

CHAPTER 20

TRANSPORT AND COMMUNICATION

The statistics in this chapter relate in the main to the year 1975-76, with comparisons restricted to a few recent years. The chapter contains information on shipping; railways; tram, bus and ferry services; journeys to work and to school; motor vehicles; road traffic accidents; roads and bridges; 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.

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 Ministers for Transport, Capital Territory, Northern Territory, and each State Minister with transport responsibilities. The New Zealand Minister of Transport, Civil Aviation and Railways, and the Northern Territory Cabinet Member for Transport and Industry attend as observers.

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. ATAC is the meeting ground at a ministerial level and provides an effective means for inviting discussion and reaching uniformity of approach towards transport administrative procedures and policy. It also provides a means for reviewing and discussing national solutions of 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, 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 Bureau of Transport Economics

This Bureau, which from June 1977 incorporated the functions of the former Commonwealth Bureau of Roads, undertakes research and analysis to assist the Commonwealth Government in the formulation and development of policy aimed at the efficient allocation of resources in the transport field. This work covers all transport activities and includes the provision of advice on the level of funding for road investment as well as matters relating to the reduction of transport costs and the rational planning of future transport facilities. For administrative purposes the Bureau is attached to the Department of Transport, but it is responsible to the Minister for Transport for the conduct of its studies and investigations.

SHIPPING

Control of shipping

Commonwealth Government navigation and shipping legislation

For an outline of the development and scope of Commonwealth Government legislation, see Year Book No. 55, pages 366–7.

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 *Stevedoring Industry 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 and the *Ship Construction Bounty Act* 1975.

Navigation Act 1912 as Amended

One of the largest Commonwealth Acts, the *Navigation Act*, with forty-four sets of Regulations made under it, provides for various regulatory controls over ships and their crews, passengers and cargoes, mainly in connection with the ensuring of the safety of the ship and the preservation of life at sea. Substantial penalties are provided for serious offences. In particular, it gives effect to the important international conventions produced under the aegis of the Inter-Government Maritime Consultative Organisation (IMCO) dealing with safety of life at sea, ships' load lines and prevention of collisions.

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 a statutory Committee 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 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 coastal trade provisions of the *Navigation Act*, the Australian coastal trade is reserved for licensed vessels, i.e. those which comply with Australian standards of manning, accommodation, and award conditions and wages. 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 these conditions and to operate in the Australian coastal trade subject to approval being given for the importation of the vessel where necessary.

Provision exists for unlicensed vessels to operate in the coast 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.

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.

The last amending *Navigation Act* was passed in 1972. It was mainly for the purpose of inserting provisions dealing with the tonnage measurements of ships.

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. In October 1974, when the Act was amended, the title was changed to the Australian Shipping Commission to reflect the increasing importance of overseas trading activities.

As at 30 June 1977 the Commission, operating as the Australian National Line, owned and/or operated a fleet of thirty-four vessels. The fleet includes ten vessels engaged in overseas trading: five vehicle deck cargo ships—*Australian Emblem* 23,481 tonnes deadweight, *Australian Escort* 23,481 tonnes deadweight, *Australian Enterprise* 14,364 tonnes deadweight, *Australian Explorer* 14,206 tonnes deadweight and *Allunga* 20,601 tonnes deadweight; three cellular container ships—*Australian Endeavour* 26,948 tonnes deadweight, *Australian Venture* 39,454 tonnes deadweight and *Australian Exporter* 26,650 tonnes deadweight; and two ore/bulk carriers—*Australian Pioneer* 122,600 tonnes deadweight and *Australian Prospector* 139,346 tonnes deadweight. The coastal fleet of twenty-four vessels includes one vehicle deck passenger ship—*Empress of Australia* 2,736 tonnes deadweight; seven vehicle deck cargo ships totalling 44,505 tonnes deadweight; one container/bulk-ship of 12,140 tonnes deadweight in the Darwin trade; two bulk carriers in the 100,000 tonnes deadweight class; four bulk carriers in the 50–100,000 tonnes deadweight class; eight other bulk carriers each less than 50,000 tonnes deadweight totalling 95,632 tonnes deadweight; and one grain carrier 2,054 tonnes deadweight.

The Line has two 27,000 tonnes deadweight bulk carriers under construction in an Australian yard; and one 122,000 tonnes deadweight, one 139,000 tonnes deadweight and four 15,900 tonnes deadweight bulk carriers, and one 15,500 tonnes deadweight vehicle deck vessel under construction in overseas yards.

The Line operates specialised terminals at Adelaide, Melbourne, Burnie, Devonport, Bell Bay, Sydney, Port Kembla, Brisbane, Rockhampton (Port Alma), Mackay, Townsville, Cairns and Darwin.

The vehicular passenger ships *Empress of Australia* and *Australian Trader* carried 131,199 passengers between the mainland and Tasmania in the year ended 30 June 1976. In the year ended 30 June 1977, the *Empress of Australia* carried 112,063 passengers between Melbourne and Devonport. During the same periods, 11.9 and 12.9 million tonnes of cargo respectively were carried by Australian National Line vessels.

Australian Shipbuilding Board

Advice to the Minister on the shipbuilding industry, including recommendations on bounty for each particular shipbuilding proposal, is provided by the Australian Shipbuilding Board. This Board has a membership of six including a representative from each of the Department of Defence (Navy Office) and the trade union movement.

To 31 December 1977, 355 vessels valued at approximately \$788 million had been completed by Australian shipyards. Seventy-seven of those vessels (ranging from customs launches to survey and research vessels, landing craft and lighthouse supply vessels) were built for the Commonwealth Government. The remaining 278 were built under a Commonwealth subsidy scheme for other ship owners, including the Australian National Line.

Three major Australian shipyards are building merchant vessels—one in South Australia, and two in New South Wales; two other shipyards are engaged principally in naval shipbuilding—one in New South Wales and one in Victoria. There are numerous smaller yards building fishing vessels and other small craft and many builders of wooden commercial and pleasure boats.

Shipbuilding Assistance

The shipbuilding industry in Australia has been given Government assistance since the introduction of the shipbuilding subsidy scheme in 1947. The level of maximum subsidy has been determined by the Government on the basis of inquiries into the industry by the former Tariff Board, now the Industries Assistance Commission. These inquiries have been held in 1954, 1959, 1963, 1971 and 1976. The Commission, in 1978, has a reference under inquiry covering the construction of vessels under 6,000 tons gross.

Present policy is given effect by the *Ship Construction Bounty Act 1975*. Assistance is by way of a bounty at a fixed percentage dependent upon the size of the vessel and, for maximum bounty, the date upon which construction was commenced in the shipyard. This rate is applied to the lowest acceptable Australian tender received as a result of public calling of tenders with appropriate deductions applied for items ineligible for bounty. Under the policy Australian owners may seek approval to import ships when overseas prices are less than the bounty-paid Australian price.

Vessels eligible for the bounty are fishing vessels of 21 metres length and longer and other vessels of 150 gross construction tons and above. For the smaller vessels, bounty is at 25 per cent, rising at 2½ per cent per 1,000 tons gross to the maximum which, in 1978, is 31 per cent. This diminishes to a long-term rate of 25 per cent for vessels commenced in 1981. The administration of the policy on shipbuilding assistance is the responsibility of the Minister for Industry and Commerce.

Australian Stevedoring Industry Authority

Following extensive consultations with parties directly involved in the Australian stevedoring industry, a National Stevedoring Industry Conference was established to consider the development of a framework within which parties directly involved in the industry could be given greater responsibility in the industry's affairs. In April 1977 a report of the National Stevedoring Industry Conference was presented and, as a consequence, legislation was developed to provide for: termination of the operation of the Australian Stevedoring Industry Authority; alternative means for dealing with industry funding arrangements; and measures designed to improve the operational and industrial relations aspects of the industry. Legislation was introduced into the Parliament during November 1977 and becomes operative from a date to be proclaimed.

An important part of the proposed new arrangements is the establishment of a Stevedoring Industry Consultative Council which would be under the chairmanship of a Government appointee and draw its membership from all major organisations concerned with stevedoring.

The legislation provides for the establishment of a federal co-ordinating committee comprising representatives of both the employers and the Waterside Workers' Federation to oversee the implementation and operation of arrangements agreed to in the National Stevedoring Industry Conference. In each port a Port Co-ordinating Committee is to be established to implement the arrangements at the local level.

Legislation will also provide for the establishment of the National Stevedoring Industry Finance Committee to oversee the disbursement of funds collected for employers by various statutory levies. The statutory provisions relating to the industry are contained in the *Stevedoring Industry Acts (Termination) Act 1977*; the *Stevedoring Industry Charge (Termination) Act 1977*; the *Stevedoring Industry Finance Committee Act 1977*; the *Stevedoring Industries Levy Act 1977*; the *Stevedoring Industry Levy Collection Act 1977*; and the *Port Statistics Act 1977*.

Commission of Inquiry into Transport to and from Tasmania

The Commission was established in April 1974 to inquire into, and report upon, the following matters:

- the existence and extent of any differences between the levels of charges for the transport of persons and goods between places in Tasmania and places on the mainland of Australia and the levels of charges for the transport of persons and goods between places on the mainland of Australia;
- the main cause of any such differences;
- the effects of any such differences on particular industries in Tasmania and on the possible intention to extend existing industries and develop new industries in Tasmania; and
- any measures that might be taken to reduce or eliminate any such differences that have an adverse effect for Tasmania, being measures to improve efficiency in respect of shipping, port utilisation, the organisation of freight forwarding, and other relevant matters, with a view to reducing transport costs.

The Commission of Inquiry was directed to make such recommendations arising out of the inquiries into the above matters as it considered appropriate.

Following presentation of the Report of Commissioner Mr J. F. Nimmo, C.B.E. to the Government on 5 March 1976, the Minister for Transport announced the adoption of those aspects of the Commissioner's recommendations concerning financial assistance to Tasmanian shippers who suffer a cost disability in the movement of certain non-bulk cargoes by sea between Tasmania and the mainland.

The Commonwealth Department of Transport was made responsible for the management of an arrangement to be known as the Tasmanian Freight Equalisation Scheme (TFES). The northbound component of the scheme was introduced in July 1976 and the southbound component in July 1977.

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

The Overseas Cargo Shipping provisions of the Trade Practices Act are administered by the Minister for Transport.

The principal object of the Overseas Cargo Shipping provisions is the control of the operations of shipping conferences (associations into which shipowners have traditionally combined) and of individual shipowners in relation to the carriage of goods by sea from Australia to other countries. To achieve that object, the provisions are designed to facilitate negotiations between shipowners and The Australian Shippers' Council, an association designated under the Act by the Minister that represents the interests of shippers and producers of goods exported from Australia.

Regarding shipping conferences, the provisions require certain agreements of a specified character between shipowners operating in the outward trades from Australia to be filed with the Clerk of Shipping Agreements. A shipowner who is a party to such an agreement may be requested by the Minister to give him an undertaking to negotiate with the Council with regard to the arrangements for, and the terms and conditions that are applicable to, cargo shipping to which the agreement relates. Whether such a shipowner has failed so to negotiate, or whether the services provided pursuant to the agreement are adequate, efficient or economical, are the matters that may be referred by the Minister for enquiry and report by the Trade Practices Tribunal. Certain powers are vested in the Governor-General to disapprove the agreement after consideration of a report by the Tribunal to the Minister. A probable effect of such a disapproval would be to force a shipowner party to the agreement to carry on its business in the absence of any agreement with other shipowners. The Governor-General may, however, in his discretion, approve such a shipowner entering into another agreement.

Provisions similar to the provisions in respect of shipping conferences apply in respect of individual shipowners. In addition, an individual shipowner may, as a result of a declaration by the Governor-General, be prohibited from engaging in certain specified activities in carrying on his business, e.g. engaging in freight cutting with the object of substantially damaging the business of another shipowner.

The provisions also protect the rights of efficient Australian flag operators to participate to a reasonable extent in overseas cargo shipping.

Review of Australia's Overseas Cargo Shipping Legislation

On 17 March 1977 the Minister for Transport announced the establishment of a study group to review Australia's overseas cargo shipping legislation and report within six months.

The review covered the operation of Part X of the Trade Practices Act, possible future legislative arrangements and the role and long-term financing of the Australian Shippers' Council.

The recommendations of the report are being considered by the Government.

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.

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 tons and under.

Period covered by the statistics

Monthly shipping statistics relate to vessels arriving at and departing from each port in a calendar month. Annual statistics are published on a financial year basis.

Statistics of vessels

Statistics of vessels are compiled in terms of registered net tonnages. Net tonnage is expressed in units of 100 cubic feet (i.e. 100 cu ft equals 1 ton) and represents the volume of enclosed space which can be utilised for cargo or passengers.

Statistics of vessel movements

Returns show the last or next port of call of a vessel according to whether an arrival or departure at a port is being reported. Each vessel is classified to either the overseas or the coastal fleets serving Australia. This information, supplemented by the voyage of the vessel indicated by ports it visits to load or discharge cargo, is the basis on which each vessel movement is allocated to one of the following classifications: overseas direct; overseas via other States; overseas via ports in the same State; interstate direct; interstate via ports in the same State; intrastate.

Cargo loaded or discharged

Returns for arrivals show cargo discharged, and for departures cargo loaded, in terms of tonnes or cubic metres, depending on the basis on which freight is charged.

Type of service

Overseas shipping cargo statistics are classified by type of service. Coastal shipping cargo statistics, on the other hand, combine all service types.

For overseas shipping, cargo shipped in liners is shown separately from cargo shipped in tramps, bulkships and tankers. A liner is a vessel which, on the voyage on which cargo is loaded or discharged at an Australian port, is operated to provide services on a specified route on a relatively regular basis.

Statistics of cargo shipped in liner services do not necessarily provide a measure of cargo carried by ships operating under shipping conference arrangements. For example, liner services may be provided by shipping companies which are not parties to conference agreements. Cargo may also be shipped under shipping conference conditions in vessels operating on a voyage charter basis for specific cargo and, in the statistics, such cargo is classified as cargo shipped in tramp vessels.

Country of loading or discharge of overseas cargo

In statistics of overseas shipping cargo, country of loading or discharge of 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.

Transshipments of cargo within Australia

The State of loading or discharge shown in the statistics is the State in which cargo is loaded onto, or discharged from, reporting vessels. Cargo loaded in a given State can therefore include cargo previously shipped interstate, while cargo discharged can include cargo which would subsequently be shipped interstate.

Units of measurement

Deadweight tonnage. A measure of the total mass (weight) of cargo, fuel, potable water, boiler feed water, ballast, stores, crew and their gear, etc. It is equal to loaded displacement tonnage less light displacement tonnage.

Gross tonnage. A measure of the enclosed internal volume of a ship and its superstructure, with certain spaces exempted. It is also an indicator of the total volumetric size of a ship.

Net tonnage. A volumetric measure consisting of the gross tonnage less the volume of non-earning spaces, e.g. master's cabin, crew accommodation, wheelhouse, galley, etc., and an allowance for machinery spaces. Volumetric measurement of ships has not yet been converted to metric.

Overseas shipping

The following table shows the number of vessels entered and cleared direct from and to overseas countries, and the aggregate net tonnage involved, for the years 1971-72 to 1975-76.

OVERSEAS SHIPPING(a): VESSELS ENTERED AND CLEARED

		1971-72	1972-73	1973-74	1974-75	1975-76
Entered	number	5,439	5,647	5,975	6,230	5,772
	'000 net tons	53,144	62,628	72,042	80,313	75,002
Cleared	number	5,447	5,631	5,909	6,254	5,824
	'000 net tons	53,491	62,031	71,462	80,305	75,399

(a) Excludes vessels of 200 net tons and under.

Particulars of the total overseas movement of shipping for each year from 1822 to 1920-21 were published in Year Book No. 15, page 507 and those for each year from 1921-22 to 1950-51 were published in Year Book No. 40, page 97. Those for each year from 1947-48 are shown in the Statistical Summary of this Year Book.

The following table shows, for each State and the Northern Territory, the number of vessels entered and cleared direct from and to overseas countries, and the aggregate net tonnage involved.

OVERSEAS SHIPPING(a): VESSELS ENTERED AND CLEARED, STATES, 1975-76

		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
Entered	number	1,405	647	1,052	294	2,019	163	192	5,772
	'000 net tons	14,279	4,970	13,072	2,539	35,730	2,457	1,956	75,002
Cleared	number	1,187	587	1,266	334	2,130	137	183	5,824
	'000 net tons	12,614	4,599	14,968	2,412	36,377	2,241	2,188	75,399

(a) Excludes vessels of 200 net tons and under.

The following table shows particulars of overseas shipping which entered Australian ports according to country of registration of vessels.

OVERSEAS SHIPPING: VESSELS ENTERED DIRECT, BY COUNTRY OF REGISTRATION, AUSTRALIA(a)
('000 net tons)

Country of registration of vessels	1973-74	1974-75	1975-76	Country of registration of vessels	1973-74	1974-75	1975-76
Australia	331	398	512	Singapore, Republic of	788	991	1,229
Denmark	884	1,022	374	Sweden	1,423	1,506	1,053
France	171	124	338	United Kingdom	10,828	12,263	9,938
Germany, Federal Republic of	2,377	2,575	1,932	United States of America	618	860	623
Greece	4,957	4,248	4,156	U.S.S.R.	572	795	1,369
Hong Kong	229	345	922	Other countries	3,718	5,275	5,078
India	1,496	1,548	1,034				
Italy	913	978	722	All countries—			
Japan	20,751	22,904	24,080	In cargo	19,558	19,764	18,089
Liberia	10,077	11,876	12,129	Proportion of total %	27.1	24.6	24.1
Netherlands	1,181	1,218	798	In ballast	52,484	60,549	56,913
New Zealand	363	289	198	Proportion of total %	72.9	75.4	75.9
Norway	8,130	7,909	5,159				
Panama	2,235	3,189	3,358	Grand Total	72,042	80,313	75,002

(a) Excludes vessels of 200 net tons and under.

Australian registered tonnage which entered Australian ports from overseas during the year 1975-76 represented 0.68 per cent of the total tonnage entered.

Interstate shipping

Interstate movement

Interstate direct. The following table shows the number of coastal vessels entered and the net tonnage recorded into each State and the Northern Territory from any other State during 1975-76. Total interstate movements by coastal and overseas vessels are shown in *Total interstate movements* below.

INTERSTATE MOVEMENT: COASTAL VESSELS ENTERED INTERSTATE DIRECT 1975-76(a)

		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
Number of vessels	.	883	1,122	310	380	196	1,033	91	4,015
Net tonnage	'000 tons	6,453	6,276	2,316	2,029	2,567	2,903	300	22,845

(a) Excludes vessels of 200 net tons and under.

