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TRADE, TRANSPORT, AND COMMUNICATIONS

TRADE PRACTICES LEGISLATION

Concern with trade practices arises traditionally from a desire to protect the public from " exploitation " by a monopolist, defined in the simplest terms as a " single seller ", who in the absence of competition may be able to raise prices, restrict production, and possibly retard development.

Three complications arise in translating this concern into practice. The first is that even in purely economic terms the problem of monopoly has proved to be much more complicated than outlined above. A firm does not need to be a " single seller " to behave as a monopolist ; a trade association or marketing agreement may pursue a monopolistic sales policy even though its members are independent and competitive in other respects ; and monopolistic practices such as refusal to deal are often more important than monopolisation in itself. The second complication is that government policy is much more ambivalent in practice than appears at first sight. Governments have themselves sponsored some forms of monopoly, e.g., patent and copyright laws and agricultural marketing schemes. The third complication is that, under Australia's federal system, monopoly control is divided between state and federal governments, the broad principle being that federal powers are largely confined to monopolies which operate interstate or abroad (e.g., shipping), and state powers to those which operate on a local or regional basis.

Monopolisation

The first attempts at monopoly control in Australia as well as overseas were probably in connection with " natural monopolies " or public utilities, such as gas, electricity, or transport companies. In Victoria, for example, the old Metropolitan Gas Company operated under 1877 legislation according to which the maximum price of gas was fixed but had to be reduced if dividends rose above 10 per cent. With long-term inflation this type of price control eventually became ineffective and the ultimate solution was found in public ownership, and the administration of government-owned enterprises by statutory corporations or commissions.

In fields other than public utilities, government ownership has not generally found favour as a means of monopoly control. State governments have been inhibited from taking over large enterprises in the fields of industry, mining, commerce, and finance because so many of them operate

on an interstate basis. On the other hand, the Australian Government has found its constitutional powers limited by section 92 of the Commonwealth Constitution, as became evident when attempts were made to " nationalise " airlines and banking after the Second World War. The only significant action in these fields has probably been the establishment of government enterprises, such as the State Savings Bank of Victoria, to operate in competition with private enterprise.

In the United States of America federal " trust busting " legislation designed to break up large monopolies has been on the statute books for over eighty years, but despite some success the record is not significant. Following the American example, monopolisation and combinations in restraint of trade were both declared illegal in Australia in 1906. No effective action was taken to enforce the monopolisation provisions of this legislation until shortly before its repeal in 1965, perhaps because of the difficulty of defining " monopolisation ". By 1965, however, statistical studies of industrial concentration had led to the concept of a " dominant firm ", i.e., one accounting for at least one third of a particular trade. In 1948 this concept had been adopted in British legislation enabling the government to refer cases of suspected dominance to a Monopolies Commission, which was required to report on the facts and the extent to which they gave rise to practices which were against the public interest. In 1965 the Australian Government adopted some features of this procedure, but made examination a much more elaborate process, and limited it to cases where a dominant firm actually engaged in or induced the specified practices of refusal to deal, predatory price cutting, and monopolistic price fixing. In consequence the new provisions have proved as ineffective as the old and the question now is whether they could be made more effective by simplification to bring them closer into line with British practice.

Marketing agreements and trade associations

As mentioned above, combinations in restraint of trade were declared illegal under Australian Government legislation in 1906. Previously they had been merely unenforceable under common law. The prohibition applied specifically only to trade with other countries and among the States, but at that time and for many years afterwards Victoria and other States were heavily dependent on the coastal trade in coal from New South Wales. The Northern Collieries Association maintained the price of coal by control of output, and sales were made only through the Associated Shipping Companies, who were designated sole purchasing agents and for their part agreed not to handle coal from other sources. Prosecutions launched under the Act were unsuccessful on appeal both to the High Court and later to the Privy Council, apparently because of the difficulty of proving " intent " and defining the " public interest ".

In the depressed inter-war years the attention of both State and Australian Governments was diverted to agricultural marketing. Here the objective was to protect the producer rather than the consumer by stabilising and generally raising the prices received by growers. Statutory authority was necessary to enable producer boards compulsorily to acquire, store, and market agricultural products. Following the example of Queensland and New South Wales, Victoria passed a Marketing of Primary Products

Act in 1935 under which marketing boards could be established on the petition of growers. In fact, most of the marketing schemes set up under the Act proved to be of relatively short duration. At present the two most important agricultural marketing boards in Victoria are the Egg and Egg Pulp Board and the Milk Board. One difficulty encountered by State marketing schemes has been that of controlling sales across State boundaries because of the constitutional requirement under section 92 that trade among the States be " absolutely free ". Australian Government efforts to supplement State legislation, particularly with respect to dried fruits marketing, also ran into constitutional difficulties. A number of Australian Government export control boards have, however, operated successfully in conjunction with State boards.

The Trade Practices Act, introduced in 1965 after lengthy discussion and since replaced by the *Restrictive Trade Practices Act* 1971, repealed the American-type prohibitions of the 1906 legislation and substituted a procedure adapted from modern British practice. Apart from agricultural marketing schemes, trade agreements which aim at fixing prices and discounts directly or indirectly (by control of stocks, control of output, zoning of markets, or exclusive dealing arrangements) are now required to be registered with the Commissioner of Trade Practices. Registered agreements are subject first, to examination and investigation by the Commissioner ; second, to consultations between the Commissioner and the parties ; and third, to the possibility of proceedings before the Trade Practices Tribunal. This procedure is again far more elaborate than the British and after seven years has resulted in only one agreement, to control frozen vegetable prices, being terminated by the Tribunal as against the public interest. A number of other agreements have been terminated after examination or consultation, but it has not been possible to build up any body of case law as in Britain. On the other hand, the Australian register is much more inclusive than the British. During the first five years, 1967 to 1972, 13,629 agreements were registered, which is about five times as many as were registered during the initial period in Britain. The number lodged in Melbourne was 5,787, more than in any other capital city. It is difficult to avoid the conclusion that the Australian register is unmanageably large and this is partly explained by the fact that three quarters of the registered agreements were either " vertical " (i.e., between manufacturers and distributors) or " miscellaneous " in character (e.g., licensing or leasing agreements). This leaves only 1,549 trade associations and 1,825 other " horizontal " agreements of the traditional cartel type, and of these less than half were among manufacturers.

Collusive tendering and bidding

In the discussions leading up to the *Trade Practices Act* 1965, the hope was expressed that the States would collaborate with the Australian Government by referring to it their power to control intrastate restrictive agreements and practices. In the event only Tasmania took this step with the result that there still exists, in the words of the Trade Practices Commissioner, " a big gap with regard to professional and other services that are provided by individuals whose activities and restrictions are organised on an intrastate or regional basis ".

However, in respect of agreements involving collusive tendering and bidding, Victoria and New South Wales both enacted legislation complementary to that of the Australian Government. This is a particularly sensitive field because collusive tendering notably affects building contracts and material supplies for government departments and municipalities. Similarly collusive bidding, although less important as far as public authorities are concerned, may adversely affect the returns of growers at wool auctions and so acquires political significance.

The Victorian Collusive Practices Act of 1965 was narrower in scope than the Australian Act, and applied only to tenders submitted to State and municipal authorities. On the other hand, it provided fewer opportunities for successful defence against the prescribed penalty. The Act does not appear to have been widely used, but it was invoked in 1969 to require the submission of information from the concrete pipe manufacturers to the State Attorney-General at a time when that industry was under investigation by the Australian Government.

Resale price maintenance

With the development of discount houses and supermarkets the old monopolistic practices of boycotts and refusal to deal have acquired a new importance as instruments of resale price maintenance. A manufacturer with a branded pre-packaged product supported by national advertising may find it in his interest, and in that of his distributors, to enforce prescribed retail prices by withholding, or threatening to withhold, supplies to discounters and price cutters.

No special mention was made of resale price maintenance in the 1965 Trade Practices Act. Collective agreements and trade associations which enforced resale price maintenance were clearly registrable and examinable under the Act, but there was doubt whether it restrained a single manufacturer from enforcing resale price maintenance in respect of his own products. The matter was brought to a head in 1971 when Dunlop Australia Ltd refused to supply Bourke's Ltd, a Melbourne store operated in association with the Australian Council of Trade Unions (A.C.T.U.). Dunlop finally agreed to supply the store under threat of industrial action, and the Australian Government introduced new legislation (later incorporated in the *Restrictive Practices Act* 1971) to deal specifically with the problem.

Under this legislation resale price maintenance became unlawful in Australia, whether enforced collectively or by a supplier acting on his own. Prices could still be " recommended " provided that the recommendation was not obligatory. Two judicial processes were provided, one by way of the Trade Practices Tribunal where suppliers could seek exemption from the ban, and one by way of the Commonwealth Industrial Court where an injunction to restrain the practice could be sought by the Australian Attorney-General, the Commissioner of Trade Practices, or any injured party. Both processes were promptly resorted to. In May 1972 the Trade Practices Tribunal dismissed an application for exemption of the book trade. In 1971–72 the Industrial Court had before it three applications for injunctions, in respect of cosmetics, imported chinaware, and sporting goods. The first was settled by consent, the second resulted in the issue of an injunction but was appealed against (partly on constitutional grounds),

and the third was adjourned at the request of the plaintiff. While these results may not seem very decisive they do indicate a greater degree of public interest and concern than has been shown over any other type of restrictive trade practice.

RETAIL TRADE

Census of Retail Establishments

Statistics of retail sales have been compiled for the years 1947–48, 1948–49, 1952–53, 1956–57, 1961–62, and 1968–69 from returns supplied by all retail establishments in Australia.

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

A comparison of the results of the 1961–62 Retail Census with those of the 1956–57 Retail Census, which were modified to take into account the changes in scope mentioned above, was last published in the *Victorian Year Book* 1970 on pages 725–31. Retail Census bulletins for 1968–69 are available from the Victorian Office of the Bureau.

Survey of Retail Establishments

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

The following table shows the value of retail sales of goods in Victoria in each of the commodity groups specified for the years 1967–68 to 1971–72 :

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

Commodity group	1967–68	1968–69	1969–70	1970–71	1971–72
Groceries	349.8	375.0	399.0	428.9	472.1
Butchers' meat	187.4	188.0	202.4	211.1	224.2
Other food (*b*)	301.6	304.4	324.9	349.2	375.8
Total food and groceries	838.8	867.4	926.3	989.2	1,072.1

VICTORIA—VALUE OF RETAIL SALES (*a*)—*continued*

($m)

Commodity group	1967–68	1968–69	1969–70	1970–71	1971–72
Beer, wine, and spirits (*c*)	240.7	256.4	277.8	292.2	312.7
Clothing and drapery	356.9	366.4	395.0	425.1	455.2
Footwear	63.5	65.5	70.1	74.8	79.9
Domestic hardware, china, etc. (*d*)	54.8	62.1	68.3	73.7	81.8
Electrical goods (*e*)	117.1	128.8	136.4	155.4	180.0
Furniture and floor coverings	97.6	104.6	114.2	127.4	139.6
Chemists' goods	109.3	123.7	134.5	147.1	161.5
Newspapers, books, and stationery	78.5	83.0	88.2	92.8	100.9
Other goods (*f*)	219.9	235.6	258.7	277.0	301.9
Total (excluding motor vehicles, parts, petrol, etc.)	2,177.1	2,293.5	2,469.5	2,654.7	2,885.6
Motor vehicles, parts, petrol, etc. (*g*)	760.1	795.0	871.8	931.6	1,006.3
GRAND TOTAL	2,937.2	3,088.5	3,341.3	3,586.3	3,891.9

(*a*) Compiled on a basis comparable with the 1961–62 Retail Census.
(*b*) Includes fresh fruit and vegetables, confectionery, soft drinks, ice cream, cakes, pastry, fish, etc., but excludes some delivered milk and bread.
(*c*) Excludes sales made by licensed clubs, canteens, etc.
(*d*) Excludes basic building materials, builders' hardware, and supplies.
(*e*) Includes radios, television and accessories, musical instruments, and domestic refrigerators.
(*f*) Includes tobacco, cigarettes, sporting goods, jewellery, etc.
(*g*) Excludes tractors, farm machinery and implements, earthmoving equipment, etc.

Retailing in Victoria since 1957, 1969

OVERSEAS AND INTERSTATE TRADE

Overseas trade: legislation and agreements

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

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

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

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

Preferential rates apply to goods, produce, or manufacture of the United Kingdom, Ireland, Canada, New Zealand, and Papua New Guinea,

and certain goods, the produce or manufacture of specified countries, provided that such goods comply with the laws in force at the time affecting the grant of preference. With the termination on 31 January 1973 of the United Kingdom–Australia Trade Agreement existing preferential rates applicable to United Kingdom goods came under review.

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

Primage duty

In addition to duties imposed by the Customs Tariff, primage duties at 5 per cent or 10 per cent are charged on some goods according to the type of goods and their origin. These duties were introduced in the 1930s as a means of raising revenue, not for protective purposes. Goods produced or manufactured by New Zealand, Norfolk Island, Fiji, Cocos (Keeling) Islands, Christmas Island (Indian Ocean), and Papua New Guinea are exempt from primage duty.

Anti-dumping duties

The *Customs Tariff (Dumping and Subsidies) Act* 1961–1965 provides protection for Australian industry against various forms of unfair trading. Under this Act dumping duty may be imposed on goods that are sold to Australian importers at a price which is less than the normal value of the goods, where this causes or threatens substantial injury to an Australian industry.

Industries Assistance Commission

The Industries Assistance Commission is set up under the provisions of the Industries Assistance Commission Act to advise the Australian Government on matters relating to the protection and encouragement of Australian industry.

Bilateral trade agreements

Australia has numerous trade agreements with overseas countries. The principal ones are outlined below :

Country	Main features of agreement
CANADA	Dated 1960. Mutual accord of preferential tariff treatment with certain specified exemptions as for 1931 Agreement plus concessions granted in 1932 and 1937.
NEW ZEALAND	Dated 1966. Provides for free trade in certain scheduled goods. Provision is made for addition of items to the schedule. The 1933 Agreement continues in force as part of the 1966 Agreement except as superseded or modified by it.
MALAYSIA	Dated 1958. Agreement negotiated with the Federation of Malaya and applies only to that part of Malaysia formerly comprising the Federation. Records exchange of preferential treatment with special protection for Australia's wheat and flour markets in Malayan States, and for Malayan rubber in Australia, provided the Papua New Guinea crop is absorbed.
INDONESIA	Dated 1959 and with a re-negotiation signed on 14 November 1972. The new agreement is a most favoured nation agreement. It establishes the G.A.T.T. as the principle governing the

Country	Main features of agreement
INDONESIA—*continued*	conduct of bilateral trade, covers support for A.S.E.A.N. and international commodity agreements, encouragement of Australian investment in Indonesia, protection of the interests of Australian consultants and contractors and consultation on shipping matters.
JAPAN	Dated 1963. Mutual exchange of most favoured nation treatment. Japan to accord preferential treatment to Australian wool and wheat as well as expanded opportunities for imports into Japan of other Australian primary produce and motor vehicles. Australia to consult Japan on temporary protection cases affecting Japanese products.
PHILIPPINES	Dated 1965. Provides for an exchange of non-discriminatory treatment while recognising existing preferences.
SOUTH KOREA	Dated 1965. Provides for an exchange of non-discriminatory treatment with allowances for existing preferences. Both Governments undertake to endeavour to increase volume of trade with each other.
EASTERN EUROPE	Australia has signed trade agreements with seven East European countries : U.S.S.R. (15 October 1965), Poland (20 June 1966), Bulgaria (22 June 1966), Romania (18 May 1967), Hungary (5 December 1967), Yugoslavia (21 July 1970) and Czechoslovakia (16 May 1972). These agreements provide basically mutual exchange of most favoured nation treatment with provision for consultation on request of either party.

NOTE. Following British entry into the European Economic Community the United Kingdom/Australia Trade Agreement which had come into effect in 1956 was terminated on 31 January 1973. The trade agreement signed between Australia and Taiwan on 22 April 1968 has lapsed, following Australia's recognition of the People's Republic of China on 22 December 1972.

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

The General Agreement on Tariffs and Trade, to which Australia was one of the original contracting parties, is an international trade agreement which has been in operation since 1 January 1948. At the end of January 1973, eighty-one countries, whose foreign trade represents well over 80 per cent of the total volume of world trade, were full contracting parties to the Agreement, two had acceded provisionally, and thirteen applied the Agreement on a *de facto* basis.

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

In June 1966 a new Part IV of G.A.T.T. came legally into force, embodying commitments to individual and joint action by contracting parties to assist developing countries through the field of international trade.

Excise Tariff

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

Customs (Import Licensing) Regulations

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

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

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

Export controls and incentives

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

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

Trade services

Trade Commissioner Service

The stimulation of interest abroad in Australia's exports is an important government activity in which the Australian Trade Commissioner Service plays a prominent part. Since the Second World War the Service has increased steadily, and by early 1974 there were 166 Trade Commissioners and Assistant Trade Commissioners in 54 posts in 41 countries.

Trade Commissioners are responsible for commercial intelligence in their territories. Particular facilities provided for Australian exporters and export organisations include : surveys of market prospects ; advice on selling and advertising methods ; arranging introductions with buyers and agents ; providing reports on the standing of overseas firms ; advice and assistance to business visitors ; helping to organise and carry through trade missions, trade displays, newspaper supplements, and other promotion and publicity media ; providing information on import duties, import licensing, economic conditions, quarantine and sanitary requirements, and other factors

affecting the entry and sale of goods; and helping to attract desirable investment.

In some countries Trade Commissioners also participate in inter-governmental negotiations in the economic and commercial fields. In certain countries where there is no diplomatic or consular mission Trade Commissioners are called upon to act as the Australian representative.

Trade Commissioners and Assistant Trade Commissioners are drawn from either private enterprise or the public service, and applications for entry into the Service are invited periodically by public advertisement. Recruitment is generally at the Assistant Trade Commissioner level and persons selected are promoted to Trade Commissioner as experience and performance warrant. In the majority of posts the Trade Commissioner is supported by an Assistant Trade Commissioner.

The Trade Commissioner Service is administered by the Department of Overseas Trade (as distinct from the diplomatic and consular services administered by the Department of Foreign Affairs), but in countries where there is an Australian diplomatic or consular mission it is the practice for Trade Commissioners to be attached to the mission and to hold an appropriate diplomatic or consular rank (Commercial Counsellor, Commercial Secretary, or Commercial Attaché).

Trade Missions

By the end of 1972 the Australian Government had sent seventy-seven trade and survey missions and five trade ships abroad as part of the campaign to increase exports. The experience acquired has indicated the need for flexibility in techniques to suit particular products or markets. At present the following types of trade missions are in use :

Survey missions. These are organised to obtain precise knowledge about the export trade potential for specific products in an overseas market. Such methods are used to explore export prospects in new or developing areas where commercial intelligence is not readily available or where a complex industry is involved and the industry requires special export knowledge.

Specialised and general trade missions. Arrangements are made for specific industries or groups of firms representing a number of industries to participate in a planned selling campaign in overseas markets with known sales potential. The mission visits the market, publicises its products and negotiates sales.

Trade displays, fairs, exhibitions, and store promotions

Since 1949 Australia has participated in numerous major trade fairs, exhibitions, and displays in Africa, Asia, Europe, the Americas, and the Pacific Area.

Initially the emphasis was on participation in general trade fairs directed at the public and the general commercial community. With the development of export promotion techniques and the greater diversity of goods available for export, more emphasis is now being placed on individual Australian trade displays and participation in specialised trade shows directed almost entirely at the business community. In addition, display rooms in Trade Commissioner offices are currently in use in Singapore, Kuala Lumpur, Manila, and Johannesburg.

Export of consulting services

Australian professional consultants have been increasingly successful in obtaining overseas commissions and are contributing significantly to Australia's foreign exchange earnings.

The Australian Professional Consultants Council consists of members of the Royal Australian Planning Institute, the Institute of Surveyors of Australia, the Royal Australian Institute of Architects, the Association of Consulting Engineers of Australia, the Institute of Quantity Surveyors, the Institute of Agricultural Science, and the Snowy Mountains Engineering Corporation. The Council assists the members of the professions concerned in obtaining overseas commissions. The Council also acts as a liaison body for the government in its efforts to promote the export of consulting services.

Most opportunities for Australian professional consultants arise through development projects financed by international aid and lending organisations such as the International Bank for Reconstruction and Development, the United Nations Development Programme, and the Asian Development Bank. However, Australian consultants are continuing to have significant successes in securing commissions from the private sector, particularly in the south-east Asian countries.

Construction contracts overseas

The Australian Overseas Construction Council has been formed by the Master Builders' Federation of Australia and the Australian Federation of Construction Contractors to assist construction contractors in winning contracts overseas.

Export Payments Insurance Corporation

The Exports Payments Insurance Corporation was established by the Australian Government in 1956 with the objective of encouraging exports by providing insurance against risks of non-payment of overseas accounts. The Corporation is charged to be self-supporting, i.e., over a period its income should be adequate to cover the expenses of operation and any payments of claims which may be incurred.

The main risks of loss against which the Corporation insures are the " commercial " risks of the insolvency or protracted default of the buyer, and " political " risks. The latter include exchange transfer difficulties ; the imposition of government regulations which prevent the import of the goods into the buyer's country ; and war, revolution, or civil disturbance in the buyer's country. For most " political " risks insurance cover is available to a maximum of 90 per cent of the amount of loss in the pre-shipment period and a maximum of 95 per cent in the post-shipment period. The rate of cover for " commercial " risks is fixed at 90 per cent.

The Corporation may submit to the Government, for consideration in the national interest, applications for payment of insurance which are commercially unacceptable to the Corporation. In considering such applications the Government takes account of both political and economic factors.

An amendment to the *Export Payments Insurance Corporation Act* 1956 in November 1964 gave E.P.I.C. the authority to issue guarantees of payments to commercial lending institutions on money raised for the purpose

of financing exports. The existence of E.P.I.C. guarantees has facilitated the raising of finance by exporters.

In addition to providing the above facilities, the Corporation insures, on behalf of the Australian Government, eligible Australian investments in overseas countries against the main non-commercial risks associated with investing overseas, e.g., expropriation, exchange transfer difficulties, and war damage. For an investment to be eligible it must confer benefits on both Australia and the investment host country. At 31 December 1971, 78 policies had been written for 21 investments, mainly in South-East Asia. The face value of these policies was $45m.

Since the first policy was issued in September 1957 Australian exporters have made increasing use of the facilities of E.P.I.C. At 31 December 1971 the Corporation had 960 policies current on its commercial account (i.e., not including government business) with a face value of over $542m. The majority of transactions have been on a short or medium term basis using a supplier credit facility (i.e., insured credit being extended to the overseas buyer by the exporter with the financial support of private lending institutions). The Corporation has issued policies covering exports to 150 countries and has insured a wide range of Australian exports.

In 1971 E.P.I.C. was authorised to extend its guarantee facility to credit made available by lending institutions direct to the overseas buyer. The new facility is known as buyer credit and is intended to cater for the export of capital goods on extended repayment terms. It is designed to supplement supplier credit and thus widen the range of facilities available to Australian exporters.

A Consultative Council, composed of two government members and eight leading figures in the fields of banking, commerce, and industry, advises the Corporation on its activities. The council meets two or three times a year and is appointed for a term of three years.

For further information on E.P.I.C., including a table on the business of the Corporation for each of the years 1967–68 to 1971–72, refer to pages 700–1.

Victoria's pattern of trade, 1964

Overseas trade : recorded value of imports and exports

All values in overseas trade statistics are determined on a " free on board (f.o.b.) port of shipment " basis. This means that all charges (in particular the cost of freight and insurance) incurred after the goods have been exported from the port of shipment are excluded. Only transport and service charges incurred, or usually incurred, prior to export are included in the determination of trade values.

