conventional and specially modified ships. These new methods are now well established and are being extended to the ports of Sydney and Brisbane.

Efforts are continuing to improve the handling and carrying of general cargo in addition to bulk cargoes which are most suitably carried by sea. More specialised and larger ships in the bulk trades are also proving valuable.

New packaging and cargo handling methods, as well as new ships, are bringing changes to port facilities, where specially designed wharves, equipment, and port modifications are matching the new concepts in ship and cargo handling around the Australian coast. These new concepts are also being extended to Australia's overseas trade.

Searoad service between Victoria and Tasmania

The following table gives details of the searoad service operated by the Australian Coastal Shipping Commission between Victoria and Tasmania :

VICTORIA—TASMANIA : SEAROAD SERVICE (a), 1969–70

Name of vessel	Passengers	Accompanied vehicles	Trade vehicles (b)	Mail vans
<i>Princess of Tasmania</i>	75,224	19,236	3,352	302
<i>Australian Trader</i>	36,475	13,057	2,601	308
<i>Bass Trader</i>	447	87	2,732	284
Total	112,146	32,380	8,685	894

(a) Excludes commercial cargo which consists of unit loads, i.e., containers, trailers, timber packs, etc., as well as commercial vehicles.

(b) Motor vehicles available for sale.

Vessels entered and cleared

The number of vessels entering Victorian ports, the number cleared from those ports, and their total tonnage in each of the five years 1965–66 to 1969–70 were as follows:

VICTORIA—OVERSEAS AND INTERSTATE SHIPPING

Particulars	1965–66	1966–67	1967–68	1968–69	1969–70
Entrances					
number	3,753	3,706	3,550	3,618	3,696
'000 net tons	16,380	17,439	17,161	17,944	20,516
Clearances					
number	3,754	3,710	3,548	3,591	3,682
'000 net tons	16,384	17,427	17,142	17,769	20,458

Nationality of shipping

The countries of registration of vessels which entered or were cleared at Victorian ports during the years 1968–69 and 1969–70 were as follows:

VICTORIA—NATIONALITY OF SHIPPING

('000 net tons)

Vessels registered at ports in—	Vessels entered		Vessels cleared	
	1968–69	1969–70	1968–69	1969–70
Australia	3,303	4,766	3,272	4,728
Bahamas	50	8	50	8
Denmark	396	169	388	164
France	239	444	239	441
Germany, Federal Republic of	484	710	482	721
Greece	540	752	540	753
Hong Kong	162	104	160	109
India	178	168	178	166
Israel	49	80	46	79
Italy	622	567	624	567
Japan	985	1,024	979	998
Liberia	1,770	1,844	1,752	1,829
Netherlands	784	919	772	886
Antilles (Netherlands)	180	499	180	525
New Zealand	164	159	161	158
Norway	1,461	1,545	1,414	1,589
Panama	170	324	170	318
Singapore	49	45	49	41
Sweden	652	587	633	593
United Kingdom	5,261	5,061	5,233	5,042
United States of America	183	196	188	203
U.S.S.R.	77	119	77	119
Yugoslavia	18	70	18	64
Other	167	356	164	357
Total	17,944	20,516	17,769	20,458

Shipping entered at Victorian ports

Particulars of shipping which entered each principal port of Victoria are given in the following table for the years 1968-69 and 1969-70:

VICTORIA—VESSELS ENTERED AT EACH PORT

Class of vessel	Melbourne		Geelong		Portland		Western Port	
	1968-69	1969-70	1968-69	1969-70	1968-69	1969-70	1968-69	1969-70
NUMBER								
Overseas—								
Direct	291	251	93	112	20	26	40	30
Other	1,475	1,650	225	249	69	88	8	28
Interstate	1,158	953	146	156	18	32	71	118
Total	2,924	2,854	464	517	107	146	119	176
'000 NET TONS								
Overseas—								
Direct	1,366	985	1,629	813	151	210	615	373
Other	9,026	10,399	1,481	2,994	326	408	73	476
Interstate	2,179	2,330	668	782	113	180	293	553
Total	12,571	13,714	3,778	4,588	590	799	981	1,402

Cargoes discharged and shipped

The following tables show the tonnage of overseas and interstate cargoes discharged and shipped in Victorian ports during 1968-69 and 1969-70, as well as the tonnage of overseas cargoes discharged and shipped during the years 1967-68 to 1969-70 according to the countries of origin and consignment, and the nationalities of the vessels in which the cargoes were carried :

VICTORIA—CARGOES DISCHARGED AND SHIPPED AT EACH PORT
(‘000 tons)

Particulars	Melbourne		Geelong		Portland		Western Port	
	1968-69	1969-70	1968-69	1969-70	1968-69	1969-70	1968-69	1969-70
DISCHARGED								
Interstate—								
Weight	1,740	1,516	867	1,096	166	100	94	75
Measure	762	910	..	..	..	..	33	19
Overseas—								
Weight	3,662	3,514	3,597	3,812	139	162	1,326	902
Measure	1,954	2,074	16	11	..	..	..	..
SHIPPED								
Interstate—								
Weight	505	655	634	560	1	3	523	920
Measure	867	1,019	5	..	..	..	1	2
Overseas—								
Weight	1,065	1,379	843	1,758	92	230	56	36
Measure	635	811	20	23	7	5	..	..

NOTE. 1 ton measurement = 40 cu ft.

**VICTORIA—OVERSEAS CARGOES DISCHARGED AND SHIPPED ACCORDING
TO GEOGRAPHIC TRADE AREAS**

(tons)

Geographic trade area of origin or consignment	1967-68		1968-69		1969-70	
	Discharged	Shipped	Discharged	Shipped	Discharged	Shipped
North America and Hawaiian Islands—						
Weight	727,317	151,793	736,092	140,947	566,877	172,564
Measure	336,956	63,374	383,146	55,771	362,581	57,660
South America—						
Weight	10,586	11,046	11,217	9,076	3,934	12,338
Measure	337	3,576	151	2,342	825	2,816
Europe (incl. U.S.S.R.)—						
Weight	211,929	251,464	270,393	284,544	192,877	466,855
Measure	705,819	283,449	801,840	259,046	887,245	290,750
Africa—						
Weight	51,736	32,343	72,507	38,794	76,960	135,212
Measure	28,666	22,686	21,726	42,510	26,333	55,148
Asia—						
Weight	6,712,408	1,251,677	6,676,465	1,299,814	6,759,155	2,251,062
Measure	530,064	151,254	631,275	160,102	671,747	241,292
Papua and New Guinea, New Zealand, and Pacific Islands—						
Weight	452,235	337,910	698,803	277,952	579,407	360,425
Measure	133,568	147,175	131,352	142,799	136,337	189,587
Indian Ocean Islands and Antarctic Area—						
Weight	308,219	1,079	258,138	5,556	210,886	3,580
Measure	..	1,236	..	65	443	1,695
Total Weight	8,474,430	2,037,312	8,723,615	2,056,683	8,390,096	3,402,036
Measure	1,735,410	672,750	1,969,490	662,635	2,085,511	838,948

NOTE. 1 ton measurement = 40 cu ft.

**VICTORIA—OVERSEAS CARGOES DISCHARGED AND SHIPPED ACCORDING
TO NATIONALITIES OF VESSELS**

('000 tons)

Vessels registered at ports in—	1967-68		1968-69		1969-70	
	Discharged	Shipped	Discharged	Shipped	Discharged	Shipped
Australia	9	..	14	..	94	62
Bermuda	..	..	..	..	96	37
Denmark	339	72	361	34	100	39
France	224	12	290	14	565	40
Germany, Federal Republic of	379	72	335	64	441	87
Greece	419	161	325	101	359	336
Hong Kong	67	52	121	69	42	107
India	43	19	52	27	130	82
Italy	71	7	18	6	42	36
Japan	500	173	826	146	818	288
Liberia	2,017	200	1,983	169	1,985	271
Netherlands	345	166	199	171	239	504
Antilles (Netherlands)	132	..	229	..	637	10
New Zealand	121	92	121	92	129	143
Norway	1,869	260	1,721	427	1,112	336
Panama	78	46	89	36	193	80
Sweden	386	235	276	171	234	229
United Kingdom	2,998	1,012	3,526	995	2,888	1,278
United States of America	63	38	58	38	129	41
U.S.S.R.	..	4	6	11	50	41
Other	150	89	143	148	193	194
Total	10,210	2,710	10,693	2,719	10,476	4,241

NOTE. In the above table tons measurement has been added to tons weight.

Port Phillip Sea Pilots

Thirty-six former shipmasters are licensed by the Marine Board of Victoria to perform all pilotage duty within Port Phillip Bay. One is in charge of the Williamstown office as Secretary-Treasurer; the others, in turn, take a week in command of the pilot steamer cruising off Point Lonsdale to put pilots aboard incoming ships or take them off departing vessels.

Thirty-four pilots are rostered for the various pilotage duties: from the Heads to Port Melbourne, Williamstown, Geelong, and Western Port; between Geelong and Melbourne; in the Yarra River or Victoria Dock; or elsewhere as required. Pilots for inward ships are organised by the pilot-in-charge of the steamer; those for departing ships and ships berthing by the Williamstown office staff.

The following table shows the number of ships (sailing inwards and outwards) piloted through Port Phillip Heads during the years 1959 to 1970:

VICTORIA—NUMBER OF SHIPS PILOTED THROUGH
PORT PHILLIP HEADS

Year	Number of ships	Year	Number of ships	Year	Number of ships
1959	3,593	1963	4,333	1967	4,606
1960	3,768	1964	4,505	1968	4,614
1961	4,288	1965	4,738	1969	4,388
1962	4,177	1966	4,759	1970	4,433

Further reference, 1963 to 1971

Melbourne Harbor Trust

Administration

The Melbourne Harbor Trust Commissioners are a financially independent, corporate body operating under the provisions of the *Melbourne Harbor Trust Act 1876*, and subsequent amendments and variations. The land and waters of the 10½ square mile port area are vested in the six commissioners who are appointed by the Governor in Council. They comprise a full-time chairman who also is virtually the port's managing director, and five part-time commissioners who, in accordance with the Act must be associated with various port activities, i.e., shipping, primary production, imports, exports, and labour.

The Melbourne Harbor Trust Commissioners are both the port authority and the conservancy authority of the Port of Melbourne. The Trust maintains, improves, and develops the port, and is empowered under its Act to make regulations for the management and financing of the port subject to the approval of the Governor in Council.

Finance

The Port of Melbourne is self-supporting and does not receive any financial grants from the State Government. The Trust's revenue is derived from a number of charges paid by the users of the port. The charges are principally wharfage rates levied on each ton of cargo landed in, or shipped out of the port, and tonnage rates levied on the gross registered tonnage of ships and the time they spend in port. Other charges cover rent of sheds, hire of port owned cargo handling equipment, general port services, and rental of land reserved for essential long term port development. Expenditure is on

port maintenance, reconstruction, modernisation, and development, with any surplus put back into port development. In 1970 the Trust had approximately \$96m invested in port assets. Capital works are financed out of revenue and out of loans, which are mainly privately arranged and are raised and financed by the Trust itself and guaranteed by the Trust's income from wharfage and tonnage. The Trust is required to pay into the Consolidated Fund of the State Government approximately one fifth of its revenue from wharfage and tonnage.

The following table shows particulars of the financial operations of the Melbourne Harbor Trust for the years 1966 to 1970:

VICTORIA—MELBOURNE HARBOR TRUST : REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1966	1967	1968	1969	1970
REVENUE					
Wharfage and tonnage rates	6,393	6,692	8,357	8,901	9,475
Rent of sheds	572	586	638	576	458
Special berth charges	317	381	489	461	402
Rent of lands	949	965	1,154	1,665	1,951
Crane fees	1,672	1,793	2,043	1,937	1,963
Other	792	796	892	781	798
Total revenue	10,695	11,213	13,573	14,321	15,047
EXPENDITURE AND APPROPRIATIONS					
Administration and general expenses	874	908	1,098	1,590	1,331
Port operating expenses	2,422	2,642	2,821	3,074	3,304
Maintenance—					
Dredging	265	203	266	315	826
Harbour	110	116	101	117	156
Wharves	638	581	593	691	687
Approaches	125	152	119	133	139
Railways	79	80	80	53	59
Cargo handling equipment	342	358	371	362	369
Other properties	93	54	55	62	83
Interest	1,551	1,706	1,780	1,927	2,032
Depreciation and renewals	1,584	1,427	2,295	2,536	2,799
Insurance	99	103	108	113	120
Sinking fund	160	435	600	200	800
General reserve	900	1,037	1,600	1,400	500
Payments to Consolidated Revenue	1,287	1,346	1,468	1,506	1,559
Other	2	2	(a)	(a)	36
Total expenditure and appropriations	10,530	11,150	13,355	14,079	14,800
CAPITAL OUTLAY					
Land and property	106	201	291	56	107
Reclamation	312	408	359	80	199
Deepening waterways	1,239	1,235	2,517	3,238	1,061
Wharves and sheds construction	1,760	2,095	3,214	2,548	2,472
Cargo handling equipment	1,252	91	537	395	527
Approaches construction	303	355	412	587	695
Floating plant	95	51	167	731	18
Other works, etc.	675	769	588	674	1,014
Total capital outlay	5,742	5,205	8,085	8,309	6,093
Loan indebtedness at 31 December	32,247	34,484	36,029	37,889	40,690

(a) Under \$500.

Advent of new cargo pattern

Container and unit-load methods of cargo handling in the Port of Melbourne have been introduced and extended during the 1960s. By 1970

the cumulative effect of gradually developing these new facilities had a significant impact on the port as a whole and the emphasis of cargo handling activities in the port had shifted from the long established conventional cargo handling areas to five principal areas catering for container and unit-load ships and cargo handling methods.

In 1970 the port handled a volume of 14.2 million tons of import, export, and transshipment cargo, an increase of 7.6 per cent over 1969. This volume was handled by coastal and overseas shipping which paid 2,992 calls at the port, an increase of about 1.5 per cent.

The changes in the character of the port began to be really noticeable with the arrival, in March 1969, of the first overseas container ship on the United Kingdom—Australia service.

Cargoes flowing through all ports of the world are classed as either "dry or wet" bulk—such as oil carried in tankers or sugar carried loose in the hold of a bulk carrier—or "general" which includes the variety of goods usually crated, boxed, or carried in some other individual packaging. Container ships carry this "general" cargo in containers of various international standard sizes.

