

CHAPTER 14

TRANSPORT AND COMMUNICATION

The statistics in this chapter relate in the main to the year 1964–65, with comparisons restricted to a few recent years. More detailed figures and particulars for earlier years are included in the annual bulletins, *Transport and Communication*, *Commonwealth Finance*, and *State, Territory and Local Government Authorities' Finance and Government Securities* published by this Bureau. Current information on subjects dealt with in this chapter appears in the *Quarterly Summary of Australian Statistics*, the *Monthly Review of Business Statistics*, the *Digest of Current Economic Statistics*, the *Monthly Bulletin of Registrations of New Motor Vehicles* and two preliminary monthly statements on *Registrations of New Motor Vehicles*, and *Road Traffic Accidents involving Casualties* (quarterly).

Information additional to that contained in Bureau publications is available in the annual reports and other statements of the Department of Shipping and Transport, the various harbour boards and trusts, the several Government railways authorities, the Department of Civil Aviation, the Postmaster-General's Department, the Overseas Telecommunications Commission, the Australian Broadcasting Control Board, and the Australian Broadcasting Commission.

SHIPPING

Control of shipping

Commonwealth navigation and shipping legislation

By section 51 (i) of the Commonwealth Constitution the Parliament of the Commonwealth is empowered to make laws in respect of 'Trade and commerce with other countries, and among the States'. By section 98 this power is further defined as extending to navigation and shipping. Section 51 (vii) empowers the Commonwealth Parliament to legislate in respect of 'Lighthouses, lightships, beacons and buoys' and section 51 (ix) in respect of 'Quarantine'.

A review of the introduction and development of the *Navigation Act 1912–1950* is given in Year Book No. 40, pp. 110–12. Amendments to the principal Act were made by the Navigation Acts of 1952, 1953, 1956, 1958, 1961, and 1965. Other shipping Acts under the powers of the Commonwealth are the *Sea-Carriage of Goods Act 1924–1961*, the *Seamen's Compensation Act 1911–1964*, the *Seamen's War Pensions and Allowances Act 1940–1965*, the *Pollution of the Sea by Oil Act 1960–1965*, the *Australian Coastal Shipping Commission Act 1956–1964*, the *Australian Coastal Shipping Agreement Act 1956*, the *Stevedoring Industry Act 1956–1965*, the *Beaches, Fishing Grounds and Sea Routes Protection Act 1932–1961* (except Section 3), the *Submarine Cables and Pipelines Protection Act 1963*, and the *Lighthouses Act 1911–1961*.

The control of shipping during, and immediately after, the 1939–45 War and the establishment of the Maritime Industry Commission (abolished in 1952), the Australian Stevedoring Industry Board (replaced in 1956 by the Australian Stevedoring Industry Authority), and the Australian Shipping Board (replaced in 1956 by the Australian Coastal Shipping Commission) are described in Year Books No. 36, pages 121–30, and No. 39, pages 147–8.

Australian Coastal Shipping Commission

This Commission was established in 1956 for the purpose of maintaining and operating interstate, overseas and territorial shipping services, and replaced the Australian Shipping Board. It operates the Australian National Line, a Commonwealth-owned merchant shipping service, which, at 30 June 1965 comprised thirty-nine vessels totalling 196,342 gross tons. These vessels included twelve with a gross tonnage of 500 to 3,000, eleven with a gross tonnage of 3,000 to 5,000, eleven with a gross tonnage of 5,000 to 8,000; the passenger/vehicular vessel *Empress of Australia*, 12,637 gross tons, the bulk ore carriers *Mount Keira*, 10,229 gross tons, *Mount Kembla*, 10,112 gross tons, and *Musgrave Range*, 14,467 gross tons.

The Commission's new 47,500 tons deadweight bulk carrier *Darling River* was launched in December 1965 and is expected to be completed in April 1966.

In the year 1964-65, the *Princess of Tasmania* carried 88,905 passengers, 20,641 accompanied vehicles, 8,133 commercial vehicles and 3,345 trade cars. Between January 1965, when the *Empress of Australia* was commissioned, and 30 June 1965, this vessel carried 10,766 passengers, 1,584 accompanied vehicles, 5,696 commercial vehicles and 231 trade cars. These vessels operate in the mainland-Tasmania trade.

Australian Shipbuilding Board

Established in March 1941 as a wartime measure under the National Security (Shipbuilding) Regulations and constituted in 1948 under the *Supply and Development Act 1939-1948*, the Board now operates under the control of the Minister for Shipping and Transport. In November 1963 the Commonwealth Public Service Board approved its permanent establishment as a branch of the Department of Shipping and Transport. The membership of the Board consists of a Chairman, a Finance Member and three other members, one of whom represents the Naval Board.

The functions of the Board are set out in detail in Regulation 22 (4) of the Supply and Development Regulations and, briefly, in the exercise of those functions the Board is responsible for:

- (a) Recommending to the Minister for Shipping and Transport the price at which vessels may be purchased and disposed of by him on behalf of the Commonwealth;
- (b) the design, construction, outfitting and trials of ships;
- (c) research into all matters connected with or incidental to shipbuilding;
- (d) advice to the Minister on developments in the shipbuilding industry;
- (e) rendering assistance to all sections of the industry.

Up to 31 January 1966 the Board had arranged the construction of ninety-four merchant vessels and one naval survey vessel totalling approximately 591,000 deadweight tons, at a cost of about \$208,000,000, and also twenty-seven smaller vessels on which the Commonwealth Shipbuilding subsidy did not apply.

At 31 January 1966 the Board had current orders for the construction of twenty vessels totalling about 240,000 deadweight tons. These vessels comprised four 49,000 ton deadweight bulk ore carriers, two 19,000 ton deadweight oil tankers, one 2,700 ton deadweight coral carrier, one 2,350 cubic yard hopper dredge, one 250 ton self-propelled floating crane, two roll-on roll-off vehicle deck cargo vessels, one lighthouse supply vessel, five tugs each of average length approximately 105 feet, and three smaller vessels.

There are five major Australian shipyards building merchant vessels, two in Queensland (Evans Deakin and Co. Pty. Ltd., Brisbane, and Walkers Ltd., Maryborough), two in South Australia (Adelaide Ship Construction Pty. Ltd., Port Adelaide, and Whyalla Shipbuilding and Engineering Works, Whyalla), and one in New South Wales (State Dockyard, Newcastle), and two shipyards principally engaged in naval shipbuilding, one in New South Wales (Cockatoo Docks and Engineering Co. Pty. Ltd., Sydney) and one in Victoria (H.M. Naval Dockyard, Williamstown). There are also numerous smaller yards, situated in every State, building smaller steel and wooden working and pleasure craft.

Australian Stevedoring Industry Authority

In March 1947 legislation established a permanent Stevedoring Industry Commission to continue in peace-time the functions performed during the war by the Commission established under National Security legislation. In June 1949 legislation was enacted to abolish the Stevedoring Industry Commission, on which employers and employees were represented, and established in its place a Stevedoring Industry Board of three members, which attended to administrative matters formerly under the control of the Commission, such as the operation of labour bureaux at ports, payment of attendance money and provision of amenities. The industrial functions which previously came within the province of the Commission were assigned to a single Judge of the Commonwealth Court of Conciliation and Arbitration. In August 1956, following a Committee of Inquiry into the stevedoring industry, the Stevedoring Industry Board was replaced by the Australian Stevedoring Industry Authority of three members, including a representative of the management side of industry and a representative of the trade union movement. At the same time the judicial and non-judicial functions formerly exercised by the Commonwealth Court of Conciliation and Arbitration were divided between the Commonwealth Industrial Court and the Commonwealth Conciliation and Arbitration Commission respectively. Awards of the Conciliation and Arbitration Commission subsequently placed payment of sick pay, public holiday pay and annual leave under the administration of the Authority. Under amending legislation which operated from 6 June 1961 the Authority became responsible for payment of long service leave to registered waterside workers, and its disciplinary powers were strengthened to reduce the time lost through unauthorized stoppages. Further amending legislation, which operated from 8 October 1965, made the Authority solely responsible for the recruitment of waterside workers. The statutory provisions regulating the industry are now contained in the *Stevedoring Industry Act 1956-1965*, the *Stevedoring Industry Act 1963*, and Division 4 of Part III of the *Conciliation and Arbitration Act 1904-1965*.

System of record

In the system of recording statistics of oversea shipping, Australia is considered as a unit, and therefore only one entry and one clearance are counted for each voyage, without regard to the number of States visited (*see also* pages 446-8). For the purpose of these statistics all external territories are treated as oversea countries.

On arrival at, or departure from, a port in Australia, whether from or for an oversea country or from or for another port in Australia, the master or agent must 'enter' the vessel with the Customs authorities at the port, and supply certain prescribed information in regard to the ship, passengers and cargo. At the end of each month the information so obtained is forwarded to the Bureau of Census and Statistics. This information relates, in the main, to vessels engaged in the carriage of passengers and/or cargo between Australian States or between Australia and oversea countries.

The size of a vessel may be expressed in a number of ways. A vessel's gross tonnage, expressed in tons of 100 cubic feet, represents the total volume of the enclosed space, i.e. a ship of 25,000 tons has a total enclosed capacity of 2,500,000 cubic feet. Its net tonnage, expressed in tons of 100 cubic feet, represents the volume of enclosed space that can be used for cargo or passengers. Its displacement is its total weight and is expressed in tons of 2,240 lb. Its deadweight tonnage is the difference between the displacement of the vessel loaded to its summer loadline and the displacement light, i.e. it is the weight the vessel can carry, including the weight of bunkers and stores. Net tonnage is the concept generally used in the tables in this chapter, but since it can give a misleading impression of the size of ships which have a function other than carrying passengers and cargo (e.g. a tug has no net tonnage), some figures are given for deadweight tons and tons gross also.

Most cargo is recorded in terms of tons of 2,240 lb. However, some is shipped and recorded on the basis of forty cubic feet representing one ton measurement.

Except in Shipping at principal ports, intra-State (coastal) movements of vessels, including those of vessels engaged solely in trade within State limits, are excluded from the statistics in the following pages.

Oversea shipping

Total movement

The following table shows the number of entrances and clearances combined of oversea vessels at Australian ports, and the aggregate net tonnage, during each of the years 1960-61 to 1964-65.

OVERSEA SHIPPING: ENTRANCES AND CLEARANCES (COMBINED)
OF VESSELS DIRECT, AUSTRALIA, 1960-61 TO 1964-65

—	1960-61	1961-62	1962-63	1963-64	1964-65
Number of vessels	6,778	7,210	6,762	7,477	7,601
Net tonnage '000 tons	34,317	37,662	37,584	41,640	43,295

Particulars of the total oversea 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 in Year Book No. 40, page 97.

Total oversea shipping, States

The following table shows, for each State and the Northern Territory, the number of entrances and clearances of vessels direct from and to oversea countries, and the aggregate net tonnage, during the year 1964-65.

**OVERSEA SHIPPING: ENTRANCES AND CLEARANCES OF VESSELS DIRECT
STATES AND NORTHERN TERRITORY, 1964-65**

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances number	1,317	520	751	299	790	83	53	3,813
'000 net tons	7,690	3,341	3,086	2,332	4,787	281	172	21,689
Clearances number	1,159	526	886	311	810	58	38	3,788
'000 net tons	7,270	4,287	3,678	1,351	4,640	237	143	21,606

Shipping communication with various countries

A vessel arriving in Australia from overseas is recorded as coming from the country where the voyage commenced, irrespective of the number of intermediate ports of call. Similarly, a vessel leaving Australia is recorded as going to the country where the voyage is scheduled to terminate. The following table shows statistics of the net tonnage entered and cleared, with cargo and in ballast, according to the principal countries where vessels commenced or terminated their voyages to or from Australia during each of the years 1962-63 to 1964-65.

**OVERSEA SHIPPING: COUNTRIES FROM WHICH ENTERED OR FOR WHICH
CLEARED, AUSTRALIA, 1962-63 TO 1964-65**

('000 net tons)

Country from which entered or for which cleared	With cargo or in ballast	Entered			Cleared		
		1962-63	1963-64	1964-65	1962-63	1963-64	1964-65
United Kingdom	Cargo	1,627	1,562	1,748	2,014	2,309	2,217
	Ballast	18	46	24	25	23	18
Canada	Cargo	502	499	657	345	274	301
	Ballast	5					3
Nauru	Cargo	532	561	468	280	322	205
	Ballast				62	43	79
New Zealand	Cargo	772	740	602	1,185	1,267	859
	Ballast	790	752	529	92	100	225
Malaysia(a)	Cargo	795	626	732	603	520	507
	Ballast	133	99	103	705	374	332
Other Commonwealth countries	Cargo	1,247	1,390	1,352	1,254	1,250	1,765
	Ballast	297	214	324	251	268	226
Arabian States	Cargo	3,158	3,183	3,664	139	266	214
	Ballast	43	53	18	2,961	2,976	3,074
France	Cargo	84	98	127	141	93	117
	Ballast			10			
Germany, Federal Republic of	Cargo	357	353	269	368	429	386
	Ballast		1	11	13		
Indonesia	Cargo	1,684	1,558	1,666	86	215	153
	Ballast	193	197	155	964	1,111	1,266
Iran	Cargo	1,020	1,102	692	107	107	132
	Ballast	10	25	4	753	876	660
Italy	Cargo	277	282	315	317	270	337
	Ballast			1	11		
Japan	Cargo	921	1,197	1,294	2,402	3,220	4,005
	Ballast	1,968	3,321	3,487	41	34	100
Netherlands	Cargo	141	94	100	218	247	156
	Ballast	5		15			22
New Caledonia	Cargo	192	186	158	171	265	272
	Ballast	31	33	65	71	29	30
United States of America	Cargo	890	1,024	1,074	857	816	725
	Ballast	13	6	31	18	30	45
Other foreign countries	Cargo	920	987	1,437	1,925	2,906	2,347
	Ballast	333	534	557	247	277	828
Total	Cargo	15,119	15,442	16,355	12,412	14,776	14,698
	Ballast	3,839	5,281	5,334	6,214	6,141	6,908
Grand total . . . . .	..	18,958	20,723	21,689	18,626	20,917	21,606

(a) For years prior to 1964-65, figures for Malaysia exclude Sarawak, which was included in Other Commonwealth countries.

Country of registration of oversea shipping

Particulars of oversea shipping which entered Australian ports during each of the years 1962-63 to 1964-65 are given in the following table according to country of registration of vessels.

OVERSEA SHIPPING: ENTRANCES DIRECT, BY COUNTRY OF REGISTRATION OF VESSELS, AUSTRALIA, 1962-63 TO 1964-65

('000 net tons)

Vessels registered at ports in—	1962-63	1963-64	1964-65	Vessels registered at ports in—	1962-63	1963-64	1964-65
Commonwealth countries—				Foreign countries—			
Australia	130	95	119	<i>continued—</i>			
Hong Kong	466	393	373	Norway	2,355	2,942	3,185
New Zealand	341	379	378	Panama	524	605	551
Singapore	49	36	38	Sweden	745	867	769
United Kingdom	7,413	7,535	6,936	United States of America	335	311	260
Other	129	89	133	Other	212	414	626
In cargo	7,244	7,180	6,922	In cargo	7,875	8,262	9,433
In ballast	1,284	1,347	1,055	In ballast	2,555	3,934	4,279
Total, Commonwealth countries	8,528	8,527	7,977	Total foreign countries	10,430	12,196	13,712
<i>Proportion of total</i>	<i>42.9</i>	<i>41.1</i>	<i>36.8</i>	<i>Proportion of total</i>	<i>57.1</i>	<i>58.9</i>	<i>63.2</i>
Foreign countries—				All countries—			
Denmark	566	680	387	In cargo	15,119	15,442	16,355
France(a)	276	289	403	Proportion of total %	79.7	74.5	75.4
Germany, Federal Republic of	312	419	710	In ballast	3,839	5,281	5,334
Greece	933	1,410	1,264	Proportion of total %	20.3	25.5	24.6
Italy	898	669	752	Grand total	18,958	20,723	21,689
Japan	1,293	1,216	1,850				
Liberia	1,150	1,400	1,833				
Netherlands	831	974	1,122				

(a) Includes New Caledonia (40 during 1964-65).

Australian registered tonnage which entered Australian ports from overseas during the year 1964-65 represented 0.5 per cent. of the total tonnage entered and was confined mainly to the New Zealand and Pacific Islands trade. Australian-owned oversea-registered tonnage entering Australian ports from overseas represented 2.1 per cent of the total tonnage entered.

Interstate shipping

System of record

Interstate shipping comprises two elements: (a) vessels engaged solely in interstate trade; and (b) vessels trading between Australia and oversea countries and in the course of their voyages proceeding from one State to another. (At 30 June 1965 there were no oversea vessels with permits to carry coastal cargo for an extended period. Oversea vessels may obtain Single Voyage Permits under section 286 of the Navigation Act to perform certain tasks on the Australian coast in cases where no 'licensee' vessel is available. Examples are the numerous tankers that obtain permits to carry petroleum products between interstate ports and, since the withdrawal of most of the interstate passenger liners, the oversea vessels which are given permits to carry passengers and frozen cargoes on the interstate run. At the present time orders in Council exist exempting certain trades from the provisions of the Navigation Act and it is not necessary for 'unlicensed' vessels to obtain a permit to engage in those trades.*) No complexity enters into the record of those in category (a), but with regard to the method of recording the movements of the oversea vessels (b), some explanation is necessary. Each State desires that its shipping statistics should show in full its shipping communication with oversea countries, but at the same time it is necessary to avoid any duplication in the statistics of Australia as a whole. In order to meet these dual requirements, a vessel arriving in any State from an oversea country—say the United Kingdom—via another State, is recorded in the second State as from the United Kingdom 'Oversea via States', thus distinguishing the movement from a direct oversea entry. Continuing the voyage, the vessel is again recorded for the statistics of the third State as from the United Kingdom 'Oversea via States'. On an inward voyage, the clearance from the first State to the second State is a clearance interstate, and is included with interstate tonnage in conformity with the pre-federation practice of the States, and to preserve the continuity of State statistics. Thus, movements of ships which are, from the standpoint of Australia as a whole, purely coastal movements, must for the individual States be recorded as 'Oversea via States' or 'Interstate' according to the direction of the movement. The significance of the record of these movements will be seen more clearly from the following tabular presentation of the inward and outward voyages to and from Australia

* Australian Shipping and Shipbuilding Statistics published by the Department of Shipping and Transport.

of an oversea vessel which, it is presumed, reaches Fremantle (Western Australia) and then proceeds to the terminal port of the voyage—Sydney (New South Wales)—via South Australia and Victoria. From the terminal port the vessel will commence the outward voyage, in this case retracing its inward track.