The procedure adopted to value exports and imports is as follows :

Exports. The recorded value of goods exported includes the cost of the outside package and has been determined, since July 1937, as follows :

(*a*) Goods sold to overseas buyers before export are valued at the Australian f.o.b. port of shipment equivalent of the actual price at which the goods were sold.

(*b*) Goods shipped on consignment are valued at the Australian f.o.b. port of shipment equivalent of the price paid for similar goods of Australian origin in the principal markets of the country to which they are dispatched for sale.

Imports. The recorded value of goods imported is the " value for duty " as laid down for Customs purposes, that is, the sum of :

(*a*) (i) the actual money price paid or to be paid for the goods by the Australian importer plus any special deduction, or

(ii) the current domestic value of the goods, whichever is the higher; and

(*b*) all charges payable or ordinarily payable for placing the goods free on board at the port of export.

In the case of goods consigned for sale in Australia the value for duty shall be the amount which would be the value for duty if the goods were at date of exportation sold to an Australian importer instead of being consigned for sale in Australia.

" Current domestic value " is defined as " the amount for which the seller of the goods to the purchaser in Australia is selling or would be prepared to sell for cash, at the date of exportation of those goods, the same quantity of identically similar goods to any and every purchaser in the country of export for consumption in that country ".

" Special deduction " is defined as " any discount or other deduction allowed to the Australian importer which would not ordinarily have been allowed to any and every purchaser at the date of exportation of an equal quantity of identically similar goods ".

Overseas trade of Victoria

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

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

Year	Imports	Exports			Excess of imports
		Australian produce	Re-exports	Total	
1967–68	1,130,741	661,989	23,766	685,755	444,986
1968–69	1,182,747	688,402	19,177	707,579	475,168
1969–70	1,347,053	883,768	28,828	912,596	434,457
1970–71	1,458,583	995,867	39,041	1,034,908	423,675
1971–72	1,431,076	1,103,230	36,501	1,139,731	291,345

VALUE OF AUSTRALIAN TRADE, AND PROPORTION HANDLED AT VICTORIAN PORTS

Year	Australian trade			Proportion of Australian trade handled at Victorian ports		
	Imports	Exports	Total	Imports	Exports	Total
	$'000 f.o.b.			per cent		
1967–68	3,264,473	3,044,675	6,309,148	34.6	22.5	28.8
1968–69	3,468,505	3,374,263	6,842,768	34.1	21.0	27.6
1969–70	3,881,227	4,137,222	8,018,449	34.7	22.1	28.2
1970–71	4,150,028	4,375,757	8,525,785	35.1	23.6	29.2
1971–72	4,008,365	4,896,381	8,904,746	35.7	23.3	28.9

Classification of overseas imports and exports

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

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

Division number	Description	Imports		Exports	
		1970–71	1971–72	1970–71	1971–72
00	Live animals	2,056	2,152	1,631	2,234
01	Meat and meat preparations	385	367	134,444	177,693
02	Dairy products and eggs	2,796	3,505	70,018	74,580
03	Fish and fish preparations	11,866	11,905	11,165	12,774
04	Cereals and cereal preparations	1,827	1,776	141,920	138,998
05	Fruit and vegetables	9,484	9,458	64,617	55,485
06	Sugar and sugar preparations and honey	1,308	1,390	989	702
07	Coffee, tea, cocoa, spices, and manufactures thereof	21,770	23,032	3,118	6,772
08	Feeding-stuff for animals (except unmilled cereals)	1,537	1,181	5,759	8,579
09	Miscellaneous preparations chiefly for food	2,063	2,490	781	842
11	Beverages	2,952	3,201	2,071	2,582
12	Tobacco and tobacco manufactures	15,492	13,460	1,116	1,070
21	Hides, skins and fur skins, undressed	826	809	34,219	39,589
22	Oil-seeds, oil nuts and oil kernels	352	372	254	1,091
23	Crude rubber (including synthetic and reclaimed)	11,923	12,123	582	520
24	Wood, timber and cork	9,230	9,548	61	90
25	Pulp and waste paper	10,134	8,390	24	40
26	Textile fibres and their waste	24,953	27,620	188,386	193,203
27	Crude fertilisers and crude minerals (except coal, petroleum, and precious stones)	13,257	11,428	305	259
28	Metalliferous ores and metal scrap	246	338	17,011	17,446
29	Crude animal and vegetable materials, n.e.c.	6,173	5,071	8,472	9,785
32	Coal, coke and briquettes	60	40	294	603
33	Petroleum and petroleum products	43,511	44,907	22,832	32,997
34	Petroleum gases and other gaseous hydrocarbons	6	13	(*a*)	(*a*)
41	Animal oils and fats	163	169	12,201	14,584
42	Fixed vegetable oils and fats	4,942	2,956	16	21
43	Animal and vegetable oils and fats, processed, and waxes of animal or vegetable origin	829	963	397	174
51	Chemical elements and compounds	43,034	38,677	4,038	4,161
52	Mineral tar and crude chemicals from coal, petroleum, and natural gas	2,320	1,903	5	4
53	Dyeing, tanning and colouring materials	12,183	13,050	2,410	2,615
54	Medicinal and pharmaceutical products	13,917	14,382	6,543	7,620
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	4,165	3,495	894	1,287
56	Fertilisers, manufactured	2,397	1,707	53	671
57	Explosives and pyrotechnic products	4,440	1,658	2,370	2,135
58	Plastic materials, regenerated cellulose and artificial resins	46,514	49,299	4,343	3,985
59	Chemical materials and products, n.e.c.	18,683	17,407	14,293	19,542

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

Division number	Description	Imports		Exports	
		1970–71	1971–72	1970–71	1971–72
61	Leather, leather manufactures, n.e.c., and dressed fur skins	3,605	4,068	2,803	2,560
62	Rubber manufactures, n.e.c.	15,173	15,239	4,679	5,094
63	Wood and cork manufactures (except furniture)	6,086	6,436	885	754
64	Paper, paperboard, and manufactures thereof	40,951	39,369	2,461	3,205
65	Textile yarn, fabrics, made-up articles and related products	132,056	145,724	10,000	9,629
66	Non-metallic mineral manufactures, n.e.c.	26,213	26,683	5,622	5,409
67	Iron and steel	47,594	45,858	3,598	3,600
68	Non-ferrous metals	11,278	8,740	34,800	27,739
69	Manufactures of metal, n.e.c.	35,581	35,718	23,618	21,137
71	Machinery (except electric)	269,102	243,031	34,298	43,434
72	Electrical machinery, apparatus, and appliances	96,291	96,361	12,772	19,095
73	Transport equipment	231,196	220,063	77,732	85,939
81	Sanitary, plumbing, heating, and lighting fixtures and fittings	2,625	3,161	738	792
82	Furniture	2,253	2,457	407	577
83	Travel goods, handbags and similar articles	1,625	2,008	37	64
84	Clothing and clothing accessories ; articles of knitted or crocheted fabric	14,999	17,811	3,905	4,839
85	Footwear, gaiters, and similar articles and parts therefor	6,839	10,123	365	389
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	50,028	49,374	10,316	12,789
89	Miscellaneous manufactured articles, n.e.c.	58,809	60,645	7,671	12,564
9A	Commodities and transactions of merchandise trade, n.e.c.	48,191	47,003	(*b*) 23,252	(*b*)23,797
	Total merchandise	1,448,292	1,420,117	1,017,589	1,118,143
9B	Commodities and transactions not included in merchandise trade	10,291	10,959	17,319	21,588
	Total	1,458,583	1,431,076	1,034,908	1,139,731

(*a*) Included in Division 9A.
(*b*) Includes Division 34.

Trade with countries

The value of trade with overseas countries from 1969–70 to 1971–72 is shown in the following table :

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

Country	Imports			Exports		
	1969–70	1970–71	1971–72	1969–70	1970–71	1971–72
Belgium-Luxembourg	9,492	11,011	11,355	8,664	9,054	7,685
Canada	49,865	48,994	45,329	26,548	18,497	29,910
China, People's Republic of	10,811	9,727	14,448	33,613	22,994	14,319
Czechoslovakia	2,730	2,947	3,115	1,563	823	1,947
Finland	5,295	7,190	5,194	267	331	297
France	33,482	29,419	29,195	38,097	34,065	36,698

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

Country	Imports			Exports		
	1969–70	1970–71	1971–72	1969–70	1970–71	1971–72
Germany, Federal Republic of	113,450	133,932	132,814	26,281	28,252	28,774
Greece	1,791	1,563	2,112	3,948	5,247	11,066
Hong Kong	19,092	20,512	23,487	21,308	23,048	24,328
India	10,591	11,704	14,669	9,100	9,430	7,609
Indonesia	2,911	3,584	4,331	8,535	9,567	10,303
Iran	1,937	3,050	1,312	5,270	3,745	9,164
Iraq	9,151	9,240	13,989	779	554	1,750
Italy	28,000	31,937	30,588	28,500	18,684	21,400
Japan	177,408	204,072	227,989	141,100	176,793	202,316
Kuwait	19,387	11,756	12,952	1,725	1,838	2,522
Malaysia	10,617	9,015	9,573	13,461	17,937	18,426
Mexico	1,228	233	320	5,318	5,728	4,931
Netherlands	22,369	23,925	19,648	15,056	15,649	9,094
New Zealand	26,736	35,135	41,720	58,820	79,725	97,966
Pakistan	6,209	5,420	3,001	8,746	3,026	1,714
Papua New Guinea	6,307	6,686	5,861	14,118	25,124	31,165
Philippines	858	1,330	1,854	13,287	14,067	18,328
Poland	798	1,006	1,036	5,275	4,369	7,287
Qatar	11,039	730	590	134	328	282
Saudi Arabia	10,118	3,385	1,891	5,659	8,796	10,013
Singapore	3,008	4,455	6,592	24,538	36,155	29,901
South Africa	5,683	4,909	5,156	30,672	40,680	43,200
Spain	4,500	6,009	8,077	5,339	3,668	5,183
Sri Lanka	4,177	4,671	4,774	5,653	5,039	1,186
Sweden	18,692	24,703	26,193	3,426	3,762	3,599
Switzerland	21,094	20,639	23,360	1,309	2,000	2,760
Taiwan	6,429	8,582	14,441	6,849	9,628	13,480
Thailand	743	1,108	2,558	7,906	11,496	13,285
United Kingdom	304,681	328,811	305,469	120,940	114,360	92,594
United States of America	315,965	363,015	311,987	112,906	116,362	140,223
U.S.S.R.	1,492	992	622	16,074	24,301	20,772
Yugoslavia	313	319	207	7,039	9,918	5,631
Other and unknown	68,604	62,867	63,267	74,773	119,868	158,063
Total	1,347,053	1,458,583	1,431,076	912,596	1,034,908	1,139,171

Interstate trade

Statistics of trade between Victoria and other Australian States are incomplete and relate mainly to seaborne trade. Although a substantial quantity of freight is carried by road and rail transport between Victoria and neighbouring States, no details of this traffic are available. A small tonnage of freight is carried interstate by air (see page 790).

Interstate trade by sea

In terms of quantity, the principal cargoes carried interstate by ship to and from Victorian ports are coal and briquettes, petroleum and petroleum products, steel, sugar and sugar preparations, and timber. However, there is also a considerable trade in foodstuffs, motor vehicles, and other manufactured goods, particularly through the Port of Melbourne. Details of the principal commodities in interstate shipments handled by the ports of Melbourne and Geelong during 1971 and 1972 are shown below. For many commodities comparison with details for previous years is not possible because of

changes in classification. In addition, details of exports from the Port of Melbourne are not comparable with those for previous years because of changes in the method of calculating tonnages. Some cargoes are recorded in tons weight, while others are recorded in tons measurement. In the statistics the measurement of 40 cu ft is taken as the equivalent of 1 ton.

Port of Melbourne

Interstate exports during 1971 and 1972 totalled 2,039,258 and 2,317,657 tons, respectively. The principal commodities were transport equipment (including touring passenger cars), 388,763 and 454,600 tons ; petroleum and petroleum products, 324,837 and 627,901 tons ; fruit and food preparations, 64,470 and 69,250 tons ; paper, paperboard, and manufactures thereof, 21,526 and 11,916 tons ; metal manufactures, 11,833 and 27,425 tons ; and building materials, 16,242 and 10,843 tons.

Interstate imports during the same periods totalled 5,535,424 and 4,443,552 tons, the principal commodities being petroleum and petroleum products, 3,066,653 and 2,047,538 tons ; raw sugar, 229,591 and 226,966 tons ; iron and steel, 298,596 and 190,913 tons ; paper, paperboard, and manufactures thereof, 191,497 and 206,075 tons ; timber, 155,254 and 128,809 tons ; touring passenger cars, 149,075 and 174,630 tons ; gypsum, 149,718 and 136,781 tons ; chemicals, 195,255 and 239,005 tons ; and cement, 64,603 and 80,370 tons.

Port of Geelong

Total interstate exports during 1971 and 1972 amounted to 538,628 and 501,143 tons, respectively, of which petroleum and petroleum products accounted for 492,873 and 467,673 tons. Total interstate imports for the same periods amounted to 1,038,693 and 725,370 tons, and consisted mainly of petroleum and petroleum products, 556,073 and 278,136 tons ; alumina, 197,408 and 173,377 tons ; pig iron and steel, 165,921 and 187,909 tons ; and coal, 54,239 and 40,110 tons.

Trade of Victoria with Western Australia and Tasmania

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

Western Australia

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

For the years 1970–71 and 1971–72 the value of exports from Victoria to Western Australia totalled $296.6m and $317.8m, respectively. Transport equipment ($59.4m and $61.1m), clothing and clothing accessories ($28.2m and $33.5m), machinery other than electric machinery ($31.3m and $32.9m), tobacco and tobacco manufactures ($12.4m and $11.2m), and rubber manufacturers ($7.5m and $9.4m) were the main types of commodities included in this total.

Imports from Western Australia during the same periods were valued at $51.4m and $44.0m, respectively. Petroleum and petroleum products

($13.9m and $10.8m), chemical elements and compounds ($14.1m and $11.5m), and textile fibres and their waste ($5.1m and $3.8m) were the main types of commodities imported.

Detailed statistics of this trade appear in the publications *External Trade of Western Australia,* 1970–71 and 1971–72 and *Interstate Trade of Western Australia,* 1970–71 and 1971–72 issued by the Deputy Commonwealth Statistician, Perth.

Tasmania

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

In 1970–71 and 1971–72 exports by sea from Victoria to Tasmania were valued at $208.8m and $227.5m, respectively. Transport equipment ($28.4m and $31.0m), petroleum products ($18.5m and $19.9m), and tobacco and tobacco manufactures ($8.9m and $12.3m) were the main types of commodities. The value of tourists' motor vehicles included in the total for each year was approximately $24.0m and $23.9m.

Imports from Tasmania during these periods amounted to $179.6m and $196.1m. Preserved vegetables ($11.2m and $15.4m) and timber ($14.6m and $14.7m) were the main commodities imported. The value of tourists' motor vehicles included in the two totals was approximately $23.8m and $24.8m, respectively.

Customs and excise revenue

The total gross customs duties collected by the Commonwealth in Victoria in each of the three years 1969–70 to 1971–72 were $155.0m, $178.7m, and $179.3m, respectively. Collections include duty received on account of goods transferred to other States for consumption and exclude duty in respect of goods imported into other States but consumed in Victoria.

The principal commodities produced in Victoria on which the Australian Government imposes excise duty are set out in the table below, together with the gross amount of duty collected on account of each item for each of the three years 1969–70 to 1971–72. As with customs duties, collections include duty levied on goods exported to other States for consumption and exclude duty in respect of goods produced in other States, but consumed in Victoria.

VICTORIA—GROSS EXCISE DUTY COLLECTED ON PRINCIPAL COMMODITIES

Article and unit of quantity		Quantity on which duty was collected			Gross excise duty collected		
		1969–70	1970–71	1971–72	1969–70	1970–71	1971–72
		'000	'000	'000	$'000	$'000	$'000
Spirits (potable)	proof gal	642	658	694	6,357	6,572	6,879
Tobacco	lb	1,495	1,342	1,119	3,348	3,209	2,945
Cigars and cigarettes	lb	17,933	17,819	17,278	75,260	81,201	87,107
Petrol	gal	643,179	627,036	703,244	79,111	93,068	119,174
All other articles (*a*)		..	..	..	115,142	121,823	130,554
Total		..	..	..	279,218	305,873	346,659

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

The overseas trade and the gross revenue collected at Victorian ports during the year 1971–72 are shown in the following table :

VICTORIA—OVERSEAS TRADE AND GROSS REVENUE COLLECTED AT VICTORIAN PORTS, 1971–72
($'000)

Particulars	Melbourne (*a*)	Geelong	Portland	Western Port	Total
Overseas trade—					
Imports	1,362,744	45,567	15,109	7,656	1,431,076
Exports	956,802	131,125	33,375	18,429	1,139,731
Total	2,319,546	176,692	48,484	26,085	2,570,807
Gross revenue—					
Customs	180,359	846	213	25	181,443
Excise	337,693	8,966	..	..	346,659
Total	518,052	9,812	213	25	528,103

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

AUSTRALIA—VALUE OF OVERSEAS TRADE, GROSS CUSTOMS, AND EXCISE DUTY COLLECTED BY STATES, 1971–72
($'000)

State	Imports	Exports	Excess of exports	Gross duty collected	
				Customs	Excise
New South Wales	1,764,770	1,204,938	−559,832	234,289	460,364
Victoria	**1,431,076**	**1,139,731**	**−291,345**	**181,443**	**346,659**
Queensland	270,484	980,954	710,470	36,215	168,984
South Australia	189,748	394,064	204,316	24,335	107,843
Western Australia	283,263	946,504	663,241	30,072	101,883
Tasmania	39,749	178,950	139,201	2,894	32,210
Northern Territory	25,866	49,243	23,377	3,560	5,281
Australian Capital Territory	3,410	1,998	−1,412	187	40
Australia	4,008,365	4,896,381	888,016	512,994	1,223,263

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

TRANSPORT

Shipping

Coastal trade

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

modified to make them more useful as a means of transportation around the coast.

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

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

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

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

Searoad service between Victoria and Tasmania

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

VICTORIA—TASMANIA : SEAROAD SERVICE (*a*), 1971–72

Name of vessel	Passengers	Accompanied vehicles	Trade vehicles (*b*)	Mail vans
Princess of Tasmania	73,262	20,065	2,259	298
Australian Trader	33,022	11,588	2,276	222
Bass Trader	322	182	1,897	74
Other A.C.S.C. vessels	..	..	2,118	..
Total	106,606	31,835	8,550	594

(*a*) Excludes commercial cargo which consists of unit loads, i.e., containers, trailers, timber packs, etc.,
(*b*) Motor vehicles available for sale.

Vessels entered and cleared

The number of vessels entering Victorian ports, the number cleared from those ports, and their total tonnage in each of the five years 1967–68 to 1971–72 were as follows :

VICTORIA—OVERSEAS AND INTERSTATE SHIPPING

Particulars		1967–68	1968–69	1969–70	1970–71	1971–72
Entrances	number	3,550	3,618	3,696	3,920	4,052
	'000 net tons	17,161	17,944	20,516	24,055	25,676
Clearances	number	3,548	3,591	3,682	3,925	4,058
	'000 net tons	17,142	17,769	20,458	24,080	25,636

Nationality of shipping

The countries of registration of vessels which entered or were cleared at Victorian ports during the years 1970–71 and 1971–72 were as follows :

VICTORIA—NATIONALITY OF SHIPPING
('000 net tons)

Vessels registered at ports in—	Vessels entered		Vessels cleared	
	1970–71	1971–72	1970–71	1971–72
Australia	9,575	11,810	9,493	11,758
Denmark	159	186	155	186
France	126	213	129	213
Germany, Federal Republic of	662	541	667	537
Greece	721	646	724	649
Hong Kong	45	64	43	66
India	138	138	138	134
Italy	537	496	534	500
Japan	1,219	1,277	1,237	1,288
Liberia	1,745	1,317	1,767	1,298
Nauru	99	107	99	107
Netherlands	651	731	675	731
Antilles (Netherlands)	343	401	338	407
New Zealand	190	163	196	165
Norway	1,075	1,168	1,053	1,165
Panama	435	447	443	447
Singapore	105	96	106	95
South Africa	102	83	102	83
Sweden	667	435	670	428
United Kingdom	4,693	4,535	4,731	4,548
United States of America	196	158	196	165
U.S.S.R.	121	116	126	116
Yugoslavia	57	81	64	81
Other	394	467	394	469
Total	24,055	25,676	24,080	25,636

Shipping entered at Victorian ports

Particulars of shipping which entered each principal port of Victoria are given in the following table for the years 1970–71 and 1971–72 :

VICTORIA—VESSELS ENTERED AT EACH PORT

Class of vessel	Melbourne		Geelong		Portland		Western Port	
	1970–71	1971–72	1970–71	1971–72	1970–71	1971–72	1970–71	1971–72
	NUMBER							
Overseas—								
Direct	269	325	143	111	36	41	41	55
Other	1,352	1,188	212	191	71	71	51	53
Interstate	1,197	1,313	199	257	23	28	326	424
Total	2,818	2,826	554	559	130	140	418	532

VICTORIA—VESSELS ENTERED AT EACH PORT—*continued*

Class of vessel	Melbourne		Geelong		Portland		Western Port	
	1970–71	1971–72	1970–71	1971–72	1970–71	1971–72	1970–71	1971–72
	NET TONS ('000)							
Overseas—								
Direct	1,079	1,427	1,043	890	262	320	499	756
Other	8,608	8,133	2,018	1,756	346	375	828	659
Interstate	4,023	4,447	1,580	1,766	163	163	3,605	5,017
Total	13,710	14,007	4,641	4,412	771	858	4,932	6,432

Cargoes discharged and shipped

The following tables show the tonnage of overseas and interstate cargoes discharged and shipped in Victorian ports during 1970–71 and 1971–72, as well as the tonnage of overseas cargoes discharged and shipped during the years 1969–70 to 1971–72 according to the countries of origin and consignment, and the nationalities of the vessels in which the cargoes were carried :

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

Particulars	Melbourne		Geelong		Portland		Western Port	
	1970–71	1971–72	1970–71	1971–72	1970–71	1971–72	1970–71	1971–72
	DISCHARGED							
Interstate—								
Weight	1,471	1,495	979	982	12	29	49	5
Measure	832	980	..	1	..	..	11	8
Overseas—								
Weight	2,220	1,980	2,373	1,970	132	209	419	420
Measure	2,183	2,291	6	1	1	..	..	..
	SHIPPED							
Interstate—								
Weight	746	854	488	573	6	1	5,408	7,470
Measure	935	1,035	..	5	..	..	1	3
Overseas—								
Weight	1,516	1,685	2,209	2,301	502	508	606	1,096
Measure	1,138	1,000	3	18	1	..	..	..

NOTE. 1 ton measurement = 40 cu ft.

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

Geographic trade area of origin or consignment	1969–70		1970–71		1971–72	
	Discharged	Shipped	Discharged	Shipped	Discharged	Shipped
North America and Hawaiian Islands—						
Weight	566,877	172,564	530,996	333,865	501,862	509,236
Measure	362,581	57,660	392,183	98,381	413,346	110,288
South America—						
Weight	3,934	12,338	3,670	46,914	11,614	122,340
Measure	825	2,816	911	4,582	954	2,259
Europe (incl. U.S.S.R.)—						
Weight	192,877	466,855	239,913	719,096	283,612	776,667
Measure	887,245	290,750	837,850	306,854	921,473	257,938
Africa—						
Weight	76,960	135,212	75,777	787,909	51,687	921,196
Measure	26,333	55,148	27,294	55,486	29,982	52,120

VICTORIA—OVERSEAS CARGOES DISCHARGED AND SHIPPED ACCORDING TO GEOGRAPHIC TRADE AREAS—*continued*
(tons)

Geographic trade area of origin or consignment	1969–70		1970–71		1971–72	
	Discharged	Shipped	Discharged	Shipped	Discharged	Shipped
Asia—						
Weight	6,759,155	2,251,062	3,682,392	2,548,483	3,172,776	2,768,504
Measure	671,747	241,292	758,085	417,906	740,259	373,271
Papua New Guinea, New Zealand, and Pacific Islands—						
Weight	579,407	360,425	437,162	397,084	382,765	492,584
Measure	136,337	189,587	173,842	257,562	185,172	219,029
Indian Ocean Islands and Antarctic Area—						
Weight	210,886	3,580	173,745	56	174,531	..
Measure	443	1,695	169	2,092	487	3,050
Total—Weight	8,390,096	3,402,036	5,143,655	4,833,407	4,578,847	5,590,527
Measure	2,085,511	838,948	2,190,334	1,142,863	2,291,673	1,017,955

NOTE. 1 ton measurement = 40 cu ft.