Overseas via States. The figures in the following table show the number and aggregate net tonnage of overseas vessels entered and cleared which, having arrived at an Australian port direct from an overseas port, continued their voyages from/to overseas countries via other Australian States.

INTERSTATE MOVEMENT: OVERSEAS VESSELS ENTERED AND CLEARED VIA OTHER AUSTRALIAN STATES, 1975-76(a)

		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
Entered	number	1,200	1,307	699	545	407	340	46	4,544
	'000 net tons	8,558	8,266	4,928	3,190	3,491	1,373	534	30,340
Cleared	number	1,437	1,350	492	512	304	372	56	4,523
	'000 net tons	10,486	8,567	3,093	3,285	3,005	1,581	344	30,361

(a) Excludes vessels of 200 net tons and under.

Total interstate movements. The following table shows, for each State and the Northern Territory, the total number of vessels entered from and cleared for other States during the year 1975-76, together with the aggregate net tonnage. Total interstate movement includes details of vessels entered or cleared interstate direct, interstate via ports in the same State and overseas via other States.

INTERSTATE MOVEMENT: TOTAL VESSELS ENTERED AND CLEARED, STATES AND NORTHERN TERRITORY, 1975-76(a)

		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
Entered	number	2,155	2,438	1,219	983	658	1,464	146	9,063
	'000 net tons	15,644	14,633	7,926	5,647	6,261	4,712	878	55,701
Cleared	number	2,359	2,503	984	903	609	1,478	156	8,992
	'000 net tons	17,044	15,147	5,913	5,357	6,094	4,702	678	54,935

(a) Excludes vessels of 200 net tons and under.

Australian trading vessels

The following table shows particulars of all Australian trading vessels of 200 gross tons or more engaged in the regular overseas, interstate or intrastate services at 30 June 1977.

**AUSTRALIAN TRADING VESSELS OF 200 GROSS TONS OR MORE
30 JUNE 1977**

(Source: Department of Transport)

<i>Vessels</i>	<i>Number</i>	<i>Deadweight tonnes</i>	<i>Gross tons</i>
Interstate vessels—			
Australian-owned, Australian-registered	54	870,445	584,047
Overseas-owned, Australian-registered, engaged in Australian coastal trade—			
New Zealand-owned	2	11,056	8,362
Other	5	147,116	94,044
Australian-owned, overseas-registered	1	41,563	23,811
Overseas-owned, overseas-registered, on charter, engaged in Australian coastal trade	12	687,640	375,661
Total interstate vessels	74	1,757,820	1,085,925
Intrastate vessels	19	311,888	194,472
Total coastal trading vessels	93	2,069,708	1,280,397
Overseas trading vessels—			
Australian-registered	12	477,880	321,311
Overseas-registered	7	173,297	115,660
Total overseas trading vessels	19	651,177	436,971
Total Australian trading vessels	112	2,720,885	1,717,368

Harbour boards and trusts**New South Wales**

The Maritime Services Board of New South Wales exercises general control over intra-state shipping, including the survey and certification of vessels, the licensing of harbour craft and the examination and issue of certificates to officers. It is responsible for the provision of pilotage services, lights, beacons, buoys and other port facilities; the imposition and collection of rates and charges on goods and vessels; and the general control and management of the navigable waters and ports within the State. At the ports of Sydney, Newcastle and Botany Bay the Board is also responsible for the provision of adequate wharfage and channels and the carrying out of all construction, maintenance and dredging work. Since 1 February 1936 the State enactments on port charges, including the Navigation Act of New South Wales, the Harbour and Tonnage Rates Act and the Sydney Harbour Trust Act, have been administered by the Maritime Services Board.

The activities of the Maritime Services Board are financed through the Consolidated Revenue Fund and the Maritime Services Fund. Revenue and expenditure in connection with pilotage and navigation services and the administration and collection of fees at Port Kembla and the other smaller ports form part of the Consolidated Revenue Fund of the State Government. Revenue and expenditure for the year 1975-76 was \$14,357,000 and \$6,722,000 respectively. The Maritime Services Fund is credited with all revenue earned at the Ports of Sydney, Newcastle, and Botany Bay with the exception of that derived from pilotage and navigation services. All expenditure on the administration and maintenance of these ports is met by this Fund.

Financial details relating to the Maritime Services Fund are shown in the following table.

**MARITIME SERVICES BOARD FUND: FINANCES OF THE PORTS OF SYDNEY,
NEWCASTLE AND BOTANY BAY**

(\$'000)

Year	Revenue			Expenditure			Surplus (+) or deficit (-)
	Capital debt at 30 June	Wharfage and tonnage rates	Total	Working expenses (a)	Interest debt redemption exchange, etc.	Total	
1971-72	93,620	19,406	30,371	23,857	6,459	30,316	+55
1972-73	103,341	18,601	29,201	23,134	6,969	30,103	-902
1973-74	110,423	24,225	40,591	32,403	7,755	40,158	+433
1974-75	112,263	25,670	46,764	37,979	8,485	46,464	+301
1975-76	115,729	28,582	49,311	39,822	9,416	49,238	+73

(a) Includes provisions for renewals, long-service leave, etc.

Port of Sydney. The wharves are situated close to the business centre of the city, about 6 or 8 kilometres from the Heads. At 30 June 1976 there were five dolphin berths 1,020 metres long, and seventy-six effective commercial cargo berths with a total length of 13,500 metres controlled by the Board. Accommodation for harbour craft amounts to 1,500 metres, while the length of other berths, including oil and private wharves, totals 4,500 metres. Depth of water at wharves is up to 13 metres. Special facilities for the storage and handling of products such as wheat, wool, coal, etc. are provided. Docking facilities are available for large vessels at the Captain Cook Graving Dock. Container facilities became available in March 1969 with the opening of the eastern section of the Balmain container terminals to cellular container vessels.

Port of Newcastle. Shipping at Newcastle is concerned primarily with the coal, iron and steel and other heavy industries located in the district. However, facilities are available for the shipment of wool, wheat and frozen meat, and a wharf is available for timber.

Botany Bay. The port is primarily a discharging centre for the oil refinery at Kurnell, near Sydney. One jetty with a tanker berth each side of the jetty is available, as well as three tanker offshore moorings with submarine pipelines.

Port Kembla. This is the port of the southern coalfields and the major industrial areas in and about Wollongong.

Other ports. In addition to the ports of Sydney, Newcastle, Botany Bay and Port Kembla, the Board controls twenty-nine outports along the coastline of 1,900 kilometres. The shipping trade of these outports is relatively small.

Victoria

Port of Melbourne. This comes under the control of the Melbourne Harbour Trust Commissioners, a financially independent statutory organisation with a full-time chairman and five part-time commissioners.

During the past ten years, the advanced methods of cargo handling, which have developed with the advent of container unit load and roll-on roll-off vessels now entering the Port, have required an expenditure in excess of \$60 million on capital works. The current capital value of the Port of Melbourne is more than \$120 million.

The Port covers an area of 27 square kilometres and provides 19 kilometres of berthage, with ninety-two commercial berths. The main container complex, Swanson Dock, has four berths. Constructed at a cost of \$20 million and taking some six years to complete, this thirty-six hectares complex handled 4.2 million tonnes of containerised cargo in 1975-76.

Currently, the Port of Melbourne has seven roll-on roll-off berths. The Webb Dock area, the Port's busiest roll-on roll-off complex, was originally a ferry berth (constructed in 1959) with a two hectares back-up area. It has now been developed into a four berth complex, with a back-up area of 8 hectares. During 1975-76 Webb Dock handled 1.9 million tonnes of cargo.

The depth of water (low water ordinary spring tide) from the main channels to the principal wharves is 9.4 to 12.2 metres.

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

MELBOURNE HARBOR TRUST: FINANCES
(\$'000)

Year	Gross loan indebtedness at 31 December	Revenue		Expenditure			Surplus (+) or Deficit (-)	
		Wharfage and tonnage rates	Total	Operation, administration and maintenance	Interest, debt redemption, exchange, etc.	General reserve, depreciation, renewals and insurance account		
1972 . . .	45,644	9,398	15,478	10,569	2,506	2,867	15,942	- 464
1973(a) . . .	(b)	5,485	8,777	5,368	1,298	1,930	8,596	+ 181
1973-74 . . .	48,051	12,702	21,338	11,451	2,820	3,818	18,089	+ 3,249
1974-75 . . .	51,060	14,124	24,156	14,461	3,141	4,648	22,250	+ 1,906
1975-76 . . .	56,018	18,192	27,918	15,489	3,716	5,174	24,379	+ 3,539

(a) From January 1973 the Trust's accounting period has been changed from a calendar year to a fiscal year. (b) Gross loan indebtedness at 30 June 1973 was \$46,201,000.

Port of Geelong. This is operated by the Geelong Harbour Trust and has available nineteen effective berths, plus two berths at the Explosives Pier, Point Wilson owned and operated by the Commonwealth Government. Two modern dry bulk berths (Lascelles Wharf Nos 1 and 2 berths) became fully operational in 1970 and a roll-on roll-off berth at Corio Quay came into operation in January 1971.

Port of Portland. Development projects currently in hand will provide the port with facilities necessary to handle fully laden carriers up to 71,000 tonnes deadweight. In the first instance, No. 1 berth and its approaches are being dredged from 11 metres to 12 metres low water and the bulk grain gallery extended to the outer limits of the K. S. Anderson wharf. Trade handled during 1975-76 amounted to 644,835 tonnes; operating revenue was \$1,459,180.

Queensland

The ports of Queensland generally are administered by harbour boards with members representing the cities, town and districts served by the ports. The ports of *Bowen, Bundaberg, Cairns, Gladstone, Mackay, Rockhampton* and *Townsville* are administered by Boards. Where no board is established, control is exercised by the Department of Tourism and Marine Services. The principal ports controlled by the Department are *Brisbane, Hay Point, Lucinda, Maryborough, Mourilyan, Thursday Island* and *Weipa*.

Brisbane. This, the busiest port in the State, is a river port of world standard dredged to a depth sufficient to accommodate most classes of vessels. The port provides wharves for containers, bulk grain, fertiliser, freezer goods, petroleum products and general cargo. Ship repair facilities include a dry dock accommodating vessels up to 85,000 tonnes deadweight. Two refineries, situated at the mouth of the river, can supply all ships' bunkering requirements.

The finances of Brisbane Harbour for the years 1971-72 to 1975-76 are shown in the following table.

BRISBANE HARBOUR: FINANCES
(\$'000)

Year	Loan indebtedness at 30 June	Receipts		Payments	
		Harbour dues	Total	Working expenses(a)	Total
1971-72 . . .	6,352	3,001	4,349	3,308	3,789
1972-73 . . .	6,653	3,010	5,586	3,700	4,228
1973-74 . . .	6,866	3,265	6,451	4,308	4,862
1974-75 . . .	7,482	3,490	7,940	5,380	5,989
1975-76 . . .	8,428	3,929	6,220	6,288	7,003

(a) Excludes interest and redemption included in total.

Because of the demand for port facilities with greater depth, a port of Brisbane study recommended that a new port should be developed at Fisherman Island, at the mouth of the Brisbane River, to

provide a more modern shipping service including container and roll-on roll-off shipping. Design work has been completed for access roads, railways and bridges. The Port of Brisbane Authority was established on 6 December 1976 to administer the port.

South Australia

Department of Marine and Harbors. All South Australian harbours are controlled by the Department of Marine and Harbors, which is responsible to the Minister of Marine for the discharge of its duties and functions. The most important ports are the seven deep-sea ports of *Port Adelaide*, *Port Pirie*, *Port Augusta*, *Wallaroo*, *Port Lincoln*, *Port Giles* and *Thevenard*. In South Australia there are also six privately-owned and operated ports. The principal of these are *Whyalla*, *Ardrossan*, *Rapid Bay*, *Proper Bay* (Broken Hill Pty Co. Ltd), and *Port Stanvac* (Petroleum Refineries (Aust.) Pty Ltd). Maximum depths of water (low water) at the wharves of the main ports range from 6.1 metres at Port Augusta to 15.0 metres at Port Lincoln. The following tables shows the finances of the Department for 1972-73 to 1976-77.

DEPARTMENT OF MARINE AND HARBORS, SOUTH AUSTRALIA: FINANCES
(\$'000)

Year	Loan indebtedness at 30 June	Revenue	Expenditure from revenue			Surplus (+ or Deficit(-))
			Working expenses	Interest	Total	
1972-73	62,655	7,324	5,453	3,028	8,481	-1,157
1973-74	67,082	10,037	6,537	3,359	9,896	+141
1974-75	73,013	10,889	8,425	3,828	12,253	-1,365
1975-76	80,388	10,705	8,294	5,432	13,726	-3,021
1976-77	87,343	12,751	10,277	6,704	16,981	-4,230

Western Australia

Port of Fremantle. This is operated and controlled by the Fremantle Port Authority. The port covers an extensive water area of some 447 square kilometres and comprises an inner and an outer harbour. The inner harbour includes twenty deep-water land-backed berths providing more than 56,800 square metres of covered storage space and 3,994 metres of wharf berth accommodation. All inner harbour berths are dredged to a low water depth of 11 metres. The outer harbour includes three main anchorages: Gage Roads, Owen Anchorage and Cockburn Sound. Deep-water jetties, including the oil refinery jetty in Cockburn Sound, are available in the outer harbour. Ocean-going deep-draft ships enter the Sound by means of a channel dredged through Success and Parmelia Banks to a low water depth of 14 metres and a bottom width of 152 metres. In the outer harbour there are three tanker berths each with a low water depth of 13 metres at the Kwinana oil refinery, two berths at the nearby steelworks jetties with a low water depth of 12 metres, two berths at the alumina works jetty with a low water depth of 12 metres, one berth at the bulk cargo jetty with a low water depth of 13 metres, and one berth at the Kwinana grain jetty with a low water depth of 17 metres. There is also a special berth for the handling of explosives. Total effective berth accommodation in the outer harbour is 2,153 metres. Gross earnings amounted to \$18,926,000 for 1975-76, working expenses to \$15,095,000, interest charges on loan capital to \$1,531,000 and loan indebtedness to \$25,789,000.

The Ports of *Albany*, *Bunbury*, *Esperance*, *Geraldton* and *Port Hedland* are controlled by their respective Port Authorities.

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

Tasmania

Port services in Tasmania are under the control of seven port authorities: the Marine Boards of Hobart, Devonport, Burnie, Circular Head (Stanley), King Island (Currie), Flinders Island (Whitemark) and the Port of Launceston Authority. Port facilities previously under the control of the Smithton Harbour Trust were vested in the Circular Head Marine Board from July 1973. The ports at *Hobart*, *Launceston* (*Bell Bay*), *Burnie* and *Devonport* are general cargo terminals for overseas and interstate shipping. Other ports catering primarily for overseas export of specialised cargoes include *Port Latta* (iron ore pellets), *Triabunna* (wood chips), and *Port Huon* (fruit).

AUTHORITIES CONTROLLING PORTS, TASMANIA: FINANCES
1971-72 TO 1975-76
 (\$'000)

Authority	Loan indebtedness at 30 June	Receipts (revenue account) total	Expenditure (revenue account)		Total (a)	New loans raised	Loan expenditure
			Works and services	Loan charges			
Hobart	11,256	3,670	1,718	1,296	4,057	2,100	2,725
Launceston	9,487	4,676	2,794	1,075	4,768	450	460
Devonport	8,290	1,847	669	874	1,807	1,000	1,507
Burnie	11,974	2,382	705	1,025	2,275	200	553
Circular Head	1,096	179	48	111	185	85	121
King Island	92	116	30	12	87	..	..
Flinders Island	180	50	24	18	48	..	3
Total 1975-76	42,375	12,918	5,988	4,411	13,226	2,935	5,368
1974-75	40,133	12,402	5,031	3,740	11,345	3,214	4,693
1973-74	38,656	10,159	3,785	3,362	9,310	3,067	3,150
1972-73	36,973	9,007	2,761	3,026	7,170	3,457	4,805
1971-72	34,648	7,752	2,928	2,844	7,194	4,590	5,261

(a) Includes expenditure not specified in component items.

Shipping at principal ports

The following table shows the total volume of shipping—overseas and coastal—entering the principal ports of Australia.

TOTAL SHIPPING: VESSELS ENTERED AT PRINCIPAL PORTS(a)

Port of entry	1974-75		1975-76		Port of entry	1974-75		1975-76	
	Num- ber	Net tons	Num- ber	Net tons		Num- ber	Net tons	Num- ber	Net tons
		'000		'000			'000		'000
New South Wales—					Western Australia—				
Sydney	2,925	16,481	2,409	15,584	Fremantle(b)	1,345	10,699	1,318	10,754
Botany Bay	366	3,286	288	3,501	Albany	127	855	125	743
Newcastle	1,377	9,093	934	8,172	Bunbury	154	937	111	799
Port Kembla	804	7,401	734	7,473	Geraldton	109	811	144	883
Victoria—					Yampi Sound	130	1,577	117	1,130
Melbourne	2,608	13,059	2,369	12,245	Port Hedland	639	15,749	561	13,066
Geelong	420	2,936	371	2,794	Dampier	532	12,487	540	12,591
Westernport	386	4,720	423	5,089	Port Walcott	173	4,716	171	4,538
Queensland—					Tasmania—				
Brisbane	1,246	8,573	1,219	8,519	Hobart	505	1,594	440	1,546
Bundaberg	90	467	83	557	Burnie	344	1,398	366	1,569
Cairns	176	696	149	748	Devonport	422	1,247	361	1,144
Gladstone	429	7,005	388	6,206	Launceston	413	2,314	386	2,211
Hay Point	159	4,459	150	4,416	Port Latta	40	716	32	692
Mackay	225	1,056	245	1,124	Northern Territory—				
Rockhampton	80	299	97	354	Darwin	134	670	148	678
Townsville	328	1,700	363	1,909	Groote Island	96	700	106	770
Weipa	285	5,337	232	4,277	Gove	129	1,852	97	1,491
South Australia—									
Adelaide	1,108	4,087	1,140	4,053					
Port Lincoln	158	809	140	667					
Port Pirie	146	863	157	976					
Port Stanvac	68	1,238	97	1,605					
Thevenard	100	430	66	295					
Whyalla	311	2,369	283	2,060					

(a) Excludes vessels of 200 net tons and under.

(b) Includes Kwinana.

Shipping cargo

Overseas and interstate cargo

The following table shows a summary of overseas and interstate cargo discharged and loaded during the past five years.