ITINERARY OF AN OVERSEA VESSEL ON THE AUSTRALIAN COAST

	Recorded as—		
	For the State and for Australia	For the States	
	1.	2.	3.
Inward Voyage—			
Enters Fremantle from United Kingdom . . .	Oversea direct	Interstate direct	
Clears Fremantle for Adelaide . . .			
Enters Adelaide from United Kingdom via Fremantle . . .		Interstate direct	Oversea via States
Clears Adelaide for Melbourne . . .			
Enters Melbourne from United Kingdom via Adelaide . . .		Interstate direct	Oversea via States
Clears Melbourne for Sydney . . .			
Enters Sydney from United Kingdom via Melbourne . . .		Interstate direct	Oversea via States
Outward Voyage—			
Clears Sydney for United Kingdom via Melbourne . . .		Interstate direct	Oversea via States
Enters Melbourne from Sydney . . .			
Clears Melbourne for United Kingdom via Adelaide . . .		Interstate direct	Oversea via States
Enters Adelaide from Melbourne . . .			
Clears Adelaide for United Kingdom via Fremantle . . .		Interstate direct	Oversea via States
Enters Fremantle from Adelaide . . .			
Clears Fremantle for United Kingdom . . .	Oversea direct	Interstate direct	

From the method outlined above the requirements for Australia and for the individual States are ascertained as follows. (a) The aggregate of all ships recorded for each State as 'Oversea direct' gives the oversea shipping for Australia as a whole; (b) the aggregate for all ships recorded in any State as 'Oversea direct' plus those recorded as 'Oversea via States' gives the total *oversea shipping* for that State; and (c) the aggregate for all ships recorded as 'Oversea via States' may also be used, together with those recorded as 'Interstate direct' (including those engaged solely in interstate movement) to furnish figures showing the total *interstate movement* of shipping.

Interstate movement

Interstate direct. The following table shows the number of entrances and the net tonnage of vessels recorded into each State and the Northern Territory from any other State (including oversea vessels on interstate direct voyages as in column 2 above) during each of the years 1962-63 to 1964-65.

INTERSTATE MOVEMENT: ENTRANCES OF VESSELS INTERSTATE DIRECT STATES AND NORTHERN TERRITORY, 1962-63 TO 1964-65

State or Territory	Number			Net tons ('000)		
	1962-63	1963-64	1964-65	1962-63	1963-64	1964-65
New South Wales . . .	1,844	1,974	2,154	5,946	6,656	7,388
Victoria . . .	1,711	1,763	1,777	4,915	5,355	5,606
Queensland . . .	772	789	879	2,195	2,213	2,656
South Australia . . .	1,132	1,228	1,222	4,010	4,397	4,595
Western Australia . . .	649	667	700	2,950	3,176	3,413
Tasmania . . .	1,200	1,131	1,151	1,739	1,719	2,136
Northern Territory . . .	71	78	82	144	177	159
Australia . . .	7,379	7,630	7,965	21,899	23,693	25,953

Oversea via States. The figures in the following table show the number of entrances and clearances of vessels to and from oversea countries via other Australian States as in column 3 in the table on page 447, and their aggregate net tonnage.

**INTERSTATE MOVEMENT: ENTRANCES AND CLEARANCES OF VESSELS
OVERSEAS VIA OTHER AUSTRALIAN STATES AND NORTHERN TERRITORY
1964-65**

—		N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances	number	869	1,019	414	589	73	238	5	3,207
	'000 net tons	4,463	6,153	1,889	2,771	316	994	30	16,616
Clearances	number	915	872	272	516	55	271	19	2,920
	'000 net tons	4,200	4,417	1,168	2,449	307	1,066	71	13,678

Total interstate movement. To ascertain the aggregate movement of interstate shipping, including the interstate movement of oversea vessels, figures in the two preceding tables must be combined. The following table shows, for each State and the Northern Territory, the total number of entrances and clearances of vessels from and for other States (including the interstate movement of oversea vessels) during the year 1964-65, together with the aggregate net tonnage.

**INTERSTATE MOVEMENT: TOTAL ENTRANCES AND CLEARANCES
STATES AND NORTHERN TERRITORY, 1964-65**

—		N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances	number	3,023	2,796	1,293	1,811	773	1,389	87	11,172
	'000 net tons	11,851	11,759	4,545	7,366	3,729	3,130	189	42,569
Clearances	number	3,144	2,780	1,194	1,815	750	1,445	101	11,229
	'000 net tons	12,126	10,721	3,970	8,312	3,953	3,235	215	42,532

The following table shows the total interstate movement of shipping, including oversea vessels travelling overseas via States and interstate direct, for Australia for each of the years 1960-61 to 1964-65.

**INTERSTATE MOVEMENT: TOTAL ENTRANCES AND CLEARANCES
AUSTRALIA, 1960-61 TO 1964-65**

—		1960-61	1961-62	1962-63	1963-64	1964-65
Entrances	number	10,225	10,551	10,552	11,040	11,172
	'000 net tons	35,791	36,974	37,428	40,747	42,569
Clearances	number	10,276	10,608	10,746	10,985	11,229
	'000 net tons	36,006	36,923	37,862	40,400	42,532

Shipping engaged solely in interstate trade

The following table shows, for each State and the Northern Territory, the number of entrances direct from other States of vessels engaged solely in interstate trade (i.e., excluding oversea vessels in continuation of their oversea voyages) during the year 1964-65, together with the net tonnage.

**SHIPPING ENGAGED SOLELY IN INTERSTATE TRADE: ENTRANCES, STATES
AND NORTHERN TERRITORY, 1964-65**

—		N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances	number	1,385	1,170	436	870	295	1,039	68	5,263
Net tons	'000	4,155	2,469	987	2,835	1,017	1,632	114	13,209

Australian trading vessels

The following table shows particulars of all Australian trading vessels of 200 gross tons or more engaged in the regular oversea, interstate or coastal (intrastate) services at 30 June 1965.

**AUSTRALIAN TRADING VESSELS OF 200 GROSS TONS OR MORE
30 JUNE 1965**

(Source: Department of Shipping and Transport)

Vessels	Number	Dead-weight tons	Gross tons
Interstate vessels—			
Australian-owned, Australian-registered	92	595,744	456,835
Oversea-owned, Australian-registered, engaged in Australian coastal trade—New Zealand-owned	10	28,131	24,694
Other	11	184,908	125,399
Oversea-owned, oversea-registered, on charter, engaged in Australian coastal trade	1	35,441	23,794
Total interstate vessels	114	844,224	630,722
Intrastate vessels	19	26,374	22,371
Total coastal trading vessels	133	870,598	653,093
Oversea trading vessels—			
Australian-owned, Australian-registered operated mainly on oversea services	7	21,842	21,345
Australian-owned, oversea-registered operated wholly on oversea services	10	108,153	79,345
Total oversea trading vessels	17	129,995	100,690
Total Australian trading vessels	150	1,000,593	753,783

Shipping at principal ports

For details of Harbour Boards and Trusts in each State *see* the chapter Local Government.

Total shipping

The following table shows the total volume of shipping—oversea, interstate and coastal—which entered the principal ports of Australia during the years 1963-64 and 1964-65. The movements of warships and of other non-commercial vessels are excluded from the table.

**TOTAL SHIPPING: ENTRANCES AT PRINCIPAL PORTS, AUSTRALIA
1963-64 AND 1964-65**

Port of entry	1963-64		1964-65		Port of entry	1963-64		1964-65	
	Num-ber	Net tons	Num-ber	Net tons		Num-ber	Net tons	Num-ber	Net tons
		'000		'000			'000		'000
New South Wales—					South Australia—				
Sydney(a)	4,170	15,619	4,357	16,890	Adelaide(b)	2,483	7,684	2,471	6,169
Newcastle	1,914	5,133	1,899	5,584	Port Lincoln	372	706	330	5,451
Port Kembla	1,156	4,178	1,153	4,398	Port Pirie	501	1,168	440	1,014
					Rapid Bay	91	250	89	269
					Wallaroo	53	247	47	228
					Whyalla	568	2,056	525	2,110
Victoria—					Western Australia—				
Melbourne	2,944	11,865	2,938	12,550	Fremantle(c)	1,418	7,881	1,411	7,715
Geelong	669	3,729	649	3,627	Albany	149	713	157	763
					Bunbury	142	603	139	660
					Carnarvon	65	110	81	99
Queensland—					Geraldton	112	389	95	372
Brisbane	1,597	5,663	1,543	5,812	Yampi	165	676	177	788
Bowen	42	133	29	119	Tasmania—				
Cairns	277	639	255	641	Hobart	546	1,362	535	1,325
Gladstone	116	632	125	766	Burnie	402	929	402	1,054
Mackay	153	482	153	509	Devonport	376	685	402	700
Rockhampton	113	305	100	261	Launceston	512	904	532	1,009
Townsville	361	1,119	318	1,062	Northern Territory—				
					Darwin	126	335	142	362

(a) Includes Botany Bay. (b) Includes Port Stanvac. (c) Includes Kwinana.

The following table shows the total shipping tonnage which entered the principal ports of Australia, New Zealand and the United Kingdom during 1964-65.

**TOTAL SHIPPING: ENTRANCES AT PORTS, AUSTRALIA, NEW ZEALAND AND
THE UNITED KINGDOM, 1964-65**

('000 net tons)

Port	Net tonnage entered	Port	Net tonnage entered	Port	Net tonnage entered
AUSTRALIA—		NEW ZEALAND—		ENGLAND AND WALES—	
Sydney (N.S.W.)(a)	16,890	Wellington	4,689	<i>continued</i>	
Melbourne (Vic.)	12,550	Auckland	4,433	Manchester (including Runcorn)	7,655
Fremantle (W.A.)(b)	7,715	Lyttelton	3,185	Tyne Ports	7,361
Adelaide (S.A.)(c)	6,169	Whangarei	2,010	Hull	6,704
Brisbane (Qld)	5,812	Otago	1,378	Bristol	6,477
Newcastle (N.S.W.)	5,584	Napier	1,236	Middlesbrough	5,578
Port Kembla (N.S.W.)	4,398	Bluff	948	Swansea	4,085
Geelong (Vic.)	3,627	Taranaki	913	Cardiff	3,302
Whyalla (S.A.)	2,110	ENGLAND AND WALES—		SCOTLAND—	
Hobart (Tas.)	1,325	London	46,924	Glasgow	8,076
Townsville (Qld)	1,062	Southampton	26,587		
Burnie (Tas.)	1,054	Liverpool (including Birkenhead)	22,301	NORTHERN IRELAND—	
Port Pirie (S.A.)	1,014	Dover	8,218	Belfast	8,808
Launceston (Tas.)	1,009				

(a) Includes Botany Bay. (b) Includes Kwinana. (c) Includes Port Stanvac.

Shipping cargo

Oversea and interstate cargo

The table following shows the aggregate tonnage of oversea and interstate cargo discharged and shipped at Australian ports for the years 1960-61 to 1964-65. Most cargo is recorded in terms of tons of 2,240 lb.; the remainder, mainly bulky commodities, is shipped and recorded on the basis of forty cubic feet representing one ton measurement.

SHIPPING CARGO DISCHARGED AND SHIPPED: AUSTRALIA, 1960-61 TO 1964-65
 ('000 tons)

Year	Oversea cargo				Interstate cargo			
	Discharged		Shipped		Discharged		Shipped	
	Weight	Meas.	Weight	Meas.	Weight	Meas.	Weight	Meas.
1960-61	17,265	3,801	13,748	1,551	13,130	1,622	13,713	1,473
1961-62	17,508	2,763	17,178	1,547	13,318	1,427	13,658	1,186
1962-63	19,497	3,397	15,405	1,545	13,882	1,306	14,340	1,100
1963-64	20,788	3,942	19,744	1,861	15,321	1,453	15,632	1,208
1964-65	23,211	4,443	20,424	1,980	15,447	1,722	16,360	1,402

The following table shows the tonnage of overseas and interstate cargo discharged and shipped at the principal ports of Australia during 1964-65.

CARGO DISCHARGED AND SHIPPED AT PRINCIPAL PORTS, 1964-65
 ('000 tons)

Port	Discharged				Shipped			
	Oversea		Interstate		Oversea		Interstate	
	Wt	Meas.	Wt	Meas.	Wt	Meas.	Wt	Meas.
Sydney	2,057	1,897	1,030	228	3,866	656	402	104
Botany Bay	4,496	..	75	..	67	..	1,044	..
Newcastle	735	..	2,790	..	2,732	..	1,694	..
Port Kembla	682	..	4,142	..	1,668	..	907	..
Other	10	..	24	..	11	11	..	..
<i>Total, New South Wales</i>	<i>7,980</i>	<i>1,897</i>	<i>8,061</i>	<i>228</i>	<i>8,344</i>	<i>667</i>	<i>4,047</i>	<i>104</i>
Melbourne	3,657	1,522	1,819	682	1,061	662	375	699
Geelong	3,581	1	594	..	1,505	2	931	1
Portland . . . . .	..	..	86	..	176	..	19	..
<i>Total, Victoria</i>	<i>7,238</i>	<i>1,523</i>	<i>2,499</i>	<i>682</i>	<i>2,742</i>	<i>664</i>	<i>1,325</i>	<i>700</i>
Brisbane	603	349	869	50	822	94	319	21
Cairns	96	2	120	8	146	7	21	2
Gladstone	32	..	70	..	1,188	..	11	..
Mackay	46	..	72	..	485	..	45	..
Townsville	100	9	199	42	424	..	49	2
Other	4	1	118	2	876	3	524	..
<i>Total, Queensland</i>	<i>881</i>	<i>361</i>	<i>1,448</i>	<i>102</i>	<i>3,941</i>	<i>104</i>	<i>969</i>	<i>25</i>
Port Adelaide	607	422	1,052	41	741	220	192	15
Ardrossan . . . . .	..	..	..	..	211	..	223	..
Port Lincoln	102	..	23	..	316	..	17	..
Port Pirie	11	..	118	..	578	..	209	..
Port Stanvac	1,593	..	6	..	11	..	444	..
Rapid Bay . . . . .	..	..	..	..	..	..	572	..
Whyalla	45	..	380	..	144	..	4,332	2
Other	67	..	7	..	570	..	328	..
<i>Total, South Australia</i>	<i>2,425</i>	<i>422</i>	<i>1,586</i>	<i>41</i>	<i>2,571</i>	<i>220</i>	<i>6,317</i>	<i>17</i>
Fremantle	500	158	645	72	959	67	294	29
Bunbury	113	..	1	..	435	36	50	..
Geraldton	66	1	..	..	269	1	16	..
Kwinana	3,254	..	52	..	563	..	1,151	..
Yampi . . . . .	..	..	4	..	..	..	1,510	..
Other	245	9	43	..	390	23	16	9
<i>Total, Western Australia</i>	<i>4,178</i>	<i>168</i>	<i>745</i>	<i>72</i>	<i>2,616</i>	<i>127</i>	<i>3,037</i>	<i>38</i>
Hobart	160	57	323	198	102	167	205	119
Burnie	60	4	256	6	45	18	129	55
Launceston	166	11	309	105	43	5	152	86
Other	3	..	127	288	5	8	176	258
<i>Total, Tasmania</i>	<i>389</i>	<i>72</i>	<i>1,015</i>	<i>597</i>	<i>195</i>	<i>198</i>	<i>662</i>	<i>518</i>
Darwin, Northern Territory	120	..	93	..	15	..	3	..
Australia	23,211	4,443	15,447	1,722	20,424	1,980	16,360	1,402

Oversea cargo according to country of registration of vessels

The following table shows the total oversea cargo, discharged and shipped combined, according to the country in which the vessels were registered, during each of the years 1962-63 to 1964-65.

**OVERSEA CARGO DISCHARGED AND SHIPPED, BY COUNTRY OF REGISTRATION
OF VESSELS: AUSTRALIA, 1962-63 TO 1964-65**

('000 tons)

Vessels registered at ports in—	1962-63		1963-64		1964-65	
	Weight	Meas.	Weight	Meas.	Weight	Meas.
Commonwealth countries—						
Australia	169	108	156	107	156	128
Hong Kong	695	71	898	69	807	101
New Zealand	515	407	641	396	548	529
United Kingdom	12,454	2,519	13,076	2,925	12,099	2,916
Other	396	116	259	99	336	140
<i>Total, Commonwealth countries</i>	<i>14,229</i>	<i>3,221</i>	<i>15,030</i>	<i>3,596</i>	<i>13,946</i>	<i>3,814</i>
<i>Proportion of total . . . %</i>	<i>40.8</i>	<i>65.2</i>	<i>37.1</i>	<i>62.0</i>	<i>32.0</i>	<i>59.0</i>
Foreign countries—						
Denmark	1,333	50	1,706	88	872	82
France and New Caledonia	374	106	415	107	748	110
Germany, Federal Republic of	627	246	765	350	1,542	352
Greece	1,800	18	2,818	131	2,647	88
Italy	1,319	56	623	46	779	55
Japan	2,622	205	2,589	271	3,852	450
Liberia	2,696	12	3,172	32	4,407	57
Netherlands	1,001	291	1,757	339	2,278	445
Norway	5,638	249	7,541	263	8,279	425
Panama	957	36	1,151	51	1,047	18
Sweden	1,621	325	2,049	373	1,886	361
United States of America	237	102	210	111	206	114
Other	448	25	706	45	1,146	52
<i>Total, foreign countries</i>	<i>20,673</i>	<i>1,721</i>	<i>25,502</i>	<i>2,207</i>	<i>29,689</i>	<i>2,609</i>
<i>Proportion of total . . . %</i>	<i>59.2</i>	<i>34.8</i>	<i>62.9</i>	<i>38.0</i>	<i>68.0</i>	<i>41.0</i>
Grand total	34,902	4,942	40,532	5,803	43,635	6,423

World shipping tonnage

At 1 July 1965 the total steamships and motorships 100 gross tons and upwards throughout the world was 41,865, with a gross tonnage of 160,391,504. Of those totals, steamships numbered 10,921 for 75,022,485 gross tons, and motorships 30,944 for 85,369,019 gross tons. Included were 5,307 oil tankers of 100 gross tons and upwards, with a gross tonnage of 55,046,070. Australian steamships and motorships, 306 for 726,999 gross tons, constituted 0.73 per cent and 0.45 per cent respectively of the total number and tonnage. This information has been derived from *Lloyd's Register of Shipping*.

