

TRANSPORT

MINISTRY OF TRANSPORT

The Victorian Ministry of Transport, in association with the statutory authorities under the Minister of Transport's jurisdiction, controls land transport in Victoria. Two exceptions to this situation are traffic management and vehicle registration, both of which lie within the administration of the Chief Secretary. The Ministry was established under the terms of the *Transport Act* 1951 for the purpose of securing the improvement, development, and better co-ordination of passenger and freight transportation in Victoria. As part of this responsibility, the Ministry carries out detailed investigations into all aspects of land transport and acts as the policy adviser to the Minister of Transport.

Victoria's transport authorities are responsible for the operation and maintenance of the transport system and the Ministry of Transport oversees their activities and formulates policy. Including the West Gate Bridge Authority, seven transport authorities report to the Minister of Transport.

The Victorian Railways is by far the largest Victorian transport authority, employing some 23,000 persons and operating a rail network of 6,600 kilometres. In the 1977-78 financial year, the Victorian Railways carried 97,000,000 passengers and transported about 11,000,000 tonnes of freight. Expenditure in this financial year amounted to \$333m. Late in 1972, legislation was enacted to change the governing body of the Victorian Railways from three commissioners to a Board of seven members, which has since been expanded to eight members. The Board comprises representatives from business and the Victorian Railways.

It became evident during the 1960s that the Flinders Street station area could no longer handle the demand for peak hour train travel and so the Victorian Government, after examining methods of reducing this bottleneck, decided that the best solution was to convert the central terminal into a five section complex by the construction of an underground rail loop around the central business district. When completed, the Melbourne underground rail loop will substantially enlarge the capacity of the whole Melbourne metropolitan area rail network.

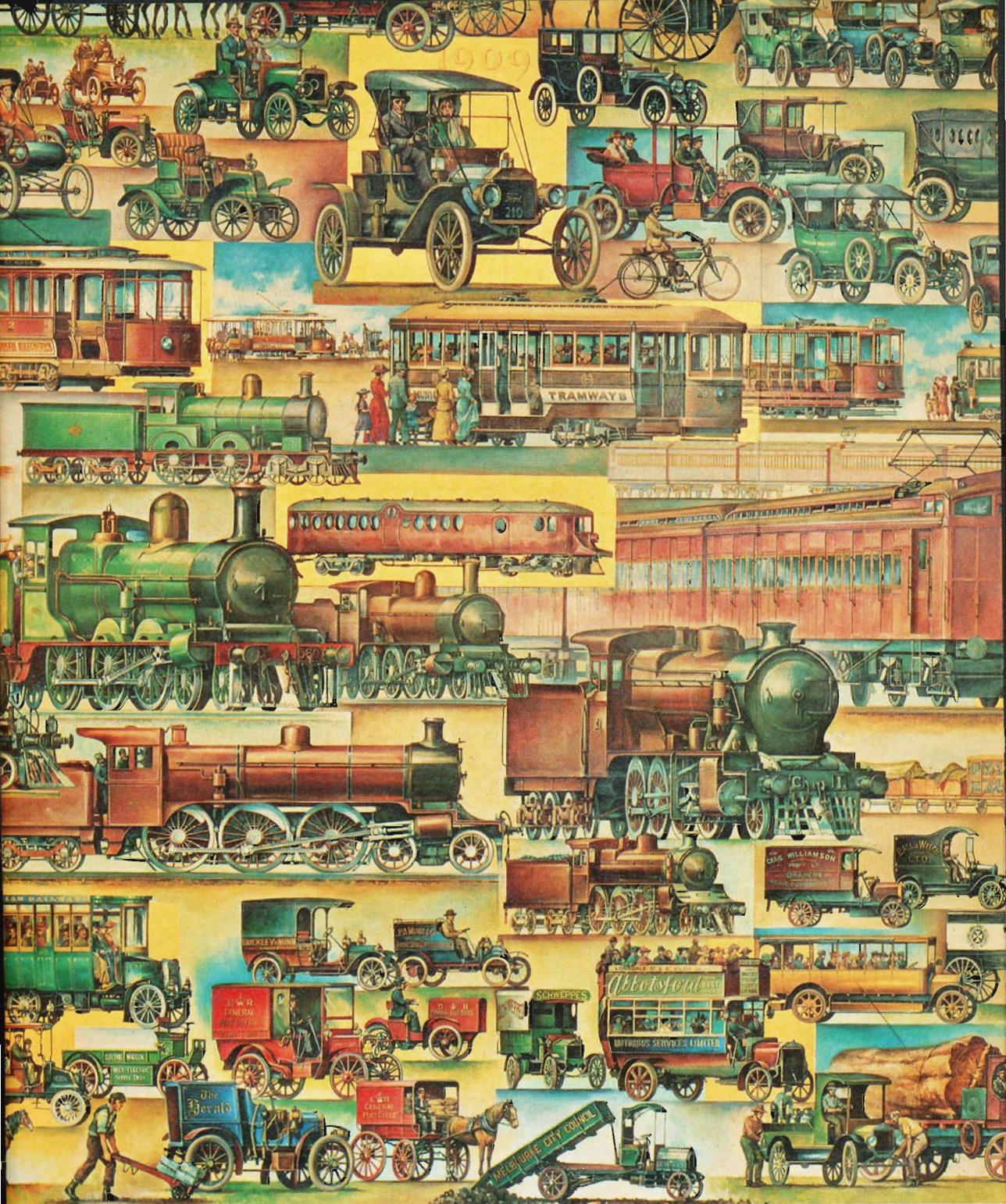
The Melbourne Underground Rail Loop Authority was created when the Melbourne Underground Rail Loop Act was proclaimed on 1 January 1971. The Authority is a corporate body comprising nine members. It is responsible for supervising and co-ordinating the planning, financing, and construction of the underground rail loop, which will comprise four new rail tracks under Spring Street and La Trobe Street, linking tracks in the existing railway system from points east of Flinders Street and Princes Bridge to points north of Spencer Street. Three new stations will be built underground and two additional tracks will be constructed between Flinders Street and Spencer Street stations. To assist in financing the underground rail loop, the Victorian Railways collects a small levy on each suburban rail journey. The balance of the funds required to complete the underground rail loop are to be provided by the Victorian Government, the Melbourne and Metropolitan Board of Works, and the Melbourne City Council.

Another railway authority which plays an important role in Victoria's transport system is the Railway Construction Board. The Railways Act prescribes that "the Board shall construct and complete all lines of railway which Parliament may hereafter authorise to be



Polly Woodside, a commercial sailing vessel launched in 1885, after her restoration by the National Trust of Australia (Victoria).

National Trust of Australia (Victoria)





One section of the mural at Spencer Street Station which covers the history of transport in Victoria from 1835 to 1935. This detailed oil painting which measures 36 metres by 9 metres was created by Harold Freedman, the Victorian State Artist, as one of a series of historical decorations designed to create an awareness of the unique history of the State.

Department of Crown Lands and Survey



(Above and below). The R. J. Hamer Forest Arboretum, a reserve of 192 hectares located in the Dandenong Ranges, where an attractive forest of native and introduced species is being developed by the Forests Commission.

Forests Commission of Victoria



constructed". The Board's major current tasks are to plan the eastern railway and supervise the construction of transport centres at Frankston and Box Hill.

Many cities around the world have abandoned their tramway systems. Melbourne, however, has retained its trams, and they have become a significant asset in moving people over comparatively short distances up to 13 kilometres from Melbourne. In fact, the Melbourne and Metropolitan Tramways Board carries more passengers than the Victorian Railways—about 121,000,000 persons in 1977–78. The board comprises three members, employs 4,700 persons, and maintains about 220 kilometres of tram services and 260 kilometres of bus services in the Melbourne metropolitan area.

A necessary part of Victoria's transport system is the operation of commercial road passenger and goods vehicles. The regulation of these functions is the responsibility of the Transport Regulation Board, which comprises three members. The regulatory pattern takes the form of a compulsory licensing system designed to meet public needs and to assist in the balanced use of transport resources.

In 1974, the Victorian Parliament passed the *Metropolitan Bridges, Highways, and Foreshores Act 1974*, thereby creating a single Victorian highway authority by transferring to the Country Roads Board the responsibility for metropolitan bridges and highways. The Country Roads Board maintains nearly 24,000 kilometres of roads and is responsible for planning and constructing new roads. The Board comprises three members and employs about 5,000 persons.

In 1964, a special Victorian Government committee recommended that a proposed crossing over the lower Yarra River should be built as a high level bridge with six traffic lanes. This recommendation was agreed to by the Victorian Government in 1965 and legislation was passed in December 1965 giving the West Gate Bridge Authority, or the Lower Yarra Crossing Authority as it was then known, the power to construct and operate a toll bridge over the lower Yarra River. Subsequent traffic estimates led the Authority to increase the number of traffic lanes from six to eight. The Authority was founded as a non-profit company limited by guarantee and is registered under the Victorian *Companies Act 1961* and administered by a chairman, deputy chairman, and seven directors.

Complementing the Victorian public transport system is an extensive privately owned bus and taxi network. With the exception of a small number of services into the central business district, Melbourne's private bus network operates on cross suburban routes linking residential areas and local shopping centres, schools, and railway stations. Private buses operate over routes covering 36,000,000 kilometres and carry about 56,000,000 passengers a year. The Victorian Government is subsidising private bus services to minimise increases in fares and providing low interest loans to facilitate the purchase of new buses.

A Metropolitan Transit Authority is to be established to co-ordinate and manage the metropolitan public transport system. The authority will have the task of ensuring that Melbourne has totally integrated public transport with a single uniform price ticket interchangeable between rail, tram, and bus.

In co-operation with Victoria's various transport authorities, the Ministry of Transport has embarked on a \$500m programme to re-equip and modernise the metropolitan transport system with the aim of providing rapid, frequent, and comfortable public transport.

Further reference: Board of Inquiry into Land Transport in Victoria, *Victorian Year Book 1975*, p. 634

LAND TRANSPORT

Railways

Introduction

The Victorian Railways system has been undergoing its first major period of rationalisation for many years. The Victorian Government decided during 1976 to close 23 uneconomic country lines. The services on these lines are being replaced by various forms of road transport, and the changes are part of a co-ordinated transport policy for Victoria.

Establishment of regional freight centres has been an important part of this policy. Freight to and from country centres is railed in bulk to the nearest regional freight centre,

and local deliveries are made by road carriers. This combines rail and road in their most efficient forms, and has given most of the State a more frequent and convenient freight service. In all, 35 of these centres were planned throughout Victoria and these were expected to be operational early in 1979.

During 1978, a further nine passenger services on branch lines were withdrawn and replaced by modern buses. As with the road carriers, these services are operated under contract to the Victorian Railways by local operators and offer faster, more comfortable travel. As a consequence there has been a substantial increase in the number of passengers.

Urban transport improvements have continued, as far as funds allow, to help the Melbourne suburban rail system meet future demand.

Administration

The Victorian Railways was established in 1856, two years after Australia's first train ran to Sandridge (now Port Melbourne), and was administered first by the Board of Land and Works, and then by either one or three commissioners. A seven-man board, since increased to eight, replaced the Commissioners in 1973. The full-time chairman is responsible to the Victorian Government through the Minister of Transport. Day-to-day matters are controlled by the general manager who is responsible to the chairman for managing the Victorian Railways within board guidelines.

Total transport service

Victoria's rail system was developed during the second half of the last century, with main lines radiating from Melbourne. Branch lines were built to serve areas which were virtually isolated. The development of road transport has meant drastic economic changes, and the twin expense of maintaining road and rail links to many centres is no longer acceptable.

The Victorian Government's decision, in September 1976, to replace uneconomic rail services with road transport not only offers the Victorian Railways significant savings, but also means improved transport services in many country areas.

The Victorian Railways first regional freight centre, which opened at Horsham in March 1976, has indicated an efficient co-ordinated freight transport system. The concept uses rail's advantage as a fast bulk carrier, linked with the flexibility of road transport for local services. Local deliveries in many country areas are now more frequent, compared with the former rail services on branch lines, yet the customer still pays the equivalent of through-rail freight rates. Some towns previously without rail freight services, such as Edenhope and Apsley, are now linked to the regional freight centre system.

There have been widespread savings in such areas as maintenance costs on branch lines, staff costs at poorly patronised stations, and the release of more than 1,000 badly needed freight wagons, as well as many locomotives for other more profitable services. More than 350 open level crossings were due to be closed. Uneconomic country passenger services on many lines have been replaced by contracted bus services, with similar advantages.

Urban transport

Co-ordinated public transport was a feature of the 1969 Melbourne Transportation Committee's plan for 1985. The Report emphasised the need for developing such projects as station car parking facilities, and tram and bus facilities at modal interchange stations to help develop the public transport network. Car parks at many suburban stations have been improved and enlarged.

The number of suburban fare zones have been reduced from 78 to 10 charge zones. Tickets were redesigned from "destination" type single tickets to "section" type single tickets. These new tickets show only the name of the selling station. This will result in substantial savings with lesser number of ticket issues and will facilitate the introduction of ticket vending machines.

Improvements to suburban services were made in most areas during 1978; they ranged from major projects such as extra tracks and modern signalling, to station rebuilding and line-side beautification. Power signalling was installed between Bayswater and Ferntree Gully. Duplication work continued between Macleod and Greensborough, Ringwood and

Croydon, and Ringwood and Bayswater. Construction of the third track between Caulfield and Mordialloc also continued.

A number of suburban stations were reconstructed during 1978. The stations were Ashburton, Bayswater, Darebin, Glen Iris, Heathmont, Lalor, McKinnon, Tooronga, and Williamstown Pier. New station buildings were constructed at Watsonia in connection with the duplication work on the track.

Another highly automated signal box at Spencer Street was brought into service late in 1978. Together with the signal box at Flinders Street it is planned to link this signal box with other signal boxes around Flinders and Spencer Streets, to a metropolitan train control system by the time the underground loop is in operation.

Rolling stock

The initial order for fifty silver trains for the suburban network has almost been completed. An interim order for a further nine trains has been placed and tenders have been called for a further fifty.

