

CHAPTER 20

TRANSPORT AND COMMUNICATION

This chapter contains information on shipping; railways; tram, bus and ferry services; motor vehicles; road traffic accidents; roads; air transport; postal services; internal and overseas telecommunication services; radio communication stations; broadcasting and television; and government bodies concerned with these activities.

More detailed figures and particulars for earlier years are included in the publications listed at the end of the chapter.

TRANSPORT ORGANISATIONS

The Australian Transport Advisory Council

In April 1946, the State and Commonwealth Governments agreed to establish a co-ordinating and advisory committee at Ministerial level to review annually the various laws and regulations deemed necessary to safeguard the interests of the State Governments and road users generally and to consider matters of transport policy.

The Australian Transport Advisory Council (ATAC), thus established, is comprised of the Commonwealth Minister for Transport and Construction, the Minister for the Capital Territory, each State Minister responsible for transport and roads, and the Northern Territory Minister for Transport and Works. The New Zealand Minister responsible for transport attends as an observer.

The Council primarily considers policy matters relating to transport operations, co-ordination and developments. Its functions are: to initiate discussion and report to the respective Governments as necessary on any matter raised by the Council or any State or Commonwealth Government Authority; generally to exercise its purely advisory functions and to report as necessary to the respective Governments concerned on any matter which will tend to promote a better co-ordination of transport development, while at the same time encouraging modernisation and innovation to meet changing needs; and to assist in maintaining continuous and comprehensive research in relation to transport development in Australia and abroad, such research to be carried out for the benefit of Australian Transport authorities and agencies.

The regulation of and the executive responsibility for transport is shared between the Commonwealth and State Governments. The ATAC is the meeting ground at a ministerial level and provides an effective means of inviting discussion and reaching uniformity of approach towards transport administrative procedures and policy. It also provides a means for reviewing and discussing national solutions to transport problems and the rectification of transport deficiencies generally. The Council has been active in: the establishment of special committees and conferences to examine and report on specific problems such as road safety, motor vehicle standards and safety features, motor vehicle emissions, transport economic research, driver licensing improvement, and highway planning; the exchange of views and the formulation of common policies on a wide range of transport matters; the effecting, at ministerial level, of Commonwealth/State and interstate co-operation on such matters as urban transport arrangements and funding, provision of funds for roads, construction and operation of interstate railway links, collecting of fines and fees interstate, policing of regulations, etc., and the publication of comprehensive surveys of Australian transport.

The Council is advised by the following four policy groups: *Co-ordinating and General Transport Group*, comprising principal Ministerial advisers, such as the Permanent Heads of the relevant Departments, deals with overall issues of policy co-ordination and development as well as topics which do not fall within the terms of reference of the other groups. *Railway Group*, comprising State and Australian National Railway Commissioners, together with Commonwealth Government representatives, advises on all railway matters considered by the Council. *Road Group*, comprising State Road Commissioners together with Commonwealth Government officials, advises the Council on matters concerned with the construction and maintenance of all classes of roads and their financing. The *Motor Transport Group*, consisting of the principal State officials in the motor vehicle safety and regulatory areas, together with Commonwealth Government representatives, advises the Council on

all matters arising from the work of the technical advisory committees and on vehicle safety standards, technical standards and on-road operation. The Group is advised by the following technical committees:

The Advisory Committee on Vehicle Performance; The Advisory Committee on Road User Performance and Traffic Codes; The Advisory Committee on Vehicle Emissions and Noise; The Advisory Committee on Safety in Vehicle Design; The Publicity Advisory Committee on Education in Road Safety; and Ad-hoc advisory committees. In addition to these technical committees, the Energy Working Group and the Advisory Committee on the Transport of Dangerous Goods report to the Co-ordinating and General Transport Group.

In March 1982, ATAC and the Australian Environment Council (AEC) jointly announced the establishment of the *Advisory Committee on Vehicle Emissions and Noise (ACVEN)*, replacing the ATAC Committee on *Vehicle Emissions and Noise Standards Advisory Committee*. The Committee examines and makes recommendations on vehicle emissions and noise and reports jointly to the Motor Transport Group and the AEC Standing Committee. The Australian Motor Vehicle Certification Board was established by ATAC in July 1969 to advise State and Territory registering authorities on compliance by new motor vehicles with Australian Design Rules (ADR's). The Board's principal function is to issue Compliance Plate Approvals, based on manufacturers' submissions, that a vehicle complies with those Rules applicable at the date it is available in Australia in a registerable condition. Compliance with ADR's is a prerequisite to vehicle registration throughout Australia. It reports to ATAC annually.

Transport Industries Advisory Council

The Transport Industries Advisory Council (TIAC) was formed following the March 1971 Australian Transportation Conference. The TIAC, an access channel between industry and the Commonwealth Minister for Transport and Construction, provides advice and comment to the Minister on policy issues as well as recommendations related to improving transport systems in Australia, including Aviation.

The 33 members (as at 30.6.82) of TIAC are drawn from senior management in all modes of transport, major consumers, Government bodies and unions. The Minister appoints members on the basis of personal expertise. New members, appointed annually, serve on the Council for extendable terms of three years. The full Council, which meets four times a year, operates through three geographically based working Committees, which were recently restructured into ad hoc subject specific project committees. The Council is represented at pre-budget economic consultative meetings with the Prime Minister and Cabinet Ministers.

Examples of topics currently under consideration by TIAC include the Australian rail systems and recommendations of the 1981 ARRDO Report, need for a national transport Strategy, road tanker safety, undeclared hazardous cargo, and industrial relations in the transport industry.

Marine and Ports Council of Australia

The Marine and Ports Council of Australia (MPCA) provides an advisory forum for Commonwealth and State Governments in which to discuss initiatives and developments in marine and port matters. Membership comprises the Commonwealth Minister for Transport and Construction (Chairman) and State and Territory Ministers whose portfolios include responsibility for port and marine matters.

Evolving from six meetings of a Commonwealth/State Ministerial Council for Port Development and Marine Affairs, the MPCA was convened for the first time in May 1976, bringing together Commonwealth and State policy-making machinery in relation to ports, the administration of shipping matters, cargo movements, shipping and marine laws, marine pollution control, safety and consultation on treaties. The Council now meets annually.

To assist the Council in its deliberations there exists a Committee of Advisers comprising Commonwealth, State and Territory ministerial advisers, generally at permanent head level or equivalent, who are responsible for marine and port matters. This Committee makes recommendations to Ministers on matters referred to them by Ministers or from within the Committee. In addition, several standing and Ad hoc Working Groups have been established to report and make recommendations to Advisers on legal, technical, operational and administrative issues of relevance to Council's activities.

Aviation Industry Advisory Council

The Aviation Industry Advisory Council (AVIAC) was established in 1978 to enhance the level of consultation between the aviation industry and the Government. The Council provides advice to the Commonwealth Minister for Aviation on policies, plans and programs relating to the aviation industry

within Australia, promotes the continuing development of a safe, efficient, economic aviation industry within Australia, and provides a forum for discussion of important matters of joint concern to the aviation industry and Government.

Membership of the Council consists of the Commonwealth Minister for Aviation (Chairman); Secretary to the Department of Aviation; Chairman of Qantas Airways Ltd, Australian National Airlines Commission (TAA), East-West Airlines; Joint Managing Directors of Ansett Transport Industries Ltd; National President of the General Aviation Association; and presidents of the Aircraft Owners and Pilots Association of Australia and the Royal Federation of Aero Clubs of Australia.

The AVIAC has established a Committee of Advisers to assist in the analysis and preparation of matters to put to the Council for deliberation and decision.

The Bureau of Transport Economics

The Bureau of Transport and Economics (BTE) is a professional research body which undertakes independent studies and investigations to assist the Commonwealth Government in formulating policy relating to all modes of transport.

The primary function of the BTE is to advise the Commonwealth Government on the economic, financial and technical aspects of air, road, rail and sea transport in Australia. In pursuit of this overall function, the BTE analyses the nature, capacity, performance and financing of transport systems. It also investigates the economic and resource allocation implications of such systems. The BTE has a secondary function of providing assistance to State and local governments, Commonwealth and State instrumentalities and the private sector to identify and address transport problems.

Although formally linked to the Commonwealth Department of Transport and Construction, the BTE has a considerable degree of professional and administrative autonomy and reports directly to the Minister for Transport and Construction on its program of research work.

SHIPPING

Control of shipping

Commonwealth Government navigation and shipping legislation

Commonwealth Government Acts concerned with shipping are: the *Navigation Act 1912*, the *Sea-Carriage of Goods Act 1924*, the *Seamen's Compensation Act 1911*, the *Seamen's War Pensions and Allowances Act 1940*, the *Pollution of the Sea by Oil Act 1960*, the *Pollution (Shipping Levy) Act 1972*, the *Pollution (Shipping Levy Collection) Act 1972*, the *Australian Shipping Commission Act 1956*, the *Beaches, Fishing Grounds and Sea Routes Protection Act 1932*, the *Submarine Cables and Pipelines Protection Act 1963*, the *Lighthouses Act 1911*, the *Explosives Act 1961*, the *Inter-State Commission Act 1975*, the *King Island Harbour Agreement Act 1973*, the *King Island Shipping Service Agreement Act 1974*, the *Ship Construction Bounty Act 1975*, the *Trade Practices Act, 1974, Part X*, the *Shipping Registration Act 1981*.

Navigation Act 1912 as Amended

One of the largest Commonwealth Acts, the *Navigation Act*, provides for various regulatory controls over ships and their crews, passengers and cargoes, mainly for the preservation of life and property at sea. Substantial penalties are provided for serious offences. The Act gives effect to a number of important international conventions produced under the aegis of the International Maritime Consultative Organisation (IMCO).

Many of the 43 sets of Regulations under the Act are to be replaced under a system of Marine Orders that has been introduced.

Taken in the order in which they appear in the Act, the main substantive matters dealt with are as follows:

Masters and seamen. Some sections deal with the examination of masters, mates and engineers for certificates of competency. Other sections ensure that appropriate conditions apply to crews serving on ships by providing for the supervision of the engagement, discharge and payment of wages; discipline at sea; the settlement of wages and other disputes; the return to their home port of distressed seamen; taking charge of wages and effects of deceased seamen and of those who have deserted or been left behind; and enquiries into deaths at sea. These matters are administered by Mercantile Marine Offices established at numerous ports. The health of seamen is cared for by the prescription of scales of medicines and medical stores to be carried by ships, and there are provisions to give effect to International Labour Organisation Convention requirements for the accommodation of crews. Plans for new or altered accommodation in ships have to be approved by a Crew Accommodation Committee.

There are requirements for the manning of ships, designed to ensure that sufficient officers and men are carried for safety and operational purposes. Manning disputes are dealt with by statutory Committees of Advice. The Act provides for a Marine Council to advise the Minister on the suitability of persons for engagement as seamen.

Ships and shipping. There are particularly important provisions dealing with ship safety in such matters as survey of ships, load lines, life-saving and fire appliances, prevention of collisions, and carriage of potentially dangerous cargoes. Whilst in Australia, all ships come under the survey provisions of the Navigation Act and require certificates issued by the Department of Transport and Construction unless they are registered in a country which is a party to the Convention concerned and hold valid certificates issued by their Governments and conforming to the requirements of the Safety of Life at Sea and Load Lines Conventions. There is power to detain any ship the condition of which does not conform with the conditions set out in its certificate or which appears to be overloaded or otherwise unseaworthy.

Passengers. These provisions deal with matters necessary or convenient for regulating the carriage of passengers in respect of such matters as numbers that may be carried, accommodation and health aspects.

Coasting trade. Under the coasting trade provisions of the *Navigation Act*, the Australian coastal trade is reserved for licensed vessels, i.e. those which employ seamen at Australian wage rates. The Act does not restrict the class of ships which may obtain a licence. It is open to any vessel irrespective of the registry to obtain a licence on compliance with this condition and to operate in the Australian coastal trade subject to permission being given for the importation of the vessel under the Customs (Prohibited Imports) Regulations where necessary. Provision exists for unlicensed vessels to operate in the coasting trade under single voyage permits in certain circumstances where licensed vessels are not available or are inadequate to meet the needs of the trade. Strict control is exercised over the issue of permits for the carriage of coastal cargoes.

Wrecks and salvage. There are provisions in relation to wrecks and salvage, covering preservation of life and of the wreck and its cargo and related matters.

Prevention, etc., of pollution by oil of the Australian coast, coastal waters and reefs. Under these provisions, where oil is escaping, or likely to escape, from a ship, the Minister is empowered to take action to prevent or reduce pollution of the area.

Limitation and exclusion of shipowners' liability. These sections give effect to an international convention and make provision on the widest possible basis for the limitation of shipowners' liability in Australia.

Courts of Marine Inquiry. There are provisions for the holding of Courts of Marine Inquiry to investigate the circumstances attending any casualties to ships that come within Commonwealth legislative authority, usually following a preliminary investigation. Such courts are provided with power to examine all the circumstances and to deal with the certificates of ships' officers found to have been at fault.

Several significant amending Navigation Acts have been passed in recent years but are not yet fully in force. Those Acts deal with a wide range of matters and many amendments of a general, formal or consequential nature are already in force. Other important groups of amending sections are being, or are to be, brought into operation as the necessary Parts of Marine Orders, and Regulations become ready. In accordance with a Premiers' Conference Agreement, the *Navigation Act* now in effect clearly delineates Commonwealth, State and Northern Territory responsibilities for shipping and navigation.

The amending Acts comprise the *Navigation Amendment Act 1979* (No. 98 of 1979, which received Royal Assent on 22 October 1979), the *Navigation Amendment Act 1980* (No. 87 of 1980, which received Royal Assent on 29 May 1980), the *Navigation Amendment Act 1981* (No. 10 of 1981, which received Royal Assent on 25 March 1981) and the *Navigation (Protection of the Sea) Amendment Act 1981* (No. 36 of 1981 which received Royal Assent on 14 April 1981).

Shipping Registration Act 1981

The *Shipping Registration Act 1981* received Royal Assent on 25 March 1981 and was proclaimed on 26 January 1982. This Act replaces Part I of the *U.K. Merchant Shipping Act 1894* under which ships in Australia were registered as British ships. The Act provides for all ships on the British register in Australia to be automatically transferred to the new Australian register. The Act has two basic objectives namely the conferring of Australian nationality on Australian-owned ships and the registration of ownership.

Taken in order in which they appear in the Act, the main substantive matters are as follows:

Registration of Ships: This part deals with the obligation to register Australian-owned ships, the ships permitted to be registered, the application for registration, particulars to be entered in the Register, the

issue of Registration Certificates, Provisional Registration Certificates and Temporary Passes, changes in ownership, marking and naming of the ship, nationality of ships, flags to be flown, assuming and concealing Australian nationality.

Transfers, Transmissions and Mortgages: This part deals with the transfer, transmission of ship and shares, the taking out, transfer, transmission transfer and discharge of mortgages and the entry of this information into the Register.

Administration: This part deals with the appointment of the Registrar, delegation of the powers of the Minister and Registrar, the establishment of the Shipping Registration Office and Branch Offices.

Register of Ships: This part deals with the maintenance, rectification and inspection of the Register.

Transitional Provisions: This part deals with the change over from the previous law to the new legislation. This includes the completion of transactions commenced under the previous law and the acceptability of documents prepared under the previous law.

Australian Shipping Commission

The Commission was established by the *Australian Coastal Shipping Commission Act 1956*. The Commission's role has been to establish, maintain and operate interstate, overseas and territorial shipping services. The Commission's title was changed in October 1974 to the Australian Shipping Commission to reflect the increasing importance of its overseas trading activities. In 1980 the Australian Shipping Commission Act was amended to increase its borrowing powers and give it greater flexibility in having freight rates set.

As at 30 June 1982 the Commission, operating as the Australian National Line, owned and/or operated a fleet of thirty-three vessels. The fleet included 14 vessels engaged in overseas trades comprising five vehicle deck cargo ships totalling 106,297 tonnes deadweight; three cellular container ships totalling 95,628 tonnes deadweight and six ore-bulk carriers totalling 579,424 tonnes deadweight.

The fleet also included nineteen vessels engaged in coastal trades comprising one vehicle deck passenger ship, the *Empress of Australia* of 2,725 tonnes deadweight; eight vehicle deck cargo ships totalling 72,592 tonnes deadweight; one container bulkship of 12,093 tonnes deadweight in the Darwin trade; two bulk carriers in the 50-100,000 tonnes deadweight class; seven other bulk carriers each less than 50,000 tonnes deadweight totalling 154,332 tonnes deadweight.

The Line operated specialised terminals at Adelaide, Melbourne, Burnie, Devonport, Bell Bay, Sydney, Port Kembla, Brisbane, Mackay, Townsville and Cairns.

The *Empress of Australia* carried 121,381 passengers between Melbourne and Devonport together with 36,048 vehicles during the year ending 30 June 1982.

Shipbuilding Assistance

The shipbuilding industry in Australia has been assisted by the Government since the introduction of the shipbuilding subsidy scheme in 1947. The level of subsidy has been determined by the Government on the basis of inquiries into the industry by the former Tariff Board and, more recently, by the Industries Assistance Commission. These inquiries have been held in 1954, 1959, 1963, 1971, 1976 and 1977-79.

In May 1977, the Government sent a reference to the Commission on assistance to be accorded to the production of vessels under 6,000 tg. The Commission reported to the Government on 25 July 1979 and on 29 November 1979 the Government announced new, simplified assistance arrangements for the Australian shipbuilding industry, with the introduction of the new *Bounty (Ships) Act* on 1 July 1980.

Under this Act, bounty continues to be accorded to the production in Australia of vessels over 150 gross construction tons, or over 21 metres in the case of fishing vessels. Bounty is payable on a 'cost of construction basis', at a rate of 274 per cent, phasing down to a long-term rate of 20 per cent to apply from 1 July 1986.

Under the previous Act, the *Ship Construction Bounty Act 1975*, which applies to vessels for which public tenders closed on or before 30 June 1980, bounty was calculated on the basis of the lowest acceptable Australian tender. At 30 June 1982, there were 7 vessels being constructed under this Act at registered yards. The Act will run its course until the last of these vessels is completed, by about mid-1983.

Vessels built at major yards include small cargo vessels, offshore supply vessels, passenger ferries, fishing vessels, dredgers and barges. In addition, there are numerous smaller yards building non-bountiable vessels such as pleasure craft, small fishing vessels, and other small craft. Construction of large ships in Australia ceased in 1978.

In 1981-82 a total of 59 vessels were completed at Australian yards (as compared with 53 in 1980-81, 37 in 1979-80 and 47 in 1978-79).