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 1965, classified according to: (i) year of construction, 1961 to 1965 and 1960 and earlier years, (ii) type of trade in which the vessels were engaged, and (iii) vessels built in Australian or in oversea shipyards.

AUSTRALIAN-REGISTERED TRADING VESSELS, 30 JUNE 1965(a)

(Source: Department of Shipping and Transport)

Year of construction	Oversea 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
1960 and earlier	104	497,124	18	20,375	56	257,423	66	260,076	122	517,499
1961	3	20,141	1	1,996	4	22,137	..	..	4	22,137
1962	4	38,980	..	..	2	16,715	2	22,265	4	38,980
1963	2	12,932	..	..	2	12,932	..	..	2	12,932
1964	6	44,592	..	..	6	44,592	..	..	6	44,592
1965	1	14,504	..	..	1	14,504	..	..	1	14,504
Total registered in Australia	120	628,273	19	22,371	71	368,303	68	282,341	139	650,644

(a) 200 gross tons and over.

Miscellaneous

Shipping freight rates

The *Quarterly Summary of Australian Statistics* shows a list of the current freight rates for general merchandise in respect of both oversea and interstate shipments. The following table shows the freight rates from Australia to various countries for certain important commodities at 31 December 1965.

OVERSEA SHIPPING FREIGHT RATES FROM AUSTRALIA TO VARIOUS COUNTRIES, 31 DECEMBER 1965

(1 ton measurement = 40 cubic feet)

Article and country	Unit for which freight rate is quoted	Freight rate
UNITED KINGDOM AND CONTINENTAL EUROPE—		
Butter	Box 56 lb.	<i>Rates—Sterling</i> £0.613
Cheese	Ton weight	£25.184
Eggs, in shell	Ton measurement	£18.242
Meats, preserved by cold process—		
Beef, refrigerator, excluding carton	lb.	3.74d.
Lamb, refrigerator, excluding carton	lb.	4.62d.
Mutton, refrigerator, excluding carton	lb.	3.74d.
Beef, refrigerator, carton	lb.	2.70d.
Lamb, refrigerator, carton	lb.	2.70d.
Mutton, refrigerator, carton	lb.	2.70d.
Rabbits	Ton measurement	£14.272
Preserved in tins	Ton measurement	£18.828
Sausage casings, dried, in casks or cases—		
General	Ton measurement	£11.966
Refrigerated—		
Cases	Ton measurement	£19.335
Casks	Ton measurement	£18.828
Meats, not frozen—preserved in tins	Ton measurement	£11.966
Milk and cream, condensed	Ton measurement	£11.966
Fruit—		
Canned	Ton measurement	£8.900
Dried	Ton measurement	£8.900
Fresh—		
Apples	Standard bushel case	£0.680
Citrus	Standard bushel case	£0.742
Pears	Standard bushel case	£0.680
Pears	½ bushel case	£0.622
	Standard bushel case	£0.742
	½ bushel case	£0.671
	¼ bushel case	£0.480
	¼ bushel carton	£0.449
Grapes, grapefruit, oranges, lemons and plums		

OVERSEA SHIPPING FREIGHT RATES FROM AUSTRALIA TO VARIOUS COUNTRIES, 31 DECEMBER 1965—*continued*

Article and country	Unit for which freight rate is quoted	Freight rate
UNITED KINGDOM AND CONTINENTAL EUROPE—<i>continued</i>		
<i>Rates—Sterling</i>		
Grain and pulse, unprepared—		
Barley, in bags	Ton weight	£6.875
Wheat, parcels—		
Bagged	Ton weight	£6.750
Bulk	Ton weight	£5.750
Maize	Ton weight	£8.750
Oats, in bags	Ton weight	£7.375
Rice, paddy, unhusked	Ton weight	£10.000
Grain and pulse, prepared—		
Bran	Ton weight	£9.500
Pollard	Ton weight	£9.500
Flour, wheaten	Ton weight	£8.750
Rice, clean, husked	Ton weight	£9.000
Jams	Ton measurement	£9.487
Wine	Ton measurement	£11.380
Hides and skins—		
Calf	Ton weight	£18.032
Cattle	Ton weight	
Fox	Ton weight	
Kangaroo	Ton weight	
Opossum	Ton weight	
Rabbit and hare	Ton weight	
Wallaby	Ton weight	
Sheep—dumped	lb.	2.87d.
Other	Ton weight	£54.410
Pearlshell	Ton measurement	£54.410
Trochus and green snail shell, bags or cases	Ton weight	£11.966
Wool—		
Greasy, dumped	lb.	3.99d.
Scoured, and washed, dumped	lb.	5.00d.
Tops	lb.	4.77d.
Bark, tanning	Ton weight	£11.966
Sandalwood, in bags	Ton measurement	£11.966
Apparel and attire, effects	Ton weight or measurement	£18.762
Oils—		
Eucalyptus	Ton measurement	£11.966
Coconut	Ton measurement	£13.538
Whale	Ton weight	£13.538
Other	Ton measurement	£13.538
Stearine	Ton weight	£13.538
Tallow, unrefined, in drums	Ton weight	£13.538
Ore in casks, bags or drums, n.e.i.	Ton weight	£7.250
Zinc—		
Ex Risdon	Ton weight	£5.300
Other than above	Ton weight	£6.175
Dust in tins, sealed cases or new lined drums	Ton weight	£17.003
Copper, blister	Ton weight	£6.800
Lead	Ton weight	£6.175
Steel billets—		
Up to 20 feet	Ton weight	£7.462
Over 20 feet and up to 30 feet	Ton weight	£7.995
Tin clippings, hydraulically pressed	Ton weight	£6.023
Leather	Ton weight	£26.330
Timber—		
Logs up to 40 feet long	100 super. ft.	£4.166
Logs over 40 feet and up to 50 feet long	100 super. ft.	£4.473
Logs over 50 feet and up to 60 feet long	100 super. ft.	£4.797
Sawn undressed up to 30 feet—shipment of less than 50 tons	100 super. ft.	£2.208
Toilet paper	Ton measurement	£12.792
Stationery—		
Note paper and/or envelopes	Ton measurement	£19.271
Other than above	Ton measurement	£20.467
Casein	Ton weight	£15.670
Fertilizers	Ton measurement	£15.297
Soap	Ton measurement	£11.966
Gold and silver specie	Ad valorem	£0.750%
CEYLON—		
Flour, wheaten (all rates plus congestion charge of 25 per cent)	Ton weight	165s.
Milk and cream—		
Condensed	Ton measurement	282s.
Frozen	Ton measurement	486s. 6d.
General cargo	Ton weight or measurement	282s.

OVERSEA SHIPPING FREIGHT RATES FROM AUSTRALIA TO VARIOUS COUNTRIES, 31 DECEMBER 1965—continued

Article and country	Unit for which freight rate is quoted	Freight rate
		<i>Rates—Sterling</i>
INDIA—		
Milk products in cases, cartons, etc.	Ton measurement	215s.
Wheat in bags	Ton weight	162s.
Wool—		
Greasy	lb.	3.45d.
Scoured, etc.	lb.	4.42d.
Zinc bars	Ton weight	130s.
General cargo	Ton weight or measurement	252s. 6d.
SOUTH AFRICA—		
Wool—		
Greasy	lb.	3.76d.
Scoured, etc.	lb.	4.60d.
General cargo	Ton weight or measurement	241s.
		<i>Rates—</i>
		<i>Australian</i>
		<i>shillings and pence</i>
CHINA—		
Flour	2,000 lb.	165 0
Wheat in bags	Ton weight	165 0
Wool—		
Greasy	lb.	0 3
Scoured, etc.	lb.	0 3.49
General cargo	Ton weight or measurement	275 0
HONG KONG—		
Sugar, refined, in bags	Ton weight	245 0
Wheat, in bags	Ton weight	165 0 net
Wool—		
Greasy	lb.	0 3
Scoured, etc.	lb.	0 3.49
General cargo	Ton weight or measurement	275 0
JAPAN—		
Cattle hides	Ton weight	275 0
Coal, in bags	Ton weight	235 0
Copper ores and concentrates—		
Parcels (bags or drums)	Ton weight	180 0
Bulk	Ton weight	130 0
Iron and steel scrap—		
Loose	Ton weight	240 0
4-cwt. drums	Ton weight	210 0
Over 4-cwt. drums	Ton weight	185 0
Iron, pig	Ton weight	110 0
Lead ores and concentrates—		
Parcels	Ton weight	180 0
Bulk	Ton weight	130 0
Lead, pig	Ton weight	180 0
Sugar, refined, in bags	Ton weight	245 0
Wheat	Ton weight	150 0 net
Wool—		
Greasy	lb.	0 3.32
Scoured, etc.	lb.	0 3.86
Zinc ores and concentrates—		
Parcels	Ton weight	180 0
Bulk	Ton weight	130 0
General cargo	Ton weight or measurement	275 0
MALAYSIA—		
Milk products—		
Condensed—		
From eastern Australian ports	Ton measurement	245 0
From Western Australian ports	Ton measurement	225 0
Powdered in bags—		
From eastern Australian ports	Ton weight	305 0
From Western Australian ports	Ton weight	285 0
Powdered in cases or cartons—		
From eastern Australian ports	Ton weight or measurement	250 0
From Western Australian ports	Ton weight or measurement	230 0
Flour (in bags)—		
From eastern Australian ports	2,000 lb.	165 0
From Western Australian ports	2,000 lb.	155 0
General cargo—		
From eastern Australian ports	Ton weight or measurement	262 6
From Western Australian ports	Ton weight or measurement	242 6

OVERSEA SHIPPING FREIGHT RATES FROM AUSTRALIA TO VARIOUS COUNTRIES, 31 DECEMBER 1965—continued

Article and country	Unit for which freight rate is quoted	Freight rate
INDONESIA—		
Flour—		
From eastern Australian ports	2,000 lb.	Rates— Australian shillings and pence 170 0
From Western Australian ports	2,000 lb.	160 0
General cargo—		
From eastern Australian ports	Ton weight or measurement	262 6
From Western Australian ports	Ton weight or measurement	242 6
CANADA—EAST COAST AND ST. LAWRENCE PORTS TO MONTREAL—		
Fruit—		
Canned	Ton measurement	39.10
Dried	Ton measurement	36.50
Preserved	Ton measurement	42.20
Wine	Ton measurement	47.50
General cargo	Ton measurement	47.60
UNITED STATES OF AMERICA—ATLANTIC AND GULF PORTS—		
Beef, preserved by cold process—		
Quarters, etc.	100 lb. gross weight	4.65
Cartons	100 lb. net weight	4.15
Casein	Ton weight	47.00
Fish, preserved by cold process—		
Loose	Ton weight	90.00
Cartons	100 lb. net weight	4.50
Lead—		
Ores and concentrates	Ton weight	29.00
Mutton preserved by cold process—		
Carcases	100 lb. gross weight	5.00
Cuts in cartons	100 lb. net weight	4.15
Pipes and tubes of iron and steel	Ton weight or measurement	33.00
Wool—		
Greasy	100 lb.	5.25
Scoured, etc.	100 lb.	6.30
General cargo	Ton weight or measurement	47.60

Interstate rates per ton weight or measurement for general cargo at 31 December 1965 (expressed in Australian shillings and pence) were: Sydney-Melbourne, 162s.; Sydney-Brisbane, 160s.; Sydney-Adelaide, 207s.; Sydney-Fremantle, 262s.; Sydney-Hobart, 160s.; Sydney-Darwin, 248s. 6d.

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. Particulars of shipping losses and casualties reported on or near the coast during each of the years 1960-61 to 1964-65 are shown in the table below.

SHIPPING CASUALTIES TO OVERSEA AND INTERSTATE STEAM AND MOTOR VESSELS(a): AUSTRALIA, 1960-61 TO 1964-65

Year	Shipping losses			Other shipping casualties			Total shipping casualties		
	Vessels	Net tons	Lives lost	Vessels	Net tons	Lives lost	Vessels	Net tons	Lives lost
1960-61	178	549,244	..	178	549,244	..
1961-62	147	569,644	1	147	569,644	1
1962-63	122	468,326	..	122	468,326	..
1963-64	109	362,798	..	109	362,798	..
1964-65	87	315,762	..	87	315,762	..

(a) Vessels over 50 net tons.

Lighthouses; distances by sea; depths of water and tides at main ports; ferry passenger services

A list of the principal lighthouses on the coast of Australia, giving details of the location, number, colour, character, period, candle-power and visibility of each light so far as particulars are available, will be found in *Transport and Communication*, Bulletin No. 46.

The distances by sea between principal ports of Australia and some important ports in other countries which trade with Australia were published in Year Book No. 48, page 525.

A table showing the depths of water available and tides at principal ports of Australia is published in the annual bulletin, *Transport and Communication*. For some major ports information is given in the chapter Local Government.

For particulars of ferry passenger services operating in several States *see* page 472.

GOVERNMENT RAILWAYS

The Commonwealth Government and each State Government own and operate railway systems in Australia. The State systems were built primarily to provide transport links from the State capitals into the hinterland areas. Because their construction commenced long before Federation, little consideration was given to interstate rail movements, with the result that each State adopted a rail gauge considered best for its requirements. The Commonwealth Government took over the South Australian railways in and to the Northern Territory and extended them to Birdum and Alice Springs. It also constructed new lines from Queanbeyan (New South Wales) into the Australian Capital Territory and from Port Pirie (South Australia) to Kalgoorlie (Western Australia). The 4-ft. 8½-in. gauge line from South Brisbane (Queensland) to Grafton (New South Wales) is jointly owned by the Commonwealth, New South Wales and Queensland Governments. This line was opened for traffic in September 1930. Particulars of operations over the 112 route-miles within New South Wales are included with statistics of the New South Wales system, while those for the remaining sixty-nine route-miles are included with the Queensland system, unless otherwise indicated.

A number of private railways, the majority of which were constructed for mineral haulage, operate in Australia, the more important being from Whyalla to Iron Knob and Iron Baron (South Australia), from Maitland to Cessnock (New South Wales), from Broken Hill (New South Wales) to the South Australian border, and from Burnie to Zeehan (Tasmania). Not all of these railways are open for general traffic. A number of private railways for the haulage of iron ore to various seaports are under construction in the north-west of Western Australia.

In the tables in this division details of the four lines operated by the Commonwealth are grouped and shown with the totals for the various State-owned systems. Separate particulars for each Commonwealth line and more detailed statistics for all lines are shown in the annual bulletin *Transport and Communication*.

An account of the progress of railway construction in Australia since the opening of the first line in 1854 was given in Year Book No. 6, page 681, and in No. 22, page 259. A map showing routes open in Australia in 1965, according to gauge, is shown in Plate 38.

Standardization of railway gauges

Because several adjoining States have systems with different gauges, the flow of interstate rail traffic has been delayed by the need to change trains at intervening break of gauge stations. The first step towards uniform gauge railway communication between the mainland State capitals was effected with the construction of the Uniform Gauge Railway (4 ft. 8½ in. gauge) from South Brisbane to Grafton (*see* above). For details of the agreement whereby the Commonwealth and the State Governments of New South Wales and Queensland participated in its construction *see* Year Book No. 31, page 122.

A plan for the further standardization of Australian gauges was made by Sir Harold Clapp in a report submitted to the Commonwealth Government in March 1945. A summary of his report and recommendations and subsequent agreements with the States was published in Year Book No. 37, pages 146-9. Particulars of the agreement between the Commonwealth and South Australian Governments were set out in Year Book No. 51, pages 553-4.

As a further step towards standardization, a committee consisting of members of the Federal Parliament was formed in March 1956 to ascertain whether a scheme confined to the main trunk routes would be desirable. This committee recommended in October 1956 that standard gauge (4 ft. 8½ in.) lines be provided from Wodonga to Melbourne, from Broken Hill to Adelaide via Port Pirie, and from Kalgoorlie to Fremantle via Perth.

Legislation for a standard gauge link between Albury and Melbourne was enacted by the Commonwealth, Victorian and New South Wales Governments in three separate Acts assented to towards the end of 1958. The agreement on this project between the Commonwealth and the

two State Governments provided for the Commonwealth to meet 70 per cent. of the cost of unification and the two States to share equally the remaining 30 per cent. The Commonwealth was required to advance the whole of the necessary funds initially, the States' proportion, plus interest, being repayable over fifty years. The opening of the uniform gauge between Albury and Melbourne in 1962 completed the standard gauge link between South Brisbane and Melbourne, and through services were operated for the first time between Sydney and Melbourne. The final cost of this project, met initially by the Commonwealth, amounted to \$31.9 million. Details of operations are included in the statistics of the various States.

In 1961 the Commonwealth and Western Australian Governments enacted legislation to enter into an agreement to undertake certain standard gauge railway works, including the provision of rolling stock, in Western Australia at an estimated cost of \$82.4 million. The proposal is linked with the establishment of an integrated iron and steel industry at Kwinana in that State, and the new railway facilities will be used to transport iron ore from the Koolyanobbing deposits some thirty-three miles beyond Southern Cross. These railway facilities will also link Kalgoorlie with East Perth and Fremantle by a standard gauge line. It has been agreed that the project has standardization and developmental components in approximately equal parts, and initially the Commonwealth will, in effect, provide finance for all the standardization portion of the works and 70 per cent of the developmental portion. The State will repay with interest 30 per cent of the standardization costs over fifty years and all the advance for developmental works over twenty years. Work on the project commenced in 1962 and is planned to be completed by December 1968.

In 1964 the South Australian Government submitted to the Commonwealth Government a proposal in outline for the standardization of the existing railway line between Port Pirie and Adelaide. The Commonwealth Government has made available \$30,000 to South Australia for the surveying of this link without committing the Commonwealth to any further action.