Unit-load multi-purpose vessels, which first began to operate out of Melbourne in the overseas service in 1966 and in the coastal trade some eight years earlier, are vessels specially designed to carry containers and unit-loads, which are a collection of general cargo assembled into one load, usually on a tray or pallet. These ships can also carry conventional cargo, namely, individual items of general cargo handled and loaded separately, and handled individually inside the ship and on shore.

By the end of 1970 the total cargo volume of 14.2 million tons comprised 9.1 million tons of general cargo and 5.0 million tons of bulk and 30.2 per cent of the total general cargo was containerised.

Further references, 1961-1971; Changing trends in port development, 1968; Port facilities, 1969; Port emergency service, 1970; Advent of new cargo pattern, 1971

Geelong Harbor Trust

The Port of Geelong is under the control of the Geelong Harbor Trust which was constituted under an Act of 1905. The Trust consists of three commissioners appointed by the Governor in Council.

Entrance to the port is by 15 miles of channel dredged to a depth of 36 ft and a width of 400 ft.

There are nineteen effective berths in the port and two berths at the Commonwealth Explosives Pier, Point Wilson—owned and operated by the Commonwealth. Maximum water depths are 36 ft at eight berths, 32 ft at ten berths (all within the inner harbour), and three outer harbour berths of 30 ft. Special berths are provided for the handling of coal, grain, phosphatic rock and sulphur, oil, and alumina. The bulk grain terminal has a 30 million bushel storage capacity, and is capable of loading ships at the rate of 1,600 tons an hour.

Refinery Pier can accommodate simultaneously four oil tankers with maximum drafts of 34 ft. The Harbor Trust cool stores have a storage capacity of 900,000 cu ft. Adequate open coal storage is available. The port has good clearance facilities, with direct rail loading at seven berths and road clearance at all berths.

The new dry bulk berth (renamed Lascelles Wharf) came into operation early in 1970 and this together with the No. 2 berth (formerly Kings Wharf) provides 1,140 ft of modern wharf facilities for discharge of phosphatic rock and other fertiliser components.

A stern loading ramp with associated storage facilities was constructed at Corio Quay South No. 1 and came into operation in January 1971.

The Harbor Trust has floating plant which includes six tugs, six barges, and one diesel-powered floating crane.

VICTORIA—GEELONG HARBOR TRUST: REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1966	1967	1968	1969	1970
REVENUE					
Wharfage, tonnage, and special berth rates	2,373	2,464	2,428	2,536	2,937
Shipping services	838	851	801	756	909
Rents, fees, and licences	45	47	51	49	82
Freezing works and abattoirs	64	64	80	100	104
Other	120	53	5	10	22
Total revenue	3,440	3,479	3,365	3,451	4,054
EXPENDITURE AND APPROPRIATIONS					
Management expenses	366	382	432	466	517
Shipping services	647	614	670	687	775
Maintenance—					
Wharves and approaches	102	89	91	79	111
Harbour	71	81	99	109	118
Floating plant	13	16	18	22	19
Other	17	26	25	20	24
Interest on loans	401	400	413	422	388
Sinking fund	76	77	79	81	80
Depreciation provision	515	603	693	737	740
Port development fund	1,007	500	250	700	500
Other	62	66	68	75	85
Total expenditure and appropriations	3,277	2,854	2,838	3,398	3,357
CAPITAL OUTLAY (NET)					
Floating plant	..	651	131	19	9
Land and property	70	138	77	210	101
Deepening waterways	69	1,942	313	8	..
Wharves and approaches	431	553	709	718	788
Other	11	36	46	34	11
Total capital outlay	581	3,320	1,276	989	909
LOAN INDEBTEDNESS AT 31 DECEMBER					
State Government	124	118	118	87	81
Public	7,404	7,618	7,815	8,007	6,982
Total loan indebtedness	7,528	7,736	7,933	8,094	7,063

Portland Harbor Trust

Situated on the south-west coast of Victoria, the Port of Portland is administered by a board of three commissioners and serves an area of some 40,000 square miles of western Victoria and the south-east of South Australia. The port is within a few miles of main shipping routes with deep water approaches right to the entrance of the harbour basin.

Completion of extensions to the Trust's bulk seaboard grain terminal during 1969 provided storage for the handling of all types of coarse

grains with a resulting increase in the tonnage of this type of traffic, while the erection of a 4 million bushel horizontal wheat store by the Victorian Grain Elevators Board during the latter part of 1970 has further strengthened the port to service overseas markets with grain drawn from its hinterland.

The handling of a diversified range of grains during the year has justified previous forecasts made by the commissioners that the volume of grain available for export through Portland would increase with the provision of additional storage space.

The volume of exports handled during the year received an additional boost with the inauguration of shipments of bagged wheat and flour to the Middle East, and the formation of the Portland Export Company Pty Ltd, which handled several shipments of district produce to Papua-New Guinea and Pacific markets.

For the first time on record, total trade exceeded the half million ton mark in 1969-70. Compared with the previous year's figures, the volume

VICTORIA—PORTLAND HARBOR TRUST: REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
REVENUE					
Wharfage rates	137	156	159	224	246
Tonnage rates	21	26	23	26	37
Shipping services	63	108	101	139	192
State Government grant	576	615	760	616	650
Grain terminal	82	207	17	144	341
Other	46	57	86	83	67
Total revenue	925	1,169	1,146	1,232	1,533
EXPENDITURE AND APPROPRIATIONS					
Administration	68	76	92	103	118
Maintenance	78	66	70	96	86
Shipping services	61	88	77	98	158
Depreciation	26	27	27	27	34
Interest on loans	677	739	807	846	911
Sinking fund	50	52	53	53	51
Loan redemption	33	36	43	49	60
Grain terminal (excl. depreciation)	35	73	35	61	104
Other	4	2	2	6	5
Total expenditure and appropriations	1,032	1,159	1,206	1,339	1,527
CAPITAL OUTLAY					
Port rail system	..	49	66	89	7
Reclamation	315	114	59	51	17
Grain terminal	111	131	79	226	664
Deepening waterways	51	51	26	52	28
Wharves and sheds	386	395	388	41	20
Breakwater construction	..	42	..	37	15
Floating plant	..	..	..	423	152
Other	185	196	278	180	112
Total	1,048	978	896	1,099	1,015
Loan indebtedness at 30 June—					
State Government	4,083	4,083	3,673	3,673	3,673
Public	13,027	13,939	14,826	15,610	16,492
Total loan indebtedness	17,110	18,022	18,499	19,283	20,165

of cargo handled rose by 28.6 per cent to total 608,953 tons. Shipping revenue showed a corresponding increase of almost 18 per cent.

The gross register of vessels berthed amounted to 1,344,598 tons. This included 34 ships berthed for bunkers and other purposes, but excludes a further 23 vessels that made use of the port anchorage.

In order to keep pace with the growing demands of port traffic, the Harbor Trust has completed the construction of a new transit shed on No. 1 berth and has finalised plans to erect a 100,000 cu ft capacity cold store on No. 2 Quay for the storage of pre-shipment cargo requiring refrigeration.

Western Port

Western Port is an extensive inlet eastward of and adjacent to Port Phillip, and is separated from it by the Mornington Peninsula which is about 10 miles wide. The Port is sheltered from Bass Strait by Phillip Island at its southerly end and the waters between the western side of this island and the mainland form the entrance to the Port. It is approximately 26 miles from the entrance to the northern extremity of the inlet.

Although the entrance contains some large sandbanks, a deep water channel up to 102 ft deep runs close to the island. This navigable channel extending from the Western Entrance to Crib Point is 13 miles long with low-water depths of 47 ft and 49 ft, respectively, in the Northern and Western Arms. Tidal rises are of the order of 9 ft springs and 7 ft neaps.

Pilotage for the port is undertaken by the Port Phillip Sea Pilots. Large tankers inward bound from the west generally take their pilot aboard at the Pilot Boarding Station off Port Phillip Heads; tankers from the east take their pilot aboard at Flinders, where a 36 ft pilot launch is provided.

Harbour services comprise two 1,500 hp firefighting tugs each with a bollard pull of some 23 tons as well as mooring launches. The channels are marked by 34 gas buoys and the whole of the harbour services are co-ordinated from the Harbor Master's office at Stony Point.

For many years Western Port remained unexploited except for its use by a commercial fishing fleet and amateur fishing and boating enthusiasts. In June 1963 the Westernport (Oil Refinery) Act was passed by the Victorian Government giving effect to an agreement between the State and B.P. Refinery (Westernport) Pty Ltd to establish a refinery and associated port facilities. The marine terminal established provides two berthing heads, one capable of taking tankers up to 100,000 tons deadweight and the other tankers up to 40,000 tons.

Large scale development of offshore oil and natural gas reserves in nearby Bass Strait led to the Westernport Development Act being passed in December 1967. This Act gives effect to an agreement between the State and Hematite Petroleum Pty Ltd and Esso Exploration and Production Inc. to construct a fractionation plant to process the gas liquids (LPG) and a single berth marine terminal, which is located at Long Island Point, designed to accommodate tankers up to 100,000 tons deadweight. The terminal was completed in 1969. Dredging to give 47 ft in channel and swinging circle and 52 ft alongside was completed in 1970.

The erection of a plant for Cresco Fertilizers Ltd added to the recent development of the area and continued growth is likely following the

joint announcements in 1969 by B.H.P. and Guest, Keen and Nettlefolds. Their decision to develop progressively a rolling mills and major steel works complex on the western shores will require large capital investment and a large labour force.

Western Port is well located in relation to the State's major electric power grid. Port maintenance facilities have been established at Stony Point and other services such as transport, water supply, and sewerage can be progressively developed.

Further references, 1961-1971 ; Lighthouses, 1964 ; Principal ports of Victoria, 1965

Railways

Geographical factors

The Victorian transport system is centred on Melbourne, the capital of the State. The existence of considerable gaps in the Great Dividing Range has allowed the railway system to fan out to the main agricultural and pastoral areas.

The line to the north-east and Sydney passes through the Kilmore gap ; through the Woodend gap goes the northern line to Bendigo and beyond ; the Geelong line crosses the basalt plains to the south-west ; and to the east, the Gippsland valley (between the Dividing Range and the Strzelecki Ranges) provides a convenient path for the electrified main line handling the vast brown coal resources of the La Trobe Valley.

In the north-western part of the State, the Mallee region, the railway has stimulated development of what was previously regarded as arid, worthless land into prosperous farm lands. It also links Melbourne with Mildura, centre of the dried fruit industry.

Historical development

The first proposed railway for Victoria dates back to March 1839, when Robert Hoddle, Government Surveyor at Port Phillip, marked out a town site at the Beach (Port Melbourne) and planned a line from Melbourne. Seven years later, Geelong residents proposed the construction of a 200 mile line from Geelong to the vicinity of Portland and Hamilton in the Western District. In 1852-53 private railway companies were formed in Victoria and given government approval to build lines.

Australia's first steam railway began operating between Flinders Street and Sandridge (now Port Melbourne) on 12 September 1854 and was opened by The Melbourne and Hobson's Bay Railway Company for public traffic the following day. The first Victorian country railway, Geelong to Greenwich Pier (Newport), was opened on 25 June 1857, and private companies' lines were built from Melbourne to Windsor, Brighton Beach, and Hawthorn between 1859 and 1861.

In 1862 government lines were opened to Ballarat and Bendigo, and two years later, from Bendigo to Echuca. (The Geelong-Melbourne railway had been purchased by the Government in 1860.)

In less than a decade, Victoria saw fulfilled the promise of building the main trunk railways. Through the 1870s construction proceeded to the south-west from Geelong and to the south-east from Melbourne. In 1870 contracts were let for building the line from Essendon to Wodonga. The north-eastern railway, opened in sections, reached Wodonga in 1873.

Nearly ten years elapsed before junction was made with the New South Wales system at Albury on 14 June 1883. This was the beginning of the break of gauge, which continued to disrupt New South Wales-Victoria traffic until 79 years later, when the standard gauge track between Melbourne and Albury was opened for traffic in 1962.

Administration and functions

The Victorian Railways Department was established on 19 March 1856. It is administered by a board of three commissioners, appointed by and responsible to the Government through the Minister of Transport. Each commissioner gives special attention to particular branches of railway operation. They are also responsible for a number of sections of railway constructed in New South Wales under the Border Railways Agreement. The lines in the Riverina district are extensions of Victorian lines.

Main locations of tracks

The main interstate lines are the north-east to Sydney, comprising both broad (5 ft 3 in) and standard (4 ft 8½ in) gauge tracks to the border city of Albury (190½ miles), and the north-western broad gauge line linking Melbourne with Adelaide. The Victorian terminal station on this line is Serviceton (287 miles). The north-east line branches at Mangalore to serve the Goulburn Valley. The north-western line branches at Ballarat (74 miles) to Maryborough (112 miles), thence to Mildura (351 miles, the State's longest country main line), and at Ararat to Portland, the Western District's new port (250½ miles).

The Gippsland line is electrified as far as Traralgon (97½ miles), and thence is diesel operated to Bairnsdale (171 miles). The goods service, also diesel operated, is continued through to Orbost (231 miles). Lines branch from Dandenong to Nyora and from there to Wonthaggi (86 miles) and Yarram (136 miles) in South Gippsland.

Other main lines are Melbourne-Bendigo (101 miles, known as the "main line") from where lines branch further north; and Melbourne-Geelong (45 miles), continuing to Warrnambool (166 miles) and to Port Fairy (186½ miles).

Main types of rolling stock and services

Diesel-electric locomotives, the S class and X class (1,800-2,200 hp) and B class (1,600 hp), haul Victorian Railways fast passenger and freight trains. The T class (950-1,050 hp) diesel-electric locomotive is mainly a freight train operator, but it also hauls selected passenger trains. The Y class (650-750 hp) diesel-electric locomotive hauls branch line freight trains and is also used on freight yard work. The W class (650 hp) diesel-hydraulic locomotive and the F class (350 hp) diesel-electric are almost exclusively used on shunting and transfer work. In addition, five H class (1,050 hp) hump shunting diesel-electric locomotives have been brought into service. The L class (2,400 hp) electric locomotive hauls passenger and freight trains on the Gippsland line, Victoria's longest electrified track. Country passenger train services are supplemented by 102 hp, 153 hp, and 280 hp diesel, and 260 hp diesel-electric rail-cars.

Modern multiple-unit saloon type suburban electric trains are progressively replacing obsolete swing-door compartment type trains on the

suburban electric service. Most carriages on interstate and many on mainline country trains are of steel construction and air-conditioned, but a number of excursion and corridor compartment-type, non air-conditioned carriages of wooden construction are also used for country passenger traffic.