Eventually the Victorian Railways intends to replace all wooden bodied suburban trains for it has not been planned to run them through the underground loop. However, with extra demand arising from extended traffic on outer suburban lines, as well as the electrification of other lines over the next 10 years, the wooden bodied trains are unlikely to be replaced until the 1980s.

During 1978, 150 new covered vans, container wagons, and hopper wagons were constructed in Victorian Railways' workshops and entered service. These wagons are being used to carry bulk freight items such as superphosphate, briquettes, glass making sand, soda ash, and cement. A further 225 wagons were on order, and 3,590 obsolete freight wagons were withdrawn and scrapped during 1978.

In 1978, the order of ten new 3,300 h.p. "C" class diesels was completed. These diesels are now the most powerful locomotives in the possession of the Victorian Railways.

Freight

Although freight business was affected by the dry season and the strike by State Electricity Commission employees, the total tonnage carried rose from 10.9 million tonnes in 1976-77 to 11.1 million tonnes in 1977-78. The extra traffic arose from a substantial increase in the wheat traffic plus increased mining and quarry products; manufactured products and containers offset a decrease in primary products and industrial raw materials carried. The introduction of regional freight centres is rationalising operations and providing a more reliable and regular service, with less expenditure.

It has become apparent that the Victorian Railways' greatest economic advantage is in the transportation of bulk freight, where the Railways enjoy a differential advantage, and it is a main objective of Victorian Railways' policy to win more of this type of traffic.

Melbourne Underground Rail Loop Authority

In accordance with the *Melbourne Underground Rail Loop Act 1970* and amendments, the Melbourne Underground Rail Loop Authority is responsible for the supervision and co-ordination of the planning, financing, and construction of the underground rail loop and ancillary works "for the purpose of increasing the capacity and efficiency of the existing Melbourne suburban rail network". The Authority is a body corporate and comprises "not more than nine members appointed by the Governor in Council".

The loop has four underground rail tracks in separate tunnels (the Burnley, the Caulfield/Sandringham, the North Melbourne, and the Clifton Hill/city circle tracks) forming a new link (and thereby a loop and city circle) in the existing suburban rail system from east of Princes Bridge/Flinders Street station to the north of Spencer Street station, together with three new city stations (Parliament, Museum, and Flagstaff) and a new overpass structure to carry two additional elevated rail tracks between Flinders and Spencer Street stations.

The main works undertaken during 1977-78 were tunnelling and station construction in the underground portion of the loop; the commencement of finishing works and construction of sub-surface booking halls at Parliament and Museum stations; the

construction of the overpass for two additional elevated tracks between Spencer Street and Flinders Street stations; and trackwork, signalling, overhead traction wiring, and structural work associated with the connections of the underground portion of the loop to the existing surface tracks.

About 90 per cent of tunnel excavation had been completed by the end of 1978 and a significant feature was the number of tunnel drives broken through. These included two at the west end of Museum station by the largest tunnelling shield ever used in Australia with a compressed air tunnelling technique.

The transition from excavation and lining of tunnels and platform tunnels to the installation of station structures for use by future train passengers was marked by the handing over of the first platform tunnels to platform contractors and the commencement of platform installation. Progress was made in the installation of escalators at Museum station. Experimental activities included installation of station finishes at Museum station, trial track systems, noise and vibration control, and passenger information dissemination. Other construction work in hand at the end of 1978 provided for laying rail tracks and fitting out the tunnels for train running; creating pleasant, attractive, modern station finishes; establishing concourse areas, booking halls, and amenities; providing passenger and train control information systems; installing two-way, computer controlled signalling equipment; catering for the needs of the physically handicapped; and arranging station settings to merge with their environment and eventually become an integral part of planned local area development.

The first stages of operation of sections of the loop, previously programmed from December 1979, have been delayed owing to modification of the Victorian Railways new Metropolitan Train Control (METROL) building.

Finance

In 1976-77, Victorian Railways passenger income rose by \$5.8m compared with 1975-76. On the freight side revenue increased by \$8.7m compared with 1975-76.

Operational expenses

An increase of \$27.2m in expenditure was due in large measure to the effects of wage increases flowing over from the previous year or granted during 1976-77—the overall increase in wages amounted to \$20.6m. It is a paradox that railways, while being a most economical user of labour per passenger per kilometre or tonne per kilometre performed, are at the same time highly labour intensive in terms of wages as a proportion of total costs. This factor makes the railways extremely vulnerable to the financial effects of wage increases.

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 \$585.1m at 30 June 1977. After deducting the value of securities purchased from the National Debt Sinking Fund and cancelled (\$100.4m), the net liability on current loans outstanding at that date was \$484.7m.

The total liability of the State for railways construction, etc., at 30 June 1977 (which includes the liability referred to in the previous paragraph) was \$647.1m. Deduction of securities purchased from the National Debt Sinking Fund and cancelled (\$134.2m) together with cash at credit in the Fund (\$2.1m) reduced the amount outstanding at the end of the year to a net liability of \$510.8m.

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 \$510.8m at 30 June 1977 amounted to \$35.8m at an average rate of 6.977 per cent. Of this amount, the Victorian Railways are liable for \$20.2m. In addition, the State is required to pay a contribution of \$6.0m at a rate of 4.5 per cent on cancelled securities.

Additional funds, which amounted to \$92.2m at 30 June 1977, have been provided for railway construction, equipment, stores, etc., out of the Consolidated Fund, the Uniform Railway Gauge Trust Fund, the State Grants (Urban Public Transport) Trust Account, 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 Government on the repayable principal amount outstanding in respect of expenditure on the uniform gauge. (See page 621 of the *Victorian Year Book* 1966.)

Railway statistics

The following tables relate to the State railways and road motor services under the control of the Victorian Railways Board. 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 Board. 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 520.

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 Railways Department at 30 June for each of the years 1973 to 1977 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		
1973	403,158	561	19	403,738
1974	416,357	663	19	417,039
1975	442,723	1,030	19	443,772
1976	471,009	2,333	19	473,361
1977	484,954	3,979	19	488,952

(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 1976, the capital cost of rolling stock, after being written down in accordance with the *Railways (Finances Adjustment) Act* 1936, and allowing for depreciation was: \$192.6m broad gauge, \$10,661 narrow gauge, and \$4m uniform gauge.

Railways staff

The number of officers and employees in the railways (including casual labour and butty-gang workers) and the amount of salaries and wages (including travelling and incidental expenses) paid for each of the five financial years 1972-73 to 1976-77 are shown in the following table:

VICTORIA—RAILWAYS STAFF: NUMBERS, SALARIES, ETC.

Period	Average number of employees			Salaries, wages, and travelling expenses
	Salaried staff	Wages staff	Total	
				\$'000
1972-73	5,303	20,495	25,798	125,025
1973-74	5,378	19,865	25,243	153,910
1974-75	5,520	20,454	25,974	199,729
1975-76	5,363	19,735	25,098	218,609
1976-77	5,299	19,110	24,409	234,816

Railways rolling stock

The following table provides a description of the various types of rolling stock in service (exclusive of road motor rolling stock) at 30 June for each of the years 1973 to 1977:

**VICTORIA—RAILWAYS ROLLING STOCK IN SERVICE AT 30 JUNE
(EXCLUDING ROAD MOTOR SERVICES)**

Rolling stock in service	1973	1974	1975	1976	1977
Locomotives—					
Steam	26	22	19	19	17
Electric	35	35	35	35	35
Diesel electric	249	249	249	257	258
Other (a)	92	92	92	93	93
Total	402	398	395	404	403
Passenger coaches—					
Electric suburban	1,084	1,079	1,120	1,127	1,087
Other (b)	584	576	556	545	540
Total	1,668	1,655	1,676	1,672	1,627
Goods stock (c)	19,831	19,438	19,223	18,930	17,869
Service stock	1,588	1,594	1,612	1,481	1,428

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

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

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

Railways route distance

The route distance of the railways (exclusive of road motor service route distance) at 30 June for each of the years 1973 to 1977 is shown in the following table. It should be noted that the Victorian Railways operate certain services in New South Wales. At 30 June 1977, the total length of these services was 326.6 route kilometres. This distance is included in the single track broad gauge section of the following table.

**VICTORIA—RAILWAYS ROUTE DISTANCE AT 30 JUNE (EXCLUDING
ROAD MOTOR SERVICES)
(kilometres)**

Lines open for traffic	1973	1974	1975	1976	1977
Single track					
—Broad gauge (a)	5,829	5,816	5,789	5,784	5,700
—Narrow gauge	13	13	13	14	13
Double track					
—Broad gauge (a)	710	719	720	719	725
Other multi-track					
—Broad gauge (a)	135	136	136	136	140
Total route distance	6,687	6,684	6,658	6,653	6,578

(a) Broad gauge refers to 1,600 mm and 1,435 mm gauge track.

Railways traffic

The traffic of the railways (exclusive of road motor traffic) for each of the Railways for the years 1972-73 to 1976-77 are shown in the following table:

VICTORIA—RAILWAYS TRAFFIC (EXCLUDING ROAD MOTOR SERVICES)

Traffic	1972-73	1973-74	1974-75	1975-76	1976-77
Traffic train kilometres—Country	'000 7,747	7,803	7,815	7,823	7,654
Suburban	'000 13,290	13,584	14,291	14,721	14,423
Goods	'000 12,020	11,958	11,769	11,274	11,412
Total	'000 33,057	33,345	33,876	33,818	33,489
Passenger journeys—Country	'000 4,180	4,507	4,963	4,921	4,402
Suburban	'000 108,970	110,141	112,757	104,748	98,252
Total	'000 113,150	114,648	117,720	109,669	102,654
Goods and livestock carried	'000 tonnes 11,475	11,370	11,057	10,803	10,971

The tonnes carried and tonne kilometres of various classes of goods and the total tonnes carried and tonne kilometres of livestock carried by the Victorian Railways for the years 1974-75 to 1976-77 are shown in the following table:

**VICTORIA—RAILWAYS GOODS AND LIVESTOCK TRAFFIC
(EXCLUDING ROAD MOTOR GOODS SERVICES)
(’000 tonnes)**

Class of goods	Tonnes carried			Tonne kilometres		
	1974-75	1975-76	1976-77	1974-75	1975-76	1976-77
Grain—						
Barley	355	444	452	105,477	125,785	133,249
Wheat	2,021	1,866	1,837	634,888	573,989	563,780
Other	135	281	166	30,115	76,833	34,415
Flour	145	129	116	30,411	28,742	25,900
Stockfood and fodder	84	65	57	21,520	16,664	14,893
Fruit—						
Fresh	108	90	92	41,095	34,692	35,568
Dried	48	63	53	26,228	34,176	28,637
Beverages	188	172	160	46,139	41,322	38,857
Solid fuels	986	758	837	178,103	134,572	138,847
Cement	852	822	903	101,454	101,448	113,546
Mining and quarry products	334	319	512	96,605	84,140	100,298
Dairy produce	35	35	18	8,473	8,113	4,260
Milk, condensed, powdered, etc.	85	98	99	17,735	18,589	18,137
Tinplate	51	41	45	15,292	13,483	14,492
Iron, steel, and metals, unfabricated	629	635	675	163,663	191,379	213,818
Manures	470	394	593	124,277	102,605	154,264
Motor cars and accessories	267	241	233	75,248	64,351	58,123
Petroleum products	427	415	427	123,381	122,566	126,608
Paper products	226	193	203	64,435	59,815	67,669
Pipes	110	74	56	27,978	19,649	15,612
Timber	242	261	247	76,997	84,435	79,467
Wool	129	223	126	30,698	45,345	31,610
All other goods	2,875	2,829	2,755	976,962	980,895	935,359
Total goods	10,802	10,447	10,662	3,017,174	2,963,587	2,947,410
Total livestock	255	356	310	74,265	107,786	94,776
Grand total goods and livestock	11,057	10,803	10,971	3,091,439	3,071,373	3,042,186

Railways revenue and expenditure

Revenue for 1976-77 increased by \$16,227,000 compared with 1975-76. Total working expenses increased by \$29,360,000 as compared with the previous year.

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

Particulars	1972-73	1973-74	1974-75	1975-76	1976-77
REVENUE					
Passenger, etc., business—					
Passenger fares	35,971	38,343	40,283	46,662	52,417
Parcels, mails, etc.	4,515	4,885	5,736	7,049	7,336
Other	91	154	131	111	104
Goods, etc., business—					
Goods	59,937	60,057	69,653	77,687	86,282
Livestock	1,364	1,179	1,631	2,262	2,260
Miscellaneous	732	743	637	471	614
Miscellaneous—					
Dining car and refreshments services	3,808	4,369	5,418	6,116	6,891
Rentals	2,710	2,904	3,100	3,188	3,689
Bookstalls	1,139	1,263	1,434	1,515	1,576
Advertising	273	300	335	299	326

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

Particulars	1972-73	1973-74	1974-75	1975-76	1976-77
Melbourne Underground Rail Loop					
Authority special levy	899	895	922	1,395	1,833
Other	491	635	807	697	351
Total revenue	111,930	115,727	130,087	147,450	163,677
EXPENDITURE					
Working expenses—					
General expenses	138,451	166,778	215,968	237,230	261,504
Pensions	7,308	8,325	9,695	12,642	16,263
Contributions to Railway Renewals and Replacement Fund	400	400	400	400	400
Contributions to Railway Accident and Fire Insurance Fund	1,807	2,347	2,626	3,294	3,677
Pay-roll tax	4,006	6,067	8,957	10,399	10,894
Long service leave	2,621	3,036	3,786	5,696	5,501
Appropriation to Melbourne Underground Rail Loop Authority construction	899	895	922	1,395	1,833
Other (a) (b)	836	1,058	1,426	1,341	1,682
Total working expenses	156,327	188,906	243,779	272,395	301,755
Net revenue	-44,397	-73,180	-113,692	-124,945	-138,077
Debt charges—					
Interest charges and expenses (b)	10,021	10,893	12,043	13,792	16,760
Exchange on interest payments and redemption	66	44	55	57	38
Contribution to National Debt Sinking Fund	419	455	497	527	572
Net result for year	-54,903	-84,572	-126,287	-139,321	-155,448
Proportion of working expenses to revenue	per cent 139.7	per cent 163.2	per cent 187.4	per cent 184.7	per cent 184.4

(a) Including interest paid to the Commonwealth Government under the Railways Standardisation Agreement.