VICTORIA—OVERSEAS CARGOES DISCHARGED AND SHIPPED ACCORDING TO NATIONALITIES OF VESSELS
('000 tons)

Vessels registered at ports in—	1969–70		1970–71		1971–72	
	Discharged	Shipped	Discharged	Shipped	Discharged	Shipped
Australia	94	62	213	200	284	187
Bermuda	96	37	66	..	44	..
Denmark	100	39	93	42	96	40
France	565	40	134	15	263	61
Germany, Federal Republic of	441	87	369	151	291	169
Greece	359	336	159	487	87	550
Hong Kong	42	107	18	58	25	91
India	130	82	29	24	30	18
Italy	42	36	47	18	73	59
Japan	818	288	681	701	542	779
Liberia	1,985	271	826	871	352	1,051
Netherlands	239	504	280	361	304	463
Antilles (Netherlands)	637	10	315	73	383	38
New Zealand	129	143	157	192	153	168
Norway	1,112	336	661	453	748	325
Panama	193	80	130	122	129	200
Sweden	234	229	250	288	298	215
United Kingdom	2,888	1,278	2,484	1,425	2,374	1,746
United States of America	129	41	79	116	77	38
U.S.S.R.	50	41	64	26	25	36
Other	193	194	279	353	293	374
Total	10,476	4,241	7,334	5,976	6,871	6,608

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

Port Phillip Sea Pilots

Thirty-nine 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. Pilotage rates are fixed by the Marine Board with the consent of the Governor in Council. Ninety per cent of the collections are retained by the Pilot Service to pay for running expenses, wages, and pilots' remuneration. Of the remaining 10 per cent, 4 per cent is paid into the Consolidated Fund, and 6 per cent to the Treasurer of Victoria to go to and form part of the Port Phillip Pilots' Sick and Superannuation Fund.

Thirty-seven pilots are rostered for the various pilotage duties : from without Port Phillip Heads to Melbourne and Geelong, and vice versa ; in and out of the River Yarra and adjacent docks ; in and out of Western Port ; between Melbourne, Geelong, and Western Port ; and elsewhere as required. One of the pilots is elected Secretary-Treasurer and is in charge of the Pilot Office at Williamstown ; the others, in turn, take charge of the pilot vessel cruising off Port Phillip Heads.

Pilots for ships entering Port Phillip are organised by the pilot-in-charge of the pilot vessel and those for ships departing from or moving within Port Phillip are arranged by the office staff at Williamstown. The pilots licensed for Western Port maintain a roster for shipping in that port.

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 years 1961 to 1972 :

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

Year	Number of ships		Year	Number of ships		Year	Number of ships	
	Port Phillip	Western Port		Port Phillip	Western Port		Port Phillip	Western Port
1961	4,288	..	1965	4,738	..	1969	4,388	171
1962	4,177	..	1966	4,759	67	1970	4,433	377
1963	4,333	..	1967	4,606	142	1971	4,322	541
1964	4,505	..	1968	4,481	127	1972	3,941	567

Further references, 1963–1971

Melbourne Harbor Trust

Administration

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

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

Finance

The Port of Melbourne is self-supporting and does not receive any financial grants from the State Government. The Trust's revenue is derived from a number of charges paid by the users of the Port. The charges are principally wharfage rates levied on each ton of cargo landed in, or shipped out of the Port, and tonnage rates levied on the gross registered tonnage of ships and the time they spend in port. Other charges cover rent of sheds, hire of Port owned cargo handling equipment, general port services, and rental of land reserved for essential long-term port development. Expenditure is on port maintenance, reconstruction, modernisation, and development, with any surplus put back into port development. In 1971 the Trust had approximately $110m invested in port assets.

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

Particulars	1968	1969	1970	1971	1972
REVENUE					
Wharfage and tonnage rates	8,357	8,901	9,475	10,038	9,397
Rent of sheds	638	576	458	679	652
Special berth charges	489	461	402	363	319
Rent of lands	1,154	1,665	1,951	2,220	2,492
Crane fees	2,043	1,937	1,963	1,618	1,320
Other	892	781	798	1,345	1,298
Total revenue	13,573	14,321	15,047	16,263	15,478
EXPENDITURE AND APPROPRIATIONS					
Administration and general expenses	1,098	1,590	1,331	1,584	1,626
Port operating expenses	2,821	3,074	3,304	3,929	4,258
Maintenance—					
Dredging	266	315	826	938	1,410
Harbour	101	117	156	156	185
Wharves	593	691	687	774	898
Approaches	119	133	139	173	203
Railways	80	53	59	68	70
Cargo handling equipment	371	362	369	429	387
Other properties	55	62	83	33	46
Interest	1,780	1,927	2,032	2,329	2,506
Depreciation and renewals	2,295	2,536	2,799	3,024	2,745
Insurance	108	113	120	134	122
Sinking fund	600	200	800	800	..
General reserve	1,600	1,400	500	..	..
Payments to Consolidated Fund	1,468	1,506	1,559	1,634	1,486
Other	(a)	(a)	36	23	..
Total expenditure and appropriations	13,355	14,079	14,800	16,029	15,942
CAPITAL OUTLAY					
Land and property	291	56	107	1,272	336
Reclamation	359	80	199	975	195
Deepening waterways	2,517	3,238	1,061	1,624	1,013
Wharves and sheds construction	3,214	2,548	2,472	1,651	1,660
Cargo handling equipment	537	395	527	453	704
Approaches construction	412	587	695	374	638
Floating plant	167	731	18	15	47
Other works, etc.	588	674	1,014	1,030	594
Total capital outlay	8,085	8,309	6,093	7,394	5,187
Loan indebtedness at 31 December	36,029	37,889	40,690	44,059	45,644

(a) Under $500.

New cargo handling era

Container and unit-load methods of cargo handling in the Port of Melbourne were introduced and extended during the 1960s following the provision of a specially designed berth and ship in 1959. By 1969 the cumulative effect of gradually developing these new facilities had had a significant impact on the Port. Towards the end of 1969 the emphasis of cargo handling activities in the Port began to shift from the long established conventional cargo handling areas to five areas where new dock complexes had been built, a new specially designed berth added to existing docks, and an old conventional berth converted for use with container and unit-load cargo handling methods. With this shift it also became evident that the traditional hub of the Port was shifting, and that it would re-establish itself over a few years in one of the new areas which would emerge as the cargo handling centre of a radically different port.

In 1971 the Port handled a volume of 16.1 million tons of import, export, and transhipment cargo, an increase of 12.6 per cent over 1970. However, this volume was handled by shipping which paid only 2,937 calls at the Port, a decline of about 12.5 per cent. This drop was due in no small measure to the greatly increased calls made by cellular ships as well as unit and roll-on roll-off vessels on overseas trade routes. The drop of 12.5 per cent in arrivals would have been greater but for the increased number of conventional ships introduced by shipowners operating services mainly in the Malay Peninsula, Pacific Islands, west coast of the United States of America, and South Africa. The increased number of conventional vessels on these trade routes ensured almost full usage of the Port's conventional berths during the year. With trade to these countries increasing, port planners are confident that the Port's conventional berths will still have an important role to play in the future.

The changes in the character of the Port became evident with the arrival in March 1969 of the first overseas container ship on the United Kingdom–Australia service. Cargoes flowing through all ports of the world are classed as either 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 (they had operated in the coastal trade from some eight years earlier), are vessels specially designed to carry containers and unit-loads, which are a collection of general cargo assembled into one load, usually on a tray or pallet. These ships can also carry conventional cargo, namely, individual items of general cargo handled and loaded separately, and handled individually inside the ship and on shore.

In 1969 a new two berth roll-on roll-off, container, and unit-load facility was put into service on North Wharf for trans–Tasman shipping; a new cargo terminal complex was built adjacent to the berths on a seven acre area. In 1971 the emerging significant change in the character of the Port was the result of the completion of a number of unit-load, roll-on roll-off, and container cargo handling berths and terminals, and their associated shore based cargo consolidation depots; the introduction of container ships in

the coastal trade ; and additional unit-load ships and container ships in the coastal trade. Changes in some of the dock facilities are outlined below.

Swanson Dock is now a highly sophisticated container complex of four berths, surrounded by some 300 acres of land. Two berths on either side of the complex, each 800 ft in length, make the area, which was once swamp, one of the most important regions in the Port. On the west side are two 45 ton twin lift Portainer cranes, and on the east side two locally designed 45 ton twin lift cranes are in operation. The dock was opened in 1969. The container tonnage handled in 1971 by the three container berths was 2,960,596 tons as against 1,880,719 tons in 1970.

Victoria Dock was first opened to shipping in 1893. Originally some 96 acres of swamp, this area of the Port, with 24 berths, was formerly the hub of the Port's overseas conventional cargo trade. Some berths have been reconstructed and modernised, to cope with increased use by unit-load and container ships, and in the areas alongside new terminal facilities have been constructed.

The advent of a new type of roll-on roll-off, unit-load container ship with its own starboard quarter stern ramp, which gives access to practically any wharf, saw a new facility created at 32 South Wharf. The existing wharf and storing facilities were retained, and to provide sufficient wharf area for the new Pacific Australia Direct service, the wharf was extended some 200 ft downstream, and a back up area of approximately 3 acres was developed adjacent to the berth. The conventional berth at 14 South Wharf was reconstructed in early 1971 to provide a specialised berth for the Tasmania–King Island–Melbourne trade. An increase in trade between King Island and Melbourne resulted in the shipping line concerned introducing a roll-on roll-off vessel for the service.

Webb Dock, established in 1959, primarily for the interstate vehicular ferry vessel *Princess of Tasmania,* is now one of the busiest areas in the Port. Unit-load container handling from a revolutionary type of ship was introduced to Australian coastal shipping at Webb Dock, and the area has now grown to a three berth complex with a 21 acre back up area. Handling interstate and Japanese specialised shipping services, in mid-1972 the area saw the retirement of the *Princess of Tasmania* and the introduction of the *Empress of Australia* to the Melbourne–Tasmania service.

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

Geelong Harbor Trust

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

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

There are nineteen effective berths in the Port and two berths at the Commonwealth Explosives Pier, Point Wilson—owned and operated by the Australian Government. Maximum water depths are 36 ft at eight berths, 32 ft at ten berths (all within the inner harbour), and three outer harbour berths of 30 ft. Special berths are provided for the handling of grain,

phosphatic rock and sulphur, oil, and alumina. The bulk grain terminal has a 30 million bushel storage capacity, and is capable of loading ships at the rate of 1,600 tons per hour.

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

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

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

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

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

Particulars	1968	1969	1970	1971	1972
REVENUE					
Wharfage, tonnage, and special berth rates	2,428	2,536	2,937	2,724	2,050
Shipping services	801	756	909	853	773
Rents, fees, and licences	51	49	82	117	132
Freezing works and abattoirs	80	100	104	100	95
Other	5	10	22	58	50
Total revenue	3,365	3,451	4,054	3,852	3,100
EXPENDITURE AND APPROPRIATIONS					
Management expenses	432	466	517	601	745
Shipping services	670	687	775	841	839
Maintenance—					
Wharves and approaches	91	79	111	187	147
Harbour	99	109	118	183	146
Floating plant	18	22	19	26	23
Other	25	20	24	41	33
Interest on loans	413	422	388	376	310
Sinking fund	79	81	80	69	49
Depreciation provision	693	737	740	861	873
Port development fund	250	700	500	500	..
Other	68	75	85	93	24
Total expenditure and appropriations	2,838	3,398	3,357	3,778	3,189
CAPITAL OUTLAY (NET)					
Floating plant	131	19	9	..	3
Land and property	77	210	101	40	171
Deepening waterways	313	8	..	..	..
Wharves and approaches	709	718	788	120	178
Other	46	34	11	6	19
Total capital outlay	1,276	989	909	166	371
LOAN INDEBTEDNESS AT 31 DECEMBER					
State Government	118	87	81	74	67
Public	7,815	8,007	6,982	6,854	4,865
Total loan indebtedness	7,933	8,094	7,063	6,928	4,932

Portland Harbor Trust

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

Completion of a waterfront cold store and the use of modern cargo handling methods has proved valuable in handling refrigerated cargoes, which make a considerable contribution towards the tonnage incentive required for vessels to call at Portland. The siting of the cold store is helping to develop the amount of general cargo handled on No. 2 berth.

Development projects currently in hand will provide the Port with the facilities necessary to handle fully laden bulk carriers up to 70,000 tons dwt. To cater for the handling of much larger vessels of greater depth than those currently using the Port the Trust proceeded to deepen No. 1 berth and its approaches from 36 ft to 40 ft at low water.

One shipment of 42,500 tons of wheat loaded for Europe during March 1972 comprised the largest single cargo of grain handled at a Victorian port. The natural deep-water approaches to the harbour provide a major asset which is capable of being exploited on a relatively cheap basis in order to develop additional facilities necessary for bulk carriers which are a feature of Australia's maritime transport.

Expansion of Port trade during 1971–72 resulted in a record volume of cargo passing through the Port. Compared with the previous year, total trade rose by 9.51 per cent to 922,294 tons. Shipping revenue showed a corresponding increase of 11 per cent from $500,056 the previous year to $555,421. The gross register of vessels berthed amounted to 1,446,221 tons. This included 26 vessels berthed for bunkers and other purposes, but excluded a further 10 vessels making use of the Port anchorage. For the second year in succession exports of bulk grain, oilseeds, and associated bulk commodities accounted for almost 50 per cent of total Port trade.

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

Particulars	1967–68	1968–69	1969–70	1970–71	1971–72
REVENUE					
Wharfage rates	159	224	246	282	323
Tonnage rates	23	26	37	58	59
Shipping services	101	139	192	290	287
State Government grant	760	616	650	692	580
Grain terminal	17	144	341	563	559
Cold store operations	..	..	..	..	33
Other	86	83	67	74	92
Total revenue	1,146	1,232	1,533	1,959	1,933
EXPENDITURE AND APPROPRIATIONS					
Administration	92	103	118	131	165
Maintenance	70	96	86	97	111
Shipping services	77	98	158	210	214
Depreciation	27	27	34	41	43
Interest on loans	807	846	911	958	1,021
Sinking fund	53	53	51	50	52

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

Particulars	1967–68	1968–69	1969–70	1970–71	1971–72
EXPENDITURE AND APPROPRIATIONS—*continued*					
Loan redemption	43	49	60	74	86
Grain terminal (excl. depreciation)	35	61	104	282	268
Cold store operations	..	..	..	..	20
Other	2	6	5	6	..
Total expenditure and appropriations	1,206	1,339	1,527	1,849	1,980
CAPITAL OUTLAY					
Port rail system	66	89	7	2	3
Reclamation	59	51	17	26	7
Grain terminal	79	226	664	22	69
Deepening waterways	26	52	28	26	49
Wharves and sheds	388	41	20	275	188
Breakwater construction	..	37	15	12	..
Floating plant	..	423	152	..	57
Other	278	180	112	96	175
Total capital outlay	896	1,099	1,015	459	548
LOAN INDEBTEDNESS AT 30 JUNE					
State Government	3,673	3,673	3,673	3,673	3,673
Public	14,826	15,610	16,492	16,968	17,502
Total loan indebtedness	18,499	19,283	20,165	20,641	21,175

Western Port

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

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

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

Harbour services comprise two 1,500 hp firefighting tugs each with a bollard pull of some 23 tons as well as mooring launches. The channels are marked by 38 gas buoys and the whole of the harbour services are co-ordinated from the Harbor Master's office at Stony Point.

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

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

The third stage of development of this region was authorised by the *Western Port (Steel Works) Act* 1970 which provided for the establishment by John Lysaght (Australia) Ltd of a fully integrated iron and steel works on some 2,000 acres of land at Tyabb ; it provided for wharf construction and ownership by the company, with dredging to be done by the State. In 1972 the company completed the wharf to serve the first stage of the works (cold reduction facilities) and the State has also completed the channel extension and swinging circle to serve this berth at a cost of approximately $1.6m.

Since the establishment of the Lysaght plant there have been no significant developments in Western Port due in the main to two factors : the economic downturn in 1972 and the Government's decision to restrict new major developments until the findings of the Western Port Environmental Study are known.

Commissioning of the Western Port–Altona–Geelong pipeline has caused a temporary reduction in shipping. Port traffic increased from 77 tankers carrying 2,037,000 tons of petroleum in 1966–67 to 467 tankers and 34 other vessels carrying 13,426,000 tons of petroleum and 11,000 of other cargo, respectively, in 1971–72. Following the commissioning of the pipeline, these figures fell to 318 tankers carrying 9,587,000 tons of petroleum, 22 vessels carrying 54,000 tons of steel, and 34 vessels carrying 19,000 tons of general cargo in 1972–73.

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

Railways

Geographical factors

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

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

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

Historical development

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

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

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

In less than a decade, Victoria saw fulfilled the promise of building the main trunk railways. Through the 1870s construction proceeded to the south-west from Geelong and to the south-east from Melbourne. In 1870 contracts were let for building the line from Essendon to Wodonga. The north-eastern railway, opened in sections, reached Wodonga in 1873. Nearly ten years elapsed before junction was made with the New South Wales system at Albury on 14 June 1883. This was the beginning of the break of gauge, which continued to disrupt New South Wales–Victoria traffic until 79 years later, when the standard gauge track between Melbourne and Albury was opened for traffic in 1962.

Administration and functions

The Victorian Railways Department was established on 19 March 1856. It was administered for some periods by a single commissioner, but mainly by a board of three commissioners until 1973, when the commissioners were replaced by a seven-member governing board, appointed by and responsible to the Government through the Minister of Transport. The governing board is also responsible for a number of sections of railway constructed in New South Wales under the Border Railways Agreement. The lines in the Riverina district are extensions of Victorian lines.

Main locations of tracks

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

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

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

Main types of rolling stock and services

Diesel-electric locomotives, the S class and X class (1,800–2,200 hp) and B class (1,600 hp), haul Victorian Railways fast passenger and freight trains. The T class (950–1,050 hp) diesel-electric locomotive is mainly a freight train operator, but it also hauls selected passenger trains. The Y class (650–750 hp) diesel-electric locomotive hauls branch line freight trains and is also used on freight yard work. The W class (650 hp) diesel-hydraulic locomotive and the F class (350 hp) diesel-electric are almost exclusively used on shunting and transfer work. In addition, there are five H class (1,050 hp) hump shunting diesel-electric locomotives, which can also be used to haul trains. The L class (2,400 hp) electric locomotive hauls passenger and freight trains on the Gippsland line, Victoria's longest electrified track. Country passenger train services are supplemented by 102 hp, 153 hp, 280 hp diesel, 275 hp diesel-electric, and 600 hp diesel-hydraulic rail-cars.

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

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

Victoria's new electric trains

The first of Victoria's 50 new stainless steel metropolitan trains was delivered in late 1972. The trains feature forced air ventilation with winter heating, power closing doors, and air-suspension to give a smoother, quieter ride. They are capable of 70 mph to cope with high speed express running envisaged in the future.

In peak hours the new trains comprise six carriages, but can serve off-peak running by breaking the trains into two or four carriage sets. Each carriage is 75 ft long, compared with 63 ft for the "Harris" blue carriages. The six longer carriages, however, have seating capacity slightly in excess of a 7-carriage "Harris" train, but peak hour capacity of 1,500 passengers, sitting and standing, is about 200 more than the "Harris" train. The carriages have tinted glass windows, and ample insulation to keep down noise and maintain a comfortable temperature. Three pairs of doors on each side are electro-pneumatically power closed; they are opened by

passengers after the train guard has released, by push button, the power holding them closed.

Martin & King Pty Ltd have contracted to build the 250 motor and driving trailer carriages and the Victorian Railways are building the 50 trailer carriages and assembling all bogies for the entire fleet.

The Vinelander

The Melbourne–Mildura overnight train was modernised in late 1972 when modern sleeping carriages released from *The Overland* replaced the older air-conditioned sleepers. At the same time the train was named *The Vinelander*. The regular sleeping facilities of the *The Vinelander* twin trains (one running in each direction) now comprise a roomette carriage with single bed apartments, and a twinette carriage with two-bed units. Sleeping car passengers are served a continental tray breakfast, which, on the trip to Mildura, is supplemented with a complimentary pack of dried fruits as an introduction to the Sunraysia district. In addition, the train has economy and first-class sitting carriages with lay-back seats. MotoRail facilities are a feature of the train, enabling passengers to take cars, or cars and trailers, with them.

Melbourne yard modernisation

Victorian Railways new Melbourne Yard and Freight Terminal was commissioned in December 1970. Built at a cost of $14m and working around the clock, the yard is capable of handling up to 5,000 wagons a day compared with 2,500 under the old system. It is returning 14 per cent on capital invested, and more than one million vehicles have passed over the hump since its completion.

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

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

Suburban tracks

Victoria's first section of 5 ft 3 inch gauge suburban line, from Flinders Street Station to Sandridge (now Port Melbourne), was completed in 1854 for Australia's first train. Construction of other lines was as follows : Flinders Street to St Kilda (1857) ; Footscray to Williamstown (1859) ; Princes Bridge to Hawthorn, Richmond to Brighton Beach (1859 to 1861) ; Melbourne to Essendon (1860) ; Essendon to Broadmeadows (1872) ; South Yarra to Dandenong (1877 to 1879) ; Caulfield to Frankston (1881–82) ; Hawthorn to Lilydale (1882) ; Brighton Beach to Sandringham (1887) ; North Melbourne to Somerton (1884 to 1889) ; Collingwood to Heidelberg (1888) ; Ringwood to Upper Ferntree Gully, Clifton Hill to Preston (1889) ; Burnley to Darling and Camberwell to Ashburton (1890) ; Princes Bridge to Collingwood (1901) ; Heidelberg to Eltham (1902) ; Eltham to Hurstbridge (1912) ; Darling to Glen Waverley (1929–30) ;

Ashburton to Alamein (reconditioned and reopened in 1948) ; Fawkner to Upfield (reopened in 1959) ; Upper Ferntree Gully to Belgrave (converted to broad gauge and electrified in 1962) ; and Lalor to Epping (reopened in 1964).

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

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

Passenger and goods traffic, fares, and freight rates

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

Most of the passenger revenue is derived from the operation of the suburban electrified service ; traffic on this has fallen slightly in recent years. However, additional trains are needed to handle a growing long distance peak period load. In 1946 the number of trains used for peak service was 109 ; in 1972 it was 138. Following elimination of break of gauge at Albury for passenger trains since April 1962, a significant gain has been recorded in passenger traffic between Melbourne and Sydney, and interstate passenger business generally has been active. The ordinary fares are competitive and attractive concessions are available, e.g., to students travelling at any time, and party travel. Parcels sent by passenger trains are a large revenue earner.

Standardisation of gauge in Australian network

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

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

Bogie exchange

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

The exchange of bogies, introduced in Australia by the Victorian Railways, is now an essential part of interstate railway operations. It has enabled loaded rail wagons to travel over different gauge lines and eliminated the manual transfer of goods from one wagon to another at break of gauge terminals. Bogies can be changed under a loaded vehicle in much less time than that taken for transhipping goods from one wagon to another. The two bogie exchange centres in Victoria at South Dynon and Wodonga handled 23,393 vehicles for the year ended 30 June 1972. With bogie exchange, the tonnage of overland traffic handled in Victoria increased steadily and is now very much greater than that handled in 1962.