Freight wagons are of the fixed wheel or bogie types. They include many types of wagons and vans, up to 57 ton capacity, and a wide variety of specially designed wagons to carry loads ranging up to 170 tons.

New metropolitan trains

The first of Melbourne's new fluted stainless steel trains are expected to enter service in 1972. Based on a Japanese design, the trains will be built in Australia at a cost of \$30m. The new trains incorporate many of the latest developments in urban transport including heating, ventilation, tinted windows, improved seating, better braking, ride, and acceleration, and self locking doors. The trains are less prone to vandalism and will be easier and cheaper to maintain.

Although only six carriages will be used on the new trains (compared with seven or eight in the Harris trains) 1,500 passengers per train can be carried in peak hour—200 more than in the Harris trains.

The cost of the trains is being met by normal railway loan allocations with provision in the purchasing programme for delivery of more than the required five trains per year should more money become available.

Melbourne yard modernisation

Victorian Railways new Melbourne Yard and Freight Terminal was commissioned in December 1970. Built at a cost of \$14m and working around the clock, the yard is capable of handling up to 5,000 wagons a day compared with 2,500 under the old system. It is returning 10 per cent on capital invested.

It incorporates Australia's first automated hump shunting and was built on the site of an outdated gravitation yard that had existed since the early 1900s. With the new yard working smoothly, inward freight received overnight is in unloading areas early in the morning. Freight loaded out of Melbourne or passing through the yard is dispatched on the first available train.

The terminal was rebuilt from 1964 to 1970 and during the period traffic was kept moving without delays.

Suburban tracks

Victoria's first section of 5 ft 3 inch gauge suburban line, from Flinders Street Station to Sandridge (now Port Melbourne), was completed in 1854 for Australia's first train. Construction of other lines was as follows: Flinders Street to St Kilda (1857); Footscray to Williamstown (1859); Princes Bridge to Hawthorn, Richmond to Brighton Beach (1859 to 1861); Melbourne to Essendon (1860); Essendon to Broadmeadows (1872); South Yarra to Dandenong (1877 to 1879); Caulfield to Frankston (1881-82); Hawthorn to Lilydale (1882); Brighton Beach to Sandringham (1887); North Melbourne to Somerton (1884 to 1889); Collingwood to Heidelberg (1888); Ringwood to Upper Ferntree Gully, Clifton Hill to Preston (1889); Burnley to Darling and Camberwell to Ashburton (1890); Princes Bridge to Collingwood (1901); Heidelberg to Eltham (1902);

Eltham to Hurstbridge (1912) ; Darling to Glen Waverley (1929–30) ; Ashburton to Alamein (reconditioned and reopened in 1948) ; Fawkner to Upfield (reopened in 1959) ; Upper Ferntree Gully to Belgrave (converted to broad gauge and electrified in 1962) ; and Lalor to Epping (reopened in 1964).

Australia's first electric train ran from Newmarket to Flemington Race-course on Sunday 6 October 1918. However, electric traction for passengers did not start until the following year.

The line from Essendon to Sandringham was the first converted from steam to electric traction, and on 15 April 1923 the electrification of Melbourne suburban railways, as originally planned, was completed. Since then electric traction has been extended to several sections of the outer suburban area. Victoria, which was first with the steam train, was also first with electric traction in Australia.

Passenger and goods traffic, fares, and freight rates

The general conditions under which goods and livestock are carried by rail are published in the Goods Rates Book, and for rating purposes goods are classified alphabetically into twenty main class rates, while special rates are provided for livestock. Relatively low rates are applicable to agricultural produce and concessions are provided for country industries. Competitive freight contract rates to meet road transport activities operate in the main Victorian country towns, particularly those close to the borders where road competition is intense. Special rates, under agreement with forwarding agents and manufacturers, provide for the transport of goods interstate in specified wagon-loads and also for the carriage of goods in various containers including flexi-vans.

Most of the passenger revenue is derived from the operation of the suburban electrified service ; traffic on this has fallen slightly in recent years. However, additional trains are needed to handle a growing long distance peak period load. In 1946 the number of trains used for peak service was 109 ; in 1969 it was 138. Following elimination of break of gauge at Albury for passenger trains since April 1962, a significant gain has been recorded in passenger traffic between Melbourne and Sydney, and interstate passenger business generally has been active. Introduction of air-conditioned carriages on several country lines in recent years has also resulted in improved services. The ordinary fares are competitive and attractive concessions are available, e.g., to students travelling on vacation, and party travel.

Parcels sent by passenger trains are a large revenue earner.

Standardisation of gauge in Australian network

The track mileage of the standard gauge line between Melbourne and Albury, including loops, departmental sidings, and dual gauge, but not including private sidings, is 243 miles.

Linking of Sydney with Perth by an all standard gauge route through Broken Hill has not been to the disadvantage of Victoria. Melbourne consignors have direct access to the Sydney standard gauge line connecting with every station in New South Wales and with Brisbane, and to the broad gauge line to Adelaide, connecting with practically every important

centre of population in South Australia. These connections give direct rail access to about three quarters of the population of Australia.

Bogie exchange

The standard gauge line from Wodonga to Melbourne provided Melbourne consignors with direct access to the standard gauge network and every station in New South Wales. However, a considerable tonnage of Victorian and overland broad gauge traffic consigned to areas in New South Wales or to Brisbane still required transshipment at either Albury or Melbourne.

The exchange of bogies, introduced in Australia by the Victorian Railways, is now an essential part of interstate railway operations. It has enabled loaded rail wagons to travel over different gauge lines and eliminated the manual transfer of goods from one wagon to another at break of gauge terminals. Bogies can be changed under a loaded vehicle in much less time than that taken for transshipping goods from one wagon to another. The two bogie exchange centres in Victoria at South Dynon and Wodonga handled 39,448 vehicles for the year ended 30 June 1970. With bogie exchange, the tonnage of overland traffic handled in Victoria increased steadily and is now very much greater than that handled in 1962.

Mechanised track maintenance

Using modern mechanised techniques, the Victorian Railways continually maintain and re-lay their railway tracks for passenger and freight traffic. Track maintenance and renewals constitute one of the larger railway budget items, the cost in 1969-70 being \$13.3m.

During the year about 161 miles of track in country districts and 5 miles in the metropolitan area were relaid with heavier rail. Points and crossings were renewed at various locations, using a total of 188 sets of points and 392 crossings.

Further references, 1964-1971

The following tables relate to the State railways and road motor services under the control of the Victorian Railways Commissioners. Certain border railways in New South Wales are, by agreement between the Victorian and New South Wales Governments, under the control of the Victorian Railways Commissioners. Particulars of these have been included with those of the State railways being operated within Victoria. Details of the operations of the road motor services are shown on page 724.

Loan liability and interest

The face value of stock and bonds allocated to the Railways Department, as reduced in accordance with the *Railways (Finances Adjustment) Act* 1936, amounted to \$430.2m at 30 June 1970. After deducting the value of securities purchased from the National Debt Sinking Fund and cancelled (\$62.1m), the net liability on current loans outstanding at that date was \$368.2m.

The total liability of the State for railways construction, etc., at 30 June 1970 (which includes the liability referred to in the previous paragraph) was \$492.2m. Deduction of securities purchased from the National Debt Sinking Fund and cancelled (\$86.4m) together with cash at credit in the Fund (\$1.0m) reduced the amount outstanding at the end of the year to a net liability of \$404.8m.

The *Railways (Funds) Act* 1961 provided that interest and other charges on moneys borrowed for the purposes of the *Railways Act* 1958 should not henceforth be included in the accounts of the Victorian Railways, but would be charged against the revenues of the State. However, the *Railways (Funds) Act* 1964 reimposed on the Railways, with effect from 1 July 1964, the obligation to pay interest and debt charges on moneys borrowed for the purposes of the *Railways Act* 1958 on and after 1 July 1960. The total annual interest payable on the liability of \$404.8m at 30 June 1970 amounted to \$20.2m at an average rate of 5.001 per cent. Of this amount, the Victorian Railways are liable for \$7.9m. In addition, the State is required to pay a contribution of \$3.9m at a rate of 4.5 per cent on cancelled securities.

Additional funds, which amounted to \$55.6m at 30 June 1970, have been provided for railway construction, equipment, stores, etc., out of Consolidated Revenue, the Uniform Railway Gauge Trust Fund, and other funds. No interest is charged against railway revenue on these amounts, with the exception that interest, at 5 per cent, is payable to the Commonwealth on the repayable principal amount outstanding in respect of expenditure on the uniform gauge. (See page 621 of the *Victorian Year Book* 1966.)

Capital cost of railways and equipment

The capital cost of all lines constructed and in course of construction, and of all works, rolling stock, and equipment of the Railway Department as at 30 June of each of the five years 1966 to 1970 is shown in the following table :

VICTORIA—TOTAL CAPITAL COST OF
RAILWAYS, ETC.: EQUIPMENT AND ROLLING STOCK
(\$'000)

At 30 June—	Railways		Road motor services	Total capital cost (a)
	Lines open	Lines in process of construction		
1966	332,956	2,693	61	335,710
1967	345,813	389	45	346,247
1968	357,135	120	36	357,291
1969	368,036	426	28	368,490
1970	377,939	432	20	378,391

(a) Written down in accordance with *Railways (Finances Adjustment) Act* 1936, and allowing for depreciation since 1 July 1937. Particulars are exclusive of the cost of stores and materials on hand and in course of manufacture.

At 30 June 1970 the capital cost of rolling stock, after being written down in accordance with the *Railways (Finances Adjustment) Act* 1936, and allowing for depreciation was : \$101.5m broad gauge, \$10,661 narrow gauge, and \$5.8m uniform gauge.

Railway staff

The number of officers and employees in the Railways Service (including casual labour and butty-gang workers) and the amount of salaries and wages (including travelling and incidental expenses) paid in each of the five financial years 1965–66 to 1969–70 are shown in the following table :

VICTORIA—RAILWAYS STAFF: NUMBERS, SALARIES, ETC.

Period	Number of employees at end of year			Salaries, wages, and travelling expenses
	Permanent	Supernumerary and casual	Total	
1965-66	16,158	11,473	27,631	\$'000 77,980
1966-67	15,704	11,038	26,742	79,464
1967-68	15,422	11,989	27,411	82,862
1968-69	15,179	11,197	26,376	87,529
1969-70	14,588	11,709	26,297	93,415

Railways rolling stock

The following table provides a description of the various types of rolling stock in service (exclusive of road motor rolling stock) for each of the years 1965-66 to 1969-70:

VICTORIA—RAILWAYS ROLLING STOCK IN SERVICE (EXCLUDING ROAD MOTOR SERVICES)

Rolling stock in service	1965-66	1966-67	1967-68	1968-69	1969-70
Locomotives—					
Steam	181	132	50	72	45
Electric	35	35	35	35	35
Diesel electric	185	199	220	237	240
Other (a)	85	87	90	90	33
Total	486	453	395	434	353
Passenger coaches—					
Electric suburban	1,089	1,116	1,113	1,110	1,104
Other (b)	698	675	659	659	637
Total	1,787	1,791	1,772	1,769	1,741
Goods stock (c)	21,914	21,725	21,489	21,374	21,133
Service stock	1,659	1,625	1,625	1,625	1,619

(a) Other locomotives comprise diesel hydraulic locomotives, cranes, rail motor diesel power units, and non-passenger carrying rail tractors.

(b) Passenger coaches owned jointly with New South Wales and South Australia have been included.

(c) All parcels and brake vans and standard gauge stock have been included.

Railways route mileage

The route mileage of the railways (exclusive of road motor service route mileage) for each of the years 1965-66 to 1969-70 is given in the following table.

It should be noted that the Victorian Railways operate certain services in New South Wales. At 30 June 1970 the total length of these services was 204 route miles. This distance is included in the single track broad gauge section of the table.

VICTORIA—RAILWAYS ROUTE MILEAGE (EXCLUDING ROAD MOTOR SERVICES)

(route miles)

Lines open for traffic	1965-66	1966-67	1967-68	1968-69	1969-70
Single track —Broad gauge (a)	3,671	3,711	3,694	3,648	3,637
Narrow gauge	8	8	8	8	8
Double track —Broad gauge (a)	431	431	433	440	440
Other multi-track—Broad gauge (a)	78	79	80	80	80
Total route mileage	4,188	4,230	4,215	4,176	4,165

(a) Broad gauge refers to 5 ft 3 in and 4 ft 8½ in gauge track.

Railways traffic

The traffic of the railways (exclusive of road motor traffic) for each of the years 1965-66 to 1969-70 is shown in the table below :

VICTORIA—RAILWAYS TRAFFIC (EXCLUDING ROAD MOTOR SERVICES)

Traffic		1965-66	1966-67	1967-68	1968-69	1969-70
Traffic train mileage—Country	'000	4,738	4,798	4,833	4,741	4,738
Suburban	'000	8,458	8,504	8,420	8,139	8,361
Goods	'000	6,949	6,733	6,633	6,809	7,445
Total	'000	20,145	20,035	19,886	19,689	20,544
Passenger journeys—Country	'000	4,793	4,674	4,535	4,078	4,000
Suburban	'000	144,332	141,593	141,733	140,788	140,309
Total	'000	149,125	146,267	146,268	144,866	144,309
Goods and livestock carried	'000 tons	12,156	12,075	11,116	11,316	11,835

The tonnage of various classes of goods and the total tonnage of livestock carried by the Victorian Railways for each of the years 1965-66 to 1969-70 are shown in the following table :

VICTORIA—RAILWAYS GOODS AND LIVESTOCK TRAFFIC
(Excluding road motor goods services)
('000 tons)

Class of goods	Quantity carried				
	1965-66	1966-67	1967-68	1968-69	1969-70
Butter	82	69	65	68	77
Grain—					
Barley	210	196	136	191	234
Wheat	2,035	1,869	1,231	1,689	1,588
Other	220	322	161	359	312
Flour	153	145	167	157	172
Bran, pollard, and sharps	53	51	50	44	57
Fruit—					
Fresh	92	86	99	83	94
Dried	74	103	72	64	54
Beer	134	140	144	137	144
Briquettes	1,571	1,487	1,416	1,028	1,203
Cement	782	807	766	765	852
Coal—					
Black	195	213	170	75	13
Brown	363	363	326	200	180
Galvanised iron	104	116	71	91	102
Iron, steel, bar rods, etc., unprepared	424	462	498	661	713
Manures	1,154	1,171	877	914	883
Motor cars and bodies	182	197	218	225	288
Petrol, benzine, etc.	133	145	165	182	313
Pulpwood	124	124	101	72	68
Pulp and paper	125	135	138	150	164
Timber	272	252	262	253	260
Wool	133	141	128	140	168
All other goods	3,303	3,322	3,520	3,489	3,602
Total goods	11,917	11,916	10,781	11,037	11,541
Total livestock	239	158	335	279	294
Grand total goods and livestock	12,156	12,075	11,116	11,316	11,835

Railways revenue and expenditure

Revenue for 1969-70 increased by \$4,528,220 compared with 1968-69. Total working expenses increased by \$7,367,356 as compared with the previous year.