CARGO DISCHARGED AND LOADED: AUSTRALIA
(^{'000})

Year	Overseas cargo				Interstate cargo			
	Discharged		Loaded		Discharged		Loaded	
	Tonnes	Cubic metres	Tonnes	Cubic metres	Tonnes	Cubic metres	Tonnes	Cubic metres
1971-72	19,505	5,865	108,047	3,161	25,801	3,087	26,387	2,799
1972-73	20,167	6,084	132,362	3,555	27,364	3,136	28,006	2,927
1973-74	23,055	7,641	150,471	3,071	28,570	3,224	29,471	3,034
1974-75	21,893	8,029	164,866	2,926	27,864	3,199	28,454	3,143
1975-76	19,718	7,170	156,133	2,488	28,371	2,978	28,241	2,937

The following table shows details of container and non-container cargo discharged and loaded at Australian ports during 1975-76.

OVERSEAS CONTAINER AND NON-CONTAINER CARGO DISCHARGED AND LOADED BY PORT, 1975-76
(^{'000})

Port	Discharged				Loaded			
	Container		Non-container		Container		Non-container	
	Tonnes	Cubic metres	Tonnes	Cubic metres	Tonnes	Cubic metres	Tonnes	Cubic metres
New South Wales—								
Sydney	970	1,238	1,862	932	694	534	4,457	318
Newcastle	6	33	1,146	7	2	..	9,410	5
Total	976	1,271	3,008	939	696	534	13,867	323
Victoria—								
Melbourne	526	2,331	1,042	1,180	1,051	471	1,064	243
Geelong	..	1	1,167	5	..	1	2,060	2
Total	526	2,332	2,209	1,185	1,051	472	3,124	245
Queensland—								
Brisbane	70	259	782	326	337	46	1,691	79
Townsville	2	..	460	40	3	28	1,183	116
Weipa	..	..	51	..	..	..	4,785	..
Total	72	259	1,293	366	340	74	7,659	195
South Australia—								
Adelaide	10	47	401	329	37	49	680	221
Total	10	47	401	329	37	49	680	221
Western Australia—								
Fremantle	25	197	3,777	204	159	55	6,034	144
Albany	..	..	96	..	..	..	649	1
Exmouth Gulf	..	..	1	..	..	..	1	..
Total	25	197	3,874	204	159	55	6,684	145
Tasmania—								
Hobart	..	..	121	7	2	..	197	3
Burnie	1	..	52	1	9	..	152	1
Total	1	..	173	8	11	..	349	4
Other Ports	1	3	7,149	30	51	48	121,425	123
Total all Ports	1,611	4,109	18,107	3,061	2,345	1,232	153,788	1,256

The following table shows details of overseas and interstate cargo discharged and loaded at principal Australian ports during 1975-76.

CARGO DISCHARGED AND LOADED AT PRINCIPAL PORTS, 1975-76
(^{'000})

Port	Overseas cargo				Interstate cargo			
	Discharged		Loaded		Discharged		Loaded	
	Tonnes	Cubic metres	Tonnes	Cubic metres	Tonnes	Cubic metres	Tonnes	Cubic metres
New South Wales—								
Sydney	2,832	2,170	5,151	852	1,511	220	197	214
Botany Bay	1,550	..	127	..	3,980	..	164	..
Newcastle	1,152	41	9,412	5	3,561	..	868	22
Port Kembla	660	2	5,377	..	7,761	4	1,861	..
Other . . . . .	..	..	469	18	19	..	..	..
Total New South Wales	6,193	2,212	20,536	875	16,832	224	3,091	237
Victoria—								
Melbourne	1,568	3,511	2,115	714	1,571	1,000	997	1,151
Geelong	1,167	6	2,060	3	436	..	897	..
Portland	94	..	259	1	47	..	19	..
Westernport	135	..	1,615	..	404	..	7,930	..
Total Victoria	2,964	3,516	6,049	718	2,458	1,000	9,844	1,151
Queensland—								
Brisbane	852	585	2,028	125	3,019	18	89	46
Cairns	29	..	430	..	12	..	10	..
Gladstone	714	..	7,505	..	61	..	517	..
Hay Point . . . . .	..	..	10,997	..	..	..	148	..
Mackay	80	2	569	..	65	..	350	..
Townsville	462	40	1,186	144	105	2	177	1
Weipa	51	..	4,785	..	..	..	53	1
Other	1	..	1,020	..	26	..	348	..
Total Queensland	2,188	627	28,521	269	3,288	20	1,692	47
South Australia—								
Port Adelaide	411	376	717	270	677	19	214	17
Ardrossan . . . . .	..	..	206	..	..	..	463	..
Port Lincoln	107	..	478	15	49	..	34	..
Port Pirie	13	..	634	..	246	..	190	..
Port Stanvac	1,849	..	101	..	533	..	612	..
Whyalla	105	..	1,693	..	1,216	..	2,196	..
Other	70	..	742	..	..	..	394	..
Total South Australia	2,556	376	4,571	285	2,720	19	4,103	17
Western Australia—								
Fremantle	3,802	401	6,193	199	1,171	18	1,714	48
Albany	96	..	649	1	21	..	2	..
Bunbury	68	1	805	27	..	..	59	..
Dampier	291	..	33,808	..	4	..	155	..
Geraldton	49	..	1,049	56	..	..	..	..
Port Hedland	47	5	30,375	2	18	..	5,675	..
Port Walcott	366	..	11,121	..	2	..	..	2
Yampi Sound . . . . .	..	..	2,796	..	..	..	183	..
Other	62	2	1,713	30	53	..	276	..
Total Western Australia	4,781	409	88,510	313	1,269	18	8,064	51
Tasmania—								
Hobart	121	7	199	3	666	199	474	155
Burnie	53	1	161	1	241	333	342	241
Devonport	2	..	30	1	132	624	176	639
Launceston	54	9	1,156	22	671	417	167	337
Port Latta	29	..	1,858	..	7	..	..	..
Other	22	..	565	..	5	71	9	41
Total Tasmania	281	17	3,969	27	1,722	1,644	1,168	1,413
Northern Territory—								
Darwin	224	12	71	..	52	3	1	3
Groote Island	1	..	1,362	..	17	23	275	3
Gove	530	1	2,544	..	12	27	4	14
Total Northern Territory	756	13	3,977	..	81	52	280	20
Australia	19,718	7,170	156,133	2,488	28,371	2,978	28,241	2,937

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 (i.e. liner or tramp, bulkship and tanker).

**OVERSEAS CARGO LOADED AND DISCHARGED IN AUSTRALIA: MAJOR TRADE AREAS
BY TYPE OF SERVICE**
(^{'000})

Major trade areas	<i>Liners(a)</i>		<i>Tramps, bulkships, tankers</i>		<i>All vessels</i>	
	<i>Tonnes</i>	<i>Cubic metres</i>	<i>Tonnes</i>	<i>Cubic metres</i>	<i>Tonnes</i>	<i>Cubic metres</i>
1975-76—						
Overseas cargo loaded—						
North America and Hawaii	561	167	5,356	4	5,918	171
South America	26	16	477	3	503	19
Europe (including U.S.S.R.)	1,176	583	29,609	49	30,785	632
Africa	221	65	1,580	44	1,802	109
Asia—						
Eastern Asia	1,091	366	107,917	33	109,008	399
Other Asia	874	357	4,983	310	5,857	667
Total Asia	1,965	723	112,900	342	114,865	1,065
Papua New Guinea, New Zealand and Pacific Islands	816	435	1,438	43	2,254	478
Indian Ocean Islands and Antarctic Area . . . . .	..	..	5	14	5	14
Overseas cargo discharged—						
North America and Hawaii	457	941	1,285	339	1,742	1,280
South America	5	13	..	..	5	13
Europe (including U.S.S.R.)	547	2,036	536	124	1,083	2,161
Africa	52	72	111	2	163	74
Asia—						
Eastern Asia	559	1,742	2,290	1,116	2,849	2,858
Other Asia	192	499	11,422	106	11,614	606
Total Asia	752	2,242	13,713	1,222	14,464	3,464
Papua New Guinea, New Zealand and Pacific Islands	595	156	1,023	13	1,617	170
Indian Ocean Islands and Antarctic Area . . . . .	..	..	644	9	644	9
Total loaded—						
1973-74.	4,588	2,835	145,883	237	150,471	3,071
1974-75.	4,643	2,503	160,224	423	164,866	2,926
1975-76.	4,766	1,989	151,366	499	156,133	2,488
Total discharged—						
1973-74.	2,394	6,012	20,661	1,629	23,055	7,641
1974-75.	2,229	5,679	19,663	2,350	21,893	8,029
1975-76.	2,407	5,459	17,311	1,711	19,718	7,170

(a) Cargo and passenger liners.

Overseas cargo according to country of registration of vessels

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

**OVERSEAS CARGO DISCHARGED AND LOADED, BY COUNTRY OF REGISTRATION
OF VESSELS: AUSTRALIA**
(⁰⁰⁰)

Country of registration of vessels	1973-74		1974-75		1975-76	
	Tonnes	Cubic metres	Tonnes	Cubic metres	Tonnes	Cubic metres
Australia	387	578	367	503	715	655
Denmark	1,891	187	2,382	221	704	156
France	266	60	158	151	572	129
Germany, Federal Republic of	4,644	686	5,465	619	3,342	540
Greece	12,145	193	9,780	132	9,598	101
Hong Kong	393	108	618	41	1,656	140
India	3,478	92	3,590	74	2,417	73
Italy	2,023	174	1,799	188	1,353	141
Japan	59,873	1,351	64,576	1,830	67,783	1,571
Liberia	25,057	399	28,018	288	29,042	311
Netherlands	2,399	574	2,410	430	1,558	305
New Zealand	613	1,047	644	629	675	146
Norway	20,604	486	18,399	538	12,950	419
Panama	3,968	64	6,021	245	6,619	333
Singapore, Republic of	1,489	311	1,719	406	2,061	366
Sweden	3,279	495	3,121	465	1,982	580
United Kingdom	21,518	2,884	23,845	2,995	19,452	2,593
United States of America	370	370	1,006	378	368	249
U.S.S.R.	961	70	1,031	126	1,988	189
Other	8,168	584	11,820	686	11,016	661
Grand total	173,526	10,713	186,769	10,945	175,851	9,658

Vessels registered in Australia

The following table shows the number and gross tonnage of trading vessels of 200 tons and over registered in Australia at 30 June 1977, 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 1977(a)

(Source: Department of Transport)

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
1972 and earlier	53	612,617	16	162,675	46	555,667	23	219,625	69	775,292
1973	5	31,320	1	15,470	6	46,790	..	..	6	46,790
1974	4	91,727	1	15,939	4	101,394	1	6,272	5	107,666
1975	6	78,227	1	388	4	30,724	3	47,891	7	78,615
1976	4	149,995	..	..	2	10,562	2	139,433	4	149,995
1977 to date(b)	1	43,878	..	..	..	..	1	43,878	1	43,878
Total registered in Australia	73	1,007,764	19	194,472	62	745,137	30	457,099	92	1,202,236

(a) Excludes vessels of 200 net tons and under.

(b) To 30 June.

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 1975-76 a total of 104.4 million tonnes of freight was carried, an increase of 116.6 per cent over the 48.2 million tonnes carried in 1956-57. However, in the same twenty-year period, the number of passengers carried (mostly within the suburban areas of Sydney and Melbourne) declined by 36.5 per cent from 499 million in 1956-57 to 317 million in 1975-76 (excluding Perth metropolitan passenger journeys). The number of train-kilometres run during 1975-76 (150 million) was a decrease of 2.0 per cent since 1956-57 (153 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 1976 there were 1,474 throughout Australia. Diesel-electric locomotives during 1975-76 hauled 97 million train-kilometres, while steam locomotives hauled only 32 thousand train-kilometres.

Railway development

Details outlining railway development in Australia are given in Year Book No. 61, page 380. The following table sets out the route-kilometres of government railways in each State and Territory from 1972 to 1976. Details prior to 1972 can be found in Year Book No. 61, page 381.

GOVERNMENT RAILWAYS: ROUTE-KILOMETRES OPEN, 1972 TO 1976
(Kilometres)

30 June—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1972 . . .	10,129	6,357	9,560	5,829	6,846	805	789	8	40,323
1973 . . .	10,129	6,357	9,560	5,904	6,897	830	789	8	40,474
1974 . . .	10,130	6,329	9,472	5,905	6,922	851	789	8	40,406
1975 . . .	10,131	6,331	9,780	5,909	6,805	851	789	8	40,604
1976 . . .	10,130	6,325	9,844	5,915	6,893	849	789	8	40,753

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. The following table shows the route-kilometres open in each State and Territory at 30 June 1976 according to gauge.

GOVERNMENT RAILWAYS: ROUTE-KILOMETRES OPEN, BY GAUGE, 30 JUNE 1976
(Kilometres)

Gauge	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1600 mm . . .	(a)328	(b)5,986	..	2,533	..	..	..	..	8,847
1435 mm . . .	(c)9,802	325	111	(d)1,828	(e)2,095	..	..	(f)8	14,169
1067 mm . . .	..	..	9,685	(g)1,554	(h)4,798	849	(i)789	..	17,675
762 mm . . .	..	14	..	..	..	..	..	..	14
610 mm . . .	..	..	48	..	..	..	..	..	48
Total . . .	10,130	6,325	9,844	5,915	6,893	849	789	8	40,753
Per 1,000 of population	2.07	1.69	4.70	4.71	5.95	2.09	8.02	0.04	2.94
Per 1,000 square kilo- metre . . .	12.64	27.79	5.70	6.01	2.73	12.52	0.59	3.33	5.30

(a) Portion of Victorian Railway System. (b) Excludes 325 route-kilometres of 1600 mm gauge which almost parallels the 1435 mm gauge line between Melbourne and Murray River. (c) Includes 47 route-kilometres of 1435 mm gauge line from Broken Hill to Cockburn owned and operated by the South Australian Government Railways. (d) Comprises 1127 kilometres of the Trans-Australian and 350 kilometres of the Central Australia Railway systems and 351 kilometres from Port Pirie to Cockburn. (e) Includes 730 kilometres of the Trans-Australian Railway system. (f) Australian Capital Territory Railway system. (g) Includes 591 kilometres of the Central Australia Railway system. (h) Excludes 132 kilometres of 1067 mm/1435 mm dual gauge line which are included in the 1435 mm gauge line. (i) Comprises 278 kilometres of the Central Australia and 511 kilometres of the North Australia Railway systems.

Government railway systems

Prior to 1 July 1975 there were six separate State Government railway systems and the Commonwealth Railways system. In 1975, however, Commonwealth and State Government legislation was enacted for the transfer to the Commonwealth Government of the Tasmanian Government Railways and the non-metropolitan South Australian railways. These transfers took effect from 1 July 1975 and the Australian National Railways Commission came into existence on that date to control the two transferred systems and the former Commonwealth Railways. As the former Commonwealth Railways includes routes in South Australia and Western Australia, and the Victorian system extended into New South Wales, the system route-kilometres shown in the following table do not represent route-kilometres within each State and Territory (these are shown in the previous table). The route-kilometres of each system open for traffic, according to gauge, at 30 June 1976 is shown in the following table.

GOVERNMENT RAILWAYS: ROUTE-KILOMETRES OPEN, BY GAUGE AND SYSTEM
30 JUNE 1976
(Kilometres)

System	Gauge					Total
	1600 mm	1435 mm	1067 mm	762 mm	610 mm	
New South Wales		(a)9,755	..	..	..	9,755
Victoria	(b)6,314	325	..	14	..	6,653
Queensland . . . . .	..	111	9,685	..	48	9,844
South Australia	2,533	398	963	..	..	3,894
Western Australia . . . . .	..	1,365	(c)4,798	..	..	6,163
Tasmania . . . . .	..	..	849	..	..	849
National . . . . .	..	2,215	1,380	..	..	3,595
Australia	8,847	14,169	17,675	14	48	40,753

(a) Includes 446 route-kilometres which are electrified. (b) Excludes 325 route-kilometres of 1600 mm gauge line which almost parallels the 1435 mm gauge line between Melbourne and Murray River. Includes 421 route-kilometres which are electrified. (c) Excludes 132 kilometres of 1067 mm/1435 mm dual gauge line which are included in the 1435 mm gauge line.

The New South Wales system is based on Sydney. The Victorian system, based on Melbourne, radiates throughout the State and extends into areas of southern New South Wales. The Queensland system extends along the coast from Brisbane to Cairns with branch lines extending inland from the larger ports. The State Government railway system in Western Australia is concentrated in the south-western section of the State, and extends north to Meekatharra and east to Kalgoorlie and Esperance. Most of the railways in South Australia are located in the south-east of the State, but an isolated narrow gauge system operates in the Eyre Peninsula area. In Tasmania several branch lines extend from the principal line connecting Hobart to Launceston.

The former Commonwealth Railways component of the Australian National Railways comprises three operational railways: the standard gauge Trans-Australian Railway from Port Pirie to Kalgoorlie, the Central Australian Railway from Port Augusta to Alice Springs (standard gauge to Marree and narrow gauge from Marree to Alice Springs) and the standard gauge Australian Capital Territory Railway from Queanbeyan to Canberra. Services operating over the narrow gauge North Australia Railway from Darwin to Larrimah were withdrawn from 30 June 1976. In this section of the chapter, details of the former Commonwealth railways are combined; however, particulars for each railway are shown separately in the annual publication, *Rail, Bus and Air Transport* (9201.0).

Information about standardisation of railway gauges, and completion and commencement dates of services and centres linked is given in Year Book No. 58, page 348.

Developments in standardisation

The Commonwealth Government has enacted legislation for the construction of a standard gauge connection between Adelaide and the Trans-Australian Railway. Work on this project has commenced and, when the link is completed, all mainland State capital cities will be connected to the standard gauge network.

The Commonwealth Government has also enacted legislation for the construction of a reliable, all-weather standard gauge railway between Tarcoola, on the Trans-Australian Railway, and Alice Springs to replace the existing flood-prone narrow gauge section of the Central Australia Railway between Marree and Alice Springs. The line is expected to be completed in 1981-82.

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, 1975-76

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	National	Aust.
Train-kilometres								
('000)(a)—								
Suburban passenger	19,900	14,721	3,326	3,640	2,249	1	..	43,836
Country passenger	10,251	7,823	4,067	2,024	1,257	225	1,471	27,120
Goods(b)	24,791	11,274	23,421	4,639	9,350	1,522	4,124	79,122
Total	54,943	33,818	30,813	10,304	12,856	1,748	5,595	150,078
Passenger journeys								
('000)(c)—								
Suburban	157,919	104,748	32,448	12,033	n.a.	19	..	n.a.
Country(d)	1,953	4,921	1,831	639	351	132	219	10,046
Total	159,872	109,669	34,278	12,672	n.a.	151	(e)219	n.a.
Passenger-kilometres								
('000)(f)—								
Suburban	n.a.	1,670,045	n.a.	170,124	n.a.	141	..	n.a.
Country	n.a.	657,807	n.a.	158,281	127,768	16,301	218,904	n.a.
Total	n.a.	2,327,852	n.a.	328,405	n.a.	16,442	218,904	n.a.
Freight—								
Tonnes carried								
('000)(d)	31,234	10,803	33,118	6,139	17,647	1,610	3,804	104,355
Net tonne-kilometres								
(million)(g)	8,566.9	3,071.4	10,101.2	1,686.6	4,542.4	231.8	2,609.0	30,809.3

(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) Passenger journeys continuing over both the Trans-Australian and Central Australia Railway Systems are counted twice. In 1975-76 these numbered 6,414. (f) One passenger travelling one kilometre. (g) One tonne carried one kilometre.