Route-miles open for traffic

The following table shows the route-mileage of each Government railway system, according to gauge, at 30 June 1965.

GOVERNMENT RAILWAYS: ROUTE-MILEAGE^(a) OPEN, SYSTEMS
30 JUNE 1965
(Miles)

System	Gauge					Total
	5 ft. 3 in.	4 ft. 8½ in.	3 ft. 6 in.	2 ft. 6 in.	2 ft. 0 in.	
New South Wales . . . . .	..	(b) 6,055	..	..	..	6,055
Victoria	(c) 4,000	202	..	9	..	4,211
Queensland . . . . .	..	69	5,686	..	30	5,785
South Australia	1,650	..	847	..	..	2,497
Western Australia . . . . .	..	..	3,733	..	..	3,733
Tasmania . . . . .	..	..	500	..	..	500
Commonwealth . . . . .	..	(d) 1,330	(e) 922	..	..	2,252
Australia	5,650	7,656	11,688	9	30	25,033

(a) Mileage of railway irrespective of whether it consists of single or multiple track. Excludes sidings and marshalling yards. (b) Includes 234 route-miles which are electrified. (c) Excludes 202 miles of 5 ft. 3 in. gauge line which almost parallels the uniform gauge (4 ft. 8½ in.) line between Albury and Melbourne. Includes 263 route-miles which are electrified. (d) Trans-Australian Railway, Australian Capital Territory Railway and portion of Central Australia Railway. (e) North Australia Railway and portion of Central Australia Railway.

As the Commonwealth systems include mileages in South and Western Australia, and the Victorian system extends into New South Wales, the system route-mileages shown in the previous table do not represent mileages within each State and Territory. The mileages within each State and Territory at 30 June 1965 are shown in the next table.

GOVERNMENT RAILWAYS: ROUTE-MILEAGE OPEN, STATES AND TERRITORIES, 30 JUNE 1965
(Miles)

Gauge	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
5 ft. 3 in.	(a) 204	(b)3,796	..	1,650	..	..	..	..	5,650
4 ft. 8½ in.	6,055	202	69	(c) 871	(d) 454	..	..	(e) 5	7,656
3 ft. 6 in. . . . .	..	..	5,686	(f)1,279	3,733	500	(g) 490	..	11,688
2 ft. 6 in. . . . .	..	9	..	..	..	..	..	..	9
2 ft. 0 in. . . . .	..	..	30	..	..	..	..	..	30
Total	6,259	4,007	5,785	3,800	4,187	500	490	5	25,033
Per 1,000 of population	1.49	1.25	3.59	3.60	5.20	1.37	14.08	0.06	2.20
Per 1,000 square miles	20.23	45.59	8.67	10.00	4.29	18.95	0.94	5.32	8.43

(a) Portion of Victorian system. (b) Excludes 202 miles of 5 ft. 3 in. gauge line which almost parallels the uniform gauge (4 ft. 8½ in.) line between Albury and Melbourne. (c) Includes 654 miles of Trans-Australian and 217 miles of the Central Australia Railway systems. (d) Portion of Trans-Australian Railway system. (e) Australian Capital Territory Railway system. (f) Includes 432 miles of the Central Australia Railway system. (g) Includes 173 miles of the Central Australia and 317 miles of the North Australia Railway systems.

The following table sets out route-mileages of Government railways in each State and Territory at various dates since the inauguration of railways in Australia in 1854.

GOVERNMENT RAILWAYS: ROUTE-MILEAGE OPEN, STATES AND TERRITORIES, 1855 TO 1965
(Miles)

At 30 June—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1855(a)	14	2	..	7	..	..	..	..	23
1861(a)	73	114	..	56	..	..	..	..	243
1871(a)	358	276	218	133	..	45	..	..	1,030
1881(a)	996	1,247	800	832	92	45	..	..	4,012
1891	2,182	2,763	2,195	1,666	198	351	145	..	9,500
1901	2,846	3,237	2,801	1,736	1,355	457	145	..	12,577
1911	3,762	3,523	3,868	1,935	2,376	470	145	..	16,079
1921	5,043	4,267	5,752	3,408	3,992	630	199	5	23,296
1931	6,247	4,514	6,529	3,725	4,634	665	317	5	26,636
1941	6,368	4,518	6,567	3,809	4,835	642	490	5	27,234
1951	6,354	4,445	6,560	3,805	4,682	613	490	5	26,954
1961	6,303	4,050	6,324	3,836	4,577	517	490	5	26,102
1965	6,259	4,007	5,785	3,800	4,187	500	490	5	25,033

(a) At 31 December.

Summary of operations

The following table shows a summary of the operations of the Australian Government railway systems during 1964-65.

GOVERNMENT RAILWAYS: SUMMARY OF OPERATIONS, SYSTEMS, 1964-65

System	Revenue train-miles (a)	Passenger journeys (b)	Passenger-miles (c)	Goods and livestock	
				Tons carried (b)	Ton-miles (d)
	'000	'000	'000	'000	'000
New South Wales	40,194	238,732	n.a.	27,889	4,705,996
Victoria	20,489	149,753	1,682,960	12,596	2,028,201
Queensland	17,605	25,215	n.a.	10,031	(e) 1,751,465
South Australia	6,582	15,196	216,067	5,089	765,366
Western Australia	7,562	10,395	137,888	5,229	842,066
Tasmania	1,272	1,340	19,563	1,091	116,566
Commonwealth	2,914	347	120,947	2,919	885,823
Australia (b)	96,618	440,978	n.a.	64,844	(e) 11,095,483

(a) One train (i.e. a complete unit of locomotive and vehicles, electric train set, or rail motor) travelling one mile for revenue purposes. (b) Inter-system traffic is included in the total for each system (including each Commonwealth Railway) over which it passes. (c) One passenger travelling one mile. (d) One ton carried one mile. (e) Excludes Queensland portion of Uniform Gauge Railway.

Gross earnings

Gross earnings are composed of earnings from (a) coaching traffic, including the carriage of passengers, mails, horses, parcels, etc., by passenger trains; (b) carriage of goods and livestock; and (c) rents and miscellaneous items. In this section particulars of State Government grants are excluded. Details of these grants made during 1964-65 are shown on page 463.

In the following table gross earnings are shown for the years 1960-61 to 1964-65, together with earnings per average route-mile worked and per revenue train-mile.

GOVERNMENT RAILWAYS: GROSS EARNINGS, SYSTEMS, 1960-61 TO 1964-65

Year	System							Aust.
	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Cwth	
Gross earnings (\$'000)—								
1960-61	179,502	85,974	73,060	27,740	32,634	5,464	12,072	416,446
1961-62	176,702	85,114	72,318	27,848	35,098	5,406	12,482	414,968
1962-63	182,482	86,878	75,244	27,672	32,920	5,598	13,958	424,752
1963-64	202,488	92,778	84,260	29,496	34,602	5,668	15,194	464,486
1964-65	213,258	100,225	81,321	29,764	35,715	5,581	17,419	483,283
Gross earnings per average route-mile worked (\$)—								
1960-61	29,612	20,040	11,502	10,952	7,916	10,254	5,360	15,928
1961-62	29,144	19,836	11,834	10,998	9,114	10,478	5,544	16,200
1962-63	30,138	20,370	12,382	10,930	8,670	10,850	6,198	16,660
1963-64	33,442	21,872	13,908	11,732	9,410	11,248	6,746	18,358
1964-65	35,220	23,801	14,057	11,882	9,567	11,162	7,735	19,300
Gross earnings per revenue train-mile (cents)—								
1960-61	473.64	471.56	398.97	401.74	417.38	360.42	515.26	447.67
1961-62	471.87	450.27	411.76	413.36	435.18	381.97	508.81	448.21
1962-63	488.42	446.05	419.13	411.39	435.99	423.39	547.60	457.02
1963-64	518.16	461.27	439.75	442.47	460.97	428.67	569.45	481.26
1964-65	530.56	489.17	461.91	452.20	472.31	438.62	597.85	500.20

The following table shows gross earnings for the year 1964-65 classified according to the three main sources of earnings together with the percentage of the total derived from each source.

GOVERNMENT RAILWAYS: DISTRIBUTION OF GROSS EARNINGS SYSTEMS, 1964-65

System	Gross earnings (\$'000)			Proportion of total (per cent)		
	Coaching	Goods and livestock	Miscellaneous	Coaching	Goods and livestock	Miscellaneous
New South Wales	48,682	154,543	10,033	22.83	72.47	4.70
Victoria	30,851	63,361	6,013	30.78	63.22	6.00
Queensland	9,086	69,696	2,539	11.17	85.71	3.12
South Australia	4,338	23,096	2,330	14.57	77.60	7.83
Western Australia	3,573	30,688	1,454	10.01	85.92	4.07
Tasmania	358	5,019	204	6.41	89.94	3.65
Commonwealth	2,695	13,593	1,131	15.48	78.03	6.49
Australia	99,583	359,996	23,704	20.61	74.48	4.91

Working expenses

In comparing the working expenses of the various railway systems, allowances should be made for the variation in gauges, terrain, traffic handled and method of operation. In addition to variations between systems there are also variations on different portions of the same system. Working expenses, wherever presented in the Railways section of this chapter, include reserves for depreciation in the South Australian, Western Australian, Tasmanian and Commonwealth systems but exclude interest, sinking fund, exchange and certain other payments (see page 463).

The following table shows the total working expenses, the ratio of working expenses to gross earnings, and working expenses per average route-mile worked, and per revenue train-mile for the years 1960-61 to 1964-65.

GOVERNMENT RAILWAYS: WORKING EXPENSES, SYSTEMS 1960-61 TO 1964-65

Year	System							Aust.
	N.S.W.	Vic.	Qld	S.A. (a)	W.A. (a)	Tas. (a)	Cwth (a)	
Working expenses (\$'000)—								
1960-61	159,112	83,254	77,058	30,620	34,294	7,090	(b)9,258	400,686
1961-62	159,190	85,812	76,170	31,206	34,908	6,878	b10,330	404,494
1962-63	158,652	87,000	75,436	30,984	34,606	6,670	13,286	406,634
1963-64	177,416	91,512	78,288	30,910	35,802	6,894	14,218	435,040
1964-65	187,240	99,337	80,513	31,713	36,529	7,219	15,967	458,518
Ratio of working expenses to gross earnings (%)—								
1960-61	88.64	96.84	105.47	110.38	105.08	129.75	(b)76.68	96.22
1961-62	90.09	100.82	105.33	112.06	99.46	127.21	(b)82.75	97.47
1962-63	86.94	100.14	100.25	111.97	105.13	119.13	95.19	95.73
1963-64	87.62	98.64	92.91	104.80	103.47	121.61	93.58	93.66
1964-65	87.79	99.11	99.01	106.55	102.28	129.35	91.66	94.87
Working expenses per average route-mile worked (\$)—								
1960-61	26,248	19,406	12,132	12,088	8,318	13,304	(b)4,110	15,326
1961-62	26,256	19,998	12,464	12,324	9,064	13,330	(b)4,588	15,790
1962-63	26,202	20,398	12,414	12,238	9,114	12,926	5,900	15,950
1963-64	29,300	21,572	12,922	12,296	9,736	13,678	6,314	17,194
1964-65	30,923	23,590	13,917	12,660	9,785	14,438	7,090	18,311
Working expenses per revenue train-mile (cents)—								
1960-61	419.84	456.65	420.80	443.46	438.61	467.64	b395.12	430.73
1961-62	425.11	453.96	433.68	463.21	432.82	485.91	b421.06	436.90
1962-63	424.64	446.68	420.20	460.63	458.34	504.39	521.27	437.53
1963-64	454.00	454.97	408.58	463.70	476.96	521.30	532.87	450.75
1964-65	465.83	484.83	457.32	481.82	483.07	567.37	548.02	474.57

(a) Includes provision for depreciation. (b) Excludes provision for depreciation which was not charged to working expenses.

The following table shows the total working expenses for the year 1964-65 classified according to the four main expenditure headings.

**GOVERNMENT RAILWAYS: DISTRIBUTION OF WORKING EXPENSES
SYSTEMS, 1964-65
(\$'000)**

System	Maintenance of way and works	Motive power(a)	Traffic	Other charges	Total working expenses
New South Wales	31,313	62,232	43,023	50,672	187,240
Victoria	18,851	29,071	27,664	23,751	99,337
Queensland	20,745	34,943	20,068	4,757	80,513
South Australia	(b) 7,106	(b) 11,836	(b) 8,688	4,083	31,713
Western Australia	(b) 8,154	(b) 15,594	8,551	4,230	36,529
Tasmania(b)	1,792	2,605	1,918	904	7,219
Commonwealth	5,161	4,324	2,543	(b) 3,939	15,967
Australia	93,122	160,605	112,455	92,336	458,518

(a) Includes maintenance of rolling stock. (b) Includes provision for depreciation.

Net earnings

The following table shows, for the years 1960-61 to 1964-65, net earnings, i.e., the excess of gross earnings over working expenses and the amount of such net earnings per average route-mile worked and per revenue train-mile.

GOVERNMENT RAILWAYS: NET EARNINGS, SYSTEMS, 1960-61 TO 1964-65

Year	System							Aust.
	N.S.W.	Vic.	Qld	S.A. (a)	W.A. (a)	Tas. (a)	Cwth (a)	
Net earnings (\$'000)—								
1960-61	20,390	2,720	-3,998	-2,880	-1,660	-1,626	(b) 2,814	15,760
1961-62	17,512	-698	-3,852	-3,358	190	-1,472	(b) 2,152	10,474
1962-63	23,830	-122	-192	-3,312	-1,686	-1,072	672	18,118
1963-64	25,072	1,266	5,972	-1,414	-1,200	-1,226	976	29,446
1964-65	26,018	888	808	-1,949	-814	-1,638	1,452	24,765
Net earnings per average route-mile worked (\$)—								
1960-61	3,364	634	-630	-1,136	-402	-3,050	(b) 1,250	602
1961-62	2,888	-162	-630	-1,326	50	-2,852	(b) 956	410
1962-63	3,936	-28	-32	-1,308	-444	-2,076	298	710
1963-64	4,142	300	986	-564	-326	-2,430	432	1,164
1964-65	4,297	211	140	-778	-218	-3,276	645	989
Net earnings per revenue train-mile (cents)—								
1960-61	53.80	14.91	-21.83	-41.72	-21.23	-107.22	(b) 120.14	16.94
1961-62	46.76	-3.69	-21.92	-49.85	2.36	-103.94	(b) 87.75	11.31
1962-63	63.78	-0.63	-1.07	-49.24	-22.35	-81.00	26.33	19.49
1963-64	64.16	6.30	31.17	-21.23	-15.99	-92.63	36.58	30.51
1964-65	64.73	4.34	4.59	-29.62	-10.76	-128.75	49.83	25.63

(a) Includes provision for depreciation, (b) Excludes provision for depreciation.
Minus sign (-) denotes loss.

Net earnings, grants to railways, interest, sinking fund, surplus or deficit, 1964-65

The following table shows, for each railway system for the year 1964-65, (i) net earnings as above, (ii) State grants and other items credited to railways accounts, (iii) loan interest, exchange, sinking fund, etc., payments charged against the accounts, and (iv) the net surplus or deficit after these items have been taken into account. Particulars of items (ii) to (iv) are not included in the preceding tables in this section.

The figures shown in this table accord with those published in the Annual Reports of the Railways Commissioners of the several systems. Because of the differences in governmental practice concerning costs other than operative charged against railway accounts, compensation for non-paying and developmental lines, etc., and the inclusion in some railways finances of the operations of ancillary transport services, direct comparison cannot be made between the results

shown in the table. For further information on railways finance, in particular expenditure from loan and other funds, see the chapter Public Finance of this Year Book. See also the Reports of the several Railways Commissioners.

**GOVERNMENT RAILWAYS: SURPLUS OR DEFICIT OF EACH SYSTEM
AT 30 JUNE 1965**

(\$)

System	Net earnings—excess of gross earnings over working expenses(a)	Plus grants and other income	Less other expenses charged to railways				Surplus (+) or deficit (-)	
			Loan interest and exchange	Sinking fund	Loan management expenses	Other		Total
State—								
N.S.W.	26,017,876	3,200,000	23,491,400	5,068,660	69,200	(c) 412,600	29,041,860	176,016
Victoria	888,462	27,528	3,046,056	136,548	..	(f) 62,892	3,245,496	-2,329,506
Queensland	808,342	286,766	13,945,352	..	..	(i) 1,033,408	14,978,760	-13,883,652
S. Australia	-1,949,288	8,005,304	4,992,704	..	..	(l) 190,722	5,183,426	872,590
W. Australia	-813,858	195,526	6,201,716	..	..	..	6,201,716	-6,820,048
Tasmania	-1,638,216	..	909,790	..	..	(m) 13,620	923,410	-2,561,626
Total, States	23,313,318	11,715,124	52,587,018	5,205,208	69,200	1,713,242	59,574,668	-24,546,226
Commonwealth	1,451,992	..	..	..	..	..	..	1,451,992
Australia	24,765,310	11,715,124	52,587,018	5,205,208	69,200	1,713,242	59,574,668	-23,094,234

(a) See p. 462. (b) Grants to meet losses on country development lines, \$1,600,000, and to subsidize payments due from superannuation account, \$1,600,000. (c) Loan flotation expenses. (d) Kerang-Koondrook Tramway recoup from Treasury. (e) Payments required in respect of loan expenditure since 1 July 1960. (f) Net loss on road motor services not included in previous pages. (g) Adjustment for deficit on Queensland portion of Uniform Gauge Railway as included in foregoing tables. (h) Includes interest and redemption—Mt. Isa project fund, \$3,485,278. (i) Interest on unopened lines, \$350,142; demolished assets written off, \$683,266. (j) Excludes Queensland portion of Uniform Gauge Railway. (k) Grants towards working expenses \$6,400,000, and debt charges, \$1,600,000; and surplus from road motor services, \$5,304. (l) Interest and repayment under Railways Standardization Agreement. (m) Obsolete and other stocks written off.

Traffic

The following table shows particulars of railway passenger and goods traffic for the years 1960-61 to 1964-65.