The figures for 1979-80 and 1980-81 reflect increased activity in the Australian shipbuilding industry and the amounts of Government financial assistance paid in these years show similar increases.

Total financial assistance to the Australian shipbuilding industry in 1981-82 amounted to \$26.8m (as compared with \$17.3m in 1980-81, \$13.4m in 1979-80 and \$10.8m in 1978-79).

Importation of Ships

The control of imports forms an integral part of the Government's shipbuilding assistance arrangements, complementing the bounty legislation. Under the Customs (Prohibited Imports) Regulations all ships are 'prohibited imports' and may not be imported into Australia except with the written permission of the Minister for Transport and Construction. For shipbuilding policy purposes, importation is permitted in the case of new vessels, second-hand vessels outside the size range 70-10,000 gross construction tons, and vessels of a type not available new from Australian yards.

Stevedoring Industry

In December 1977, legislation was introduced which provided for new administrative, financial and industrial arrangements for the stevedoring industry and abolished the Australian Stevedoring Industry Authority. The arrangements give the parties directly involved in the industry greater responsibility in the industry's affairs.

The Stevedoring Industry Finance Committee is responsible for the disbursement of funds collected through statutory man-hour and cargo levies.

A federal co-ordinating committee comprising representatives of the employers and the Waterside Workers' Federation (WWF) and Broken Hill Pty Ltd (BHP) and the Australian National Line oversees the operation of arrangements agreed to in the General Agreement between employers and the WWF. At the port level such matters are handled by Port Co-ordinating Committees set up in the major ports.

Under section 85A of the *Conciliation and Arbitration Act 1904* a Port Conciliator Service was created to assist parties to an industry award to implement the procedures of that award for the prevention or settling of disputes.

A non-statutory Stevedoring Industry Consultative Council chaired by Sir Alan Westerman, CBE, has been established to provide a forum for discussion and liaison between government(s), user interests and the operating sections of the industry. The Chairman is appointed by the Commonwealth Government.

The Statutory provisions relating to the industry are contained in the *Stevedoring Industry Finance Committee Act 1977*, the *Stevedoring Industry Levy Act 1977*, the *Stevedoring Industry Levy Collection Act 1977*, the *Port Statistics Act 1977* and sections 85A, 86, 87 of the *Conciliation and Arbitration Act 1904*.

Tasmanian Freight Equalisation Scheme

The Commission of Inquiry into Transport to and from Tasmania in its Report published in March 1976 found that because of Tasmania's physical separation from the mainland by sea, Tasmanian shippers suffer a cost freight disability in moving non-bulk cargoes by sea between Tasmania and the mainland.

Following on from the Report, the Commonwealth Government introduced, with effect from 1 July 1976, the Tasmanian Freight Equalisation Scheme. The Scheme is designed to equalise door-to-door freight costs of moving certain eligible commodities between Tasmania and the mainland by sea with those for moving similar commodities over comparable interstate mainland rail and road routes.

The northbound component applies to Tasmanian consignors of specified goods by sea that are bought for use or exported for sale on the mainland. Under the southbound component certain producer raw materials, machinery and equipment are eligible for assistance. The northbound component was introduced in July 1976 and the southbound component in July 1977. Assistance under the latter applied to shipments made from 1 July 1976.

In 1981-82 assistance provided under the Scheme for northbound cargoes totalled \$27.7m, and \$1.7m in respect of southbound cargoes. Since its inception assistance provided under the Scheme up to the end of 1981-82 totalled \$148.6 million.

Responsibility for the administration of the Scheme lies within the Transport and Construction portfolio.

Revised rates of assistance for northbound cargoes were introduced on 1 July 1978 and revised southbound rates on 1 March 1980 following reviews of freight costs by the Bureau of Transport Economics. It is expected that revised rates of assistance for both northbound and southbound cargoes will be introduced during 1982-83.

Trade Practices Act 1974 (Part X—Overseas Cargo Shipping)

The Overseas Cargo Shipping provisions of the *Trade Practices Act* (Part X) are administered by the Transport and Construction portfolio.

Part X establishes conditions for the operation of outwards shipping conferences and individual shipowners operating in Australia's outwards trades. Conference agreements between several shipowners in a particular trade make provision for the fixing of common freight rates. They may also include provisions for pooling arrangements and shares of the trade and rationalised sailing schedules. With suitable safeguards, these arrangements can have beneficial effects for shippers in that conference arrangements can lead to regular and predictable services at stable freight rates.

Part X, therefore, exempts conferences from the generally applicable anti-restrictive provisions of the Act, and seeks to ensure adequate safeguards to protect shippers through:

- requiring the filing of outwards conference agreements;
- requiring shipowners to give undertakings to hold meaningful negotiations with the designated shipper body, the Australian Shippers' Council (ASC);
- providing for disapproval of a conference agreement to be exercised by the Governor-General on a number of prescribed grounds, such as a failure on the part of the shipowner to comply with an undertaking, lack of due regard to the need for overseas shipping services to be efficient, economical and adequate, prevention or hindrance of an Australian flag operator from engaging efficiently in overseas cargo shipping to a reasonable extent.

Comparable provisions apply to individual shipowners who are not party to a conference agreement.

Marine pollution

The *Pollution of the Sea by Oil Act* 1960, Part VIIA of the *Navigation Act* 1912 and the *Pollution of the Sea by Oil (Shipping Levy) and (Shipping Levy Collection) Acts* 1972 currently provide the Commonwealth power to deal with matters relating to marine oil pollution.

The Acts respectively provide for the control of discharges at sea and provision of control equipment and procedures on ships; empower the Minister to intervene to take action to prevent or reduce pollution and makes provision relating to limitation of liability of oil tankers for oil pollution damage; and provide for the collection of a levy to finance the National Plan to Combat Pollution of the Sea by Oil.

Maritime Industry Commission of Inquiry

For details see Year Book No. 61, pages 370-1.

Collection and presentation of statistics**Basic documents**

From 1 July 1966 shipping statistics have been compiled by the Australian Bureau of Statistics from returns submitted by shipping companies or their representatives to Customs Houses at the various seaports throughout Australia. A return is required for the departure of a vessel from a port as well as for its arrival at that port.

On 1 July 1979 revised Bureau of Customs forms (B380/B381) came into operation bringing changes in concepts and definitions. At the same time improvements were made in the coverage of the shipping and cargo statistics collection. Consequently statistics for 1979-80 onwards are not always comparable with data for previous periods.

Scope of the statistics

Arrivals and departures of vessels are treated separately in shipping statistics. Not all vessels are included in the statistics, as returns are not required for (i) naval vessels; (ii) yachts and other craft used for pleasure; (iii) foreign fishing vessels that neither load nor discharge cargo; (iv) Australian registered fishing vessels operating from Australian ports; (v) geographical survey vessels, seismic survey vessels, oceanographic survey vessels; (vi) offshore oil drilling rigs and vessels servicing them; (vii) vessels of 200 registered net tonnes and under.

Period covered by the statistics

The shipping statistics presented relate to overseas vessels arriving at or departing from Australian ports within the financial year.

Vessel characteristics

Vessel recording

Vessel movement statistics are recorded as "Vessel Number" and "Vessel Calls". "Vessel Number" relates to the number of overseas direct arrivals to, or departures from Australia. "Vessel Calls" relates to the number of port visits that an overseas vessel makes in Australia. For example, an overseas vessel which arrives direct in Brisbane and makes a further call in Sydney before departing for an overseas port from Melbourne is counted as one under "Vessel Number" for both arrivals (Brisbane) and departures (Melbourne) and as one arrival call and one departure call for each of the three ports.

Vessel type

All vessels are classified from *Lloyd's Register of Shipping* according to one of 13 vessel types which describe them in terms of their structure or design. These 13 vessel types are amalgamated into four broad categories as follows:

<i>Category</i>	<i>Vessel types</i>
(a) general cargo vessels	Container Ships Roll on—Roll off General Cargo Ships Livestock Cargo
(b) tankers	Gas carriers: refrigerated Gas carriers: non-refrigerated Tankers: Crude oil and petroleum products Tankers: Chemical and specialised
(c) bulk carriers	Dry Bulk Carrier Bulk/oil Carrier
(d) other vessels	Multi-purpose Passenger Other

Type of service

Vessels are also classified according to the type of service they provide. The two types of service for which statistics are shown are:

- (a) liner service, (according to conference and non-conference) relates specifically to a vessel which is operated by a carrier providing services on a specified route on a relatively regular basis and
- (b) other service which refers to all vessels operating in other than a liner service.

Conference vessels—A 'conference' is an association of shipowners which regulates the freight rates and terms and conditions of carriage of goods in any particular trade. Conferences only operate liner services and not charter services. Conference arrangements normally include provisions for sharing the trade, rationalising sailing schedules and pooling arrangements for resources and/or revenue.

Country of registration

The country of registration or flag of the vessel refers to the country in which the vessel is registered according to *Lloyd's Register of Shipping*.

Recording of cargo loaded or discharged

Returns for arrivals show cargo discharged, and returns for departures show cargo loaded, in terms of Revenue Tonnes. A revenue tonne is the unit of quantity predominantly used in the shipping industry. It is the basis on which freight is charged and is obtained by adding mass (tonnes weight) and volume (cubic metres) units.

Container cargo

Statistics of container cargo refer only to cargo shipped in 20 ft or 40 ft standard international containers. To provide a standard measure, all statistics relating to containers are expressed in terms of 20 ft units. A 40 ft container is therefore recorded as two twenty-foot equivalent units (or TEU's).

Country of loading or discharge of overseas cargo

In statistics of overseas shipping and cargo, the country of loading, or discharge, of overseas cargo is the country of location of the port where the cargo was loaded on to, or is to be discharged from, a reporting vessel. The countries shown are not necessarily the countries of origin or ultimate destination of cargo because previous or subsequent transshipments of cargo are not taken into account. The statistics of cargo classified by the country in which it was loaded or discharged cannot therefore be compared directly with statistics of overseas trade classified by country of origin or consignment.

Trade area

Ports at which vessels load or discharge cargo are allocated to their respective countries, which are in turn allocated to trade areas in accordance with the Classification of Trade Areas for Cargo Statistics.

Units of measurement

The cargo carrying capacity of vessels has in the past been measured in terms of registered net tonnage. However, as from 1 July 1979 this statistic has been replaced by deadweight tonnage (DWT).

Deadweight tonnage. A measure of the total mass (weight, in tonnes) of cargo, stores, fuel, passengers and crew carried by the ship when loaded to her maximum summer loadline.

Gross tonnage. A measure of the enclosed internal volume of a ship and its superstructure, with certain spaces exempt, in units of 1 ton per 2.83 cubic metres.

Overseas shipping

The following table shows the movement of vessels and cargo to and from overseas countries, for the years 1975-76 to 1980-81.

OVERSEAS SHIPPING: VESSEL AND CARGO MOVEMENTS

	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Arrivals—						
<i>vessel details</i>						
vessel number	5,772	5,830	5,615	5,677	6,249	5,995
DWT ('000 tonnes)	n.a.	n.a.	n.a.	n.a.	247,218	237,223
<i>cargo discharged</i>						
revenue tonnes ('000)	26,888	28,329	26,981	28,637	31,028	32,480
gross weight ('000 tonnes)	n.a.	n.a.	n.a.	n.a.	26,219	26,767
Departures—						
<i>vessel details</i>						
vessel number	5,824	5,824	5,668	5,655	6,168	5,922
DWT ('000 tonnes)	n.a.	n.a.	n.a.	n.a.	246,555	234,618
<i>cargo loaded</i>						
revenue tonnes ('000)	158,621	167,118	166,700	167,304	188,681	179,413
gross weight ('000 tonnes)	n.a.	n.a.	n.a.	n.a.	187,778	178,514

The following table shows particulars of overseas shipping which arrived at or departed from Australian ports according to the country of registration of vessels.

OVERSEAS SHIPPING: VESSEL DEPARTURES AND ARRIVALS BY COUNTRY OF REGISTRATION, 1980-81

<i>Country of registration</i>	<i>Departures</i>		<i>Arrivals</i>	
	<i>Vessel number</i>	<i>DWT ('000 tonnes)</i>	<i>Vessel number</i>	<i>DWT ('000 tonnes)</i>
Antilles (Netherlands)	6	86	4	80
Australia	164	8,915	168	9,087
Belgium-Luxembourg	27	1,350	25	1,300
Bermuda	16	545	16	545
China—excl. Taiwan	179	6,293	173	6,223
—Taiwan	27	1,448	26	1,388
Denmark	84	1,527	85	1,622
Finland	11	322	11	322
France	26	1,118	28	1,157
Germany, Federal Republic of	145	2,471	163	2,695
Greece	330	11,913	339	12,009
Hong Kong	133	3,352	127	3,363
India	82	2,918	82	2,844
Ireland	2	54	2	54
Italy	20	1,067	21	1,100
Japan	1,202	78,707	1,224	80,276
Korea, Republic of	143	3,409	149	3,539
Kuwait	40	1,189	41	1,228
Liberia	923	47,073	927	47,253
Malaysia	41	970	43	995
Nauru, Republic of	10	249	11	297
Netherlands	82	1,742	80	1,658
New Zealand	114	1,293	124	1,366
Norway	178	8,253	185	8,418
Panama	652	17,574	649	17,466
Philippines	30	1,481	30	1,464
Poland	16	281	15	266
Singapore, Republic of	251	4,797	259	4,820
South Africa, Republic of	16	307	14	273
Spain	1	111	1	111
Sweden	34	908	36	923
Thailand	3	211	3	211
Turkey	7	328	7	328
United Kingdom	513	15,527	520	15,658
United States of America	44	1,755	47	1,849
U.S.S.R.	162	2,036	162	2,034
Other countries	208	3,035	198	3,003
Total All Countries	5,922	234,618	5,995	237,223
With cargo	5,281	214,902	2,260	50,695
In ballast	641	19,715	3,735	186,528

Australian trading vessels

The following table shows particulars of all Australian trading vessels of 150 gross tons or more engaged in the regular overseas, interstate or intrastate services at 30 June 1982.

**AUSTRALIAN TRADING VESSELS OF 150 GROSS TONS OR MORE
30 JUNE 1982**

(Source: Department of Transport and Construction)

<i>Vessels</i>	<i>Number</i>	<i>DWT</i>	<i>Gross Tons</i>
Interstate—			
Australian owned, Australian registered	46	1,197,887	760,430
Australian owned, overseas registered	1	2,540	2,577
Overseas owned, Australian registered	7	126,907	87,853
Overseas owned, overseas registered	6	369,442	203,609
<i>Interstate fleet</i>	60	1,696,776	1,054,469
Intrastate—			
Australian owned, Australian registered	20	270,405	168,590
Overseas owned, Australian registered	1	58,077	36,088
<i>Intrastate fleet</i>	21	328,482	204,678
Coastal fleet	81	2,025,258	1,259,147
Overseas—			
Australian owned, Australian registered	17	640,829	433,438
Overseas owned, Australian registered	4	550,087	307,886
Overseas owned, overseas registered	7	225,306	145,751
Overseas fleet	28	1,416,222	887,075
Total Australian fleet	109	3,441,480	2,146,222

Harbour boards and trusts

For detailed information *see* the individual State Year Books.

Shipping at principal ports

The following table shows the total movement of overseas shipping and cargo at Australian ports, 1980-81.

OVERSEAS VESSEL AND CARGO MOVEMENTS AT AUSTRALIAN PORTS 1980-81

Australian port	Departures		Cargo loaded	Arrivals		Cargo discharged
	Vessel details			Vessel details		
	Vessel calls	DWT (<i>'000 tonnes</i>)	Gross weight (<i>'000 tonnes</i>)	Vessel calls	DWT (<i>'000 tonnes</i>)	Gross weight (<i>'000 tonnes</i>)
New South Wales—						
Sydney	1,529	32,579	5,790	1,501	32,344	3,045
Botany Bay	504	13,468	399	571	14,944	3,022
Newcastle	614	21,573	15,931	630	21,530	1,393
Port Kembla	240	10,709	6,967	250	10,801	595
Other	40	1,244	924	40	1,190	3
<i>Total</i>	<i>2,927</i>	<i>79,573</i>	<i>30,011</i>	<i>2,992</i>	<i>80,808</i>	<i>8,058</i>
Victoria—						
Melbourne	1,868	36,805	2,453	1,820	35,158	2,661
Geelong	262	6,733	2,724	266	6,715	1,505
Westernport	212	5,741	1,807	217	5,915	100
Other	127	3,213	1,054	128	3,192	214
<i>Total</i>	<i>2,469</i>	<i>52,492</i>	<i>8,037</i>	<i>2,431</i>	<i>50,980</i>	<i>4,480</i>
Queensland—						
Brisbane	1,052	20,321	1,460	946	18,607	1,516
Gladstone	291	13,553	10,124	313	14,207	697
Hay Point	202	18,537	14,964	202	18,533	—
Townsville	256	4,059	931	260	4,082	596
Weipa	96	4,652	3,978	96	4,652	47
Other	436	5,612	2,821	453	5,748	162
<i>Total</i>	<i>2,333</i>	<i>66,735</i>	<i>34,279</i>	<i>2,270</i>	<i>65,828</i>	<i>3,019</i>
South Australia—						
Port Adelaide	490	7,998	1,204	489	8,007	456
Port Lincoln	90	2,347	805	89	2,316	104
Port Pirie	93	1,676	760	95	1,681	39
Port Stanvac	36	2,839	163	44	3,087	2,097
Thevenard	43	612	405	49	710	—
Whyalla	29	512	233	26	422	105
Other	68	1,296	598	73	1,306	47
<i>Total</i>	<i>849</i>	<i>17,280</i>	<i>4,168</i>	<i>865</i>	<i>17,528</i>	<i>2,850</i>
West Australia—						
Fremantle	1,022	23,470	4,183	1,026	23,404	4,616
Bunbury	161	4,237	2,650	158	4,108	157
Dampier	395	37,731	34,396	397	38,153	234
Geraldton	156	2,969	1,425	157	2,995	105
Port Hedland	362	33,431	29,473	366	33,847	173
Port Walcott	120	16,209	13,902	123	16,570	36
Yampi Sound	38	2,205	2,200	38	2,205	—
Other	277	4,756	2,133	275	4,710	309
<i>Total</i>	<i>2,531</i>	<i>125,006</i>	<i>90,363</i>	<i>2,540</i>	<i>125,992</i>	<i>5,632</i>
Tasmania—						
Hobart	148	2,460	815	137	2,379	115
Launceston	119	3,119	1,864	119	3,228	68
Port Latta	25	2,254	2,093	27	2,315	12
Other	118	2,239	393	111	2,152	78
<i>Total</i>	<i>410</i>	<i>10,072</i>	<i>5,165</i>	<i>394</i>	<i>10,073</i>	<i>274</i>
Northern Territory—						
Darwin	108	1,094	27	108	1,095	449
Other	173	6,615	4,645	175	6,671	764
<i>Total</i>	<i>281</i>	<i>7,709</i>	<i>4,672</i>	<i>283</i>	<i>7,766</i>	<i>1,213</i>
Port not available	290	4,675	1,818	174	1,964	1,242
Total all ports	12,090	363,543	178,514	11,949	360,941	26,767

Shipping cargo

The following table shows details of container and non-container cargo loaded and discharged at Australian ports during 1980-81.