Rolling stock

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

System and date	Locomotives					Coaching stock(b)	Goods stock	Service stock
	Steam	Diesel-electric	Electric	Other(a)	Total			
30 June 1976—								
New South Wales . . . . .	..	421	40	85	546	2,809	15,701	1,847
Victoria	19	266	35	82	402	2,368	18,740	1,481
Queensland . . . . .	..	416	..	86	502	1,150	20,766	2,228
South Australia	4	151	..	..	155	394	7,046	550
Western Australia	2	186	..	20	208	376	10,972	467
Tasmania	7	50	..	21	78	113	2,097	168
National . . . . .	..	100	..	..	100	146	3,074	514
Australia	32	1,590	75	294	1,991	(c)7,592	(c)78,405	(c)7,256
30 June—								
1975.	37	1,573	75	295	1,980	7,624	78,810	7,614
1974.	78	1,563	76	294	2,011	7,870	79,086	7,723
1973.	87	1,539	76	291	1,993	7,982	79,913	7,800
1972.	168	1,489	76	267	2,000	8,178	81,135	8,033

(a) Includes non-passenger-carrying diesel power vans. (b) Includes all brake vans and non-powered electric train stock. (c) Includes jointly-owned stock.

Train-kilometres*Train-kilometres by type of service and motive power***GOVERNMENT RAILWAYS: TRAIN-KILOMETRES 1975-76**
(^{'000 kilometres})

	<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>
Type of service—								
Passenger—suburban .	19,900	14,721	3,326	3,640	2,249	1	..	43,836
Passenger—country .	10,251	7,823	4,067	2,024	1,257	225	1,471	27,120
Goods(a) .	24,791	11,274	23,421	4,639	9,350	1,522	4,124	79,122
Total .	54,943	33,818	30,813	10,304	12,856	1,748	5,595	150,078
Type of motive power—								
Hauled by diesel-electric locomotives .	30,158	15,510	27,953	5,771	10,216	1,743	5,465	96,816
Hauled by steam locomotives .	..	19	4	7	1	..	..	32
Hauled by electric and other locomotives .	3,282	1,413	523	..	..	..	..	5,218
Powered coaching stock .	21,503	16,877	2,333	4,526	2,639	5	130	48,012
Total .	54,943	33,818	30,813	10,304	12,856	1,748	5,595	150,078

(a) Includes mixed train-kilometres.

*Total train-kilometres***TRAIN-KILOMETRES**
(^{'000 kilometres})

<i>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>
1971-72 . . .	61,176	33,175	29,165	10,018	12,410	1,767	6,013	153,724
1972-73 . . .	59,941	33,058	29,523	10,024	11,669	1,960	5,859	152,035
1973-74 . . .	58,255	33,345	28,542	10,313	12,617	2,154	5,966	151,192
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

Passenger traffic*Passenger journeys***GOVERNMENT RAILWAYS: PASSENGER JOURNEYS(a), SYSTEMS**
(^{'000})

<i>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>
SUBURBAN								
1971-72 . . .	(b)196,097	133,840	30,184	12,918	10,800	597	..	384,436
1972-73 . . .	194,140	108,970	30,500	12,756	11,143	559	..	358,068
1973-74 . . .	192,228	110,141	32,003	12,914	11,332	514	..	359,132
1974-75 . . .	167,868	112,757	34,821	11,997	n.a.	273	..	n.a.
1975-76 . . .	157,919	104,748	32,448	12,033	n.a.	19	..	n.a.
COUNTRY(c)								
1971-72 . . .	(b)12,403	3,954	1,762	515	350	189	207	19,380
1972-73 . . .	11,985	4,180	1,645	564	376	193	222	19,165
1973-74 . . .	6,716	4,507	1,720	683	416	179	263	14,485
1974-75 . . .	3,977	4,963	1,811	700	394	156	239	12,239
1975-76 . . .	1,953	4,921	1,831	639	351	132	219	10,046
TOTAL(c)								
1971-72 . . .	(b)208,500	137,794	31,946	13,433	11,150	785	207	403,816
1972-73 . . .	206,125	113,150	32,145	13,320	11,518	752	222	377,233
1973-74 . . .	198,944	114,648	33,723	13,597	11,748	693	263	373,618
1974-75 . . .	171,844	117,720	36,632	12,697	n.a.	429	239	n.a.
1975-76 . . .	159,872	109,669	34,278	12,672	n.a.	151	219	n.a.

(a) Based on ticket sales making allowance for periodical tickets. Tickets sold at concession rates are counted as full journeys. (b) Figures for earlier years include unremunerative journeys. (c) Inter-system traffic is included in the total for each system (including each National railway) over which it passes.

Freight traffic

Freight carried

GOVERNMENT RAILWAYS: FREIGHT CARRIED(a), SYSTEMS

('000 tonnes)

Commodity and year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	National	Aust.
1975-76—								
Wheat	3,488	1,866	692	543	3,874	..	..	10,463
Other agricultural produce	1,163	943	3,169	537	113	13	24	5,962
Coal, coke and briquettes	14,557	758	21,271	8	1,140	130	1,824	39,688
Other minerals(b)	2,908	319	3,539	1,700	9,155	37	132	17,790
Wool	135	223	37	33	148	5	7	588
Fertilisers and manure	187	394	131	208	472	46	2	1,440
Cement	556	822	212	58	130	285	68	2,131
Timber	135	261	110	69	278	331	29	1,213
Livestock	212	356	705	199	55	1	67	1,595
All other commodities	7,893	4,861	3,252	2,784	2,282	762	1,651	23,485
Total	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
1973-74	32,651	11,370	25,401	6,607	14,839	1,828	4,270	96,966
1972-73	31,044	11,475	24,666	5,781	13,706	1,554	4,255	92,481
1971-72	32,310	11,795	19,267	6,014	13,867	1,299	4,119	88,671

(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.

Freight net tonne-kilometres

GOVERNMENT RAILWAYS: FREIGHT NET TONNE-KILOMETRES, SYSTEMS

(Million)

Commodity and year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	National	Aust.
1975-76—								
Wheat	1,425.0	514.0	(a)	75.2	1,068.3	..	..	(a)
Other agricultural produce	651.2	288.1	(a)	87.4	37.5	2.6	33.9	(a)
Coal, coke and briquettes	1,247.9	134.6	(a)	3.5	179.0	25.9	462.4	(a)
Other minerals(b)	563.7	84.1	(a)	381.7	1,767.3	2.8	28.9	(a)
Wool	48.4	45.3	(a)	9.5	65.0	1.0	11.1	(a)
Fertilisers and manure	119.0	102.6	(a)	63.0	170.8	13.8	2.8	(a)
Cement	177.5	101.4	(a)	20.1	43.3	25.0	19.7	(a)
Timber	113.0	84.4	(a)	21.3	100.2	27.7	44.4	(a)
Livestock	125.9	107.8	383.2	44.2	15.9	0.3	32.4	709.7
All other commodities	4,095.3	1,608.9	9,718.0	980.7	1,095.2	132.7	1,973.4	19,604.2
Total	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
1973-74	8,642.5	3,126.2	7,855.1	1,753.1	4,142.5	277.9	2,532.0	28,329.3
1972-73	8,117.6	3,164.8	7,613.1	1,588.4	3,686.2	210.6	2,201.1	26,581.7
1971-72	8,615.2	3,264.2	6,315.1	1,583.0	3,447.8	169.7	2,007.9	25,402.9

(a) Not available separately, included with 'All other commodities'. (b) Includes sand and gravel.

Finance

GOVERNMENT RAILWAYS: GROSS EARNINGS(a), SYSTEMS, 1975-76
(\$'000)

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	National	Aust.
Coaching—								
Suburban passenger	58,069	33,370	5,428	2,960	..	2	..	99,826
Country passenger	9,256	13,215	5,502	3,198	3,373	207	6,474	41,226
Other	19,361	8,548	3,657	1,471	2,563	328	711	36,641
<i>Total coaching</i>	86,686	55,133	14,587	7,629	5,936	537	7,185	177,693
Freight (goods and live-stock)—								
Wheat	(c)	13,251	6,947	2,798	30,660	..	1	n.a.
Other agricultural produce	(c)	6,010	19,130	2,865	1,205	102	416	n.a.
Coal, coke and briquettes	(c)	3,761	91,903	56	5,946	621	3,034	n.a.
Other minerals(d)	(c)	1,844	22,079	8,126	25,589	113	500	n.a.
Wool	(c)	1,292	1,086	245	3,528	44	112	n.a.
Fertilisers and manure	(c)	1,933	1,906	900	3,655	407	36	n.a.
Cement	(c)	4,331	2,877	369	1,213	1,074	378	n.a.
Timber	(c)	2,625	1,753	392	3,183	893	422	n.a.
Livestock	(c)	2,262	11,829	1,689	598	53	728	n.a.
All other commodities	(c)	43,100	50,536	18,156	32,549	4,205	34,473	n.a.
<i>Total freight</i>	208,627	80,409	210,046	35,596	108,126	7,512	40,101	690,417
Miscellaneous	23,450	11,750	5,859	6,642	16,788	..	7,333	71,642
<i>Grand total</i>	318,763	147,292	230,492	49,688	130,850	8,048	54,618	939,751

(a) Excludes Government grants. (b) Includes State Co-ordination Tax Contribution. (c) Not available separately. (d) Includes sand and gravel.

GOVERNMENT RAILWAYS: WORKING EXPENSES, SYSTEMS, 1975-76
(\$'000)

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.(a)	National	Aust.
Maintenance of way and works	77,586	(b)	72,870	(a)20,544	(a)27,537	6,557	12,960	218,054
Motive power(c)	154,106	(b)	95,902	(a)29,001	(a)43,514	6,966	17,772	347,261
Traffic	118,259	237,230	74,872	(a)27,386	33,420	5,715	13,231	510,113
Other charges	122,237	34,710	22,018	14,422	14,137	2,848	20,317	230,689
<i>Total</i>	472,188	271,940	265,662	(a)91,352	(a)118,607	22,087	(a)64,279	1,306,115

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

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								
1971-72	266,268	112,685	124,782	35,386	63,634	6,123	29,208	638,086
1972-73	254,070	111,833	137,745	35,085	63,600	6,835	31,241	640,408
1973-74	262,691	115,613	149,844	39,531	78,480	7,674	37,217	691,050
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

WORKING EXPENSES

				(a)	(a)	(a)	(a)	
1971-72	263,484	138,722	119,743	46,521	63,748	10,391	31,540	674,149
1972-73	298,180	156,120	133,384	52,320	68,223	11,829	34,487	754,543
1973-74	349,897	188,599	162,101	60,747	81,916	15,598	44,423	903,281
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

NET EARNINGS(b)

1971-72	2,784	-26,036	5,038	-11,135	-115	-4,267	-2,333	-36,063
1972-73	-44,111	-44,287	4,361	-17,236	-4,622	-4,994	-3,247	-114,135
1973-74	-87,206	-72,986	-12,257	-21,216	-3,436	-7,924	-7,206	-212,231
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

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

GOVERNMENT RAILWAYS: SURPLUS OR DEFICIT, SYSTEMS, 30 JUNE 1976

(\$'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	-153,425	(b)4,799	..	..	4,799	44,815	8,622	..	(c)1,810	55,246
Victoria	-124,648	(d)63	95	..	158	13,849	527	456	..	14,831
Queensland	-35,170	..	..	..	..	49,936	..	..	(e)3,000	52,936
South Australia	-41,664	..	411	..	411	1,214	..	611	(f)62	1,887
Western Australia	12,243	..	1,462	(g)85	1,547	14,173	..	2,657	..	16,831
Tasmania	-14,039	..	..	113	113	..	..	..	..	..
National	-9,661	..	..	..	..	..	..	..	..	..
Australia	-366,364	4,862	1,968	198	7,028	123,987	9,149	3,724	4,872	141,731
										-501,067

(a) Includes interest and exchange. (b) Grants to meet losses on country developmental lines, and to subsidise payments due to superannuation account. (c) Loan management and loan flotation expenses. (d) Kerang-Koondrook tramway recoup from Treasury. (e) Demolished assets written off. (f) Interest and repayment under Railway Standardisation and Railway Equipment Agreements. (g) Australian currency revaluation adjustment.

Employment, salaries and wages

GOVERNMENT RAILWAYS: AVERAGE NUMBER OF EMPLOYEES (EXCLUDING CONSTRUCTION STAFF) AND SALARIES AND WAGES PAID(a), 1975-76

	<i>N.S.W.</i>	<i>Vic.(b)</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>National</i>	<i>Aust.</i>
Salaried staff . . .	8,932	5,363	4,057	1,749	2,168	352	775	23,396
Wages staff. . . .	30,399	19,735	19,946	5,732	7,589	1,589	3,365	88,355
Total staff . . .	39,331	25,098	24,003	7,481	9,757	1,941	4,140	111,751
SALARIES AND WAGES PAID								
paid . . . \$'000	355,168	217,081	213,932	71,414	81,433	17,388	35,500	991,915

(a) Excludes salaries and wages paid to road motor staff. (b) Includes construction staff.

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 table have been compiled from information supplied to the Bureau of Transport Economics by the various railway operators. All operators provided details of tonnes consigned and most provided details of tonne-kilometres performed. In a few cases the tonne-kilometre figures have been estimated by the Bureau of Transport Economics using the advised average length of haul.

TRAFFIC TASK PERFORMED BY AUSTRALIAN NON-GOVERNMENT RAILWAYS
1966-67 TO 1975-76

<i>Year</i>	<i>Iron ore railways</i>	<i>Sugar tramways</i>	<i>Other non-government railways</i>	<i>Total non-government railways</i>	<i>Non-government as a percentage of total tonnes consigned/tonne-kilometres performed</i>
TONNES CONSIGNED ('000)					Per cent
1966-67 . . .	10,048	14,507	11,612	36,167	n.a.
1967-68 . . .	16,576	14,327	12,538	43,441	40
1968-69 . . .	25,203	16,085	11,398	52,686	45
1969-70 . . .	37,366	13,730	14,990	66,086	47
1970-71 . . .	49,537	14,801	14,496	78,834	50
1971-72 . . .	54,865	16,189	13,742	84,796	51
1972-73 . . .	67,723	16,060	16,990	100,773	55
1973-74 . . .	84,867	16,442	19,970	121,279	58
1974-75 . . .	95,666	17,163	21,180	134,009	59
1975-76 . . .	83,837	18,844	18,678	121,359	56
TONNE-KILOMETRES (million)					
1966-67 . . .	1,411	234	201	1,846	9
1967-68 . . .	2,848	236	200	3,284	14
1968-69 . . .	5,009	260	203	5,472	20
1969-70 . . .	8,903	222	219	9,344	28
1970-71 . . .	13,332	239	198	13,769	35
1971-72 . . .	16,121	261	214	16,596	40
1972-73 . . .	19,501	259	272	20,032	43
1973-74 . . .	25,890	264	336	26,490	48
1974-75 . . .	29,559	275	341	30,175	50
1975-76 . . .	25,748	302	304	26,354	46

TRAM, BUS, AND FERRY SERVICES

Systems in operation

Trams and trolley-buses. At 30 June 1976 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. Tram services ceased to operate in Ballarat on 19 September 1971 and in Bendigo on 16 April 1972.

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 Western Australian Government Railways. Particulars of bus services under the control of private operators for the States of New South Wales, Victoria, Queensland, South Australia and Western Australia are given in the annual bulletin *Rail, Bus and Air Transport* (9201.0).

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; and Tasmania, on the Mersey River at Devonport. 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 and in the annual bulletin *Rail, Bus and Air Transport* (9201.0). In Victoria and Queensland the services operated are not extensive. There are no ferry passenger services in South Australia.

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, 1975-76

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Route-kilometres at 30 June—									
Tram(a) . . . kilometres		217		11					228
Bus	998	249	658	820	7,631	453	64	344	11,217
Vehicle-kilometres—									
Tram '000		24,235		710					24,945
Bus	63,908	12,681	19,061	32,513	41,553	9,487	1,032	9,896	190,131
Rolling stock at 30 June—									
Tram number		739		26					765
Bus	1,854	279	552	715	884	315	33	375	5,007
Passenger journeys—									
Tram '000		106,129		1,248					107,375
Bus	182,702	20,821	49,588	57,088	60,286	20,512	661	14,505	406,163
Gross revenue(b)—									
Tram and bus . . . \$'000	44,885	30,272	11,499	14,454	14,114	3,000	257	2,939	121,420
Working expenses(c)—									
Tram and bus . . . \$'000	81,101	47,647	16,898	22,446	24,396	7,879	878	6,997	208,241
Net revenue—									
Tram and bus . . . \$'000	-36,217	-17,375	-5,399	-7,991	-10,282	-4,879	-620	-4,058	-86,821
Employees at 30 June—									
Tram and bus . . . number	6,786	4,540	1,440	1,695	2,109	651	114	511	17,846
Accidents—									
Tram and bus(d)—									
Persons killed . . . number	4	15	1	314	1		1		22
Persons injured . . .	n.a.	420	290	314	422	68	2	19	(e)1,535

(a) Gauge 1435 mm throughout. (b) Excludes government grants. (c) Includes provision of reserves for depreciation, etc., where possible. (d) Excludes accidents to employees. (e) Excludes New South Wales. Minus sign (—) denotes deficit.

TRAM AND BUS SERVICES: GOVERNMENT AND MUNICIPAL

	1971-72	1972-73	1973-74	1974-75	1975-76
Route-kilometres at 30 June—					
Tram kilometres	225	228	227	228	228
Bus "	10,495	10,890	11,780	11,859	11,217
Vehicle kilometres—					
Tram '000	25,180	25,119	24,555	24,516	24,945
Bus "	170,769	172,866	179,702	187,797	190,131
Rolling stock at 30 June—					
Tram number	722	734	734	729	765
Bus "	4,437	4,442	4,761	4,967	5,007
Passenger journeys—					
Tram '000	104,558	106,333	110,791	112,329	107,375
Bus "	398,421	410,139	417,513	(a)416,160	406,163
Gross revenue(b)—					
Tram and bus . . . \$'000	91,015	95,171	105,149	112,690	121,420
Working expenses(c)—					
Tram and bus . . . \$'000	103,274	117,598	146,655	187,787	208,241
Net revenue—					
Tram and bus . . . \$'000	-12,260	-22,426	-41,506	-75,098	-86,821
Employees at 30 June—					
Tram and bus . . . number	17,545	17,256	17,549	17,829	17,846
Accidents—					
Tram and bus(d)—					
Persons killed . . . number	22	30	10	14	22
Persons injured . . . "	2,275	2,732	2,587	(e)1,245	(e)1,535

(a) Excludes Northern Territory.
 Minus sign (—) denotes deficit.