GOVERNMENT RAILWAYS: TRAFFIC, SYSTEMS, 1960-61 TO 1964-65

Year	System							Aust.
	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Cwth	
Passenger-journeys (a) (b) (⁰⁰⁰)—								
1960-61	235,416	149,929	28,876	15,574	12,661	2,103	303	444,862
1961-62	234,638	152,768	26,700	15,176	11,906	1,816	315	443,319
1962-63	235,169	152,727	26,081	14,922	11,537	1,558	334	442,328
1963-64	240,677	153,396	25,903	15,227	10,814	1,426	338	447,781
1964-65	238,732	149,753	25,215	15,196	10,395	1,340	347	440,978
Passenger-journeys per average route-mile worked (number)—								
1960-61	38,835	34,948	4,546	6,147	3,071	3,946	134	17,015
1961-62	38,700	35,602	4,369	5,994	3,092	3,519	140	17,306
1962-63	38,839	35,809	4,292	5,893	3,038	3,018	148	17,350
1963-64	39,748	36,161	4,276	6,057	2,941	2,828	150	17,697
1964-65	39,427	35,562	4,359	6,066	2,785	2,680	154	17,610
Goods and livestock carried (b) (⁰⁰⁰ tons)—								
1960-61	24,104	10,977	7,981	4,515	4,833	1,192	1,738	55,340
1961-62	24,050	10,350	8,153	4,616	5,342	1,096	1,958	55,565
1962-63	23,641	10,841	8,736	4,503	4,793	1,165	2,230	55,909
1963-64	25,814	12,132	9,796	5,179	5,187	1,155	2,478	61,741
1964-65	27,889	12,596	10,031	5,089	5,229	1,091	2,919	64,844
Goods and livestock carried per average route-mile worked (tons)—								
1960-61	3,976	2,559	1,256	1,791	1,172	2,236	772	2,118
1961-62	3,967	2,412	1,334	1,823	1,387	2,124	869	2,169
1962-63	3,904	2,542	1,438	1,778	1,262	2,257	990	2,193
1963-64	4,263	2,860	1,617	2,060	1,411	2,291	1,100	2,440
1964-65	4,606	2,991	1,734	2,032	1,401	2,181	1,296	2,589

(a) Suburban and country—based on ticket sales, making allowances for periodical tickets. Tickets sold at concession rates are counted as full journeys. (b) Inter-system traffic is included in the total for each system (including each Commonwealth Railway) over which it passes.

Passenger traffic

With the exception of the Commonwealth railway systems, which operate only country services, all systems provide both suburban and country passenger services. Traffic classed as 'suburban' moves between stations within a classified suburban area around each capital city, while traffic classed as 'country' originates or terminates at stations outside this suburban area. Particulars of suburban and country passenger traffic are shown separately in the two tables following.

Suburban passenger traffic. The following table shows a summary of suburban passenger operations for the years 1960-61 to 1964-65. Most of the suburban services in New South Wales and Victoria are operated within electrified areas.

**GOVERNMENT RAILWAYS: SUBURBAN PASSENGER SUMMARY, SYSTEMS
1960-61 TO 1964-65**

Year	Suburban passenger-journeys (a)	Suburban passenger train-miles	Suburban passenger-miles	Average number of passengers per train-mile	Average mileage per passenger-journey	Suburban passenger earnings			
						Gross	Per passenger-journey	Per passenger-mile	Per passenger train-mile
	('000)	('000)	('000)		(miles)	(\$'000)	(cents)	(cents)	(cents)
New South Wales system—									
1960-61	222,333	11,176	} n.a.	} n.a.	} n.a.	25,510	11.47	n.a.	228
1961-62	221,861	11,250				25,490	11.49	n.a.	227
1962-63	221,960	10,915				25,672	11.57	n.a.	235
1963-64	227,319	10,939				26,346	11.59	n.a.	241
1964-65	225,420	10,888				26,163	11.61	n.a.	240
Victorian system—									
1960-61	145,558	7,902	1,282,975	162	8.81	17,770	12.21	1.38	225
1961-62	147,977	8,296	1,299,379	157	8.78	18,012	12.17	1.38	217
1962-63	147,587	8,303	1,302,094	157	8.82	17,978	12.18	1.38	217
1963-64	148,314	8,369	1,315,105	157	8.87	18,056	12.17	1.37	216
1964-65	144,846	8,480	1,279,320	151	8.83	19,837	13.70	1.55	234
Queensland system—									
1960-61	24,582	2,009	} n.a.	} n.a.	} n.a.	1,924	7.82	n.a.	96
1961-62	22,890	1,850				1,954	8.54	n.a.	106
1962-63	22,413	1,706				1,932	8.62	n.a.	113
1963-64	22,512	1,742				1,924	8.55	n.a.	111
1964-65	22,254	1,778				1,896	8.52	n.a.	107
South Australian system—									
1960-61	14,584	2,082	117,423	56	8.05	1,590	10.90	1.35	77
1961-62	14,211	1,962	114,852	59	8.08	1,562	10.99	1.36	80
1962-63	13,978	1,941	115,219	59	8.24	1,578	11.29	1.37	82
1963-64	14,332	1,967	120,110	61	8.38	1,634	11.40	1.36	83
1964-65	14,326	1,951	119,232	61	8.32	1,711	11.94	1.43	88
Western Australian system—									
1960-61	12,026	1,357	82,612	61	6.87	968	8.04	1.17	72
1961-62	11,308	1,355	78,469	58	6.94	938	8.29	1.19	69
1962-63	10,937	1,334	76,312	57	6.98	924	8.44	1.21	69
1963-64	10,298	1,368	71,468	52	6.94	954	9.27	1.33	70
1964-65	9,911	1,375	69,824	51	7.05	977	9.86	1.40	71
Tasmanian system—									
1960-61	1,859	202	11,018	54	5.93	110	5.88	0.99	54
1961-62	1,585	188	9,778	52	6.17	112	7.01	1.13	59
1962-63	1,347	135	8,385	62	6.23	98	7.25	1.17	72
1963-64	1,229	137	7,664	56	6.24	90	7.33	1.17	66
1964-65	1,135	136	7,208	53	6.35	84	7.38	1.16	61

(a) See footnote (a) to table on page 463.

Country passenger traffic. The following table shows a summary of country passenger operations for the years 1960-61 to 1964-65.

**GOVERNMENT RAILWAYS: COUNTRY PASSENGER SUMMARY, SYSTEMS
1960-61 TO 1964-65**

Year	Country passenger-journeys (a)	Country passenger train-miles (b)	Country passenger-miles (c)	Average number of passengers per train-mile (c)	Average mileage per passenger-journey (miles)	Country passenger earnings			
						Gross (\$'000)	Per passenger-journey (cents)	Per passenger-mile (cents)	Per passenger train-mile (d) (cents)
New South Wales system—									
1960-61	13,083	10,206	} n.a.	n.a.	n.a.	13,650	104.32	n.a.	133
1961-62	12,777	10,410				13,896	108.76	n.a.	133
1962-63	13,209	10,475				14,832	112.27	n.a.	142
1963-64	13,358	10,576				15,298	114.53	n.a.	145
1964-65	13,312	10,461				15,571	116.97	n.a.	149
Victorian system—									
1960-61	4,371	4,482	388,258	87	88.84	6,496	148.62	1.67	145
1961-62	4,791	4,726	413,435	87	86.31	6,946	145.01	1.68	147
1962-63	5,140	4,829	418,887	87	81.50	7,062	137.41	1.68	147
1963-64	5,082	4,835	410,830	85	80.84	7,082	139.35	1.72	147
1964-65	4,907	4,837	403,640	83	82.26	7,553	153.91	1.87	156
Queensland system—									
1960-61	4,294	4,869	} n.a.	n.a.	n.a.	4,812	112.08	n.a.	99
1961-62	3,810	4,714				4,756	124.79	n.a.	101
1962-63	3,668	4,689				4,698	128.09	n.a.	100
1963-64	3,391	4,608				4,450	131.22	n.a.	97
1964-65	2,961	4,092				4,140	139.81	n.a.	101
South Australian system—									
1960-61	990	2,039	100,683	49	101.69	1,644	166.09	1.63	82
1961-62	965	2,043	100,591	49	104.24	1,676	173.75	1.67	82
1962-63	944	2,014	99,761	50	105.69	1,692	179.32	1.70	84
1963-64	895	1,954	96,877	50	108.20	1,658	185.11	1.71	85
1964-65	870	1,944	96,835	50	111.32	1,665	191.44	1.72	86
Western Australian system—									
1960-61	635	1,254	73,900	59	116.34	1,282	201.76	1.73	102
1961-62	598	1,184	74,230	63	124.12	1,342	224.25	1.81	113
1962-63	600	1,121	75,684	67	126.19	1,338	223.09	1.77	119
1963-64	516	982	66,753	68	129.39	1,342	260.31	2.01	137
1964-65	484	984	68,064	69	140.64	1,469	303.44	2.16	149
Tasmanian system—									
1960-61	244	323	12,940	40	53.10	160	65.49	1.23	49
1961-62	231	324	12,745	39	55.10	160	68.90	1.25	49
1962-63	211	318	12,255	39	58.19	156	74.27	1.27	49
1963-64	197	314	11,380	36	57.98	144	73.16	1.26	46
1964-65	205	263	12,355	47	60.27	140	68.52	1.14	54
Commonwealth system—									
1960-61	303	825	93,540	113	309.07	1,676	553.76	1.79	203
1961-62	315	923	100,604	109	319.15	1,808	573.81	1.80	196
1962-63	334	939	107,991	115	322.99	1,914	572.16	1.77	203
1963-64	338	898	107,005	119	316.20	1,915	565.96	1.79	213
1964-65	347	907	120,977	133	348.89	2,172	626.37	1.80	240

(a) See footnote (a) to table on page 463. (b) Includes a proportion of mixed train-miles. (c) Passenger-miles divided by passenger train-miles inclusive of a proportion of mixed train-miles. (d) Passenger earnings divided by passenger train-miles inclusive of a proportion of mixed train-miles.

Freight traffic

The following table shows the quantities of various commodities carried on the various systems and the earnings derived during 1964-65.

GOVERNMENT RAILWAYS: COMMODITIES CARRIED AND EARNINGS SYSTEMS, 1964-65

System	Coal, coke and briquettes	Other minerals (a)	Agri-cultural produce (b)	Wool	Live-stock	All other commodities	Total
QUANTITY CARRIED(c)							
('000 tons)							
New South Wales	10,825	2,613	4,441	239	565	9,206	27,889
Victoria	2,198	136	3,581	136	359	6,186	12,596
Queensland	2,810	1,015	3,344	50	665	2,147	10,031
South Australia	12	1,420	1,273	36	142	2,206	5,089
Western Australia	758	868	1,533	86	101	1,883	5,229
Tasmania	120	29	47	3	20	872	1,091
Commonwealth	1,933	63	40	4	91	788	2,919
Australia	18,656	6,144	14,259	554	1,943	23,288	64,844

FREIGHT EARNINGS							
(\$'000)							
New South Wales	n.a.	n.a.	n.a.	n.a.	6,294	n.a.	154,543
Victoria	6,773	399	18,684	1,231	2,152	34,122	63,361
Queensland	9,460	4,932	15,079	1,807	8,353	30,065	69,696
South Australia	34	6,881	4,452	369	954	10,406	23,096
Western Australia	2,473	1,921	8,028	1,256	770	16,240	30,688
Tasmania	511	61	208	31	108	4,100	5,019
Commonwealth	2,211	413	408	56	530	9,975	13,593
Australia	n.a.	n.a.	n.a.	n.a.	19,161	n.a.	359,996

(a) Includes sand and gravel. (b) Includes wheat and fruit. (c) See footnote (b) to table on page 463.

A summary of freight traffic on each railway system for each of the years 1960-61 to 1964-65 is shown in the following table.

GOVERNMENT RAILWAYS: FREIGHT SUMMARY, SYSTEMS, 1960-61 TO 1964-65

Year	Revenue goods train-miles (a)	Revenue net ton-miles	Average train load (paying traffic) (b)	Average haul per ton (c)	Goods and livestock earnings				Density of traffic (e)
					Gross	Per average route-mile worked	Per revenue net ton-mile	Per revenue goods train-mile (d)	
	('000)	(million)	(tons)	(miles)	(\$'000)	(\$)	(cents)	(cents)	('000)
New South Wales system—									
1960-61	16,516	3,613	219	150	126,116	20,804	3.49	763	596
1961-62	15,786	3,576	227	149	122,848	20,262	3.43	778	590
1962-63	15,971	3,743	234	158	126,646	20,916	3.38	793	618
1963-64	17,563	4,282	244	166	144,646	23,888	3.37	823	707
1964-65	18,845	4,706	250	169	154,543	25,523	3.28	820	777
Victorian system—									
1960-61	5,847	1,612	276	147	53,164	12,392	3.30	909	376
1961-62	5,880	1,581	269	153	51,466	11,994	3.26	875	368
1962-63	6,345	1,693	267	156	53,016	12,430	3.13	836	397
1963-64	6,909	1,906	276	157	58,730	13,846	3.08	850	449
1964-65	7,172	2,028	283	161	63,361	15,047	3.12	883	482
Queensland system									
1960-61	11,267	1,472	131	195	59,606	9,486	4.05	529	234
1961-62	10,832	1,461	135	189	58,934	9,754	4.03	544	242
1962-63	11,375	1,559	137	190	62,008	10,320	3.97	545	260
1963-64	12,604	1,841	146	200	70,828	11,826	3.85	562	307
1964-65	11,528	1,751	152	187	68,102	11,914	3.89	591	306

For footnotes see next page.

GOVERNMENT RAILWAYS: FREIGHT SUMMARY, SYSTEMS, 1960-61 TO 1964-65
—continued

Year	Revenue goods train-miles (a)	Revenue net ton-miles	Average train load (paying traffic) (b)	Average haul per ton (c)	Goods and livestock earnings				Density of traffic (e)
					Gross	Per average route-mile worked	Per revenue net ton-mile	Per revenue goods train-mile (d)	
South Australian system—									
1960-61	2,784	645	232	142	21,812	8,610	3.38	783	255
1961-62	2,733	650	238	141	21,760	8,594	3.35	797	257
1962-63	2,771	679	245	151	21,494	8,488	3.17	776	268
1963-64	2,745	754	275	146	23,170	9,216	3.07	844	300
1964-65	2,687	765	285	150	23,096	9,220	3.02	860	306
Western Australian system—									
1960-61	5,208	748	144	155	27,880	6,762	3.73	535	181
1961-62	5,526	831	150	156	30,228	7,850	3.63	547	216
1962-63	5,095	762	150	159	28,126	7,408	3.69	552	201
1963-64	5,156	813	158	157	29,788	8,100	3.66	577	221
1964-65	5,203	842	162	161	30,688	8,221	3.64	590	226
Tasmanian system—									
1960-61	991	114	115	95	4,912	9,202	4.32	496	213
1961-62	903	107	119	98	4,822	9,346	4.51	534	207
1962-63	869	112	129	96	5,044	9,774	4.51	580	217
1963-64	871	114	131	99	5,138	10,192	4.51	590	226
1964-65	873	117	133	107	5,019	10,039	4.31	575	233
Commonwealth system—									
1960-61	1,519	549	362	316	9,074	4,030	1.65	597	244
1961-62	1,530	581	380	297	9,342	4,148	1.61	611	258
1962-63	1,610	664	412	298	10,662	4,734	1.61	662	295
1963-64	1,770	744	421	300	11,832	5,254	1.59	668	331
1964-65	2,007	886	441	303	13,593	6,036	1.53	677	393

(a) Includes a proportion of mixed train-miles. (b) Net ton-miles per goods (including a portion of mixed) train-mile. (c) Net ton-miles per ton carried. (d) Goods and livestock earnings divided by goods train-miles, inclusive of a proportion of mixed train-miles. (e) Total net ton-miles per average route-mile worked. (f) Excludes Queensland portion of Uniform Gauge Railway.

Rolling stock

The following table shows the number of rolling stock on capital account of Government railways at 30 June 1965.

GOVERNMENT RAILWAYS: ROLLING STOCK(a), SYSTEMS, 30 JUNE 1965

System	Locomotives					Coaching stock(c)	Goods stock	Service stock
	Steam	Diesel-electric	Electric	Other (b)	Total			
New South Wales	534	241	41	22	838	(d) 3,451	(d)20,290	(e) 2,219
Victoria	220	161	35	69	485	(d) 2,418	(d)21,137	(d) 1,676
Queensland	613	139	..	11	763	1,402	23,701	2,018
South Australia	151	97	..	..	248	(d) 586	7,818	(d) 526
Western Australia	240	94	..	17	351	519	11,875	1,041
Tasmania	20	37	..	20	77	136	2,337	174
Commonwealth	4	52	..	8	64	154	1,607	489
Australia	1,782	821	76	147	2,826	(f) 8,777	(f)88,781	(f) 8,144

(a) Included in capital account. (b) Includes non-passenger-carrying diesel power vans. (c) Includes all brake vans. (d) Excludes stock jointly owned with other systems. (e) Includes vehicles not having a capital value. (f) Includes jointly owned stock.

The following table shows the numbers of rolling stock on capital account for all railway systems at 30 June of each of the years 1961 to 1965.

GOVERNMENT RAILWAYS: ROLLING STOCK^(a), AUSTRALIA, 1961 TO 1965

30 June—	Locomotives					Coaching stock ^(c)	Goods stock	Service stock
	Steam	Diesel-electric	Electric	Other ^(b)	Total			
1961 . . .	2,651	491	76	109	3,327	9,172	92,455	6,896
1962 . . .	2,456	541	76	123	3,196	9,177	91,094	7,976
1963 . . .	2,215	608	76	132	3,031	8,969	90,020	7,960
1964 . . .	1,981	694	76	140	2,891	8,829	88,929	7,944
1965 . . .	1,782	821	76	147	2,826	8,777	88,781	8,144

^(a) Included in capital account. ^(b) Includes non-passenger-carrying diesel power vans. ^(c) Includes all brake vans.

Accidents

The following table shows particulars of the number of persons killed or injured through train accidents and the movement of rolling stock on the Government railways of Australia during 1964-65.

GOVERNMENT RAILWAYS: ACCIDENTS^(a), SYSTEMS, 1964-65

—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Cwlth	Aust.
Persons killed . . .	53	48	23	9	10	1	..	144
Persons injured . . .	743	638	181	39	76	8	11	1,696

^(a) Excludes accidents to railway employees.