OVERSEAS CONTAINER AND NON-CONTAINER CARGO LOADED AND DISCHARGED AT
AUSTRALIAN PORTS, 1980-81

(*000 revenue tonnes)

Port	Loaded			Discharged		
	Container cargo	Other cargo	Total	Container cargo	Other cargo	Total
New South Wales—						
Sydney	1,034	4,958	5,991	2,038	2,609	4,647
Botany Bay	226	203	429	878	2,537	3,416
Newcastle	14	15,916	15,931	14	1,388	1,402
Port Kembla	-	6,967	6,967	-	595	595
Other	-	924	924	-	4	4
<i>Total</i>	<i>1,274</i>	<i>28,969</i>	<i>30,242</i>	<i>2,931</i>	<i>7,133</i>	<i>10,063</i>
Victoria—						
Melbourne	2,003	790	2,793	2,787	1,995	4,782
Geelong	16	2,709	2,725	7	1,501	1,508
Westernport	-	1,807	1,807	-	100	100
Other	3	1,051	1,054	-	214	214
<i>Total</i>	<i>2,022</i>	<i>6,357</i>	<i>8,378</i>	<i>2,794</i>	<i>3,810</i>	<i>6,604</i>
Queensland—						
Brisbane	455	1,058	1,514	320	1,687	2,007
Gladstone	-	10,124	10,124	-	698	698
Hay Point	-	14,964	14,965	-	-	-
Townsville	12	919	931	3	649	651
Weipa	-	3,978	3,978	-	48	48
Other	7	2,818	2,825	2	160	162
<i>Total</i>	<i>473</i>	<i>33,862</i>	<i>34,336</i>	<i>325</i>	<i>3,242</i>	<i>3,567</i>
South Australia—						
Port Adelaide	130	1,114	1,244	79	671	750
Port Lincoln	-	805	805	-	105	105
Port Pirie	-	760	760	-	39	39
Port Stanvac	-	163	163	-	2,097	2,097
Thevenard	-	405	405	-	-	-
Whyalla	-	233	233	-	105	105
Other	-	598	598	-	47	47
<i>Total</i>	<i>130</i>	<i>4,078</i>	<i>4,208</i>	<i>79</i>	<i>3,064</i>	<i>3,143</i>
West Australia—						
Fremantle	337	3,892	4,230	370	4,587	4,958
Bunbury	-	2,650	2,650	-	157	157
Dampier	-	34,396	34,397	-	234	234
Geraldton	-	1,425	1,425	-	106	106
Port Hedland	-	29,473	29,473	-	207	207
Port Walcott	-	13,902	13,902	-	36	36
Yampi Sound	-	2,200	2,200	-	1	1
Other	16	2,117	2,133	3	317	320
<i>Total</i>	<i>353</i>	<i>90,057</i>	<i>90,410</i>	<i>373</i>	<i>5,645</i>	<i>6,019</i>
Tasmania—						
Hobart	12	804	815	5	134	139
Launceston	2	1,862	1,864	-	74	74
Port Latta	-	2,093	2,093	-	12	12
Other	81	320	401	18	66	84
<i>Total</i>	<i>95</i>	<i>5,079</i>	<i>5,174</i>	<i>23</i>	<i>287</i>	<i>309</i>
Northern Territory—						
Darwin	-	27	27	-	486	486
Other	-	4,645	4,645	-	764	764
<i>Total</i>	<i>-</i>	<i>4,673</i>	<i>4,673</i>	<i>-</i>	<i>1,250</i>	<i>1,251</i>
Port not available	451	1,541	1,992	478	1,045	1,524
Total Australia	4,798	174,615	179,413	7,003	25,477	32,480

Overseas cargo according to major trade areas and vessel type

The following table shows details of cargo loaded in Australia for discharge overseas, and cargo discharged in Australia from overseas classified according to the major trade areas of the world and by vessel type.

OVERSEAS CARGO LOADED AND DISCHARGED IN AUSTRALIA: MAJOR TRADE AREAS BY VESSEL TYPE, 1980-81

('000 revenue tonnes)

<i>Trade area</i>	<i>General cargo vessels</i>	<i>Tankers</i>	<i>Bulk carriers</i>	<i>Other vessels</i>	<i>All vessels</i>
<i>Loaded</i>					
Europe	1,427	102	26,247	147	27,922
East Asia	1,339	177	11,579	37	13,132
Japan	3,556	1,212	113,797	9	118,573
N. America-E. Coast	465	82	1,875	2	2,424
N. America-W. Coast	244	17	2,721	115	3,096
Central America	23	31	47	-	100
S. America-E. Coast	67	32	453	-	552
S. America-W. Coast	20	1	80	5	106
West Africa	-	-	1	-	1
South East Africa	138	34	252	-	424
Red Sea	194	-	1,123	-	1,317
Persian Gulf	485	72	2,228	4	2,789
West India	141	32	406	-	579
East India	119	61	317	1	498
South East Asia	1,793	734	2,013	18	4,558
New Zealand	982	448	562	-	1,992
Papua New Guinea	440	192	39	-	670
Central Pacific	234	201	1	-	436
French Pacific	94	13	44	-	151
Pacific Islands	19	26	21	-	66
Other	10	-	14	-	25
Total Loaded	11,789	3,465	163,820	338	179,413
<i>Discharged</i>					
Europe	2,019	666	285	44	3,014
East Asia	1,224	71	160	4	1,460
Japan	3,639	382	2,330	6	6,357
N. America-E. Coast	1,106	758	807	3	2,674
N. America-W. Coast	878	103	1,381	284	2,648
Central America	6	38	7	-	51
S. America-E. Coast	71	4	-	-	75
S. America-W. Coast	-	-	-	-	-
West Africa	6	-	10	-	16
South East Africa	187	82	14	1	285
Red Sea	24	500	-	-	524
Persian Gulf	11	7,788	507	-	8,306
West India	59	-	-	-	59
East India	64	12	-	-	77
South East Asia	631	2,780	80	11	3,503
New Zealand	1,227	40	256	-	1,524
Papua New Guinea	76	15	5	-	95
Central Pacific	44	-	-	3	47
French Pacific	6	-	-	-	6
Pacific Islands	34	-	1,063	-	1,096
Other	-	-	663	-	664
Total Discharged	11,313	13,241	7,568	358	32,480

Overseas cargo according to major trade areas and type of service

The following table shows details of cargo loaded in Australia for discharge overseas, and cargo discharged in Australia from overseas, classified according to the major trade areas of the world, by type of shipping service.

OVERSEAS CARGO LOADED AND DISCHARGED IN AUSTRALIA: MAJOR TRADE AREAS BY TYPE OF SERVICE, 1980-81
(**'000 revenue tonnes**)

Trade area	Loaded			Discharged		
	Liner service			Liner service		
	Conference	Non-conference	Other vessels	Conference	Non-conference	Other vessels
Europe	897	160	26,866	1,589	375	1,049
East Asia	403	242	12,487	777	419	263
Japan	1,088	809	116,676	1,792	671	3,894
North America—E. Coast	402	36	1,986	810	141	1,723
North America—W. Coast	296	17	2,782	1,036	344	1,268
Central America	11	9	80	—	—	50
South America—E. Coast	16	29	507	21	46	8
South America—W. Coast	3	16	87	—	—	—
West Africa	—	—	1	5	—	10
South and East Africa	57	40	327	90	36	158
Red Sea	63	11	1,243	—	13	512
Persian Gulf	41	94	2,654	56	31	8,219
West India	106	20	453	40	5	14
East India	43	21	433	39	11	27
S.E. Asia	551	251	3,756	365	205	2,933
New Zealand	796	85	1,110	1,214	122	188
Papua New Guinea	215	79	376	40	16	40
Central Pacific	98	20	318	7	8	32
French Pacific	45	52	54	—	3	3
Pacific Islands	—	18	48	24	16	1,057
Other	—	—	25	—	—	664
Total	5,132	2,011	172,270	7,905	2,462	22,113

Overseas cargo according to country of registration of vessels

The following table shows the total overseas cargo, loaded and discharged, according to the country in which the vessels were registered.

**OVERSEAS CARGO LOADED AND DISCHARGED, BY COUNTRY OF REGISTRATION OF VESSELS:
AUSTRALIA**

('000 revenue tonnes)

Country of registration	1978-79		1979-80		1980-81	
	Loaded	Discharged	Loaded	Discharged	Loaded	Discharged
Antilles (Netherlands)	197	409	10	277	8	81
Australia	4,087	1,116	6,254	1,545	6,876	1,330
Belgium-Luxembourg	1,389	176	1,334	549	1,125	222
Bermuda	737	194	586	84	451	20
China—excl. Taiwan	7,257	21	7,727	388	5,419	180
—Taiwan	2,371	14	2,180	42	1,201	—
Denmark	757	1,099	475	1,001	647	653
Finland	103	32	256	35	252	38
France	353	81	1,297	63	459	335
Germany, Federal Democratic Republic of	1,136	1,137	1,154	913	1,035	1,016
Greece	7,063	1,883	11,042	1,895	8,380	2,439
Hong Kong	2,237	333	2,225	549	1,975	624
India	1,696	88	2,055	152	2,349	221
Ireland	24	—	47	—	50	—
Italy	902	521	1,281	216	839	137
Japan	67,021	2,866	71,674	3,553	68,555	4,109
Korea, Republic of	3,499	48	3,369	80	3,066	303
Kuwait	93	72	127	51	151	—
Liberia	33,064	4,331	36,539	4,414	37,826	5,817
Malaysia	82	310	566	426	509	388
Nauru, Republic of	68	220	119	187	141	138
Netherlands	341	530	761	964	551	888
New Zealand	378	612	429	671	641	1,187
Norway	6,844	2,072	6,723	2,082	5,694	1,571
Panama	10,559	1,574	13,299	1,436	14,522	1,795
Philippines	1,262	51	997	240	1,305	46
Poland	83	56	82	144	71	156
Singapore, Republic of	2,252	1,138	2,787	812	2,786	1,054
South Africa, Republic of	209	112	230	197	195	96
Spain	147	80	114	—	—	105
Sweden	573	498	801	528	448	496
Thailand	—	272	—	134	—	197
Turkey	(a)	(a)	66	—	282	—
United Kingdom	8,248	5,519	9,413	5,606	8,214	5,446
United States of America	353	636	322	582	261	634
U.S.S.R.	695	202	1,122	310	1,291	320
Other Countries	1,222	329	1,216	904	1,838	436
Total All Vessels	167,304	28,637	188,681	31,028	179,413	32,480

(a) included in 'other countries'.

Vessels registered in Australia

The following table shows the number and gross tonnage of trading vessels of 150 tons or more registered in Australia at 30 June 1982, classified according to: (i) year of construction; (ii) type of trade in which the vessels were engaged; and (iii) vessels built in Australian or in overseas shipyards.

AUSTRALIAN-REGISTERED TRADING VESSELS, 30 JUNE 1982(a)

(Source: Department of Transport and Construction)

Year of construction	Overseas and interstate vessels		Intrastate vessels		Built in Australian yards		Built overseas		Total	
	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons	No.	Gross tons
1975 and earlier	42	597,461	17	191,570	42	555,406	17	233,625	59	789,031
1976	5	167,700	-	-	3	28,267	2	139,433	5	167,700
1977	7	246,655	1	2,851	3	46,991	5	202,515	8	249,506
1978	9	161,695	-	-	1	25,849	8	135,846	9	161,695
1979	4	97,762	-	-	-	-	4	97,762	4	97,762
1980	-	-	1	2,792	-	-	1	2,792	1	2,792
1981	6	224,394	1	1,155	-	-	7	225,549	7	225,549
1982	1	93,940	1	6,310	1	6,310	1	93,940	2	100,250
Registered in Australia	74	1,589,607	21	204,678	50	662,823	45	1,131,462	95	1,794,285

(a) Excludes vessels of 150 gross tons and under.

Miscellaneous

Shipping casualties

Courts of Marine Inquiry are constituted by a magistrate assisted by skilled assessors and when necessary, are held at the principal port in each State and at Launceston (Tasmania). Such courts have power to deal with the certificates of officers who are found at fault.

RAILWAYS

Government railways

Government railways in Australia operate in all States and Territories and provide an important means of transportation. In 1979-80 a total of 125.7 million tonnes of freight was carried, an increase of 141.7 per cent over the 52.0 million tonnes carried in 1959-60. However, in the same twenty-year period, the number of passengers carried (mostly within the suburban areas of Sydney and Melbourne) declined by 16.3 per cent from 479 million in 1959-60 to 401 million in 1979-80. The number of train-kilometres run during 1979-80 (151 million) was an increase of 3.4 per cent since 1959-60 (146 million), which is an indication of the trend towards heavier train loads with the more powerful motive power now available. Since the introduction of the first mainline diesel-electric locomotives in 1950, their numbers have increased greatly until at 30 June 1980 there were 1,727 throughout Australia. Diesel-electric locomotives during 1979-80 hauled 99 million train-kilometres, while electric and other locomotives hauled 4 million train-kilometres.

The Australian National Railways Commission (ANRC) assumed full control over the Tasmanian and non-metropolitan South Australian railways on 1 March 1978. This change is reflected in the figures for the 1977-78 financial year as many data items, previously available separately from these three systems, are now included in the figures shown for the ANRC. Urban rail services in South Australia remain the responsibility of the State Transport Authority (STA) and particulars of these are shown as the South Australian railway system.

Due to changes in accounting procedures and the introduction of a multi-modal system of travel, i.e. one ticket can cover a journey involving more than one mode, the STA cannot provide, in many instances, separate particulars for train, bus and tram services operated by that authority. Where data is not separately identifiable it has been included in relevant tables in the railway section of this year book.

Railway development

Details outlining railway development in Australia are given in Year Book No. 61, page 380. One feature of the Australian government railways is the variety of gauges to which they are built. There are three principal gauges: 'broad' (1,600 mm), 'standard' (1,435 mm), and 'narrow' (1,067 mm). Extensive route-kilometres of 1,067 mm gauge railway were built in areas where traffic volumes were initially known to be small and where it was imperative to minimise the costs of construction.

Government railway systems

The six government owned railway systems are operated by the State Rail Authority of New South Wales (SRA), Queensland Government Railways (QR), Victorian Government Railways (VR), Western Australian Government Railways (WAGR), the State Transport Authority of South Australia (STA), and Australian National Railways Commission (ANRC).

As the Australian National Railways Commission system includes routes in more than one State, and the Victorian system extends into New South Wales, the system route-kilometres shown in the following table do not represent route-kilometres within each State and Territory. The route-kilometres of each system open for traffic, according to gauge, at 30 June 1980 is shown in the following table.

GOVERNMENT RAILWAYS: ROUTE-KILOMETRES OPEN, BY GAUGE AND SYSTEM 30 JUNE 1980

(Kilometres)

System	Gauge			Total
	1600 mm	1435 mm	1067 mm	
New South Wales . . . . .	..	(a)9,773	..	9,773
Victoria	(b)5,859	313	12	6,184
Queensland . . . . .	..	(c)111	9,793	9,904
South Australia	(d)142	..	..	142
Western Australia . . . . .	..	1,377	(e)4,396	5,773
National	(d)2,395	2,609	2,683	7,687
Australia	8,396	14,183	16,884	39,463

(a) Includes 469 kilometres which are electrified. (b) Includes 328 kilometres of 1600 mm gauge line operating in New South Wales. Includes 420 route-kilometres which are electrified. (c) Operated by the State Rail Authority of New South Wales which is reimbursed for the cost of operations. (d) See page 493. (e) Excludes 148 kilometres of 1435 mm/1067 mm dual gauge line which is included in the 1435 mm gauge line.

The following table sets out the route kilometres of each government railways system from 1975 to 1980.

GOVERNMENT RAILWAYS: ROUTE KILOMETRES OPEN, BY SYSTEM, 1975 TO 1980

(Kilometres)

30 June—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	National	Total
1975	9,756	6,659	9,780	3,888	6,075	851	3,595	40,604
1976	9,755	6,653	9,844	3,894	6,163	849	3,595	40,753
1977	9,755	6,579	9,796	3,894	6,165	864	3,080	40,133
1978	9,763	6,364	9,787	(a)142	5,764	(a)	(a)7,890	39,710
1979	9,820	6,184	9,789	142	5,770	(a)	(a)7,683	39,388
1980	9,773	6,184	9,904	142	5,773	(a)	7,687	39,463

(a) See page 527.

The SRA (1435 mm gauge) operates lines radiating southwest and west from Sydney, northwest from Newcastle, and north from Sydney to Brisbane. QR (1067 mm gauge) operates a coastal line from Brisbane to Cairns, with long branches inland from the major ports. VR (1600 mm gauge, with the 1435 mm gauge Albury to Melbourne line) operates a network throughout Victoria and extending into New South Wales. WAGR (1067 mm gauge) operates in south-western Western Australia, and also operates standard gauge (1435 mm) from Perth to Kalgoorlie, Esperance and Leonora. The STA (1600 mm gauge) operates railways in the Adelaide metropolitan area only. ANRC operates the non-metropolitan railways in South Australia (1600 mm and 1067 mm gauge), including the isolated Eyre Peninsula system (1067 mm gauge), the Tasmanian main line from Hobart to Launceston, with its branches (1067 mm gauge) and the railways (1435 mm gauge) from Kalgoorlie to Broken Hill (the

Trans-Australian Railway), Queanbeyan to Canberra, Port Augusta to Marree, and the new Central Australia Railway from Tarcoola to Alice Springs. Services on the line between Darwin and Larrimah, the North Australia Railway, (1067 mm gauge) were withdrawn on 30 June 1976 and the line was officially closed effective as from 11 February 1981.