Mechanised track maintenance

Using modern mechanised techniques, the Victorian Railways continually maintain and re-lay their railway tracks for passenger and freight traffic. Track maintenance and renewals constitute one of the larger railway budget items, the cost in 1971–72 being $15m.

During the year about 130 miles of track in country districts and 2 miles in the metropolitan area were relaid with heavier rail. Points and crossings were renewed at various locations, using a total of 225 sets of points and 336 crossings.

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 $461.7m at 30 June 1972. After deducting the value of securities purchased from the National Debt Sinking Fund and cancelled ($71.1m), the net liability on current loans outstanding at that date was $390.6m.

The total liability of the State for railways construction, etc., at 30 June 1972 (which includes the liability referred to in the previous paragraph) was $523.6m. Deduction of securities purchased from the National Debt Sinking Fund and cancelled ($97.6m) together with cash at credit in the Fund ($1.4m) reduced the amount outstanding at the end of the year to a net liability of $424.6m.

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 $424.6m at 30 June 1972 amounted to $22.3m at an average rate of 5.258 per cent. Of this amount, the Victorian Railways are liable for $9.7m. In addition,

the State is required to pay a contribution of $4.4m at a rate of 4.5 per cent on cancelled securities.

Additional funds, which amounted to $56m at 30 June 1972, have been provided for railway construction, equipment, stores, etc., out of the Consolidated Fund, the Uniform Railway Gauge Trust Fund, and other funds. No interest is charged against railway revenue on these amounts, with the exception that interest, at 5 per cent, is payable to the Australian Government on the repayable principal amount outstanding in respect of expenditure on the uniform gauge. (See page 621 of the *Victorian Year Book* 1966.)

Further references, 1964–1972

The following tables relate to the State railways and road motor services under the control of the Victorian Railways Commissioners. Certain border railways in New South Wales are, by agreement between the Victorian and New South Wales Governments, under the control of the Victorian Railways Governing 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 764.

Capital cost of railways and equipment

The capital cost of all lines constructed and in course of construction, and of all works, rolling stock, and equipment of the Railway Department at 30 June for each of the five years 1968 to 1972 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		
1968	357,135	120	36	357,291
1969	368,036	426	28	368,490
1970	377,939	432	20	378,391
1971	386,769	427	19	387,215
1972	395,032	484	19	395,535

(*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 1972 the capital cost of rolling stock, after being written down in accordance with the *Railways (Finances Adjustment) Act* 1936, and allowing for depreciation was: $103.4m broad gauge, $10,661 narrow gauge, and $5.3m uniform gauge.

Railway 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 1967–68 to 1971–72 are shown in the following table :

VICTORIA—RAILWAYS STAFF: NUMBERS, SALARIES, ETC.

Period	Number of employees at end of year			Salaries, wages, and travelling expenses
	Permanent	Supernumerary and casual	Total	
				$'000
1967–68	15,422	11,989	27,411	82,862
1968–69	15,179	11,197	26,376	87,529
1969–70	14,588	11,709	26,297	93,415
1970–71	14,669	11,511	26,180	101,825
1971–72	13,982	11,988	25,970	108,272

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 1968 to 1972:

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

Rolling stock in service	1968	1969	1970	1971	1972
Locomotives—					
Steam	50	72	45	38	37
Electric	35	35	35	35	35
Diesel electric	220	237	240	246	249
Other (*a*)	90	90	95	95	95
Total	395	434	415	414	416
Passenger coaches—					
Electric suburban	1,113	1,110	1,104	1,090	1,090
Other (*b*)	659	659	637	616	597
Total	1,772	1,769	1,741	1,706	1,687
Goods stock (*c*)	21,489	21,374	21,050	20,000	20,264
Service stock	1,625	1,625	1,619	1,617	1,602

(*a*) Other locomotives comprise diesel hydraulic locomotives, cranes, rail motor diesel power units, and non-passenger carrying rail tractors.
(*b*) Passenger coaches owned jointly with New South Wales and South Australia have been included.
(*c*) All parcels and brake vans and standard gauge stock have been included.

Railways route mileage

The route mileage of the railways (exclusive of road motor service route mileage) at 30 June for each of the years 1968 to 1972 is given in the following table. It should be noted that the Victorian Railways operate certain services in New South Wales. At 30 June 1972 the total length of these services was 204 route miles. This distance is included in the single track broad gauge section of the table.

VICTORIA—RAILWAYS ROUTE MILEAGE AT 30 JUNE (EXCLUDING ROAD MOTOR SERVICES)
(route miles)

Lines open for traffic		1968	1969	1970	1971	1972
Single track	—Broad gauge (*a*)	3,694	3,648	3,637	3,637	3,635
	Narrow gauge	8	8	8	8	8
Double track	—Broad gauge (*a*)	433	440	440	440	439
Other multi-track	—Broad gauge (*a*)	80	80	80	80	81
Total route mileage		4,215	4,176	4,165	4,165	4,163

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

Railways traffic

The traffic of the railways (exclusive of road motor traffic) for each of the years 1967–68 to 1971–72 is shown in the table below :

VICTORIA—RAILWAYS TRAFFIC (EXCLUDING ROAD MOTOR SERVICES)

Traffic		1967–68	1968–69	1969–70	1970–71	1971–72
Traffic train mileage—Country	'000	4,833	4,741	4,738	4,768	4,761
Suburban	'000	8,420	8,139	8,361	8,315	8,287
Goods	'000	6,633	6,809	7,445	7,747	7,566
Total	'000	19,886	19,689	20,544	20,830	20,614
Passenger journeys—Country	'000	4,535	4,078	4,000	4,080	3,954
Suburban	'000	141,733	140,788	140,309	138,131	133,840
Total	'000	146,268	144,866	144,309	142,211	137,794
Goods and livestock carried	'000 tons	11,116	11,316	11,835	12,490	11,609

The tonnage of various classes of goods and the total tonnage of livestock carried by the Victorian Railways for each of the years 1967–68 to 1971–72 are shown in the following table :

VICTORIA—RAILWAYS GOODS AND LIVESTOCK TRAFFIC
(EXCLUDING ROAD MOTOR GOODS SERVICES)
('000 tons)

Class of goods	Quantity carried				
	1967–68	1968–69	1969–70	1970–71	1971–72
Butter	65	68	77	74	45
Grain—					
Barley	136	191	234	276	326
Wheat	1,231	1,689	1,588	2,541	2,048
Other	161	359	312	356	293
Flour	167	157	172	176	135
Bran, pollard, and sharps	50	44	57	45	30
Fruit—					
Fresh	99	83	94	96	105
Dried	72	64	54	59	66
Beer	144	137	144	138	142
Briquettes	1,416	1,028	1,203	1,060	999
Cement	766	765	852	844	842
Coal—					
Black	170	75	13	11	7
Brown	326	200	180	172	150
Galvanised iron	71	91	102	94	84
Iron, steel, bar rods, etc., unprepared	498	661	713	531	458
Manures	877	914	883	822	743
Motor cars and bodies	218	225	288	308	315
Petrol, benzine, etc.	165	182	313	327	340
Pulpwood	101	72	68	61	48
Pulp and paper	138	150	164	172	166
Timber	262	253	260	244	238
Wool	128	140	168	172	165
All other goods	3,520	3,489	3,602	3,669	3,596
Total goods	10,781	11,037	11,541	12,248	11,341
Total livestock	335	279	294	242	268
Grand total goods and livestock	11,116	11,316	11,835	12,490	11,609

Railways revenue and expenditure

Revenue for 1971–72 increased by $4,024,707 compared with 1970–71. Total working expenses increased by $9,684,753 as compared with the previous year.

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

VICTORIA—RAILWAYS REVENUE AND EXPENDITURE

Particulars	1967–68	1968–69	1969–70	1970–71	1971–72
	$'000	$'000	$'000	$'000	$'000
REVENUE					
Passenger, etc., business—					
Passenger fares	30,330	30,507	31,754	31,859	34,806
Parcels, mails, etc.	4,077	4,149	4,122	4,097	4,322
Other	104	103	104	112	101
Goods, etc., business—					
Goods	55,465	56,637	59,641	62,829	62,370
Livestock	1,703	1,265	1,521	1,221	1,566
Miscellaneous	637	631	607	550	619
Miscellaneous—					
Dining car and refreshment services	3,451	3,467	3,461	3,583	3,592
Rentals	2,101	2,178	2,340	2,468	2,655
Bookstalls	1,052	1,061	1,096	1,085	1,085
Advertising	234	234	246	251	259
Melbourne Underground Rail Loop Authority special levy	..	..	..	447	952
Other	240	359	227	256	465
Total revenue	99,394	100,591	105,119	108,759	112,791
EXPENDITURE					
Working expenses—					
Way and works	20,695	22,372	23,969	26,153	27,909
Rolling stock	27,484	29,137	30,589	33,469	35,429
Traffic	35,876	37,688	40,505	44,107	47,314
Electrical engineering branch	4,494	4,425	4,683	4,681	4,827
Stores branch	1,585	1,633	1,670	1,838	1,972
Pensions	5,273	5,451	5,724	6,176	6,533
Service grants and retiring gratuities	1,116	1,146	1,419	1,463	1,519
Contributions to Railway Renewals and Replacement Fund	400	400	400	400	400
Contributions to Railway Accident and Fire Insurance Fund	1,740	2,116	1,813	1,497	1,936
Pay-roll tax	1,874	1,982	2,125	2,325	3,400
Long service leave	1,606	1,829	2,118	2,551	2,355

VICTORIA—RAILWAYS REVENUE AND EXPENDITURE—*continued*

Particulars	1967–68	1968–69	1969–70	1970–71	1971–72
Working expenses—*continued*	$'000	$'000	$'000	$'000	$'000
Appropriation to Melbourne Underground Rail Loop Authority construction	..	..	..	447	952
Other (*a*) (*b*)	3,061	3,164	3,697	4,108	4,355
Total working expenses	105,204	111,344	118,712	129,215	138,900
Net revenue	−5,810	−10,753	−13,593	−20,456	−26,109
Debt charges—					
Interest charges and expenses (*b*)	5,377	6,221	7,062	8,081	9,077
Exchange on interest payments and redemption	119	106	99	91	81
Contribution to National Debt Sinking Fund	251	288	330	365	393
Net result for year	−11,557	−17,368	−21,084	−28,993	−35,660
	%	%	%	%	%
Proportion of working expenses to revenue	105.8	110.7	112.9	118.8	123.1

(*a*) Including interest paid to the Australian Government under the Railways Standardisation Agreement, namely, in 1967–68, $215,103 ; 1968–69, $210,204 ; 1969–70, $205,306 ; 1970–71, $200,408; and 1971–72, $195,510.
(*b*) Including loan conversion expenses.

The gross revenue and working expenses per average mile of railway worked for each of the five years 1967–68 to 1971–72 are shown in the following table :

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

Particulars		1967–68	1968–69	1969–70	1970–71	1971–72
Average number of miles open for traffic		4,210	4,190	4,170	4,166	4,163
Gross revenue per average mile open	$	23,594	23,992	25,193	26,091	27,077
Working expenses per average mile open	$	24,961	26,543	28,431	30,978	33,322

Road motor services

The following table gives, for each of the five years 1967–68 to 1971–72, particulars of the operations of the road motor services under the control of the Railways Commissioners :

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

Particulars		1967–68	1968–69	1969–70	1970–71	1971–72
Car mileage		241,069	258,561	270,241	264,150	262,539
Passenger journeys		888,834	902,967	926,435	902,700	857,406
Gross revenue	$	62,216	62,378	65,516	64,010	71,384
Working expenses	$	119,601	128,057	153,455	161,068	178,072
Capital expenditure at end of year (less depreciation written off)	$	36,374	27,758	20,471	19,292	19,252

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.

Melbourne underground rail loop

Melbourne, like most cities of comparable size, has the transportation problem of concentration of travel in the morning and evening peak periods. This peak demand affects all transport systems, a substantial portion of the load being borne by the suburban electric railway particularly at the central railway terminal where commuter congestion is increasing.

The provision of additional rail transport facilities for the central business district of Melbourne has been under consideration for many years. In 1929 the Metropolitan Town Planning Commission recommended the construction of a " northern city railway " to reduce pedestrian congestion in the vicinity of the Flinders Street and Princes Bridge stations at peak hours. In 1950 the Parliamentary Public Works Committee commenced an inquiry into the provision of an underground City railway. The report, submitted in 1954, accepted the principle of the provision of additional stations linked by underground tracks to the existing surface system. In 1958 the Minister of Transport formed a committee to review the proposed scheme for the provision of an underground railway for Melbourne, in the light of the existing and prospective traffic conditions. The committee confirmed the need for additional points of passenger dispersal connected by underground tracks to the existing suburban railway. Several proposals were considered ; that finally adopted being a loop incorporating three new City stations.

The loop scheme was approved by the Government and incorporated in the *City of Melbourne Underground Railway Construction Act* 1960. Construction was deferred owing to lack of funds but planning and investigations continued over the next ten years. The Act of 1960 was later repealed and replaced by the *Melbourne Underground Rail Loop Act* 1970 which provided for a new authority (the Melbourne Underground Rail Loop Authority) to be responsible for the supervision and co-ordination of the planning, financing, and contruction of the loop. The Authority, of nine members appointed by the State Government, was constituted in February 1971.

The loop is designed primarily to disperse the peak hour commuter concentration now centred on Flinders Street and Princes Bridge situated on the southern edge of the central business district and to a lesser extent on Spencer Street on the western edge, by distributing a proportion of the City's work force through a number of additional stations on the eastern and northern edges of the area. The loop is also designed to relieve the peak hour train congestion at Flinders Street by speeding up train movements through platforms.

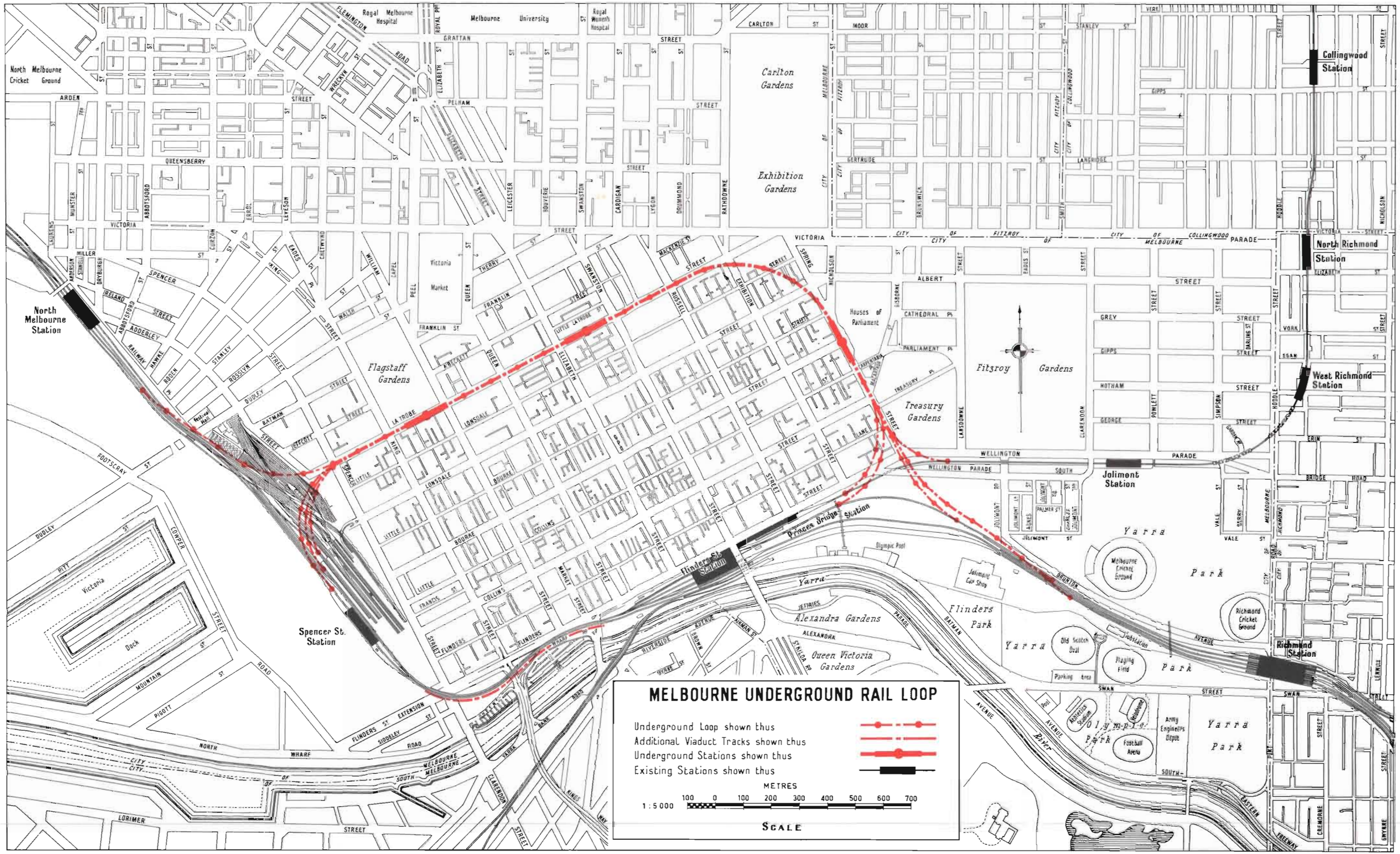
The proposed plan will provide the City with a multi-station terminal having double the capacity for handling people and trains of that operating in 1973. The additional stations will be linked by four underground tracks connected to the existing surface tracks thus forming four separate loops encircling the central business district. One of these loops will serve the north eastern lines of the suburban system which pass through Jolimont (the Clifton Hill loop), another will serve the eastern lines which pass through Burnley (the Burnley loop), another the south eastern lines which pass through South Yarra (the Caulfield–Sandringham loop), and the other the northern and western lines which pass through North Melbourne (the Northern loop). All suburban lines will have a connection with the loop

route with the exception of the St Kilda and Port Melbourne lines. Passengers from these lines will have access to the loop by changing trains at Flinders Street.

A City circle will be incorporated in the system by linking up one of the loops, the Clifton Hill loop, to form a closed circuit. The route adopted for the underground portion of the loops will follow Spring and La Trobe Streets, with underground stations, one in Spring Street centred on Bourke Street (Parliament), one between Elizabeth and Swanston Streets in La Trobe Street (Museum), and one in the vicinity of William Street in La Trobe Street (Flagstaff). These three new stations, with the two existing stations, Spencer Street and Flinders Street, will form a five station City terminal. Four underground tracks will be laid in four separate tunnels, each tunnel being 3.74 km (2.33 miles) in length. The four tunnels will be arranged in pairs on two levels and stations will have platforms on two levels. Thus the four loop lines will traverse (below the surface and on street alignment) the eastern and northern boundaries of the central business district, Spring Street and La Trobe Street, and (partly on the surface and partly elevated) the western and southern boundaries, Spencer Street and Flinders Street. The existing four viaduct tracks along Flinders Street will become part of the loop tracks and two additional viaduct tracks will be constructed to provide for passenger and freight traffic on the direct route between Flinders Street and Spencer Street.

As a result of the planning and investigation which was undertaken by the Victorian Railways and the Railway Construction Board from 1960 to 1971, plans for the junctions of the underground tracks with the surface system were available when the Melbourne Underground Rail Loop Authority was constituted and work commenced in the Jolimont railway yards in June 1971 on the junctions for the Burnley loop and the Caulfield–Sandringham loop. This work involved the construction of box-section tunnels under sidings and under the suburban tracks between Flinders Street and Richmond, with ramps for the sub-surface tracks to come to the surface and connect with the existing tracks. Similar work to link the western end of the underground section of the loops to the surface tracks has commenced and construction of box-section underpass tunnels in the Spencer Street yard is well advanced. Here the sub-surface tracks of the Clifton Hill, Burnley, and Caulfield–Sandringham loops pass under country and interstate lines, suburban lines, and a signal box, and will emerge up three ramps to connect with the surface tracks at the northern end of the Spencer Street station platforms. The western end of the connection for the Northern loop will be located immediately south of North Melbourne station platforms. At this end the sub-surface track of the Northern loop will divide into two branches which will rise to the surface by two ramps one of which is under construction and will be completed in early 1974. Construction of the ramp for the Clifton Hill loop connection to the underground tunnel at the Jolimont end has commenced. This ramp is located in the railway reserve between Jolimont Road and Spring Street parallel to and on the north side of the existing Jolimont–Clifton Hill lines. At the lower end it joins a box-section tunnel under Wellington Parade.

The work on railway property, which included track and signal alterations associated with the underpass tunnel and ramp construction, has generally been undertaken by the Victorian Railways under contract to the Authority


North Melbourne Cricket Ground
Flemington Road
Royal Melbourne Hospital
Melbourne University
Royal Women's Hospital
Carlton Gardens
Exhibition Gardens
Collingwood Station
North Melbourne Station
Victoria Market
Flagstaff Gardens
Houses of Parliament
Fitzroy Gardens
Treasury Gardens
North Richmond Station
West Richmond Station
Spencer St. Station
Flinders St. Station
Princes Bridge Station
Jolimont Station
Richmond Station
Victoria Dock
Alexandra Gardens
Queen Victoria Gardens
Flinders Park
Yarra Park
Melbourne Cricket Ground
Richmond Cricket Ground
Olympic Pool
Old Scotch Oval
Playing Field
Parking Area
Jolimont Car Shop
Substation
Pool
Athletics Stadium
Velodrome
Olympic Park
Football Arena
Army Engineers Depot
Yarra River
Festival Hall
Melbourne Underground Rail Loop
Underground Loop shown thus
Additional Viaduct Tracks shown thus
Underground Stations shown thus
Existing Stations shown thus
METRES
1:5000
100 0 100 200 300 400 500 600 700
SCALE

in accordance with designs prepared for the Authority by the Railway Construction Board. The main tunnelling work under Spring and La Trobe Streets and construction of the stations will be carried out by other civil engineering contractors. With the exception of the Wellington Parade underpass, most of the tunnels outside the railway boundary will be circular in section, 5.95 metres (19 ft 6 in.) internal diameter. Parliament and Flagstaff stations will be constructed by tunnelling methods. Museum station will be constructed by open cut. Construction of the Museum station has necessitated the acquisition of property on the southern side of La Trobe Street between Swanston and Elizabeth Streets and the demolition of buildings in order to divert the roadway and tramway to allow excavation from the surface in La Trobe Street. Station platforms will vary in depth below the surface from 12 metres at the Elizabeth Street end of Museum station to 37 metres at Parliament station. Sub-surface material comprises basalt with underlying silurian siltstones, mudstones, and sandstones in all stages of weathering.

The Melbourne Underground Rail Loop is not a separate and independent railway. It is part of a plan to expand the suburban rail system to meet the anticipated increase in commuter demand for rail transportation to and from the central business district, and is designed to operate as an integral part of the existing system. Although expansion of route capacity is being progressively undertaken (by provision of additional tracks, improved signalling, additional trains, etc.) the resulting increase cannot be fully utilised without providing matching terminal facilities. The five station loop terminal will provide the terminal capacity to match the planned route capacity of the system.

Tramway and omnibus services

Melbourne and Metropolitan Tramways Board

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

Particulars relating to the tramway systems under the control of the Melbourne and Metropolitan Tramways Board are shown for each of the years 1967–68 to 1971–72 in the following table :

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD : TRAMWAYS

Period	Track open at end of year		Tram mileage	Passenger journeys	Operating receipts	Operating expenses	At end of year	
	Double	Single					Rolling stock	Persons employed
	miles	miles	'000	'000	$'000	$'000	number	number
1967–68	134	3	16,480	127,575	15,628	16,604	691	3,726
1968–69	134	3	16,069	119,009	15,946	17,042	698	3,525
1969–70	134	3	15,273	110,692	16,682	17,766	698	(*b*)4,159
1970–71	135	2	14,899	109,779	16,576	18,881	696	(*b*)4,323
1971–72	135	2	14,763	101,962	19,026	20,937	(*a*)696	(*b*)4,331

(*a*) Includes 42 in reserve or idle.
(*b*) Includes omnibus employees. Tramways employees not available separately.