(b) Including loan conversion expenses.

The gross revenue and working expenses per average kilometre of railway worked for each of the years 1972-73 to 1976-77 are shown in the following table:

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

Particulars	1972-73	1973-74	1974-75	1975-76	1976-77
Average number of kilometres open for traffic	6,687	6,685	6,658	6,653	6,578
Gross revenue per average kilometre open	\$ 16,727	17,300	19,525	22,145	24,748
Working expenses per average kilometre open	\$ 23,347	28,212	36,556	40,869	45,572

Road motor services

The following table shows, for each of the years 1972-73 to 1976-77, particulars of the operations of the road motor services under the control of the Victorian Railways Board:

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

Particulars	1972-73	1973-74	1974-75	1975-76	1976-77
Bus kilometres	360,064	351,494	372,849	392,901	367,834
Passenger journeys	759,209	760,684	792,952	790,070	754,250
Gross revenue	\$ 73,832	76,047	89,302	94,781	91,673
Working expenses	\$ 207,348	307,021	385,838	455,522	522,470
Capital expenditure at end of year (less depreciation written off) (a)	\$ 19,212	19,172	19,132	19,092	19,092

(a) From 1 July 1976, rather than being applied to assets as in the past, depreciation is being charged as working expenses.

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 a chairman, a 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 operating on routes permitted by the Transport Regulation Board.

**VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD:
TRAMWAYS**

Period	Track open at end of year		Tram kilometres	Passenger journeys	Operating receipts	Operating expenses	At end of year	
	Double	Single					Rolling stock	Persons employed (a)
	kilometres	kilometres	'000	'000	'000	'000	number	number
1973-74	217	4	23,873	109,368	20,552	29,370	(b) 697	4,193
1974-75	217	4	23,840	111,077	20,916	37,176	(b) 713	4,575
1975-76	217	4	24,235	106,126	24,986	42,844	(b) 728	4,540
1976-77	217	4	24,166	102,886	26,684	47,981	(b) 747	4,624
1977-78	217	4	24,185	101,269	27,981	48,853	(b) 748	4,708

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

(b) Includes rolling stock in reserve or idle.

The Board is at present carrying out an extensive programme of improving its rolling stock. Following the completion of an initial purchase of 115 new tramcars, an order has been placed for a further 100 tramcars for delivery between 1979 and 1983. New buses are also being obtained to replace the older vehicles in the fleet and to provide for improved services.

An extension of the Burwood tramway to a new terminus at East Burwood was opened in July 1978, and preparation is being made for an extension of the East Preston tramway to Bundoora.

**VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD:
MOTOR OMNIBUS SYSTEMS**

Period	Route kilometres	Bus kilometres	Passenger journeys	Operating receipts	Operating expenses	At end of year	
						Rolling stock	Persons employed (a)
		'000	'000	'000	'000	number	number
1973-74	237	11,918	22,168	4,486	7,939	(b) 272	4,193
1974-75	242	12,027	22,658	4,555	9,941	(b) 263	4,575
1975-76	249	12,681	20,821	5,286	11,813	(b) 258	4,540
1976-77	249	12,762	20,073	5,688	13,057	(b) 259	4,624
1977-78	258	12,874	19,339	5,760	14,472	(b) 305	4,708

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

(b) Includes rolling stock in reserve or idle.

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

Particulars	1973-74	1974-75	1975-76	1976-77	1977-78
REVENUE					
Traffic receipts	24,751	25,168	29,968	32,194	33,546
Miscellaneous operating receipts	287	303	304	179	195
Non-operating receipts	293	325	418	458	551
Total revenue	25,331	25,796	30,690	32,831	34,292

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

Particulars	1973-74	1974-75	1975-76	1976-77	1977-78
EXPENDITURE					
Traffic operation costs	17,587	22,729	25,761	29,148	31,709
Maintenance—					
Permanent way	1,331	1,603	1,765	1,827	1,667
Tramcars	4,118	5,096	5,523	6,249	6,982
Buses	1,710	2,216	2,522	2,837	3,182
Electrical equipment of lines and sub-stations	945	1,237	1,429	1,498	1,511
Buildings and grounds	515	621	699	730	827
Electric traction energy	856	889	1,048	1,178	1,376
Fuel oil for buses	329	374	533	561	661
Bus licence and road tax fees	22	9	3	1	2
General administration and stores department costs	2,355	3,019	3,031	3,598	2,397
Pay-roll tax	1,174	1,721	1,967	2,191	2,281
Workers compensation payments	1,382	1,822	3,239	2,706	1,499
Depreciation	918	909	1,156	1,479	1,780
Non-operating expenses	110	147	146	186	241
Provisions—					
Long service leave	619	690	984	1,138	1,282
Retiring gratuities	1,077	1,262	1,587	1,785	2,122
Accrued sick leave	76	146	163	165	216
Public risk insurance	618	827	886	853	1,317
Interest on loans	1,678	1,947	2,361	3,094	4,441
Total expenditure	37,419	47,264	54,803	61,224	65,492
Net surplus (+) or deficit (-)	-12,088	-21,468	-24,113	-28,393	-31,201
Capital outlay	992	6,059	8,761	9,621	14,036
Loan indebtedness at 30 June	28,457	31,935	37,225	45,725	54,413

The following tables show an analysis of operating receipts, operating expenses, etc., for each of the years 1973-74 to 1977-78:

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

Period	Operating receipts			Operating expenses		Ratio operating expenses to operating receipts
	Amount	Per vehicle kilometre	Per passenger	Amount	Per vehicle kilometre	
	\$'000	cents	cents	\$'000	cents	per cent
1973-74	20,552	86.09	18.79	29,370	123.03	142.91
1974-75	20,916	87.73	18.83	37,176	155.94	r177.74
1975-76	24,986	103.10	23.54	42,844	176.79	171.47
1976-77	26,684	110.42	25.94	47,981	198.55	179.81
1977-78	27,981	115.70	27.62	50,780	209.97	181.48

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

Period	Operating receipts			Operating expenses		Ratio operating expenses to operating receipts
	Amount	Per vehicle kilometre	Per passenger	Amount	Per vehicle kilometre	
	\$'000	cents	cents	\$'000	cents	per cent
1973-74	4,486	37.64	20.24	7,939	66.61	176.97
1974-75	4,555	37.87	20.10	9,941	82.66	218.24
1975-76	5,286	41.68	25.39	11,813	93.16	223.48
1976-77	5,689	44.58	28.34	13,057	102.31	r229.51
1977-78	5,760	44.74	29.78	14,472	112.41	251.25

Private motor omnibus services

The following table shows particulars of Victorian private omnibus services, including details of route operations, charter, schools, and other special services. In the year 1976-77, route operations accounted for 49 per cent of total distance travelled, while charter, school, and other special services accounted for 19, 31, and 1 per cent, respectively.

VICTORIA—PRIVATE MOTOR OMNIBUS SERVICES

Particulars	1972-73	1973-74	1974-75	1975-76	1976-77	
	\$'000	\$'000	\$'000	\$'000	\$'000	
Number of vehicles	3,171	3,118	3,130	3,205	3,310	
Distance travelled	'000 kilometres	98,990	101,266	97,782	r99,427	103,342
	\$'000	\$'000	\$'000	\$'000	\$'000	
Revenue	32,074	35,916	45,389	52,548	61,045	
Expenditure—						
Drivers' wages	11,368	13,753	17,667	20,273	22,908	
Repairs and maintenance	3,845	4,250	5,597	6,702	7,934	
Depreciation	2,464	2,557	2,678	3,144	3,677	
Other	11,008	12,360	15,545	18,180	21,592	
Total expenditure	28,685	32,920	41,487	48,299	56,111	
Assets (a)—						
Motor vehicles	7,457	7,261	7,695	9,953	12,041	
Other assets	12,333	13,559	14,665	16,399	18,290	
Total assets	19,790	20,820	22,360	26,352	30,331	
Liabilities (a)	9,612	10,834	11,734	14,841	17,332	

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

Tramways in provincial cities

Tramway services in Ballarat and Bendigo ceased on 19 September 1971 and 16 April 1972, respectively, both being replaced by privately operated bus services. Parts of the Ballarat and Bendigo systems were re-opened during 1972 as tourist attractions operating during weekends and holidays.

Further reference: Melbourne tramways 1930-1961, *Victorian Year Book* 1963, pp. 771-2

Country Roads Board*Introduction*

The Country Roads Board, constituted under the *Country Roads Act* 1912, commenced operations in 1913.

There are about 160,000 kilometres of public roads in Victoria of which some 23,700 kilometres comprise the State's principal system of Country Roads Board declared roads. Under the provisions of the Country Roads Act the Board may, subject to the confirmation of the Governor in Council, declare any road to be a State highway, a freeway, or a main road. The Board also has power to recommend to the Governor in Council that any road be proclaimed as a tourists' road or a forest road.

The Board meets the full cost of works required to cater for the needs of through traffic on State highways, freeways, tourists' roads, and forest roads. State highways and freeways, while serving the immediate district through which they pass as arterial routes, also carry much long distance traffic. Tourists' roads and forest roads generally pass through areas where little or no rate revenue is available to the local municipality. Main roads, the construction and maintenance costs of which are partly borne by local municipal councils, form what may be described as a secondary system of important roads in Victoria. In addition, there is a vast network of unclassified roads, many of which carry considerable traffic and which, within the limits of available finance, are subsidised by the Board as needs and priorities warrant.

The Board's system of classified or declared roads at 30 June 1978 comprised 7,030 kilometres of State highways, 284 kilometres of freeways, 797 kilometres of tourists' roads, 1,031 kilometres of forest roads, and 14,555 kilometres of main roads.

State highways

Under legislation passed in 1924, a "State highway" in Victoria has a specific meaning. It is a road declared as such by the Board with the confirmation of the Governor in Council. State highways are the principal road arteries forming interstate connections and links between important provincial centres. The more important State highways also form part of the national route system of interstate highways. At 30 June 1978, there were 7,030 kilometres of State highways, 6,774 kilometres of which had a sealed surface.

National highways in Victoria

A national highway is a road or proposed road that in the opinion of the Commonwealth Department of Transport is or will be the principal road linking: (1) two or more State capitals; (2) a State capital city and Canberra; (3) a State capital city and Darwin; (4) Brisbane and Cairns; or (5) Hobart and Burnie; or a road or proposed road that should, in the opinion of the Commonwealth Department of Transport, be treated by reason of its national importance as a national highway.

The construction of national highways in Victoria is carried out by the Country Roads Board as the State's road authority. At present the Hume Highway and the Western Highway have been declared as national highways under the National Roads Act, excluding sections within the urban areas of Melbourne and Ballarat.

Long-term proposals for the Hume Highway include its development to a dual carriageway road from the outskirts of Melbourne to Wodonga. The construction of local by-passes and deviations around settlements and townships, for example, Seymour, Mangalore, Avenel, Euroa, Violet Town, Benalla, and Wangaratta will be considered. The completion of the freeway between Wallan and Broadford in mid-1976 extended the construction of dual carriageways from the outskirts of Melbourne to Seymour.

The Western Highway between Melbourne and Ballarat is being progressively developed to dual carriageway standard. Further work on the sections between Ballarat and Murray Bridge at the South Australian border is a long-term consideration. Work already commenced or completed includes the construction of a four-lane highway from the outskirts of Melbourne to west of Gordon. The completion of the by-pass of Wallace and Bungaree will provide a continuous four-lane carriageway between Melbourne and Ballarat.

Freeways

An amendment to the Country Roads Act in 1956 gave the Board power to construct by-pass roads (freeways), the first constructed being the Maltby Freeway at Werribee, opened in 1961. Since then the development of freeways by the Board has continued with the opening of the Lower Yarra Freeway; the Calder Freeway to Keilor East; the Western Freeway at Bacchus Marsh, Pentland Hills, Gordon, Ballan, and Myrniong; the Mulgrave Freeway from Forster Road, Mount Waverley, to north of Dandenong; the South Eastern Freeway; the South Gippsland Freeway; the Tullamarine Freeway; the Princes Freeway, between Moe and Morwell; sections of the Princes Freeway between Melbourne and Geelong; Mornington Peninsula Freeway between Dromana and Rosebud; Frankston Freeway; sections of the Hume Freeway between Melbourne and Seymour, and the Eastern Freeway. The Mulgrave Freeway west of Forster Road, and the West Gate Freeway in South Melbourne and Port Melbourne were under construction.

Some sections of freeway were developed from existing single carriageway State highways, while others were completely new routes adding to Victoria's total road length.

Tourists' roads

The Country Roads (Tourists' Roads) Act was passed in 1936. Under its terms, the Governor in Council, on the recommendation of the Country Roads Board, may proclaim suitable roads to be tourists' roads.

The Board constructs and maintains tourists' roads in, and leading to, places of special tourist interest in various parts of Victoria. Victoria has about 800 kilometres of proclaimed tourists' roads. The Board bears the full cost of works required to cater for the needs of through traffic, and in general, carries out the works concerned.

The Great Ocean Road is the longest tourists' road in Victoria. For 207 kilometres, the road follows the rugged south-west coast, from Torquay to Peterborough. The road was built by the Board for the Great Ocean Road Trust. The Trust's purpose was to open up the country to tourists and provide a road to connect the coastal towns. The road was built largely by returned soldiers and sailors of the First World War, and stands as a memorial to the servicemen in that war. The Great Ocean Road was completed in 1932 and proclaimed a tourists' road in 1936.

Other tourists' roads that cater for holiday travellers include the Phillip Island Road (23 kilometres) and the Wilsons Promontory Road (31 kilometres).