With regard to urban rail, Sydney and Melbourne have major electrified suburban rail systems which include some underground lines. The Brisbane suburban system is being upgraded and electrified. Adelaide and Perth have smaller-scale, non-electric urban rail networks. Rail services in the urban and inter-urban areas of Sydney, Newcastle and Wollongong are provided by the SRA in conjunction with the Urban Transit Authority of New South Wales which has responsibility for co-ordination of transport services in these areas. Similarly, metropolitan rail services in Perth are operated by the WAGR on behalf of and at the direction of the Metropolitan Transport Trust.

See also details in the annual publication *Rail Transport, Australia* (9213.0), and Year Book No. 58, page 348.

The Commonwealth Government has enacted legislation for the construction of a standard gauge connection between Adelaide and the Trans-Australian Railway at Crystal Brook. Work on this project is being undertaken by the Australian National Railways Commission. When the link is completed, all mainland State capital cities will be connected to the standard gauge network.

The new all-weather standard gauge railway between Tarcoola, on the Trans-Australian Railway, and Alice Springs was officially opened in October 1980. Upon transfer of rail services to this new line, the narrow section of the Central Australia Railway from Marree to Alice Springs was officially closed effective as from 1 January 1981.

The Commonwealth Government also announced its intention to construct a standard gauge railway from Alice Springs to Darwin and \$10 million is to be provided over three years for preliminary planning and design work. This work is also being undertaken by the Australian National Railways Commission.

Operations of Government railway systems

Particulars of train-kilometres, passenger journeys, passenger-kilometres, freight-tonnes carried, and freight tonne-kilometres included in this section refer only to operations for which revenue is received.

Summary of operations

GOVERNMENT RAILWAYS: SUMMARY OF OPERATIONS, SYSTEMS, 1979-80

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>National</i>	<i>Aust.</i>
Train-kilometres							
(^{'000})(a)—							
Suburban passenger	22,372	13,174	4,116	3,977	1,713	..	45,352
Country passenger	9,932	6,208	4,087	..	1,003	2,896	24,126
Goods(b)	27,052	11,413	24,386	..	9,043	9,496	81,390
Total	59,356	30,795	32,589	3,977	11,759	12,392	150,868
Passenger journeys							
(^{'000})(c)—							
Suburban	204,961	85,755	28,006	(g)73,210	n.a.	..	n.a.
Country(d)	3,860	3,207	1,476	..	233	585	9,361
Total	208,821	88,962	29,482	(g)73,210	n.a.	585	n.a.
Passenger-kilometres							
(^{'000})(e)—							
Suburban	n.a.	1,363,645	n.a.	n.a.	n.a.	..	n.a.
Country	n.a.	399,131	n.a.	n.a.	94,046	249,343	n.a.
Total	n.a.	1,762,777	n.a.	n.a.	n.a.	249,343	n.a.
Freight—							
Tonnes carried							
(^{'000})(d)	39,686	13,453	38,440	..	21,388	12,704	125,671
Net tonne-kilometres							
(million)(f)	10,664.9	3,887.8	11,464.6	..	4,730.7	5,618.2	36,366.2

(a) One train (i.e. a complete unit of locomotive and vehicles, electric train set, or rail motor) travelling one kilometre for revenue purposes. (b) Includes mixed train-kilometres. (c) Based on ticket sales making allowances for periodical tickets. Tickets sold at concession rates are counted as full journeys. (d) Inter-system traffic is included in the total for each system over which it passes. (e) One passenger travelling one kilometre. (f) One tonne carried one kilometre. (g) See page 527.

Polling stock

GOVERNMENT RAILWAYS: ROLLING STOCK INCLUDED IN CAPITAL ACCOUNT
(Number)

System and date	Locomotives				Coaching stock	Goods stock	Service stock
	Diesel-electric	Electric	Other(a)	Total			
30 June 1980(b)							
New South Wales	496	46	20	562	2,131	12,853	1,963
Victoria	266	35	39	340	1,518	12,138	1,164
Queensland	474	..	77	551	1,061	21,125	2,423
South Australia	2	..	4	6	172	1	12
Western Australia	189	..	21	210	128	10,056	485
National	300	..	24	324	111	11,512	1,181
Australia	1,727	81	185	1,993	5,121	67,685	7,228
30 June—							
1979 (b)	1,695	74	203	1,972	5,055	67,163	7,192
1978(b)	1,674	74	194	1,942	6,872	71,043	7,225
1977	1,646	74	262	1,982	7,615	75,694	6,616
1976	1,590	75	326	1,991	7,592	78,405	7,256
1975	1,573	75	332	1,980	7,624	78,810	7,614

(a) Includes non-passenger-carrying diesel power vans and steam locomotives. (b) Excludes jointly-owned stock.

Train-kilometres

Train-kilometres by type of service and motive power

GOVERNMENT RAILWAYS: TRAIN-KILOMETRES 1979-80
(*000 kilometres)

	N.S.W.	Vic.	Qld	S.A.	W.A.	National	Aust.
Type of service—							
Passenger—suburban	22,372	13,174	4,116	3,977	1,713	..	45,352
Passenger—country	9,932	6,208	4,087	..	1,003	2,896	24,126
Goods(a)	27,052	11,413	24,386	..	9,043	9,496	81,390
Total	59,356	30,795	32,589	3,977	11,759	12,392	150,868
Type of motive power—							
Hauled by diesel-electric locomotives	32,299	15,575	29,882	2	9,630	11,515	98,903
Hauled by electric and other locomotives(b)	2,744	1,308	190	6	1	..	4,250
Powered coaching stock	24,313	13,913	2,517	3,968	2,127	876	47,716
Total	59,356	30,795	32,589	3,977	11,759	12,392	150,868

(a) Includes mixed train-kilometres. (b) Includes steam locomotives.

Total train-kilometres

TRAIN-KILOMETRES
(*000 kilometres)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	National	Aust.
1974-75	55,661	33,876	30,114	10,189	12,866	1,983	5,936	150,624
1975-76	54,943	33,818	30,813	10,304	12,856	1,748	5,595	150,078
1976-77	57,039	33,489	30,206	10,742	12,846	1,667	5,134	151,125
1977-78	56,860	32,013	30,199	(a)3,982	12,596	(a)..	(a)13,152	148,801
1978-79	55,622	30,856	32,100	3,957	12,068	..	12,918	147,520
1979-80	59,356	30,795	32,589	3,977	11,759	..	12,392	150,868

(a) See page 527.

Freight traffic
Freight carried

GOVERNMENT RAILWAYS: FREIGHT CARRIED(a), SYSTEMS
(^{'000 tonnes})

<i>Commodity and year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>National</i>	<i>Aust.</i>
1979-80—								
Grain	6,056	5,062	2,022	..	3,534	..	2,203	18,877
Other agricultural produce	1,223	311	1,874	..	177	..	73	3,658
Coal, coke and briquettes	20,068	867	25,637	..	1,775	..	1,923	50,270
Other minerals(b)	3,476	26	4,135	..	11,722	..	1,976	21,335
Iron and steel	2,127	749	(c)	..	—	..	760	3,636
Fertilisers	304	631	179	..	517	..	517	2,148
Cement	483	718	158	..	75	..	398	1,832
Timber	95	187	115	..	228	..	151	776
Containers	3,025	932	635	..	—	..	1,031	5,623
Livestock	119	128	844	..	19	..	290	1,400
All other commodities	2,709	3,843	2,841	..	3,340	..	3,383	16,116
Total	39,685	13,454	38,440	..	21,388	..	12,704	125,671
1978-79	33,482	11,190	36,542	..	19,288	..	10,623	111,125
1977-78	33,434	11,120	34,155	..	18,625	..	9,995	107,329
1976-77	33,777	10,971	34,237	6,402	19,003	1,644	3,909	109,943
1975-76	31,234	10,803	33,118	6,139	17,647	1,610	3,804	104,355
1974-75	33,476	11,057	30,208	6,738	16,153	1,731	4,102	103,465

(a) Inter-system traffic is included in the total for each system (including each National railway) over which it passes. (b) Includes sand and gravel. (c) Included in item "All other commodities".

Freight net tonne-kilometres

GOVERNMENT RAILWAYS: FREIGHT NET TONNE-KILOMETRES, SYSTEMS
(Million)

<i>Commodity and year</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>National</i>	<i>Aust.</i>
1979-80—								
Grain	2,313.4	1,527.6	(b)	..	1,009.5	..	365.0	n.a.
Other agricultural produce	626.6	101.6	(b)	..	75.2	..	21.2	n.a.
Coal, coke and briquettes	1,865.8	146.6	(b)	..	310.4	..	500.5	n.a.
Other minerals(a)	598.3	10.7	(b)	..	1,761.0	..	418.9	n.a.
Iron and steel	1,413.5	250.4	(b)	..	—	..	689.6	n.a.
Fertilisers	193.0	160.2	(b)	..	203.7	..	176.9	n.a.
Cement	178.8	118.2	(b)	..	31.1	..	65.9	n.a.
Timber	97.5	65.5	(b)	..	77.1	..	79.4	n.a.
Containers	1,723.1	368.7	(b)	..	—	..	769.0	n.a.
Livestock	88.0	41.6	508.9	..	7.9	..	154.3	800.7
All other commodities	1,566.7	1,096.7	(b)	..	1,254.9	..	2,377.6	n.a.
Total	10,664.9	3,887.8	11,464.6	..	4,730.7	..	5,618.2	36,366.2
1978-79	8,776.7	3,145.3	10,925.2	..	4,178.8	..	5,029.5	32,055.5
1977-78	9,243.3	3,108.7	10,417.2	(c)	4,273.1	(c) (c)	4,794.2	31,836.5
1976-77	9,320.2	3,042.2	10,286.6	1,834.0	4,532.5	247.5	2,732.4	31,995.4
1975-76	8,566.9	3,071.4	10,101.2	1,686.6	4,542.4	231.8	2,609.0	30,809.3
1974-75	8,782.3	3,091.4	9,118.0	1,756.9	4,262.4	273.3	2,507.4	29,791.7

(a) Includes sand and gravel. (b) Not available separately. (c) See page 527.

Finance

GOVERNMENT RAILWAYS: GROSS EARNINGS(a), SYSTEMS, 1979-80
(**\$'000**)

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.(b)</i>	<i>W.A.</i>	<i>National</i>	<i>Aust.</i>
Coaching—							
Suburban passenger	78,849	44,489	8,479	n.a.	n.a.	..	n.a.
Country passenger	32,155	12,224	7,498	..	3,638	12,748	68,263
Other	16,959	17,553	5,260	n.a.	2,357	—	n.a.
Total coaching	127,963	74,266	21,237	n.a.	5,995	12,748	242,209
Freight (goods and livestock)—							
Grain	(d)	51,714	23,754	..	37,245	15,853	n.a.
Other agricultural produce	(d)	4,268	16,723	..	4,211	747	n.a.
Coal, coke and briquettes	(d)	3,908	151,814	..	11,589	6,728	n.a.
Other minerals(c)	(d)	267	32,203	..	35,496	11,802	n.a.
Iron and steel	(d)	6,355	—	..	—	9,542	n.a.
Fertilisers	(d)	4,501	4,559	..	5,500	3,833	n.a.
Cement	(d)	4,851	2,296	..	1,256	2,206	n.a.
Timber	(d)	2,639	1,804	..	3,469	1,398	n.a.
Containers	(d)	6,498	8,943	..	—	15,539	n.a.
Livestock	(d)	1,521	21,139	..	403	5,444	n.a.
All other commodities	(d)	49,713	60,935	..	44,129	58,423	n.a.
Total freight	331,185	136,235	324,170	..	143,299	131,514	1,066,403
Miscellaneous	36,685	25,235	7,293	n.a.	24,964	13,709	107,886
Grand total	495,833 (e)	230,549	352,700	26,943	174,258	157,971 (f)	1,438,254

(a) Excludes Government grants. (b) See page 527. (c) Includes sand and gravel. (d) Not available separately. (e) Includes earnings from freight carried by VICRAIL on behalf of the S.R.A. of N.S.W. and the ANRC. (f) Includes South Australia.

GOVERNMENT RAILWAYS: WORKING EXPENSES, SYSTEMS, 1979-80
(**\$'000**)

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>National</i>	<i>Aust.</i>
Maintenance of way and works	126,388	(b)	111,770	n.a.	(c)41,139	n.a.	n.a.
Motive power(a)	280,690	(b)	167,823	n.a.	(c)47,053	n.a.	n.a.
Traffic	179,714 (c)	339,417	106,409	n.a.	67,392	n.a.	n.a.
Other charges	170,763	53,170	36,501	n.a.	24,695	n.a.	n.a.
Total	757,555	392,586	422,503	(d)74,391	(c)180,280	222,799	2,050,114

(a) Includes maintenance of rolling stock. (b) Not available separately; included with traffic. (c) Includes provision of reserves for depreciation. (d) See page 527.

GOVERNMENT RAILWAYS: GROSS EARNINGS, WORKING EXPENSES, AND NET EARNINGS, SYSTEMS
(\$'000)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	National	Aust.
GROSS EARNINGS								
1974-75	291,373	129,942	183,687	47,950	106,844	8,266	41,367	809,429
1975-76	318,763	147,292	230,492	49,688	130,850	8,048	54,618	939,751
1976-77	351,875	163,512	262,561	54,284	137,323	8,780	62,590	1,040,925
1977-78	380,724	176,522	273,551	(c)6,113	149,477	(c)	(c)122,040	1,108,427
1978-79	379,033	192,656	310,418	24,550	154,597	..	131,829	1,193,083
1979-80	495,833	230,549	352,700	26,943	174,258	..	157,971	1,438,254
WORKING EXPENSES								
				(a)	(a)			
1974-75	415,234	243,393	227,925	80,466	103,696	19,973	55,847	1,146,534
1975-76	472,188	271,940	265,662	91,352	118,607	22,087	64,279	1,306,115
1976-77	570,272	301,232	299,044	103,629	132,024	23,340	52,628	1,482,169
1977-78	643,623	332,508	337,002	(c)25,723	148,708	(c)	(c)195,796	1,683,360
1978-79	679,999	347,802	365,070	71,043	159,737	..	204,738	1,828,389
1979-80	757,555	392,586	422,503	74,391	180,280	..	222,799	2,050,114
NET EARNINGS(b)								
1974-75	-123,861	-113,451	-44,238	-32,516	3,148	-11,707	-14,479	-337,104
1975-76	-153,425	-124,648	-35,170	-41,664	12,243	-14,039	-9,661	-366,364
1976-77	-218,397	-137,720	-36,483	-49,345	5,299	-14,560	9,962	-441,244
1977-78	-262,899	-155,986	-63,451 (c)	-19,610	769	(c) (c)	-73,756	-574,933
1978-79	-300,966	-155,147	-54,652	-46,493	-5,141	..	-72,909	-635,308
1979-80	-261,722	-162,037	-69,803	-47,448	-6,022	..	-64,828	-611,860

(a) Includes provision of reserves for depreciation. (b) Excess of gross earnings over working expenses as shown in this table. (c) See page 527.

GOVERNMENT RAILWAYS: SURPLUS OR DEFICIT, SYSTEMS, 30 JUNE 1980
(\$'000)

System	Net earnings — excess of gross earnings over working expenses		Plus grants and other earnings payable to railways			Less other expenses charged to railways					Surplus or deficit (-)
	State government grants	Road motor earnings	Other	Total	Interest and ex-change	Sinking fund	Road motor expenses (a)	Other	Total		
New South Wales	-261,722	(b)10,996	..	10,996	63,300	13,264	..	694	77,258	-327,984	
Victoria	-162,037	-	84	84	..	..	424	..	424	-162,377
Queensland	-69,803	-	..	..	60,369	-	-	(c)500	60,869	-130,672
South Australia (d)	-47,448	49,752	-	49,752	-	-	-	-	-	2,304	
Western Australia	-6,022	-	1,477	1,477	19,407	-	4,067	(e)14	23,488	-28,033	
National	-64,828	58,100	-	58,100	4,233	-	-	-	4,233	-10,961	
Australia	-611,860	118,848	1,561	120,409	147,309	13,264	4,491	1,208	166,272	-657,723	

(a) Includes interest and exchange. (b) Grants to meet losses on country developmental lines, and the employer liability to the Government Railways Superannuation Account. (c) Demolished assets written off. (d) See page 527. (e) Australian currency revaluation adjustment.

Employment, salaries and wages

GOVERNMENT RAILWAYS: AVERAGE NUMBER OF EMPLOYEES (EXCLUDING CONSTRUCTION STAFF) AND SALARIES AND WAGES PAID^(a), 1979-80

	N.S.W.	Vic. ^(b)	Qld	S.A. (c)(d)	W.A.	National (e)	Aust.
Salaried staff	9,372	5,388	4,078	630	2,114	2,278	23,860
Wages staff	33,227	17,361	20,870	3,172	7,425	8,395	90,450
Total staff	42,599	22,749	24,948	3,802	9,539	10,673	114,310
Salaries and wages paid \$'000	598,052	281,413	315,246	31,401	112,646	153,111	1,491,869

(a) Excludes salaries and wages paid to road motor staff. (b) Includes construction staff. (c) See page 527. (d) Includes staff made available to the State Transport Authority by the ANRC. (e) Excludes staff made available to the South Australian STA.

Non-government railways

The Australian non-government railways covered in this section are those which operate outside industrial estates, harbour precincts, mines and quarries with a route distance exceeding two kilometres.

The figures in the following table have been compiled from information supplied to the Department of Transport and Construction or the Bureau of Transport Economics by the various railway operators. Prior to 1979-80 these statistics were collected and published by the Bureau of Transport Economics. In 1979-80 the collection was passed to the Department of Transport and Construction. All operators provided details of tonnes carried and most provided details of tonne-kilometres performed. In a few cases the tonne-kilometre figures have been estimated by the Department of Transport and Construction or the Bureau of Transport Economics using the advised average length of haul.

TRAFFIC TASK PERFORMED BY AUSTRALIAN NON-GOVERNMENT RAILWAYS 1975-76 TO 1980-81

Year	Iron ore railways	Sugar tramways	Other non-government railways ^(a)	Total non-government railways ^(a)
TONNES CARRIED (million)				
1975-76	83.8	18.8	17.8	120.5
1976-77	86.6	20.1	20.3	127.0
1977-78	85.9	20.3	17.9	124.0
1978-79	79.5	18.6	19.6	117.7
1979-80	88.3	18.3	20.6	127.2
1980-81	88.5	20.6	20.2	129.4
TONNE-KILOMETRES (million)				
1975-76	25,748	302	298	26,348
1976-77	26,646	322	369	27,337
1977-78	27,723	325	324	28,372
1978-79	24,930	299	324	25,553
1979-80	27,128	292	345	27,765
1980-81	28,264	351	324	28,939

(a) Includes transfers to and from Government railways.