(b) Excludes government grants.
 (d) Excludes accidents to employees.

(c) Includes provision of reserve for
 depreciation, etc., where possible. (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. Particulars of registrations, licences, fees payable, etc., in each State and Territory at 30 June 1977 are shown in *Motor Vehicle Registrations, 1976-77*, (9304.0).

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 1976 by the Australian Bureau of Statistics for the purpose of gathering information on the usage of motor vehicles. Previous surveys were conducted in 1963 and 1971. 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 1976. 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 1976 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 1976(P)**

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	..	..	..	..	16,023.7	3.9	2,452.9	6.4	16,234.4	2.6	45,540.2	1.4	80,279.3	1.2
Motor cycles	..	..	..	..	171.9	13.9	46.7	21.1	610.9	7.9	812.7	8.1	1,642.3	5.4
Utilities and panel vans	4,105.2	4.7	1,923.6	8.1	6,378.6	4.5	350.8	20.6	1,728.7	7.1	3,845.6	6.2	12,303.9	2.6
Rigid trucks	3,768.1	1.3	1,730.9	2.1	5,503.6	1.5	51.2	10.1	195.1	6.3	278.4	7.3	6,029.5	1.4
Articulated trucks	1,398.6	0.8	578.4	1.1	1,978.5	0.8	4.9	11.2	21.0	4.9	4.3	14.5	2,008.8	0.8
Other truck type vehicles	..	..	..	..	230.9	15.4	2.6	32.2	29.4	12.6	164.0	9.4	426.8	9.0
Total	9,271.9	2.1	4,232.8	3.8	30,287.3	2.3	2,908.9	5.9	18,819.5	2.3	50,645.1	1.4	102,690.6	1.0

(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 and 1976. At these census dates considerably greater information concerning the particulars shown in the tables following is available. Final detailed results of the 1976 census will be published in separate census bulletins for each State and Territory and for Australia.

A revised classification of motor vehicles has been adopted for publication of statistics of 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 for these categories are not strictly comparable with data for previous periods.

MOTOR VEHICLE CENSUS: 30 SEPTEMBER 1976 (PRELIMINARY)

('000)

State or Territory	Motor cars and station wagons	Utilities	Panel vans	Trucks		Other truck type vehicles	Buses	Motor cycles	Total (a)
				Rigid	Articulated				
New South Wales	1,712.6	131.8	108.2	115.4	13.1	7.9	11.1	94.4	2,194.6
Victoria	1,476.7	105.2	47.1	119.1	9.8	4.7	6.8	52.5	1,821.9
Queensland	722.9	87.8	34.7	92.7	5.9	2.6	3.7	72.8	1,023.0
South Australia	509.2	41.4	19.6	36.3	5.2	4.1	3.2	31.8	650.7
Western Australia	441.8	54.4	34.1	42.9	3.4	3.8	3.3	28.0	611.5
Tasmania	158.7	17.0	8.3	10.3	1.2	1.1	1.7	6.5	204.8
Northern Territory	18.1	7.4	1.9	1.9	0.3	0.2	0.2	2.6	32.7
Australian Capital Territory	79.9	4.6	4.7	2.5	0.1	0.1	0.9	3.7	96.4
Total	5,119.9	449.6	258.4	421.1	38.9	24.3	31.0	292.3	6,635.6

(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	Motor cycles	Total vehicles
1972	4,147.3	998.0	180.2	5,325.1
1973	4,376.2	1,047.5	210.4	5,634.1
1974	4,627.2	1,099.9	259.1	5,986.1
1975	4,895.8	1,157.8	279.3	6,333.0
1976	5,124.1	1,240.6	295.7	6,660.3
1976(a)	5,119.9	1,223.4	292.3	6,635.6

(a) 30 September 1976 Motor Vehicle Census figures.

**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.
1972	390.3	401.4	406.8	429.4	434.6	427.7	321.9	452.4	404.3
1973	406.9	416.6	432.4	449.1	450.1	442.3	348.2	486.1	421.1
1974	423.6	436.8	445.1	467.2	471.4	460.5	367.4	519.4	440.2
1975	441.7	456.8	452.7	493.0	496.7	484.0	510.5	549.6	459.9
1976	448.3	475.1	493.3	508.1	523.1	503.9	602.6	572.6	478.6
1976(b)	446.0	485.3	483.6	514.7	519.9	501.8	317.8	470.9	475.8

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

(b) 30 September 1976 Motor Vehicle Census figures.

Registrations of new motor vehicles

Particulars of registrations of new motor vehicles are shown by type of vehicle in monthly bulletins, and by type and make of vehicle in quarterly 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 and year	Motor cars	Station wagons	Utilities	Panel vans	Trucks		Other truck type vehicles	Buses	Total (excludes motor cycles)	Motor cycles
					Rigid	Articulated				
1976-77—										
New South Wales . . .	123,025	29,077	14,030	14,094	11,964	1,281	903	1,043	195,417	16,800
Victoria	98,301	19,493	9,398	7,952	8,402	1,210	812	777	146,345	7,645
Queensland	51,651	11,913	12,283	6,151	5,401	670	203	384	88,656	12,790
South Australia	37,230	7,317	3,638	3,156	3,229	919	364	315	56,168	6,081
Western Australia . . .	35,438	8,925	5,490	5,552	5,243	429	247	401	61,725	3,887
Tasmania	12,023	2,497	1,430	1,350	1,076	129	175	101	18,781	1,428
Northern Territory . . .	1,451	777	1,481	526	368	55	9	38	4,705	925
Australian Capital Territory	6,505	1,479	670	751	368	59	36	146	10,014	765
Australia	365,624	81,478	48,420(a)	39,532(a)	36,051(a)	4,752(a)	2,749(a)	3,205	581,811	50,321
1975-76	380,713	73,924	43,500	38,296	39,574	4,139	474	3,743	584,363	60,017
1974-75	433,244	69,476	45,151	36,647	32,675	3,545	409	3,040	624,187	67,563
1973-74	407,983	57,007	41,848	29,352	29,878	3,753	398	2,465	572,684	85,249
1972-73	373,876	55,863	41,144	28,136	29,176	3,364	365	2,215	534,139	65,551

(a) Not directly comparable with previous figures.

Drivers' and riders' licences

At 30 June 1977, the numbers of licences in force to drive or ride motor vehicles were: New South Wales, 2,722,246; Victoria, 2,032,520; South Australia, 674,117; Western Australia, 621,288; Tasmania, 213,053; Northern Territory, 29,595; Australian Capital Territory, 128,000. 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**ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): NUMBER OF ACCIDENTS, PERSONS KILLED OR INJURED, 1976**

State or Territory	Number of accidents	Persons killed	Persons injured	Per 100,000 of mean population			Per 10,000 motor vehicles registered(h)		
				Number of accidents	Persons killed	Persons injured	Number of accidents	Persons killed	Persons injured
New South Wales.	27,393	1,264	37,327	557	26	760	125	6	170
Victoria . . .	12,680	938	17,653	338	25	471	71	5	99
Queensland . .	7,814	569	10,405	370	27	493	79	6	105
South Australia .	8,090	307	11,082	641	24	878	126	5	173
Western Australia.	5,287	308	7,059	452	26	603	87	5	116
Tasmania . . .	1,603	108	2,323	393	27	570	79	5	114
Northern Territory	582	51	814	572	50	800	169	15	237
Australian Capital Territory . .	833	38	1,145	410	19	563	89	4	123
Australia . . .	64,282	3,583	87,808	462	26	631	98	5	134

(a) Accidents reported to the police which occurred in public thoroughfares and which resulted in death within thirty days or in bodily injury to an extent requiring surgical or medical treatment. (b) Average number of motor vehicles (excluding tractors, plant and equipment) on register.

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): NUMBER OF ACCIDENTS, PERSONS KILLED OR INJURED

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Total		
									Number	Per 100,000 of mean population	Per 10,000 motor vehicles registered(b)
Accidents involving casualties—											
1972	27,365	14,757	7,863	8,116	4,909	1,371	592	777	65,750	506	123
1973	29,308	14,485	8,643	9,267	5,404	1,479	711	854	70,151	533	124
1974	29,853	12,542	8,086	9,469	4,742	1,393	575	813	67,473	504	112
1975	28,217	12,514	8,241	8,793	5,104	1,496	554	869	65,788	486	104
1976	27,393	12,680	7,814	8,090	5,286	1,603	582	833	64,281	462	98
Persons killed—											
1972	1,092	915	572	312	340	106	53	32	3,422	26	6
1973	1,230	935	638	329	358	105	55	29	3,679	28	7
1974	1,275	806	589	382	334	111	44	31	3,572	27	6
1975	1,288	910	635	339	304	122	64	32	3,694	27	6
1976	1,264	938	569	307	308	108	51	38	3,583	26	5
Persons injured—											
1972	36,814	20,646	10,788	10,997	6,751	1,968	795	1,007	89,766	691	168
1973	39,294	20,011	11,660	12,625	7,377	2,103	1,012	1,122	95,204	723	169
1974	40,429	17,539	10,627	12,725	6,277	1,911	788	1,042	91,338	683	152
1975	38,141	17,437	11,019	12,020	6,832	2,137	789	1,124	89,499	661	141
1976	37,327	17,653	10,405	11,082	7,058	2,323	814	1,145	87,807	631	134

(a) See footnote (a) to previous table. (b) See footnote (b) to previous table.

Types of road user killed or injured

Responsibility for cause of accident is not indicated by this classification.

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): PERSONS KILLED OR INJURED, TYPES OF ROAD USER INVOLVED, 1976

Type of road user	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
PERSONS KILLED									
Drivers of motor vehicles	455	358	196	116	107	44	21	12	1,309
Motor cyclists	135	90	83	41	32	13	7	7	408
Pedal cyclists	19	37	16	9	7	4	1	..	93
Passengers (all types)(b)	395	261	184	86	101	35	17	15	1,094
Pedestrians	259	190	89	55	59	12	5	3	672
Other classes(c)	1	2	1	..	2	..	..	1	7
Total	1,264	938	569	307	308	108	51	38	3,583
PERSONS INJURED									
Drivers of motor vehicles	14,131	6,950	3,716	4,249	2,932	969	264	468	33,679
Motor cyclists	4,239	1,648	1,730	1,622	764	246	139	178	10,566
Pedal cyclists	842	706	384	566	249	29	20	65	2,861
Passengers (all types)(b)	13,720	6,454	3,807	3,846	2,434	887	322	364	31,834
Pedestrians	4,335	1,870	763	792	655	192	69	70	8,746
Other classes(c)	60	25	5	7	24	..	..	..	121
Total	37,327	17,653	10,405	11,082	7,059	2,323	814	1,145	87,808

(a) Accidents reported to the police which occurred in public thoroughfares and which resulted in death within thirty days or in bodily injury to an extent requiring surgical or medical treatment. (b) Includes pillion riders. (c) Includes bystanders, tram-drivers, riders of horses and drivers of animal-drawn vehicles.

Age groups of persons killed or injured**ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): PERSONS KILLED OR INJURED BY AGE GROUP, 1976**

Age group (years)	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
PERSONS KILLED									
Under 5	47	23	20	10	7	..	2	2	111
5 and under	28	19	13	6	5	1	1	..	73
7 " " 17	89	88	54	25	29	19	6	5	315
17 " " 21	246	166	132	59	71	29	11	3	717
21 " " 30	277	210	105	56	56	22	11	17	754
30 " " 40	141	86	61	27	42	9	7	3	376
40 " " 50	100	82	50	17	23	6	8	5	291
50 " " 60	130	84	44	38	27	7	3	..	333
60 and over	201	169	90	69	46	15	2	3	595
Not stated	5	11	..	..	2	..	..	..	18
Total	1,264	938	569	307	308	108	51	38	3,583
PERSONS INJURED									
Under 5	1,341	493	323	278	200	51	38	38	2,762
5 and under	766	353	202	148	150	38	22	19	1,698
7 " " 17	4,362	1,968	1,326	1,605	732	347	85	141	10,566
17 " " 21	8,218	3,842	2,763	2,430	1,629	704	160	286	20,032
21 " " 30	8,793	4,137	2,478	2,213	1,705	515	274	336	20,451
30 " " 40	4,380	1,967	1,039	941	718	209	105	117	9,476
40 " " 50	3,243	1,473	760	748	499	160	59	95	7,037
50 " " 60	2,768	1,255	584	642	402	134	30	49	5,864
60 and over	3,006	1,413	748	654	457	155	23	44	6,500
Not stated	450	752	182	1,423	567	10	18	20	3,422
Total	37,327	17,653	10,405	11,082	7,059	2,323	814	1,145	87,808

(a) See footnote (a) to previous table.

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 1976. 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 1976
(Kilometres)

<i>Class of road</i>	<i>N.S.W.</i>	<i>Vic.(a)</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Total</i>
State highways . . .	10,476	(b)7,259	10,170	13,564	12,798	1,941	105,493
Trunk roads . . .	7,080	14,577	130			..	
Ordinary main roads . .	18,317		8,116			1,065	
<i>Total main roads</i> . .	<i>35,873</i>	<i>21,836</i>	<i>18,416</i>	<i>13,564</i>	<i>12,798</i>	<i>3,006</i>	<i>105,493</i>
Secondary roads . . .	(c)285	..	(d)13,760	..	8,251	292	22,588
Development roads . .	3,608	..	7,607	..	..	198	11,413
Tourist roads . . .	395	795	..	..	..	115	1,305
Other roads . . .	2,594	(e)1,039	..	..	..	..	3,633
<i>Total other roads</i> . .	<i>6,882</i>	<i>1,834</i>	<i>21,367</i>	<i>..</i>	<i>8,251</i>	<i>605</i>	<i>38,939</i>
Grand total . . .	42,755	23,670	39,783	13,564	21,049	3,611	144,432

(a) As from 1 July 1974 the Country Roads Board acquired the road making powers, roads and relevant staff of the Melbourne and Metropolitan Board of Works. (b) Includes 223 kilometres of freeways constructed by the Country Roads Board. (c) Metropolitan only. (d) Includes mining access roads, farmers' roads and tourist tracks. (e) 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 1976
(Kilometres)

<i>Surface of roads</i>	<i>N.S.W.(a)</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>(a)Total</i>
Bitumen or concrete . .	66,878	56,693	41,099	17,843	31,797	7,129	4,907	1,518	227,864
Gravel, crushed stone or other improved surface . . .	65,499	45,845	30,176	21,180	31,579	13,473	1,750	370	209,872
Formed only . . .	41,920	28,060	61,248	24,392	45,808	726	5,476	42	405,532
Cleared only . . .	14,689	28,962	56,371	37,026	52,794		8,018	..	
Total . . .	188,985	159,560	188,894	100,441	161,979	21,328	20,151	1,930	843,268

(a) Excludes 20,286 kilometres of road dedicated but not trafficable.

* Includes bridges.

Expenditure on roads and bridges

Primary responsibility for the construction and maintenance of roads and bridges rests with State and local authorities. In each State there exists a central road authority or a government department which undertakes construction, reconstruction and maintenance of declared 'main' and 'developmental' roads, and which administers the distribution of funds to local authorities and supervises and co-ordinates road construction throughout the State. Provision of roads and bridges has always been one of the principal functions of local authorities, and these authorities still account for a significant proportion of construction and maintenance activity (see Chapter 22, Public Finance). However the relative importance of the contribution of local authorities has tended to decline in recent years, reflecting in part a reassessment of priorities in allocations of road finance. The Commonwealth Government is concerned with construction and maintenance of roads and bridges in the Northern Territory and Australian Capital Territory and roads of access to Commonwealth Government property in the various States; but the Commonwealth Government's most significant contribution to government activity in this field is in the assistance given to the States in the form of specific purpose capital grants, which constituted about 34 per cent of the total outlay by State and local authorities on roads and bridges in 1975-76.

In what follows, figures are provided of expenditure on road transport by all public authorities and of Commonwealth Government grants for road purposes, and an account is given of the activities of the principal authorities concerned with roads and bridges in each State.

All public authorities

The figures given in the following table provide an approximate measure of the aggregate net expenditure on roads and bridges by Commonwealth Government, State and local authorities in recent years. Expenditure on roads by those authorities whose primary activity is directed towards functions other than roads, e.g. electricity, forestry, housing, etc., is not included. The figures cover expenditure on the construction, reconstruction and maintenance of roads and bridges, and on direct administration. Debt charges are not normally classified by function and are therefore excluded. Because a satisfactory and consistent distinction between new construction and maintenance cannot be made with existing data, all expenditure on roads and bridges is treated as capital expenditure.

ALL PUBLIC AUTHORITIES: GROSS FIXED CAPITAL EXPENDITURE ROAD SYSTEMS (\$ million)

Year	Commonwealth Government authorities	State and local authorities						All public authorities
		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	
1971-72	19	239	170	110	61	75	23	696
1972-73	24	272	171	127	68	80	24	765
1973-74	26	304	198	142	68	84	26	848
1974-75	29	389	265	192	85	99	39	1,098
1975-76	34	511	319	213	106	112	58	1,352

Commonwealth Government Grants

The following table shows the allocations to the States of Commonwealth grants for road construction, maintenance, repair and other works connected with transport for each of the years 1971-72 to 1975-76. Prior to 1974-75 these grants were provided under the various Commonwealth Aid Roads Acts, and since 1974-75 under the *National Roads Act*, the *Roads Grant Act*, and the *Transport (Planning and Research) Act*.

COMMONWEALTH GRANTS TO THE STATES FOR ROAD SYSTEMS (\$'000)

Year	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Total
1971-72	74,500	49,820	45,360	25,500	39,250	10,820	245,250
1972-73	85,590	57,240	52,110	28,000	43,910	12,150	279,000
1973-74	98,270	65,720	59,830	31,000	48,030	13,950	316,800
1974-75	115,792	75,951	75,372	31,888	50,449	18,585	368,037
1975-76	136,232	91,989	90,049	41,484	62,225	20,097	442,076

New South Wales

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

During 1971-72 changes were made in the method of financing road construction. The New South Wales Government decided that, as from 1 January 1972, the full cost of works carried out by the Department of Main Roads was to be met from the Department's own funds. Prior to this date, local councils in the County of Cumberland were required to meet half the cost of secondary roads construction and a proportion of the cost of tourist roads; and in country districts councils were required to meet a proportion of the cost of road and bridge construction and maintenance on roads other than State highways. The financial burden was therefore removed from councils in respect of works under the control of the Department of Main Roads. Councils continued to perform work on those roads for which they were responsible in the past.