In winter, the tourists' roads leading to Victoria's ski resorts carry many holiday travellers and ski enthusiasts. The major ski resorts are at Mt Hotham, Mt Buller, Falls Creek, and Mt Buffalo. The tourists' roads leading to these ski resorts are the Mt Buffalo Road (39 kilometres), the Mt Buller Road (27 kilometres), Bogong High Plains Road (66 kilometres) to Falls Creek, and the Alpine Road (83 kilometres) to Mt Hotham. Each winter the Board's snow-clearing teams keep these roads open to traffic. The Donna Buang Road (34 kilometres) and the Acheron Way (35 kilometres) lead to Mt Donna Buang.

The number of people visiting the alpine resorts is increasing each year. The Board's task of maintaining the tourists' roads that lead to the State's resorts benefits both an important tourist industry and the people it serves. In winter and summer, travellers along many tourists' roads can enjoy scenic drives and take a break from driving by stopping at a roadside rest area or scenic lookout.

The Board, local councils, and other authorities have provided roadside stops with eating facilities, toilets, tables, and litter bins to give drivers and passengers an opportunity to stop in a pleasant roadside environment.

Forest roads

Forest roads proclaimed under the provisions of the Country Roads Act are situated within or adjacent to any State forest, or in areas considered by the Country Roads Board to be timbered, mountainous, or undeveloped.

The Board bears the full cost of works required to cater for the needs of through traffic, with about half the work being carried out by municipal councils on behalf of the Board.

The Board's proclaimed forest roads throughout Victoria have had an important effect on the growth of the State's timber extraction industry. Their most important use is in the transport of logs from the forest to the saw mills. About 520 kilometres of the State's 1,031 kilometres of forest roads are used for this purpose. A further 120 kilometres are used to transport sawn timber from the mills to markets. The other forest roads are used for carting local produce, posts, and firewood.

More than 90 per cent of Victoria's saw log and pulp wood production comes from State Forests under licence from the Forests Commission, and the Board's forest roads carry 28 per cent of that production. Many of the roads used for timber extraction are in isolated and mountainous areas and often become a financial burden for local councils because they earn very little rate revenue.

The Board was first given the power to declare forest roads under the *Forest Roads and Stock Routes Act 1943*. When the Country Roads Board takes over responsibility for such roads, municipalities are relieved of all the construction and maintenance costs for them. In 1977-78, Board expenditure on proclaimed forest roads was \$1.6m, but grants could only be made for the most urgent works required. Grants for forest roads are allocated on the basis of need, and work priorities are determined by the Board.

The longest forest road in the State stretches 145.5 kilometres from Heyfield to Jamieson, winding through the Great Dividing Range. It is also Victoria's busiest forest road and carries the most timber. However, the road has only been open as a continuous link between Heyfield and Jamieson since 1969 when the Board completed construction of a 16 kilometre section near Mt Skene in the Great Dividing Range. The Board spent \$385,000 on constructing this road. The Heyfield-Jamieson Road provides an additional link between Gippsland and Northern Victoria for tourist and commercial traffic as well as logging trucks.

Main roads

The Board is empowered under the Country Roads Act to declare as a main road any road which in its opinion is of sufficient importance. Main roads are generally roads linking centres of industry, commerce, or settlement. At 30 June 1978, there were 14,555 kilometres of main roads.

Rural roads

Victoria is the most densely populated State in Australia, with some 3.8 million people living in 140,600 square kilometres.

The pattern of Victoria's rural life has come to depend heavily on the rural road system. Since the development of the motor vehicle the demand placed on the road system has increased and rural commerce relies heavily on trucks using roads to carry produce to the railway yards, or directly to the ports.

On 1 January 1913, the Country Roads Act was proclaimed and after 50 years of unco-ordinated control, since the abolition of the Department of Roads and Bridges, the Act once more established a central road authority. The Victorian Government had previously allocated money for roads but with no State-wide body to co-ordinate road development, regional areas, particularly Gippsland, suffered from inequalities in the distribution of funds. When it was established in 1913, one of the first tasks of the new Country Roads Board was to evaluate the condition of roads in the Gippsland region.

There are now about 141,000 kilometres of rural public roads in Victoria (excluding public roads in the Melbourne Statistical Division, the Geelong Statistical District and the urban areas of Bendigo and Ballarat) of which some 21,800 kilometres comprise the principal rural system of Country Roads Board declared roads.

In addition to its declared roads the Board, within the limits of available finance, subsidises works carried out by municipal councils on thousands of kilometres of unclassified roads.

In 1977-78, the board spent \$102.6m on the construction (\$70.0m) and maintenance (\$32.6m) of rural roads in Victoria. Of this total \$44.2m was expended by municipal councils on rural roads from allocations made by the Board.

The State's rural roads can be divided into three systems. The rural State highways are the principal arteries forming interstate connections and link the larger centres of population in the State. State highways such as the Hume, the Western, and the Princes connect Victoria's road system to the highways of the neighbouring States of New South Wales and South Australia. The Hume Highway between Melbourne and Wodonga, and the Western Highway between Melbourne and Ballarat are progressively being upgraded to freeway standard. These highways form part of an Australia-wide national highway network. During 1977-78, the Board spent \$21m on upgrading these two highways.

The second system consists of the main roads linking centres of population with other centres or with areas of industry, commerce, or settlement. These roads provide a means for primary producers and manufacturers to move their products to the nearest railway line or highway system, and also cater for recreational traffic.

The third system could be called feeder roads, providing local access to farming or residential areas.

Each system is co-ordinated with the other to enable vehicles, either private or commercial, to move rapidly between all points in the State.

Roadside development

Roads are among the most permanent structures, and once built they cannot be considered apart from their surroundings. In recent years the board has furthered the development of what is termed the complete highway to provide a balanced combination of safety, utility, economy, and beauty. Such factors as the preservation of flora, conservation of landscape features, rehabilitation of cleared areas, and erosion control are important aspects of the Board's road design practices. Some 80,000 trees and shrubs are planted annually on declared road reserves. The Board is also developing roadside stopping places for motorists' convenience. They include rest areas with water and toilet facilities, wayside stops, scenic view points, and parking areas.

Sources of finance

The board's two main sources of finance are Commonwealth and Victorian Government funds. Funds derived from Victorian sources are:

- (1) *Motor registration fees.* Fees payable on the registration and re-registration of motor vehicles and trailers less the costs of collecting the fees (excluding metropolitan omnibus registration fees and a major proportion of registration fees paid to the Roads [Special Projects] Fund).
- (2) *Registration number plate fees.* Fees payable for the provision and/or replacement of number plates less the costs of providing the plates and collecting the fees.
- (3) *Examiners' licence fees.* Fees payable by persons licensed to conduct motor car roadworthiness examinations, less cost of collection of the fees.
- (4) *Authorised log book fees.* Fees payable for the purchase of log books less the cost of providing the books and collecting the fees.
- (5) *Learner drivers permit fees.* Seven eighths of the permit fee and the permit extension fee payable by applicants for, and/or holders of, learner driver permits, less seven eighths of the cost of collection of the fees (one eighth less one eighth cost of collection is paid to the Drivers' Licence Suspense Accounts).
- (6) *Drivers' licence testing fees.* Seven eighths of \$4.00 of the fee payable for the test of proficiency of candidates for motor car drivers' licences less seven eighths of the cost of conducting the test and collecting the fee (one eighth of \$4.00 less one eighth of the cost of collection, is paid to the Drivers' Licence Suspense Account) and the amount of each fee above \$4.00 is paid to the Consolidated Fund.
- (7) *Motor car drivers' licence fees and tractor drivers' licence fees.* One eighth of the fees payable for the issue of drivers' licences less one eighth of the cost of collecting the fees. (One half, less one half cost of collection, is paid to the Consolidated Fund; one quarter, less one quarter cost of collection, is paid to the Municipalities Assistance Fund; and one eighth, less one eighth cost of collection, is paid to the Drivers' Licence Suspense Account.)
- (8) *Motor driving instructors' appointment and testing fees.* Fees payable by candidates for motor driving instructors' licences, less cost of collection of the fees.
- (9) *Motor driving instructors' licence fees.* One quarter of the fees payable for the issue of motor driving instructors' licences less one quarter of the costs of collection of the fees. (One half, less one half cost of collection, is paid to the Consolidated Fund; and one quarter, less one quarter cost of collection, is paid to the Municipalities Assistance Fund.)
- (10) *Unregistered vehicle permit fee.* A fee for the issue of a permit to use an unregistered motor car or trailer on a highway for a period of not more than seven days, less the costs of collection of the fee.
- (11) *Proprietorship notification fee.* A fee payable with the notification by a proprietor of a motor car or trailer of repossession of the item under a hire purchase agreement, bill of sale or like instrument, less the costs of collection of the fee.
- (12) Fines imposed under the provisions of the Country Roads Act.
- (13) All moneys received under Part II of the Commercial Goods Vehicles Act (tonne-kilometre tax).
- (14) Municipal payments on account of main road works.
- (15) Any special moneys appropriated by Parliament.
- (16) Loan money.
- (17) Allocation from the Roads (Special Projects) Fund.

Moneys are also provided from Commonwealth sources. In 1977-78, receipts from the Commonwealth amounted to \$99m.

Total funds available to the Board in 1977-78 including unexpended balance of \$0.8m brought forward from 1976-77, amounted to \$224.7m.

From 1 July 1978, Commonwealth financial assistance to Victoria for roads is provided by two Commonwealth Acts; the Roads Grants Act and the Transport (Planning and Research) Act.

Receipts and expenditure

Receipts and expenditure covering the operations of the Board for each of the years 1973-74 to 1977-78 are shown in the following table:

VICTORIA—COUNTRY ROADS BOARD: RECEIPTS AND EXPENDITURE
(\$'000)

Particulars	1973-74	1974-75	1975-76	1976-77	1977-78
RECEIPTS					
Fees—Motor Car Act (less cost of collection)	37,537	41,985	50,827	60,801	75,978
Municipalities contributions—permanent works and maintenance—main roads	2,136	2,047	2,233	2,518	2,891
Commonwealth grants (a)	55,274	78,977	92,132	91,192	98,980
Roads (Special Projects) Fund	7,643	30,429	30,192	28,963	33,456
Proceeds from Commercial Goods Vehicles Act	10,359	10,038	10,132	9,968	9,818
Loans from Victorian Government	300	300	325	325	325
Grants from Victorian Government	568	772	427	638	581
Other receipts	860	1,247	1,525	1,746	1,924
Total	114,677	165,795	187,793	196,151	223,953
EXPENDITURE					
Construction, maintenance, etc., of roads and bridges	92,349	135,107	146,920	169,281	182,131
Plant purchases	1,116	1,783	1,234	1,366	2,059
Buildings, workshops, etc.	565	806	313	726	1,063
Interest and sinking fund payments	2,619	2,688	2,793	2,934	2,993
Payment to Tourist Fund	709	751	840	1,017	1,216
Payment to Transport Regulation Board	585	622	602	608	598
Payment to Traffic Authority Fund	354	375	420	508	608
Payment to Melbourne and Metropolitan Tramways Board	200	200	200	195	356
Planning and research	1,039	2,205	3,663	2,843	2,817
Management and operating expenditure (b)	16,207	21,432	23,303	24,042	29,102
Total	115,742	165,969	180,288	203,520	222,943

(a) Includes relief of unemployment grants: 1974-75, \$3,134,000; and 1975-76, \$2,202,000.

(b) Includes residual liability for loan funds under the *Metropolitan Bridges, Highways and Foreshores Act* 1974—\$371,000 in 1975-76.

Expenditure on roads and bridges

The following table summarises the total expenditure by the Country Roads Board on roads and bridges during each of the five years 1973-74 to 1977-78:

VICTORIA—COUNTRY ROADS BOARD: EXPENDITURE ON
ROADS AND BRIDGES
(\$'000)

Particulars	1973-74	1974-75	1975-76	1976-77	1977-78
State highways—					
Construction	11,385	17,165	18,871	22,712	27,594
Maintenance	7,589	9,280	12,101	13,697	14,659
Freeways—					
Construction	29,677	47,983	53,204	53,617	51,551
Maintenance	714	1,368	1,779	2,130	2,912
Main roads—					
Construction	13,535	18,029	16,633	21,150	23,031
Maintenance	6,608	8,469	10,147	11,621	12,753
Unclassified roads—					
Construction	15,061	24,169	25,020	31,877	34,690
Maintenance	4,181	4,165	4,601	6,256	7,124
Tourists' roads—					
Construction	1,032	1,032	518	1,473	1,445
Maintenance	828	1,102	1,235	1,593	1,781
Forest roads—					
Construction	370	416	475	557	687
Maintenance	540	686	867	923	930
Metropolitan bridges	—	1	2	13	—
Rail/road bridges protection	—	—	—	—	456
State Intersection Control Programme	—	333	424	305	625
Murray River bridges and punts	177	123	228	145	287
Traffic line marking	652	784	816	1,212	1,606
Total construction	71,060	108,794	114,721	131,386	138,998
Total maintenance	20,460	25,071	30,730	36,220	40,159
Total other	829	1,242	1,469	1,675	2,974
Total expenditure	92,349	135,107	146,920	169,281	182,131

Loan liability to the State

The loan liability of the Board to the Victorian Government at 30 June 1978 was \$29.5m.

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, as well as 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.