TRAM, BUS, AND FERRY SERVICES**Systems in operation**

Trams and trolley-buses. At 30 June 1981 tram services were in operation in Melbourne, Victoria and in Adelaide, South Australia. The last of the trolley-bus services ceased to operate in Australia with its replacement by buses in Perth, Western Australia, on 29 August 1969. Regular tram services ceased to operate in Ballarat on 19 September 1971 and in Bendigo on 16 April 1972. However services are operated in both cities, on an irregular basis, but generally at holiday periods, as a tourist attraction.

In many parts of Australia private lines used for special purposes in connection with the timber, mining, sugar, or other industries are often called tramways, but they are more properly railways, and the traffic on them has nothing in common with that of the street tram used for the conveyance of passengers.

Buses. Services are operated by government or municipal authorities and private operators. Statistics are collected for government and municipal bus services located in all State capital cities; Canberra, Australian Capital Territory; Newcastle, New South Wales; Rockhampton, Queensland; Fremantle and the Eastern Goldfields area, Western Australia; Launceston and Burnie, Tasmania; Darwin, Northern Territory; and for country road services operated by the Victorian Railways, the State Rail Authority of New South Wales, the Western Australian Government Railways, and the Australian National Railways. Particulars of bus services under the control of private operators for the States of New South Wales, Victoria, Queensland and South Australia, are given in the annual publication *Rail, Bus and Air Transport, Australia* (9201.0) for years prior to 1976-77.

Ferries. Ferry passenger services are operated in the following States: New South Wales, at Sydney and Newcastle; Western Australia, on the Swan River at Perth; Tasmania, on the Mersey River at Devonport and on the Derwent River at Hobart; and the Brisbane River at Brisbane. Control is exercised by both government authorities and private operators. Particulars of the operations of these services are given in previous issues of this Year Book. There are no ferry passenger services in South Australia or Victoria.

Government and municipal tram and bus services

Because of the development in recent years of the various forms of public road transport under the control of single authorities and the gradual replacement of tram services by bus services, it is not possible to obtain separate statistics for all phases of the activities of each form of transport, particularly financial operations.

TRAM AND BUS SERVICES: GOVERNMENT AND MUNICIPAL STATES AND TERRITORIES

		<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Aust.</i>
<i>1979-80</i>										
Route-kilometres at 30 June—										
Tram(a)	kilometres	..	220	..	11	..	..	..	..	231
Bus	"	1,066	290	790	955	9,722	464	100	786	14,173
Vehicle-kilometres—										
Tram	'000	..	23,547	..	783	..	..	..	..	24,330
Bus	"	64,660	12,739	20,630	36,775	44,525	9,511	1,581	13,541	203,963
Rolling stock at 30 June—										
Tram	number	..	733	..	26	..	..	..	..	759
Bus	"	1,718	311	570	824	962	312	46	369	5,112
Passenger journeys—										
Tram	'000	..	98,889	..	(b)	..	..	..	..	(g)98,889
Bus	"	194,366	19,872	47,861	(b)	56,646	17,184	1,209	19,500	(g)356,638
Gross revenue(c)—										
Tram and bus	\$'000	54,233	40,545	19,772	(b)	18,614	4,164	377	5,619	(g)143,324
Working expenses(d)—										
Tram and bus	\$'000	114,374	65,911	27,225	(b)	42,876	10,996	755	15,728	(g)277,865
Net revenue—										
Tram and bus	\$'000	-60,140	-25,366	-7,454	(b)	-24,262	-6,832	-379	-10,109	(g)-134,542
Employees at 30 June—										
Tram and bus	number	6,372	4,589	1,476	(b)	2,255	601	86	865	(g)16,244
Accidents—										
Tram and bus(e)—										
Persons killed	number	4	6	-	-	2	-	-	-	(g)12
Persons injured	"	n.a.	652	329	398	442	36	-	60	(f)(g)1,917
<i>1980-81</i>										
Route-kilometres at 30 June—										
Tram(a)	kilometres	..	220	..	11	..	..	..	..	231
Bus	"	1,091	n.a.	646	951	8,620	484	138	n.a.	11,930
Vehicle-kilometres—										
Tram	'000	..	24,062	..	802	..	..	..	..	24,864
Bus	"	65,551	13,163	19,600	37,197	45,983	9,973	1,857	n.a.	193,324
Rolling stock at 30 June—										
Tram	number	..	741	..	26	..	..	..	..	767
Bus	"	1,699	270	537	776	962	303	39	355	4,941
Passenger journeys—										
Tram	'000	..	100,474	..	(b)	..	..	..	..	(g)100,474
Bus	"	188,787	21,018	41,340	(b)	57,541	16,988	1,659	19,800	(g)347,133
Gross revenue(c)—										
Tram and bus	\$'000	76,162	49,568	24,839	(b)	21,214	4,909	473	7,431	(g)184,596
Working expenses(d)—										
Tram and bus	\$'000	136,254	93,638	28,558	(b)	45,229	13,133	1,430	19,192	(g)337,434
Net revenue—										
Tram and bus	\$'000	-60,092	-44,070	-3,719	(b)	-24,015	-8,224	-169	-11,761	(g)-152,050
Employees at 30 June—										
Tram and bus	number	6,268	4,571	n.a.	(b)	2,259	601	96	n.a.	(g)13,795
Accidents—										
Tram and bus(e)—										
Persons killed	number	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Persons injured	"	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

(a) Gauge 1435 mm throughout. (b) Not separately available. See page 527. (c) Excludes government grants. (d) Includes provision of reserves for depreciation, etc., where possible. (e) Excludes accidents to employees. (f) Excludes New South Wales. (g) Excludes details of metropolitan tram and bus services operated by the South Australian State Transport Authority. See page 527. Minus sign (-) denotes deficit.

TRAM AND BUS SERVICES: GOVERNMENT AND MUNICIPAL

		1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Route-kilometres at 30 June—							
Tram	kilometres	228	228	228	231	231	231
Bus	"	11,217	12,142	12,649	12,828	14,173	11,930
Vehicle kilometres—							
Tram	'000	24,945	24,940	24,955	24,967	24,330	24,864
Bus	"	190,131	192,003	197,660	201,693	203,963	193,324
Rolling stock at 30 June—							
Tram	number	765	765	774	756	759	767
Bus	"	4,995	4,897	5,050	5,070	5,112	4,941
Passenger journeys—							
Tram	'000	107,375	104,188	102,581	(a)101,070	(a) 98,889	(a) 100,474
Bus	"	403,058	404,228	413,987	(a)357,558	(a) 356,638	(a) 347,133
Gross revenue(b)—							
Tram and bus	\$'000	121,420	123,740	134,457	(a)123,741	(a) 143,324	(a) 184,596
Working expenses(c)—							
Tram and bus	\$'000	208,241	239,107	267,281	(a)258,644	(a) 277,865	(a) 337,434
Net revenue—							
Tram and bus	\$'000	-86,821	-115,366	-132,824	(a)-134,902	(a)-134,542	(a)-152,050
Employees at 30 June—							
Tram and bus	number	17,846	18,276	(a)16,613	(a)16,547	(a) 16,244	(a) 13,795
Accidents—							
Tram and bus(d)—							
Persons killed	number	22	25	22	(f)27	(a) 12	n.a.
Persons injured	"	(e)1,535	(e)1,609	(e)1,727	(a)1,885	(a) 1,917	n.a.

(a) Excludes details of metropolitan tram and bus services in South Australia. See page 527. (b) Excludes government grants. (c) Includes provision of reserve for depreciation, etc., where possible. (d) Excludes accidents to employees. (e) Excludes New South Wales.

MOTOR VEHICLES

Arrangements for the registration of motor vehicles and the licensing of drivers and riders are not uniform throughout Australia, since they are the function of a separate authority or authorities in each State and Territory.

Tables in this section include vehicles owned by private individuals, local government authorities, State Governments, and the Australian Government (excluding those belonging to the defence services).

Survey of motor vehicle usage

A survey was conducted throughout Australia in late 1979 by the Australian Bureau of Statistics for the purpose of gathering information on the usage of motor vehicles. Previous surveys were conducted in 1963, 1971 and triennially since 1976. The owners of approximately 53,000 vehicles other than buses were approached for information relating to the usage of their vehicles over the twelve months ended 30 September 1979. The framework from which the sample was drawn was obtained from the motor vehicle registration authorities in all States and Territories. The survey was based on respondents' recollection of their usage of the selected vehicles over their period of ownership during the survey year.

The main purpose of the survey was to determine the total distance travelled by vehicles, classified according to area and purpose of travel. Information was also obtained from the survey on: (i) tonne-kilometres; (ii) average load carried; (iii) vehicle usage (i.e. for hire and reward, ancillary or other); (iv) main type of operation; (v) fuel consumption; (vi) occupant-kilometres; and (vii) driver characteristics.

The following table shows, for Australia, total annual kilometres travelled for the twelve months ended 30 September 1979 classified by vehicle type and purpose of travel. The percentage standard errors (S.E.%) indicate the extent to which the estimates can vary by chance because only a sample and not the total vehicle population was enumerated. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained from a comparable complete enumeration, and about nineteen chances in twenty that the difference will be less than two standard errors. For example, if an estimate of 3,000 million kilometres has a standard error of 5 per cent (i.e. 150 million kilometres), then there would be approximately two chances in

three that a comparable complete collection would give a figure within the range of 2,850 million kilometres to 3,150 million kilometres and about nineteen chances in twenty that the figure would be within the range of 2,700 million kilometres to 3,300 million kilometres.

TOTAL ANNUAL KILOMETRES BY VEHICLE TYPE AND PURPOSE OF TRAVEL, TWELVE MONTHS ENDED 30 SEPTEMBER 1979 (FINAL)

Type of vehicle	Laden business		Unladen business		Total business (a)		Paid to and from work		Unpaid to and from work		Private		Total	
	million kilometres	S.E. %	million kilometres	S.E. %	million kilometres	S.E. %	million kilometres	S.E. %	million kilometres	S.E. %	million kilometres	S.E. %	million kilometres	S.E. %
Cars and station wagons	..	..	..	..	17,027.2	3.9	2,358.0	7.4	17,088.9	2.5	48,383.1	1.4	84,871.5	1.1
Motor cycles	..	..	..	..	168.9	10.4	..	..	606.6	5.5	940.1	5.0	1,768.2	3.6
Utilities and panel vans	5,315.1	5.5	2,232.2	8.1	8,298.3	4.7	376.3	15.8	2,219.8	7.5	5,033.3	5.2	15,928.0	2.6
Rigid trucks	3,801.8	1.7	1,658.2	2.4	5,460.1	1.7	36.4	10.6	167.9	20.0	172.7	6.4	5,837.2	2.0
Articulated trucks	1,806.1	1.2	773.5	1.4	2,580.4	1.0	3.6	21.0	19.5	7.2	4.0	11.6	2,607.4	1.0
Other truck type vehicles	..	..	..	..	232.0	8.7	3.5	35.4	28.7	13.2	192.7	8.6	456.9	5.4
Total	10,922.9	2.7	4,663.9	4.0	33,766.9	2.3	2,830.3	6.5	20,131.5	2.3	54,725.9	1.3	111,469.2	0.9

(a) Includes the total kilometres travelled for business purposes of cars, station wagons, motor cycles and utilities and panel vans predominantly used for private purposes. The dissection of business travel into laden/unladen was not sought for these vehicles.

Motor vehicles on register

Details of motor vehicles on the register are compiled by up-dating motor vehicle census data from information made available by the various motor vehicle registration authorities in the States and Territories. Censuses of motor vehicles have been conducted in respect of 31 December 1955 and 1962, and 30 September 1971, 1976 and 1979. At these census dates considerably greater information concerning the particulars shown in the tables following is available. Final detailed results of the 1979 census have been published in separate census publications for each State and Territory and for Australia.

MOTOR VEHICLE CENSUS: 30 SEPTEMBER 1979 (FINAL)
(**'000**)

State or Territory	Motor cars and station wagons		Panel vans	Trucks		Other truck type vehicles	Buses	Motor cycles	Total (a)
	Utilities			Rigid	Articulated				
New South Wales	1,906.6	146.7	129.6	136.6	15.4	10.2	13.0	93.2	2,451.3
Victoria	1,554.4	109.2	54.9	127.8	10.4	9.8	9.0	48.5	1,924.0
Queensland	855.0	157.8	57.6	48.9	7.2	3.4	4.9	78.6	1,213.4
South Australia	543.8	42.0	23.8	38.7	4.6	5.0	3.6	30.4	691.8
Western Australia	521.1	58.2	46.9	52.5	4.0	5.5	4.3	27.2	719.6
Tasmania	175.1	19.2	10.4	11.6	1.4	2.0	2.0	4.6	226.1
Northern Territory	24.4	10.1	2.5	1.5	0.5	0.1	0.2	2.3	41.6
Australian Capital Territory	89.3	5.0	5.3	2.4	0.2	0.3	0.8	3.6	106.9
Australia	5,669.6	548.2	331.0	419.9	43.7	36.3	37.8	288.3	7,374.7

(a) Excludes tractors, plant and equipment, caravans and trailers.

MOTOR VEHICLES ON REGISTER, BY TYPE OF VEHICLE, AUSTRALIA
(**'000**)

30 June	Motor cars and station wagons	Utilities, trucks, panel vans, other truck type vehicles and buses	Total (excludes motor cycles)	Motor cycles
1976	5,072.8	1,215.0	6,287.8	293.0
1977	5,243.0	1,279.6	6,522.6	295.5
1978	5,462.2	1,359.9	6,822.1	292.4
1979	5,657.2	1,412.7	7,069.9	288.2
1980	5,800.6	1,462.4	7,262.9	310.3
1981	6,021.0	1,544.3	7,565.3	352.3

MOTOR VEHICLES(a) ON REGISTER PER 1,000 OF POPULATION, STATES AND TERRITORIES

30 June	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1976	422.9	458.7	324.1	477.5	489.9	475.4	325.9	427.5	448.1
1977	431.1	463.3	464.8	494.9	520.3	490.9	338.6	450.0	459.6
1978	443.3	482.2	483.4	501.5	542.2	511.8	394.4	436.8	475.1
1979	455.0	494.4	498.3	506.7	552.4	529.7	386.9	474.3	487.1
1980	468.5	487.5	516.6	515.7	561.8	530.8	381.9	462.4	494.3
1981	479.8	499.3	539.1	522.1	569.8	542.7	408.0	465.0	506.8

(a) Excludes motor cycles, tractors, plant and equipment, caravans and trailers.

Registrations of new motor vehicles

Particulars of registrations of new motor vehicles are shown by type of vehicle in preliminary monthly bulletins, and by type and make of vehicle in monthly and annual bulletins of Motor Vehicle Registrations.

In these statistics 'registrations' mean registrations processed by the motor vehicle registration authorities in the States and Territories during the period.

A revised classification of motor vehicles has been adopted for publication of statistics of new motor vehicle registrations from 1 July 1976. The principal difference between this classification and that which it replaces involves the categories utilities, panel vans, trucks and other truck type vehicles. The principle of accepting vehicle-type data as recorded by the registration authority has also been accepted. Consequently, figures shown from July 1976 are not strictly comparable with data for previous periods.

REGISTRATIONS OF NEW MOTOR VEHICLES, BY TYPE OF VEHICLE

State or Territory	Motor cars and station wagons	Utilities	Panel vans	Trucks		Other truck type vehicles	Buses	Total (excludes motor cycles)	Motor cycles
				Rigid	Articulated				
1981-82--									
New South Wales	165,538	14,019	25,013	13,736	1,152	835	1,945	222,238	24,705
Victoria	121,960	8,382	3,296	12,992	953	693	1,201	149,477	15,731
Queensland	81,240	17,927	9,122	4,261	670	279	885	114,384	15,324
South Australia	36,890	2,926	3,063	2,811	402	204	222	46,518	7,050
Western Australia	42,329	4,749	5,656	4,786	317	98	473	58,408	5,835
Tasmania	12,210	1,487	979	562	82	84	108	15,512	1,110
Northern Territory	3,467	2,001	521	187	67	12	47	6,302	882
Australian Capital Territory	7,621	544	359	727	22	13	117	9,403	1,054
Australia	471,255	52,035	48,009	40,062	3,665	2,218	4,998	622,242	71,691
1980-81	462,487	47,474	37,391	36,485	4,269	1,939	4,170	594,215	70,799
1979-80	451,950	43,826	30,169	33,541	4,282	1,611	3,045	568,424	53,947
1978-79	463,453	41,591	32,068	33,756	4,496	1,891	3,171	580,426	37,278
1977-78	432,439	45,946	40,312	35,034	4,000	2,474	3,712	563,917	38,049
1976-77	447,103	(a)48,419	(a)39,532	(a)36,051	(a)4,752	(a)2,749	3,205	581,811	50,321

(a) Not directly comparable with previous figures.

Drivers' and riders' licences

At 30 June 1981, the numbers of licences in force to drive or ride motor vehicles were: New South Wales, 3,087,347; Victoria, 2,181,714; South Australia, 771,993; Western Australia, 731,113; Tasmania, 236,728; Northern Territory, 67,588; Australian Capital Territory, 137,545. Particulars are not available for Queensland.

ROAD TRAFFIC ACCIDENTS

Compulsory fitting and use of seat belts and protective helmets in Australia

Information on the compulsory fitting and use of seat belts and protective helmets in Australia is given in Year Book No. 61, page 395.

Accidents involving casualties, persons killed, persons injured

Since 1 January 1980 the ABS in the compilation of national statistics on road traffic accidents has adopted a new definition of injury and injury accidents. An injury is now defined as injury to any person involved in a road vehicle accident resulting in the injured person being admitted to hospital. An injury accident is therefore defined as a non-fatal road vehicle accident in which at least one injured person was admitted to hospital. Statistics prior to this date on injury accidents and number of persons injured are therefore not comparable.

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES^(a) (ADMISSIONS TO HOSPITALS): NUMBER OF ACCIDENTS, PERSONS KILLED OR INJURED, 1980

State or Territory				Per 100,000 of mean population			Per 10,000 motor vehicles registered ^(b)		
	Number of accidents	Persons killed	Persons injured	Number of accidents	Persons killed	Persons injured	Number of accidents	Persons killed	Persons injured
New South Wales	9,911	1,303	11,463	192	25	222	39	5	45
Victoria	7,074	657	8,466	181	17	216	36	3	43
Queensland	4,195	557	4,803	184	24	211	33	4	38
South Australia	2,321	269	2,723	177	21	208	33	4	38
Western Australia	2,566	293	3,080	202	23	242	34	4	41
Tasmania	776	100	889	183	24	210	34	4	39
Northern Territory	347	63	402	299	54	346	74	13	86
Australian Capital Territory	222	30	228	100	14	103	21	3	22
Australia	27,412	3,272	32,054	187	22	218	36	4	42

(a) Accidents reported to the police or other relevant authority which occurred in public thoroughfares and which resulted in death within thirty days or personal injury to the extent that the injured person was admitted to hospital. (b) Number of motor vehicles (excluding tractors, plant and equipment) on register at 30 June 1980.