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

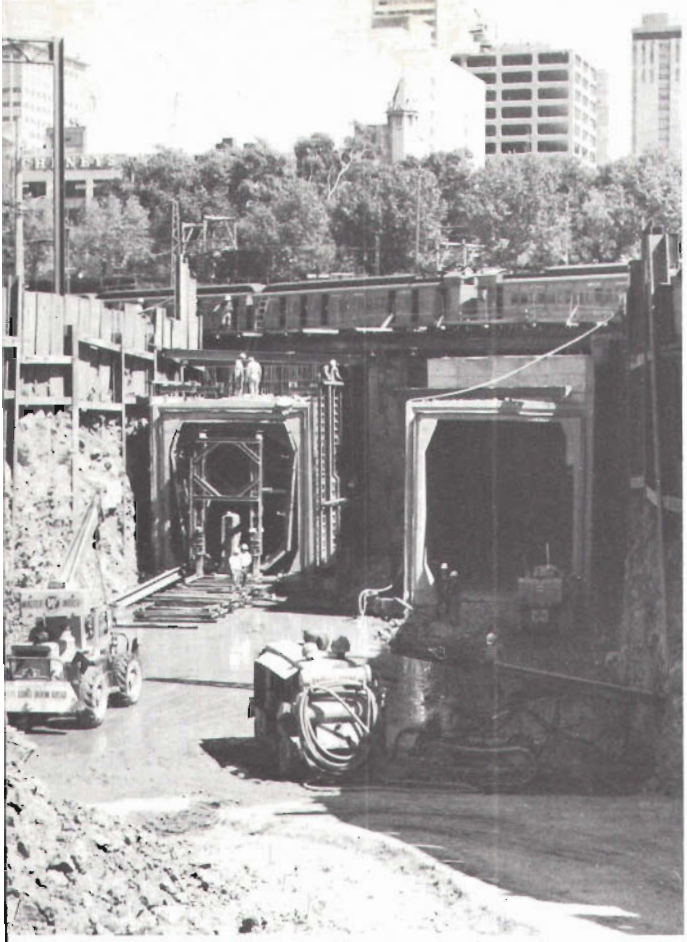
VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD: REVENUE, EXPENDITURE, ETC.
($'000)

Particulars	1968–69	1969–70	1970–71	1971–72
REVENUE				
Traffic receipts	19,269	20,141	20,107	22,879
Miscellaneous operating receipts	176	176	179	214
Non-operating receipts	240	251	231	259
Total revenue	19,685	20,568	20,517	23,352
EXPENDITURE				
Traffic operation costs	9,595	9,788	11,070	12,143
Maintenance—				
Permanent way	934	970	988	1,236
Tramcars	2,550	2,685	2,850	2,948
Buses	921	989	1,078	1,196
Electrical equipment of lines and substations	537	594	675	744
Buildings and grounds	264	302	330	324
Electric traction energy	874	831	812	802
Fuel oil for buses	190	186	218	249
Bus licence and road tax fees	21	21	22	21
General administration and stores department costs	1,173	1,394	1,563	1,737
Pay-roll tax	367	380	427	625
Workers compensation payments	465	418	524	543
Depreciation	1,018	1,008	937	922
Non-operating expenses	96	86	92	100
Provisions—				
Long service leave	290	396	350	366
Retiring gratuities	486	671	532	611
Accrued sick leave	70	96	61	70
Public risk insurance	300	220	288	297
Interest on loans	1,311	1,358	1,448	1,498
Total expenditure	21,462	22,393	24,265	26,433
Net surplus (+) or deficit (−)	−1,777	−1,825	−3,748	−3,081
Capital outlay	691	695	712	856
Loan indebtedness at 30 June	24,224	24,874	26,010	26,822

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD: MOTOR OMNIBUS SYSTEMS

Period	Route miles	Bus mileage	Passenger journeys	Operating receipts	Operating expenses	At end of year	
						Rolling stock	Persons employed
		'000	'000	$'000	$'000	number	number
1967–68	140	7,335	25,576	3,413	4,192	233	844
1968–69	139	7,099	24,271	3,499	4,324	226	791
1969–70	139	6,923	22,353	3,635	4,540	277	(*b*) 4,159
1970–71	139	7,018	22,753	3,710	4,991	273	(*b*) 4,323
1971–72	143	6,953	20,471	4,067	5,396	(*a*) 272	(*b*) 4,331

(*a*) Includes 38 in reserve or idle.
(*b*) Includes tramways employees. Omnibus employees not available separately.



One of Melbourne's new stainless steel suburban trains.

Victorian Railways

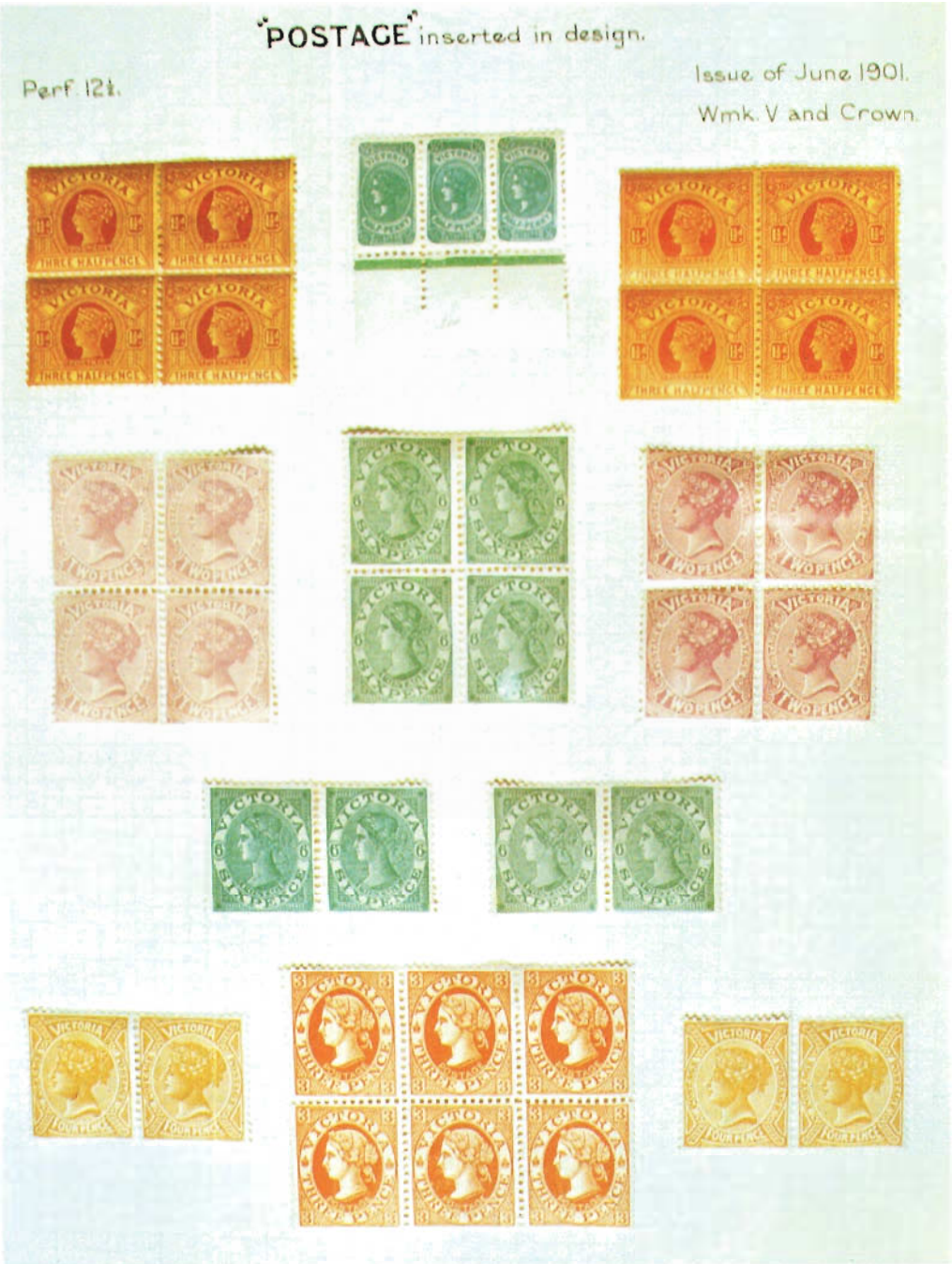
A Melbourne suburban train passes over completed sections of box-tunnels in Jolimont railway yards.

Melbourne Underground Rail Loop Authority

The site for the Melbourne underground rail loop Museum station, located in La Trobe Street between Elizabeth and Swanston Streets. Traffic has been temporarily diverted while certain aspects of work are undertaken.

Examples of the 3d blue. These stamps show the "White Veil" variety.

The Charity stamps of 1897 (top pair), and 1900. Since these stamps were available solely for postal use, the word "Postage" was incorporated in the design. Other stamps of this period could be used for both postal and fiscal duties, and bore the words "Stamp Duty".

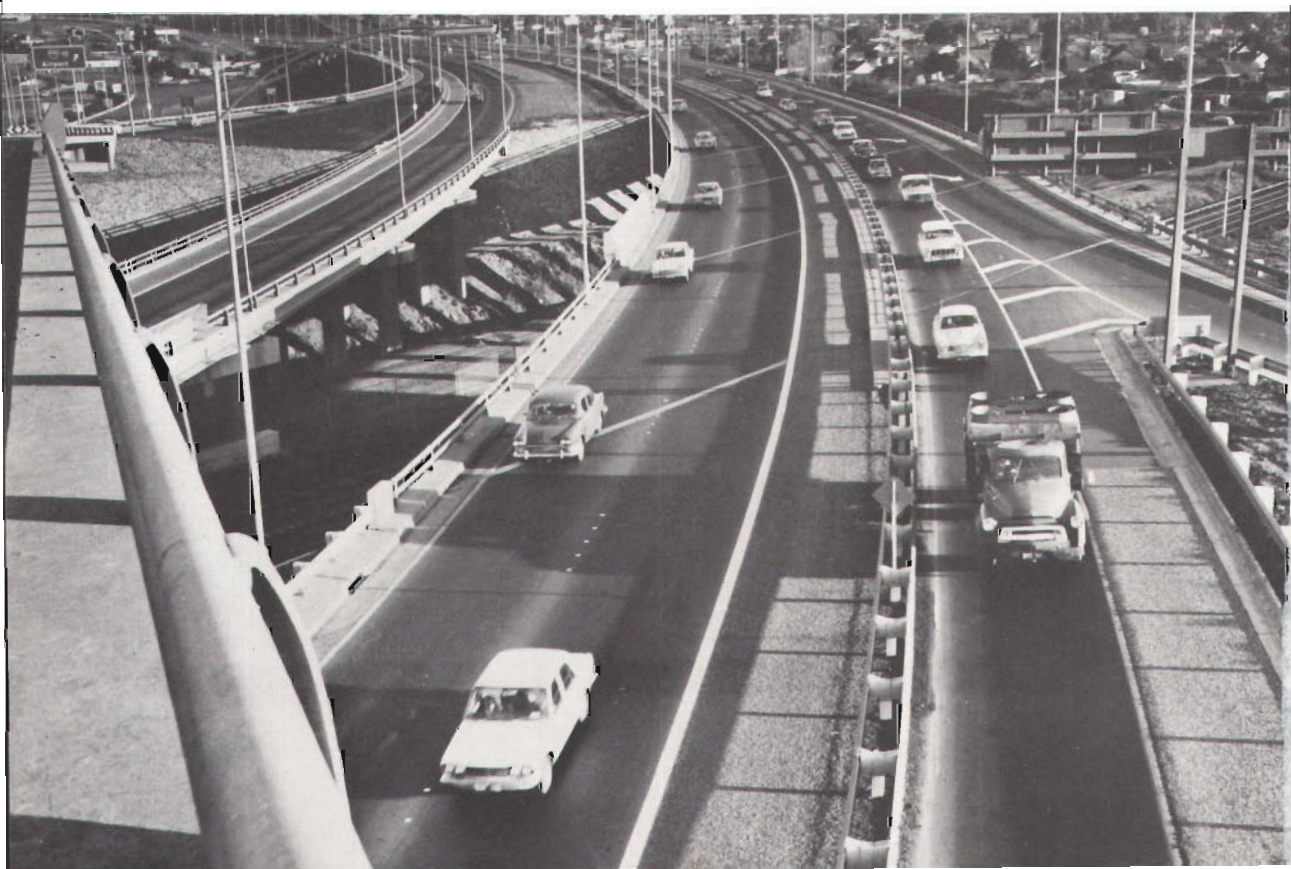


Following Federation in January 1901, the various States continued to issue stamps under their own name until the first Commonwealth issue appeared in 1913. After Federation, the words "Stamp Duty" were replaced by "Postage" on all Victorian postage stamps. The stamps illustrated above range from the ½d to the 6d value. They were issued in June 1901.

The Western Highway at Dobie, east of Ararat, a typical Victorian country road.

Country Roads Board

The Tullamarine Freeway at the Bell Street, Coburg interchange. This freeway links Melbourne's Tullamarine international airport with the rest of the city.



The following tables give an analysis of operating receipts, operating expenses, etc., for each of the five years 1967–68 to 1971–72 :

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

Period	Operating receipts			Operating expenses		Ratio operating expenses to operating receipts
	Amount	Per vehicle mile	Per passenger	Amount	Per vehicle mile	
	$'000	cents	cents	$'000	cents	per cent
1967–68	15,628	94.83	12.25	16,604	100.75	106.25
1968–69	15,946	99.24	13.40	17,042	106.06	106.87
1969–70	16,682	109.23	15.07	17,766	116.33	106.50
1970–71	16,576	111.25	15.10	18,881	128.74	113.91
1971–72	19,026	128.88	18.66	20,937	141.82	110.04

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

Period	Operating receipts			Operating expenses		Ratio operating expenses to operating receipts
	Amount	Per vehicle mile	Per passenger	Amount	Per vehicle mile	
	$'000	cents	cents	$'000	cents	per cent
1967–68	3,413	46.53	13.34	4,192	57.15	122.82
1968–69	3,499	49.29	14.42	4,324	60.91	123.58
1969–70	3,635	52.51	16.26	4,540	65.58	124.91
1970–71	3,710	52.86	16.31	4,991	71.11	134.53
1971–72	4,067	58.49	19.87	5,396	77.61	132.68

Private motor omnibus services

The following table contains particulars of the operations of Victorian private omnibus services. In addition to details of route operations, charter, school, and other special services are included. In the year 1971–72 route operations accounted for 54 per cent of total mileage travelled, while charter, school, and other special services accounted for 16, 29, and 1 per cent, respectively.

VICTORIA—PRIVATE MOTOR OMNIBUS SERVICES

Particulars		1967–68	1968–69	1969–70	1970–71	1971–72
Number of vehicles		2,846	2,811	2,899	2,875	3,030
Mileage—Petrol vehicles	'000 miles	36,079	34,627	34,349	32,980	33,218
Diesel vehicles	'000 miles	19,995	20,308	22,679	24,809	26,843
Total mileage	'000 miles	56,074	54,935	57,028	57,789	60,061
		$'000	$'000	$'000	$'000	$'000
Revenue		21,297	22,057	23,721	26,330	28,628
Expenditure—						
Drivers' wages		6,904	7,270	7,974	9,104	10,236
Repairs and maintenance		2,646	2,734	2,913	3,149	3,477
Depreciation		2,062	2,045	2,181	2,239	2,364
Other		7,441	7,343	7,997	8,674	9,741
Total expenditure		19,053	19,392	21,065	23,166	25,818

VICTORIA—PRIVATE MOTOR OMNIBUS SERVICES—*continued*

Particulars	1967–68	1968–69	1969–70	1970–71	1971–72
Assets (*a*)—					
Motor vehicles	5,758	5,645	5,988	6,258	7,222
Other assets	8,120	8,609	9,671	10,264	11,024
Total assets	13,878	14,254	15,659	16,522	18,246
Liabilities (*a*)	5,650	5,762	6,546	7,042	8,179

(*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. Part of the Bendigo system reopened in December 1972 as a tourist attraction.

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

Motor vehicles

Registration, licences, etc.

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

VICTORIA—REGISTRATION AND LICENCE RATES AT 1 MARCH 1973

Type of registration or licence	Annual rate
REGISTRATION	
Motor cycle (without trailer, etc.)	$4.10 plus $0.50 surcharge (*b*)
Motor cycle (with trailer, etc., attached)	$6.10 plus $0.50 surcharge (*b*)
Motor car (private use)	$0.60 for each power-weight unit (*a*) plus $0.50 surcharge (*b*)
Motor car (private and business use)	$0.75 for each power-weight unit (*a*) plus $1.00 surcharge (*b*)
Trailer (attached to motor car)	From $2.50 each, according to the unladen weight and use
Motor car (commercial passenger vehicle) operating on a stage omnibus service or a temporary school service licence	$15 plus $1.00 surcharge (*b*)
Motor car (used for carrying passengers or goods for hire or in the course of trade)	From $1.10 to $1.60 for each power-weight unit (*a*) according to the unladen weight and the type of tyres plus $1.00 surcharge (*b*)
Motor car (constructed for the carriage of goods) owned by primary producer and used solely in connection with his business	From $0.30 to $1.30 for each power-weight unit (*a*) according to the number of wheels and the type of tyres (when more than one motor car is so owned, the rate shall apply to one motor car only) plus $0.50 surcharge (*b*)
Mobile crane, self-propelled (used otherwise than for lifting and towing vehicles)	$27.10 (unless a lower fee would otherwise have been payable) plus $1.00 surcharge (*b*)
LICENCE	
Driver's or rider's licence	$12 issued for a three year period (An additional fee of $6 is payable by all applicants for new licences)
Learner's permit	$2 for motor cycles only
Instructor's licence	$40 issued for a three year period

(*a*) The number of power-weight units is that number which is equal to the sum of the horsepower and the weight in hundredweights of a motor car unladen and ready for use.
(*b*) Surcharges apply to registrations or re-registrations effected on and after 1 August 1972 and renewals due on and after that date.
NOTE. The minimum annual fee for the registration of any motor vehicle other than a motor cycle is $12.

The following tables show, at dates from 30 June 1968 to 30 June 1972, the number of drivers' and riders' licences in force and the total revenue received at the Motor Registration Branch of the Police Department :

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

Type of licence	1968	1969	1970	1971	1972
Drivers'	1,337,381	1,399,903	1,464,523	1,524,104	1,585,095
Riders'	34,292	35,894	37,551	42,292	49,023
Total	1,371,673	1,435,797	1,502,074	1,566,396	1,634,118

VICTORIA—GROSS REVENUE COLLECTED BY MOTOR REGISTRATION BRANCH

($'000)

Particulars	1967–68	1968–69	1969–70	1970–71	1971–72
Registrations and tax	47,219	54,190	57,842	61,270	65,819
Drivers' licences	2,792	3,272	3,177	4,823	7,338
Other	748	764	810	887	921
Total	50.759	58,226	61 829	66,980	74,078

The following table shows the number of motor vehicles on the register by type at the end of 1962 and 1971 (motor vehicle census years), and at 31 December 1971 and 1972. Particulars of Australian 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)	31 December 1971	31 December 1972
			'000	'000
Motor cars	610,974	929,477	940.7	987.1
Station wagons	69,528	201,884	203.2	207.3
Light commercial type vehicles—				
Open	94,470	89,764	89.9	91.0
Closed	31,851	46,539	47.0	49.7
Trucks—				
Rigid	76,591	79,386	79.8	82.1
Articulated		9,417	9.5	9.7
Other truck type vehicles	2,890	3,520	3.6	3.9
Buses	3,409	5,129	5.2	5.6
Motor cycles	15,802	28,160	30.7	36.7
Total	905,515	1,393,276	1,409.7	1,473.1

(a) A revised classification of motor vehicles was adopted for the census of motor vehicles at 30 September 1971. The principal differences between the new classification and that at 31 December 1962 are :
(i) " Light commercial type vehicles " include utilities, panel vans and trucks with carrying capacity under one ton, and ambulances and hearses.
(ii) " Rigid trucks " include utilities and panel vans with a carrying capacity of one ton and over.
(iii) " Other truck type vehicles " consist of those truck type vehicles which are designed for purposes other thau 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 ". Direct comparisons therefore between the two censuses can only be made for the categories motor cars, station wagons, and motor cycles. However, for comparative purposes utilities registered at 31 December 1962 have been included in the classification " light commercial vehicles—open " and panel vans and ambulances and hearses, registered at the same date, in the classification " light commercial type vehicles—closed ". 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, giving new vehicle registrations by types and makes of vehicles, include details of Australian Government-owned vehicles (other than those of the defence services) :

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

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

Make	Motor cars			Station wagons		
	1970 (*a*)	1971 (*a*)	1972	1970	1971	1972
Austin	3,268	1,797	1,166	..	..	..
B.M.W.	181	163	170	..	..	..
Chrysler (*b*)	11,005	9,538	8,288	2,076	1,707	1,321
Datsun	4,274	5,444	6,142	165	365	330
Fiat	1,015	684	350	13	4	..
Ford	22,193	20,535	25,150	3,708	3,838	4,384
Holden (*c*)	32,172	32,144	28,316	7,371	7,228	6,300
Honda	856	911	511	..	1	..
Jaguar	305	505	306	..	..	..
M.G.	383	245	212	..	..	..
Mazda	4,014	5,165	3,741	295	248	241
Mercedes Benz	588	587	501	..	..	..
Morris	4,104	2,849	3,378	..	..	..
Peugeot	520	450	466	25	3	..
Renault	1,550	1,473	1,655	..	..	75
Rover	248	215	187	..	..	59
Statesman	..	729	1,181	..	..	..
Toyota	7,136	6,591	7,215	381	141	111
Triumph	637	683	512	..	..	..
Volkswagen	2,506	2,827	1,970	526	535	473
Volvo	173	406	720	13	32	72
Other	874	720	665	36	37	34
Total	98,002	94,661	92,802	14,609	14,139	13,400

(*a*) Includes ambulances and hearses.
(*b*) Dodge, Hillman, and Mitsubishi are included with Chrysler.
(*c*) Excludes Statesman, which is shown separately.

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

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

Make	1971				1972 (*a*)			
	Utilities	Panel vans	Other	Total	Light commercial type vehicles (*b*)		Other (*a*)	Total
					Open	Closed		
B.M.C. (*b*)	232	2	16	250	149	1	1	151
Bedford	..	..	1,363	1,363	..	..	1,337	1,337
Chrysler (*c*)	680	14	771	1,465	1,179	52	603	1,834
Daihatsu	26	..	155	181	8	14	134	156
Datsun	383	90	389	862	278	59	424	761
Ford	1,908	1,371	999	4,278	1,669	1,483	1,194	4,346
Holden	2,692	1,649	11	4,352	3,796	2,462	9	6,267
International	27	5	1,556	1,588	..	1	1,408	1,409
Land Rover	214	9	18	241	199	..	149	348
Leyland	..	..	187	187	..	3	208	211
Mazda	77	233	60	370	112	176	71	359

VICTORIA—REGISTRATIONS OF NEW MOTOR VEHICLES OTHER THAN MOTOR CARS, STATION WAGONS, AND MOTOR CYCLES ACCORDING TO MAKE—*continued*
(Includes Australian Government-owned vehicles other than those of the defence services)

Make	1971				1972 (*a*)			
	Utilities	Panel vans	Other	Total	Light commercial type vehicles (*b*)		Other (*a*)	Total
					Open	Closed		
Mercedes	..	..	154	154	..	..	110	110
Morris (*b*)	..	391	..	391	..	285	..	285
Toyota	340	238	597	1,175	..	..	1,083	1,083
Volkswagen	10	3	1,097	1,110	77	883	176	1,136
Other	93	80	343	516	95	53	382	530
Total	6,682	4,085	7,716	18,483	7,562	5,472	7,289	20,323

(*a*) As from 1 January 1972 a revised classification of motor vehicles has been adopted and used also as a basis for a census of motor vehicles at 30 September 1971. For further information see notes on previous table dealing with vehicles on the register.
(*b*) B.M.C. includes all Austin and Morris commercial vehicles except Morris 10 hp panel vans.
(*c*) Chrysler includes all Dodge, Commer, Hillman and Mitsubishi vehicles.