VICTORIA—REGISTRATION AND LICENCE RATES AT 1 MARCH 1978

Type of registration or licence	Annual rate
REGISTRATION	
Motor cycle	\$7.40 plus \$2.00 surcharge (a)
Motor car (private use)	\$1.10 for each power-weight unit (b) plus \$2.00 surcharge (a)
Motor car (private and business use)	\$1.35 for each power-weight unit (b) plus \$4.00 surcharge (a)
Trailer (attached to motor car)	From \$4.50 each, according to the unladen weight and use.
Motor car (commercial passenger vehicle operating on a stage omnibus service)	\$2.60 plus \$4.00 surcharge (a)
Motor car (commercial passenger vehicles) operating on a temporary school service licence	\$26.70 plus \$4.00 surcharge (a)
Motor car (used for carrying passengers or goods for hire or in the course of trade)	From \$2.10 to \$2.80 for each power-weight unit (b) according to the unladen weight plus \$4.00 surcharge (a)
Motor car (constructed for the carriage of goods, including station wagons) owned by primary producer and used solely in connection with his business	From \$0.55 to \$1.10 for each power-weight unit (b) according to the number of wheels (when more than one motor car is so owned, the rate shall apply to one motor car only) plus \$2.00 surcharge (a)
Mobile crane, self-propelled (used otherwise than for lifting and towing vehicles)	\$48.90 (unless a lower fee would otherwise have been payable) plus \$4.00 surcharge (a)
Recreation vehicle	\$3.00 for vehicle with not more than 3 wheels, in any other case \$10.00
LICENCE	
Driver's or rider's licence	\$18.00 issued for a three year period (an appointment fee of \$3.00 and testing fee of \$7.00 is payable by all applicants for new licences)
Learner's permit	\$2.00 for twelve months and \$2.00 for a three month extension, if required. Appointment and testing fees as above, are also payable
Instructor's licence	\$40.00 issued for a three year period

(a) Surcharges apply to registrations or re-registrations effected on and after 1 August 1972 and renewals due on and after that date.

(b) The number of power-weight units is that number which is equal to the sum of the horsepower and the weight in 50-kilogram units 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 \$21.50.

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

Type of licence	1973	1974	1975	1976	1977
Drivers'	1,660,454	1,801,203	1,829,298	1,888,560	1,961,382
Riders'	51,354	55,707	56,576	68,496	71,138
Total	1,711,808	1,856,910	1,885,874	1,957,056	2,032,520

The following table shows the number of motor vehicles on the register by type at 31 December 1962, at 30 September 1971 and 1976 (motor vehicle census years), and at 31 December 1977. Particulars of Commonwealth Government-owned vehicles with the exception of defence service vehicles are included. Tractor-type vehicles, plant, and trailers are excluded.

**VICTORIA—NUMBER OF MOTOR VEHICLES ON REGISTER
BY TYPE OF VEHICLE**

Type of vehicle	Census, 31 December 1962	Census, 30 September 1971 (a)	Census 30 September 1976 (a)	At 31 December 1977
Motor cars	610,974	929,477	1,222,733	1,261,157
Station wagons	69,528	201,884	233,480	237,209
Utilities	94,470	89,764	104,538	108,812
Panel vans	31,851	46,539	46,980	50,870
Trucks —				
Rigid	} 76,591	79,386	117,764	121,918
Articulated		9,417	9,766	9,740
Other truck type vehicles	2,890	3,520	4,867	5,761
Buses	3,409	5,129	7,294	8,078
Motor cycles	15,802	28,160	51,931	50,270
Total	905,515	1,393,276	1,799,353	1,853,815

(a) Revised classifications of motor vehicles were adopted for the censuses of motor vehicles at 30 September 1971 and 1976.

The principal differences between the new classification for 30 September 1971 and that at 31 December 1962 were:

- (i) Utilities and panel vans include "Light commercial type vehicles" and trucks with a carrying capacity under 1.016 tonnes, and ambulances and hearses (which were previously included under motor cars).
- (ii) "Rigid trucks" include utilities and panel vans with a carrying capacity of 1.016 tonnes and over.
- (iii) "Other truck type vehicles" consist of those truck type vehicles which are designed for purposes other than freight carrying, e.g., street flushers or fire engines. Previously, this category incorporated vehicles such as tankers and concrete agitators which are now classified as "trucks".

The 1976 Motor Vehicle Census has as its main features:

- (i) Allocation of commercial vehicles to the categories "utilities", "panel vans", or "rigid trucks" solely on the basis of the body type as recorded by the registration authority.

- (ii) The inclusion in "other truck types" of ambulances, hearses, and motorised caravans.

Direct comparisons, therefore, between the three censuses can only be made for the categories station wagons, buses, and motor cycles. However, for comparative purposes "light commercial type vehicles—open" registered at 30 September 1971 have been included in the classification utilities and "light commercial type vehicles—closed", registered at the same date, are included in the classification panel vans. Trucks and other truck types registered at 31 December 1962 have also been included under similar headings but attention is drawn to the changes in definition of those categories outlined above.

The following tables, showing new vehicle registrations by types and makes of vehicles, include details of Commonwealth Government-owned vehicles (other than those of the defence services):

**VICTORIA—REGISTRATIONS OF NEW MOTOR CARS AND
STATION WAGONS ACCORDING TO MAKE**
(Includes Commonwealth Government-owned vehicles other than those
of the defence services)

Make	Motor cars			Station wagons		
	1975-76	1976-77	1977-78	1975-76	1976-77	1977-78
Alfa Romeo	406	383	537	—	—	—
B.M.W.	331	354	503	—	—	—
Chrysler	7,740	6,992	6,586	1,455	1,726	807
Datsun	12,357	12,302	13,423	1,287	1,186	1,216
Fiat	461	430	352	—	22	62
Ford	23,490	24,106	22,745	5,332	5,212	5,588
Holden	25,052	22,885	22,659	5,309	4,936	4,391
Honda	1,692	1,763	2,453	150	276	172
Jaguar	383	417	337	—	—	—
Leyland	1,068	971	1,181	—	—	—
Mazda	6,621	5,719	5,303	1,721	1,815	1,026
Mercedes-Benz	812	898	901	—	—	—
Peugeot	717	788	488	33	73	78
Renault	1,205	1,131	610	412	323	258
Rover	147	117	68	227	259	198
Saab	125	132	82	—	—	—
Statesman	1,341	1,406	1,235	—	—	—
Subaru	332	327	290	327	572	465
Toyota	12,454	12,909	13,974	1,742	2,389	3,427
Triumph	647	747	629	—	—	—
Volkswagen	1,818	1,387	811	365	252	52
Volvo	1,540	1,269	1,144	318	385	379
Other	715	868	909	36	67	29
Total	101,454	98,301	97,220	18,714	19,493	18,148

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

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

Make	1976-77				1977-78			
	Util- ities	Panel vans	Other	Total	Util- ities	Panel vans	Other	Total
Bedford	—	62	1,014	1,076	—	30	941	971
Bedford Isuzu	—	—	315	315	—	—	332	332
Chevrolet	135	—	138	273	115	—	274	389
Chrysler	363	55	40	458	292	232	11	535
Daihatsu	162	75	154	391	233	137	183	553
Datsun	443	46	291	780	349	178	299	826
Dodge	273	6	641	920	25	—	583	608
Ford	2,135	2,763	1,348	6,246	1,882	2,415	1,331	5,628
Holden	2,008	2,383	1,229	5,620	2,115	2,168	1,372	5,655
International	11	—	1,258	1,269	—	—	1,232	1,232
Leyland	202	177	161	540	227	172	253	652
Mazda	486	565	481	1,532	411	325	638	1,374
Nissan	884	76	536	1,496	558	—	712	1,270
Suzuki	292	361	—	653	306	450	12	768
Toyota	1,698	844	2,146	4,688	1,691	644	3,273	5,608
Volkswagen	36	530	441	1,007	17	247	242	506
Other	270	9	1,008	1,287	184	169	988	1,341
Total	9,398	7,952	11,201	28,551	8,405	7,167	12,676	28,248

Transport Regulation Board

General

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 40 kilometres of the G.P.O., Melbourne, is a statutory authority originally constituted "for the purpose of securing improvement and co-ordination of means of and facilities for locomotion and transport" and for the purposes of carrying into effect the provisions of specific legislation in this field. Although by later amending legislation a Ministry of Transport was established with particular functions, the Board's functions as a licensing authority are still to channel the evolution of road transport in the interests of the most efficient use of community resources.

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

Particulars	1972-73	1973-74	1974-75	1975-76	1976-77
Licences issued "as of right"—					
40 kilometres of Melbourne	16,489	18,113	20,877	22,121	23,617
40 kilometres of Ballarat, Bendigo, or Geelong	1,667	1,869	2,176	2,413	2,636
40 kilometres of owner's place of business	7,004	7,683	9,159	10,305	10,896
Primary producers (vehicles over 2 tonnes load capacity)	17,534	17,363	17,132	17,091	16,919
Butter, milk, and cheese factories	347	420	344	577	511
80 kilometres of owner's place of business (vehicles up to 4 tonnes load capacity) (a)	58,658	47,995	34,155	32,707	32,121
State-wide rights for carriage of own goods (vehicles not exceeding 500 kilograms)	—	10,358	19,890	19,133	18,188
Third Schedule (basically perishable) commodities	13,461	12,108	10,189	9,009	8,366
Approved decentralised secondary industries	1,192	1,430	1,630	1,836	1,861
80 kilometres of Melbourne	—	318	481	559	530
80 kilometres of Portland	—	10	36	41	47
Bulk tankers—petroleum products	—	185	466	502	497

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

Particulars	1972-73	1973-74	1974-75	1975-76	1976-77
"Discretionary" licences—					
Passenger—					
Omnibuses	3,450	3,537	3,536	3,663	3,741
Taxis and hire-cars	3,464	3,531	3,572	3,563	3,570
Omnibus temporary/special	177	171	183	197	182
Goods	14,756	12,451	10,862	10,253	11,320
Goods—passenger	25	22	19	18	16
Total licences issued	138,224	137,564	134,707	133,988	135,018
Financial transactions—	\$'000	\$'000	\$'000	\$'000	\$'000
Revenue	3,125	4,510	6,296	6,932	7,996
Expenditure (including payments to local authorities for comfort stations and bus shelters)	3,231	3,900	5,218	6,212	7,214
Levy to Transport Fund	—	—	356	524	580
Balance	-106	610	722	196	202
Collections—					
Road maintenance contributions collected and transferred direct to Country Roads Board	9,745	10,362	10,039	10,133	9,969
Motor boat registration fees collected and paid to Tourist Fund	333	397	580	855	975
Log book fees	10	11	10	12	15

(a) Vehicles up to 6 tonnes load capacity after February 1974.

Licences, permits, and drivers' certificates

During the year ended 30 June 1977, the Board issued 78,373 goods permits for temporary variation of the operations of a vehicle. There were 5 new tow truck licences issued and at 30 June 1977, there were 720 licences on record. For the year ended 30 June 1977, there were 5,526 new drivers' certificates issued: 4,214 commercial passenger, 799 private omnibus, and 513 tow truck.

Buses

Commercial buses at 30 June 1977 totalled: metropolitan 1,490, urban 148 (Ballarat 40, Bendigo 31, and Geelong 77), country 1,992, touring omnibus 111, and temporary special licence, 182.

Taxis and hire-cars

Taxis and hire-cars at 30 June 1977 totalled: metropolitan 2,919, urban 201 (Ballarat 50, Bendigo 37, and Geelong 114), and country 450.

Passenger fares

At 30 June 1977, adult bus fares were 17c, 27c, and 35c, respectively, for the first three sections travelled, rising by 5c up to section 6 with a further 5c rise up to section 10, and thereafter, by various amounts.

Since 1 October 1975, there have been two tariffs operating for taxi fares. The second tariff represents a 20 per cent loading on the normal meter distance charge and applies between 9.00 p.m. and 6.00 a.m. Monday to Saturday, midday Saturday to midnight Sunday, and public holidays. Taxi fares at 1 July 1976 were 45c flagfall (including the first 90 metres on tariff 1 and the first 72 metres on tariff 2), plus 5c for each additional 180 or 144 metres for tariff 1 or tariff 2, respectively.

Goods and passenger applications

For the year ended 30 June 1977, the Board heard 3 goods and 27 passenger applications at public hearings. The majority of the applications were determined and settled without the need for a public hearing and numbered 3,697 goods and 3,471 passenger cases.

Motor boats

The Board is responsible for the registration of motor boats (under 20 metres in length) and for keeping records of ownership. Fees collected from motor boat registration totalled \$974,853 for 1976-77. These fees, less the cost of collection and administration of the Motor Boating Act, are paid into the Tourist Fund administered by the Department of State Development. At 30 June 1977, there were 83,176 motor boats registered by the Board.

Commercial freight transport

In 1976, the Victorian Government announced that transport regulation in its present form would be progressively phased out within five years; and that road and rail services should eventually operate in a competitive condition. Since that time the Board has been required to administer existing legislation so as to provide the Victorian Railways with opportunity to adjust to the changes that would occur in a more competitive environment.

A principal feature of the Victorian Railways' review has been the design of a State-wide network of regional freight centres. Nine of these centres were established and operating at the end of 1976-77.

Road distribution from regional freight centres is undertaken by private transport operators, under contract to the Victorian Railways. In most cases, the combined service is designed to operate as an overnight "to door" delivery service between Melbourne and consignees' premises in respective freight centre locations.

Passenger services

The Victorian Government provides financial assistance to operators of private bus services. The subsidy scheme was introduced in 1974 pending the results of a major study into the future of the industry and the establishment of administrative machinery necessary to implement plans of rationalisation and consolidation. The scheme provides assistance in the areas of revenue support through a direct fare subsidy, and vehicle replacement through an allocation of funds for low interest loans.

Taxi industry

In December 1976, the Board authorised a group of suburban taxis to use all metropolitan taxi ranks until 31 May 1977. A previous application for metropolitan licences by this group had been rejected by the Board after hearing the submissions of interested parties. Following a further application for metropolitan licences by the suburban group in April 1977, the subsequent objections have necessitated another public hearing in the future. Therefore, to allow time for the matter to be resolved, an extension of authority for the operators to use metropolitan ranks has been authorised.

It is hoped that the introduction of a common licence will expedite consolidation of radio depots, but the high cost of equipment necessary to effectively control large amalgamated fleets remains a major consideration.

Road maintenance charges

The owners of commercial goods vehicles with a load capacity exceeding 4.1 tonnes are required to pay a tonne-kilometre charge as compensation for wear and tear caused to Victorian roads. The total amount collected (\$144.7m since 1956) is paid to the Country Roads Board Fund—Road Maintenance Account. An amount equal to six per cent of collections is recouped to help defray the collection costs.