ROAD TRAFFIC ACCIDENTS INVOLVING FATALITIES

Year	N.S.W	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Australia
Accidents involving fatalities—									
1976	1,119	830	497	277	255	97	48	33	3,156
1977	1,118	835	515	270	259	99	39	26	3,161
1978	1,222	775	532	254	304	96	58	27	3,268
1979	1,125	750	544	277	257	83	43	24	3,103
1980	1,152	608	508	240	268	96	55	27	2,954
1981	1,130	677	510	196	217	97	63	24	2,914
Persons killed—									
1976	1,264	938	569	307	308	108	51	38	3,583
1977	1,268	954	572	306	290	112	47	29	3,578
1978	1,384	869	612	291	345	106	68	30	3,705
1979	1,290	847	613	309	279	93	53	24	3,508
1980	1,303	657	557	269	293	100	63	30	3,272
1981	1,292	766	594	222	238	111	70	29	3,322

ROADS*

An article dealing with the development of roads in Australia is given in Year Book, No. 60, pages 385-93.

Summary of roads used for general traffic

Proclaimed or declared roads. The table following is a summary of the roads proclaimed or declared under the Acts of the several States relative to the operations of the central road authorities, and shows the lengths of various classes proclaimed or declared as at 30 June 1981. The central road authority in each State assumes responsibility under the Act for the whole, or a proportion, of the cost of construction and/or maintenance of these roads, the extent varying from State to State and with the class and locality of the roads. Before proclamation of a main road, consideration is given, in general, to the following points: availability of funds; whether the road is, or will be, within one of several classes of main trunk routes; the value of the roads as connecting links between centres of population or business; whether the district is, or will be, sufficiently served by railways. Provision is also made in some States for the declaration of roads other than main roads. The absence of a particular class in any State does not necessarily imply that there are no roads within that State that might be so classified; the classes are restricted only to roads proclaimed or declared under the Acts. A further point to make is that, through various causes (e.g. insufficiency of funds, man-power or materials), construction or maintenance may not keep pace with gazettal of roads, and, therefore, the condition of a road may not match its status.

PROCLAIMED OR DECLARED ROADS: LENGTHS, STATES, 30 JUNE 1981

(Kilometres)

<i>Class of road</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
State Highways and Freeways	(a)10,648	7,326	10,363		7,725	1,957	108,869
Trunk roads	7,091	14,564	151	13,427	7,486	1,195	
Ordinary main roads	18,330		8,606				
<i>Total main roads</i>	<i>36,069</i>	<i>21,890</i>	<i>19,120</i>	<i>13,427</i>	<i>15,211</i>	<i>3,152</i>	<i>108,869</i>
Secondary roads	(b)299	-	13,023	-	8,729	285	22,336
Development roads	3,474	-	8,036	-	-	84	11,594
Tourist roads	444	798	-	-	-	150	1,392
Other roads	2,498	(c)1,030	-	-	-	-	3,528
<i>Total other roads</i>	<i>6,715</i>	<i>1,828</i>	<i>21,059</i>	<i>-</i>	<i>8,729</i>	<i>519</i>	<i>38,850</i>
Grand total	42,784	23,718	40,179	13,427	23,940	3,671	147,719

(a) Includes 167 kilometres of freeways and tollways. (b) Metropolitan only. (c) Forest roads.

Total roads. The following table represents an attempt to classify all the roads open for general traffic in Australia, at the latest dates available, according to States and Territories and to certain broad surface groups. The figures in the table for the States are obtained from the Deputy Commonwealth Statistician in each State, and are derived mainly from local government sources.

ALL ROADS OPEN FOR GENERAL TRAFFIC LENGTHS, STATES AND TERRITORIES, 30 JUNE 1981

(Kilometres)

<i>Surface of roads</i>	<i>N.S.W.(a)(b)</i>	<i>Vic.(c)</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.(d)</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.(e)</i>	<i>Total (a)</i>
Bitumen or concrete	70,277	63,196	47,562	20,586	32,593	7,808	5,598	1,865	n.a.
Gravel, crushed stone or other improved surface	66,616	48,197	34,481		39,214	13,952	4,123	327	n.a.
Formed only	39,188	24,183	56,362	81,536	46,126	521	4,956	42	n.a.
Cleared only	13,092	22,499	22,576							40,788	208	6,670	-
Total	189,173	158,075	160,981	102,122	158,721	22,489	21,347	2,234	n.a.

(a) Excludes 15,397 kilometres of road dedicated but not trafficable. (b) Figures as at 30 June 1978. Later figures will not be available as the collection of this data has been discontinued in accordance with a decision arising out of the Review of the Commonwealth Functions. (c) Excludes roads coming under the responsibility of the State Electricity Commission (72 km), Melbourne and Metropolitan Board of Works (39 km) and Forests Commission (38,431 km). (d) Figures as at 30 June 1979. Figures as at 30 June 1981 are not yet available. (e) Figures as at 30 June 1980. Figures as at 30 June 1981 are not yet available.

* Includes bridges.

Expenditure on roads and bridges

Primary responsibility for the construction and maintenance of roads and bridges rests with State and local authorities. For detailed information see the individual State Year Books.

National Association of Australian State Road Authorities

The National Association of Australian State Road Authorities (NAASRA) was established in 1934. The present member authorities are: Department of Main Roads, New South Wales; Country Roads Board, Victoria; Main Roads Department, Queensland; Highways Department, South Australia; Main Roads Department, Western Australia; Department of Main Roads, Tasmania; Northern Territory Department of Transport and Works; Commonwealth Department of Transport and Construction.

The Association's objectives are to provide a central organisation where, by co-operative effort, a uniform approach to the improvement, planning and development of the Australian road system can be achieved. National standards for road and bridge construction and maintenance and improved administrative and financial control methods are developed by committees of experienced staff from the authorities, with secretarial services provided by a small staff located in Sydney.

This Secretariat arranges publication of the policies and standards which are widely used by road authorities, local government and universities; co-operates with the Standards Association of Australia on the preparation of national codes of practice; and acts as an Australian centre for contact with overseas road bodies and for the circulation of standards published by them.

The Association regularly confers with the Department of Transport and Construction, the Bureau of Transport Economics and the Australian Transport Advisory Council on major road policies. As part of the Commonwealth Government's external aid program and in conjunction with the Department of Foreign Affairs, member authorities of the Association conduct engineering training courses for experienced engineers from African and Asian countries.

The Association is a member of the Permanent International Association of Road Congresses (PIARC) and of the Road Engineering Association of Asia and Australasia (REAAA).

Australian Road Research Board

The Australian Road Research Board (ARRB) is a non-profit-making company founded in 1960 by the National Association of Australian State Road Authorities (NAASRA), and now located at Vermont in Victoria. It is financed by Federal and State Government Road Authorities whose permanent heads make up ARRB's Board of Directors. The Executive Director, a full-time employee and member of the Board, is responsible for administering the Directors' policies.

The ARRB regularly undertakes and sponsors road and road transport research over a comprehensive range of subjects and disseminates results to appropriate organisations, engineers and scientists involved in the design, location, construction, upkeep and use of roads. In selecting and monitoring its research projects, and developing a longer term research plan, ARRB is assisted by a senior advisory Steering Committee and four Technical Committees in the areas of Road Technology, Road Users, Road Transport and Local Government, the members of which are experts drawn from government, commerce and education.

ARRB disseminates road research information through its major biennial conferences, first held in 1962, and regular symposia, seminars and workshops and through its publications which include the *ARRB Conference Proceedings*, a quarterly journal *Australian Road Research*, the *Source Book for Australian Roads*, symposium and workshop papers and various reports and technical manuals arising out of its many research projects. ARRB also maintains a unique library of road literature and operates a computer-based information service which abstracts and indexes Australian road literature in the quarterly *Australian Road Index (ARI)*, and research projects in the annual *Australian Road Research in Progress (ARRIP)*. The machine-readable version of *ARI* and *ARRIP*, called Australian Road Research Documentation (ARRD), is available on AUSINET, the Australian Information Network.

ARRB acts as the Australian member of the Organisation for Economic Co-operation and Development's International Road Research Documentation (IRRD) system, contributing information on Australian literature and projects, IRRD information from all member countries is available to users of AUSINET. ARRB also maintains close contacts with road research organisations in other countries.

AIR TRANSPORT

Department of Transport

International Organisations. Australia is one of the 150 (as at 30 June 1982) members of the International Civil Aviation Organisation (ICAO). Australia has continued its membership of the (governing) Council since ICAO was established in 1947. Australia is also a member of the 15 man Air Navigation Commission which is responsible for drawing up international standards and procedures for the safety, regularity and efficiency of air navigation. In addition, Australia participates in the Commonwealth Air Transport Council, the South Pacific Regional Civil Aviation Council and the Airport Operators Council International.

International agreements. Australia had air service agreements in force with twenty-eight countries at 30 June 1982. Under these agreements Australia is granted rights to operate services between Australia to and through the countries in question; these rights are exercised by Australia's international airline Qantas. In return, the designated airlines of the other countries which are partners to these agreements are granted traffic rights in Australia. Australia also had air service arrangements granting traffic rights with four other countries at 30 June 1982.

International air services. At 30 June 1982, twenty-three overseas international airlines were operating regular scheduled air services to Australia. These were: Air-India (India), Air Nauru (Nauru), Air New Zealand (New Zealand), Air Niugini (Papua-New Guinea), Air Pacific (Fiji), Air Vanuatu (Vanuatu), Alitalia (Italy), British Airways (Britain), Canadian Pacific Air Lines (Canada), Cathay Pacific (Hong Kong), Continental Airlines (United States of America), Deutsche Lufthansa (Federal Republic of Germany), Garuda Indonesian Airways (Indonesia), Japan Air Lines (Japan), Jugoslovenski Aerotransport (Yugoslavia), KLM Royal Dutch Airlines (Netherlands), Singapore International Airlines (Singapore), Pan American World Airways (United States of America), Philippines Air Lines (Philippines), South African Airways (Republic of South Africa), Thai Airways International (Thailand), Malaysian Airways System (Malaysia), and Union de Transport Aeriens (France). Qantas, Australia's international airline, operates a fleet of 24 Boeing 747 jet aircraft. All shares in Qantas Airways Limited are owned by the Commonwealth Government.

International operations. The table following shows particulars of international airline traffic during 1981-1982 moving into and out of an area which embraces Australia and Norfolk Island. These figures do not include traffic between Australia and Norfolk Island.

AIR TRANSPORT: INTERNATIONAL AIRLINE TRAFFIC TO AND FROM AUSTRALIA(a), 1981-82p

Type of traffic	Number of		Freight tonnes	Mail tonnes
	flights	Passengers		
Traffic to Australia—				
Qantas Airways Limited	3,974	947,471	34,094	941
Other airlines	6,586	1,245,869	56,549	5,498
All airlines	10,560	2,193,340	90,643	6,439
Traffic from Australia—				
Qantas Airways Limited	3,950	885,487	23,581	2,803
Other airlines	6,594	1,193,311	45,158	1,291
All airlines	10,544	2,078,798	68,739	4,094

(a) Australian mainland and Norfolk Island.

Statistics covering the operations of Australia's regular overseas services are shown in the following table. These operations include all stages of Qantas flights linking Australia with overseas countries.

AIR TRANSPORT: OPERATIONS OF AUSTRALIA'S REGULAR OVERSEAS SERVICES

	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Hours flown number	85,839	79,499	75,643	70,065	74,879	73,679
Kilometres flown '000	65,221	61,586	58,962	59,040	59,109	58,188
Passengers—						
Embarkations number	1,488,858	1,551,679	1,569,374	1,782,673	1,933,580	1,883,477
Passenger-kilometres '000	10,541,870	11,318,928	12,029,554	14,317,936	16,296,416	14,876,509
Freight—						
Tonnes uplifted tonnes	33,417	34,380	40,972	51,373	52,326	53,753
Tonne-kilometres '000	243,911	258,748	301,253	373,534	412,518	418,849
Mail—						
Tonnes uplifted tonnes	2,997	3,205	2,981	3,238	3,878	3,919
Tonne-kilometres '000	26,217	27,788	27,618	32,019	36,226	36,581

Regular air services within Australia

Trunk route services. In June 1981 the Parliament passed a package of legislation consisting of the *Airlines Agreement Act 1981* and the *Airlines Equipment Amendment Act 1981*, as well as the *Australian National Airlines Repeal Act 1981* and the *Independent Air Fares Committee Act 1981*.

The Airlines Agreement Act ratified the 1981 Airlines Agreement between the Commonwealth, Ansett Transport Industries and TAA, which provided for the continuation of the two airline policy in respect of scheduled trunk route passenger services as well as repealing earlier Airlines Agreements. Successive Airlines Agreements have provided the basis for the two airline policy, under which scheduled passenger services on trunk routes are provided by the privately owned Ansett Airlines of Australia (a division of Ansett Transport Industries (Operations) Pty Ltd, a subsidiary of Ansett Transport Industries Ltd) and the Commonwealth owned Australian National Airlines Commission, trading as Trans-Australia Airlines (TAA). The 1981 Airlines Agreement also more clearly defined the role for regional and commuter operators.

The Airlines Equipment Amendment Act provided for the import, by specialist freight operators and regional airlines, of large turbo jet aircraft (the Commonwealth's power to control imports is the basic means of upholding the two airline policy). The Australian National Airlines Repeal Act provided for the restructuring of TAA as a public company, and the Independent Air Fares Committee Act provided for the establishment of a Committee with authority over fares for domestic regular public transport passenger services.

At 30 June 1982, the Ansett fleet included 16 Boeing 727s, 12 Boeing 737s, four McDonnell-Douglas DC 9s, three Electra freighters, nine Fokker F27 Friendships and three helicopters. At the same date, Trans-Australia Airlines operated a fleet of 12 Boeing 727s, three Airbus A300s, 10 McDonnell-Douglas DC 9s and eight Fokker F27 Friendships.

Regional services. In addition to their competitive trunk route services, both Ansett Airlines of Australia and Trans-Australia Airlines operate regional services, most of which are non-competitive. There are also a number of smaller regional airlines operating from Sydney (Air New South Wales and East-West Airlines), Adelaide (Airlines of South Australia), Perth (Airlines of Western Australia), Cairns (BPA Pty Ltd), and Darwin (Airlines of Northern Australia). Regional airlines are so-called because, in general, they serve specific geographic regions. Except for the independently-owned East-West Airlines and BPA Pty Ltd, all regional airlines are divisions of Ansett Transport Industries (Operations) Pty Ltd. The larger aircraft used by these regional airlines are Fokker F28 Fellowships and F27 Friendships.

Freight services. In addition to freight services provided by the passenger airlines, Interstate Parcel Express Company (IPEC) provides all-freight airline services with Argosy and DC 9 aircraft over a limited network including services across Bass Strait.

Commuter services. These are regular public transport flights with light aircraft operating to fixed timetables, but not operated under airline licences. They primarily provide airlinks between towns and country areas over routes which are not served by the major airlines. At 30 June 1982, there were 55 operators of commuter services in Australia, serving some 300 centres. Details of the operations of these commuter services are excluded from the statistics shown in this section.

Scheduled domestic airline services. Statistics of all regular airline services are set out in the following table.

AIR TRANSPORT: OPERATIONS OF REGULAR INTERNAL SERVICES, AUSTRALIA(a)

		1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Hours flown	number	270,928	258,151	279,385	280,233	284,381	277,199
Kilometres flown	'000	130,100	122,933	134,702	135,409	138,185	137,264
Passengers—							
Embarkations	number	9,315,141	9,348,697	10,289,477	10,720,181	11,504,957	11,380,798
Passenger-kilometres	'000	7,280,993	7,329,665	8,180,418	8,618,671	9,485,635	9,747,272
Freight—							
Tonnes uplifted	tonnes	106,061	108,108	120,887	127,528	129,775	124,955
Tonne-kilometres	'000	97,499	96,315	106,460	110,746	109,603	107,851
Mail—							
Tonnes uplifted	tonnes	9,708	9,636	11,307	13,126	15,053	17,372
Tonne-kilometres	'000	9,113	9,148	10,718	12,518	14,206	16,397

(a) Includes flights of all Australian-owned airlines, with the exception of those of Qantas Airways Limited, between airports located within Australia. The domestic carrier, East-West Airlines, commenced services between Australia and Norfolk Island in March 1977 and particulars of these flights are included from that time. Prior to March 1977, Australia-Norfolk Island flights were serviced by Qantas and details of those flights were included with statistics of regular overseas services.

Internal airline passenger embarkation and disembarkation. The statistics set out in the next table have been compiled by aggregating all internal airline passenger traffic loaded and unloaded at each airport. They include passengers on flights between Australia and Norfolk Island. At ports where through-passengers transfer between flights, such passengers are counted as embarking as well as disembarking passengers.

INTERNAL AIRWAYS PASSENGER EMBARKATIONS AND DISEMBARKATIONS AT PRINCIPAL AUSTRALIAN AIRPORTS

Airport	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
Sydney	4,788,086	4,839,215	5,274,577	5,539,561	5,961,807	5,858,143
Melbourne	4,125,932	4,149,390	4,552,462	4,743,757	5,104,448	5,046,031
Brisbane	2,119,538	2,075,381	2,252,888	2,282,641	2,521,119	2,636,552
Adelaide	1,454,917	1,615,684	1,729,030	1,801,084	1,931,395	1,930,219
Perth	629,530	704,041	792,768	830,273	910,637	929,949
Canberra	901,837	881,668	966,388	945,260	967,803	872,223
Coolangatta	314,780	320,425	409,151	457,789	570,137	632,791
Hobart	403,759	403,069	437,948	455,577	473,567	474,115
Cairns	275,439	270,147	307,525	345,344	387,095	426,064
Townsville	329,831	322,498	353,522	363,285	378,884	384,587
Launceston	304,784	309,341	353,596	387,456	390,215	380,512
Darwin	208,806	199,963	225,052	249,056	278,669	290,789
Mackay	249,196	244,025	254,954	253,229	261,982	197,892

General aviation activity, which covers all flying other than scheduled airline operations has grown rapidly throughout Australia in recent years and is an important sector of the Australian aviation industry. Hours flown by general aviation during 1980-81 were estimated at 1.83 million, approximately 4.4 per cent more than the previous year.