Consumption of coal, oil and petrol

The following table shows the value of coal, oil and petrol consumed by the various Government railways during 1964-65.

GOVERNMENT RAILWAYS: VALUE OF COAL, OIL AND PETROL CONSUMED, SYSTEMS, 1964-65
(^{'000})

System	Coal		Oil				Petrol for rail cars
	Locomotives	Other purposes	Diesel ^(a)	Fuel ^(b)	Lubrication	Other purposes	
New South Wales	(c)	(c)	3,426	168	428	310	..
Victoria . . .	1,033	39	1,324	612	231	224	..
Queensland . . .	1,998	66	1,542	..	91	217	..
South Australia . . .	262	34	809	59	n.a.	n.a.	(d)
Western Australia	1,047	21	618	..	250	177	9
Tasmania . . .	8	1	161	..	30	11	..
Commonwealth . . .	1	2	641	..	70	92	1

^(a) Used in internal combustion engines of locomotives and rail cars. ^(b) Used in oil-fired furnaces of steam locomotives. ^(c) Not available. The quantity of coal used was 635,763 tons for locomotives and 13,326 tons for other purposes. ^(d) Less than \$500.

Staff employed and salaries and wages paid

The following table shows details of the average staff employed and the salaries and wages paid by the government railways of Australia during 1964-65.

GOVERNMENT RAILWAYS: AVERAGE NUMBER OF EMPLOYEES, AND SALARIES AND WAGES PAID, SYSTEMS, 1964-65

System	Operating staff			Construction staff			Total salaries and wages paid (\$'000)	Average earnings per employee (\$)
	Salaried	Wages	Total	Salaried	Wages	Total		
New South Wales	9,136	37,502	46,638				125,017	2,681
Victoria	(a) 5,319	(a) 22,593	(a) 27,912	(b)	(b)	(b)	75,667	2,711
Queensland(c)	4,264	21,345	25,609	10	210	220	64,874	2,512
South Australia	1,791	6,284	8,075	25	1,002	1,027	23,780	2,613
Western Australia	2,026	9,578	11,604	..	..	..	27,520	2,372
Tasmania	377	1,837	2,214	26	123	149	5,355	2,266
Commonwealth	473	2,337	2,810	..	..	..	8,422	2,997
Australia	23,386	101,476	124,862	61	1,335	1,396	330,635	2,619

(a) Includes construction staff.
of Uniform Gauge Railway.

(b) Included with operating staff.

(c) Excludes Queensland portion

TRAMWAY, TROLLEY-BUS AND OMNIBUS SERVICES

Systems in operation

Tramway and trolley-bus. Since 1 April 1947 all systems have been operated by government or municipal authorities. During the year 1964-65, tramway systems were in operation in the following cities: Melbourne, Bendigo, and Ballarat, Victoria; Brisbane, Queensland; and Adelaide, South Australia. Trolley-bus services operated in Brisbane, Queensland; Perth, Western Australia; and Hobart and Launceston, Tasmania. All systems were electric.

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 tramways for the convenience of passengers, which are dealt with in the present section.

Motor omnibus. Services are operated by government or municipal authorities and private operators. Statistics are collected for government and municipal omnibus services located in all State capital cities; Canberra, Australian Capital Territory; Newcastle, New South Wales; Maryborough and 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 and the Tasmanian Transport Commission. In Sydney the Government tramway system has been replaced by omnibus services, and in Perth the Metropolitan (Perth) Passenger Transport Trust has replaced privately owned services in the metropolitan area. In Hobart the Government trolley-bus and omnibus services have replaced the Government tramway service.

Particulars of motor omnibus services under the control of private operators are recorded for the States of New South Wales, Victoria, Queensland, South Australia and Western Australia. In New South Wales particulars of private services are compiled for the Sydney metropolitan and Newcastle transport districts and the City of Greater Wollongong. In Victoria particulars since 1963-64 relate to operations within the Melbourne metropolitan area. Prior to this they referred to services operating within eight miles of the General Post Office, Melbourne. In South

Australia particulars relate to services licensed by the Municipal Tramways Trust and the Transport Control Board. In Queensland they relate to all cities with a population of 10,000 persons or more. In Western Australia particulars of all private services throughout the State are included.

Government and municipal 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 tramway services by motor omnibus services, it is no longer possible to obtain separate statistics for all phases of the activities of each form of transport, particularly financial operations. In this section, therefore, statistics of public tramway, trolley-bus and motor omnibus services are combined in single tables with separate details shown for each form of transport where possible. The following table gives a summary for 1964-65 of the operations of tramway, trolley-bus and omnibus systems controlled by government and municipal authorities.

TRAMWAY, TROLLEY-BUS AND OMNIBUS SERVICES: GOVERNMENT AND MUNICIPAL, STATES AND TERRITORIES, 1964-65

	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Route-miles at 30 June—									
Tram(a) miles	..	156	59	7	..	..	..	..	222
Trolley-bus . . . . . "	..	..	20	..	17	28	..	..	65
Omnibus "	574	123	312	141	4,304	911	29	66	6,460
Vehicle miles—									
Tram '000	..	17,748	6,309	495	..	..	..	..	24,552
Trolley-bus . . . . . "	..	..	1,044	..	(b)	1,225	..	..	..
Omnibus "	44,784	7,267	6,718	10,971	18,639	5,180	483	1,890	98,201
Rolling stock at 30 June—									
Tram number	..	782	287	30	..	..	..	..	1,099
Trolley-bus . . . . . "	..	..	36	..	50	66	..	..	152
Omnibus "	1,746	300	319	353	617	238	18	89	3,680
Passenger-journeys—									
Tram '000	..	152,619	63,029	2,438	..	..	..	..	218,086
Trolley-bus . . . . . "	..	..	6,779	..	(b)	(b)	..	..	..
Omnibus "	261,609	29,812	33,484	53,996	50,902	23,954	915	5,073	466,524
Gross revenue(c)—									
Tram, trolley-bus and omnibus \$'000	24,749	17,980	7,751	5,899	5,877	2,246	130	478	65,110
Working expenses(d)—									
Tram, trolley-bus and omnibus \$'000	28,000	18,470	8,304	5,487	6,578	2,862	159	659	70,519
Net revenue—									
Tram, trolley-bus and omnibus \$'000	-3,251	-490	-553	412	-701	-616	-29	-181	-5,409
Ratio of working expenses to gross revenue—									
Tram, trolley-bus and omni- bus per cent	113.14	102.72	107.14	93.02	111.94	127.41	122.40	137.86	108.31
Employees at 30 June—									
Tram, trolley-bus and omnibus number	7,286	4,819	2,537	1,418	1,931	696	25	129	18,841
Accidents—									
Tram, trolley-bus and omni- bus(e)—									
Persons killed number	5	15	16	..	5	1	2	..	44
Persons injured "	1,366	681	54	179	266	60	..	..	2,606

(a) Gauge 4 feet 8½ inches throughout. (b) Included with omnibus services. (c) Excludes government grants. (d) Includes provision of reserves for depreciation, etc., where possible. (e) Excludes accidents to employees.

Minus sign (-) denotes deficit.

The following table gives a summary of the operations of tramway, trolley-bus and omnibus systems controlled by government and municipal authorities for the years 1960-61 to 1964-65.

TRAMWAY, TROLLEY-BUS AND OMNIBUS SERVICES: GOVERNMENT AND MUNICIPAL, AUSTRALIA, 1960-61 TO 1964-65

	1960-61 (a)	1961-62	1962-63	1963-64	1964-65
Route-miles at 30 June—					
Tram miles	238	229	223	227	222
Trolley-bus "	92	88	88	65	65
Omnibus "	5,413	5,777	5,735	5,921	6,460
Vehicle miles—					
Tram '000	30,010	28,034	26,363	25,689	24,552
Trolley-bus "	4,558	} 93,647	94,883	96,272	98,201
Omnibus "	85,924				
Rolling stock at 30 June—					
Tram number	1,227	1,190	1,124	1,101	1,099
Trolley-bus "	246	240	208	152	152
Omnibus "	3,366	3,450	3,474	3,540	3,680
Passenger-journeys—					
Tram '000	265,473	} 469,549	474,194	471,085	466,524
Trolley-bus "	19,461				
Omnibus(b) "	440,822				
Gross revenue(c)—					
Tram, trolley-bus and omnibus \$'000	63,600	63,514	63,394	63,688	65,110
Working expenses(d)—					
Tram, trolley-bus and omnibus \$'000	68,764	68,412	67,344	67,890	70,519
Net revenue—					
Tram, trolley-bus and omnibus \$'000	-5,164	-4,898	-3,950	-4,202	-5,409
Ratio of working expenses to gross revenue—					
Tram, trolley-bus and omnibus per cent	108.12	107.71	106.23	106.61	108.31
Employees at 30 June—					
Tram, trolley-bus and omnibus number	21,455	20,607	19,986	19,346	18,841
Accidents—					
Tram, trolley-bus and omnibus(e)—					
Persons killed number	25	42	32	38	44
Persons injured "	2,756	3,076	2,915	2,839	2,606

(a) Includes particulars of New South Wales tramway services up to cessation of operation in February, 1961. (b) Includes particulars for Tasmanian trams (to October, 1960) and trolley-buses. (c) Excludes government grants. (d) Includes provision of reserves for depreciation, etc., where possible. (e) Excludes accidents to employees.

Minus sign (-) denotes deficit.

Private omnibus services

The following table shows the operations of motor omnibus services under the control of private operators in New South Wales, Victoria, Queensland, South Australia and Western Australia during each of the years 1960-61 to 1964-65. Particulars are not available for Tasmania and the Northern Territory.

MOTOR OMNIBUS SERVICES: PRIVATE, STATES, 1960-61 TO 1964-65

Year	Number of omnibuses (a)	Omnibus-miles	Passenger-journeys	Value of plant and equipment (b)	Gross revenue	Persons employed (b)
		'000	'000	\$'000	\$'000	
New South Wales(c)—						
1960-61(d)	1,169	20,611	76,157	3,694	6,576	1,662
1961-62	1,233	26,336	83,523	3,926	8,388	1,593
1962-63	1,296	25,141	72,082	3,988	7,776	1,452
1963-64	1,351	29,516	79,122	4,850	9,392	1,657
1964-65	1,440	31,945	79,951	5,253	9,921	1,796
Victoria—Melbourne Metropolitan Area(e)—				(f)		(g)
1960-61(h)	551	15,702	70,273	1,510	4,934	732
1961-62(h)	539	15,805	69,150	1,388	5,226	721
1962-63(h)	553	16,405	70,197	1,400	5,368	709
1963-64	747	20,584	86,333	2,174	6,810	936
1964-65	763	21,280	83,274	2,296	7,362	911
Queensland(i)—						
1960-61	378	8,298	25,806	1,482	2,476	578
1961-62	394	8,714	26,301	1,612	2,562	582
1962-63	402	8,562	25,563	1,734	2,508	574
1963-64	416	8,754	26,334	1,892	2,640	562
1964-65	415	8,841	27,705	1,713	2,885	547
South Australia(j)—						
1960-61	281	5,963	11,171	} n.a. {	1,698	} n.a.
1961-62	258	6,030	11,153		1,738	
1962-63	244	6,045	11,583		1,806	
1963-64	256	6,357	11,783		1,866	
1964-65	268	6,779	11,635		2,024	
Western Australia(k)—						
1960-61	142	4,049	10,394	706	1,172	273
1961-62(l)	58	3,098	7,268	284	766	82
1962-63	61	1,088	1,696	240	270	74
1963-64	62	978	1,425	244	230	67
1964-65	44	791	1,446	123	155	45

(a) At 30 June. (b) At end of period. (c) Metropolitan, Newcastle and Wollongong transport districts only. (d) Nine months ended March 1961; subsequent figures relate to the years ended 31 March. (e) Partly estimated. (f) Vehicles only. (g) Drivers only. (h) Figures relate only to services operating within eight miles of General Post Office, Melbourne. (i) All cities with a population of 10,000 persons or more. (j) Services licensed by the Municipal Tramways Trust and the Transport Control Board. (k) Includes services operated in metropolitan and rural areas. (l) Decrease due to Metropolitan (Perth) Passenger Transport Trust's acquisition of services previously privately owned.

FERRY (PASSENGER) SERVICES

Ferry passenger services are operated in the following States—New South Wales, at Sydney and Newcastle; Western Australia, on the Swan River at Perth; Tasmania, on the Mersey River at Devonport. Control is exercised by both governmental authorities and private operators. In Victoria and Queensland the services operated are not extensive. There are no ferry passenger services in South Australia.

Summary of operations

The operations of ferry passenger services in New South Wales, Western Australia and Tasmania during the years 1960-61 to 1964-65 are summarized in the following table. Particulars of vehicular ferries are not included.

FERRY (PASSENGER) SERVICES: STATES, 1960-61 TO 1964-65

Year	Number of vessels	Passenger accommodation	Passenger-journeys	Gross revenue	Persons employed
			'000	\$'000	
New South Wales—Sydney and Newcastle—					
1960-61	40	19,211	15,093	1,744	316
1961-62	39	17,641	14,452	1,660	295
1962-63	38	17,653	14,456	1,672	300
1963-64	38	17,463	14,777	1,763	289
1964-65	40	17,506	15,062	1,911	302
Western Australia—Perth—					
1960-61	4	785	180	18	7
1961-62	4	800	168	20	8
1962-63	4	800	192	22	8
1963-64	4	800	185	24	8
1964-65	5	865	201	31	8
Tasmania—Hobart and Devonport—					
1960-61	4	1,482	436	21	12
1961-62	4	1,482	406	19	12
1962-63	4	1,482	380	21	12
1963-64(a)	1	40	177	8	3
1964-65(a)	1	40	180	8	3

(a) Devonport only.

MOTOR VEHICLES

The 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 registration, licences, fees payable, etc., in each State and Territory at 30 June 1960 were given in Year Book No. 47, pages 553-6, and at 30 June 1963 in *Transport and Communication*, Bulletin No. 54, 1962-63.

Motor vehicles on register; licences

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

Census of Motor Vehicles, 1962

A census of motor vehicles on register at 31 December 1962 was conducted by the Commonwealth Statistician in co-operation with the Deputy Commonwealth Statisticians and the motor vehicle registration authorities. The census covered items shown on the motor vehicle registration certificate such as make of vehicle, year of model, type of vehicle, horsepower, motive power, location (i.e. address on registration certificate), ownership (private, government, etc.), and for specific types of vehicles such items as unladen weight, carrying capacity, passenger capacity, and in some States gross vehicle weight. Details were published in printed bulletins for each State and Territory and for Australia, and in issue No. 54, 1962-63 of the annual bulletin *Transport and Communication*. Year Book No. 50, 1964, contains summarized particulars of the census (pages 591-4). Reference is made to the publication of results of previous enumerations of this nature in Year Book No. 51 (page 571).

The following table contains a summary for each State and Territory of the number of motor vehicles of each type on the register at 31 December 1962. The total number of each type recorded for Australia at the previous motor vehicle census (31 December 1955) is included for purposes of comparison.

**CENSUS OF MOTOR VEHICLES, 31 DECEMBER 1962: TYPES OF VEHICLE
STATES AND TERRITORIES**

State or Territory	Motor cars (a)	Station wagons	Utilities	Panel vans	Trucks	Other truck-type	Omnibuses	Motor cycles	Total motor vehicles (b)
New South Wales	742,947	85,746	137,138	49,479	84,670	2,822	5,004	20,398	1,128,204
Victoria	611,497	69,528	94,470	31,328	76,591	2,890	3,409	15,802	905,515
Queensland	255,513	31,086	90,434	13,184	39,932	448	1,815	13,963	446,375
South Australia	220,010	18,895	38,539	9,678	31,684	982	1,580	16,717	338,085
Western Australia	149,799	15,838	37,784	8,585	27,256	541	1,365	12,257	253,425
Tasmania	69,020	6,677	11,183	6,364	8,487	301	940	2,101	105,073
Northern Territory	4,321	1,258	2,806	471	1,326	73	91	325	10,671
Australian Capital Territory	15,591	2,408	1,802	808	935	34	115	296	21,989
Australia, 31 Dec. 1962	2,068,698	231,436	414,156	119,897	270,881	8,091	14,319	81,859	3,209,337
No.									
Per cent	64.5	7.2	12.9	3.7	8.4	0.3	0.4	2.6	100.0
Australia, 31 Dec. 1955	1,356,682	15,948	c361,970	c53,808	250,630	5,884	10,142	127,129	2,182,193
No.									
Per cent	62.2	0.7	16.6	2.5	11.5	0.3	0.4	5.8	100.0

(a) Includes ambulances and hearses. (b) Excludes tractors, trailers, plant and equipment, etc. (c) Queensland panel vans are included with utilities.

Motor vehicles on register, etc.

The following table shows particulars of the number of motor vehicles on register and the number per 1,000 of population at 31 December 1964.

**MOTOR VEHICLES(a) ON REGISTER: STATES AND TERRITORIES
31 DECEMBER 1964**

State or Territory	Motor cars, station wagons, ambulances, hearses	Utilities, panel vans, trucks(b), omnibuses	Motor cycles	Total(c)	Per 1,000 of population
New South Wales	969,093	289,706	18,063	1,276,862	307
Victoria	789,327	217,163	13,051	1,019,541	322
Queensland	355,244	152,702	12,423	520,369	326
South Australia	276,902	85,084	14,107	376,093	360
Western Australia	195,818	78,470	9,602	283,890	355
Tasmania	88,084	29,005	1,586	118,675	316
Northern Territory	7,706	5,733	305	13,744	444
Australian Capital Territory	25,019	4,571	313	29,903	353
Australia	2,707,193	862,434	69,450	3,639,077	323

(a) On a basis comparable with the Census of Motor Vehicles, 1962. All figures are subject to revision. (b) Includes other truck-type vehicles. (c) Excludes tractors, trailers, plant and equipment, etc.

The table following shows a summary for Australia of the number of motor vehicles on register and the number per 1,000 of population at 31 December each year 1960 to 1965.