Road charges collected during 1976-77 amounted to \$9.969m compared with \$10.133m during 1975-76. This represents a drop of 1.6 per cent from last year's figure and can be attributed mainly to the general economic conditions.

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 its twelve regional offices. In addition, the Board is considerably involved in other

legislation which its officers are empowered to enforce, including the Motor Car Act and Regulations and the Road Traffic Act and Regulations as they relate to commercial road transport.

**VICTORIA—TRANSPORT REGULATION BOARD:
SUMMARY OF PROSECUTIONS TAKEN TO COURTS UNDER
ENFORCEMENT LEGISLATION**

Acts or Regulations	1972-73	1973-74	1974-75	1975-76	1976-77
Transport Regulation Act (Passenger)	106	125	98	127	96
Commercial Goods Vehicles Act—Part 1	755	804	1,059	1,176	1,617
Transport Consolidated Regulations 1960-1977	296	308	319	250	217
Motor Car Act	1,939	1,814	1,448	1,710	1,293
Motor Car Regulations	381	629	619	493	274
Road Traffic Regulations	499	571	531	400	202
Summary Offences Act	—	—	5	4	6
Justices Act	2	—	—	—	3
Total	3,978	4,251	4,079	4,160	3,708

Tow trucks

Operation and control of tow trucks in the Melbourne metropolitan area has been a matter of concern to the Board for some years, and in 1975 a study was commenced into the whole spectrum of accident towing. Co-ordination of the study was vested in a representative Steering Committee comprising members of the towing industry, panel repair industry, insurance companies, police, social protection groups, and the Board. During 1976, a firm of consultants was briefed to examine and report on detailed aspects of the study. The study embraces assessment of the feasibility of a zoned distribution of accident-attending tow trucks, a central control base to allocate emergency tow jobs, and imposition of standard charges for towing and salvage.

West Gate Bridge Authority

On 15 November 1978, the West Gate Bridge was officially opened to traffic. The last steel half-box section was lifted into position on 2 June 1978, and a programme of finishing-off works was then carried out, comprising the erection of lamp standards and railings and the surfacing of the steel deck.

The bridge carries eight lanes of traffic, four in each direction, as well as two service lanes for emergency vehicles and breakdowns. The tolls, based on the number of tyres and axles of vehicles, were announced by the Minister of Transport in June 1978; there are four classes, ranging from sixty cents for motor cars to two dollars for the largest semi-trailers.

Bridge controllers and toll officers underwent a training programme prior to opening, to prepare them for their operational roles. All activity on the bridge is monitored by the bridge controllers in the control room, where emergency service vehicles, the emergency telephone system, hazard warning lights, and traffic signal system are co-ordinated. The control room also has direct lines to the police, ambulance, fire brigade, and the Port of Melbourne Authority.

Under the provisions of the *Lower Yarra Crossing Authority Act 1965*, the Authority financed the construction of the project by raising private loan funds from savings banks, life offices, private superannuation funds, and other private lenders. All such loans were subject to the prior approval of the Victorian Treasury and the Governor in Council, and accordingly, are guaranteed as to repayment of all principal and interest thereon. The Act requires that the project be amortised over a period of not more than 40 years from the date on which the bridge was opened to traffic and, as soon as it is free from all encumbrances, it is to be handed over to the Victorian Government.

Road Safety and Traffic Authority

The Road Safety and Traffic Authority (RoSTA) has the responsibility of framing policies for the safe and orderly movement of traffic and pedestrians on Victorian roads

and implementation of such policies as directed by the Victorian Government. The Authority's functions under the Road Traffic Act are to carry out research and investigation into road accident prevention; promote road accident prevention practices; request municipal councils to adopt specific practices; and advise the Chief Secretary on accident prevention policies, regulations, and any matter for the improvement of traffic conditions or control. These functions embody those of the former Traffic Commission which the Authority replaced in March 1971.

Since 1958 the Authority has received from the Victoria Police a comprehensive statistical record of reported road accidents involving casualties and certain types of property damage accidents. This information forms the basis of the State Traffic Accident Record.

A part of the State Traffic Accident Record, Accidents by Location, which shows reported accidents by location and road user movement has been produced on an annual basis since 1968. Interim accumulative statistics are provided on a quarterly basis and supplied to highway authorities approximately two months after the end of the quarter. The information contained in the State Traffic Accident Record is also used as a basis for research into road accidents, for advice to the Victorian Government and the Parliamentary Road Safety Committee, as well as to highlight areas where promotion of road safety practices and the development of accident countermeasures is required.

Further reference: *Victorian Year Book 1977*, pp. 670-1

Motor Accidents Board

The Motor Accidents Board of Victoria administers a "no fault" motor accident compensation scheme. This scheme excludes any attempts to introduce degrees of fault, allocation of negligence, and similar concepts. It is the first of its type in Australia and is proving of interest overseas.

The "no fault" concept is a fundamental departure from the law of tort. Such are the complexities and numbers of accidents in current society, many of which are not related to negligence or fault, that payment of some compensation is seen as a social liability paid for by the community.

The beginning of the Victorian Government's move for a "no fault" system of motor accident compensation was in the recommendation of two committees, the first appointed to report on methods of reducing the time involved and the high costs of litigation procedures, and the second to draw up in draft detailed provisions for "no fault" benefits and administration. The Motor Accidents Act, which embraced most of the second committee's recommendations concerning a "no fault" system, received Royal Assent in April 1973. Its administrative provisions, including appointment of the Board, were enacted in September 1973, and benefits began to operate from 12 February 1974. The total amount of benefits paid by the Board to 30 June 1978 was \$69,908,721.

Road traffic accidents

The following tables include particulars of those 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.

While there is a requirement for accidents involving a casualty to be reported to the Victoria Police, in practice not all such accidents are so reported, particularly where injury of minor severity has occurred, and there is some evidence of understatement in recent years of the numbers of accidents and persons injured compared with earlier years.

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 that shown on page 205.

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

Period	Number of accidents	Persons killed	Persons injured	Number of accidents	Per 100,000 of mean population	
					Persons killed	Persons injured
1972-73	14,611	949	20,312	405	26	564
1973-74	13,452	877	18,634	368	24	510
1974-75	12,693	887	17,765	343	24	480
1975-76	12,591	898	17,596	337	24	471
1976-77	13,673	915	18,558	363	24	493

The table which follows provides a description of types of road users killed or injured in road traffic accidents occurring during the years 1974-75 to 1976-77:

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

Description	1974-75		1975-76		1976-77	
	Killed	Injured	Killed	Injured	Killed	Injured
Drivers of motor vehicles	334	6,872	344	6,871	333	7,448
Motor cyclists	71	1,504	77	1,663	86	1,677
Passengers (any type)	275	6,852	262	6,559	255	6,626
Pedestrians	185	1,902	187	1,832	207	1,969
Pedal cyclists	21	606	26	644	33	814
Other	1	29	2	27	1	24
Total	887	17,765	898	17,596	915	18,558

Particulars of victims of road traffic accidents during the years 1974-75 to 1976-77 are shown according to age in the following table:

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

Age group (years)	1974-75		1975-76		1976-77	
	Killed	Injured	Killed	Injured	Killed	Injured
Under 5	28	622	26	542	22	533
5 and under 7	14	327	15	332	16	351
7 and under 17	75	1,970	75	2,037	80	2,044
17 and under 21	179	3,954	173	3,903	170	3,954
21 and under 30	199	4,171	195	4,242	207	4,442
30 and under 40	75	1,965	97	1,884	81	2,133
40 and under 50	84	1,522	69	1,436	74	1,484
50 and under 60	73	1,302	72	1,255	79	1,297
60 and over	159	1,417	169	1,355	172	1,367
Not stated	1	515	7	610	14	953
Total	887	17,765	898	17,596	915	18,558

Further references: Australian Road Safety Council, *Victorian Year Book* 1966, p. 761; Traffic Commission, 1971, pp. 741-2

SEA TRANSPORT

Shipping

Introduction

During the 1830s, settlers quickly found that, because of the absence of roads, sea transport was essential in and between the settlements of the Port Phillip District.

Despite the rapid growth and spread of speedier land transport in the next one hundred years, the size of Port Phillip Bay for many decades encouraged the regular use of ships to a greater extent than other coastal areas of the State, with cargoes from the western region including dairy products, livestock, and timber, and from the eastern region, fish. Servicing of the goldfields of Walhalla and the Tambo Valley was also provided by way of Port Albert.

The Port of Melbourne was established in 1877 when the Melbourne Harbor Trust Commissioners was constituted as the port authority under the Melbourne Harbor Trust Act. The port expanded with the growth of Victoria's population and consequent trade also utilised facilities at Geelong and Portland.

The Pool of Melbourne opposite the Customs House and other Yarra River and Bay berths were crowded with the masts of sailing ships and Victoria became associated with the clipper classic, the annual grain race. By the early years of the twentieth century sail had been superseded by coal and oil fuels, with the accompanying dock, bunkering, and maintenance requirements.

In the years following the Second World War, Australian shipowners revised their trading practices as a result of vigorous competition from land-based transport operators. Consequently, 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 trend was the expansion of the bulk cargo trade to include goods, such as sugar, as well as various oil and oil products. Later, unit loads and containers with improved handling facilities on both ship and shore were introduced. These new methods led to the specialised ship, exclusively designed and equipped to meet requirements of the particular trade. These were the roll-on roll-off stern loading ships for cargo packed on-road vehicles, and the container ship designed for containerised cargo and other unit loads.

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 and the demands of Australian overseas trade.

The types of cargo handled by the other major Victorian ports still reflect proximity to the rural sectors of the State, with wheat and wool exports being made from Geelong and Portland. Western Port has developed in the last decade as a major port for petroleum products and steel with the development of secondary industry in the region surrounding the port. The Port of Melbourne, with its expanded container handling facilities, caters for all types of cargo for both the coastal trade and overseas trade.

Searoad service between Victoria and Tasmania

The following table shows details of the searoad service operated by the Australian Shipping Commission between Victoria and Tasmania during the years 1973-74 to 1976-77:

VICTORIA—TASMANIA: SEAROAD SERVICE (a)

Name of vessel	Passengers				Accompanied vehicles			
	1973-74	1974-75	1975-76	1976-77	1973-74	1974-75	1975-76	1976-77
<i>Empress of Australia</i>	110,462	114,663	112,142	111,622	33,351	30,171	31,567	31,775
<i>Bass Trader</i>	106	52	—	—	15	10	—	—
Other Australian Shipping Com- mission vessels	2	1	—	—	1	1	—	—
Total	110,570	114,716	112,142	111,622	33,367	30,182	31,567	31,775

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

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 1972-73 to 1976-77 were as follows:

VICTORIA—OVERSEAS AND INTERSTATE SHIPPING

Particulars		1972-73	1973-74	1974-75	1975-76	1976-77
Entrances	number	3,680	3,530	3,496	3,261	3,409
	'000 net tonnes	22,419	21,840	21,244	20,806	22,413
Clearances	number	3,670	3,510	3,508	3,251	3,368
	'000 net tonnes	22,338	21,725	21,313	20,803	21,984

Nationality of shipping

The countries of registration of vessels which entered or were cleared at Victorian ports during the years 1975-76 and 1976-77 were as follows:

VICTORIA—NATIONALITY OF SHIPPING
(^{'000 net tonnes})

Vessels registered at ports in—	Vessels entered		Vessels cleared	
	1975-76	1976-77	1975-76	1976-77
Australia	7,765	9,284	7,854	9,270
Denmark	159	184	171	184
France	81	180	81	152
Germany, Federal Republic of	574	766	541	740
Greece	519	843	502	828
Hong Kong	187	206	178	196
India	147	245	121	256
Italy	266	172	269	155
Japan	1,448	1,361	1,403	1,351
Liberia	1,019	1,144	1,006	1,100
Netherlands	486	327	453	312
Antilles (Netherlands)	131	66	148	72
New Zealand	94	37	92	39
Norway	593	748	593	748
Panama	1,077	1,200	1,092	1,108
Poland	102	126	108	121
Singapore	253	254	251	237
South Africa	96	62	85	62
Sweden	379	323	358	333
Taiwan	89	78	95	65
United Kingdom	3,557	3,340	3,630	3,188
United States of America	620	572	620	579
U.S.S.R.	402	403	391	393
Other	r762	493	r761	494
Total	20,806	22,413	20,803	21,984

Shipping entered at Victorian ports

Particulars of shipping which entered each principal port of Victoria are shown in the following table for the years 1975-76 and 1976-77:

VICTORIA—VESSELS ENTERED AT EACH PORT

Class of vessel	Melbourne		Geelong		Portland		Western Port	
	1975-76	1976-77	1975-76	1976-77	1975-76	1976-77	1975-76	1976-77
NUMBER								
Overseas—								
Direct	427	459	134	103	26	43	60	53
Other	1,076	1,113	124	106	49	49	189	177
Interstate	856	937	96	105	11	16	168	183
Intrastate	10	8	17	23	12	12	6	22
Total	2,369	2,517	371	337	98	120	423	435

VICTORIA—VESSELS ENTERED AT EACH PORT—*continued*

Class of vessel	Melbourne		Geelong		Portland		Western Port	
	1975-76	1976-77	1975-76	1976-77	1975-76	1976-77	1975-76	1976-77
NET TONNES ('000)								
Overseas								
Direct	2,690	3,251	1,062	805	184	279	1,034	925
Other	6,660	7,151	950	932	336	322	1,121	1,485
Interstate	2,835	2,952	626	791	45	92	2,863	2,696
Intrastate	59	56	157	213	115	131	72	331
Total	12,244	13,410	2,795	2,741	680	824	5,090	5,437

Cargoes discharged and shipped

The following tables show the tonnage of overseas and interstate cargoes discharged and shipped in Victorian ports during 1975-76 and 1976-77, as well as the tonnage of overseas cargoes discharged and shipped during the years 1974-75 to 1976-77 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)