The funds of the Department of Main Roads are derived principally from motor vehicle taxation, charges on heavy commercial goods vehicles under the *Road Maintenance (Contribution) Act*, 1958, grants under Commonwealth Aid Roads Acts and subsequent Acts (see page 513), other grants from the State or Commonwealth Governments, and proceeds of a levy on municipal and shire councils in the County of Cumberland in accordance with the *Main Roads Act*, 1924. The State Government also makes repayable advances for Main Roads Department works, and since 1963 the Commissioner for Main Roads has had the power (with the approval of the Governor on the recommendation of the Treasurer) to borrow moneys. The figures shown below represent the aggregate revenue and expenditure of the following funds: the County of Cumberland Main Roads General and Special Purposes Funds, the Country Main Roads General and Special Purposes Funds, and the Aid Roads Fund.

**DEPARTMENT OF MAIN ROADS, NEW SOUTH WALES: REVENUE
AND EXPENDITURE
(\$'000)**

	1971-72	1972-73	1973-74	1974-75	1975-76
REVENUE(a)					
Motor vehicle taxation, registration and licence fees	73,637	92,731	99,294	104,276	106,222
Grants—					
Commonwealth Road Grants	55,617	65,924	77,628	108,796	134,402
Other State and Commonwealth grants	655	1,886	2,048	8,821	13,572
Contributions by other departments and bodies	776	651	641	625	1,119
Local authorities' contributions—					
Under section 11 of <i>Main Roads Act</i>	5,890	311	167	156	104
Other	645	425	381	436	1,131
Sydney-Newcastle Expressway Toll	2,564	2,653	3,626	4,235	6,069
Other	1,020	1,336	1,111	1,862	1,903
Total	140,804	165,915	184,896	229,206	264,523
EXPENDITURE(b)					
Roads and bridges—					
Construction	98,055	113,987	126,761	155,451	194,939
Maintenance	26,364	29,956	35,333	50,531	60,323
Administration	9,413	9,949	11,184	12,804	13,771
Interest, exchange, etc., on debt	4,331	4,489	4,595	4,934	5,962
Other(c)	4,291	4,359	4,217	4,911	6,070
Total	142,455	162,740	182,089	228,630	281,064

(a) Excludes repayable advances by the State Government and private loans (\$8,800,000 in 1971-72, \$8,000,000 in 1972-73, \$6,500,000 in 1973-74, \$10,000,000 in 1974-75, and \$15,250,000 in 1975-76) and transfers from Sydney Harbour Bridge Account for Expressway construction (\$57,000 in 1971-72, \$334,000 in 1972-73, \$7,000 in 1973-74, \$3,000 in 1974-75, and \$7,000 in 1975-76). Expenditure from these amounts is fully reflected in expenditure. (b) Excludes debt redemption (\$1,874,000 in 1971-72, \$2,327,000 in 1972-73, \$3,618,000 in 1973-74, \$2,719,000 in 1974-75, and \$3,298,000 in 1975-76). (c) Mainly purchase of assets not subject to annual depreciation charge. The purchase of other assets is omitted here because the depreciation charge for them is reflected each year in 'Roads and bridges'.

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

The Sydney Harbour Bridge was opened for traffic on 19 March 1932, and has a main span of 503 metres with clearance for shipping of 52 metres. The deck, 49 metres wide, carries eight road traffic lanes, two railway tracks, one cycleway and one footway. During 1975-76, approximately 51 million private road vehicles, 23.7 million rail passengers and 11.2 million bus passengers crossed the bridge. Income from tolls during 1975-76 amounted to \$5,427,000, including road tolls of \$5,105,000, and a lump sum contribution of \$322,000 for rail and bus passengers in lieu of the per capita toll charge.

The sections of the Sydney-Newcastle Expressway now open to traffic extend approximately 26 kilometres between Berowra and Calga. Total cost of the project was \$36 million. Toll collections during the year ended 30 June 1976 amounted to \$4,863,000. Southern Freeway was opened to traffic on 24 July 1975 and extends for approximately 23 kilometres between Waterfall and Bulli Pass. Total cost of the tollway was \$30 million.

Victoria

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

The funds of the Country Roads Board are derived principally from motor registration fees, including a major portion of the fees credited for the Roads (Special Projects) Fund, a proportion of drivers' licence fees, payments by the Commonwealth Government under the Commonwealth Roads Acts and subsequent legislation (*see* page 513), road charges under the *Commercial Goods Vehicles Act*, repayments by municipalities, and grants and loans from the State Government. From 1 July 1974, the Country Roads Board acquired from the Melbourne and Metropolitan Board of Works the latter's road-making powers, road assets, etc., plus relevant staff, thus increasing the scope of the Country Roads Board's responsibilities. Some of the major works taken over and being completed by the Country Roads Board are the construction of the Eastern Freeway from Collingwood to Bulleen (*due for completion by the end of 1977*), the Mulgrave Freeway, and the Johnson Street Bridge in South Melbourne which will connect to the proposed West Gate Freeway.

Major works currently being carried out by the Country Roads Board include the construction of the Calder Freeway Keilor Section to bypass the township of Keilor, widening of the Nepean Highway between Elsternwick and Moorabbin, and extension of the Mornington Peninsula Freeway from Springvale Road, Chelsea, to join the Frankston Freeway.

COUNTRY ROADS BOARD, VICTORIA: RECEIPTS AND PAYMENTS
(\\$'000)

	1971-72	1972-73	1973-74	1974-75	1975-76
RECEIPTS					
Motor Car Act—registration and licence fees (less cost of collection)	34,296	35,428	37,537	41,985	50,827
Municipalities' payments	2,190	2,182	2,136	2,047	2,233
Commonwealth Roads Acts	45,300	49,785	55,274	(a)78,977	92,132
Roads (Special Projects) Fund	6,721	5,675	7,643	30,429	30,192
Road charges, Commercial Goods Vehicles Act	9,136	9,745	10,359	10,038	10,132
Loans from State Government	400	400	300	300	325
Grants from State Government	983	1,333	568	772	427
Other	713	703	860	1,247	1,525
Total	99,739	105,251	114,677	165,795	187,793
PAYMENTS					
Construction and maintenance of roads and bridges—					
State highways	22,113	18,044	18,974	26,445	30,972
Main roads	20,372	20,660	20,142	26,499	26,780
Freeways	18,345	23,857	30,391	49,352	54,983
Tourist roads	2,284	1,749	1,860	2,134	1,754
Forest roads	858	840	910	1,102	1,342
Unclassified roads	16,846	17,513	19,242	28,334	29,621
Other	120	130	177	124	230
Plant purchase	2,060	1,765	1,116	1,783	1,234
Buildings, workshops, etc.	331	641	565	806	313
Interest, debt redemption, etc.	2,584	2,612	2,619	2,688	2,793
Statutory payment to—					
Tourist Fund	658	686	709	751	840
Traffic Authority Fund	329	343	354	375	420
Transport Regulation Board	534	548	585	622	602
Administration and other	12,250	14,099	18,099	24,954	28,406
Total	99,685	103,487	115,742	165,969	180,288

(a) Includes \$3,134,000 employment grants.

Queensland

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

The funds of the Department of Main Roads are obtained chiefly from motor vehicle registration and collections, fees, etc., under the Transport Acts, grants from the Commonwealth Government (see page 513) and loans, grants and advances from the State Government. The total receipts and payments during each of the years 1971-72 to 1975-76 are shown in the following table.

DEPARTMENT OF MAIN ROADS, QUEENSLAND: RECEIPTS AND PAYMENTS
(**\$'000**)

	1971-72	1972-73	1973-74	1974-75	1975-76
RECEIPTS					
Motor vehicle registration, Transport Acts collections, fees, etc.	26,886	29,303	31,802	33,650	48,536
Loans from State Government	500	1,750	1,400	5,800	1,869
Grants from State Government	183	313	200	1,422	1,121
Roads (Contribution to Maintenance) Act	4,862	5,194	5,420	5,108	5,101
Commonwealth (Roads Grants)	55,298	58,444	68,018	80,139	92,307
Maintenance repayments—local authorities	1,137	1,302	1,271	876	997
Hire, rent, sales of plant, etc.	6,517	7,413	8,012	9,761	10,496
Other	750	961	1,686	1,541	2,099
Total	96,132	104,680	117,810	138,297	162,525
PAYMENTS					
Permanent road works and surveys(a)	62,942	66,030	69,983	88,156	100,212
Maintenance of roads	13,189	13,574	18,608	25,554	29,731
Plant, machinery, buildings, etc. (including plant maintenance)	4,797	5,130	5,483	6,212	7,958
Loans—					
Interest	— 108	— 216	— 241	— 126	199
Redemption	847	798	765	743	736
Administration and other	14,947	17,617	21,846	19,908	21,380
Total	96,614	102,933	116,444	140,447	160,215

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

South Australia

The Highways Department is administered by the Commissioner of Highways who is empowered, subject to the approval of the Minister of Transport, to undertake the construction, maintenance and protection of the principal roads of the State, allocate grants to Councils for roadworks and supervise the expenditure of those grants, and assist the Councils to purchase road-making plant and to defray the cost of road-works. In addition, the Commissioner advises Councils on technical questions concerning the construction, maintenance or repair of roads. Funds of the Department are derived mainly from the Highways Fund (into which are paid the proceeds from motor vehicle registration and drivers' licences (less cost of collection), appropriations from loan funds, repayments of advances made to Councils, and contributions by the Bus and Tram Division of the State Transport Authority) and from grants from the Commonwealth Government (see page 513).

The following table shows particulars of receipts and payments, during the years 1971-72 to 1975-76, of funds controlled by the Highways Department.

HIGHWAYS DEPARTMENT, SOUTH AUSTRALIA: RECEIPTS AND PAYMENTS
(\$'000)

	1971-72	1972-73	1973-74	1974-75	1975-76
RECEIPTS					
Motor vehicle registration, licences, fees	18,000	18,828	19,872	25,840	27,574
Commonwealth Roads Grants Acts	25,500	28,000	31,000	31,769	41,099
Other(a)	4,088	5,157	6,571	4,871	7,471
Total	47,589	51,985	57,443	62,481	76,144
PAYMENTS					
Construction and reconstruction of roads and bridges(b)	32,049	33,604	35,210	39,180	44,095
Maintenance(a)(b)	13,303	11,197	11,483	14,964	18,479
Recoups to Consolidated Revenue Fund—interest, debt redemption and exchange	580	619	653	675	707
Advances to local and semi-government authorities	305	262	4	42	31
Stores, plant, machinery, suspense accounts, etc.(c)	3,816	3,967	4,808	4,651	6,642
General administration . . . . .	..	2,638	3,191	3,908	4,048
Total	50,053	52,287	55,348	63,420	74,001

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

Western Australia

Work connected with road construction and maintenance and associated projects in Western Australia is undertaken by the State Government through the Main Roads Department, and by local government authorities throughout the State. The Department operates under the *Main Roads Act 1930-1976* and is administered by a Commissioner of Main Roads who is responsible to the Minister for Transport. The Act makes provision for the construction and maintenance of public roads in the categories of highways, main and secondary roads, and other roads, and for the control of access to roads. Within its own district each local government authority is responsible for the provision and upkeep of roads other than those provided by the Main Roads Department. In addition, the local authorities are required by the *Main Roads Amendment Act 1975* to maintain secondary roads within or along their boundaries.

Revenue for road works in Western Australia is derived principally from allocations made under Commonwealth roads grants (see page 513). Other sources of income for road works are all motor vehicle licence fees (other than recording fees), excess load permit fees and one half of drivers' licences which are paid to the Main Roads Trust Account under authority of the *Road Traffic Act 1974-76*. Further moneys for expenditure on road maintenance are available under the *Road Maintenance (Contribution) Act 1965-76*, the *Transport Commission Act 1966-76* and from payments by local government authorities in respect of permanent works and the maintenance of highways, main and secondary roads.

Receipts and payments for the years 1971-72 to 1975-76 are shown in the following table.

MAIN ROADS DEPARTMENT, WESTERN AUSTRALIA: RECEIPTS AND PAYMENTS
(\$'000)

	1971-72	1972-73	1973-74	1974-75	1975-76
RECEIPTS					
Motor vehicle registration fees, etc.	14,245	14,567	15,321	23,987	30,424
Commonwealth Government Grants—					
Commonwealth Roads Grants	39,250	43,910	48,030	50,195	62,058
States Grants (Beef Cattle Roads) Act	1,600	1,900	981	..	..
Other Grants . . . . .	..	..	255	205	366
Road Maintenance (Contribution) Act	3,822	3,359	3,682	4,178	4,451
Recoups from other Government Departments and Local Authorities for works carried out	2,295	2,672	2,788	4,044	4,905
Other	434	461	477	487	3,022
Total	61,646	66,870	71,534	83,096	105,225
PAYMENTS					
Road construction and maintenance	44,887	47,111	45,675	54,726	62,981
Other road works—signals, traffic engineering, etc.	784	777	1,075	2,067	3,476
Statutory grants to Local Authorities	12,435	13,295	13,962	15,044	16,205
Administration, supervision, etc.	7,231	8,296	9,893	12,050	13,435
Other	328	410	304	324	338
Total	65,665	69,889	70,910	84,211	96,435

Tasmania

Under the *Roads and Jetties Act 1935*, the control of the construction and maintenance of roads and certain road-making plant was vested in the Minister for Lands and Works. Works authorised by the Minister in respect of roads classified as State highways, main roads, secondary roads and tourist and developmental roads are constructed by the Department of Public Works and financed from the State Highways Trust Fund, into which are paid the grants from the Commonwealth Government (*see* page 513), motor vehicle taxes and public vehicle fees. Loan funds are also authorised by Parliament for road purposes. Municipal councils contribute towards the cost of maintaining main and secondary roads in the classified system. The maintenance of roads not included in the classified system is the responsibility of municipal councils, but they are assisted with grants made available under the *Roads Grants Act*.

The following table gives a detailed analysis only of funds available to the State government and expenditure from the State Road Funds for the years 1971-72 to 1975-76.

STATE ROAD FUNDS; TASMANIA: RECEIPTS AND PAYMENTS
(\\$'000)

	1971-72	1972-73	1973-74	1974-75	1975-76
RECEIPTS					
Motor vehicle taxation, registration, licences, fees, fines, etc.	5,659	5,912	6,338	6,660	8,545
Commonwealth Roads Grants	10,820	12,150	13,950	18,620	20,097
State Loan Fund	930	540	710	936	633
Contributions by Local Authorities	17	19	17	18	19
Other	307	277	441	429	307
Total	17,733	18,897	21,456	26,662	29,602
PAYMENTS					
Construction and reconstruction of roads and bridges	12,960	13,810	15,757	18,936	24,161
Maintenance of roads and bridges	4,475	4,686	4,978	6,494	8,052
Planning and research	189	186	220	363	421
Total	17,624	18,682	20,955	25,793	32,634

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; Commonwealth Department of 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.

Road research is a continuing concern, and in 1959 the Association decided to set up and finance a separate national centre to conduct road research on behalf of its members. The Australian Road Research Board (ARRB) was duly established in 1960 as a company controlled by a Board consisting of the NAASRA members.

The Association regularly confers with the Commonwealth Department of Transport, 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 form ARRB's Board of Directors. The Executive Director, a full-time employee of the Board, is responsible for administering the Directors' policies.

ARRB regularly undertakes and arranges 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. The Board also relies on advice from its Technical Committees in Bituminous Surfacing, Road Pavements, Human Factors, Local Government Engineering, Traffic Engineering and Transport Planning, and its Steering Committee of senior advisors.

ARRB disseminates road research information through its biennial conference, first held in 1962, and regular symposia, and through its publications which include the *Conference Proceedings*, a quarterly journal *Australian Road Research* and various reports arising out of its many research projects. The Board also maintains a unique library of road literature and operates an expanding computer-based information service called *Australian Road Index* which collects and collates all Australian road research findings. It also operates the International Road Research Documentation (IRRD) data base of OECD in Australia.

The Commonwealth Bureau of Roads

In June 1977, the Commonwealth Bureau of Roads was officially amalgamated with the Bureau of Transport Economics. (See section on the Bureau of Transport Economics at the beginning of this chapter.)

AIR TRANSPORT

Department of Transport

Control of air transport in Australia is exercised by the Department of Transport. The Department's jurisdiction covers Australia and areas of the Indian and Pacific Oceans. Year Books Nos. 16, 19 and 38 trace the establishment of air transport control in Australia and the appropriate Acts of Parliament and Regulations under which this control is exercised. Further details about air transport control and operations are given in the annual reports to the Commonwealth Parliament by the Minister for Transport.

Regular air services within Australia

Interstate services. The majority of scheduled interstate services with passenger and all-freight aircraft are provided by two airlines only: the private enterprise airline Ansett Airlines of Australia (a division of Ansett Transport Industries (Operations) Pty Ltd, which is a subsidiary of Ansett Transport Industries Ltd); and the Commonwealth Government-owned Trans-Australia Airlines (TAA). All principal routes are competitive, with both airlines providing equal capacities in accordance with legislation passed by the Commonwealth Parliament. The two principal Acts which establish the legislative basis of this controlled competition are the *Airlines Agreements Act* 1952 and the *Airlines Equipment Act* 1958. The Airlines Equipment Act established the machinery for the achievement and maintenance of comparable, but not necessarily identical, aircraft fleets between TAA and Ansett Airlines of Australia, and was designed to prevent the provision of excess aircraft capacity. The *Airlines Agreement Act* established the basis of control of the two-airline competitive system and extended this machinery until at least 1982.

In addition to purely interstate services, both Ansett Airlines of Australia and Trans-Australia Airlines operate non-competitive intrastate routes in Australia. The Ansett Airlines of Australia non-competitive routes radiate mainly from Melbourne, while those of Trans-Australia Airlines are located within Queensland.

At 30 June 1977, the Ansett Airlines of Australia fleet included twelve Boeing 727s, twelve DC-9s, twelve Friendships, four Electra freighters, three helicopters and one Twin Otter DHC-6. At the same date, Trans-Australia Airlines operated a fleet of eleven Boeing 727s, twelve DC-9s, four Friendships and four Twin Otter DHC-6.

Intrastate services. In addition to the intrastate services operated by Ansett Airlines of Australia and Trans-Australia Airlines there are a number of smaller regional airlines operating from Sydney (Ansett Airlines of New South Wales and East-West Airlines), Adelaide (Ansett Airlines of South Australia), Perth (MacRobertson Miller Airlines), and Alice Springs (Connair). With the exception of Connair, which provides regular service to outback homesteads and communities, all of these are concerned primarily with traffic moving to and from their respective capital city. Except for the independently-owned East-West Airlines and Connair, all regional airlines are divisions of Ansett Transport Industries (Operations) Pty Ltd. The larger aircraft used by these regional airlines are Fellowships and Friendships. Connair uses DC3s and Herons.