MOTOR VEHICLES ON REGISTER: AUSTRALIA, 1960 TO 1965

31 December—	Motor cars, station wagons, ambulances, hearses	Utilities, panel vans, trucks(a), omnibuses	Motor cycles	Total(b)	Per 1,000 of population
1960(c) . . .	2,027,298	798,828	97,696	2,923,822	281
1961(c) . . .	2,126,339	803,551	88,855	3,018,745	285
1962(d) . . .	2,300,134	827,344	81,859	3,209,337	297
1963(e) . . .	2,498,925	844,481	74,719	3,418,125	310
1964(e) . . .	2,707,193	862,434	69,450	3,639,077	323
1965(e) . . .	2,894,203	872,394	67,435	3,834,032	334

(a) Includes other truck-type vehicles. (b) Excludes tractors, trailers, plant and equipment, etc. (c) Estimates for inter-censal years on a basis comparable with the Censuses of 1955 and 1962. (d) Census figures. (e) Subject to revision.

The table following shows the number of motor vehicles on register per 1,000 of population in each State and Territory at 31 December for each of the years 1961 to 1965.

MOTOR VEHICLES(a) ON REGISTER PER 1,000 OF POPULATION
STATES AND TERRITORIES, 1961 TO 1965

31 December—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1961(b) . . .	267	290	278	332	311	275	386	309	285
1962(c) . . .	281	300	288	338	331	284	406	319	298
1963(d) . . .	293	312	306	349	344	299	428	341	311
1964(d) . . .	307	322	326	360	355	316	444	353	323
1965(d) . . .	317	330	343	367	369	331	432	363	334

(a) Excludes tractors, trailers, plant and equipment, etc. (b) Estimates for inter-censal years on a basis comparable with the Censuses of 1955 and 1962. (c) Census figures. (d) Subject to revision.

Drivers' and riders' licences

At 30 June 1965 the numbers of licences in force to drive or ride motor vehicles were: New South Wales, 1,608,213; Victoria, 1,215,435; South Australia, 438,666; Western Australia, 329,157; Tasmania, 136,744; Australian Capital Territory, 46,612. Particulars are not available for Queensland and the Northern Territory.

Registrations of new motor vehicles

The following table shows the number of new motor vehicles registered in each State and Territory during the year ended 31 December 1965.

REGISTRATIONS OF NEW MOTOR VEHICLES: STATES AND TERRITORIES, 1965

State or Territory	Motor cars and station wagons	Utilities, panel vans, trucks(a) and omnibuses	Motor cycles	Total
New South Wales . . .	121,423	25,749	3,251	150,423
Victoria	93,115	17,865	1,058	112,038
Queensland	44,855	12,502	1,758	59,115
South Australia	34,168	6,966	1,090	42,224
Western Australia	22,655	8,081	594	31,330
Tasmania	10,443	2,564	122	13,129
Northern Territory	1,153	744	72	1,969
Australian Capital Territory	3,939	719	117	4,775
Australia	331,751	75,190	8,062	415,003

(a) Includes other truck-type vehicles, ambulances and hearses.

Particulars of the registrations of new motor vehicles during each of the years ended 31 December 1961 to 1965 are shown in the following table.

REGISTRATIONS OF NEW MOTOR VEHICLES
AUSTRALIA, 1961 TO 1965

Year	Motor cars and station wagons	Utilities, panel vans, trucks(a) and omnibuses	Motor cycles	Total
1961	188,132	49,608	6,103	243,843
1962	266,789	56,457	5,414	328,660
1963	307,380	66,783	5,272	379,435
1964	333,063	75,492	6,482	415,037
1965	331,751	75,190	8,062	415,003

(a) Includes other truck-type vehicles, ambulances and hearses.

ROADS AND BRIDGES

Information on the length of roads in Australia, the class of roads and their composition, together with particulars of the financial operations of the roads authorities in the several States, is included in the chapter Local Government of this Year Book.

ROAD TRAFFIC ACCIDENTS

Accidents reported

Accidents involving casualties, persons killed, persons injured

The following table gives a summary of road traffic accidents involving casualties in each State and Territory for the year ended December 1964.

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): NUMBER OF ACCIDENTS, PERSONS KILLED AND PERSONS INJURED STATES AND TERRITORIES, 1964

State or Territory	Accidents involving casualties	Persons killed			Persons injured		
		Number	Per 100,000 of mean population	Per 10,000 motor vehicles registered	Number	Per 100,000 of mean population	Per 10,000 motor vehicles registered
New South Wales	19,399	1,010	25	8	26,631	646	215
Victoria	13,991	904	29	9	19,836	634	200
Queensland	7,220	461	29	9	10,383	655	207
South Australia(b)	6,998	238	23	7	9,222	894	252
Western Australia	4,062	222	28	8	5,450	690	197
Tasmania	1,184	89	24	8	1,709	465	148
Northern Territory	224	25	80	19	297	946	228
Australian Capital Territory	476	17	21	6	730	904	259
Total	53,554	2,966	27	8	74,258	667	210

(a) Accidents (reported to the police) which occurred in public thoroughfares and which resulted in the death of any person within a period of thirty days after the accident, or injury to an extent requiring surgical or medical treatment. (b) Includes all accidents resulting in bodily injury to any person whether or not requiring medical or surgical treatment.

The following table shows the number of road traffic accidents involving casualties and persons killed or injured in road traffic accidents in each State and the Australian Capital Territory during each of the years ended December 1960 to 1964 and for the Northern Territory for the years ended December 1963 and 1964.

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): NUMBER OF ACCIDENTS, PERSONS KILLED AND PERSONS INJURED STATES AND TERRITORIES, 1960 TO 1964

Year	N.S.W.	Vic.	Qld	S.A. (b)	W.A.	Tas.	N.T.	A.C.T.	Total	
									Number	Per 10,000 motor vehicles registered
Accidents involving casualties—										
1960 . . .	17,011	12,087	5,764	5,988	3,713	778	n.a.	339	45,680	162
1961 . . .	16,380	11,719	5,371	5,865	3,528	855	n.a.	296	44,014	148
1962 . . .	16,076	12,026	6,310	6,491	3,685	833	n.a.	348	45,769	147
1963 . . .	18,101	12,590	6,724	6,299	4,057	1,051	218	425	49,465	149
1964 . . .	19,399	13,991	7,220	6,998	4,062	1,184	224	476	53,554	152
Persons killed—										
1960 . . .	978	760	346	234	199	78	n.a.	10	2,605	9
1961 . . .	918	794	337	178	172	73	n.a.	7	2,479	8
1962 . . .	876	808	403	194	177	61	n.a.	8	2,527	8
1963 . . .	900	780	398	223	198	75	16	8	2,598	8
1964 . . .	1,010	904	461	238	222	89	25	17	2,966	8
Persons injured—										
1960 . . .	22,655	16,669	8,175	7,704	4,862	1,079	n.a.	490	61,634	218
1961 . . .	21,839	16,115	7,467	7,297	4,779	1,173	n.a.	451	59,121	199
1962 . . .	21,468	16,781	8,703	8,321	5,077	1,158	n.a.	498	62,006	199
1963 . . .	24,652	17,577	9,445	8,271	5,399	1,595	313	628	67,880	205
1964 . . .	26,631	19,836	10,383	9,222	5,450	1,709	297	730	74,258	210

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

Types of road user killed or injured

The following table shows the number of persons killed and the number injured in each State and Territory, classified according to types of road user for the year ended December 1964. Responsibility for cause of accident is not indicated by this classification.

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): PERSONS KILLED OR INJURED, BY TYPE OF ROAD USER INVOLVED, STATES AND TERRITORIES, 1964

Type of road user	N.S.W.	Vic.	Qld	S.A. (b)	W.A.	Tas.	N.T.	A.C.T.	Total
PERSONS KILLED									
Drivers of motor vehicles	330	335	164	75	91	34	8	6	1,043
Motor cyclists	26	11	25	13	9	3	2	..	89
Pedal cyclists	38	54	12	17	8	3	..	..	132
Passengers (all types)(c)	287	233	145	56	71	14	10	9	825
Pedestrians	328	269	115	76	43	35	5	2	873
Other classes(d)	1	2	..	1	..	..	..	..	4
Total	1,010	904	461	238	222	89	25	17	2,966

PERSONS INJURED									
Drivers of motor vehicles	9,860	7,287	3,842	3,550	1,968	667	140	293	27,607
Motor cyclists	861	422	667	760	415	47	11	20	3,203
Pedal cyclists	955	1,113	549	646	372	58	5	52	3,750
Passengers (all types)(c)	10,907	8,184	4,385	3,431	2,010	722	129	302	30,070
Pedestrians	4,012	2,745	924	824	675	214	12	63	9,469
Other classes(d)	36	85	16	11	10	1	..	..	159
Total	26,631	19,836	10,383	9,222	5,450	1,709	297	730	74,258

(a) See footnote (a) to table on page 477. (b) See footnote (b) to table on page 477. (c) Includes pillion riders. (d) Includes tram drivers, riders of horses and drivers of animal-drawn vehicles.

Age groups of persons killed or injured

The following table shows the age groups of persons killed or injured in traffic accidents in each State and Territory for the year ended December 1964.

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): PERSONS KILLED OR INJURED, BY AGE GROUP, STATES AND TERRITORIES, 1964

Age group (years)	N.S.W.	Vic.	Qld	S.A. (b)	W.A.	Tas.	N.T.	A.C.T.	Aust.
PERSONS KILLED									
Under 5	33	30	10	12	6	5	1	1	98
5 and under	20	14	9	5	7	2	2	..	59
7 " " 17	82	70	39	25	21	4	1	..	243
17 " " 21	151	108	79	31	34	20	3	..	426
21 " " 30	152	141	77	33	34	14	5	3	459
30 " " 40	110	118	47	26	21	10	4	6	342
40 " " 50	100	105	66	29	34	6	7	2	349
50 " " 60	130	118	52	22	30	7	1	2	362
60 and over	229	185	82	44	34	21	..	2	597
Not stated	3	15	..	11	1	..	1	..	31
Total	1,010	904	461	238	222	89	25	17	2,966

PERSONS INJURED									
Under 5	917	684	321	278	170	55	11	39	2,475
5 and under	538	442	172	161	141	37	2	19	1,512
7 " " 17	3,119	2,463	1,297	1,244	794	218	15	105	9,255
17 " " 21	5,441	3,773	2,340	1,816	1,146	353	33	161	15,063
21 " " 30	5,677	4,215	2,195	1,647	1,005	339	103	164	15,345
30 " " 40	3,392	2,653	1,220	1,073	542	167	67	80	9,194
40 " " 50	2,915	2,140	1,023	859	550	181	38	71	7,777
50 " " 60	2,270	1,612	803	647	417	98	17	41	5,905
60 and over	1,988	1,524	772	532	350	96	6	37	5,305
Not stated	374	330	240	965	335	165	5	13	2,427
Total	26,631	19,836	10,383	9,222	5,450	1,709	297	730	74,258

(a) See footnote (a) to table on page 477. (b) See footnote (b) to table on page 477.

Types of accident

The following table shows the number of accidents involving casualties and persons killed or injured in each State and Territory, classified according to types of accident, for the year ended December 1964.

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES^(a): NUMBER OF ACCIDENTS AND PERSONS KILLED AND PERSONS INJURED, BY TYPE OF ACCIDENT, STATES AND TERRITORIES, 1964

Type of accident	N.S.W.	Vic.	Qld	S.A. (b)	W.A.	Tas.	N.T.	A.C.T.	Aust.
NUMBER OF ACCIDENTS									
Collisions between vehicles . . .	9,630	7,692	3,256	4,257	2,048	579	63	309	27,834
Vehicle overturning or leaving road . . .	3,406	2,165	2,560	960	1,138	303	119	52	10,703
Vehicle colliding with pedestrian . . .	4,036	2,837	992	807	672	233	17	59	9,653
Vehicle colliding with fixed object(c) . . .	2,025	1,022	224	903	129	59	6	49	4,417
Passenger accidents . . .	177	127	83	36	42	4	8	3	480
Vehicle colliding with animal . . .	125	52	71	28	24	6	9	1	316
Other . . .	..	96	34	7	9	..	2	3	151
Total	19,399	13,991	7,220	6,998	4,062	1,184	224	476	53,554

PERSONS KILLED									
Collisions between vehicles . . .	373	384	171	90	77	25	8	10	1,138
Vehicle overturning or leaving road . . .	174	176	152	46	98	30	9	1	686
Vehicle colliding with pedestrian . . .	321	266	116	74	42	33	5	2	859
Vehicle colliding with fixed object(c) . . .	130	66	7	26	4	1	..	3	237
Passenger accidents . . .	9	5	8	..	1	..	3	1	27
Vehicle colliding with animal . . .	3	2	3	1	..	..	..	..	9
Other . . .	..	5	4	1	..	..	..	..	10
Total	1,010	904	461	238	222	89	25	17	2,966

PERSONS INJURED									
Collisions between vehicles . . .	14,648	12,103	5,109	5,806	3,018	915	99	525	42,223
Vehicle overturning or leaving road . . .	4,846	3,321	3,784	1,338	1,542	472	157	70	15,530
Vehicle colliding with pedestrian . . .	3,957	2,729	965	798	657	220	12	60	9,398
Vehicle colliding with fixed object(c) . . .	2,843	1,396	305	1,202	156	89	10	69	6,070
Passenger accidents . . .	185	125	95	38	41	4	5	2	495
Vehicle colliding with animal . . .	152	66	86	33	26	9	12	1	385
Other . . .	..	96	39	7	10	..	2	3	157
Total	26,631	19,836	10,383	9,222	5,450	1,709	297	730	74,258

(a) See footnote (a) to table on page 477. (b) See footnote (b) to table on page 477. (c) Includes parked vehicles.

Australian Road Safety Council

Origin, objectives and organization

The Australian Road Safety Council was formed in 1947 by the Australian Transport Advisory Council, which comprises Commonwealth and State transport ministers and Commonwealth ministers with associated interests, to co-ordinate road safety activities in Australia. It was re-constituted in February 1961 by the Australian Transport Advisory Council, in order to provide a smaller, more effective, organization.

The Council comprises twenty-two members, representing the Commonwealth and State Governments and the major categories of organized road users and includes six independent specialists in the fields of medicine, enforcement, road research, statistics, road engineering, and traffic engineering who were added to the Council in 1965. It meets approximately twice each year and has established a number of temporary sub-committees to investigate and report upon particular aspects of its activities.

The Department of Shipping and Transport provides the secretariat for the Council. Each section represented on the Australian Road Safety Council—Commonwealth, State and community/commercial—exercises full control over its own activities.

Mode of operation

The media used by the Australian Road Safety Council include metropolitan daily press and metropolitan radio and television, platform and pulpit, plus a wide variety of posters, pamphlets, booklets, publications and films. The official publication of the Council is the *Australian Road Safety Council Report* which is published monthly. Through its secretariat in the Department of Shipping and Transport, the Council works in close collaboration with other committees established by the Australian Transport Advisory Council. These include the Australian Road Traffic Code Committee, which prepares model regulations with the object of attaining national uniformity of traffic laws; and the Australian Motor Vehicle Standards Committee, which devises national standards for the construction, equipment, and operational efficiency of all road vehicles. At the present time a special committee of Commonwealth and State educationists, called together by the Australian Road Safety Council, is investigating ways and means of broadening and strengthening the impact of road safety education throughout the school system. Another committee is looking into the question of more comprehensive and purposeful road accident statistics.

Jointly with the Australian Motor Vehicle Standards Committee the Council is investigating the desirability of compulsory vehicle inspections, and works in co-operation with the National Health and Medical Research Council and the Australian Traffic Code Committee in examining existing arrangements on the policy and procedures best suited to Australian conditions for the promotion of driver improvement through health standards, licensing and enforcement. The Council recently brought together representatives of commerce and industry and seat-belt manufacturers to promote a national seat-belt campaign. The move resulted from both Australian and overseas studies which indicated that the risk of death or serious injury to drivers and passengers could be reduced substantially by the use of seat belts.

CIVIL AVIATION

Department of Civil Aviation

Control of civil aviation in Australia is exercised by the Department of Civil Aviation, which was established in 1939 to take over from the Civil Aviation Board the regulation of civil aviation in Australia. The Department's jurisdiction covers not only Australia but also Papua, New Guinea and areas of the Indian and Pacific Oceans. Year Book Nos. 16, 19 and 38 trace the establishment of civil aviation control in Australia and the appropriate Acts of Parliament and Regulations under which this control is exercised. The present functions of the Department are shown in Year Book No. 51, pages 578-9, and further details about its operations are given in the annual reports to the Commonwealth Parliament by the Minister for Civil Aviation.

International activity

International organizations. A full report of the formation of the International Civil Aviation Organization, the Commonwealth Air Transport Council and the South Pacific Air Transport Council appeared in Year Book No. 37, and particulars of subsequent activity in the international field were included in No. 38. The International Civil Aviation Organization had a membership of 110 nations in December 1965. Australia has continued its representation on the Council, a position which it held since I.C.A.O. was established in 1947. Further details will be found in Year Book No. 40 and earlier issues.