Particulars	Melbourne		Geelong		Portland		Western Port	
	1975-76	1976-77	1975-76	1976-77	1975-76	1976-77	1975-76	1976-77
DISCHARGED								
Interstate—								
Tonnes	1,571	2,448	436	421	47	19	404	413
Cubic metres	1,000	202	—	—	—	—	—	—
Overseas—								
Tonnes	1,568	1,688	1,167	1,137	94	163	135	132
Cubic metres	3,511	3,694	6	2	—	1	—	—
SHIPPED								
Interstate—								
Tonnes	997	2,002	897	1,106	19	11	7,930	9,242
Cubic metres	1,151	190	—	—	—	—	—	—
Overseas—								
Tonnes	2,115	1,999	2,060	1,576	259	243	1,615	1,421
Cubic metres	714	712	3	3	1	—	—	—

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

Geographic trade area of origin or consignment	1974-75		1975-76		1976-77	
	Discharged	Shipped	Discharged	Shipped	Discharged	Shipped
North America and Hawaiian Islands—						
Tonnes	500,608	356,370	359,357	422,722	529,067	261,667
Cubic metres	698,271	85,248	623,694	117,428	706,780	130,351
South America—						
Tonnes	1,093	56,326	1,990	47,858	23,102	36,966
Cubic metres	7,635	32,377	4,869	11,420	7,561	22,995
Europe (incl. U.S.S.R.)—						
Tonnes	244,479	547,457	170,067	911,435	289,595	696,369
Cubic metres	1,483,153	189,065	1,230,806	166,918	1,187,401	171,258
Africa—						
Tonnes	55,362	267,810	54,958	331,678	48,969	293,283
Cubic metres	29,887	48,244	39,636	22,752	21,156	14,343
Asia—						
Tonnes	1,907,864	3,100,128	1,789,619	3,417,497	1,610,697	3,096,805
Cubic metres	1,476,956	449,272	1,574,303	313,544	1,706,759	283,987
Papua New Guinea, New Zealand, and Pacific Islands—						
Tonnes	431,488	916,484	466,722	917,822	485,561	852,545
Cubic metres	122,099	238,255	39,013	80,106	64,482	88,055
Indian Ocean Islands and Antarctic area—						
Tonnes	214,504	222	121,142	6	132,338	1,256
Cubic metres	1,123	940	3,890	6,313	1,957	4,108
Total—Tonnes	3,355,398	5,244,797	2,963,855	6,049,018	3,119,329	5,238,891
Cubic metres	3,819,124	1,043,401	3,516,211	718,481	3,696,096	715,097

**VICTORIA—OVERSEAS CARGOES DISCHARGED AND SHIPPED
ACCORDING TO NATIONALITIES OF VESSELS
(‘000)**

Vessels registered at ports in—	1975-76				1976-77			
	Discharged		Shipped		Discharged		Shipped	
	tonnes	cubic metres	tonnes	cubic metres	tonnes	cubic metres	tonnes	cubic metres
Australia	102	309	98	58	55	409	114	37
Denmark	46	74	60	19	20	69	91	21
France	7	52	18	7	58	46	55	8
Germany, Federal Republic of	103	204	103	81	199	303	237	145
Greece	176	39	463	1	388	64	551	12
Italy	42	56	37	8	7	38	38	6
Japan	374	643	510	70	290	650	584	31
Liberia	255	98	803	11	210	153	752	31
Netherlands	172	109	382	42	155	64	102	22
Antilles (Netherlands)	121	13	11	6	48	3	9	2
New Zealand	175	12	128	10	65	—	34	—
Norway	150	196	248	25	201	195	146	13
Panama	104	110	872	9	121	132	773	11
Singapore	69	38	64	34	66	55	97	44
Sweden	43	141	88	41	35	154	79	33
United Kingdom	741	977	1,011	187	923	959	793	192
United States of America	37	162	56	20	48	120	46	16
U.S.S.R.	15	54	275	5	20	65	100	—
Other	231	229	822	84	210	218	638	91
Total	2,963	3,516	6,049	718	3,119	3,696	5,239	715

NOTE. Part of the cargo is recorded in tonnes and part in cubic metres. As the total cannot be stated accurately as either tonnes or cubic metres, each is recorded and published separately.

Further references: *Lighthouses, Victorian Year Book 1964*, pp. 665-6; *Principal ports of Victoria, 1965*, pp. 744-7; *Australian Shipbuilding Board, 1975*, pp. 665-6

Port Phillip Sea Pilots

Forty-one former shipmasters operate the Port Phillip Pilot Service, sixteen of whom are also licensed for Western Port. The Service is conducted on a co-operative, non-profit basis. Licences as pilots are issued by the Marine Board of Victoria, each ingoing pilot purchasing a share of the pilot vessels and other plant. The Port Phillip Pilot Service is one of the oldest organisations in Victoria, the first pilot licence having been issued to one George Tobin by Governor Sir George Gipps of New South Wales on 26 June 1839.

The following table shows the number of ships (sailing inwards and outwards) piloted through Port Phillip Heads and the entrance to Western Port during the period 1968-69 to 1977-78. Although the number of ships has not increased, tonnes carried has risen markedly because of larger vessels such as container, roll-on roll-off, and LASH (lighter aboard ship) ships.

VICTORIA—NUMBER OF SHIPS PILOTED THROUGH PORT PHILLIP HEADS AND THE ENTRANCE TO WESTERN PORT

Year	Number of ships		Year	Number of ships	
	Port Phillip	Western Port		Port Phillip	Western Port
1968-69	4,388	171	1973-74	3,903	644
1969-70	4,433	377	1974-75	4,117	665
1970-71	4,322	541	1975-76	3,778	744
1971-72	3,941	567	1976-77	3,717	741
1972-73	3,921	560	1977-78	3,897	620

Port of Melbourne Authority

Administration

The Port of Melbourne Authority (formerly the Melbourne Harbor Trust Commissioners which was established in 1877 by an Act of the Victorian Parliament) is a financially independent, corporate body operating under the provisions of the *Port of Melbourne Authority Act 1978*. The land and waters of the 27.5 square kilometre Port area are vested in the body corporate which is appointed by the Governor in Council. It comprises a full-time chairman who also is virtually the Port's managing director, and five

part-time members who, in accordance with the Act must be associated with various port activities, i.e., shipping, primary production, imports, exports, and labour.

The Port Authority is also the conservancy authority for the Port of Melbourne. The Authority 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.

Cargo pattern

Container and unit-load methods of cargo handling in the Port of Melbourne were introduced and extended during the 1960s. By 1970, the cumulative effect of gradually developing these new facilities had 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. During the year ended 30 June 1978, the Port handled a volume of 17.09 million tonnes of import, export, and transshipment cargo. This volume was handled by coastal and overseas shipping which paid 2,489 calls at the Port.

The changes in the character of the Port became really noticeable when the first overseas container ship on the United Kingdom-Australia service arrived in March 1969. Cargoes flowing through all ports of the world are classed as either wet or dry bulk cargoes (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 especially 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. During the twelve months ended 30 June 1978, the Port handled 3.93 million tonnes of bulk cargo, and 13.16 million tonnes of general cargo including empty returns; 7.4 million tonnes of general cargo was carried in 413,773 containers.

Container handling facilities

The Authority from the late 1950s has been involved in capital works programmes devoted principally to new specialised areas in the Port of Melbourne to handle container/cellular and roll-on roll-off ships. The most notable has been the Swanson Dock six-berth container complex, and the four berth roll-on roll-off complex at Webb Dock. In 1977, modernisation of berths 16 to 21 Victoria Dock to accommodate modern cargo handling requirements was commenced.

The Johnson Street Bridge project made redundant berths up to 6 North Wharf and 10 South Wharf. Included on the North Wharf section of the Port were berths 1 and 2 which were roll-on roll-off berths for the Union Steam Ship Company of New Zealand vessels operating services to Tasmanian and New Zealand ports.

Preliminary work on the reconstruction and redevelopment of berths 5, 6, and 7 Victoria Dock, now called 5 and 6 Victoria Dock, for the Union Steam Ship Company roll-on roll-off services began soon after the Victorian Government decided that the Johnson Street Bridge had to be built to ease congestion of vehicular traffic in the city proper and also allow a faster and uninterrupted flow of traffic between industrial areas—including the port and commercial establishments on both sides of the Yarra River. The new roll-on roll-off terminal became operational on 1 May 1975.

The completed project is now equipped with two roll-on roll-off berths, two stern loading ramps, a new terminal of approximately 4.45 hectares, three steel framed sheds, a sub-station to cater for crane, ramp, lighting, and other power needs, a rail siding into the terminal, and crane rails built on the wharf apron for a future container crane, if needed.

Finance

The Port of Melbourne is self-supporting and does not receive any financial grants from the Victorian Government. The Authority'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 tonne 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 spent 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 being put back into port development. At 30 June 1978, the Authority had approximately \$184m invested in port assets. Capital works are financed out of revenue and out of loans, which are raised and financed by the Authority itself and guaranteed by the Victorian Government. The Authority is required to pay into the Consolidated Fund of the Victorian Government approximately 4 per cent of its revenue from import wharfage and tonnage.

The following table shows particulars of the financial operations of the Melbourne Harbor Trust for the years 1973 to 1978:

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

Particulars	1 Jan. 1973 -30 June 1974 (a)	1974-75	1975-76	1976-77	1977-78
REVENUE					
Wharfage and tonnage rates	18,187	14,124	18,192	20,567	19,821
Rent of sheds	1,030	639	518	502	488
Special berth charges	522	439	324	331	279
Rent of lands	4,545	3,555	4,396	4,561	4,967
Crane fees	3,049	2,547	2,191	2,383	2,089
Other	2,782	2,852	2,297	2,752	2,973
Total revenue	30,115	24,156	27,918	31,096	30,617
EXPENDITURE AND APPROPRIATIONS					
Administration and general expenses	2,286	2,156	2,222	3,199	2,869
Port operating expenses	7,138	6,825	7,127	7,547	8,027
Maintenance—					
Dredging	2,149	1,663	1,554	2,836	2,241
Harbour	315	300	320	298	416
Wharves	1,398	1,204	1,466	1,554	1,895
Approaches	337	323	383	439	558
Railways	93	93	96	118	135
Cargo handling equipment	838	865	1,087	1,240	1,295
Other properties	195	116	117	119	143
Interest	4,118	3,088	3,715	4,195	4,610
Depreciation and renewals	5,494	4,399	4,844	5,440	5,896
Insurance	254	250	330	507	537
Sinking fund	1,350	650	1,000	1,000	1,000
General reserve	2,000	1,000	2,300	1,000	—
Payments to Consolidated Fund	1,470	916	1,117	1,250	700
Other	—	52	1	1	—
Total expenditure and appropriations	29,435	23,900	27,679	30,743	30,322
CAPITAL OUTLAY					
Land and property	539	6,444	1,327	629	3,382
Reclamation	1,250	1,241	513	393	606
Deepening waterways	3,710	2,881	3,095	4,896	4,433
Wharves and sheds construction	4,930	5,222	3,914	4,262	4,494
Cargo handling equipment	237	239	1,618	409	589
Approaches construction	492	699	427	267	152
Floating plant	545	1,765	3,901	2,038	1,567
Other works, etc.	692	443	1,072	1,568	2,288
Total capital outlay	12,395	18,934	15,867	14,462	17,511
Loan indebtedness at end of period	48,051	51,060	56,018	61,303	68,769

(a) Eighteen months ended 30 June 1974. The Trust's accounting period was altered from a calendar year to a fiscal year from 1 January 1973.

Further references: Changing trends in port development, *Victorian Year Book* 1968, p. 745; Port facilities, 1969, p. 755; Port emergency service, 1970, pp. 750-1; Advent of new cargo pattern 1971, pp. 715-8; New cargo handling era, 1974, pp. 749-50; Forward development plan, 1975, pp. 672-3; Co-ordinated port development plan, 1975, pp. 673-4

Geelong Harbor Trust

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

Entrance to the Port is by 24 kilometres of channel dredged to a depth of 11 metres and a width of 122 metres.

There are nineteen effective berths in the Port and two berths at the Commonwealth Explosives Pier, Point Wilson, owned and operated by the Commonwealth Government. The Harbor Trust has floating plant which includes six tugs, several barges, and one diesel-powered floating crane of 35 tonnes.

The following table shows particulars of the financial operations of the Geelong Harbor Trust for the calendar years 1973 to 1977:

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

Particulars	1973	1974	1975	1976	1977
REVENUE					
Wharfage, tonnage, and special berth rates	2,096	2,175	2,169	2,195	2,618
Shipping services	1,100	1,512	1,233	1,852	2,198
Rents, fees, and licences	136	145	158	185	212
Freezing works and abattoirs	150	171	179	191	99
Other	22	17	26	31	179
Total revenue	3,504	4,020	3,765	4,454	5,306
EXPENDITURE AND APPROPRIATIONS					
Management expenses	985	1,324	1,488	1,588	1,657
Shipping services	992	1,383	1,541	1,524	1,665
Maintenance—					
Wharves and approaches	186	207	229	296	292
Harbour	162	177	213	309	327
Floating plant	32	36	53	71	76
Other	41	58	71	64	72
Interest on loans	263	210	156	151	142
Sinking fund	48	31	29	26	22
Depreciation provision	892	913	905	906	844
Other	25	11	33	193	16
Total expenditure and appropriations	3,626	4,350	4,718	5,128	5,113
CAPITAL OUTLAY (NET)					
Floating plant	4	—	—	—	27
Land and property	140	46	75	55	11
Wharves and approaches	103	124	18	9	191
Other	—	111	91	38	43
Total capital outlay	247	281	184	102	272
LOAN INDEBTEDNESS AT 31 DECEMBER					
Victorian Government	67	33	—	—	—
Public	4,763	3,110	2,611	2,560	2,239
Total loan indebtedness	4,830	3,143	2,611	2,560	2,239

Portland Harbor Trust

Situated on the south-west coast of Victoria, Portland is a small, but modern port capable of handling the import and export requirements of one of Australia's most productive hinterlands. The port is within a few kilometres of major shipping routes, with deep water approaches right to the entrance of the harbor basin.