Aerodromes

The number of aerodromes throughout Australia and its external territories at 30 June 1982 was 445. Seventy-seven were owned by the Commonwealth Government and 368 by local authorities and private interests. The number of licensed helipads throughout Australia and its territories is 5. Capital expenditure on aerodrome and building construction was \$46.429 million in 1981-82. Maintenance expenditure on Commonwealth Government-owned aerodromes during 1981-82 was \$8.256 million. Expenditure on development and maintenance grants to licensed aerodromes participating in the Local Ownership Plan totalled \$6.744 million.

Airway facilities

A total of 460 navigational aids were in service at 30 June 1982. The total includes 249 non-directional beacons (NDB) (includes 221 standard NDB's and 27 locators), 108 distance measuring equipment (DME), 11 international distance measuring equipment (DMEI), 74 VHF omni-directional ranges (VOR), 17 instrument landing systems (ILS) and one twin locator approach system.

One hundred and sixty-four aerodromes are now equipped with night landing facilities. One hundred and seven Australian-designed 'T' systems (T-VASIS) are operating. Eight long-range surveillance radars, two short range and seven secondary surveillance radars are also in operation. There are twenty-six fully-equipped Air Traffic Control Centres and forty-two flight service units in operation.

Air transport registrations, licences, etc., in force in Australia

At 30 June 1981 there were 6,525 aircraft registered in Australia. At the same time there were also 54,667 pilots' licences in force, of which 24,644 were private pilots' licences, 5,320 commercial pilots' licences, 1,477 senior commercial pilots' licences, 2,321 air transport pilots' licences, and 20,905 student pilots' licences. In addition there were 733 flight engineer licences, and 17 flight navigator licences in force.

Accidents and casualties

AIR TRANSPORT: ACCIDENTS INVOLVING CASUALTIES(a), AUSTRALIA(b)

	1976	1977	1978	1979	1980	1981
Number	33	36	48	37	48	39
Persons killed	55	45	58	35	61	53
Persons seriously injured	17	24	35	29	33	33

(a) Accidents involving civil aircraft (including registered gliders) which resulted in death or serious injury. Excludes parachutists and casualties involving non-registered aircraft. (b) Excludes accidents outside Australia involving aircraft on the Australian register; includes all accidents to overseas registered aircraft that occur in Australia.

POSTAL, TELECOMMUNICATION AND RADIOCOMMUNICATION SERVICES

In this section, particulars for the Australian Capital Territory are included with those for New South Wales, and the South Australian figures include particulars for the Northern Territory, unless otherwise indicated. The Central Offices of the Department of Communications are located in Canberra and Melbourne.

Department of Communications

The Postal and Telecommunications Department was created on 22 December 1975. It replaced the Postmaster-General's Department, assuming those PMG functions remaining after the formation of the Postal and Telecommunications Commissions on 1 July 1975. Following the election in November 1980, the name of the Department was changed to the Department of Communications. A major activity of the Department is the administration of the *Wireless Telegraphy Act 1905* which concerns the regulation and management of the radio frequency spectrum for radiocommunications within the Commonwealth and its Territories.

The Department also undertakes, planning for the development of broadcasting and television services in Australia and the determination of standards and practices for technical equipment used in broadcasting and television services for which formal responsibility attaches to the Minister for Communications pursuant to the provisions of the *Broadcasting and Television Act*. The Department is closely involved in the planning and procurement of the National Communications Satellite System (NCSS), in association with other government departments and agencies in particular AUSSAT PTY LTD, a government-owned company formed to own and operate NCSS.

Another function of the Department is to provide policy advice to the Minister on postal, telegraphic, telephonic, broadcasting and other like services which are subject to legislation for which the Minister for Communications is responsible.

Authorities responsible to the Minister for Communications have been established to provide within Australia a network of facilities which enable people and organisations:

- to send letters, printed matter, parcels and money in Australia and overseas and to receive such items within Australia from overseas;
- to converse by telephone in Australia and overseas;
- to send and receive written messages, data pictures and other visual matter by electrical means within Australia and to and from overseas;
- to relay on the telecommunications network, radio and television broadcasts emanating within Australia and those on relay to and from overseas.

Australian Postal Commission

The Australian Postal Commission was established under the *Postal Services Act 1975*. It commenced operations on 1 July 1975 and trades under the name Australia Post.

The establishment of the Australian Postal Commission was accompanied by a complete reorganisation of the management of postal services in Australia. The Commission was given a charter to improve postal services whilst avoiding the large financial losses of previous years. The *Postal Services Act* sets specific financial objectives for the Commission, which are designed to enable postal services to be operated on a business-oriented basis.

In accordance with the *Postal Services Act 1975*, the Australian Postal Commission is required to pursue, as far as practicable, a financial policy to secure revenue sufficient to meet all expenditure chargeable to revenue and provide at least half of its capital expenditure.

Since 1 July 1975, Australia Post has taken a number of initiatives to develop new services and maintain existing ones while at the same time maintaining competitive pricing. The initiatives include:

- the introduction on 1 July 1981 of Australia Post Express, a fast service for urgent postal articles;
- the introduction of reduced rate and discount mail services for bulk lodgment of mail;
- the introduction of a concessional rate for domestic greeting cards in November and December;
- the introduction of a new Postal Money Order Service;
- the revision of the Registered Publications Service;
- the introduction of an overnight parcel service between all capital cities;
- a new policy for rural and remote mail deliveries which provides for a minimum of twice-weekly delivery wherever practicable;
- the extension of the high-speed International Priority Paid service network;
- the extension of the Surface Air Lifted network; and
- the introduction of the Bulk Direct Mail Service for approved addressed advertising mail.

The Commission has undertaken a program to decentralise the mail network as a means of improving efficiency and, more particularly, the reliability of the mail service. Plans for decentralised mail networks have already been approved for New South Wales, Victoria and Queensland. These involve establishment of regional mail centres in metropolitan and country areas to replace the former highly centralised network which relied heavily on a single facility in the capital cities. The new arrangements are almost complete in New South Wales and Victoria and under way in Queensland. The following tables indicate Australia Post's financial results, services and operations for 1981-82. Selected tables also show figures for earlier periods.

AUSTRALIAN POSTAL COMMISSION: REVENUE AND EXPENDITURE, 1977 TO 1982
(\$'000)

Year ended 30 June—	1977	1978	1979	1980	1981	1982
Revenue—						
Mail services	435,790	456,739	528,978	582,200	668,676	767,843
Money order, postal order services	6,881	6,242	5,434	6,350	7,758	10,059
Commission on agency services	101,739	95,636	93,171	82,189	83,471	86,935
Other revenue	17,186	20,110	18,907	19,442	22,147	22,591
Total	561,596	578,727	646,490	690,187	782,052	887,428
Expenditure—						
Operating and general	395,675	426,100	476,915	530,875	625,005	696,026
Transportation	50,168	55,343	44,842	52,744	61,018	69,985
Depreciation, superannuation, long-service leave, interest	86,854	95,217	102,144	94,876	108,772	140,639
Total	532,697	576,660	623,901	678,495	794,795 (a)	906,650

(a) Includes an abnormal adjustment to implement new depreciating accounting arrangements. See table below.

TRANSPORT AND COMMUNICATION

**AUSTRALIAN POSTAL COMMISSION: STATEMENT OF REVENUE AND
EXPENDITURE FOR THE YEAR ENDED 30 JUNE 1982**
(S'000)

Revenue—	
Mail services	767,843
Postal money order services	10,059
Commission on agency services	86,935
Other revenue	22,591
<i>Total</i>	887,428
Expenditure—	
Operating and general	696,026
Transportation	69,985
Depreciation	10,457
Superannuation	80,000
Long service leave	27,049
Interest	3,065
<i>Total</i>	886,582
Operating surplus (deficit) before abnormal item	846
Abnormal item—	
Adjustment to implement new depreciating accounting arrangements	(20,068)
Operating deficit after abnormal item	(19,222)
Appropriations—	
Unappropriated accumulated surplus/(deficit) brought forward	(12,743)
Deficit for the year	(19,222)
Accumulated deficit	(31,965)
Appropriation—	
For capital financing	(11,686)
Accumulated deficit carried forward	(20,279)

**AUSTRALIAN POSTAL COMMISSION: SUMMARY OF TRANSACTIONS
AFFECTING FIXED ASSETS, 1981-1982**
(S'000)

<i>Class of assets</i>	<i>Balance at 1 July 1981</i>	<i>Adjustments (a)</i>	<i>Additions in the year</i>	<i>Asset expenditure written out</i>	<i>Balance at 30 June 1982 (b)</i>
Land	35,984	(256)	2,913	59	38,582
Buildings	200,926	596	24,498	1,191	224,829
Motor vehicles	18,233	—	3,979	2,918	19,294
Plant and Equipment	57,870	(31,759)	7,798	422	33,487
<i>Total of fixed assets</i>	313,013	(31,419)	39,188	4,590	316,192
<i>Less accumulated depreciation</i>	66,887				63,234
Net book value of fixed assets	246,126				252,958

(a) Adjustments required to complete implementation of new depreciation accounting arrangements. (b) At cost.

**AUSTRALIAN POSTAL COMMISSION: ANALYSIS OF TRANSACTIONS
AFFECTING ACCUMULATED DEPRECIATION, 1981-82**
(S'000)

<i>Class of asset</i>	<i>Balance at 1 July 1981</i>	<i>Adjustments (a)</i>	<i>Depreciation provided for in 1981-82</i>	<i>Accumulated depreciation written out</i>	<i>Balance at 30 June 1982</i>
Buildings	38,577	153	4,555	734	42,551
Motor vehicles	6,140	—	3,715	1,806	8,049
Plant and Equipment	22,170	(11,506)	2,187	217	12,634
Accumulated depreciation	66,887	(11,353)	10,457	2,757	63,234

(a) Adjustments required to complete the depreciation accounting arrangements.

AUSTRALIAN POSTAL COMMISSION: PERSONS ENGAGED IN PROVIDING POSTAL SERVICES AT 30 JUNE 1981 AND 1982

	H.Q.	N.S.W. (Incl. A.C.T.)	Vic.	Qld	S.A. (Incl. N.T.)	W.A.	Tas.	Aust. 1982	Aust. 1981
Official staff (a)—									
Full-time Permanent	597	10,462	7,669	3,937	2,752	2,223	672	28,312	28,135
Full-time Temporary	10	2,520	1,061	258	64	183	51	4,147	4,611
Part-time	1	1,173	518	326	306	261	98	2,683	2,612
Other staff (b)	—	3,070	1,840	1,673	809	688	369	8,449	8,535
Total	608	17,225	11,088	6,194	3,931	3,355	1,190	43,591	43,893

(a) 'Official Staff' are those whose employment is governed by the *Postal Services Act 1975*. (b) Includes persons who are not employed under the *Postal Services Act*, but who are employed on the basis of business transacted. Also included are persons or organisations who hold road mail service contracts with the Australian Postal Commission.

AUSTRALIAN POSTAL COMMISSION: MAIL DELIVERY NETWORK AND POST OFFICES AT 30 JUNE 1981 AND 1982

	N.S.W	Vic.	Qld	S.A.	W.A.	Tas.	Aust. 1982	Aust. 1981
Contract road services	1,660	774	1,046	267	396	185	4,328	4,362
Households receiving mail	1,925,644	1,322,009	719,299	495,399	447,582	146,999	5,056,932	4,905,308
Businesses receiving mail	164,059	118,031	73,891	44,277	43,296	11,457	455,011	454,496
Post Offices—								
Official—								
At 1 July 1981	509	332	219	162	158	42	1,422	1,427
At 30 June 1982	507	332	217	157	158	41	1,412	1,422
Non-official—								
At 1 July 1981	1,149	916	562	483	329	196	3,635	3,742
At 30 June 1982	1,098	891	544	463	304	194	3,494	3,635
Total post offices	1,605	1,223	761	620	462	235	4,906	5,057

AUSTRALIAN POSTAL COMMISSION: TOTAL POSTAL ARTICLES HANDLED ('000)

Year ended 30 June	Posted for delivery within Australia	Posted for places abroad	Received from abroad	Total postal articles handled	Mail carried on domestic air services (included in total handled)	
					Articles	Gross weight kilograms
1977	1,975,417	82,158	140,802	2,198,377	496,470	6,448,310
1978	2,072,239	81,907	149,393	2,303,539	516,330	6,706,242
1979	(a)2,267,596	(a)87,757	149,278	(a)2,504,631	661,352	8,590,967
1980	2,379,953	94,826	156,573	2,631,352	769,391	9,994,392
1981	2,503,450	107,798	155,642	2,766,890	949,995	12,340,441
1982	2,606,124	105,154	165,276	2,876,554	1,083,876	14,079,557

(a) Estimating methods were refined in 1980 and volumes for 1979 have been reassessed on a comparable basis.

AUSTRALIAN POSTAL COMMISSION: ORDINARY POSTAL ARTICLES(a)
(*'000*)

<i>Year ended 30 June</i>	<i>Standard articles</i>				<i>Non-standard articles</i>			
	<i>Posted for delivery within Australia</i>	<i>Posted for places abroad</i>	<i>Received from abroad</i>	<i>Total articles</i>	<i>Posted for delivery within Australia</i>	<i>Posted for places abroad</i>	<i>Received from abroad</i>	<i>Total articles</i>
1980	2,033,092	79,414	112,093	2,224,599	320,803	12,769	39,847	373,419
1981	2,124,622	90,569	110,463	2,325,654	349,352	14,440	40,897	404,689
1982	2,221,294	87,501	121,929	2,430,724	353,669	14,920	38,188	406,777

STATES—YEAR ENDED 30 JUNE 1982

New South Wales	894,207	34,537	55,324	984,068	151,166	7,389	14,647	173,202
Victoria	589,329	27,422	42,766	659,517	110,524	4,171	15,515	130,210
Queensland	320,181	9,856	11,573	341,610	40,986	1,413	4,871	47,270
South Australia	191,183	6,796	4,679	202,658	23,354	723	1,141	25,218
Western Australia	175,265	8,516	7,587	191,368	21,902	1,188	2,014	25,104
Tasmania	51,129	374	..	51,503	5,737	36	..	5,773

(a) Includes Certified, Messenger Delivery and Priority Paid Mail.

AUSTRALIAN POSTAL COMMISSION: REGISTERED ARTICLES(a) AND PARCELS
(*'000*)

<i>Year ended 30 June</i>	<i>Registered articles</i>				<i>Parcels</i>			
	<i>Posted for delivery in Australia</i>	<i>Posted for places abroad</i>	<i>Received from abroad</i>	<i>Total articles</i>	<i>Posted for delivery in Australia</i>	<i>Posted for places abroad</i>	<i>Received from abroad</i>	<i>Total articles</i>
1977	3,370	1,375	2,696	7,441	16,900	1,030	1,970	19,900
1978	3,122	1,422	2,794	7,338	18,234	1,068	1,998	21,300
1979	(b)3,092	1,371	2,790	(b)7,253	(b)19,838	1,088	2,018	(b)22,944
1980	3,107	1,451	2,758	7,316	22,951	1,192	1,875	26,018
1981	3,204	1,470	2,330	7,004	26,272	1,319	1,952	29,543
1982	2,938	1,458	2,854	7,250	28,223	1,275	2,305	31,803

STATES—YEAR ENDED 30 JUNE 1982

New South Wales	988	752	1,846	3,586	11,065	534	1,228	12,827
Victoria	756	459	834	2,049	8,144	431	585	9,160
Queensland	510	88	46	644	4,327	109	205	4,641
South Australia	306	69	22	397	2,238	89	78	2,405
Western Australia	255	88	106	449	1,971	101	155	2,227
Tasmania	123	2	..	125	478	11	54	543

(a) Totals include Certified, Messenger Delivery and Priority Paid Mail.

(b) Estimating methods were refined in 1980 and volumes for 1979 have been reassessed on a comparable basis.

AUSTRALIAN POSTAL COMMISSION: SPECIAL SERVICES: ARTICLES HANDLED
(*'000*)

<i>Year ended 30 June</i>	<i>Certified mail</i>	<i>Messenger delivery</i>	<i>Priority paid mail</i>
1977	4,927	1,007	1,449
1978	5,473	1,013	1,783
1979	5,056	1,048	2,020
1980	5,780	1,169	2,350
1981	5,889	1,370	2,669
1982	5,897	1,434	2,793

STATES—YEAR ENDED 30 JUNE 1982

New South Wales	1,818	1,022	1,403
Victoria	1,729	238	649
Queensland	939	56	297
South Australia	595	57	233
Western Australia	601	57	152
Tasmania	215	4	59

Telecommunications services within Australia

The Australian Telecommunications Commission commenced operations on 1 July 1975, taking over the telecommunications functions of the former Postmaster-General's Department.

The functions of the Commission as set out in the *Telecommunications Act 1975* are:

- to plan, establish, maintain and operate telecommunications services within Australia;
- to operate such other services as the Commission is authorised by this Act to operate;
- to provide, at the request of the Australian Government, technical assistance outside Australia in relation to the planning, establishment, maintenance and operation of telecommunications services in countries outside Australia; and
- to do anything incidental or conducive to the performance of any of the preceding functions.

Financial results

The following tables show the earnings, expenses and funds situation for the latest available three years of the Commission's operations.

AUSTRALIAN TELECOMMUNICATIONS COMMISSION: REVENUE (\$'000)

Year ended 30 June—	1980	1981	1982
Telephone rentals	602,655	674,102	833,201
Telephone calls	1,355,373	1,533,172	1,761,610
Telephone connections and rearrangements	102,091	119,556	142,727
Telegrams	32,497	33,005	30,165
Telex rentals	25,644	29,830	40,020
Telex calls	28,936	29,345	32,488
Other earnings(a)	133,613	190,430	244,166
Total	2,280,810	2,609,440	3,084,377

(a) Major items within this classification are: fees for advertisements in telephone directories, proceeds of sales of fixed assets, telephone service connection fees and telex call fees.