Under the provisions of the *Railways (Funds) Act* 1961, an account was created in the Trust Fund and called the "Railway Equalisation Account". The Act provided for the annual appropriation out of the Consolidated Revenue and the payment into the Equalisation Account of any excess of railway income over railway operating expenses for the preceding year. Moneys standing to the credit of the Account were to be available for the purpose of supplementing railway income in the event of its falling short of railway operating expenses. The amounts paid into the Equalisation Account were \$1,840,692 for the year 1960-61, \$7,318 for 1961-62, and \$740,758 for 1963-64. To offset deficits for the years 1962-63 and 1964-65, amounts of \$419,168 and \$2,169,601, respectively, were transferred to Railway Revenue from the Equalisation Account, the latter transfer extinguishing the balance in the Account. The calculation of these amounts was based on Treasury figures (which on the income side are mainly cash records) and not on net revenue shown in the following table.

VICTORIA—RAILWAYS REVENUE AND EXPENDITURE
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
REVENUE					
Passenger, etc., business—					
Passenger fares	27,826	30,162	30,330	30,507	31,754
Parcels, mails, etc.	3,630	4,135	4,077	4,149	4,122
Other	163	88	104	103	104
Goods, etc., business—					
Goods	59,276	61,531	55,465	56,637	59,641
Livestock	1,478	1,026	1,703	1,265	1,521
Miscellaneous	692	769	637	631	607
Miscellaneous—					
Dining car and refreshment services	3,345	3,464	3,451	3,467	3,461
Rentals	1,710	1,880	2,101	2,178	2,340
Bookstalls	1,054	1,053	1,052	1,061	1,096
Advertising	211	228	234	234	246
Other	234	241	240	359	227
Total revenue	99,619	104,579	99,394	100,591	105,119
EXPENDITURE					
Working expenses—					
Way and works	19,633	19,940	20,695	22,372	23,969
Rolling stock	28,997	28,740	27,484	29,137	30,589
Traffic	32,939	34,611	35,876	37,688	40,505
Electrical engineering branch	4,563	4,427	4,494	4,425	4,683
Stores branch	1,426	1,563	1,585	1,633	1,670
Pensions	4,945	5,073	5,273	5,451	5,724
Service grants and retiring gratuities	1,173	1,146	1,116	1,146	1,401
Contributions to Railway Renewals and Replacement Fund	400	400	400	400	400
Contributions to Railway Accident and Fire Insurance Fund	1,315	1,441	1,740	2,116	1,813
Pay-roll tax	1,744	1,852	1,874	1,982	2,125
Long service leave	1,353	1,521	1,606	1,829	2,118
Other (a) (b)	2,664	2,846	3,061	3,164	3,715
Total working expenses	101,151	103,560	105,204	111,344	118,712
Net revenue	-1,532	+1,019	-5,810	-10,753	-13,593

VICTORIA—RAILWAYS REVENUE AND EXPENDITURE—*continued*
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Debt charges—					
Interest charges and expenses (b)	3,726	4,546	5,377	6,221	7,062
Exchange on interest payments and redemption	129	132	119	106	99
Contribution to National Debt Sinking Fund	176	213	251	288	330
Net result for year	—5,563	—3,872	—11,557	—17,368	—21,084
Proportion of working expenses to revenue	101.5	99.0	105.8	110.7	112.9

(a) Including interest paid to Commonwealth under Railways Standardisation Agreement, namely, 1966, \$224,898; 1967, \$220,000; 1968, \$215,103; 1969, \$210,204; and 1970, \$205,306.

(b) Including loan conversion expenses.

The gross revenue and working expenses per average mile of railway worked for each of the five years 1965-66 to 1969-70 are shown in the following table :

VICTORIA—RAILWAYS REVENUE AND EXPENDITURE PER AVERAGE
MILE OPEN (EXCLUDING ROAD MOTOR SERVICES)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Average number of miles open for traffic	4,189	4,218	4,210	4,190	4,170
Gross revenue per average mile open \$	23,765	24,777	23,594	23,992	25,193
Working expenses per average mile open \$	24,112	24,519	24,961	26,543	28,431

Road motor services

The following table gives, for each of the five years 1965-66 to 1969-70, particulars of the operations of the road motor services under the control of the Railways Commissioners :

VICTORIA—ROAD MOTOR SERVICES
(Under the control of the Railways Commissioners)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Car mileage	314,337	283,301	241,069	258,561	270,241
Passenger journeys	1,060,324	1,033,774	888,834	902,967	926,435
Gross revenue \$	68,925	70,287	62,216	62,378	65,516
Working expenses \$	145,393	136,571	119,601	128,057	153,455
Capital expenditure at end of year (less depreciation written off) \$	60,859	44,990	36,374	27,758	20,471

NOTE. The apparent discrepancy between the amount of working expenses and revenue was brought about by revenue not having received a proportion of combined rail and road services earnings, while working expenses have been charged with road motor operating cost in full.

Tramway and omnibus services

Melbourne and Metropolitan Tramways Board

The Melbourne and Metropolitan Tramways Act provides for a Board consisting of chairman, deputy chairman, and a member appointed by the Governor in Council. Subject to the direction of the Minister, the Board controls, manages, operates, and maintains the tramways of the metropolitan area, and a fleet of buses plying on routes permitted by the Transport Regulation Board.

Particulars relating to the tramway systems under the control of the Melbourne and Metropolitan Tramways Board are shown for each of the years 1965-66 to 1969-70 in the following table :

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD :
TRAMWAYS

Period	Track open at end of year		Tram mileage	Passenger journeys	Operating receipts	Operating expenses	At end of year	
	Double	Single					Rolling stock	Persons employed
	miles	miles	'000	'000	\$'000	\$'000	number	number
1965-66	134	4	16,609	140,556	14,727	15,636	693	3,786
1966-67	134	4	16,571	131,876	15,921	16,440	693	3,745
1967-68	134	3	16,480	127,575	15,628	16,604	691	3,726
1968-69	134	3	16,069	119,009	15,946	17,042	698	3,525
1969-70	134	3	15,273	110,692	16,682	17,766	(a) 698	(b) 4,159

(a) Includes 44 in reserve or idle.

(b) Includes omnibus employees. Tramways employees not available separately.

As the community grows and the use of private motor vehicles extends, passengers using public transport become fewer and this causes financial strain. Notwithstanding this, the Board has a policy of expansion and in 1961 acquired a privately owned network of buses in the rapidly developing suburbs of Box Hill, Nunawading, Ringwood, Mitcham, Doncaster, Bulleen, and Warrandyte, and extended some other services.

Details of the revenue and expenditure of the Melbourne and Metropolitan Tramways Board for the years 1966-67 to 1969-70 are shown in the following table :

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD :
REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1966-67	1967-68	1968-69	1969-70
REVENUE				
Traffic receipts	19,060	18,864	19,269	20,141
Miscellaneous operating receipts	176	176	176	176
Non-operating receipts	312	287	240	251
Total revenue	19,548	19,327	19,685	20,568
EXPENDITURE				
Traffic operation costs	9,096	9,325	9,595	9,788
Maintenance—				
Permanent way	960	903	934	970
Tramcars	2,457	2,480	2,550	2,685
Buses	765	851	921	989
Electrical equipment of lines and substations	474	526	537	594
Buildings and grounds	206	245	264	302
Electric traction energy	874	884	874	831
Fuel oil for buses	184	197	190	186
Bus licence and road tax fees	25	23	21	21
General administration and stores department costs	1,178	1,166	1,173	1,394
Pay-roll tax	346	355	367	380
Workers compensation payments	496	407	465	418
Depreciation	1,014	1,001	1,018	1,008
Non-operating expenses	65	76	96	86

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD :
REVENUE, EXPENDITURE, ETC.—*continued*

Particulars	1966-67	1967-68	1968-69	1969-70
Provisions—				
Long service leave	290	292	290	396
Retiring gratuities	527	543	486	671
Accrued sick leave	56	92	70	96
Public risk insurance	286	231	300	220
Interest on loans	1,222	1,274	1,311	1,358
Obsolescence in stores stock	8	..	..	..
Total expenditure	20,529	20,871	21,462	22,393
Net surplus (+) or deficit (—)	—981	—1,544	—1,777	—1,825
Capital outlay	1,317	938	691	695
Loan indebtedness at 30 June	23,397	23,840	24,224	24,874

In the following table, the operations of the motor omnibus systems of the Melbourne and Metropolitan Tramways Board are shown for each of the years 1965-66 to 1969-70 :

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD :
MOTOR OMNIBUS SYSTEMS

Period	Route miles	Bus mileage	Passenger journeys	Operating receipts	Operating expenses	At end of year	
						Rolling stock	Persons employed
		'000	'000	\$'000	\$'000	number	number
1965-66	123	6,763	25,120	2,871	3,809	231	828
1966-67	126	6,931	25,107	3,315	4,024	223	817
1967-68	140	7,335	25,576	3,413	4,192	233	844
1968-69	139	7,099	24,271	3,499	4,324	226	791
1969-70	139	6,923	22,353	3,635	4,540	(a) 277	(b) 4,159

(a) Includes 45 in reserve or idle.

(b) Includes tramways employees. Omnibus employees not available separately.

The following tables give an analysis of operating receipts, operating expenses, etc., for each of the five years 1965-66 to 1969-70 :

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD :
TRAMWAYS : OPERATING RECEIPTS, OPERATING EXPENSES, ETC.,
PER MILE, ETC.

Period	Operating receipts			Operating expenses		Ratio operating expenses to operating receipts
	Amount	Per vehicle mile	Per passenger	Amount	Per vehicle mile	
	\$'000	cents	cents	\$'000	cents	per cent
1965-66	14,727	88.67	10.48	15,636	94.14	106.17
1966-67	15,921	96.08	12.07	16,440	99.21	103.26
1967-68	15,628	94.83	12.25	16,604	100.75	106.25
1968-69	15,946	99.24	13.40	17,042	106.06	106.87
1969-70	16,682	109.23	15.07	17,766	116.33	106.50

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD :
MOTOR OMNIBUS SYSTEMS : OPERATING RECEIPTS, OPERATING
EXPENSES, ETC., PER MILE, ETC.

Period	Operating receipts			Operating expenses		Ratio operating expenses to operating receipts
	Amount	Per vehicle mile	Per passenger	Amount	Per vehicle mile	
	\$'000	cents	cents	\$'000	cents	per cent
1965-66	2,871	42.45	11.43	3,809	56.32	132.67
1966-67	3,315	47.83	13.20	4,024	58.06	121.39
1967-68	3,413	46.53	13.34	4,192	57.15	122.82
1968-69	3,499	49.29	14.42	4,324	60.91	123.58
1969-70	3,635	52.51	16.26	4,540	65.58	124.91

Private motor omnibus services

The following table contains particulars of the operations of Victorian private omnibus services. In addition to details of route operations, charter, school, and other special services are included. In the year 1969-70 route operations accounted for 63 per cent of total mileage travelled, while charter, school, and other special services accounted for 7, 27, and 3 per cent, respectively.

VICTORIA—PRIVATE MOTOR OMNIBUS SERVICES

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Number of vehicles	2,843	2,701	2,846	2,811	2,899
Mileage—Petrol vehicles	'000 miles 35,669	35,114	36,079	34,627	34,349
Diesel vehicles	'000 miles 16,461	16,713	19,995	20,308	22,679
Total mileage	'000 miles 52,130	51,826	56,074	54,935	57,028
Revenue	\$'000 18,476	\$'000 19,628	\$'000 21,297	\$'000 22,057	\$'000 23,721
Expenditure—					
Drivers' wages	6,068	6,273	6,904	7,270	7,974
Repairs and maintenance	2,268	2,431	2,646	2,734	2,913
Depreciation	1,887	1,910	2,062	2,045	2,181
Other	6,203	6,620	7,441	7,343	7,997
Total expenditure	16,426	17,234	19,053	19,392	21,065
Assets (a)—					
Motor vehicles	5,403	5,199	5,758	5,645	5,988
Other assets	7,081	7,444	8,120	8,609	9,671
Total assets	12,484	12,643	13,878	14,254	15,659
Liabilities (a)	4,417	4,534	5,650	5,762	6,546

(a) Incomplete. Assets and liabilities of operators engaged solely in school bus services are not available.

Tramways in provincial cities

The cities outside the metropolitan area having electric tramway systems at 30 June 1970 were : Ballarat, with 13.84 miles of lines (2.33 double and 11.51 single track) and Bendigo, with 8.64 miles of lines (2.43 double and 6.21 single track). Both of these systems were operated by the State Electricity Commission of Victoria. (See page 733 for further information.)

The traffic particulars of these lines for each of the five years 1965-66 to 1969-70 are summarised in the following table :

VICTORIA—TRAMWAYS IN PROVINCIAL CITIES

Period	Track open		Tram mileage	Passenger journeys	Traffic receipts	Operating expenses	Rolling stock	Persons employed
	Double	Single						
	miles	miles	'000	'000	\$'000	\$'000	number	number
1965-66	5	18	830	4,333	248	720	46	187
1966-67	5	18	836	3,861	282	755	48	184
1967-68	5	18	824	3,537	265	753	48	185
1968-69	5	18	828	3,237	264	744	46	174
1969-70	5	18	801	2,902	262	761	48	168

Further references, 1961-1971; Melbourne tramways 1930-1961, 1963

Motor vehicles

Registration, licences, etc.

Every motor car and motor cycle must be registered with the Chief Commissioner of Police if used on Victorian roads. All trailers (except agricultural implements and certain small trailers for private use), fore-cars, and side cars drawn by or attached to motor cars or motor cycles must also be registered.