Commuter services. These are not airline services but regular flights by charter firms with small single and twin-engined aircraft operating to fixed and published timetables. They provide regular air links between many centres, towns and country areas which are either not served by the major airlines or have no direct air service with their capital or nearest major provincial city. The first commuter service approved was for Opal Air Pty Ltd, of Coober Pedy (S.A.), to operate between Adelaide and the South Australian opal fields. At 30 June 1977 forty-one charter operators were operating commuter services in Australia. 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)**

		1971-72	1972-73	1973-74	1974-75	1975-76
Hours flown	number	248,774	256,435	281,611	282,706	270,928
Kilometres flown	'000	115,931	121,605	135,209	138,928	133,436
Passengers—						
Embarkations	number	6,629,316	7,502,892	8,857,654	9,393,104	9,315,141
Passenger-kilometres	'000	5,276,524	5,842,540	7,001,336	7,578,752	7,483,035
Freight—						
Tonnes uplifted	tonnes	89,883	94,425	112,654	107,813	106,061
Tonne-kilometres	'000	76,475	84,039	101,334	100,942	100,514
Mail—						
Tonnes uplifted	tonnes	10,137	10,114	9,916	9,613	9,708
Tonne-kilometres	'000	9,589	10,100	9,569	9,312	9,405

(a) Includes flights of all Australian-owned airlines, with the exception of those of Qantas Airways Limited, between airports located within Australia.

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 Papua New Guinea (which ceased on 16 September 1975) and 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	1971-72	1972-73	1973-74	1974-75	1975-76
Sydney	3,694,498	4,162,659	4,679,513	4,953,051	4,788,086
Melbourne	2,861,896	3,226,294	3,876,877	4,037,585	4,125,932
Brisbane	1,448,920	1,658,043	2,078,812	2,218,780	2,119,538
Adelaide	1,046,840	1,154,384	1,374,645	1,494,675	1,454,917
Canberra	670,608	813,712	934,069	981,815	901,837
Perth	545,890	536,057	646,699	696,527	629,530
Hobart	227,016	282,676	382,636	375,769	403,759
Townsville	202,160	231,665	315,782	320,153	329,831
Coolangatta	188,917	243,994	278,044	300,854	314,780
Launceston	208,090	244,982	294,694	287,741	304,784
Cairns	182,300	204,414	251,847	266,620	275,439
Mackay	133,806	159,408	196,951	213,972	249,196
Darwin	131,703	141,696	182,319	241,003	208,806

International activity

International organisations. The International Civil Aviation Organization had a membership of 129 nations in June 1977. Australia has continued its position as a member of the Council, which it has held since ICAO was established in 1947. Further details will be found in Year Book No. 40 and earlier issues.

International agreements. Australia had air service agreements in force with twenty-five countries at 30 June 1977. 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 six other countries at 30 June 1977.

International air services. At 30 June 1977, twenty-two 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 (New Guinea), Air Pacific (Fiji), Alitalia (Italy), British Airways Overseas Division (Britain), Canadian Pacific Air Lines (Canada), Cathay Pacific (Hong Kong), Deutsche Lufthansa (Federal Republic of Germany), Garuda (Indonesia), Japan Air Lines (Japan), JAT (Yugoslavia), KLM Royal Dutch Airlines (Netherlands), Singapore International Airlines (Singapore), Merpati Nusantara Airlines (Indonesia), Pan American World Airways (United States of America), Philippines Air Lines (Philippines), South African Airways (Republic of South Africa), Thai International (Thailand), Malaysian Airways (Malaysia) and Union de Transport Aeriens (France). Qantas, Australia's international airline, operates a fleet of twenty-seven aircraft of which seven are Boeing 707-338C jet aircraft and thirteen are Boeing 747B jet aircraft. All the shares in Qantas Airways Limited are owned by the Commonwealth Government.

International operations. The table following shows particulars of international airline traffic during 1975-76 moving into and out of an area which embraces Australia, Papua New Guinea, and Norfolk Island. These figures do not include traffic between Australia and Papua New Guinea and Norfolk Island.

**AIR TRANSPORT: INTERNATIONAL AIRLINE TRAFFIC
TO AND FROM AUSTRALIA(a), 1975-76**

Type of traffic	Aircraft movements	Passengers	Freight	Mail
Traffic to Australia—			tonnes	tonnes
Qantas Airways Limited	4,314	640,294	15,790	912
Other airlines	7,344	772,844	28,429	4,044
All airlines	11,658	1,413,138	44,219	4,956
Traffic from Australia—				
Qantas Airways Limited	4,302	605,333	11,807	1,952
Other airlines	7,307	783,412	15,051	856
All airlines	11,609	1,388,745	26,858	2,809

(a) Australian mainland, and Papua New Guinea 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 external territories and overseas countries, and stages external to Australia for flights of other Australian-owned airlines; they exclude flights over stages located within Papua New Guinea.

AIR TRANSPORT: OPERATIONS OF AUSTRALIA'S REGULAR OVERSEAS SERVICES

	1971-72	1972-73	1973-74	1974-75	1975-76
Hours flown number	91,357	87,548	90,293	86,231	85,839
Kilometres flown '000	66,270	64,823	69,062	65,045	65,221
Passengers—					
Embarkations number	885,548	1,054,929	1,295,457	1,418,541	1,488,858
Passenger-kilometres '000	4,892,044	6,775,195	8,653,357	9,434,345	10,541,870
Freight—					
Tonnes uplifted tonnes	20,961	23,239	27,328	29,974	33,417
Tonne-kilometres '000	143,514	150,342	195,078	213,748	243,911
Mail—					
Tonnes uplifted tonnes	2,841	2,791	2,912	2,950	2,997
Tonne-kilometres '000	24,627	22,891	25,071	24,043	26,217

General aviation activity, which covers all non-airline operations such as charter, aerial work and private flying, has grown rapidly throughout Australia in recent years and is an important sector of the Australian aviation industry. In 1976-77 the general aviation hours flown chiefly with light aircraft totalled 1,257,000 compared with 262,548 hours flown by Australian airline aircraft. At 30 June 1977 aircraft employed in general aviation numbered 4,726.

Aerodromes

The number of aerodromes throughout Australia and its external territories at 30 June 1977 was 451. Eighty-three were owned by the Commonwealth Government and 368 by local authorities and private interests. Capital expenditure on aerodrome and building construction was \$13.8 million in 1976-77. Maintenance expenditure on Commonwealth Government-owned aerodromes during 1976-77 was \$4.6 million, and development and maintenance grants to licensed aerodromes participating in the Local Ownership Plan totalled \$999,725.

Airways facilities

A total of 416 navigational aids were in service at 30 June 1977. The total includes 224 non-directional beacons (NDB), 102 distance measuring equipment (DME), 9 international distance measuring equipment (DMEI), 9 visual-aural ranges (VAR), 55 VHF omni-directional ranges (VOR), 16 instrument landing systems (ILS) and one twin locator approach system.

One hundred and forty-two aerodromes are now equipped with night landing facilities. Eighty-one Australian-designed 'T' systems (T-VASIS) are operating. Seven long-range surveillance radars, two short range and nine secondary surveillance radars (seven civil, two military) are also in operation. There are twenty-seven fully-equipped Air Traffic Control Centres and fifty-three flight service units.

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

At 30 June 1977 there were 4,871 aircraft registered in Australia. At 30 June 1977 there were also 36,462 pilots' licences in force, of which 17,035 were private pilots' licences, 3,619 commercial pilots' licences, and 15,808 student pilots' licences. Flight radio-telephone operators' licences numbered 25,808.

Accidents and casualties

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

	1971-72	1972-73	1973-74	1974-75	1975-76
Number	28	30	34	24	32
Persons killed	37	41	46	25	54
Persons seriously injured	23	8	19	16	24

(a) Accidents involving civil aircraft which resulted in death or serious injury. Excludes parachutists killed on contact with earth after an uninterrupted fall. (b) Excludes accidents outside Australia involving aircraft on the Australian register.

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 Postal and Telecommunications Department are located in Canberra, Melbourne and Sydney.

Postal and Telecommunications Department—General

Early in 1975, legislation was passed to establish two statutory authorities—the Australian Telecommunications Commission and the Australian Postal Commission—to take over the postal and telecommunications responsibility of the former Postmaster-General's Department from 1 July 1975. The residual functions of the former department remain with the Postal and Telecommunications Department, which was created from that date. These mainly involve the administration of the *Wireless Telegraphy Act* 1905 which concerns the licensing and management of the radio frequency spectrum. The new Department also took over (from the former Department of the Media) the responsibility for policy matters concerned with broadcasting.

The principal functions of the Department are 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 Post and Telecommunications is responsible.

Since its establishment the Department has assumed other responsibilities, some of which are currently reflected in the *Wireless Telegraphy Act* 1905 and the *Broadcasting and Television Act* 1942.

The authorities responsible to the Minister for Post and Telecommunications 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;
- to plan and manage the radio frequency spectrum and regulate radio communications service;
- to construct, maintain and operate the transmitters of the National Broadcasting and Television Service and the Radio Australia Service (*see* pages 534-537); and
- to provide agency services for Australian and State Government Departments and other instrumentalities.

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 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 of Australia Post Courier services, a revision of parcel rates and the introduction of a concessional rate for domestic Christmas greeting cards.

In order to improve services further, the Commission has decided to decentralise the mail sorting and distribution network. The program involves the establishment of regional mail sorting centres in country and suburban areas in each State. A number have already been established.

The following tables indicate Australia Post's financial results, services and operations for 1976-77. Selected tables also show figures from 1972-73 to 1976-77.

AUSTRALIAN POSTAL COMMISSION: REVENUE AND EXPENDITURE, 1973 TO 1977
(*'000*)

<i>Year ended 30 June—</i>	<i>1973</i>	<i>1974</i>	<i>1975</i>	<i>1976(a)</i>	<i>1977(a)</i>
Revenue—					
Mail services	207,277	224,246	274,073	402,221	435,790
Money order, postal order services	4,778	4,944	5,653	7,481	6,881
Commission on agency services	10,055	11,863	13,207	85,882	101,739
Other revenue	4,386	3,943	9,055	10,014	17,186
Total	226,496	244,996	301,988	505,688	561,586
Expenditure—					
Operating and general	173,265	203,185	262,006	354,995	395,675
Transportation	35,404	36,638	42,214	46,723	50,168
Depreciation, superannuation, long-service leave, interest	38,719	59,691	62,364	72,268	86,834
Total	247,388	299,514	366,584	473,976	532,697

(a) Figures not comparable with years prior to 1976 due mainly to changes in accounting for work done at post offices for Telecom Australia.

NOTE: Prior to 1975, postal services were operated by the Postmaster-General's Department.

**AUSTRALIAN POSTAL COMMISSION: STATEMENT OF REVENUE
AND EXPENDITURE FOR THE YEAR ENDED 30 JUNE 1977**
(*\$'000*)

Revenue—	
Mail services	435,790
Postal order and money order services	6,881
Commission on agency services	101,739
Other revenue	17,186
Total	561,596
Expenditure—	
Operating and general	395,675
Transportation	50,168
Depreciation	9,341
Superannuation	54,253
Long Service Leave	16,383
Interest	6,877
Total	532,697
Accumulated surplus available for appropriation—	
Operating surplus	28,899
Accumulated surplus brought forward	20,335
Total	49,234
Appropriation—	
Transfer to fixed assets reserve	28,000
Total	28,000
Accumulated surplus carried forward	21,234

**AUSTRALIAN POSTAL COMMISSION: SUMMARY OF TRANSACTIONS
AFFECTING FIXED ASSETS, 1976-77**

\$A

<i>Class of asset</i>	<i>Value at 1 July 1976</i>	<i>Additions in the year</i>	<i>Asset expenditure written out</i>	<i>Value at 30 June 1977 (a)</i>
Land	21,514,053	1,514,408	55,665	22,972,796
Buildings	148,624,447	10,647,889	55,787	159,216,549
Motor vehicles	8,131,389	5,275,782	2,023,059	11,384,112
Plant	36,129,488	1,562,699	965,245	36,726,942
Equipment	12,330,707	2,129,176	431,198	14,028,685
<i>Total value of fixed assets</i>	<i>226,730,084</i>	<i>21,129,954</i>	<i>3,530,954</i>	<i>244,329,084</i>
<i>Less depreciation</i>				<i>50,247,937</i>
Net book value of fixed assets				194,081,147

(a) At cost.

**AUSTRALIAN POSTAL COMMISSION: ANALYSIS OF TRANSACTIONS
AFFECTING THE PROVISION FOR DEPRECIATION, 1976-77**

\$A

<i>Class of asset</i>	<i>Balance of provision at 1 July 1976</i>	<i>Depreciation provided for in 1976-77</i>	<i>Asset expenditure written out</i>	<i>Balance of provision at 30 June 1977</i>
Buildings	26,622,807	3,292,479	55,787	29,859,499
Motor vehicles	2,052,718	2,710,462	2,023,059	2,740,121
Plant	11,591,689	2,451,661	965,245	13,078,105
Equipment	4,114,895	886,515	431,198	4,570,212
Total value of provision	44,382,109	9,341,117	3,475,289	50,247,937

**AUSTRALIAN POSTAL COMMISSION: PERSONS ENGAGED IN PROVIDING POSTAL
SERVICES AT 30 JUNE 1977**

	<i>N.S.W. (Incl. H.Q. A.C.T.)</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A. (Incl. N.T.)</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust. 1977</i>	<i>Aust. 1976</i>
Full time official staff								
(a)—								
Permanent	503	8,490	6,071	3,448	2,542	2,010	665	23,729
Temporary	7	4,126	2,295	594	249	340	124	7,735
Other staff(b) . . . . .	..	4,482	2,690	246	1,230	977	407	12,002
Total	510	17,098	11,056	6,258	4,021	3,327	1,196	43,466
								45,431

(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 1977**

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Aust. 1977</i>	<i>Aust. 1976</i>
Contract road services . . .	1,823	863	1,120	325	376	185	4,692	4,962
Households receiving mail(a) .	1,668,499	1,208,363	625,208	442,151	367,123	125,440	4,434,784	4,362,639
Businesses receiving mail(a) .	147,000	102,082	59,887	35,681	33,170	10,503	388,323	394,076
Post offices—								
Official—								
At 1 July 1976 . . .	514	333	215	171	162	46	1,441	..
Opened 1976–77 . . .	3	2	3	1	3	1	13	..
Closed 1976–77 . . .	2	..	..	1	1	5	9	..
At 30 June 1977 . . .	515	335	218	171	164	42	1,445	..
Non-official—								
At 1 July 1976 . . .	1,418	1,109	748	569	381	222	4,447	..
Opened 1976–77 . . .	6	1	1	1	5	6	20	..
Closed 1976–77 . . .	51	60	50	14	10	8	193	..
At 30 June 1977 . . .	1,373	1,050	699	556	376	220	4,274	..
Total post offices . . .	1,888	1,385	917	727	540	282	5,719	..

(a) New South Wales and Australia figures not fully comparable with 1976 figures. For 1977 only private boxes and private bags actually let have been included.

**AUSTRALIAN POSTAL COMMISSION: TOTAL POSTAL ARTICLES HANDLED
(‘000)**

<i>Year ended 30 June</i>	<i>Posted for delivery within Australia</i>	<i>Posted for places abroad</i>	<i>Received from abroad</i>	<i>Total postal articles handled</i>	<i>Mail carried on domestic air services (included in total)(a)</i>	
					<i>Articles</i>	<i>Gross weight</i>
						<i>kilograms</i>
1973	2,531,026	124,214	172,347	2,827,587	550,478	6,794,426
1974	2,515,692	114,966	187,386	2,818,026	525,258	6,483,148
1975	2,371,014	112,996	198,232	2,682,242	521,010	6,430,717
1976	2,062,987	104,680	196,064	2,363,731	453,780	5,594,724
1977	2,047,930	104,796	204,861	2,357,587	522,313	6,448,310

(a) Postings within Australia and Territories for delivery therein.

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

<i>Year ended 30 June</i>	<i>Standard letters</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>
1975(b)	2,025,091	95,482	152,957	2,273,530	319,051	14,381	40,219
1976	1,782,575	88,984	154,488	2,026,047	261,090	13,282	36,440
1977	1,770,453	88,953	163,035	2,022,441	257,067	13,455	36,752

STATES—YEAR ENDED 30 JUNE 1977

New South Wales	682,749	38,219	85,883	806,851	106,902	7,635	20,184	134,721
Victoria	519,142	26,644	52,039	597,825	83,590	3,671	10,071	97,332
Queensland	242,906	6,857	12,135	261,898	25,786	925	2,472	29,183
South Australia	150,738	9,688	6,582	167,008	18,873	370	1,679	20,922
Western Australia	129,828	7,229	6,397	143,454	16,355	822	2,312	19,489
Tasmania	45,089	317	..	45,406	5,562	31	34	5,627

(a) Includes certified messenger delivery and priority paid mail. (b) Introduction of standard and non-standard categories from 1 October 1974—not comparable with previous years.

AUSTRALIAN POSTAL COMMISSION: REGISTERED ARTICLES(a) AND PARCELS(b)
(^{'000})

Year ended 30 June	Registered articles			Parcels			
	Posted for delivery in Australia	Posted for places abroad	Received from abroad	Total articles	Posted for delivery in Australia	Posted for places abroad	Received from abroad
1973	7,071	1,846	2,455	11,372	22,483	1,137	1,825
1974	7,063	1,898	2,761	11,722	22,323	1,041	1,972
1975	6,256	2,113	2,797	11,166	20,609	1,020	2,260
1976	3,877	1,533	2,807	8,217	15,442	884	2,332
1977	3,370	1,375	2,696	7,441	17,040	1,013	2,378

STATES—YEAR ENDED 30 JUNE 1977

New South Wales	1,168	725	1,719	3,612	7,188	432	915	8,535
Victoria	862	444	790	2,096	4,766	342	787	5,895
Queensland	605	60	53	718	2,422	85	262	2,769
South Australia	363	62	35	460	1,332	73	225	1,620
Western Australia	248	82	99	429	1,076	66	160	1,302
Tasmania	124	2	..	126	266	15	29	310

(a) Totals include messenger delivery mail.

(b) Totals include certified messenger delivery and priority paid mail.