AUSTRALIAN TELECOMMUNICATIONS COMMISSION: EXPENDITURE (\$'000)

Year ended 30 June—	1980	1981	1982
Maintenance of plant	576,760	644,515	790,826
Operating	399,873	482,387	556,407
General and administrative	178,739	191,762	238,097
Accommodation	99,382	116,484	128,527
Depreciation	447,383	533,680	577,216
Superannuation	—	—	—
Long service leave	—	—	—
Interest	367,127	408,125	518,187
Total	2,069,264	2,376,953	2,809,260

LOCAL AND TRUNK LINE TELEPHONE CALLS

<i>Year ended 30 June—</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>
Effective paid local calls	4,786,559,000	5,300,578,000	5,451,452,000
Local calls per service	1,041	1,078	1,044
Trunk line calls	589,774,000	680,961,000	785,466,000
Trunk lines calls per service	129	139	150
Total calls	5,376,333,000	5,981,539,000	6,236,918,000

Subscriber Trunk Dialling (STD) facilities were introduced during the year 1961–62. For the year ended at 30 June 1982, 94.4 per cent of trunk calls were made by STD.

Telegrams

Telegrams can be lodged at any post office or telephone office or from any public telephone equipped for multi-coin operation. In addition, telegrams can be dispatched from any subscriber's telephone or telex service. The number of telegrams of various types transmitted within Australia is set out below.

TELEGRAM TRAFFIC

<i>Year ended 30 June—</i>	<i>1980</i>	<i>1981</i>	<i>1982</i>
Ordinary	4,631,985	4,320,353	3,808,525
Urgent	153,718	141,887	133,758
Meteorological	349,445	333,685	315,753
Service	295,747	265,086	200,580
Total telegrams	5,430,895	5,061,011	4,458,616

Telex

Particulars of the operations of the telex network, which are additional to the telegraph traffic shown above, are as follows.

TELEX NETWORK SERVICES AND INTERNAL CALLS

<i>Year ended 30 June—</i>	<i>Number of services</i>	<i>Internal calls during the year</i>
1980	29,731	37,415,000
1981	33,975	43,057,000
1982	37,802	44,209,000

Further detailed statistics are contained in the Commission's Annual Reports.

Overseas telecommunications services

The Overseas Telecommunications Commission (Australia) (OTC), established by the Overseas Telecommunications Act 1946, is a Commonwealth Statutory Authority responsible for the establishment, maintenance, operation and development of all public telecommunications services between Australia and other countries, between Australia and its external territories and with ships at sea. It has a specific responsibility under section 38A, to make its services available at the lowest possible rates of charges. OTC is responsible to the Commonwealth Parliament through the Minister for Communications.

Telephone, telex, public message telegram, phototelegram, switched data and leased circuit services are provided to most countries and places throughout the world by means of submarine cables, communications satellites and, in a decreasing number of cases, short wave radio. Television relay is provided to and from countries with access to satellite communications facilities. Recently introduced services include INTERPLEX (a large scale, common-use, leased-message switching system), MIDAS (a multimode international data acquisition service), OVERSEASFAX (an international facsimile service for document transfer) and INTERTEL (a comprehensive public message service for small businesses).

International consultation

OTC participates in the Commonwealth Telecommunications Organisation (CTO), the International Telecommunication Union (ITU) and the International Telecommunications Satellite Organisation (INTELSAT) which owns and operates the international telecommunications satellite system, and the International Maritime Satellite Organisation (INMARSAT), which operates an international satellite system for the provision of high-grade telecommunications, including distress and search and rescue communications, with ships at sea.

Establishments

The Commission's Head Office is in Sydney and it has offices in Melbourne and Brisbane. The Commission owns and operates International Gateway terminals at Paddington and Broadway in Sydney which interface with the national telecommunications network; cable stations at Cairns (Qld), Guam in the Mariana Islands and at Norfolk Island (at present under construction); satellite earth stations at Carnarvon (W.A.), Ceduna (S.A.) and Moree (N.S.W.); international radio stations at Doonside and Bringelly (N.S.W.) and at Gngara (W.A.); and fourteen coast radio stations at points around the Australian coast and one at Norfolk Island for communicating with ships at sea.

Submarine cables

OTC is a part owner of the following submarine cables (the year in which they opened for service is in brackets): COMPAC, Sydney-Auckland-Suva-Hawaii-Vancouver (1963); SEACOM, Sydney-Madang-Guam-Hong Kong-Kota Kinabula (Malaysia)-Singapore (1967); TRANSPAC II, Hawaii-Guam-Okinawa (1975); HAW III, Hawaii-U.S. Mainland (1975); TASMANTAN, Sydney-Auckland (1976); A-PNG, Sydney-Port Moresby (1976); OLUHO, Okinawa (Japan)-Philippines-Hong Kong (1977); ASEAN P-S, Philippines-Singapore (1978); ASEAN I-S, Indonesian-Singapore (1980) and IOCOM, Penang-Madras (1981).

In November 1979 the Government gave approval for OTC to participate in a replacement Pacific cable system (ANZCAN) linking Australia and New Zealand with Fiji, Hawaii and North America, with onward connections to Britain and Europe. OTC's investment in the system, which is now under construction and will be entering into service in 1984, will be approximately \$200 million.

Satellites

OTC is the fifth largest shareholder in INTELSAT which operates communication satellites over the Indian, Pacific and Atlantic Oceans, and a major shareholder in INMARSAT (see above). INTELSAT satellites now carry more than half of Australia's international telecommunications and, through OTC, provide capacity through which the remote area television service is provided by the ABC.

1981-82 Statistics

As at 31 March 1982, OTC staff totalled 2,616; revenue for the previous 12 months was \$260 million and profit before tax was \$47.7 million. Telephone service, which is available to 213 overseas destinations, provided about 68 per cent of revenue, telex about 17 per cent and telegraph about 4.1 per cent. International Subscriber Dialling (ISD), by which the customer can dial his or her own overseas telephone calls, is now available to more than 132 destinations. Over 99 per cent of international telex calls from Australia are now automatically subscriber connected.

More detailed statistics are contained in the OTC Annual Report.

Facilities to match growth

The high growth in demand for the Commission's services requires that the capacity of its major transmission and switching plant be at least doubled every three years. The OTC is applying computer techniques extensively in a number of its services, including telephone, telex, MIDAS (multimode international data acquisition service) and INTERPLEX (private message-switched networks).

Charges

Tariff reductions were introduced on selective routes in the high customer usage telephone and telex services. Some increases were necessary in telegram tariffs due to the high cost, labour intensive nature of the service.

Detailed information on OTC

The Commission reports on its operations to Parliament through its Minister about October each year. Traffic, financial and other information is contained in its Annual Report, copies of which are available on request to the OTC.

International telecommunication traffic

The following table shows particulars of overseas telecommunication traffic between Australia and overseas countries for the years ended 31 March 1981 and 1982.

INTERNATIONAL TELECOMMUNICATION SERVICES: YEARS ENDED 31 MARCH 1981 AND 1982

Service		Transmissions					
		From Australia		To Australia		Total	
		1980-81	1981-82	1980-81	1981-82	1980-81	1981-82
Telephone	'000 paid minutes	82,380	109,960	67,100	82,900	149,480	192,860
Telex	'000 paid minutes	20,024	22,648	20,425	23,450	40,449	46,098
Television programs	paid minutes	7,316	10,899	34,661	77,237	41,977	(a)97,051
Telegraph services	'000 words	49,525	48,845	35,691	35,592	85,216	84,437

(a) Includes 8,915 paid minutes of television programs distributed within Australia by OTC.

Coastal stations

The Overseas Telecommunications Commission operates fourteen coastal radio stations at points around the Australian coast, and one at Norfolk Island. During the year ended 31 March 1982 the Coastal Radio Service handled 7,531,000 paid words to ships and 6,375,000 words from ships. Ship calls over the radiotelephone service extended over 536,000 paid minutes.

Radiocommunication stations authorised

At 30 June 1978 there were 460,171 civil radiocommunication stations authorised for operation in Australia and its Territories. Of these, 6,316 were stations established at fixed locations, 24,000 were land stations which were established at fixed locations for communication with mobile stations, 13 were space and broadcasting stations, 420,442 were mobile stations and 9,400 were amateur stations. Particulars of broadcasting stations are shown on page 557.

BROADCASTING AND TELEVISION

Radio and television broadcasting falls within the jurisdiction of the Commonwealth Government and, pursuant to the *Broadcasting and Television Act 1942*, is one of the responsibilities of the Minister for Communications. Federal bodies which are involved include the Australian Telecommunications Commission, the Australian Broadcasting Commission (ABC), the Special Broadcasting Service, the Australian Broadcasting Tribunal, the Department of Communications and the Overseas Telecommunications Commission.

Basically, the Australian broadcasting system is comprised of the following types of stations:

- national radio and television stations broadcasting programs produced by the Australian Broadcasting Commission;
- commercial radio and land television stations operated by companies under licence;
- public radio stations operated by corporations under licence on a non-profit basis; and
- stations operated under the aegis of the Special Broadcasting Service.

As from 1 January 1977, the Minister for Communications assumed the responsibility for broadcasting planning, including all matters relating to the technical operation of stations, and for the investigation of interference to the transmission and reception of programs.

The Commercial Radio and Television Service

Commercial radio and television stations are operated by companies under licences granted by the Australian Broadcasting Tribunal and with technical operating conditions determined by the Minister for Communications. The stations obtain income from the broadcasting of advertisements. At 30 June 1982 there were 135 commercial radio stations in operation in Australia. Call signs for radio stations are prefixed by numerals indicating each State of Australia. (2—New South Wales, 3—Victoria, 4—Queensland, 5—South Australia, 6—Western Australia, 7—Tasmania, 8—Northern Territory). In addition there were fifty commercial television stations and 110 commercial television translator stations in operation in Australia. A television translator station is a station of low power designed to receive the signals of another station and re-transmit them; it does not originate programs. There are nine limited coverage repeater stations in Australia operated by mining companies which transmit programs recorded on magnetic tape.

The Public Broadcasting Service

The Broadcasting and Television Act also makes provision for the grant of licences for the operation of public radio and television stations. At 30 June 1982, 30 public radio stations were broadcasting "special purpose" programs ranging from fine music to ethnic languages. A number of public radio stations are associated with tertiary educational institutions. There are no public television services in operation.

The Special Broadcasting Service

The Special Broadcasting Service (SBS) was established by the Commonwealth Government on 1 January 1978 to provide multilingual radio services and, if authorised by regulations, to provide multilingual television services. A regulation authorising the provision of multilingual television services was gazetted in August 1978. The Service is also empowered by the *Broadcasting and Television Act 1977* to provide broadcasting and television services for such special purposes as are prescribed by the Government.

In carrying out its functions the SBS provides:

- *multilingual broadcasting services to:*
 - the Melbourne metropolitan area and Geelong through radio station 3EA which broadcasts in 42 languages for 126 hours per week
 - the Sydney metropolitan area through radio station 2EA which broadcasts in 48 languages for 126 hours per week
 - the provincial centres of Newcastle and Wollongong in N.S.W. through 2EA translator stations.
- subsidies to public broadcasting stations in Adelaide, Brisbane, Canberra, Hobart, Perth, Albury, Armidale, Bathurst, Lismore and Newcastle for the production and presentation of ethnic radio programs.
- a subsidy to Whyalla Ethnic Broadcasters Inc. for the production of ethnic radio programs for presentation on commercial radio station 5AU Whyalla.
- a *multicultural television service* on VHF Channel 0 and UHF Channel 28 to the Sydney and Melbourne metropolitan areas and Geelong.

Broadcasting services

The Australian Broadcasting Tribunal

The Australian Broadcasting Tribunal came into being on 1 January 1977 and is responsible for certain of the functions previously performed by the Australian Broadcasting Control Board (abolished 31 December 1976), including the licensing and supervising of the operations (other than technical aspects) of all stations except national stations. The Tribunal is empowered to grant, renew, suspend or revoke licences, to determine program and advertising standards applicable to licensed stations, and to determine the hours of transmission of licensed stations. In particular, the Tribunal is required to conduct public inquiries into the granting of licences following the invitation of applications by the Minister. The Tribunal may also conduct enquiries into the renewal of licences, the setting of standards of broadcasting practices, alleged breaches of licence conditions and such other matters as the Minister may direct.

The National Broadcasting Service

In sound broadcasting the programs of the National Broadcasting Service are provided by the Australian Broadcasting Commission through transmitters operated by the Australian Telecommunications Commission.

Technical facilities. At 30 June 1982 the National Broadcasting Service comprised 127 transmitting stations, of which ninety-four were medium frequency, sixteen frequency modulation and seventeen high frequency (six internal and eleven Radio Australia).

The medium-frequency transmitters operate in the broadcast band 526.5 to 1,606.5 kilohertz. The high-frequency stations, using frequencies within the band of three to thirty megahertz, provide services to listeners in sparsely populated parts of Australia such as the north-west of Western Australia, the Northern Territory, and northern and central Queensland.

Many of the programs provided by country stations are relayed from the capital cities using high-quality program transmission lines. A number of program channels are utilised to link national broadcasting stations in the capital cities of Australia. When necessary, this system is extended to connect both the national and commercial broadcasting stations.

At 30 June 1982 eighty of the Australian medium-frequency stations were situated outside the six State capital cities.

Program facilities. The programs of the Australian Broadcasting Commission cover a wide range of activities. The proportions of broadcasting time allocated on Radio 1 stations to the various types of program during 1981-82 were as follows: entertainment 58.1 per cent; news 8.3 per cent; sporting 13 per cent; spoken word 9.9 per cent; drama and features 0.2 per cent; parliament 7.6 per cent; religious 1.2 per cent; rural 0.8 per cent; and presentation 0.5 per cent. By contrast, the ABC's Radio 2 station's programming was: classical music 53.8 per cent; light music 0.4 per cent; entertainment 3.5 per cent; drama and features 5.1 per cent; young people's programs 0.2 per cent; education 5.9 per cent; spoken word 14.0 per cent; religious 3.7 per cent; news 8.3 per cent; rural 3.2 per cent; and presentation 1.4 per cent. Radio 3 (regional) stations feature a higher proportion of news and rural programs. Further particulars of the operations of the Australian Broadcasting Commission in respect of music, drama and features, youth education, talks, rural broadcasts, news, and other activities are shown in the Forty-ninth Annual Report of the Australian Broadcasting Commission.

Overseas Broadcasting Service

There are seven high-frequency stations at Shepparton, two at Lyndhurst, Victoria and two at Carnarvon, Western Australia which provide the overseas service known as Radio Australia. As in the case of the National Broadcasting Service, these stations are maintained and operated by the Australian Telecommunications Commission, and their programs are arranged by the ABC. The programs, which, as well as entertainment, give news and information about Australia presented objectively, are directed to most parts of the world but with special emphasis on Asia and the Pacific. They include 67 news bulletins a day. The overseas audience has been quite substantial in recent years, as evidenced by a large number of letters from listeners abroad (233,687 in 1981-82, and 377,697 in 1980-81), Radio Australia broadcasts in nine languages—English, Indonesian, Japanese, Neo-Melanesian, Thai, French, Standard Chinese, Cantonese and Vietnamese.

BROADCASTING STATIONS: 30 JUNE 1982

Type of station	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
National—									
Medium frequency	21	6	21	10	22	6	6	2	94
High frequency	1	2	2	—	1	—	—	—	6
Frequency modulation	3	2	3	3	2	2	—	1	16
Overseas—									
Short wave (Radio Australia)	—	9	—	—	2	—	—	—	11
Commercial—									
Medium frequency	43	24	29	10	17	8	2	2	135
Frequency modulation	2	2	1	1	1	—	—	—	7
Public broadcasting—									
Medium frequency	2	2	1	1	1	—	—	1	(a)8
Frequency modulation	8	4	3	2	2	2	2	—	23

(a) Includes broadcasting stations 2EA and 3EA operated by the Special Broadcasting Service.

Television services

The National Television Service

The National Television Service is provided by the Australian Broadcasting Commission through transmitters operated by the Australian Telecommunications Commission. The first national station (ABN Sydney) commenced regular transmission on 5 November 1956. At 30 June 1982, 251 stations were operating—86 transmitters and 165 translator stations.

The television programs provided by the Australian Broadcasting Commission cover a wide range of activities. The proportions of television time allocated among the ABC's various departments at 30 June 1982 were as follows: drama 18.83 per cent; public interest 11.55 per cent; sporting 16.96 per cent; news 6.72 per cent; variety and acts 5.16 per cent; education 26.8 per cent; musical performance 1.72 per cent; religious 1.08 per cent; special arts and aesthetics 1.52 per cent; cartoons 2.43 per cent; panel and quiz games 0.24 per cent; and presentation 6.81 per cent. The average weekly transmission time for the 251 national television transmitters was ninety-eight hours during the year ended 30 June 1982.

During the year ended 30 June 1982, thirty three new national translator channels went into operation in New South Wales, Victoria, Queensland, Western Australia and the Northern Territory.

Colour television

Colour television (PAL) was introduced in Australia late in 1974 and services became fully effective in March 1975.

TELEVISION AND TRANSLATOR STATIONS: 30 JUNE 1982

<i>Type of station and location</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>N.T.</i>	<i>A.C.T.</i>	<i>Total</i>
National—									
Metropolitan television	1	1	1	1	1	1	1	1	8
Country television	13	8	31	6	15	2	3	—	78
Translator	37	12	45	10	34	14	12	1	165
<i>Total, National</i>	<i>51</i>	<i>21</i>	<i>77</i>	<i>17</i>	<i>50</i>	<i>17</i>	<i>16</i>	<i>2</i>	<i>251</i>
Commercial—									
Metropolitan television	3	3	3	3	2	1	1	1	17
Country television	11	6	8	3	4	1	—	—	33
Translator	36	12	24	5	7	17	—	1	102
<i>Total, Commercial</i>	<i>50</i>	<i>21</i>	<i>35</i>	<i>11</i>	<i>13</i>	<i>19</i>	<i>1</i>	<i>2</i>	<i>152</i>

Related publications

More detailed figures and particulars for earlier years are included in the annual publications, *Rail Transport, Australia* (9213.0), *Commonwealth Government Finance* (5502.0), and *Motor Vehicle Registrations, Australia* (9304.0). Current information on subjects dealt with in this chapter appears in the *Monthly Summary of Statistics, Australia* (1304.0), the *Digest of Current Economic Statistics, Australia* (1305.0), *Overseas and Coastal Shipping, Australia* (annual) (9207.0), two monthly publications, *Registration of New Motor Vehicles, Australia* (9301.0) and *Motor Vehicle Registrations, Australia* (9303.0), one monthly publication, *Road Traffic Accidents Involving Fatalities, Australia* (9401.0), and the quarterly publication *Road Traffic Accidents Involving Casualties (Admissions to Hospitals), Australia* (9405.0).

Information additional to that contained in ABS publications is available in the annual reports and other statements of the Department of Transport and Construction, the Department of Aviation, the various harbour boards and trusts, the several Government railway authorities, the Australian Postal Commission, the Australian Telecommunications Commission, and the Australian Broadcasting Commission.