Transport Regulation Board

The *Transport Regulation Act* 1932 set up a Board of Inquiry to investigate Victoria's land transport problems. The recommendations of this Board led to the constitution of the Transport Regulation Board in 1934. The Board, consisting of a chairman, a primary producers' representative, and a representative of commercial interests outside a radius of 25 miles of the G.P.O., Melbourne, is a statutory authority 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 Co-ordinator of Transport was set up with particular functions, the Board's function as a licensing authority is still to channel the evolution of road transport in the interests of the most efficient use of community resources.

In effect, the scope of the Board's authority has been confined to the regulation of the operation of commercial road passenger and goods vehicles with a view to maximising service to the community and rationalising road–rail competition. It derives its present authority from the *Transport Regulation Act* 1958 and the *Commercial Goods Vehicles Act* 1958.

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

Particulars	1967–68	1968–69	1969–70	1970–71	1971–72
Licences issued "as of right"—					
25 miles radius of the G.P.O. or P.O.—Melbourne	15,147	15,316	15,466	15,622	15,901
Ballarat, Bendigo, and Geelong	1,507	1,544	1,514	1,546	1,577
25 miles radius of owner's place of business	6,909	6,970	6,904	6,779	6,787
Primary producers (vehicles over 2 tons load capacity)	17,313	17,522	17,705	17,271	17,477
Butter, milk, and cheese factories	546	501	428	388	355
50 miles radius of owner's place of business (vehicles up to 4 tons load capacity)	51,618	53,886	55,553	56,215	56,612
Third Schedule commodities	12,684	13,062	13,136	13,111	13,294

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

Particulars	1967–68	1968–69	1969–70	1970–71	1971–72
Approved decentralised secondary industries	799	899	969	1,058	1,128
"Discretionary" licences—					
Passenger	6,543	6,563	6,563	6,823	6,877
Temporary passenger	177	172	165	156	163
Goods (4 years)	12,518	13,357	14,208	14,454	14,151
Temporary goods	807	590	534	532	548
Goods—passenger	38	34	32	30	26
Total licences issued	126,606	130,416	133,177	133,985	134,896
Financial transactions—	$'000	$'000	$'000	$'000	$'000
Revenue	2,403	2,511	2,662	2,742	2,946
Expenditure (including payments to local authorities for road maintenance, comfort stations, and bus shelters)	1,990	2,172	2,452	2,871	2,949
Balance	413	339	210	−129	−3
Road charges collected and transferred direct to Country Roads Board	7,248	7,841	8,558	8,905	9,138
Motor boat registration fees collected and paid to Tourist Fund	219	233	254	282	305
Log book fees	21	11	11	11	10

Commercial goods transport

With the exception of vehicles used exclusively on interstate trade and primary producer vehicles not exceeding 2 tons load capacity, all commercial goods vehicles are subject to the control and licensing of the Board pursuant to the provisions of the *Commercial Goods Vehicles Act* 1958. Licences issued fall into two broad groups.

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

The second group, termed " discretionary " licences, are issued at the discretion of the Board and authorise operations, generally of a permanent nature, not covered by any of the " as of right " group of licences.

Types of discretionary goods licences

As discretionary licences are written to meet specific conditions, there are a great variety of different types. However, they fall broadly into the following classifications:

Route services ex Melbourne and country centres. These are generally of a short haul nature to non-rail pockets of territory or to areas beyond rail terminals.

Extended " as of right " licences are issued to carriers according to circumstances for general or particular classes of goods.

Special commodities. These relate to specially constructed vehicles and equipment for particular operations and traffic.

Ancillary operations. Where extension of " as of right " ancillary licence authorities associated with trades and business are approved.

Contractors. Extended areas of operation approved for earthmoving or road contractors or the like.

Mails and parcels services. These services are usually operated primarily as contracted mail services.

Timber carriers. The transport requirements of country mills are met by licences which cover transport of logs to the mills and sawn timber to the local railway station, or short haul deliveries direct to customers.

Decentralised industries

A number of licences have been granted where industries have decided to employ contract carriers, or where their own vehicles are used for a combination of carrying not covered by the " as of right " licence issued under section 5 of the *Commercial Goods Vehicles Act* 1958.

In dealing with cases where an industry establishes that it is at a disadvantage because of its location, the Board is empowered to take into account the relative costs and convenience of the alternative forms of transport. The Board has maintained the policy that long-standing and high volume rail traffic associated with country secondary industries should not be diverted to road carriers where an adequate railway service is available.

At 30 June 1972, 24 carriers held 76 discretionary licences in respect of 22 decentralised industries, and 391 licences had been granted to 93 industries authorising extension of " EI " " as of right " licence rights.

Permits

Permits are issued at the discretion of the Board to authorise temporarily the operation of a vehicle in a manner not specified in the licence. For the years ended 30 June 1971 and 1972 the number of goods permits issued were 165,634 and 163,101, respectively.

A survey conducted by the Board established that 283,740 trips involving a total of 2,281,611 tons of goods moved under permit authority were made for the period June 1971 to May 1972. During the year the Board found it necessary to increase permit fees to meet increased administrative costs.

Tow trucks

The issue of a tow truck licence is at the discretion of the Board, based on the criteria contained in section 8 of the *Commercial Goods Vehicles Act* 1958. Regulations relating to standards of vehicle construction, crane and allied equipment must be complied with before a licence is granted. At 30 June 1972 there were 722 tow truck licences of which 716 were full-term four year licences and 6 were temporary licences.

To accommodate demand for " trade " towing as distinct from accident scene activity, the Board approved seven additional tow trucks in the Melbourne area specifically for this purpose. These restricted licences exclude attendance at accident scenes except where the unit has been bespoken by the owner or driver of the vehicle involved in the accident. To assist in the identification of these vehicles, a special label with the letters " R.T." is displayed on the windscreen and a " restricted " sign is fixed to the unit.

Board of Inquiry into Land Transport in Victoria

This Inquiry was set up by the Government in November 1970 with Sir Henry Bland constituting the Board, to inquire into, report upon, and

make recommendations concerning the existing system of land transport in Victoria (with the exception of passenger transport within the areas of metropolitan Melbourne and the urban areas of Ballarat, Bendigo, and Geelong for which transportation plans have been or are being prepared).

The Report and findings of the Board of Inquiry were presented to Parliament by the Minister of Transport on 29 March 1972. The Minister was able to state that " the Government accepts the general principles contained in the recommendations of the Report as providing guidelines for changes, which should be made progressively and over a long period in an endeavour to work towards a position in which the community is able to make the best use of its total transport resources ".

The Minister listed some recommendations for early implementation :

1. The simplification of transport regulation by the issue of more long term licences in place of many of the present trip and monthly permits.
2. The setting up of a Bureau of Road Transport Costs within the Transport Regulation Board.
3. A detailed study to be undertaken of the transport costs and handling procedures for wool on rail.
4. An examination of the present methods of cartage and distribution of petroleum products.
5. The Railways, in conjunction with the Grain Elevators Board, to examine existing methods of handling grain traffic.
6. Consideration of annual roadworthiness certificates being introduced for commercial vehicles over 6 ton capacity ; compulsory inspection of vehicles over 12 ton capacity as a condition of issue of licence ; and compulsory third party property damage insurance for heavy vehicles.

Drivers' certificates

Commercial passenger vehicles. Every driver of a commercial passenger vehicle must possess a driver's certificate issued by the Board. This certificate is a separate authority additional to the motor car driver's licence issued by the Police. Each application for a certificate must be accompanied by a satisfactory medical and eyesight report. A medical and eyesight report is then required at three-yearly intervals, or more frequently if the holder of a certificate is subject to some disability or is over sixty years of age. If the applicant is medically acceptable, his application is forwarded to the Chief Commissioner of Police for a check and report on character, traffic record, and general suitability. Before issue of a certificate, the Board has to be satisfied that the applicant is a " fit and proper " person to drive a public service vehicle. Prospective drivers of metropolitan taxi-cabs and hire-cars must, in addition, pass a test of knowledge of the metropolitan area. 4,766 applications for drivers' certificates were made during 1971–72. Of this total, 3,916 certificates were issued, 2,143 of these being to drive metropolitan taxi-cabs or hire-cars and 1,773 for buses and country taxi-cabs. At 30 June 1972 the 18,221 (16,394 at 30 June 1971) certificates on issue to drivers of commercial passenger vehicles consisted of the following types : buses 5,518 (5,093) ; taxis 12,373 (10,998) ; and temporary 330 (303).

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

A certificate is issued only after the applicant's character, traffic record, and general suitability have been checked by the Police. The minimum age requirement for applicants is 20 years, although some exceptions are permitted in the case of apprentices or full-time employees of tow truck owners. At 30 June 1972 there were 2,316 (2,106 at 30 June 1971) certificates on issue.

Passenger fares and hiring rates

Bus and taxi fares chargeable by operators are determined by the Board. At 30 June 1972 bus fares charged by the majority of operators in the metropolitan area were :

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

Metropolitan and suburban taxi fares (which also apply in the three urban areas of Ballarat, Bendigo, and Geelong) were increased by the Board in June 1972 to take effect from 13 August 1972. The fares at that date became :

Flagfall	29 cents
Mileage rate	24 cents
Detention	$3.60 per hour
Service fee	15 cents per hiring made through a depot
Luggage	5 cents each item carried outside passenger compartment

Co-ordination of services

The Board is represented on the Passenger Co-ordination Committee under the chairmanship of the Director of Transport. This committee is involved with projects aimed at improving co-ordination of the various modes of transport.

Public hearings

Public hearings are designed to give all parties concerned with matters affecting the issue of discretionary licences, or those of a generally contentious nature, an opportunity to present their views to the Board. During the year ended 30 June 1972 the Board heard fifteen applications for discretionary goods licences at public hearings held at Melbourne and one held at Horsham.

In relation to commercial passenger vehicles, 56 applications for new licences or variation of existing licences were dealt with at public hearings held at Melbourne, Horsham, and Swan Hill.

Private sittings

Most discretionary matters are dealt with by the Board in private sittings. These include applications for licences where there are no objections, and the transfer, renewal, and variation of existing licences. During the

year ended 30 June 1972 the Board dealt with a total of 4,094 cases involving goods licences and with 2,770 passenger licensing matters.

Commercial passenger transport

All licences for commercial vehicles are issued on a "discretionary" basis and authorise the operation of buses, taxis, and hire-cars under authority of the *Transport Regulation Act* 1958.

Buses

Bus licensing is divided into three groups—metropolitan, urban, and country.

Metropolitan. There are two basic types of licence issued in the metropolitan area—route bus and charter. At 30 June 1972 there were 241 private bus route services licensed to operate in the metropolitan and outer suburban areas of Melbourne, with a total of 929 licensed vehicles operating. There were also 230 buses operated by the Melbourne and Metropolitan Tramways Board and 12 buses operated by the Victorian Railways over routes on which service is provided by these authorities. At the same date there were 207 charter buses licensed to operate exclusively in the charter, or group hiring capacity, on journeys commencing within a 20 mile radius of Melbourne. These vehicles normally have a capacity of more than 20 adults and are comfortable and attractive. They are permitted to engage in regular contract work for industries and schools and also to operate for regular sporting and special functions. Charter hirings are not, however, the sole preserve of this group of vehicles. In addition to the basic right of route buses to operate stage services, the Board permits vehicles of suitable standard, operating on route services within a 15 mile radius of Melbourne, to undertake charter journeys from one of three local zones within the 15 mile radius to any location in Victoria.

Urban. At 30 June 1972 there were a total of 145 buses licensed in urban areas to provide route, charter, and touring services. Numbers of vehicles authorised to operate in each of the three urban areas were: Ballarat 38, Bendigo 26, and Geelong 81.

In 1971–72 the electric tramway services operated by the State Electricity Commission in Ballarat and Bendigo were replaced by private bus services. The Ballarat bus services were introduced in August and September 1971, and the Bendigo services, which involved reorganisation of the whole urban transport network in that city, commenced operation in April 1972. The changeover in both areas was successful and the travelling public are now able to enjoy an improved transport service in modern vehicles. Traffic during off peak periods was found to be poor, particularly during evenings, Saturday afternoons, and Sundays, and all aspects of services are being closely watched and traffic patterns recorded.

Country. At 30 June 1972 there were 1,809 licences issued to operate in country areas of the State; 434 of these were fully licensed to operate stage services and to undertake charter and touring work. The remaining 1,375 buses were especially licensed vehicles under contract to the Education Department to provide daily transport for school children to and from country schools. A number of these vehicles also have the ability to undertake charter hirings.

The Board also licenses a small number of vehicles especially equipped to operate as touring omnibuses. These operate on advertised tours for which separate and distinct fares are payable by each passenger. At 30 June 1972 there were 60 vehicles so licensed.

Taxis and hire-cars

On a similar basis to bus licensing, taxi and hire-car operation is divided into three groups—metropolitan, urban, and country.

The main operational rights of taxis and hire-cars can be summarised as follows :

Metropolitan. Metropolitan taxis may be hired from the street, from taxi stands, or by telephone bookings for journeys to any place in Victoria, provided hirings commence within the defined metropolitan taxi area, which varies between a 15 and 20 mile radius of Melbourne. Suburban taxis operate under radio control from a specified depot, and may be hired to any place in Victoria provided journeys commence within areas as follows, for each type of hiring : hirings from taxi stands may only commence from stands situated in a vehicle's local zoned area ; hirings from the street may commence anywhere within the defined metropolitan taxi area of Melbourne; and hirings by telephone may commence anywhere within Victoria. Metropolitan hire-cars may only accept hirings booked through a depot and may operate for journeys to any place in Victoria.

Urban. Urban taxis may be hired from the street, from taxi stands, or by telephone bookings for journeys to any place in Victoria, provided hirings commence within the defined urban areas of Ballarat, Bendigo, and Geelong. Urban hire-cars have similar rights, but hirings must be through a depot.

Country. Country taxis may operate from specified taxi stands and depots outside the metropolitan and urban taxi areas to any place in Victoria. Country hire-cars have similar rights to country taxis but hirings must be bespoken through a depot.

VICTORIA—TAXIS AND HIRE-CARS LICENSED AT 30 JUNE 1972

Particulars	Number
Metropolitan area—	
Metropolitan taxis	1,806
Suburban taxis	917
Metropolitan hire-cars	20
Total metropolitan	2,743
Urban areas—	
Ballarat—urban taxis	50
Bendigo—urban taxis	36
urban hire-cars	2
Geelong—urban taxis	114
Total urban	202
Country areas—	
Country taxis	486
Country hire-cars	55
Total country	541
GRAND TOTAL	3,486

Enforcement

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

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

VICTORIA—TRANSPORT REGULATION BOARD : PROSECUTIONS

Act or Regulations	1969–70	1970–71	1971–72
Transport Regulation Act (Passenger)	82	101	77
Commercial Goods Vehicles Act Part I	855	675	633
Transport Consolidated Regulations 1960	515	354	292
Motor Car Act	3,248	3,499	2,030
Motor Car Regulations	582	604	460
Road Traffic Regulations	714	869	601
Police Offences Act (Summary Offences Act)	8	4	..
Justices Act	3	3	3
Drugs of Addiction and Restricted Substances Regulations	4	..	1
Total	6,011	6,109	4,097

Standards

Improvement in the standard of public service vehicles is the constant aim of the Board.

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

Because of the need to adapt normal production cars for use as taxis, the fitting of two-way radio and, to a lesser extent, the taxi meter has presented problems, and in giving approval for these fittings the Board has had regard to the requirements and purposes of the various Australian design rules. The aim of these design rules is to provide for safer cars for the motoring public. Car manufacturers have been required to meet the requirements of these rules by specified dates since 1 January 1969.

As a consequence, for new buses there is a design trend for appearance and passenger comfort to be suited to a particular operation as well as to passenger safety requirements. There is a gradual change to larger destination panels displaying route numbers in addition to destination. This is now a requirement for all new route buses.

Special projects

The Board is continuing to extend financial assistance to projects designed to improve the convenience and facility of bus and taxi services to the public. The most important of these are modal interchange facilities, particularly at railway stations, for passengers arriving and departing by buses and taxis.

Road maintenance charges

Owners of commercial goods vehicles with a load capacity exceeding four tons are required to pay a ton-mile charge as compensation for wear and tear caused to Victorian roads under Part II of the Commercial Goods Vehicles Act. This charge is made at a rate of 5/18ths of a cent per ton-mile, based on the tare weight of the vehicle plus 40 per cent of its load capacity. Journeys made solely in connection with the carriage of certain primary produce and livestock do not attract this charge. Vehicles operating on inter-state trade are not exempt. At 30 June 1972 there were 40,000 vehicles with registered load capacities exceeding four tons. As a result of court action taken in respect of offences against Part II of the Commercial Goods Vehicles Act during 1971–72, 5,466 convictions were recorded, fines amounting to $166,308 were imposed, and contributions amounting to $126,585 were ordered to be paid.

Motor boats

The *Motor Boating Act* 1961 and the Motor Boating (General) Regulations 1962 require the registration of privately used motor boats not exceeding 65 ft in length. They also provide for the control of operations of such motor boats in Victorian waters. The Board's function is confined principally to the registration of motor boats. At 30 June 1972 the number of motor boats on the register was 52,411.

Metropolitan Transportation Committee

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

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

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

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

Further reference, 1968

Road Safety and Traffic Authority

Before 1935 road traffic was administered according to the provisions of the Motor Car Act, the Police Offences Act, and the Local Government Act. In that year a Road Traffic Act was passed, accompanied by separate regulations for country and metropolitan conditions. The Traffic Commission was constituted by the provisions of the *Road Traffic Act* 1956, and in 1971 the Road Safety and Traffic Authority took over the functions of the Commission. The Road Safety and Traffic Authority was constituted by the *Road Traffic (Road Safety and Traffic Authority) Act* 1970 and consists of a full-time Chairman and Deputy Chairman with part-time members nominated by the Victoria Police, the Country Roads Board, the Melbourne and Metropolitan Board of Works, the Royal Australasian College of Surgeons, the Royal Automobile Club of Victoria, the Chamber of Automotive Industries, the Municipal Association, and the Trades Hall Council.

The functions of the Authority are to carry out research and investigation into road accident prevention; to promote road accident prevention practices; to request any municipal council to adopt recommended road accident prevention practices and to advise the Minister of failure by the council to do so; and to advise the Minister on road accident prevention policies, matters relating to traffic control referred to it by the Minister, matters relating to regulations, and generally for the improvement of traffic conditions and the control of traffic. The Authority advises the Government about regulations for the improvement and control of traffic, and sets down standards for traffic control items such as signals, pedestrian crossings, and certain signs, after consulting the Country Roads Board, the Melbourne and Metropolitan Board of Works, and the municipal councils.

In 1958 new Road Traffic Regulations were issued, which were more easily understood, and which encouraged easier, safer, and more orderly driving; they clearly stated the privileges and responsibilities of both motorist and pedestrian. An important feature was the " sign board " legislation, which permitted traffic and parking to be controlled by signs; a severe penalty may be imposed for illegally erecting a parking or traffic sign.

Since 1958 the Authority has received from the Victoria Police a comprehensive, confidential statistical report of every accident reported, and from 1960 until July 1972 the information was put on punch cards by the Australian Bureau of Statistics and was then analysed by the Authority. Since that date the forms have been forwarded direct to the Authority, which extracts a summary of the factors in each accident as data to be incorporated on computer tape. Annual accident books are produced from these tapes, enabling highway authorities to identify high accident frequency locations which may be investigated with a view to remedial treatment. Studies have been made of major approach routes to the City and a particular length of one such arterial route—High Street in Prahran, Malvern, Camberwell, and Waverley—was selected for a traffic engineering experiment. This included re-setting of traffic lights, installation of new traffic lights and pedestrian crossings, erection of signs, and restriction on parking.

The Authority has worked closely with the Consultative Council on Road Accident Mortality, which has instituted a research project to investigate fatal accidents with a view to recommending measures to counter road accidents and to improve the assistance to accident casualties. The Council

has also investigated the pattern of injuries, enabling recommendations for improved safety features in vehicles to be supported by factual evidence. The Authority has instituted a programme of municipal involvement in road accident prevention and is assisting municipalities in setting up local representative committees to assist in this matter.

In 1967 the Traffic Commission Fund was instituted and this enabled additional finance to be provided to assist municipalities in traffic matters. From 1952 government funds had been made available to subsidise municipalities in improving such items as traffic signals and pedestrian crossings, and since 1967 subsidies have been widened to include installation of new traffic control signals, pedestrian crossings, and other works or projects to improve traffic control. The Traffic Authority Fund was established under the Road Traffic (Road Safety and Traffic Authority) Act, and the moneys available to the Authority were augmented by a 50 cent surcharge on motor vehicle registrations being paid into this Fund.

Occupants of vehicles in which seat belts are fitted have been required to wear the belts since 1 January 1971, and a 70 mph absolute speed restriction was introduced on 1 January 1972 on a trial basis. Amendments to the Regulations established a means by which a length of road could be classified as a priority road whereon a driver shall not be required to give way to his right. Provision was also made for individual intersections to be protected by the erection of signs whereby a driver was similarly not required to give way to his right.

In September 1972 the Authority assumed the functions of the Traffic Safety Division of the National Safety Council. These included the distribution of road safety literature to schools and various organisations and the conduct of advanced driver training courses. Staff is made available to give road safety talks and demonstrations, and to show road safety films to schools and various organisations. The Authority has been actively associated with road safety promotion and has undertaken two major educational campaigns, one on the alcohol 0.05 legislation and the other on pedestrian safety. It is also preparing a road code booklet (driving guide) which it is intended to distribute to all households throughout the State in early 1974.

Lower Yarra Crossing Authority

The barrier posed by the Yarra River to traffic between the south-eastern suburbs and the western suburbs of Melbourne has been assuming greater importance as the City has developed. First, the river had been continually widened and deepened to enable shipping to ascend to the riverside docks ; this precluded any bridging of the river downstream from the docks. Second, the lack of such a bridge caused all traffic which did not use the meagre ferry facilities to detour through the congested city area.

Tunnels under the river were seriously considered on three occasions, but a succession of ferry services managed to cater for the increasing traffic loads. The Western Industries Association formed in 1957 aimed to improve the status of the western suburbs through various public projects including a fixed crossing for the river to replace the over-burdened ferries. With the principle of a high-level bridge under consideration and proof that growth of the western suburbs and districts was being inhibited through the lack of such a crossing, the Association was eventually successful in forming

the Lower Yarra Crossing Authority. This non-profit making company was registered in 1965.

The Authority applied to the Victorian Government for a franchise to build and operate a toll crossing, and this was granted by Act of Parliament. A maximum period of forty years was granted the Authority in which to amortise its borrowings, following which the asset would revert to the State. In June 1966 the State Government guaranteed the finances of the Authority, greatly assisting the raising of funds necessary for the project. Tenders for construction of the bridge closed in February 1968.

Although the bridge was to be the more spectacular part of the project there still remained the extensive associated works. The total length of the Lower Yarra Crossing Authority project is about 3½ miles, extending from Graham Street (Port Melbourne) in the east to Williamstown Road (Yarraville) in the west. The principal sections of the project are : the Williamstown Road interchange, the western concrete approach viaduct, the main steel bridge across the Yarra, the eastern concrete approach viaduct, the toll plaza, the Salmon Street overpass, and the Graham Street interchange. Thirty-two contracts were involved in the project, ranging from the building of the bridge itself to landscaping.