The following is a brief summary of the annual fees applicable at 1 March 1971 in respect of the principal types of registration and for the licensing of drivers and riders :

VICTORIA—REGISTRATION AND LICENCE RATES AT 1 MARCH 1971

Type of registration or licence	Annual rate
REGISTRATION—	
Motor cycle (without trailer, etc.)	\$4.10
Motor cycle (with trailer, etc., attached)	\$6.10
Motor car (private use)	\$0.60 for each power-weight unit (a)
Motor car (private and business use)	\$0.75 for each power-weight unit (a)
Trailer (attached to motor car)	From \$2.50 each, according to the unladen weight and use
Motor car (commercial passenger vehicle) operating on a stage omnibus service or a temporary school service licence	\$15
Motor car (used for carrying passengers or goods for hire or in the course of trade)	From \$1.10 to \$1.60 for each power-weight unit (a) according to the unladen weight and the type of tyres
Motor car (constructed for the carriage of goods owned by primary producers and used solely in connection with their business)	From \$0.30 to \$1.30 for each power-weight unit (a) according to the number of wheels and the type of tyres. (When more than one motor car is so owned, the rate shall apply to one motor car only.)
Mobile crane, self-propelled (used otherwise than for lifting and towing vehicles)	\$27.10 (Unless a lower fee would otherwise have been payable.)
LICENCE—	
Driver's or rider's licence	\$12 issued for a three year period. (An additional fee of \$6 is payable by all applicants for new licences.)
Learner's permit	\$2 for motor cycles only
Instructor's licence	\$40 issued for a three year period

(a) The number of power-weight units is that number which is equal to the sum of the horsepower and the weight in hundredweights of a motor car unladen and ready for use.

NOTE. The minimum annual fee for the registration of any motor vehicle other than a motor cycle is \$12.

The following tables show, for each of the years 1965-66 to 1969-70, the number of drivers' and riders' licences in force and the total revenue received at the Motor Registration Branch of the Police Department :

VICTORIA—DRIVERS' AND RIDERS' LICENCES IN FORCE AT 30 JUNE

Type of licence	1966	1967	1968	1969	1970
Drivers'	1,227,990	1,280,459	1,337,381	1,399,903	1,464,523
Riders'	31,487	32,832	34,292	35,894	37,551
Total	1,259,477	1,313,291	1,371,673	1,435,797	1,502,074

**VICTORIA—GROSS REVENUE COLLECTED BY MOTOR
REGISTRATION BRANCH
(\$'000)**

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Registrations and tax	41,052	43,299	47,219	54,190	57,842
Drivers' licences	2,872	2,746	2,792	3,272	3,177
Other	581	612	748	764	810
Total	44,505	46,657	50,759	58,226	61,829

The following table shows the number of motor vehicles on the register by type at the end of each of the years 1955 and 1962 (motor vehicle census years), 1968, 1969, and 1970. Particulars of Commonwealth-owned vehicles with the exception of defence service vehicles are included. Tractor-type vehicles, plant, and trailers are excluded.

VICTORIA—MOTOR VEHICLES ON THE REGISTER ACCORDING TO TYPE

Type of vehicle	At 31 December—				
	1955	1962	1968	1969	1970
Cars (a)	422,543	611,496	807,028	852,365	903,247
Station wagons	5,690	69,528	173,216	184,825	194,893
Utilities	75,721	94,470	91,674	91,719	92,323
Panel vans	19,913	31,328	36,557	37,724	38,950
Trucks (b)	70,362	79,482	92,432	94,992	97,328
Omnibuses	2,580	3,409	4,365	4,625	4,962
Total (excluding motor cycles)	596,809	889,713	1,205,272	1,266,250	1,331,703
Motor cycles (c)	26,406	15,802	17,042	19,881	24,847
Grand total	623,215	905,515	1,222,314	1,286,131	1,356,550

(a) Includes ambulances and hearses.

(b) Includes trucks and truck-type vehicles, but excludes tractors, plant, and trailers.

(c) Includes motor scooters.

The following tables, giving new vehicle registrations by types and makes of vehicles, include details of Commonwealth-owned vehicles (other than those of the defence services). They are not strictly comparable with the preceding table.

**VICTORIA—REGISTRATION OF NEW MOTOR CARS AND
STATION WAGONS ACCORDING TO MAKE**

(Includes Commonwealth-owned vehicles other than those of the defence services)

Make	Motor cars (a)			Station wagons		
	1968	1969	1970	1968	1969	1970
Austin	3,567	3,057	3,268	..	1	..
B.M.W.	72	118	181	..	..	..
Chrysler	8,218	9,227	8,212	2,297	2,221	1,633
Datsun	2,822	3,385	4,274	457	247	165
Fiat	634	993	1,015	22	2	13
Ford	16,936	18,808	22,193	3,414	3,544	3,708
Hillman	2,437	2,962	2,510	297	525	443
Holden	26,230	30,167	32,172	7,675	7,505	7,371
Honda	328	530	856	1	..	..
Jaguar	220	159	305	..	..	..
M.G.	380	405	383	..	..	..
Mazda	2,413	3,254	4,014	242	278	295
Mercedes Benz	641	624	588	..	..	..
Mitsubishi	196	151	283	..	..	..
Morris	5,720	5,215	4,104	1	..	..
Peugeot	549	640	520	64	62	25
Renault	1,070	1,389	1,550	1	..	..
Toyota	7,027	6,882	7,136	532	440	381
Triumph	441	513	637	..	..	..
Volkswagen	2,688	1,952	2,506	371	498	526
Other	1,861	1,665	1,295	57	66	49
Total	84,450	92,096	98,002	15,431	15,389	14,609

(a) Includes ambulances, hearses, and cars other than sedans.

**VICTORIA—REGISTRATIONS OF NEW MOTOR VEHICLES OTHER THAN
MOTOR CARS, STATION WAGONS, AND MOTOR CYCLES
ACCORDING TO MAKE**

(Includes Commonwealth-owned vehicles other than those of the defence services)

Make	1969				1970			
	Utilities	Panel vans	Other (a)	Total	Utilities	Panel vans	Other (a)	Total
Austin	146	..	..	146	121	..	..	121
B.M.C. (b)	129	27	300	456	89	3	96	188
Bedford	2	94	1,746	1,842	3	..	1,445	1,448
Chrysler	622	..	..	622	429	1	..	430
Commer	2	50	337	389	..	33	265	298
Datsun	292	52	372	716	271	49	464	784
Dodge	268	12	680	960	320	8	642	970
Ford	1,746	752	1,417	3,915	1,865	989	1,371	4,225
Holden	3,045	1,767	..	4,812	2,979	1,866	..	4,845
International	106	26	1,448	1,580	76	25	1,563	1,664
Land Rover	237	2	38	277	293	20	31	344
Mazda	43	162	54	259	39	201	75	315
Morris (b)	..	599	..	599	..	471	..	471
Toyota	368	148	776	1,292	359	145	924	1,428
Volkswagen	87	51	707	845	53	43	783	879
Other	38	31	693	762	75	79	857	1,011
Total	7,131	3,773	8,568	19,472	6,972	3,933	8,516	19,421

(a) Other vehicles including trucks, omnibuses, milk tankers, petrol tankers, etc.

(b) Since 1 January 1969 B.M.C. includes all Austin and Morris commercial vehicles except Austin 15 hp utilities and Morris 10 hp panel vans.

Transport Regulation Board

The *Transport Regulation Act* 1932 set up a Board of Inquiry to investigate Victoria's land transport problems. The recommendations of this Board led to the constitution of the Transport Regulation Board in 1934. The Board, consisting of a chairman, a primary producers' representative, and a representative of commercial interests outside a radius of 25 miles of the G.P.O., Melbourne, is a statutory authority and, at present, derives its authority from the *Transport Regulation Act* 1958 and the *Commercial Goods Vehicles Act* 1958. The chairman of the Board is a statutory member of the Metropolitan Transportation Committee.

VICTORIA—TRANSPORT REGULATION BOARD: LICENCES ISSUED : SUMMARY OF FINANCIAL OPERATIONS

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Licences issued "as of right"—					
25 miles radius of the G.P.O. or P.O.—					
Melbourne	14,798	14,831	15,147	15,316	15,466
Ballarat	1,537	1,512	1,507	1,544	1,514
Bendigo					
Geelong					
25 miles radius of owner's place of business	6,714	6,821	6,909	6,970	6,904
Primary producers (vehicles over 2 tons load capacity)	17,080	17,414	17,313	17,522	17,705
Butter, milk, and cheese factories	708	694	546	501	428
50 miles radius of owner's place of business (vehicles up to 4 tons load capacity)	47,218	49,498	51,618	53,886	55,553
Third Schedule commodities	12,203	12,548	12,684	13,062	13,136
Approved decentralised secondary industries	679	768	799	899	969
"Discretionary" licences—					
Passenger	6,603	6,576	6,543	6,563	6,563
Temporary passenger	221	214	177	172	165
Goods (4 years)	10,995	11,582	12,518	13,357	14,208
Temporary goods	963	756	807	590	534
Goods—passenger	52	46	38	34	32
Total licences issued	119,771	123,260	126,606	130,416	133,177
Financial transactions—					
Revenue	\$'000 (a) 2,025	\$'000 2,383	\$'000 2,403	\$'000 2,511	\$'000 2,662
Expenditure (including payments to local authorities for road maintenance, comfort stations, and bus shelters)	1,636	1,860	1,990	2,172	2,452
Balance	389	523	413	339	210
Road charges collected and transferred direct to Country Roads Board	6,378	6,733	7,248	7,841	8,758
Motor boat registration fees collected and paid to Tourist Fund	179	193	219	233	254
Log book fees (b)	(b)	5	21	11	11

(a) Includes amount recouped from Country Roads Board for road charges collected.

(b) As from 15 May 1967 all collections paid to Country Roads Board.

Licences

With the exception of vehicles used exclusively on interstate trade and primary producer vehicles not exceeding 2 tons load capacity, all commercial passenger and goods vehicles are subject to the control and licensing of the Board. Licences issued fall into two broad groups.

The first group, which comprises the majority of licences in force, are issued on application and are classed "as of right" goods licences. These licences are issued at a fee fixed by legislation and confer rights clearly defined in that legislation. They confer restricted rights and are confined to commercial goods vehicles.

The second group, termed "discretionary" licences, are issued at the discretion of the Board. The legislation sets out fully the matters to be taken into consideration by the Board before granting or refusing passenger or discretionary goods licences. All licences for passenger vehicles fall into this category.

Permits

Permits are issued at the discretion of the Board to authorise temporarily the operation of a vehicle in a manner not specified in the licence. For the year ended 30 June 1970 the number of goods permits and passenger permits issued were 159,718 and 7,182, respectively.

Drivers' certificates

Commercial passenger vehicles. Every driver of a commercial passenger vehicle must possess a driver's certificate issued by the Board. This certificate is a separate authority additional to the motor car driver's licence issued by the Police. Each application for a certificate must be accompanied by a satisfactory medical and eyesight report. A medical and eyesight report is then required at three-yearly intervals, or more frequently if the holder of a certificate is subject to some disability or is over sixty years of age. If the applicant is medically acceptable, his application is forwarded to the Chief Commissioner of Police for a check and report on character, traffic record, and general suitability. Before issue of a certificate, the Board has to be satisfied that the applicant is a "fit and proper" person to drive a public service vehicle. Prospective drivers of metropolitan taxi-cabs and hire-cars must, in addition, pass a test of knowledge of the metropolitan area and a special Police driving aptitude test. Some 3,960 applications for drivers' certificates were made during 1969-70, an increase of 241 over that of the previous year. Of this total, 2,881 certificates were issued, 1,177 of these being to drive metropolitan taxi-cabs or hire-cars and 1,704 for buses and country taxi-cabs. Since the acceptance of female drivers into the taxi industry late in 1968 a total of 124 have been authorised to drive metropolitan taxis. At 30 June 1970 the 14,241 certificates on issue to drivers of commercial passenger vehicles consisted of the following types : buses 4,802 ; taxis 9,161 ; goods/passenger 239 ; temporary 39.

Tow trucks. Every driver of a tow truck must possess a driver's certificate issued by the Board before he can legally drive such a vehicle.

A certificate is issued only after the applicant's character, traffic record, and general suitability have been checked by the Police. The minimum age requirement for applicants is 21 years, although some exceptions are permitted in the case of apprentices or full-time employees of tow truck owners. At 30 June 1970 there were 2,098 certificates on issue.

Passenger fares and hiring rates

As from 1 November 1970 the Board approved omnibus fare increases in the metropolitan area and the three urban districts of Ballarat, Bendigo, and Geelong. The fares are :

Section travelled	Adult fare cents	Children's fare cents
1	10	5
2	15	9
3	18	10
Extra sections	1	Various

Taxi fare increases were approved by the Board from 13 December 1970 for the metropolitan area and the three urban districts. The rates include :

Flagfall	25 cents (including first 2/11th of a mile)
Mileage rate	22 cents (2 cents each 1/11th of a mile)
Detention	\$3.00 per hour
Service fee	15 cents per hiring made through depot
Luggage	5 cents each item carried outside passenger compartment.

Public hearings

Public hearings are designed to give all parties concerned with matters affecting the issue of discretionary licences, or those of a generally contentious nature, an opportunity to present their views to the Board. During the year ended 30 June 1971 the Board heard seventeen applications for discretionary goods licences at public hearings held at Melbourne, Maldon, and Mallacoota.

The major hearings were concerned with the transport of primary producer requirements between the Shelbourne area and Melbourne and Geelong. Although the rail line to Shelbourne had recently been closed, the Board decided that there were adequate rail services adjacent to the area that could be utilised. Others were associated with the carriage of materials and products by hire and reward carriers on behalf of country decentralised secondary industries located at Ballarat, Shepparton, Maryvale, and Colac. Except in the Shepparton and Colac cases where road authority was limited to a proportion of the traffic, these applications were granted. Another hearing concerned a general goods service between Melbourne and the Genoa-Mallacoota area. Two earlier unsuccessful approaches had been made on this basis. However, as reduced railway freights from Melbourne to the railhead had failed to arrest the transfer of traffic to interstate operators during a prolonged trial period, the area had constantly pressed for a road service, and subsequently a licence was granted.

In relation to commercial passenger vehicles, forty-nine applications for new licences or variation of existing licences were heard during the year.

In view of the Government's approval of the recommendations by the Board regarding the replacement of the electric tramway services in the urban areas of Ballarat and Bendigo, major hearings were held to determine applications for omnibus services. In the Ballarat urban area, the Board concluded that service along the tram routes could best be provided under the control of one operator. Some modifications of the existing urban bus services in Ballarat have been approved and implementation was introduced in three stages from 23 August 1971. In the case of Bendigo the operational changeovers occurred between 16 March and 17 April 1972.

The Board also introduced changes to omnibus charter policy. Following a public hearing held in June 1970, the Board extended the metropolitan omnibus charter radius from 50 miles to State-wide for an experimental period of twelve months subject to trip permit authority being obtained. In addition special service omnibuses were given an extended franchise from 15 miles to 20 miles of the G.P.O., Melbourne. This was similarly authorised experimentally for twelve months on a trip permit basis.