Most of the port's trade comprises the handling of bulk commodities such as grains, fertiliser components, and petroleum products. Four shipping berths are backed by modern shore installations and existing berths will shortly be augmented by a new multi-purpose berth that will cater for roll-on roll-off vessels and, ultimately, fully integrated container traffic.

New container park facilities being developed by the Portland Harbor Trust will, in the initial stage, cover an area of some 2.6 hectares and cater for the storage and handling of 80 refrigerated and 500 dry containers.

An overall rise of 7.6 per cent in the volume of trade handled through Portland during 1976-77 reflects the importance of new trades established during the two preceding years. With a total throughput of 694,054 tonnes, export trade amounted to 274,346 tonnes and imports totalled 419,708 tonnes.

The importance of the growing trade with Middle East countries is shown in port statistics which disclose that 20 per cent of total export tonnage and 25 per cent of all vessels engaged in Portland's export trade during the year were involved in servicing these expanding trade outlets. Cargoes comprised livestock, bagged wheat and flour, carton meat, building components, stock pellets, and processed cheese.

The following table shows particulars of the financial operations of the Portland Harbor Trust for the years 1972-73 to 1976-77:

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

Particulars	1972-73	1973-74	1974-75	1975-76	1976-77
REVENUE					
Wharfage rates	285	347	288	290	370
Tonnage rates	41	37	48	49	61
Shipping services	227	209	225	275	399
Victorian Government grant	785	1,314	974	1,384	1,220
Grain terminal	236	265	417	760	723
Cold store operations	32	18	51	7	28
Other	78	122	87	83	83
Total revenue	1,684	2,312	2,090	2,848	2,884
EXPENDITURE AND APPROPRIATIONS					
Administration	183	233	298	340	356
Maintenance	133	120	167	164	140
Shipping services	221	290	300	409	444
Depreciation	52	52	52	53	55
Interest on loans	1,055	1,123	1,220	1,305	1,402
Sinking fund	53	51	54	55	56
Loan redemption	87	93	98	103	110
Grain terminal (excl. depreciation)	163	179	196	343	353
Cold store operations	25	16	35	16	26
Total expenditure and appropriations	1,972	2,157	2,420	2,788	2,942
CAPITAL OUTLAY					
Port rail system	23	97	—	—	—
Road works	—	—	156	30	—
Reclamation	6	7	208	39	5
Grain terminal	253	114	2	46	54
Deepening waterways	61	1	72	77	—
Wharves and sheds	32	69	199	441	919
Breakwater construction	—	60	4	—	—
Floating plant	358	44	—	—	—
Other	68	123	53	148	46
Total capital outlay	801	515	694	781	1,024
LOAN INDEBTEDNESS AT 30 JUNE					
Victorian Government	3,673	3,673	3,673	3,673	3,823
Public	18,055	18,612	19,114	19,711	20,401
Total loan indebtedness	21,728	22,285	22,787	23,384	24,224

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 16 kilometres wide. The Port is sheltered from Bass Strait by Phillip Island at its south-eastern end and the waters

between the western side of this island and the mainland from the entrance to the Port. It is approximately 42 kilometres from the entrance to the northern extremity of the inlet.

Although the entrance contains some large sandbanks, a deep water channel up to 31 metres deep marked by 37 light buoys runs close to the island. This navigable channel extending from the western entrance to Crib Point is 21 kilometres long with low water depths of 14 metres and 15 metres, in the northern and western arms, respectively. Tidal rises are of the order of 3 metre springs and 2 metre neaps.

The Crib Point Refinery Jetty provides two berthing heads each 38 metres in length; the Long Island Jetty has a berthing head of 109 metres in length. The Steel Industry Wharf (No. 1) consists of a loading ramp and fender wharf 46 metres in length and the Steel Industry Wharf (No. 2) consists of a wharf 152 metres long.

The following table shows particulars of port traffic through Western Port for the years 1973-74 to 1977-78:

VICTORIA—WESTERN PORT: PORT TRAFFIC

Year	Petroleum products		Steel and cars		General cargo	
	Tankers	Tonnes	Vessels	Tonnes	Vessels	Tonnes
		'000		'000		'000
1973-74	247	10,500	88	497	—	—
1974-75	329	10,128	68	461	4	1
1975-76	380	10,647	60	465	—	—
1976-77	376	11,165	81	572	—	—
1977-78	319	11,362	79	570	—	—

AIR TRANSPORT

Civil aviation

Administration

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

The functions performed by the Department include the following:

- (1) Registration and marking of aircraft;
- (2) 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) licensing of pilots, navigators, aircraft radio operators, flight engineers, and aircraft maintenance engineers;
- (4) licensing of airline, charter, and aerial work operators, and supervision of their activities;
- (5) provision and maintenance of aeronautical communications, navigation aids, aerodromes, and landing grounds;
- (6) establishment and operation of air traffic control, flight service, aeronautical information, search and rescue, and fire-fighting and rescue services; and
- (7) investigation of aircraft accidents, incidents, and defects.

Victorian aerodromes

The major aerodromes in Victoria are owned and operated by the Commonwealth Government through the Department of Transport. Since 1957, the Commonwealth Government policy has been that aerodromes (except capital city airports) should be owned and operated by local authorities under the Local Ownership Plan.

At present there are eight Commonwealth Government owned aerodromes at Melbourne (Tullamarine), Avalon, Bacchus Marsh, Essendon, Mallacoota, Mangalore, Moorabbin, and Sale, and twenty-eight licensed aerodromes at Ararat, Bairnsdale, Ballarat, Benalla, Bendigo, Birchip, Corryong, Echuca, Hamilton, Hopetoun, Horsham, Kerang, La Trobe valley, Maryborough, Mildura, Nhill, Orbost, Portland, Robinvale, St Arnaud, Shepparton, Stawell, Swan Hill, Warracknabeal, Warrnambool, Whittlesea, Wycheproof, and Yarram.

The licences of all licensed aerodromes, except Whittlesea, are held by the local government authority. Under the local ownership plan, the Commonwealth Government will pay 50 per cent of the development costs of new aerodromes or transfer existing aerodromes free of cost to local authorities and then pay 50 per cent of future approved maintenance and development costs. Similar assistance is given to 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 Ballarat, Bendigo, Birchip, Hopetoun, La Trobe valley, Maryborough, Portland, Robinvale, St Arnaud, Shepparton, and Warrnambool.

The assistance authorised by the Commonwealth Government to Victorian local authorities for aerodrome works during the year ending 30 June 1978 was \$47,254 for development, and \$191,034 for maintenance works.

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

Classification of flying activities

Flying activities are classified by regulation into the following categories:

(1) Private operations

These are operations in which an aircraft is used for personal transportation—private or business, carriage of persons or goods for other than hire or reward, or other activities of a non-commercial nature. The extent of this activity within Victoria may be gauged from the fact that there were 763 aircraft classified in the private category and approximately 4,250 licensed private aeroplane pilots in Victoria at 30 June 1978.

(2) Aerial work operations

These operations refer to aircraft being used for aerial survey; spotting; photography; agriculture; flying training; and the cartage of goods for purposes of trade. In terms of hours flown, the most significant operations are agricultural and flying training. To 30 June 1977, over 104,600 training hours were flown by training organisations in Victoria.

(3) 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 an increasing use of twin engine aircraft. Twin jet aircraft are being used increasingly in executive type work. At 30 June 1977, there were 97 Victorian based operators licensed to conduct charter operations; over 58,800 hours were flown by these organisations.

(4) Commuter operations

Since the Second World War, country or feeder air services within Victoria have commenced on different occasions but ceased when they proved to be uneconomic. In 1966, the Commonwealth Government decided a new attempt should be made to provide this type of air service between Melbourne 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. This type of operation is usually known as a commuter service.

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 June 1978, Victorian commuter services of the type in question were operating between the following centres on a regular basis: Essendon — Flinders Island, Essendon —

Maroochydore, Essendon — Sale — Bairnsdale, Essendon — Strahan — Queenstown, Essendon — Warrnambool — Portland, Essendon — Wollongong, Melbourne — Mallacoota — Merimbula, Melbourne — Bendigo — Swan Hill — Mildura, Melbourne — Geelong, Melbourne — Wagga Wagga, Mildura — Adelaide, and Mildura — Hay — Sydney.

(5) *Regular public transport*

Although commuter operations are regular public transport services, this heading usually refers to aircraft operating in accordance with an airline licence, to carry passengers and cargo according to fixed schedules and on specified routes.

Services based or terminating at Melbourne Airport are domestic—Ansett Airlines of Australia and Trans Australia Airlines, or international—Qantas, Air New Zealand, Lufthansa, Cathay Pacific, Garuda Airlines, Malaysian Airline System, Singapore Airlines, K.L.M., Alitalia, Air Nauru, Pan American, British Airways, and Philippine Airlines.

Gliding clubs

Gliding is mainly carried out at Bacchus Marsh, Benalla, Bendigo, Casterton, Colac, Corowa, Horsham, Kurweeton, La Trobe valley, Laverton, Leongatha, Mildura, Moorooduc, and Tocumwal. Many other areas are used to a lesser extent. A Commonwealth Government subsidy is granted to clubs through the Gliding Federation of Australia.

Air traffic control

Control of air traffic is maintained by the Commonwealth Department of Transport through its Air Traffic Control organisation. This includes the closely co-ordinated sections of Operational Control, which are concerned with each individual flight; Airport Control, which applies to all movements on or within 32 kilometres of an aerodrome; and Area Control, which controls aircraft along the main air routes to ensure the avoidance of collisions. In conjunction with air traffic control, the Department maintains a wide range of air navigation aids and a comprehensive search and rescue organisation. The function of navigation aids is described in detail on pages 773-6 of the *Victorian Year Book* 1965.

Melbourne (Tullamarine) Airport

The Tullamarine site of 2,140 hectares was chosen for the development of Melbourne Airport when Essendon could not be further enlarged. The completed aerodrome is 20 kilometres from the G.P.O., Melbourne, 7 kilometres from Essendon Airport, and is accessible by a freeway.

The 15 kilometres of runways and taxiways were completed early in 1968. The north-south runway (2,591 metres) and the east-west runway (2,286 metres) are both designed for the operation of modern jet aircraft. They are 147 cm 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 100 kilometres per hour. The north-south runway was extended to 3,658 metres in 1972. There is a provision for future development of the east-west runway to extend to 2,743 metres and for a second set of parallel runways.

Civil aviation statistics

Domestic passenger movements, which represent the total of embarkations and disembarkations for each Victorian aerodrome served by a regular service for the years 1973 to 1977 were as follows:

VICTORIA—DOMESTIC PASSENGER MOVEMENTS OF REGULAR AIR SERVICES

Airport	Passenger movements				
	1973	1974	1975	1976	1977
Melbourne	3,582,157	3,990,847	4,137,338	4,114,456	4,291,450
Mildura	16,130	17,707	19,786	19,094	20,214
Hamilton	9,695	9,622	8,842	7,210	7,009

The following table shows particulars for 1976 and 1977 of regular interstate and intrastate air services terminating in Victoria:

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

Particulars		Interstate		Intrastate		Total	
		1976	1977	1976	1977	1976	1977
Kilometres flown	'000	48,687	48,713	342	333	49,029	49,046
Passenger kilometres	'000	3,238,762	3,371,280	8,603	9,225	3,247,365	3,380,505
Freight—							
Tonnes		60,697	61,918	41	31	60,738	61,949
Tonne kilometres	'000	46,511	47,439	18	14	46,529	47,453
Mail—							
Tonnes		4,198	4,263	12	11	4,210	4,274
Tonne kilometres	'000	3,448	3,663	6	5	3,454	3,668

The first of the following tables deals with aircraft registered and licences issued by the Commonwealth Department of Transport in Victoria and the second deals with details of Melbourne (Tullamarine) Airport activities:

VICTORIA—AIRCRAFT REGISTERED AND LICENCES ISSUED

Particulars	1973	1974	1975	1976	1977
Registered aircraft owners	504	658	647	900	938
Registered aircraft	891	1,012	1,015	1,240	1,363
Student pilot licences	2,963	2,910	3,005	3,756	4,299
Private pilot licences	3,615	3,737	3,747	3,948	4,481
Commercial pilot licences	950	862	892	851	934
Airline pilot licences	963	1,057	1,085	1,131	1,154
Aircraft maintenance engineer licences	1,121	1,134	1,100	1,216	1,263

VICTORIA—MELBOURNE (TULLAMARINE) AIRPORT

Particulars	1973	1974	1975	1976	1977
Domestic aircraft movements	67,517	72,037	71,993	68,473	68,558
Domestic passengers embarked	1,798,331	1,994,115	2,068,415	2,065,897	2,144,619
Domestic passengers disembarked	1,783,826	1,996,732	2,068,923	2,063,022	2,146,831
International aircraft movements	6,117	6,389	7,278	7,528	8,578
Passengers arriving/departing overseas	587,976	465,642	551,626	653,529	685,219

Further references: History of civil aviation, *Victorian Year Book* 1962, p. 742; Classification of flying activities, 1964, pp. 843-4; Radio aids to air navigation in Victoria, 1965, pp. 773-6; Aerial agricultural operations, 1966, pp. 764-5; Flying training in Victoria, 1967, pp. 783-5; Regular public transport, 1968, pp. 779-81; Commuter services, 1969, pp. 790-1; Radar development in the Melbourne area, 1971, pp. 748-50; Aerodrome local ownership plan, 1974, p. 791; Use of radar in traffic control, 1975, pp. 682-4; Civil aircraft manufacture, 1977, pp. 688-90

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Central Office

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 Journey to work and journey to school (irregular) (9205.0)
 Motor vehicle registrations (annual) (9304.0)
 Motor vehicle registrations (quarterly) (9303.0)
 Outward overseas cargo (9206.0)
 Overseas and coastal shipping (9207.0)
 Rail, bus, and air transport (9201.0)
 Road accident fatalities (monthly) (9401.0)
 Road traffic accidents involving casualties (quarterly) (9402.0)
 Road traffic accidents involving casualties (quarterly) (9403.0)