Work on the foundations for the main bridge structures was officially commenced on 9 April 1968 and was marked by a short ceremony on the west bank when the Premier (the Hon. Sir Henry Bolte) operated a drilling rig to commence the excavation of the first foundation works. In addition to this work, extensive filling of the bridge alignment on the eastern bank was undertaken and test bores were sunk at each of the foundation locations for the whole length of the bridge alignment.

By October 1970 the project works were approximately four fifths complete, with the remaining few spans of the approach viaducts on the east and west sides of the river and the erection of the main steel spans to be finished. However on 15 October 1970 the 367 ft steel span between piers 10 and 11 collapsed, causing the deaths of 35 men. A Royal Commission was immediately set up by the State Government and, following publication of its Report in August 1971, the Authority engaged a new contractor to complete construction of the 2,800 ft long cable stayed box girder bridge.

The Authority also formed its own Directorate of Engineering to continue the work of design, supervision of construction, and contract administration previously carried out by its former consulting engineers. Since then the entire design has been reviewed and rechecked; modifications have been made to the construction of the steel box girders, and erection procedures for the steel spans have been altered considerably. It was not until late 1972 that work regained its former momentum.

The bridge's 8,500 ft length of concrete and steel is 122 ft wide, with the 1,100 ft central steel span 176 ft above low water mark. Traffic flow on the eight lanes of the bridge is expected to be 45,000 vehicles a day initially ; it is expected to reach 100,000 vehicles a day by 1985.

Delays occasioned by the old route's 40 intersections, which included 14 sets of traffic lights, will no longer hamper travel between the City and the west. The rapid transport of goods and commuters through the project, which will soon be linked into many of Melbourne's arterial roads, will

ensure that the west becomes a full partner in the growth of Melbourne and Victoria.

Apart from the completion of the steel spans, the Authority has now completed the remainder of the project works, and sections of the expressway on the eastern side of the river between Lorimer Street, Port Melbourne, and Todd Road, Fishermens Bend, are now open to traffic.

Road traffic accidents

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

1. that the accident occurred on any road, street, lane, thoroughfare, footpath, or place open to or used by the public by right or custom, at the time of the accident ;
2. that it involved :
   (i) any road vehicle which, at the time of the accident, was in motion ; or
   (ii) any animal which, at the time of the accident, was in motion and was being used for the purpose of transportation or travel ; or
   (iii) any train passing over a level crossing for the time being open to the public ; and
3. that the accident resulted in :
   (i) death of any person within a period of thirty days after the accident ; or
   (ii) bodily injury to any person to an extent requiring surgical or medical treatment.

The tables do not include figures of accidents on railway lines (except at level crossings), or on private property. For these and other reasons, the total number of deaths shown in these tables is not comparable with those shown on page 161.

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

Period	Number of accidents	Persons killed	Persons injured	Per 100,000 of mean population		
				Number of accidents	Persons killed	Persons injured
1962–63	12,330	803	17,149	409	27	569
1963–64	13,067	838	18,401	425	27	599
1964–65	14,432	907	20,482	460	29	653
1965–66	14,110	933	20,277	442	29	635
1966–67	14,077	963	19,994	433	30	615
1967–68	15,113	868	21,932	458	26	664
1968–69	15,622	964	22,498	465	29	670
1969–70	17,030	1,065	24,502	498	31	716
1970–71	15,327	996	22,067	440	29	634
1971–72	14,988	884	21,090	424	25	597

The table which follows provides a description of types of road users killed or injured in road traffic accidents occurring during the years 1969–70 to 1971–72 :

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

Description	1969–70		1970–71		1971–72	
	Killed	Injured	Killed	Injured	Killed	Injured
Drivers of motor vehicles	418	10,198	355	8,746	317	8,184
Motor cyclists	19	729	36	986	54	1,345
Passengers (any type)	315	9,732	338	8,870	268	8,242
Pedestrians	270	2,797	235	2,578	217	2,490
Pedal cyclists	40	1,015	31	859	28	799
Other	3	31	1	28	..	30
Total	1,065	24,502	996	22,067	884	21,090

Particulars of victims of road traffic accidents during the years 1969–70 to 1971–72 are shown according to age in the following table:

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

Age group (years)	1969–70		1970–71		1971–72	
	Killed	Injured	Killed	Injured	Killed	Injured
Under 5	36	874	41	776	28	862
5 and under 7	16	467	20	420	16	457
7 and under 17	82	2,754	91	2,599	69	2,450
17 and under 21	191	5,088	205	4,846	170	4,481
21 and under 30	197	5,855	190	5,298	209	5,167
30 and under 40	113	2,896	102	2,427	92	2,363
40 and under 50	115	2,615	84	2,155	82	2,033
50 and under 60	107	1,788	92	1,650	62	1,524
60 and over	208	1,778	170	1,622	154	1,518
Not stated	..	387	1	274	2	235
Total	1,065	24,502	996	22,067	884	21,090

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

Civil aviation

Control of aviation

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

The functions performed by the Department include the following:

1. the registration and marking of aircraft;
2. the determination and enforcement of airworthiness requirements for aircraft and the issue of certificates of airworthiness, certificates of type approval, and supervision of aircraft design;
3. the licensing of pilots, navigators, aircraft radio operators, flight engineers, and aircraft maintenance engineers;
4. the licensing of airline, aerial work, and charter operators, and supervision of their activities;

5. the provision and maintenance of aeronautical communications, navigational aids, aerodromes, and landing grounds ;
6. the establishment and operation of air traffic control, aeronautical information, and search and rescue and fire-fighting and rescue services ; and
7. the investigation of aircraft accidents, incidents, and defects.

Aerodromes

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

Domestic operations at Melbourne Airport (Tullamarine) commenced on 20 June 1971. The licences of all the licensed aerodromes except Grovedale and Whittlesea are held by the local government authority. Under the aerodrome local ownership plan assistance is given to local authorities to maintain licensed aerodromes on a dollar for dollar basis. Similar assistance is given the local authority to develop and maintain aerodromes which are or will be served by a regular public transport service. Local authorities which have received developmental assistance include Bairnsdale, Corryong, Horsham, Kerang, Mildura, Nhill, Portland, Shepparton, Swan Hill, Warracknabeal, and Warrnambool. The assistance authorised by the Australian Government to Victorian local authorities for aerodrome works in the year ending 30 June 1972 was $13,000 (1971: $5,000) for development and $82,000 (1971 : $68,000) for maintenance works.

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

Private operations

In this category, aircraft are used for the personal purposes of the owner. The extent of this activity within the State may be gauged from the fact that there were 342 (1971: 303) aircraft registered in the private category and approximately 3,500 (1971 : 3,217) licensed private aeroplane pilots in Victoria at 31 December 1972.

Aerial work operations

Aerial survey, spotting, agricultural operations, advertising, flying training, aerial ambulance operations, and flying for government purposes are examples of the operations included in this category. In terms of hours flown, the most significant operations are agricultural (see page 317) and flying training. In 1972 over 67,000 (1971 : 61,000) training hours were flown by training organisations in Victoria. In the interests of encouraging flying for defence and commercial purposes, flying training and gliding organisations receive financial assistance from the Australian Government. The Australian Flying Scholarship Scheme under which, in 1970–71, sixteen Victorian resident pilots commenced flying training has been suspended and no scholarships have been awarded since then.

Charter operations

These consist of flights for the carriage of passengers or cargo for hire or reward, but which may not be notified to the general public as being operated between fixed terminals or to fixed schedules, or for the carriage of passengers or cargo between fixed terminals to fixed schedules in circumstances in which the accommodation in the aircraft is not available to members of the public. During the 1950s most charter operations were conducted in single engine aircraft, but there is now an increasing use of the modern small twin engine " executive " aircraft. At 31 December 1972 there were 93 (1971 : 88) Victorian based operators licensed to conduct charter operations and flying hours had increased from 2,215 in 1960 to over 35,000 by 1972.

Commuter services

Since the Second World War country or feeder air services within Victoria have commenced on different occasions but ceased when they proved uneconomic. In 1966 the Australian Government decided a new attempt should be made to provide this type of air service between the capital and numerous country centres. As it was felt charter operators would be prevented by the Air Navigation Regulations from operating to a fixed schedule, it was decided to grant certain exemptions under the Regulations. A charter operator who met appropriate additional requirements and standards would be permitted to operate air services between centres to a fixed schedule and on a regular basis.

By October 1967 exemptions under the regulations had been granted to three operators. Using single and light twin engined aircraft capable of carrying six to thirteen passengers, these operators were approved to operate services to Stawell, Ararat, Ballarat, Kerang, Swan Hill, Echuca, Shepparton, La Trobe valley, West Sale, and Bairnsdale, and to the interstate centres of Albury and Merimbula. Some of these services commenced in November 1967 and others followed with varying degrees of success and continuity. At June 1973 commuter services of the type in question were operating between the following centres on a regular basis : Essendon–Sale, Essendon–Swan Hill, Essendon–Warrnambool and Portland, and between Essendon–Merimbula on a seasonal basis.

Melbourne (Tullamarine) Airport

The Tullamarine site of 5,300 acres was chosen for the development of Melbourne Airport when Essendon could not be further enlarged. The completed aerodrome is 12½ miles from the G.P.O. and 4½ miles from Essendon Airport, and is accessible by a freeway.

The 9½ miles of runways and taxiways were completed early in 1968. The north-south runway (8,500 ft) and the east-west runway (7,500 ft) are both designed for the operation of modern jet aircraft. They are 58 inches thick, and are capable of taking the weight of the Boeing 747 (" Jumbo " jet) and supersonic aircraft. High speed turnouts have been provided to both runways which allow aircraft to turn off the runway at 60 mph. The north-south runway was extended to 12,000 ft in 1972. There is a provision for future development of the east-west runway to extend to 9,000 ft and for a second set of parallel runways.

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

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

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

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

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

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. An Australian Government subsidy is granted to clubs through the Gliding Federation of Australia.

Air traffic control

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

Aircraft parts and materials

There are 161 organisations in Victoria which have been approved by the Department of Civil Aviation to manufacture and/or distribute aircraft parts, materials, and fuel.

Civil aviation statistics

Domestic passenger movements, which represent the total of embarkations and disembarkations, for 1972 for each Victorian aerodrome served by a regular service were as follows :

VICTORIA—DOMESTIC PASSENGER MOVEMENTS ON REGULAR AIR SERVICES, 1972

Airport	Passenger movements	Airport	Passenger movements
Melbourne	2,950,316	Hamilton	59,985
Mildura	52,322		

The following table shows particulars for 1972 of regular interstate and intrastate air services terminating in Victoria :

VICTORIA—REGULAR INTERSTATE AND INTRASTATE AIR SERVICES TERMINATING IN VICTORIA, 1972

Particulars		Interstate	Intrastate	Total
Miles flown	'000	28,673	209	28,882
Passenger miles	'000	1,496,462	3,868	1,500,330
Freight—				
Short tons		108,861	80,277	189,138
Ton miles	'000	25,420	12	25,432
Mail—				
Short tons		9,359	34	9,393
Ton miles	'000	2,306	5	2,311

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

VICTORIA—CIVIL AVIATION

Particulars	1968	1969	1970	1971	1972
Registered aircraft owners	391	362	435	475	528
Registered aircraft	754	785	807	795	817
Student pilot licences	2,548	2,559	2,886	2,927	2,751
Private pilot licences	2,510	2,844	3,023	3,225	3,484
Commercial pilot licences	613	597	743	761	844
Airline pilot licences	535	824	893	914	888
Aircraft maintenance engineer licences	873	900	909	990	1,040

VICTORIA—MELBOURNE (TULLAMARINE) AIRPORT

Particulars	1970	1971	1972
Domestic aircraft movements (*a*)	..	30,411	59,985
Domestic passengers embarked	..	737,360	1,475,295
Domestic passengers disembarked	..	733,127	1,475,021
International aircraft movements (*b*)	1,531	4,309	5,757
Passengers arriving/departing overseas	65,907	185,094	280,235

(*a*) Domestic operations transferred from Essendon to Tullamarine from 20 June 1971.
(*b*) International operations transferred from 1 July 1970.

Aerodrome local ownership plan

The aerodrome local ownership plan, which provides for Australian Government assistance on a dollar for dollar basis to local government bodies which operate municipal aerodromes, was introduced in 1959. As originally formulated the plan provided for assistance for development of aerodromes which supported regular public transport air services and for maintenance of all municipally operated licensed aerodromes whether or not they were served by regular airline services. The basic philosophy of the local ownership plan is involvement at local government level which permits priorities for aerodrome development to be determined in the area which best knows the need.

The plan also provided for the transfer to municipal bodies, free of any cost, of any Australian Government-owned aerodromes which the municipal body was prepared to maintain for aviation purposes. Under this provision of the plan the Australian Government aerodromes at Ararat, Bairnsdale, Ballarat, Hamilton, Kerang, Mildura, and Nhill were transferred free to councils or bodies representing combinations of councils. The aerodromes at Corryong, Horsham, La Trobe valley, Portland, Shepparton, Warracknabeal, and Yarram were constructed with financial and technical assistance provided under the plan and the aerodromes at Birchip, Orbost, Stawell, and Wycheproof were developed by councils without financial assistance for construction works but with technical assistance and with dollar for dollar assistance for subsequent maintenance.

Proposals are being considered for licensed aerodromes for general aviation at Bendigo, Casterton, Kaniva, Kyneton, Leongatha, Maryborough, Robinvale, and Wangaratta. It is estimated that about ten additional municipalities will develop licensed aerodromes in the future thus providing Victoria with an excellent network of aerodromes. The Australian Government aerodromes at Benalla, Mallacoota, and Sale, which are available for free transfer to the councils, have not been accepted by them.

Under the original plan all navigational facilities remained the responsibility of the Australian Government. In areas where distances between major population centres are relatively short and the arterial road system is becoming well developed, as in Victoria, many previously viable air services became uneconomic and ceased to operate and the resultant residual need for air transport was filled by general aviation aircraft. The ability of these aircraft to operate at night resulted in many requests for the installation of aerodrome lighting and navigational aids, which, while desirable from a local viewpoint could not always be given a priority on a national basis which would satisfy local opinion.

In March 1972 the plan was changed to permit dollar for dollar assistance to municipal bodies wishing to install and maintain aerodrome lighting or take over, free of cost, Australian Government lighting on municipal aerodromes. The change also provided for assistance in the development of aerodromes to support general aviation operations, providing the municipal body first acquired suitable land for the aerodrome developments. In addition the change made provision for the Australian Government to meet the full cost of upgrading aircraft pavements on municipal aerodromes for jet aircraft when required for regular passenger services.

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

COMMUNICATIONS

Postmaster-General's Department

In 1837 Mr E. J. Foster, Clerk to the Bench at the Port Phillip Settlement, was officially permitted to act as Postmaster in addition to performing his normal duties. Since then the Postmaster-General's Department in Victoria has progressed from a staff of one and a crude bark hut, to a large administration employing a staff of approximately 32,000 persons located throughout the State. The complexity of modern communications requires specialisation in activities, and, to meet these requirements, the Victorian Administration is divided into six major sectors : Postal Services Division, Engineering Division, Telecommunications Division, Personnel Branch, Supply Branch, and Finance and Accounting Branch. Each of these sectors is further divided for efficient functioning.

At 30 June 1972 there were 336 official and 1,417 non-official post offices, 797 country automatic telephone exchanges, 353 country manual exchanges, and 103 metropolitan automatic exchanges. These offices and installations ensure that departmental services are within the reach of all but the most isolated homes.

To maintain the operating staff at desirable levels, large numbers of trainees are recruited each year. A seven month training course for postal clerks-in-training concluded in January 1972, with 38 successful candidates. Classes were held at the Postal Training School in Melbourne, but approximately half of the training period was spent under actual working conditions at various post offices. A second course, which commenced in January 1972 and ended in July of that year, resulted in a further 41 successful candidates. In addition to these two courses, a special course was provided for Postal Officers, Grade III.

In telecommunications, the five year course for technicians-in-training which had been conducted by the Department for many years, began to be phased out early in 1971 in favour of two new four year courses—for telecommunications trainees and telecommunications tradesmen. By January 1972 there were some 700 technicians-in-training still completing courses. Approximately half this number were in their fourth year of training, and the remainder were completing their fifth and final year. Two courses for telecommunications trainees were held during the financial year, one for first year students, and the other for second year students. A total of approximately 460 students attended these two courses. During the four year course, trainees spend approximately two years at a technical college and the remaining time at Departmental training centres, or gaining practical experience at telephone exchanges or television transmitters. Candidates for this course are required to have reached Leaving standard in english, physics, and mathematics.

The four year course for telecommunications tradesmen involves approximately twenty months spent at a Departmental training centre, and the remainder of the time engaged in practical field work. About 250

second year students and 150 first year students were trained during 1971–72.

A twelve month course for linemen-in-training commenced in June 1971 and was completed in May of the following year. Fifty-five candidates enrolled for this course. A second course for linemen-in-training was commenced in January 1972, when 122 candidates enrolled. In addition to these courses, specialised instruction on new techniques in the ever-changing field of electronics was provided for qualified officers. Five year courses are also available for apprentice tradesmen in the following trades, where the number following each trade indicates the number of trainees engaged in the course during 1971–72 : motor mechanic 25, sheet metal worker 14, instrument maker 4, fitter and turner 47, carpenter 10, wood machinist 3, structural steel worker 16, electrical fitter and mechanic 67, signwriter 5, locksmith 3, frenchpolisher 1, panel beater 2, and electro-plater 1.

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

The following information mainly describes the branches and divisions of the Postmaster-General's Department that are associated with services directly available to the public.

Post Offices Branch

During 1971–72 new official post office buildings were opened at Altona North, Bairnsdale, Belmont, Bentleigh, Horsham, Lilydale, Mentone, and Seymour. Modern and attractive in appearance, yet strictly functional and planned to meet future needs, they provide facilities for the latest mail handling techniques as well as greatly improved amenities for staff.

S.A.L. (Surface Air Lifted) Service

This service, introduced in August 1971, provides an intermediate choice between overseas sea mail and air mail. Economy priced and available from all post offices, S.A.L. mail is particularly suited to small packets and parcels previously sent by sea mail. Delivery time is about a third of that for sea mail.

Stamps issued during 1971–72

On 5 July 1971 a set of four animal stamps was issued. The 6c stamp commemorated the centenary of the foundation in Australia of the Royal Society for the Prevention of Cruelty to Animals, the 12c stamp featured animal science, the 18c fauna conservation, and the 24c animals' aid to man.

A set of Aboriginal art stamps was issued on 29 September 1971. The set comprised 20c bark painting, 25c body decoration, 30c cave painting, and 35c grave posts.

The rise in postal rates on 1 October 1971 resulted in the issue of three new stamps on that date. Two 7c stamps were introduced to meet the new inland rate for letters not exceeding one ounce. One of these stamps featured a portrait of Queen Elizabeth II ; the other stamp, designed for use in

vending machines, depicted Sturt's Desert Pea. The third stamp had a value of 2c, and was also intended for use in vending machines. It portrayed Sturt's Desert Rose. This 2c stamp was introduced to be used in conjunction with existing 5c stocks, the 2c and 5c machines providing the required 7c postage. Later, 7c vending machines became more widely available.

The 1971 Christmas stamp was issued on 13 October. The design showed the heads of the three wise men, depicted in a graphic, modernistic style. Value of the stamp was 7c, and it was printed in seven different colours. On 8 March 1972 the second set of stamps featuring former Prime Ministers of Australia was presented in booklet form. All stamps were of 7c value, and they featured Andrew Fisher, Joseph Cook, Stanley M. Bruce, and William M. Hughes. A 7c stamp was issued on 18 April 1972 to commemorate the fiftieth anniversary of the foundation of the Country Women's Association. The final stamp issue for the financial year occurred on 14 June 1972 and featured a set of four primary industries stamps. The industries depicted concerned beef, fish, rice, and fruit.

Philatelic centres in Victoria

At 30 June 1972 there were eleven philatelic centres operating at official post offices in Victoria. At these centres it is possible to purchase the commemorative issues of Australia up to six months after their date of issue (subject to stocks not being exhausted before that time). Collectors can also obtain at these centres new postage stamp issues from the Australian Antarctic Territory, Norfolk Island, Cocos (Keeling) Island, Fiji, Western Samoa, Nauru, Christmas Island, and Papua New Guinea. In addition to the philatelic centres, " first day of issue " postmarker facilities are available at 155 post offices in Victoria.

New postal uniforms

In March 1972 a new dark blue uniform was introduced for delivery staff and motor drivers. It was created by a leading Australian fashion designer, and developed with the assistance of the Australian Wool Board, Commonwealth Scientific and Industrial Research Organization, and the Australian Government Clothing Factory. The material is 80 per cent wool and 20 per cent polyester.

Transport Branch

The Transport Branch of the Postal Services Division has a fleet of 721 vehicles and a staff of 461 persons. This figure includes 370 motor drivers who are employed largely on rostered shifts and who transport mails and clear public telephone coin boxes and street letter boxes throughout the metropolitan area. The Branch also provides a pool of sedan cars for authorised departmental staff, and undertakes the movement of bulk equipment, stores, cables, and poles by truck to specified locations.

In some areas, mails are conveyed by private contractors. There are 1,072 of these services in Victoria which operate over a total of 13.8 million miles, at a cost of $1.8m per annum. Most of the mail routes operated under private contract serve the more sparsely populated areas of the State.

The vehicles allotted to the Transport Branch form only a part of the total fleet of 4,469 vehicles belonging to the Department in Victoria. A

large proportion of this total are vehicles allotted to the Engineering Division, and are stationed at various depots throughout the State. Many have been designed for specific duties, such as the conveyance of large drums of cable, lengthy telephone poles, or for use as mobile cranes. Others are fitted out as mobile workshops. In addition to these vehicles, the Engineering Division also employs 575 major mechanical aids, the majority of which are used for earthmoving activities. Over 1,000 small mobile units are used for various special purposes.

Telecommunications services

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

Automatic telephone service

Steady progress is being maintained towards providing a totally automatic telephone network throughout the State. During 1971–72 several new automatic telephone exchanges were brought into service, the largest ones being at Healesville, Korumburra, and Werribee.

A new type of wall telephone, known as the Wallfone, has been added to the range of instruments available to the public. It is of Australian design and manufacture, and modern techniques have been used to keep the manufacturing, installation, and service costs to a minimum without impairing performance. The unit was styled by Post Office industrial designers in collaboration with the manufacturer, following a wide survey of wall telephones in use in other countries. It is available in three colours: powder blue, appliance white, and black.

Subscriber Trunk Dialling (S.T.D.) facilities which enable a telephone subscriber to dial direct to distant subscribers, without the assistance of a P.M.G. operator, have continued to expand rapidly. During 1971–72, 565 exchanges in Victoria provided 790,587 services with access to S.T.D. Some additional centres to which S.T.D. became available during this time include Healesville, Korumburra, and Werribee. Other centres that had had limited S.T.D. facilities, such as Ballarat, Colac, and Sale, were given full access to national S.T.D.

Automatic Telex

Automatic Telex is basically similar to S.T.D., but the typewritten message from the teleprinter is communicated instead of the spoken word. During 1971–72 an additional 220 Telex services were connected, bringing the total services in operation to 2,276. Victorian Telex subscribers now have access to more than 9,235 services in Australia, and to some 100 countries overseas.

" Datel " service

There is now an increasing demand for facilities to transmit digital data for computers over telephone and telegraph lines. Known originally as "Data Transmission ", the service is now called " Datel ". Questions sent by teleprinter to the computer have to be converted to signals that can be " understood " by the computer. Similarly, answers have to be converted to a form that can be transmitted over the lines provided by the Department. This conversion is performed by a modulator/demodulator unit, known as a " Modem ". The data can be sent over the telephone network, over private telephone or telegraph lines providing point to point circuits for the customer's exclusive use, or by means of the Telex network. All lines except those used in the Telex network are suitable for high transmission speeds. At 30 June 1972, 156 customers were using Datel services.