**AUSTRALIAN POSTAL COMMISSION: SPECIAL SERVICES:
ARTICLES HANDLED**

(^{'000})

Year ended 30 June	Certified mail	Messenger delivery	Priority paid mail(a)
1973	6,116	1,716	1,354
1974	6,241	1,794	1,623
1975	6,288	1,572	1,462
1976	5,424	1,129	1,386
1977	4,927	1,007	1,449

STATES—YEAR ENDED 30 JUNE 1977

New South Wales	1,436	598	633
Victoria	1,424	217	390
Queensland	1,009	81	135
South Australia	408	49	151
Western Australia	420	51	98
Tasmania	230	11	42

**AUSTRALIAN POSTAL COMMISSION:
MONEY ORDERS AND POSTAL ORDERS**

Money orders issued

Year ended 30 June	For payment in Australia		For payment overseas		Postal orders issued	
	Number	Value	Number	Value	Number	Value
	^{'000}	^{\$'000}	^{'000}	^{\$'000}	^{'000}	^{\$'000}
1973	4,705	139,665	447	5,231	16,787	57,475
1974	4,348	149,099	426	5,343	15,822	60,887
1975	4,161	177,023	361	5,645	14,547	60,566
1976	3,685	197,201	258	4,681	9,673	42,554
1977	3,610	218,513	198	4,162	7,100	33,075

**AUSTRALIAN POSTAL COMMISSION:
SUMMARY OF AUSTRALIAN OVERSEAS AIRMAIL—ARTICLES
(‘000)**

Year ended 30 June	Despatched overseas				Received from overseas			
	Letters	Other articles	Parcels	Total articles	Letters	Other articles	Parcels	Total articles
1973	78,901	5,767	202	84,870	122,572	9,002	632	132,206
1974	82,115	7,098	275	89,488	136,272	10,233	703	147,208
1975	81,987	7,256	301	88,544	140,961	10,495	816	152,272
1976	76,802	6,942	274	84,018	143,449	10,514	879	154,842
1977	75,464	6,829	337	82,630	150,868	11,019	937	162,824

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 first two years of the Commission's operations.

**AUSTRALIAN TELECOMMUNICATIONS COMMISSION: REVENUE
(\$'000)**

Year ended 30 June—	1976	1977
Telephone rentals	416,831	454,111
Telephone calls	839,580	967,331
Telephone connections and rearrangements	58,447	77,465
Telegrams	29,423	31,511
Telex rentals	14,090	16,219
Telex calls	17,417	20,021
Other earnings(a)	48,401	108,334
Total	1,424,189	1,674,991

(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—	1976	1977
Maintenance of plant	278,125	355,196
Operating	236,148	275,278
General and administrative	62,621	71,520
Accommodation	50,224	64,678
Depreciation	312,358	340,817
Superannuation	70,395	100,381
Long service leave	22,336	24,090
Interest	239,588	278,629
Total	1,271,795	1,510,589

**AUSTRALIAN TELECOMMUNICATIONS COMMISSION:
FUNDS STATEMENT
(\$ million)**

<i>At 30 June—</i>	<i>1976</i>	<i>1977</i>
Source of funds—		
From the Commonwealth	392.0	215.0
From the public . . . . .	..	193.7
From trading activities—		
Net trading result	152.4	164.4
Plus non-cash charges—		
Depreciation	312.4	340.8
Excess of liability over long service leave	10.0	7.1
<i>Total</i>	<i>866.8</i>	<i>921.0</i>
Application of funds—		
Increase in fixed assets and stores holdings	780.0	897.0
Less non-cash charges capitalised—		
Depreciation	-8.4	-9.2
Long service leave liability	-13.0	-15.6
Increase in current assets over current liabilities	108.2	48.8
<i>Total</i>	<i>866.8</i>	<i>921.0</i>

A brief history of the development of telecommunications in Australia is shown in Year Book No. 59, pages 378-82. Common internal telecommunication operations comprise telephone, telegram, telex and data services. The following tables give details of these services.

TELEPHONE SERVICES IN OPERATION AT 30 JUNE 1977

	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Australia</i>
Type of service—							
Ordinary exchange services	1,316,158	1,045,980	448,259	317,270	263,638	96,680	3,487,985
Duplex services . . . . .	..	..	2	2	..	..	4
Party line services	2,699	433	2,200	714	430	..	6,497
Private branch exchange	151,875	103,965	40,619	40,184	36,566	6,534	379,743
Public telephones	12,670	7,928	5,179	3,164	2,755	1,118	32,814
Connected to—							
Automatic exchanges	1,439,967	1,139,084	465,659	347,894	298,022	104,333	3,794,959
Manual exchanges	43,435	19,222	30,600	13,440	5,387	..	112,084
Located in—							
Metropolitan areas	850,910	728,242	225,091	228,523	203,503	42,069	2,278,338
Outer metropolitan areas	84,596	126,946	46,267	40,968	28,471	5,237	332,485
Country areas	547,896	303,118	224,901	91,843	71,435	57,027	1,296,220
<i>Total</i>	<i>1,483,402</i>	<i>1,158,306</i>	<i>496,259</i>	<i>361,334</i>	<i>303,409</i>	<i>104,333</i>	<i>3,907,043</i>

TELEPHONE INSTRUMENTS IN SERVICE

<i>At 30 June—</i>	<i>N.S.W.</i>	<i>Vic.</i>	<i>Qld</i>	<i>S.A.</i>	<i>W.A.</i>	<i>Tas.</i>	<i>Australia</i>
1976	2,236,284	1,598,447	644,988	478,276	404,041	139,472	5,501,508
1977	2,376,900	1,701,769	688,024	487,469	436,033	144,711	5,834,906
Number per 100 population at 30 June 1977	46.2	45.2	32.4	35.5	36.8	35.4	41.7

LOCAL AND TRUNK LINE TELEPHONE CALLS

<i>Year ended 30 June—</i>	<i>1976</i>	<i>1977</i>
Effective paid local calls	3,720,000,000	3,924,000,000
Local calls per service	1,028	1,032
Trunk line calls	374,300,000	412,000,000
Trunk lines calls per service	103	108
Total calls	4,094,300,000	4,336,000,000

Subscriber Trunk Dialling (STD) facilities were introduced during the year 1961–62. For the year ended at 30 June 1977, 84 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>1976</i>	<i>1977</i>
Ordinary	11,234,049	9,225,700
Urgent	292,018	172,149
Lettergrams	16,159	16,627
Meteorological	913,617	743,004
Service	474,449	240,289
Total telegrams	12,930,292	10,397,769

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>
1976	17,047	27,036,000
1977	19,601	29,435,000

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

Overseas telecommunications services

The Overseas Telecommunications Commission (Australia), which was established by the *Overseas Telecommunications Act 1946*, is the authority responsible for the establishment, maintenance, operation and development of telecommunication services between Australia and other countries, the external territories (mostly islands in the Pacific and Indian Oceans) and ships at sea.

Telephone (including International Subscriber Dialling), telex, public message telegram, photo-telegram, switched data and leased circuit services are provided to many countries and places throughout the world by means of submarine cables, communication satellites and, in a decreasing number of cases, high frequency radio. Television services are provided to those countries with access to satellite communication facilities.

OTC is directed by five Commissioners appointed by the Governor-General. The chief executive is the General Manager, who is appointed by the Commission.

Details of overseas communication systems operating in Australia prior to 1946 and developments leading to the establishment of the Commission were published in Year Book No. 37, pages 220-4.

International consultation

OTC participates in the Commonwealth Telecommunications Organisation, the International Telecommunication Union and the International Telecommunications Satellite Organisation (INTELSAT) which has established a global communications satellite system. OTC is involved in the establishment of the International Maritime Satellite Organisation (INMARSAT) which will provide a satellite system for high-grade telephone, telex and data communications with ships at sea on a global basis, including distress and search and rescue communications.

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 Ceduna (S.A.) Cairns (Qld) and at Guam in the Mariana Islands; satellite earth stations at Carnarvon (W.A.), Ceduna (S.A.) and Moree (N.S.W.) which provide more than half of Australia's telecommunications links; international radio stations at Doonside and Bringelly (N.S.W.) and at Bassendean and Gnaraga (W.A.); and fourteen coast radio stations at points around the Australian coast and 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-Vancouver (1963); SEACOM, Sydney-Madang-Hong Kong-Singapore (1967); TRANSPAC II, Hawaii-Guam-Okinawa (1975); HAW III, Hawaii-U.S. Mainland (1975); TASMAN, Sydney-Auckland (1976); A-PNG, Cairns-Port Moresby (1976).

The OLUHO cable linking Okinawa (Japan), Luzon (Philippines) and Hong Kong was placed in service in August 1977. Plans for a Philippines-Singapore cable are progressing. An OTC ownership interest in both systems is under consideration.

Satellites

OTC is a shareholder in INTELSAT which operates communication satellites over the Indian, Pacific and Atlantic Oceans.

1976-77 Statistics

As at March 1977 the OTC staff totalled 2,059, revenue for the previous twelve months was approximately \$100 million and profit after tax was \$12.651 million, the after tax return on capital and reserves being 13.8 per cent. Telephone service which is available to 210 overseas destinations provided about 55 per cent of revenue, telex about 24 per cent and telegraph about 10 per cent. A significant event on 1st April 1976 was the introduction of International Subscriber Dialling or ISD, by which the customer can dial his or her own overseas telephone calls to many destinations. Over 97 per cent of overseas telex calls from Australia are now automatically subscriber connected.

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. OTC is applying computer techniques extensively in its telegraph, telephone and telex services.

Charges

The Commission made some reduction in charges for its services in 1976-77 and will consider further reductions in 1977-78. Some other charges were increased to avoid excessive cross subsidisation.

Detailed information on OTC

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

International telecommunication traffic

The following table shows particulars of overseas telecommunication traffic between Australia and overseas countries for the years ended 31 March 1976 and 1977.

**INTERNATIONAL TELECOMMUNICATION SERVICES: YEARS ENDED 31 MARCH
1976 AND 1977**

Service		Transmissions					
		From Australia		To Australia		Total	
		1975-76	1976-77	1975-76	1976-77	1975-76	1976-77
Telephone	'000 paid minutes	19,262	26,345	22,106	26,506	41,368	52,851
Telex	'000 paid minutes	9,637	11,453	9,320	10,981	18,957	22,434
Television programs	paid minutes	1,382	921	9,199	9,254	10,581	10,175
Telegraph services	'000 words	65,817	62,174	55,516	51,075	121,333	113,249

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 1977 the coastal radio service handled 5,965,000 paid words to ships and 4,701,000 words from ships. Ship calls over the radiotelephone service extended over 202,000 paid minutes.

Radiocommunication stations authorised

At 30 June 1977 there were 266,403 civil radiocommunication stations authorised for operation in Australia and its Territories. Of these, 5,887 were stations established at fixed locations, 21,620 were land stations which were established at fixed locations for communication with mobile stations, 13 were space and broadcasting stations, 231,060 were mobile stations and 7,823 were amateur stations. Particulars of broadcasting stations are shown on page 536.

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 Post and Telecommunications. Federal bodies which are directly involved include the Postal and Telecommunications Department, the Australian Broadcasting Commission, the Australian Broadcasting Tribunal, the Australian Telecommunications Commission and the Special Broadcasting Service (*see* page 535).

Basically, the Australian broadcasting and television system is comprised of the following types of stations: national broadcasting and television stations funded by the Federal Government; commercial broadcasting and television stations operated by companies under licence; public broadcasting and television 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 Postal and Telecommunications Department 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 Broadcasting and Television Service

Commercial broadcasting and television stations are operated by companies under licences granted by the Australian Broadcasting Tribunal and with technical operating conditions determined by the Postal and Telecommunications Department. The stations obtain income from the broadcasting of advertisements. At 30 June 1977 there were 123 commercial broadcasting 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 sixty-six 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 by wireless telegraphy; it does not originate programs. There are ten repeater stations in Australia operated by mining companies which transmit programs recorded on magnetic tape over a limited area.

The fee for a licence to operate a commercial broadcasting or television station is \$200 plus an amount based on the gross earnings from advertising receipts during the preceding financial year, assessed on a sliding scale varying from 1 per cent for amounts up to \$0.5 million to 6.0 per cent on amounts exceeding \$5.0 million.

The Broadcasting and Television Act makes provision for the grant of licences for the operation of a broadcasting or a television station for special purposes. As at 9 November 1977 this section of the Act had not been proclaimed. However, fifteen stations have been licensed on an experimental basis and, of these, two are operated by music broadcasting societies in Sydney and Melbourne, while the remainder are associated with various tertiary educational institutions throughout Australia.

The Special Broadcasting Service

The *Broadcasting and Television Amendment Bill 1977*, which was passed by Parliament on 9 November 1977, makes provision for the establishment of the Special Broadcasting Service (SBS). The role of the new authority will be to produce special broadcasting programs which it would not be appropriate for the Australian Broadcasting Commission or other established broadcasters to undertake. Initially the SBS will be responsible for the ethnic broadcasting service through stations 2EA Sydney and 3EA Melbourne. It is envisaged that the SBS may, at a later stage, assume responsibility for other special broadcasting and television services in Australia. New services by the SBS, however, may only be undertaken after parliamentary approval is given and the necessary regulations promulgated. The SBS will be empowered to fund its operations by the broadcasting of sponsored programs, by charging for the provision of services and facilities and by the sale of programs and rights or interests in programs. These avenues of funding are in addition to moneys appropriated annually from the Parliament to the SBS. The SBS will not, however, derive revenue by means of normal commercial advertising.

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 and to determine program and advertising standards applicable to licensed stations. In particular, the Tribunal is required to conduct public inquiries into the grant of licences following the invitation of applications by the Minister, and 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 1977 the National Broadcasting Service comprised 110 transmitting stations, of which eighty-eight were medium frequency, four frequency modulation and eighteen high frequency (six internal and twelve Radio Australia).

The medium-frequency transmitters operate in the broadcast band 530 to 1,590 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 1977 seventy-three 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 1976-77 were as follows: classical music 0.2 per cent; entertainment 57.1 per

cent; news 8.3 per cent; sporting 12.5 per cent; light music 0.1 per cent; spoken word 9.1 per cent; drama and features 0.9 per cent; parliament 8.9 per cent; religious 1.4 per cent; young people's programs 0.6 per cent; rural 0.3 per cent; and presentation 0.6 per cent. By contrast, the ABC's Radio 2 station's programming was: classical music 54.3 per cent; light music 1.2 per cent; entertainment 3.4 per cent; drama and features 4.5 per cent; young people's programs 0.4 per cent; education 5.9 per cent; spoken word 13.6 per cent; religious 3.9 per cent; news 8.4 per cent; sporting 0.1 per cent; rural 3.5 per cent; and presentation 1.1 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-fifth Annual Report of the Australian Broadcasting Commission.

Overseas Broadcasting Service

There are seven high-frequency stations at Shepparton, two at Lyndhurst, Victoria, one at Brisbane, Queensland 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 A.B.C. 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 73 news bulletins a day. The overseas audience has grown very substantially in recent years, as evidenced by a large and increasing number of letters from listeners abroad (277,638 in 1976-77), Radio Australia broadcasts in nine languages—English (and simple English), Indonesian, Japanese, Neo-Melanesian, Thai, French, Standard Chinese, Cantonese and Vietnamese.

BROADCASTING STATIONS: 30 JUNE 1977

Type of station	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
National—									
Medium frequency	22	6	20	10	18	6	5	2	89
High frequency	1	2	2	..	2	..	..	..	7
Frequency modulation	1	1	..	1	..	..	..	1	4
Overseas—									
Short wave . . . . .	..	9	1	..	2	..	..	..	12
Domestic—									
Short wave (serving inland Australia, high frequency)	1	2	2	..	1	..	..	..	6
Commercial—									
Medium frequency	39	22	27	9	14	8	2	2	123
Public community—									
Medium frequency	1	1	..	1	(a)2	1	..	1	7
Frequency modulation	4	2	1	..	1	..	..	..	8

(a) Includes one emergency broadcasting station.

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 1977, 154 stations were operating, including sixty-nine 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 to 30 June 1977 were as follows: drama, 17.6 per cent; public interest, 15.9 per cent; sporting 17.3 per cent; news 6.7 per cent; variety and acts 5.9 per cent; education 25.8 per cent; musical performance 0.9 per cent; religious 1.1 per cent; rural 0.4 per cent; special arts and aesthetics 1.4 per cent; cartoons 0.8 per cent; panel and quiz games 0.5 per cent; and presentation 5.8 per cent. The average weekly transmission time for the 154 national television transmitters was eighty-five hours during the year ended 30 June 1977.

During the year ended 30 June 1977, one new national television transmitter, namely ABLCS Channel 9, Leigh Creek, South Australia, commenced regular transmission. Ten new national translator channels went into operation—at Eden and Menindee in New South Wales; North Cairns and Mossman in Queensland; Wongan Hills, Narrogin, Koolyanobbing and Newman in Western Australia; and Burnie and Wynyard in Tasmania.

Ten remote communities are now provided with ABC programs from material tape recorded at Townsville and Perth.

Colour television

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

TELEVISION STATIONS: 30 JUNE 1977

Type of station and location	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Total
National—									
Metropolitan . . .	1	1	1	1	1	1	1	1	8
Country	13	7	31	6	15	2	3	..	77
<i>Total, National</i> . . .	<i>14</i>	<i>8</i>	<i>32</i>	<i>7</i>	<i>16</i>	<i>3</i>	<i>4</i>	<i>1</i>	<i>85</i>
Commercial—									
Metropolitan . . .	3	3	3	3	2	1	1	1	17
Country	11	6	8	3	4	1	..	..	33
<i>Total, Commercial</i> . . .	<i>14</i>	<i>9</i>	<i>11</i>	<i>6</i>	<i>6</i>	<i>2</i>	<i>1</i>	<i>1</i>	<i>50</i>

TELEVISION TRANSLATOR STATIONS: 30 JUNE 1977

Type of station	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Total
National	23	8	10	4	10	13	1	..	69
Commercial	21	9	15	2	2	16	..	1	66
<i>Total</i>	<i>44</i>	<i>17</i>	<i>25</i>	<i>6</i>	<i>12</i>	<i>29</i>	<i>1</i>	<i>1</i>	<i>135</i>

Related publications

More detailed figures and particulars for earlier years are included in the annual bulletins, *Rail, Bus and Air Transport* (9201.0), *Public Authority Finance—Federal Authorities* (5502.0), and in the annual mimeographed statement *Motor Vehicle Registrations* (9304.0). Current information on subjects dealt with in this chapter appears in the *Monthly Review of Business Statistics* (1304.0), the *Digest of Current Economic Statistics* (1305.0), *Overseas and Coastal Shipping* (annual) (9207.0), *Motor Vehicle Registrations* (quarterly) (9303.0), one preliminary monthly statement *Registration of New Motor Vehicles* (9301.0), two quarterly bulletins *Road Traffic Accidents involving Casualties* (9403.0) and (9402.0), and the monthly bulletin, *Road Accident Fatalities* (9401.0).

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