Board of Inquiry into Land Transport in Victoria

This Inquiry was set up by the Government in November 1970 with Sir Henry Bland constituting the Board, to inquire into, report upon, and make recommendations concerning the existing system of land transport in Victoria (with the exception of passenger transport within the areas of metropolitan Melbourne and the urban areas of Ballarat, Bendigo, and Geelong for which transportation plans have been or are being prepared) and in particular :

1. whether the existing land transport system is satisfactory to meet the needs of agriculture, commerce and industry, and the public ;
2. whether the present division of freight traffic as to area and type of goods between road and rail is desirable ;
3. whether there is duplication of existing transport services which is wasteful and, if so, how such duplication could be avoided ;
4. whether the existing system of transport regulation allows a flexible transport system which can adapt reasonably to changing conditions ;
5. what changes, if any, should be brought about in the system of transport regulation and the provision of rail services to give the most efficient transport service practicable in the public interest ; and
6. what effect any changes proposed would be likely to have on the transport industry and government finances generally.

The Board of Inquiry received written submissions from a wide variety of interested parties and also conducted a number of hearings at Melbourne and country centres. The Board's Report was presented early in 1972.

Enforcement

Enforcement action relating to the provisions of the Transport Regulation Act, the Commercial Goods Vehicles Act, and the Transport Consolidated Regulations is the responsibility of the Board's field staff comprising inspectors located at head office and at twelve regional offices. In addition, the Board assists in policing relevant provisions of the Motor Car Act and Regulations and the Road Traffic Act and Regulations. While the Board is the registering authority for motor boats, its staff does not police the regulations governing craft specifications, equipment, and behaviour of drivers; this is handled by Police and local authorities.

A brief summary of prosecutions taken before the courts under legislation mentioned above is given in the following table :

VICTORIA—TRANSPORT REGULATION BOARD :
PROSECUTIONS, 1969-70

Act or Regulations	Cases
Transport Regulation Act (Passenger)	82
Commercial Goods Vehicles Act Part I	855
Transport Consolidated Regulations 1960	515
Motor Car Act	3,248
Motor Car Regulations	582
Road Traffic Regulations	714
Police Offences Act (Summary Offences Act)	8
Justices Act	3
Drugs of Addiction and Restricted Substances Regulations	4
Total	6,011

Standards

As the licensing authority for all commercial passenger vehicles, the Board is also responsible for the safe operation and vehicle standards of licensed commercial passenger vehicles.

In the case of taxi-cabs, the Board's requirement of replacement when a car reaches four years from the date of first registration (a longer life of 6 years is conceded for large cars) has improved the standard of cars in the taxi and hire car fleet throughout the State.

The increase in permitted vehicle dimensions to a width of 8 ft 2½ inches and a length of 36 ft has enabled bus operators to cater for larger hiring parties, or alternatively to install better types of luxury seating without reducing previous seating capacities. Larger vehicles on route services are also proving useful in coping with peak demands. The tendency for some bus operators to defer replacement of vehicles, and to continue to present old buses for annual safety and roadworthiness inspection, has been checked by Board action in evaluating all vehicles over 10 years in service, and warning owners in advance when replacement will be required. The Board also requires to be notified when a replacement vehicle, new or secondhand, is intended to be purchased, and where an operator proposes any major reconstruction or "face lifting" of an existing licensed vehicle. In all these cases the Board has the right to reject the vehicle for licensing or further licensing. Powers exist under the Act and Regulations to enable the Board to cancel or refuse a licence for a vehicle classed as "unsuitable" for the purpose for which it is to be used. Safety in passenger vehicle operation is of prime concern to the Board.

During the year 6,726 passenger vehicles were inspected.

Road maintenance charges

Owners of commercial goods vehicles with a load capacity exceeding four tons are required to pay a ton-mile charge as compensation for wear

and tear caused to Victorian roads. This charge is made at a rate of 5/18ths of a cent per ton-mile, based on the tare weight of the vehicle plus 40 per cent of its load capacity. Journeys made solely in connection with the carriage of certain primary produce and livestock do not attract this charge. Vehicles operating on interstate trade are not exempt. At 30 June 1970 there were 40,335 vehicles with registered load capacities exceeding four tons.

Motor boats

The Board registers privately used motor boats not exceeding 65 ft in length. The Victoria Police, assisted by other government authorities, are responsible for the enforcement of regulations governing the operation of boats and use of equipment. At 30 June 1970 the number of motor boats on the register was 46,257.

Metropolitan Transportation Committee

The Metropolitan Transportation Committee was established by the provisions of the *Metropolitan Transportation Committee Act 1963*. The members of this Committee are the Minister of Transport (chairman); the Minister for Local Government; the chairmen of the Victorian Railways Commissioners, Melbourne and Metropolitan Tramways Board, Transport Regulation Board, Country Roads Board, Road Safety and Traffic Authority, and Melbourne and Metropolitan Board of Works; a councillor nominated by the Melbourne City Council; the Chief Planner of the Melbourne and Metropolitan Board of Works; the Director of Finance; and the Director of Transport.

The functions of the Committee are to advise the Governor in Council on any matter relating to the planning, development, and improvement of transport services within the metropolitan area, and the supervision, co-ordination, and control of the activities of the bodies concerned, and to make such inquiries as it thinks fit in that behalf.

The Act requires that no body represented on the Committee shall proceed with any major project or plan which may affect public transport provided by any other such body in the metropolitan area unless it has first been submitted to and considered by the Committee. The provision does not apply to the granting of licences or permits for public transport services.

In September 1963 the Committee commenced a comprehensive transportation study within the metropolitan area. Using the results obtained from surveys conducted during 1964 the planning group of engineers, drawn from the bodies represented on the Transportation Committee, has prepared a comprehensive plan of roads and public transport which will be needed to carry the traffic projected for the year 1985.

Further reference, 1968

Road Safety and Traffic Authority

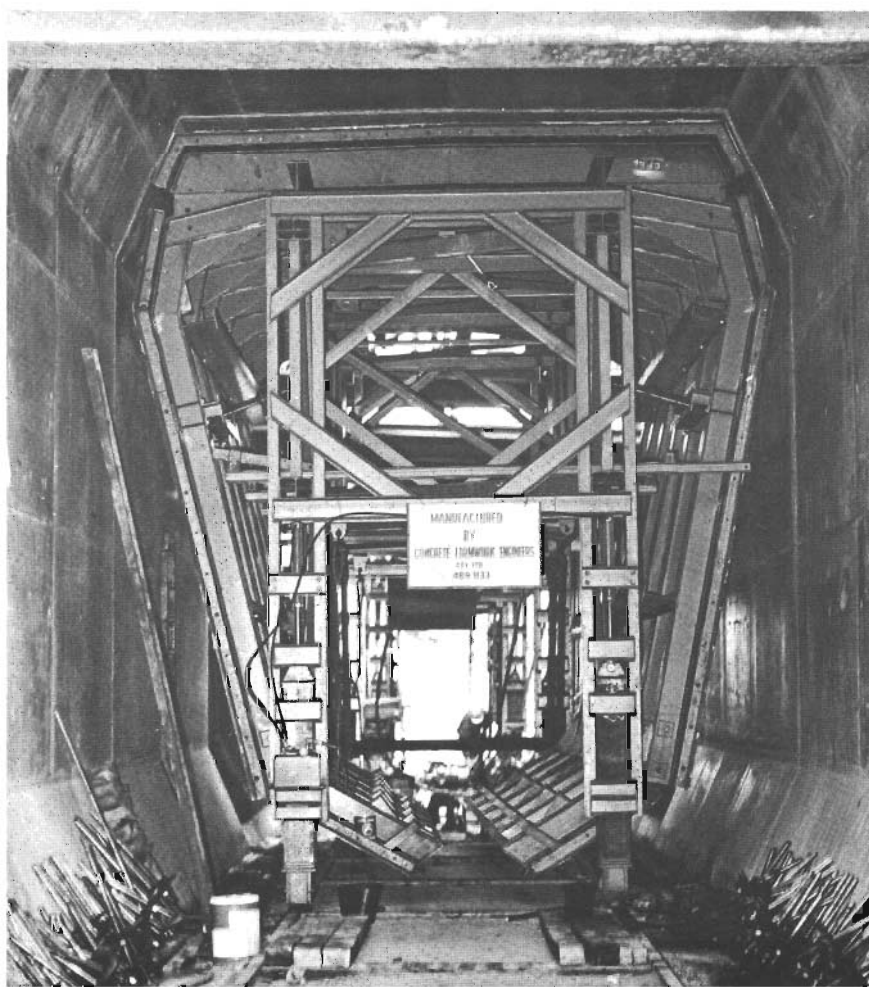
Traffic control

The Traffic Commission was constituted by the provisions of the *Road Traffic Act 1958* and before this the only legislation on traffic control was the prohibition of prescribed actions. In 1968 the results of technical experience and work done in the intervening years were consolidated in the



Construction work on Melbourne's underground railway, which was officially begun on 22 June 1971.

*Melbourne Underground Rail
Loop Authority*





Floods near Orbost in February 1971.
The Age

Flood water in Elizabeth Street, Melbourne, on 17 February 1972. The heaviest city downpour ever recorded caused extensive damage.
The Age



Road Traffic Regulations. The major changes during this period were the adoption of centre of the road turns, a realistic range of speed limits, and "signpost" legislation. Road traffic measures adopted include the development of more sophisticated traffic-signal equipment to allow for variations in the volume of traffic movement at given periods and devices such as lights, road marks, and barriers designed to influence driver behaviour. In 1970-71 about \$1.7m was spent on traffic control devices.

During the last two decades major relocations, new alignments and new freeways and roadways have been constructed; in addition, the Forests Commission, Country Roads Board, Melbourne and Metropolitan Board of Works, and park managements have constructed many new roads to provide access to new areas and cater more for tourists. A new era in metropolitan transportation began in 1960 when the South Eastern Freeway was opened. Three years later the Metropolitan Transportation Committee was established to plan the development of an integrated transport system for the Melbourne metropolitan area.

Previously matters such as parking and direction of traffic were controlled by various government regulations and municipal by-laws but the 1968 regulations vested this power in councils. More efficient enforcement of these regulations was possible with the introduction of parking tickets in 1959 and traffic tickets in 1965.

More detailed road accident data have enabled Police and traffic officials to analyse the various features associated with accidents. The Commission has worked on accident reduction projects using funds from the Commonwealth Aid Road Fund in studying major arteries in the metropolis and country. In December 1970 legislation was passed to make it compulsory to wear seat belts in cars where fitted, those cars manufactured and first registered after 1 January 1971 being required to have seat belts fitted to both front seats and rear seats.

The creation of the Road Safety and Traffic Authority which replaced the Traffic Commission in 1971 gave further impetus to the development of accident reduction measures. The new authority is responsible for research into accident prevention, advising the Minister on traffic policy, and recommending suitable regulations. It provides strong support to the Parliamentary Road Safety Committee.

Road traffic accidents

The following tables include particulars of all road traffic accidents reported by the Victoria Police during the periods specified, which satisfied the following conditions:

1. that the accident occurred on any road, street, lane, thoroughfare, footpath, or place open to or used by the public by right or custom, at the time of the accident;
2. that it involved:
 - (i) any road vehicle which, at the time of the accident, was in motion; or
 - (ii) any animal which, at the time of the accident, was in motion and was being used for the purpose of transportation or travel; or

- (iii) any train passing over a level crossing for the time being open to the public ; and
3. that the accident resulted in :
- (i) death of any person within a period of thirty days after the accident ; or
- (ii) bodily injury to any person to an extent requiring surgical or medical treatment.

The tables do not include figures of accidents on railway lines (except at level crossings), or on private property. For these and other reasons, the total number of deaths shown in these tables is not comparable with those shown on page 158.

VICTORIA—ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES :
NUMBER OF PERSONS KILLED OR INJURED

Period	Number of accidents	Persons killed	Persons injured	Per 100,000 of mean population		
				Number of accidents	Persons killed	Persons injured
1955-56	10,606	582	13,483	415	23	527
1956-57	10,804	589	14,120	411	22	538
1957-58	11,233	571	15,015	418	21	559
1958-59	12,462	661	16,784	453	24	610
1959-60	12,267	698	16,595	435	25	589
1960-61	12,140	773	16,757	420	27	579
1961-62	11,639	818	16,074	394	28	544
1962-63	12,330	803	17,149	409	27	569
1963-64	13,067	838	18,401	425	27	599
1964-65	14,432	907	20,482	460	29	653
1965-66	14,110	933	20,277	442	29	635
1966-67	14,077	963	19,994	433	30	615
1967-68	15,113	868	21,932	458	26	664
1968-69	15,622	964	22,498	466	29	670
1969-70	17,030	1,065	24,502	498	31	717

The table which follows provides a description of types of road users killed or injured in road traffic accidents occurring during the years 1967-68 to 1969-70 :

VICTORIA—ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES :
DESCRIPTION OF PERSONS KILLED OR INJURED

Description	1967-68		1968-69		1969-70	
	Killed	Injured	Killed	Injured	Killed	Injured
Drivers of motor vehicles	317	8,787	391	9,109	418	10,198
Motor cyclists	15	501	29	642	19	729
Passengers (any type)	261	9,004	289	8,997	315	9,732
Pedestrians	229	2,612	215	2,716	270	2,797
Pedal cyclists	39	979	36	991	40	1,015
Other	7	49	4	43	3	31
Total	868	21,932	964	22,498	1,065	24,502

Particulars of victims of road traffic accidents during the years 1967-68 to 1969-70 are shown according to age in the following table :

**VICTORIA—ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES :
AGE OF PERSONS KILLED OR INJURED**

Age group (years)	1967-68		1968-69		1969-70	
	Killed	Injured	Killed	Injured	Killed	Injured
Under 5	31	733	29	774	36	874
5 and under 7	15	431	15	462	16	467
7 and under 17	57	2,525	76	2,513	82	2,754
17 and under 21	147	4,698	163	4,734	191	5,088
21 and under 30	181	4,989	211	5,314	197	5,855
30 and under 40	85	2,589	102	2,627	113	2,896
40 and under 50	86	2,338	97	2,380	115	2,615
50 and under 60	90	1,655	109	1,710	107	1,788
60 and over	176	1,608	159	1,627	208	1,778
Not stated	..	366	3	357	..	387
Total	868	21,932	964	22,498	1,065	24,502

Traffic Commission, 1961-1971; Australian Road Safety Council, 1966; Lower Yarra Crossing Authority, 1971

Civil aviation

Control of aviation

The Victorian *Air Navigation Act* 1958 prescribes that control of aviation within the State shall be vested in the Commonwealth. The Air Navigation Act and Regulations in Victoria are consequently administered by the Department of Civil Aviation through its Regional Director in Melbourne.