Radio communication systems

During 1971–72 a number of microwave radio systems, forming part of the broadband network in Victoria, were established by the Department in various parts of the State. During February 1972 links were provided between Beech Forest and Yuulong (24 channels) and Beech Forest and Johanna (also 24 channels). A 960 channel broad band radio system for use between Hamilton and Warrnambool was completed in November 1971 and brought into service early in 1972. Other links provided were between Yuulong and Hordern Vale (24 channels), which was brought into service in April 1972 ; between Sale and Dargo (24 channels), in June 1972 ; between Arthur's Seat and Tankerton (24 channels), in June 1972 ; and between Mt St Bernard and Harrietville (one channel), in June 1972.

Radio communications

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

As a member of the International Telecommunications Union, the Postmaster-General's Department in Australia observes and checks all radio transmissions received in Australia. Results of these observations are forwarded to the International Frequency Registration Board in Geneva. Switzerland.

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

Revenue and expenditure

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

In Victoria for the year 1971–72 cash receipts were $235.8m. The collections were : postal $57.9m, telephone $165.8m, telegraph $5.5m,

proceeds of sales $2.1m, recoverable works $4.4m, and international services $0.2m.

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

In Victoria for the year 1971–72 cash expenditure was $220.7m, salaries and wages were $140.9m, materials $53.5m, carriage of mails by contractors $3.0m, buildings, sites, properties $6.7m, accommodation and services $5.3m, and other $11.4m.

Statistics

The number of post offices and the number of persons employed by the Postmaster-General's Department in each of the five years 1967–68 to 1971–72 were as follows :

VICTORIA—POST OFFICES: PERSONS EMPLOYED

Period	Number of post offices	Persons employed					
		Permanent	Temporary and exempt	Semi- and non-official postmasters and staffs	Mail contractors	Other (*a*)	Total
1967–68	1,981	17,312	9,753	2,267	1,052	791	31,175
1968–69	1,900	18,081	9,124	2,159	898	782	31,044
1969–70	1,827	18,346	9,429	2,036	984	768	31,563
1970–71	1,759	19,240	9,338	1,930	899	694	32,101
1971–72	1,690	20,762	8,157	1,856	824	725	32,324

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

The following table shows the total number and value of money orders and postal notes issued and paid in each of the five years 1967–68 to 1971–72 :

VICTORIA—MONEY ORDERS AND POSTAL ORDERS

Period	Money orders (*a*)				Postal orders			
	Issued		Paid		Issued		Paid	
	Number	Value	Number	Value	Number	Value	Number	Value
	'000	$'000	'000	$'000	'000	$'000	'000	$'000
1967–68	2,763	115,739	2,573	115,197	3,303	5,484	3,410	5,330
1968–69	2,166	47,189	2,086	46,767	3,543	6,925	3,495	6,484
1969–70	1,926	38,931	1,936	37,709	3,808	8,086	3,714	7,277
1970–71	1,487	33,454	1,481	33,004	4,158	11,007	3,888	9,597
1971–72	1,179	28,887	1,101	28,467	4,415	13,295	4,028	12,042

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

Of the money orders issued in 1971–72, 1,051,030 for $27,580,102 were payable in Australia and 127,942 for $1,307,044 in other countries. The orders paid included 1,050,193 for $27,038,672 issued in Australia, and 50,310 for $1,428,417 in other countries.

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

Period	Letters, postcards, etc.	Registered articles (except parcels)	Newspapers and packets	Parcels (including those registered)
	POSTED FOR DELIVERY WITHIN AUSTRALIA			
1967–68	580,820	2,385	100,854	5,531
1968–69	575,773	2,307	100,878	5,473
1969–70	559,138	2,262	94,188	5,652
1970–71	640,991	2,145	85,800	5,777
1971–72	631,969	1,929	78,763	5,810
	DISPATCHED TO AND RECEIVED FROM PLACES OVERSEAS			
1967–68	83,387	1,151	15,447	705
1968–69	91,724	1,171	14,372	734
1969–70	77,142	1,249	13,860	792
1970–71	86,076	1,326	14,846	899
1971–72	84,251	1,349	8,842	881
	TOTAL POSTED IN VICTORIA AND RECEIVED FROM OVERSEAS			
1967–68	664,207	3,536	116,301	6,236
1968–69	667,497	3,478	115,250	6,207
1969–70	636,280	3,511	108,048	6,444
1970–71	727,067	3,471	100,646	6,676
1971–72	716,220	3,278	87,605	6,691

VICTORIA—RADIO COMMUNICATION STATIONS AUTHORISED AT 30 JUNE

Class of station	1968	1969	1970	1971	1972
Transmitting and receiving—					
Fixed stations (*a*)—					
Aeronautical	4	4	4	4	..
Services with other countries	12	12	12	..	..
Other	223	226	262	277	260
Land stations (*b*)—					
Aeronautical	28	24	49	52	75
Base stations—					
Land mobile services	1,527	1,693	2,066	2,351	2,565
Harbour mobile services	22	23	31	37	37
Coast (*c*)	16	20	25	27	1
Limited coast	..	..	..	..	32
Repeater	..	..	..	..	40
Special experimental	143	153	169	159	138
Mobile stations (*d*)—					
Aeronautical	449	437	512	510	449
Land mobile services	17,795	20,225	25,005	27,447	29,592
Harbour mobile services	163	178	257	252	270
Radiodetermination	..	..	..	..	9
Radiotelephone subscribers service	..	..	..	..	159
Ships	626	728	914	989	1,088
Space services (*e*)	..	..	..	..	1
Amateur stations	1,723	1,785	1,925	1,966	1,989
Total transmitting and receiving	22,731	25,508	31,231	34,071	36,705
Receiving only—					
Fixed stations (*a*)	198	199	198	198	34
Grand total	22,929	25,707	31,429	34,269	36,739

(*a*) Stations established at fixed locations for communication with other stations similarly established.
(*b*) Stations established at fixed locations for communication with mobile stations.
(*c*) Land stations for communication with ocean-going vessels.
(*d*) Equipment installed in motor vehicles and harbour vessels.
(*e*) A radiocommunication service between earth stations and/or space stations.

Information relating to telephone services at 30 June 1968 to 1972 is given below :

VICTORIA—TELEPHONE SERVICES AT 30 JUNE

Particulars	1968	1969	1970	1971	1972
Telephone exchanges	1,425	1,353	1,312	1,274	1,253
Public telephones	7,373	7,463	7,505	7,610	7,585
Services in operation	727,575	770,162	824,227	864,044	896,615
Instruments connected	1,019,603	1,080,223	1,182,149	1,239,652	1,293,977
Instruments per 1,000 of population	306.7	319.2	343.3	353.9	365.0

Broadcast and television licences in force

The number of stations licensed for broadcasting and television, and the number of holders of broadcast listeners' and television viewers' licences in Victoria at 30 June 1968 to 1972 are shown in the following table :

VICTORIA—NUMBER OF BROADCASTING AND TELEVISION LICENCES IN FORCE AT 30 JUNE

Class of licence	1968	1969	1970	1971	1972
Broadcasting station (*a*)	20	20	20	20	20
Television station (*b*)	9	9	9	9	9
Broadcast receiver	94,982	80,685	72,051	64,298	58,390
Television receiver	96,789	73,078	107,362	115,613	111,921
Combined broadcast and television receiver	629,729	647,814	675,457	690,464	699,652
Amateur	1,723	1,785	1,925	1,966	1,989

(*a*) Excluding eight broadcasting stations (including three shortwave) operated by the national broadcasting service. In 1970–71 seven broadcasting stations (including two shortwave) have been excluded.
(*b*) Excluding eight television stations operated by the national television service.

Postage stamps of Victoria

Before the introduction of postage stamps, the majority of letters were sent " unpaid ", and the postal fee was collected by the postman. There were many disadvantages in this system, notably the time wasted by the postman in contacting the recipient of each letter, and further delay while that person found the amount of money required. Complications often arose because the householder had no coinage, and the postman was unable to give change. There was also the considerable weight in coins the postman had to carry during the latter half of his round, in addition to his bag of mail.

These problems were solved by the introduction of stamped envelopes or adhesive stamps to pre-pay postage. The principal advocate for this system was the British postal reformer, Rowland Hill, who was later knighted for his services and who was largely responsible for introducing uniform penny postage in Britain. He set out his plans for improving the British postal system in a pamphlet published in 1837 ; a copy of this pamphlet was read by James Raymond, the Postmaster-General in the Colony of New South Wales, who was so impressed by Hill's suggestions for the pre-payment of postage that he immediately obtained the authority of Sir George Gipps,

the Governor, to issue letter sheets embossed with the Post Office Seal, the embossed impression serving as an official receipt indicating that postage had been paid. These letter sheets were issued in November 1838, and were the first form of pre-paid mail in the world using an embossed stamp to indicate that postage had been paid. They preceded the British system, which employed adhesive stamps, by about eighteen months. However, the New South Wales embossed envelopes were used only by Sydney residents, in a local penny post restricted to within the city delivery limits.

The first nation-wide penny post service was introduced in Britain on 10 January 1840 and the first use of adhesive stamps to pre-pay postage came into use there on 6 May 1840. Adhesive stamps proved to be much more popular with the British public than the pre-paid envelopes which were offered for sale at the same time, and nations throughout the world were soon introducing stamps to pre-pay postage. New South Wales and Victoria were the first of the Australian colonies to employ adhesive postage stamps, both colonies introducing them early in January 1850. The New South Wales stamps were issued on 1 January of that year, making it the third British colony to issue stamps ; the Victorian stamps were released two days later. At that time Victoria was still officially a part of New South Wales, but Separation was imminent, and Victorians were determined to have stamps of their own. Thomas Ham, a Melbourne engraver and printer, was therefore commissioned to prepare a suitable design, incorporating a " half-length " portrait of Queen Victoria with the proposed name of the new colony, Victoria, above it. The stamps were issued in three values, 1d, 2d, and 3d. They were placed on sale approximately eighteen months before Separation from New South Wales actually took place. Victoria's second stamp issue was the " Queen on throne " design, which was recess printed by Thomas Ham, and issued in December 1852.

In addition to the Thomas Ham lithographs of the " half-length " stamps, further printings of the 1d and 3d values were made by J. S. Campbell and Co., and later by Campbell and Fergusson, of Melbourne. One of the contracts between the Postmaster-General's Department and the printing firm of Campbell and Fergusson shows that on 19 December 1853 the firm entered a bond to supply 500,000 1d stamps, and 500,000 3d stamps, using the " half-length " design, and two million 2d stamps in the " Queen on throne " design. The stamps were to be printed from plates held by the Postmaster-General. A second contract, entered into on 30 April 1854, was to supply one and a half million 2d stamps. A third contract, dated 19 May 1854, was for the production of a new stamp—the octagonal 1s blue. In this latter contract Campbell and Fergusson undertook to " prepare for the Postmaster-General a shilling postage stamp plate, and three million impressions, to provide paper, printing, and gumming ; the work to be performed in the best manner (specimen of gumming herewith attached), and under the superintendence of an officer of the P.M.G. for that purpose. The stamps to be furnished in sheets of one hundred (100) or Five Pounds (£5) value, of a dark blue colour, and in a perfect state, in quantities of not less than five hundred thousand (500,000) per month, on condition of receiving the sum of Four Hundred and Eighty Pounds (£480), the plate from which the above impressions are struck off to become the property of the Postmaster-General." A further Campbell and Fergusson

contract dated 2 June 1854 was for the production of four million 1d stamps and two million 3d stamps, all of " half-length " design.

On 2 June 1854 Samuel Calvert, of Melbourne, signed a £500 bond to " Make and engrave on the best hardened Turkey Boxwood, a certain Plate or Die for the printing of ' Two Shillings ' postage stamps." The contract was for an initial printing of one million stamps, in sheets of fifty stamps each. Calvert's speciality was engraving on wood, and his competitive prices enabled him to secure contracts to engrave and print several stamps by this method of production. They are known today as the " woodblocks ", and include the 6d red-brown issue of 13 September 1854 ; the 6d " too late " stamp issued on 1 January 1855 ; and the " emblems " stamps issued in January 1857. Calvert's final series of stamps, the " emblems ", were so named because each corner of the stamp pictured an emblem pertaining to the industrial development of Victoria at that time. They ranged from pastoral interests to a draughtsman's instruments, and from shipping to the accessories of a gold prospector.

The first stamps of Victoria were issued imperforate and had to be cut from the sheet. During later printings of the " woodblocks " series, a rather crude form of perforation known as rouletting was introduced ; this greatly simplified the separation of stamps. Soon after the " emblems " stamps were first issued, one of Calvert's business rivals, Thomas Ham, wrote to the Department, saying " Calvert undertook to supply printing, paper, gumming, and perforating at a price which would not afford the smallest profit on the capital, time, and labour expended on its execution, however inferior the workmanship." There was apparently some truth in Ham's statement, as Calvert soon found himself in financial difficulties and on 28 April 1858 was summonsed to appear before the Supreme Court on a charge of embezzlement. It was stated that he had pawned 170 sheets of stamps, part of 1,800 sheets (valued at £35,000), which had been handed over to Calvert by the Department to be perforated. Calvert was found guilty, but the jury recommended clemency as there was some doubt concerning the evidence. The sentence was three months imprisonment. It was the end of any further Government contracts for Calvert, and it heralded the beginning of the end for private printing contracts.

In October 1856 Victoria issued its first stamp to be produced overseas. This was a more sophisticated version of Ham's " Queen on throne " design, and it was recess printed by Perkins, Bacon and Co., the British firm of printers and engravers who had produced the famous Penny Black and Two-pence Blue of Great Britain. In April 1858 Frances Robinson was employed by the Department to complete the printing contract entered into by Calvert, and later to print further supplies. Following the Calvert episode, the Government demanded tighter security measures governing the safe holding of printed sheets of stamps, printing plates, and dies. In 1859 Robinson was placed on the Government pay-roll, and his printing works and stock were purchased by the Department. A Government Stamp Printing Branch was established on 1 January 1860 with Robinson in charge, and this marked the end of private printing contracts.

Adhesive labels, besides being used for the pre-payment of postage, were also employed for the collection of fees, and stamp duty. The Postage Act of 1883 provided for the three types of stamps to be combined in one

issue, and since there were many more printing plates available inscribed "Stamp Duty" than "Postage" or "Stamp Statute", stamps with the words "Stamp Duty" came into regular postal use on 1 January 1884. This meant that high value stamps of £1, £5, £10, £25, £50, and £100, which were mainly intended for fiscal use, were also legally available for the pre-payment of large, or highly valuable, registered parcels.

In December 1867 a five shillings stamp was issued for the first time. The first Victorian halfpenny stamp, the smallest stamp ever issued by the Colony, appeared in 1874. Two Victorian issues of particular interest are the "charity" stamps of 1897 and 1900. These stamps were considerably larger than the standard issues, and were produced in sets of two values. The 1897 issue featured a 1s stamp which had a postal value of one penny, and a 2s 6d stamp with a postal value of 2½d. The balance of the money paid for these stamps was given to a hospital fund. In May 1900 "charity" stamps of 1d and 2d values surcharged to sell at 1s and 2s, respectively, were issued. The surplus funds were donated to a Boer War patriotic fund.

Although the various States continued to issue postage stamps under their own names until 1913, revenue from stamp sales went to the Commonwealth Government following Federation in 1901. From 1901 Victorian stamps abandoned the words "Stamp Duty" and replaced them by "Postage".

Overseas telecommunications services

The Overseas Telecommunications Commission (Australia) is the authority responsible for the establishment, maintenance, and operation of telecommunication services between Australia and other countries, with ships at sea, and to and between Australia's external Territories.

The Commission was established under the *Overseas Telecommunications Act* 1946. This Act implemented, in Australia, a recommendation of the 1945 Commonwealth Telecommunications Conference for national ownership of the external telecommunications services of the British Commonwealth countries concerned. At the 1966 Commonwealth Telecommunications Conference the British Commonwealth countries completed a review of the machinery for their collaborative arrangements in telecommunications. Following adoption of the recommendations of the 1966 Conference by the representative Governments, the Commonwealth Telegraphs Agreements of 1948 and 1963, under which the earlier collaborative financial arrangements had been established, were formally terminated on 31 March 1969. The new Commonwealth Telecommunications Organisation became fully operative from 1 April 1969 when the Commonwealth Telecommunications Organisation Financial Agreement came into force.

The Commonwealth Telecommunications Organisation, the purpose of which is to promote the efficient exploitation and development of the Commonwealth external telecommunications system, is a three-tier structure comprising the Commonwealth Conference on Telecommunications, the Commonwealth Telecommunications Council, and the Commonwealth Telecommunications Bureau. The Commonwealth Telecommunications Council is the continuing management body of the Organisation with the role of promoting the purpose of the Organisation and carrying out the policies agreed to by Governments. The Commonwealth Telecommunications Bureau is the Secretariat for the Organisation and functions under the control and direction of the Council.

In association with the Post Office within Australia and with communication carriers in other Commonwealth and foreign countries the Commission provides public message telegram, telephone, telex, phototelegram, and leased circuit services to most countries and places throughout the world. International television programmes are provided by means of satellite communication facilities with countries operating earth stations, while the switched data service is available to a number of countries.

To meet Australia's increasing demand for overseas communication channels, and because of limitations on performance and capacity inherent in telegraph cables and high frequency radio systems, the Commission, in partnership with the overseas telecommunications authorities of Britain, Canada, and New Zealand, installed a large capacity telephone cable across the Pacific Ocean, connecting Australia, New Zealand, and Canada via Suva and Honolulu. The cable (COMPAC) was opened in December 1963 and forms part of a British Commonwealth large capacity cable scheme, in which a complementary cable between Britain and Canada (CANTAT) was officially opened in December 1961. The two cable connections are linked across Canada by a microwave system. The Commonwealth cable system feeds into the United States of America network at Hawaii and into the European network at London.

The south-east Asia cable project (SEACOM), extending the large capacity telephone cable system from Sydney to Singapore and Kuala Lumpur via Cairns, Madang, Guam, Hong Kong, and Kota Kinabalu, was opened for service on 30 March 1967.

The Commonwealth Cable Management Committee, comprising representatives of Britain, Canada, Australia, New Zealand, Malaysia, and Singapore, administers COMPAC and SEACOM.

In August 1964, Australia became a foundation member of INTELSAT, a partnership of nations concerned in establishing a global communications satellite system. Australia has an ownership share (2.4 per cent) making it the sixth largest contributor among the 83 INTELSAT member countries, and it is represented by the Overseas Telecommunications Commission. Australia is one of the 18 representatives on the Interim Communications Satellite Committee (ICSC), which is the management body of INTELSAT.

The agreements under which the INTELSAT Consortium has operated in the period since 1964 were interim in nature, providing for the negotiation of permanent arrangements for the consortium after experience had been gained during the initial period. Negotiations of the permanent agreements for INTELSAT commenced in Washington, D.C. in 1969 and were successfully concluded in May 1971 at a Plenipotentiary Conference attended by delegates from 92 countries.

The permanent arrangements for INTELSAT are embodied in two interrelated agreements. The first is an inter-governmental agreement which outlines the principles and objectives of the consortium and defines the basic organisational arrangements. The second, the Operating Agreement, provides the basis for the operation and management of the INTELSAT system and may be signed by Governments or telecommunications entities designated by Governments. The new agreements were signed in Washington, D.C. on 20 August 1971 by the Australian Government and the Commission, as the designated Australian national communications authority.

In March 1968 a satellite earth station at Moree, New South Wales, owned and operated by the Commission, commenced commercial communications, including a capability for television transmission and reception. This station, which operates to the Pacific Ocean INTELSAT IV satellite positioned in a stationary orbit 22,300 miles above the equator, was the first in Australia constructed as a 'standard' station of the INTELSAT network, and carries direct circuits between Australia and other countries in the Pacific region. The link with Japan, the first by satellite between Australia and an Asian country, was established for commercial operation on 14 March 1969.

The completion of the new standard earth stations at Carnarvon (Western Australia) and Ceduna (South Australia) in 1969 and a significant expansion of facilities at the earth station at Moree (N.S.W.) provided increased telecommunications services via satellite.

The original non-standard station at Carnarvon (opened in 1967) is now used solely for telemetry, tracking, and command functions under contract with the INTELSAT organisation. These functions provide for four such stations to be spaced around the world so that any INTELSAT satellite can be viewed and controlled wherever it may be. These stations keep a continuous check on the position of each satellite and its functioning by means of signals transmitted by the satellite. When required, signals are transmitted to a satellite to control the direction of its antenna and to change its orbital position. During launches, these stations transmit the commands which fire the satellite motor to place it in final orbit. The Interim Communications Satellite Committee selected the Carnarvon station for this purpose after calling competitive tenders from earth station owners in the coverage zone of the Indian Ocean and Pacific Ocean satellites.

The second Carnarvon station, operating via the Pacific Ocean INTELSAT IV satellite, provides a link for the National Aeronautics and Space Administration (NASA) between its Carnarvon space tracking stations and the United States. The earth station at Ceduna, operated through the Indian Ocean INTELSAT III satellite, offers services to earth stations in the United Kingdom, Indonesia, India, and other countries in the coverage area of the Indian Ocean satellite.

The following table shows particulars of overseas telecommunication traffic other than telegraphic between Australia and overseas countries for the years ended 31 March 1970 and 1971 :

AUSTRALIA—INTERNATIONAL TELECOMMUNICATION SERVICES OTHER THAN TELEGRAPHIC SERVICES, YEARS ENDED 31 MARCH 1970 AND 1971

Service		Transmissions					
		From Australia		To Australia		Total	
		1970	1971	1970	1971	1970	1971
Telephone	paid minutes	4,310,962	5,754,134	4,900,644	6,369,815	9,211,606	12,123,949
Telex	paid minutes	2,476,404	3,608,420	2,371,303	3,301,077	4,847,707	6,909,497
Television programmes	paid minutes	1,326	1,952	2,268	2,580	3,594	4,532
Leased services	paid hours	870,664	922,707	314,712	237,694	1,185,376	1,160,401
Phototelegrams	pictures	1,260	1,759	4,521	2,760	5,781	4,519

International telecommunication traffic

Particulars of the volume of international telegraph services originating and terminating in Australia during the years ended 31 March 1970 and 1971 are shown in the following table :

AUSTRALIA—INTERNATIONAL TELEGRAPH SERVICES, YEARS ENDED 31 MARCH 1970 AND 1971
('000 words)

Class of traffic	Words transmitted					
	From Australia		To Australia		Total	
	1970	1971	1970	1971	1970	1971
Letter	30,137	30,205	26,492	26,553	56,629	56,758
Ordinary	27,433	28,841	25,541	26,851	52,973	55,692
Press	3,149	3,786	3,630	4,315	6,779	8,102
Greetings	1,749	1,607	1,884	1,731	3,632	3,338
Urgent	1,718	1,891	1,399	1,540	3,117	3,431
Other	729	574	2,153	1,697	2,882	2,271
Total	64,914	66,905	61,099	62,687	126,013	129,592

Coastal stations

The Overseas Telecommunications Commission operates fourteen coastal radio stations at points around the Australian coast, three on the Papua New Guinea coast, and one at Norfolk Island. During the year ended 31 March 1971 the coastal radio service handled 6,532,744 paid words to ships and 4,036,212 words from ships. Ship calls over the radiotelephone service extended over 129,355 paid minutes.

Radiocommunication stations authorised

At 30 June 1971 there were 150,797 civil radiocommunication stations authorised for operation in Australia and its Territories. Of these, 6,006 were stations established at fixed locations, 12,225 were land stations which were established at fixed locations for communication with mobile stations, 126,094 were mobile stations and 6,472 amateur stations.