The functions performed by the Department include the following :

1. the registration and marking of aircraft ;
2. the determination and enforcement of airworthiness requirements for aircraft and the issue of certificates of airworthiness, certificates of type approval, and supervision of aircraft design ;
3. the licensing of pilots, navigators, aircraft radio operators, flight engineers, and aircraft maintenance engineers ;
4. the licensing of airline, aerial work, and charter operators, and supervision of their activities ;
5. the provision and maintenance of aeronautical communications, navigational aids, aerodromes, and landing grounds ;
6. the establishment and operation of air traffic control, aeronautical information, and search and rescue and fire-fighting and rescue services ; and
7. the investigation of aircraft accidents, incidents, and defects.

Aerodromes

Victoria is served by ten Commonwealth Government owned aerodromes at Melbourne (international), Essendon, Moorabbin, Avalon, Bacchus Marsh, Benalla, Echuca, Mallacoota, Mangalore, and Sale and by twenty-four licensed aerodromes at Ararat, Bairnsdale, Ballarat, Birchip, Corryong, Grovedale, Hamilton, Hopetoun, Horsham, Kerang, La Trobe Valley, Mildura, Nhill, Orbost, Portland, Shepparton, St Arnaud, Stawell, Swan Hill, Warracknabeal, Warrnambool, Whittlesea, Wycheproof, and Yarram.

Domestic operations at Melbourne Airport (Tullamarine) commenced on 20 June 1971. The licences of all the licensed aerodromes except

Grovedale and Whittlesea are held by the local government authority. Under the Aerodrome Local Ownership Plan assistance is given to local authorities to maintain licensed aerodromes on a \$1 for \$1 basis. Similar assistance is given the local authority to develop and maintain aerodromes which are or will be served by a regular public transport service. Local authorities which have received developmental assistance include Bairnsdale, Corryong, Horsham, Mildura, Nhill, Portland, Shepparton, Warracknabeal, and Warrnambool. The assistance authorised by the Commonwealth to Victorian local authorities for aerodrome works in the year ending 30 June 1971 was \$10,000 for development and \$79,000 for maintenance works.

In addition to these main aerodromes, there are hundreds of authorised landing grounds which serve the needs of the increasing number of light aircraft users throughout the State.

Private operations

In this category, aircraft are used for the personal purposes of the owner. The extent of this activity within the State may be gauged from the fact that there were 285 aircraft registered in the private category and approximately 3,000 licensed private aeroplane pilots in Victoria at 31 December 1970.

Aerial work operations

Aerial survey, spotting, agricultural operations, advertising, flying training, aerial ambulance operations, and flying for government purposes are examples of the operations included in this category. In terms of hours flown, the most significant operations are agricultural (see page 311) and flying training. In 1970 over 60,000 training hours were flown by training organisations in Victoria. In the interests of encouraging flying for defence and commercial purposes, training organisations receive financial assistance from the Commonwealth. They receive direct assistance in the form of subsidy payments and provision of facilities and indirect assistance through the Australian Flying Scholarship Scheme under which, in 1970-71, sixteen Victorian resident pilots commenced flying training.

Charter operations

These consist of flights for the carriage of passengers or cargo for hire or reward, but which may not be notified to the general public as being operated between fixed terminals or to fixed schedules, or for the carriage of passengers or cargo between fixed terminals to fixed schedules in circumstances in which the accommodation in the aircraft is not available to members of the public. During the 1950s most charter operations were conducted in single engine aircraft, but there is now an increasing use of the modern small twin engine "executive" aircraft. At 31 December 1970 there were 98 Victorian based operators licensed to conduct charter operations and flying hours have increased, over a ten year period, from 2,215 in 1960 to over 35,000 in 1970.

Commuter services

Since the Second World War country or feeder air services within Victoria were commenced on different occasions but ceased when they

proved uneconomic. In 1966 the Commonwealth Government decided a new attempt should be made to provide this type of air service between the capital and numerous country centres. As it was felt charter operators would be prevented by the Air Navigation Regulations from operating to a fixed schedule, it was decided to grant certain exemptions under the Regulations. A charter operator who met appropriate additional requirements and standards would be permitted to operate air services between centres to a fixed schedule and on a regular basis.

By October 1967 exemptions under the regulations had been granted to three operators. Using single and light twin engined aircraft capable of carrying six to thirteen passengers, these operators were approved to operate services to Stawell, Ararat, Ballarat, Kerang, Swan Hill, Echuca, Shepparton, La Trobe Valley, West Sale, and Bairnsdale, and to the interstate centres of Albury and Merimbula. Some of these services commenced in November 1967 and others followed with varying degrees of success and continuity. At May 1971 commuter services of the type in question were operating between the following centres on a regular basis : Essendon-Sale, Essendon-Swan Hill, and Essendon-Merimbula on a seasonal basis.

Melbourne (Tullamarine) Airport

The Tullamarine site of 5,300 acres was chosen for the development of Melbourne Airport when Essendon could not be further enlarged. The completed aerodrome is $12\frac{1}{2}$ miles from the G.P.O. and $4\frac{1}{2}$ miles from Essendon Airport, and is accessible by a new freeway.

The $9\frac{1}{2}$ miles of runways and taxiways were completed early in 1968. The north-south runway (8,500 ft) and the east-west runway (7,500 ft) are both designed for the operation of modern jet aircraft. They are 58 inches thick, and are capable of taking the weight of the Boeing 747 ("Jumbo" jet) and supersonic aircraft. High speed turnouts have been provided to both runways which allow aircraft to turn off the runway at 60 mph. The north-south runway is being extended to 12,000 ft and is expected to be completed in 1972. There is a provision for future development of the east-west runway to extend to 9,000 ft and for a second set of parallel runways.

The present parking "aprons" provide positions adjacent to the terminal building for eight international aircraft and ten aircraft for each of the domestic airlines ; a total of 28 aircraft positions. The full planned development of the passenger terminal aprons would accommodate 16 international and 60 domestic aircraft.

The terminal has three storeys, with a central international section and two adjoining sections for the domestic airlines. The ground floor caters for passenger arrivals, the first floor for passenger departures, and the second floor accommodates airline offices, pilot briefing and operations centre, main restaurants and cocktail lounges and reception rooms. Observation decks are provided overlooking the apron area.

Each terminal has a concourse extending on to the apron area, providing a covered link between the terminal and the aircraft parking positions. The aircraft are positioned "nose in" to the concourse, and passengers embark or disembark via an adjustable aerobridge connecting the aircraft door to the concourse.

An elevated road 520 yards long runs along the face of the terminal at first floor level. It gives departing passengers direct access to the departure lounge, and facilitates the movement of passengers by separating the two streams of traffic.

Instrument landing systems are provided for approaches from the north and east enabling an aircraft to land with a cloud base of 200 ft, and visibility of half a mile. Other navigation aids are long range and approach radars, distance measuring equipment, radio locator beacons, and visual approach lights. The control tower cabin is 150 ft above ground level and enables complete visual observation of the airport and its surroundings. International air services commenced from the airport in July 1970 with domestic services following in June 1971.

Domestic passenger movements, which represent the total of embarkations and disembarkations, for 1970 for each Victorian aerodrome served by a regular service were as follows :

VICTORIA—PASSENGER MOVEMENTS, 1970

Airport	Passenger movements	Airport	Passenger movements
Essendon	2,699,013	Warrnambool	5,352
Portland	4,754	Hamilton	8,218
Mildura	14,570		

Gliding clubs

Gliding is carried out mainly by clubs which operate at Bacchus Marsh, Benalla, Colac, Horsham, and Mildura. A Commonwealth subsidy is granted to clubs through the Gliding Federation of Australia.

Air traffic control

Control of air traffic is maintained by the Department of Civil Aviation through its Air Traffic Control Organisation. This includes the closely co-ordinated sections of operational control which concerns each individual flight, airport control which applies to all movements on or within 20 miles of an aerodrome, and area control which controls aircraft along the main air routes to ensure collision avoidance. In conjunction with air traffic control, the Department maintains a wide range of air navigation aids and a comprehensive search and rescue organisation. This is described in detail on pages 773-6 of the *Victorian Year Book* 1965.

Aircraft parts and materials

There are about 142 organisations in Victoria which have been approved by the Department of Civil Aviation to distribute aircraft parts, materials, and fuel.

Civil aviation statistics

The following table shows particulars for 1970 of regular interstate and intrastate air services terminating in Victoria :

**VICTORIA—REGULAR INTERSTATE AND INTRASTATE AIR
SERVICES TERMINATING IN VICTORIA, 1970**

Particulars		Interstate	Intrastate	Total
Miles flown	'000	26,665	106	26,771
Paying passengers	'000	2,887	10	2,897
Passenger miles	'000	1,309,506	1,615	1,311,121
Freight—				
Short tons		55,948	30	55,978
Ton miles	'000	25,494	5	25,499
Mail—				
Short tons		4,863	3	4,866
Ton miles	'000	2,466	..	2,466

The first of the following tables deals with aircraft registered and licences issued by the Department of Civil Aviation in Victoria, and the second with details of Essendon Airport activities:

VICTORIA—CIVIL AVIATION

Particulars	1966	1967	1968	1969	1970
Registered aircraft owners	332	370	391	362	435
Registered aircraft	630	742	754	785	807
Student pilot licences	2,574	2,672	2,548	2,559	2,886
Private pilot licences	1,927	2,253	2,510	2,844	3,023
Commercial pilot licences	481	515	613	597	743
Airline pilot licences	501	533	535	824	893
Aircraft maintenance engineer licences	757	864	873	900	909

VICTORIA—ESSENDON AIRPORT

Particulars	1966	1967	1968	1969	1970
Domestic aircraft movements	48,243	49,939	50,066	54,192	58,860
Domestic passengers embarked	890,043	976,779	1,075,898	1,201,469	1,341,985
Domestic passengers disembarked	898,493	984,911	1,069,415	1,229,748	1,357,028
International aircraft movements	1,120	1,036	1,018	1,021	634
Passengers arriving/departing overseas	42,784	48,445	49,277	56,064	34,626

VICTORIA—MELBOURNE (TULLAMARINE) AIRPORT

Particulars	1970 (a)
International aircraft movements	1,531
International passengers embarked	34,271
International passengers disembarked	31,636

(a) International operations transferred from Essendon to Tullamarine from 1 July 1970.

History of civil aviation, 1962; Classification of flying activities, 1964; Radio aids to air navigation in Victoria, 1965; Aerial agricultural operations, 1966; Flying training in Victoria, 1967; Regular public transport, 1968; Commuter services, 1969; Radar development in the Melbourne area, 1971

COMMUNICATIONS

Postmaster-General's Department

In 1837 Mr E. J. Foster, Clerk to the Bench at the Port Phillip Settlement, was officially permitted to act as Postmaster in addition to performing his normal duties. Since then the Postmaster-General's Department in Victoria has progressed from a staff of one and a crude bark hut, to a large administration employing a staff of approximately 31,000 persons located throughout the State. The complexity of modern communications requires specialisation in activities, and, to meet these requirements, the Victorian Administration is divided into six major sectors: Postal Services Division, Engineering Division, Telecommunications Division, Personnel Branch, Supply Branch, and Finance and Accounting Branch. Each of these sectors is further divided for efficient functioning.

At 30 June 1970 there were 334 official and 1,493 non-official post offices, 725 country automatic telephone exchanges, 483 country manual exchanges, and 104 metropolitan automatic exchanges. These offices and installations ensure that departmental services are within the reach of all but the most isolated homes.

To maintain the operating staff at desirable levels, large numbers of trainees are recruited each year. In 1970, 548 technicians-in-training began their five year course, 457 at the departmental training school in Tooronga (Melbourne) and 91 at the Wendouree (Ballarat) school. Their course of training covers theory and laboratory studies in electronics including radio, television, telegraph transmission, and telephony. Trainees showing certain aptitudes during training may be trained further in specialised activities. Fifty-six linesmen-in-training commenced a one year course in 1969 at one of the training schools in Doncaster (Melbourne), Bendigo, or Wendouree. The subjects in their course include practical mathematics, science, applied electricity, magnetism, wood and metal work, aerial construction, conduits, cables, and skill with tools. In the same year, a seven months training course was provided for 105 postal clerks-in-training at the Postal Training School in Melbourne. About one third of the training period was spent under actual working conditions at various post offices.

As well as postal, telephone, and telegraphic services, the Postmaster-General's Department also provides transmitting and other technical facilities for the national broadcasting and television services. The general supervision of broadcasting stations and television stations, however, is vested in the Australian Broadcasting Control Board under the *Broadcasting and Television Act* 1942-1956, while, under the same Act, the Australian Broadcasting Commission controls the activities of the National Broadcasting Service and National Television Service.

The following information mainly describes the branches and divisions of the Australian Post Office that are associated with services directly available to the public.

Post Offices Branch

During 1969-70 new official post office buildings were opened at Altona, Apollo Bay, Caulfield East, Greensborough, Laverton, Mordialloc, Tatura, and Thomastown. Modern and attractive in appearance, yet strictly functional

and planned to meet future needs, they provide facilities for the latest mail handling techniques as well as greatly improved amenities for staff.

District Postal Managers' Seminar

A Seminar of District Postal Managers from all parts of Australia was held in Melbourne between 16 and 20 March 1970. Twenty-one District Postal Managers took part in the course. The theme of the Seminar was "The major objectives of postal service in 1970 and beyond".

Transport Branch

The Transport Branch of the Postal Services Division has a fleet of 639 vehicles and a staff of 432 persons. This figure includes 358 motor drivers who are employed largely on rostered shifts and who transport mails and clear public telephone coin boxes and street letter boxes throughout the metropolitan area. The Branch also provides a pool of sedan cars for authorised departmental staff, and undertakes the movement of bulk equipment, stores, cables, and poles by truck to specified locations.

In some areas, mails are conveyed by private contractors. There are 1,103 of these services in Victoria which operate over a total of 13,266,898 miles, at a cost of \$1.6m per annum. Most of the mail routes operated under private contract serve the more sparsely populated areas of the State.

The vehicles allotted to the Transport Branch form only a part of the total fleet of 4,109 vehicles belonging to the Department in Victoria. A large proportion of this total are vehicles allotted to the Engineering Division, and are stationed at various depots throughout the State. Many have been designed for specific duties, such as the conveyance of large drums of cable, lengthy telephone poles, or for use as mobile cranes. Others are fitted out as mobile workshops. In addition to these vehicles, the Engineering Division also employs 508 major mechanical aids, the majority of which are used for earthmoving activities. Over 1,000 small mobile units are used for various special purposes.

Telecommunications services

These services are the joint responsibility of the Engineering Division and the Telecommunications Division. The Engineering Division provides and maintains the technical facilities for telephone and telegraph services and for the national radio and television networks. It allots frequencies, monitors transmissions, and issues licences for privately operated radio services. The Telecommunications Division makes telephone and telegraph facilities available to the public, orders new services, provides customer advice, issues telephone directories, and deals with other telecommunications administrative matters.

Telephone service

Steady progress is being maintained towards providing a totally automatic telephone network throughout the State. During 1969-70 several new automatic telephone exchanges were brought into service, the largest ones being at Barwon Heads, Corryong, Port Arlington, Seymour, and Woodend.

Subscriber Trunk Dialling (S.T.D.) facilities which enable a telephone

subscriber to dial direct to distant subscribers, without the assistance of a P.M.G. operator, have continued to expand rapidly. During the year ended 30 June 1970, 346 exchanges in Victoria provided 682,373 services with access to S.T.D. Some additional centres to which S.T.D. became available during this time include Bairnsdale, Corryong, Hamilton, Kerang, Kyabram, Seymour, Shepparton, and Swan Hill.

A new type of manual assistance exchange has been installed at Wangarratta at a cost of approximately \$290,000. This modern, manually operated trunk exchange provides facilities for the connection of trunk line calls not available by S.T.D., as well as a centralised information and assistance service for telephone users over an extensive area of north-eastern Victoria. The exchange is "push button" in operation, with network access controlled by common switching equipment. It is the first of its kind in Australia, being the prototype for similar and larger installations planned for other centres, including Lonsdale (Melbourne), Newcastle, and Canberra.

A new type of aluminium public telephone cabinet has been developed, and a contract has been placed for 1,170 of these cabinets. Victoria has been allocated 790 of the new cabinets.

A further step in the decentralisation of meter recording is being undertaken with the introduction of local computing in the District Telephone Office, Sale. An "Odhner" machine is being used on a trial basis and, if successful, the procedure will be extended to the other district offices.

On 11 May 1970 a new District Telephone Office was established when Shepparton reached the status of a full district. The Shepparton District serves 11 official manual exchanges, 21 non-official offices, and over fifty automatic exchanges. The area had previously been administered by the District Telephone Manager at Benalla, with a sales office located in Shepparton.

Cumulative meter for recording votes by telephone

A "cumulative meter", which accumulates pulses from twenty recorded voice relay sets, and displays them as a running total on a single meter, has been developed in the Network Performance Division. The unit provides a telephone voting system at television transmitting station HSV7, and has now been in service there for some time, operating most reliably. Two telephone numbers (each with 20 inlets) are used, one for a "yes" vote, and the other for a "no" vote. Callers are connected to an appropriate recorded announcement, and the running total of calls (meter pulses), are fed via private lines to individual meters at HSV7 studios. Apart from the output relays and meters, the unit is fully electronic, using "resistor-transistor-logic" (RTL) digital integrated circuits. Further use of the cumulative meter facility for other television voting requirements is envisaged in the near future. It could also be used on any recorded voice service, where information about calling rates is required.

Automatic Telex

Automatic Telex is basically similar to S.T.D., but the typewritten message from the teleprinter is communicated instead of the spoken word. During 1969-70 an additional 312 Telex services were connected, bringing the total services in operation to 1,700. Victorian Telex subscribers now

have access to more than 6,430 services in Australia, and to some 100 countries overseas.

"Datel" service

There is now an increasing demand for facilities to transmit digital data for computers over telephone and telegraph lines. Known originally as "Data Transmission", the service is now called "Datel". Questions sent by teleprinter to the computer have to be converted to signals that can be "understood" by the computer. Likewise, answers have to be converted to a form that can be transmitted over the lines provided by the Department. This conversion is performed by a modulator/demodulator unit, known as a "Modem". The data can be sent over the telephone network, over private telephone or telegraph lines providing point to point circuits for the customer's exclusive use, or by means of the Telex network. All lines except those used in the Telex network are suitable for high transmission speeds.

At 30 June 1970, 108 customers were using Datel services via the telephone network, and 35 were using private lines.

Television translators

A television translator is basically a relay or booster station, designed to improve television reception in areas where reception is normally poor. The translator receives programmes from a parent television station, and re-broadcasts them on a new wave-length, and under a new call-sign. Work on a new television translator designed to serve a population of approximately 12,000 in the Nhill area commenced in April 1970. The station, ABRV9, was brought into service on 19 October 1970 with a power of 50 watts. The power was increased to 500 watts in August 1971.

Radio communication systems

During 1969-70 a number of microwave radio systems, forming part of the broadband network in Victoria, were established by the Department in various parts of the State. During September 1969 links were provided between Swan Hill and Terang, Bendigo and Shepparton, and Melbourne and Hughes Creek Hill. Bendigo and Swan Hill were linked in October 1969, and Healesville and Upper Thompson River (for the Melbourne and Metropolitan Board of Works project), Melbourne and Albury, and the Corryong network were all completed in November 1969. Radio links between Morwell and Bairnsdale, Foster and Tidal River, and Melbourne and Ararat (No. 2) were completed in December 1969. A television link was provided between Melbourne and Morwell in February 1970 and radio-telephone links were established between Albury and Corryong in March 1970 and Albury and Dederang in June 1970.

Radio communications

All civil radio communications stations are licensed and controlled by the Radio Branch of the Engineering Division, where rigid technical standards for equipment design and performance are enforced by regular inspection, by monitoring, and by frequent transmission checks.

As a member of the International Telecommunications Union, the Postmaster-General's Department in Australia observes and checks all

radio transmissions received in Australia. Results of these observations are forwarded to the International Frequency Registration Board in Geneva, Switzerland.

The Radio Branch investigates complaints from broadcast listeners and television viewers concerning interference to reception. On behalf of the Department of Shipping and Transport, its staff also inspects the radio installations aboard vessels in the ports of Melbourne and Geelong.

Revenue and expenditure

For the years prior to 1968-69 cash receipts were paid into the Commonwealth Consolidated Revenue Fund. As from 1968-69 cash receipts were paid into the Post Office Trust Account which forms part of the Trust Fund of the Commonwealth. In addition receipt classifications have been reconstituted and cannot be compared with those used previously.

In Victoria for the year 1969-70 cash receipts were \$179.0m. The collections were postal \$45.6m, telephone \$123.5m, telegraph \$3.9m, proceeds of sales \$2.1m, recoverable works \$3.8m, and international services \$0.1m.

As in the case of cash receipts, the new expenditure classifications cannot be compared with those used previously. These were cash payments made for Post Office purposes from the Commonwealth Consolidated Revenue Fund but are now made from the Post Office Trust Account.

In Victoria for the year 1969-70 cash expenditure was \$184.2m, salaries and wages were \$105.4m, materials \$51.0m, carriage of mails by contractors \$2.9m, buildings, sites, properties \$9.5m, accommodation and services \$5.5m, and other \$9.9m.

Statistics

The number of post offices and telephone offices and the number of persons employed by the Postmaster-General's Department in each of the five years 1965-66 to 1969-70 were as follows :

VICTORIA—POST OFFICES, TELEPHONE OFFICES, PERSONS EMPLOYED

Period	Number of post offices	Number of telephone offices	Persons employed					Total
			Permanent	Temporary and exempt	Semi- and non-official postmasters and staffs	Mail contractors	Other (a)	
1965-66	2,094	109	16,160	9,555	2,387	942	813	29,857
1966-67	2,044	91	16,571	9,990	2,341	1,021	812	30,735
1967-68	1,981	77	17,312	9,753	2,267	1,052	791	31,175
1968-69	1,900	63	18,081	9,124	2,159	898	782	31,044
1969-70	1,827	56	18,346	9,429	2,036	984	768	31,563

(a) Includes telephone office-keepers and part-time temporary and exempt employees.

The following table shows the total number and value of money orders and postal notes issued and paid in each of the five years 1965-66 to 1969-70 :

VICTORIA—MONEY ORDERS AND POSTAL ORDERS (a)

Period	Money Orders (b)				Postal Orders			
	Issued		Paid		Issued		Paid	
	Number	Value	Number	Value	Number	Value	Number	Value
	'000	\$'000	'000	\$'000	'000	\$'000	'000	\$'000
1965-66	3,230	107,608	2,980	107,197	3,846	3,863	4,918	4,747
1966-67	3,070	112,445	2,883	111,563	3,239	4,343	4,472	5,147
1967-68	2,763	115,739	2,573	115,197	3,303	5,484	3,410	5,330
1968-69	2,166	47,189	2,086	46,767	3,543	6,925	3,495	6,484
1969-70	1,926	38,931	1,936	37,709	3,808	8,086	3,714	7,277

(a) From 1 June 1966 Postal Orders replaced Postal Notes.

(b) These figures include Official Money Orders used in bringing to account Telephone Account Collections and War Service Homes Repayments. The practice was discontinued towards the end of 1967-68.

Of the money orders issued in 1969-70, 1,792,240 for \$37,824,138 were payable in the Commonwealth of Australia and 134,115 for \$1,106,786 in other countries. The orders paid included 1,881,773 for \$36,636,164 issued in the Commonwealth, and 53,958 for \$1,072,549 in other countries.

Particulars relating to the number of letters, etc., posted and received within Victoria during the years 1965-66 to 1969-70 are as follows :

VICTORIA—LETTERS, ETC., POSTED AND RECEIVED
('000)

Period	Letters, postcards, etc.	Registered articles (except parcels)	Newspapers and packets	Parcels (including those registered)
POSTED FOR DELIVERY WITHIN THE COMMONWEALTH				
1965-66	577,379	2,414	99,611	4,943
1966-67	604,213	2,475	104,711	5,168
1967-68	580,820	2,385	100,854	5,531
1968-69	575,773	2,307	100,878	5,473
1969-70	559,138	2,262	94,188	5,652
DISPATCHED TO AND RECEIVED FROM PLACES BEYOND THE COMMONWEALTH				
1965-66	76,393	1,062	16,102	625
1966-67	82,866	1,087	16,137	672
1967-68	83,387	1,151	15,447	705
1968-69	91,724	1,171	14,372	734
1969-70	77,142	1,249	13,860	792
TOTAL POSTED AND RECEIVED				
1965-66	653,773	3,476	115,714	5,568
1966-67	687,079	3,562	120,848	5,840
1967-68	664,207	3,536	116,301	6,236
1968-69	667,497	3,478	115,250	6,207
1969-70	636,280	3,511	104,048	6,444

The number of radio communication stations authorised in Victoria at 30 June in each of the years 1966 to 1970 is shown in the following table. Figures relate to radio communication (radio-telegraph and radio-telephone) stations only.

VICTORIA—RADIO COMMUNICATION STATIONS AUTHORISED

Class of station	1965-66	1966-67	1967-68	1968-69	1969-70
Transmitting and receiving—					
Fixed stations (a)—					
Aeronautical	4	4	4	4	4
Services with other countries	13	12	12	12	12
Other	241	216	223	226	262
Land stations (b)—					
Aeronautical	23	27	28	24	49
Base stations—					
Land mobile services	1,279	1,453	1,527	1,693	2,066
Harbour mobile services	22	21	22	23	31
Coast (c)	15	16	16	20	25
Special experimental	150	141	143	153	169
Mobile stations (d)—					
Aeronautical	362	422	449	437	512
Land mobile services	14,655	16,633	17,795	20,225	25,005
Harbour mobile services	150	159	163	178	257
Ships	473	526	626	728	914
Amateur stations	1,567	1,648	1,723	1,785	1,925
Total transmitting and receiving	18,954	21,278	22,731	25,508	31,231
Receiving only—					
Fixed stations (a)	198	197	198	199	198
Grand total	19,152	21,475	22,929	25,707	31,429

(a) Stations established at fixed locations for communication with other stations similarly established.

(b) Stations established at fixed locations for communication with mobile stations.

(c) Land stations for communication with ocean-going vessels.

(d) Equipment installed in motor vehicles and harbour vessels.

Information relating to the telephone service at the end of the years 1965-66 to 1969-70 is given below :

VICTORIA—TELEPHONE SERVICES

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Telephone exchanges	1,565	1,506	1,425	1,353	1,312
Public telephones	7,292	7,344	7,373	7,463	7,505
Services in operation	660,974	693,134	727,575	770,162	824,227
Instruments connected	904,925	957,668	1,019,603	1,080,223	1,182,149
Instruments per 1,000 of population	281.2	292.7	306.7	319.2	343.3

Broadcast and television licences in force

The number of stations licensed for broadcasting and television, and the number of holders of broadcast listeners' and television viewers' licences in Victoria at the end of the years 1965-66 to 1969-70 are shown in the following table:

**VICTORIA—NUMBER OF BROADCASTING AND TELEVISION
LICENCES IN FORCE**

Class of licence	1965-66	1966-67	1967-68	1968-69	1969-70
Broadcasting station (a)	20	20	20	20	20
Television station (b)	9	9	9	9	9
Broadcast receiver	141,639	114,778	94,982	80,685	72,051
Television receiver	87,640	92,822	96,789	73,078	107,362
Combined broadcast and television receiver	574,955	598,035	629,729	647,814	675,457
Amateur	1,567	1,648	1,723	1,785	1,925

(a) Excluding eight broadcasting stations (including three shortwave) operated by the National Broadcasting Service.

(b) Excluding eight television stations operated by the National Television Service.

Overseas Telecommunications Commission

The Overseas Telecommunications Commission (Australia) is the authority responsible for Australia's external telecommunication services by cable and radio.

The Commission was established in August 1946 under the Overseas Telecommunications Act. This Act implemented, in Australia, a recommendation of the 1945 Commonwealth Telecommunications Conference for national ownership of the external telecommunication services of the British Commonwealth countries concerned and for establishment of a representative advisory board, the Commonwealth Telecommunications Board, to co-ordinate their development.

The Commission provides telegraph, telex, phototelegraph, and, in conjunction with the Postmaster-General's Department, telephone services with overseas countries and Australian territories. Leased one-way and two-way circuits are also provided for large commercial users. In addition, it operates the Australian coastal radio services for communication with ships at sea in Australian waters and high frequency radio services in communication with ships in any part of the world. The Commission's coastal radio stations also provide certain services to a number of remote stations within Australia and its territories.

Further details of the Commission's activities may be found in the *Commonwealth Year Book*.