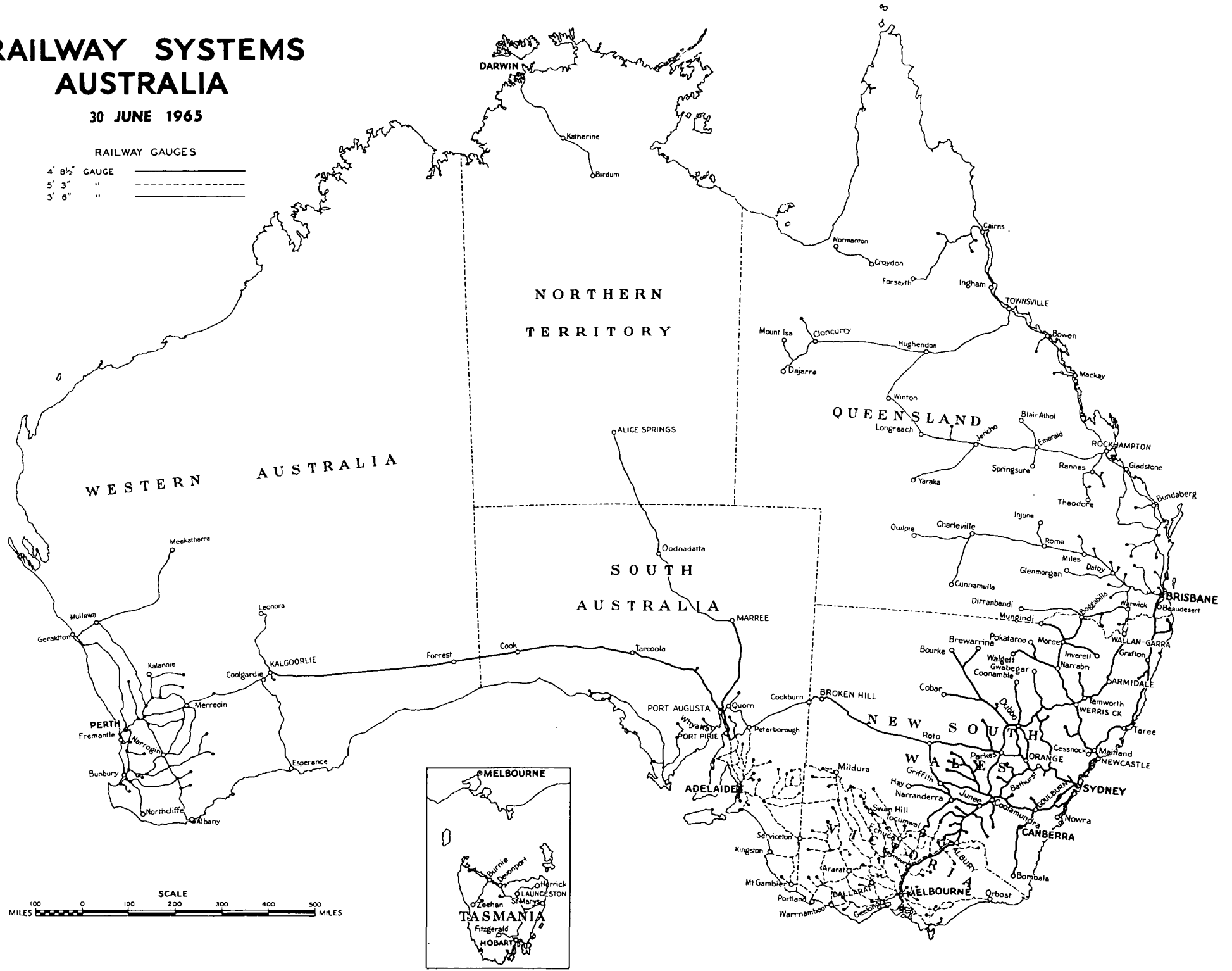
International agreements. Since 1946 Australia has signed air services agreements with twenty countries. Of these, eighteen were in force at December 1965. The countries concerned were Canada, Ceylon, France, Federal Republic of Germany, India, Ireland, Italy, Japan, Lebanon, Malaysia, Netherlands, New Zealand, Pakistan, South Africa, Thailand, United Arab Republic, United Kingdom and United States of America. The agreement with France was signed and entered into force on 13 April 1965. Agreements with Iran and Turkey had not come into operation by December 1965. Under these agreements traffic rights are granted to Australia's international airline, Qantas Empire Airways Ltd., in return for reciprocal traffic rights for the designated international airlines of the countries concerned to operate air services into Australia. Australia has also concluded arrangements with the following six countries, Austria, Greece, Indonesia, Mexico, Philippines and Singapore, under which Qantas is currently exercising traffic rights.

International air services. In December 1965 eleven overseas international airlines were operating regularly scheduled services to Australia. These included: Air-India (India), Air New Zealand, formerly Tasman Empire Airways Ltd. (New Zealand), Alitalia (Italy), British Overseas Airways Corporation (United Kingdom), Canadian Pacific Air Lines (Canada), Deutsche Lufthansa (Federal Republic of Germany), Koninklijke Luchtvaart Maatschappij (Netherlands), Pan-American World Airways (United States of America), Philippine Air Lines (Philippines),

RAILWAY SYSTEMS AUSTRALIA

30 JUNE 1965

RAILWAY GAUGES
 4' 8½" GAUGE ————
 5' 3" " - - - - -
 3' 6" " _____



CIVIL AVIATION: AUSTRALIA, 1955-56 TO 1964-65

PAYING PASSENGERS AND FREIGHT CARRIED



* INCLUDES ONLY SERVICES OPERATING WITHIN THE AUSTRALIAN MAINLAND AND TASMANIA. † AIRLINES WHOLLY OR PARTLY OWNED BY AUSTRALIAN INTERESTS.
 NOTE:— VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO RATE OF INCREASE OR DECREASE. ACTUAL NUMBERS ARE INDICATED BY THE SCALES.

South African Airways (South Africa), and Union de Transports Aeriens (France). In addition, the Indonesian airline P.N. Merpartu Nusantara operated services on demand between Sukarnapura in West Irian and Lae in New Guinea, and Trans-Australia Airlines operated services between Darwin and Portuguese Timor under charter to Transportes Aereos de Timor. By December 1965 Qantas, Australia's international airline, was operating thirteen Boeing 707-138B jet aircraft, four larger Boeing 707-338C jet aircraft, and three Lockheed Electra aircraft, over a world-wide network of 81,994 unduplicated route-miles. Firm orders had been placed by Qantas for a further five Boeing 707-338C aircraft for delivery in 1966-67, and tentative orders had been lodged for two more aircraft of this type to be delivered late in 1967. All the shares in Qantas Empire Airways are owned by the Commonwealth Government.

International operations. The table following shows particulars of international airline traffic during 1964-65 moving into and out of an area which embraces the Commonwealth of Australia, Papua-New Guinea and Norfolk Island. These figures do not include traffic between Australia and Papua-New Guinea and Norfolk Island.

**CIVIL AVIATION: INTERNATIONAL AIRLINE TRAFFIC
TO AND FROM AUSTRALIA(a), 1964-65**

Type of traffic	Aircraft movements	Passengers	Freight	Mail
Traffic to Australia—			short tons	short tons
Qantas Empire Airways	2,055	123,635	3,931	1,214
Other airlines	2,529	127,636	2,531	830
<i>All airlines</i>	<i>4,584</i>	<i>251,271</i>	<i>6,462</i>	<i>2,044</i>
Traffic from Australia—				
Qantas Empire Airways	2,103	110,492	2,478	919
Other airlines	2,523	113,745	1,921	485
<i>All airlines</i>	<i>4,626</i>	<i>224,237</i>	<i>4,399</i>	<i>1,404</i>

(a) Australian mainland and adjacent Territories (Papua-New Guinea and Norfolk Island).

Particulars of the operations of all Australian-owned airlines to places outside the Commonwealth of Australia are set out in the following table. Services to the external Territories of Papua-New Guinea and Norfolk Island are included, but services wholly within Papua-New Guinea are excluded. Details of the operations of Tasman Empire Airways Limited are included for 1960-61, but excluded after that year following the Commonwealth Government's sale of its half interest in this airline to the New Zealand Government.

**CIVIL AVIATION: OVERSEA OPERATIONS OF AUSTRALIAN-OWNED AIRLINES(a)
1960-61 TO 1964-65**

REVENUE OPERATIONS

—	1960-61	1961-62	1962-63	1963-64	1964-65
Hours flown number	57,385	51,066	48,669	53,792	68,028
Miles flown '000	20,068	19,240	20,343	22,357	28,126
Passengers—					
Embarkations number	291,258	247,517	294,908	352,442	443,665
Passenger-miles '000	847,713	836,570	1,014,867	1,185,981	1,527,039
Freight—					
Tons uplifted short tons	6,575	6,432	6,756	8,071	10,293
Ton-miles(b) '000	30,134	30,429	33,135	38,633	51,826
Mail—					
Tons uplifted short tons	2,335	2,015	2,468	2,654	3,124
Ton-miles(b) '000	11,269	11,622	15,191	16,057	19,891

(a) Includes Tasman Empire Airways Ltd. for 1960-61 only. Includes considerable traffic which neither originates in nor enters Australia. Includes operations of Australian internal airlines to and from Papua-New Guinea but excludes operations of all services wholly within Papua-New Guinea. (b) In terms of short tons.

Regular air services within Australia

Interstate services. Scheduled services with passenger and all-freight aircraft are provided by two airlines only, namely, the private enterprise airline Ansett-A.N.A. (a subsidiary of Ansett Transport Industries) and the Commonwealth-owned instrumentality, Trans-Australia Airlines. All principal routes are competitive, with both airlines providing equal capacities in accord with legislation passed by the Commonwealth Parliament. The two principal Acts which establish the legislative basis of this controlled competition are the *Airlines Agreement Act 1952-1961* 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 T.A.A. and Ansett-A.N.A., and is 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 to 1977.

In addition to purely interstate services, both Ansett-A.N.A. and Trans-Australia Airlines operate routes to New Guinea and non-competitive intrastate routes in Australia. The Ansett-A.N.A. non-competitive routes radiate mainly from Melbourne, while those of Trans-Australia Airlines are located mainly within Queensland and Tasmania. In addition, Trans-Australia Airlines operate services within Papua-New Guinea in competition with another Ansett subsidiary, Ansett-M.A.L., and Papuan Airlines.

At 30 June 1965 the Ansett-A.N.A. fleet included two Boeing 727's, three Electras, eleven Viscounts, three DC6B's, three Friendships, a number of DC4's and DC3's, ten helicopters, and smaller aircraft. At the same date Trans-Australia Airlines operated a fleet of two Boeing 727's, three Electras, twelve Viscounts, three DC6B's, nine Friendships, a number of DC4's and DC3's, three helicopters, and smaller aircraft.

Intrastate services. In addition to the intrastate services operated by Ansett-A.N.A. and Trans-Australia Airlines there are a number of smaller regional airlines operating from Sydney (Airlines of New South Wales and East-West Airlines), Brisbane (Queensland Airlines), Adelaide (Airlines of South Australia), Perth (MacRobertson Miller Airlines), and Alice Springs (Connellan Airways). With the exception of Connellan Airways, which provides regular service to outback homesteads and communities, all the remainder are concerned primarily with traffic moving to and from the respective capital city. With the exception of the independently owned East-West Airlines and Connellan Airways, all regional airlines are subsidiaries of Ansett Transport Industries. The largest aircraft used by these regional airlines are DC4's, Metropolitan, and Friendships supported by DC3's. Connellan Airways uses smaller aircraft types.

Internal operations. Particulars of the operations of all regular air services within Australia, both interstate and intrastate, during each of the years 1960-61 to 1964-65 are set out in the next table.

**CIVIL AVIATION: OPERATIONS OF REGULAR INTERNAL SERVICES
AUSTRALIA(a), 1960-61 TO 1964-65**

REVENUE OPERATIONS

	1960-61	1961-62	1962-63	1963-64	1964-65
Hours flown . . . number	219,918	207,210	217,897	244,517	256,231
Miles flown . . . '000	42,301	41,176	43,700	48,971	52,323
Passengers—					
Embarkations . . . number	2,639,080	2,666,160	2,832,934	3,256,937	3,768,244
Passenger-miles . . . '000	1,109,552	1,119,430	1,221,178	1,408,317	1,639,087
Freight—					
Tons uplifted . . . short tons	62,971	57,207	59,373	63,161	69,959
Ton-miles(b) . . . '000	28,220	26,076	28,270	30,491	33,891
Mail—					
Tons uplifted . . . short tons	5,956	6,311	6,467	7,082	7,736
Ton-miles(b) . . . '000	3,064	3,198	3,324	3,741	4,074

(a) Excludes operations between Australia and the External Territories of Papua-New Guinea and Norfolk Island, and operations within Papua-New Guinea. (b) In terms of short tons.

General aviation

General aviation activity, which covers all non-airline operations such as charter, aerial work and private flying, has grown rapidly throughout Australia in the post-war period so that now it is an important sector of the Australian aviation industry. In 1964, hours flown totalled 613,925 compared with 336,597 hours flown by aircraft belonging to the Australian airline industry. At 30 June 1965, aircraft employed in general aviation numbered 1,996.

Training of air pilots

Since 1926 the Commonwealth has subsidized flying training in Australia largely through the Aero Club movement. In 1961 the Government altered the basis of financial assistance to flying training organizations. The new system provides for the payment of \$1,274,000 in subsidies to Australian flying training organizations, including the aero clubs, flying schools and the Gliding Federation of Australia, spread over a four-year period from 1961 to 1965. A feature of the new subsidy arrangements was the establishment of the Australian Flying Scholarship scheme which is designed to train career pilots for the Australian commercial aviation industry. The scholarships provide financial assistance in much the same way as Commonwealth scholarships provide for people undertaking other professions. In the first three years of the scheme 566 scholarships were granted—406 for training to commercial licence standard, 144 to instrument rating and sixteen to agricultural rating.

During 1964-65 pupils of the Australian flying training organizations (aero clubs and commercial flying schools) received 351 private licences, 180 commercial licences and forty-seven instructor ratings. Subsidized hours flown by aero clubs and flying schools totalled 139,877 hours out of a total of 185,903 hours flown and their subsidy earnings totalled \$215,890. A limit placed on the subsidy restricted the total payment to \$150,000. During the year fourteen clubs were also assisted with the purchase of eighteen aircraft. The value of this assistance under the Aircraft Replacement Fund was \$20,000. The permanent secretariats of the Royal Federation of Aero Clubs and the Commercial Flying Schools also received \$16,000 and \$2,000 respectively during 1964-65 as additional financial assistance.

Thirty-nine clubs were affiliated with the Gliding Federation of Australia in 1964-65 and there were 1,572 members. During 1964-65 the Commonwealth assisted gliding clubs to the extent of \$12,000. This amount was allocated as follows: \$6,000 on the basis of active membership and certificates and awards gained, \$2,000 to the National Gliding School, \$4,000 for development and design work and secretarial functions. The total of all subsidy payments and financial assistance to flying training organizations and the gliding movement during 1964-65 was \$300,000.

Aerodromes

The number of aerodromes throughout Australia and its Territories at 30 June 1965 was 647. One hundred and twenty-two were owned by the Commonwealth Government and 525 by local authorities and private interests. Capital expenditure on aerodrome construction increased from \$4.54 million in 1963-64 to \$9.10 million in 1964-65. Maintenance expenditure on Commonwealth-owned aerodromes was \$3.31 million, and development grants to licensed aerodromes participating in the Local Ownership Plan totalled \$1 million. The two major projects at Melbourne and Sydney included in the five-year airports programme, which ends in 1967-68, are proceeding, and each is estimated to cost approximately \$40 million. The projects as a whole are expected to be completed in 1969, but progressive use will be made of the facilities as they become available. The Commonwealth Government approved an additional expenditure of \$16 million over the next five years to make those airport improvements necessary for the operation of additional Boeing 727's and the first DC9's to be introduced by airlines.

Airways facilities

Concurrently with the five-year aerodrome development programme, the Commonwealth Government has approved major extensions and improvements to Australia's air navigation and communications system. New long-range radar units have been installed at Sydney and Adelaide to assist air traffic control, and other units are being established at Melbourne, Brisbane, Perth, Canberra, and Point Lookout, northern New South Wales. Total cost of this radar programme is approximately \$8 million.

Further progress has been made with the programme, started in 1961, of increasing the number of laterally spaced air routes in heavy traffic areas throughout Australia and improving the network of radio navigational aids defining them. A further seventeen navigational aids were put into operation during the year and another fourteen are being installed. The number of navigational aids operating throughout the Commonwealth at 30 June 1965 totalled 295. These included 84 distance measuring equipment (DME) beacons, 37 visual aural ranges (VAR), 150 non-directional beacons (NDB), 7 VHF omni radio ranges (VOR), and 13 instrument landing systems (ILS).

Aircraft on the Australian register

The numbers of aircraft of various types on the Australian register at 30 June 1965 are set out in the following table.

CIVIL AVIATION: AIRCRAFT ON AUSTRALIAN REGISTER, 30 JUNE 1965

Type of aircraft	Number of engines				Total aircraft
	One	Two	Three	Four	
Fixed-wing powered aircraft—					
Turbo-jet . . . . .	..	1	4	15	20
Turbo-prop . . . . .	..	24	..	32	56
Piston-engined 20,000 lb. and over all-up weight . . . . .	..	79	..	20	99
Piston-engined under 20,000 lb. all-up weight	1,829	150	9	3	1,991
Helicopters	40	1	..	..	41
<i>Total powered aircraft</i>	<i>1,869</i>	<i>255</i>	<i>13</i>	<i>70</i>	<i>2,207</i>
Gliders . . . . .	..	..	..	..	164

Particulars of powered aircraft according to manufacturer and air navigation class in which registered, and further details of gliders, may be found in the bulletin *Transport and Communication*, No. 56, 1964-65.

Registrations, licences, etc. in force in Australia

The following table provides a summary of the civil aviation registrations and licences in force in Australia at 30 June in each year 1961 to 1965.

CIVIL AVIATION: REGISTRATIONS, LICENCES, ETC., AUSTRALIA^(a)
1961 TO 1965

	30 June—				
	1961	1962	1963	1964	1965
Registered aircraft owners	850	938	1,006	1,167	1,293
Registered aircraft ^(b)	1,502	1,600	1,787	1,936	2,207
Pilots' licences—					
Private	3,206	3,627	4,066	4,720	5,382
Private helicopter	2	2	3	6	6
Commercial	973	1,090	1,159	1,263	1,411
Senior commercial	147	154	176	189	192
Commercial helicopter	34	33	42	53	59
Senior commercial helicopter . . . . .	..	..	..	..	5
Student	4,151	4,433	4,845	5,676	6,907
Student helicopter	10	12	15	41	66
1st class airline transport	659	690	684	670	750
2nd class airline transport	471	432	464	603	725
Flight navigators' licences	142	141	135	137	154
1st class flight radio-telegraph operators' licences	43	37	20	19	18
Flight radio-telephone operators' licences	3,679	5,370	6,552	7,956	9,102
Flight engineers' licences	200	175	168	215	429
Aircraft maintenance engineers' licences	2,492	2,485	2,521	2,553	2,779
Aerodromes, Australia—					
Government ^(c)	132	129	122	113	110
Licensed ^(d)	351	359	380	381	386
Flying-boat bases ^(e)	13	13	13	13	13

(a) Except for aerodromes and flying-boat bases, includes the Territory of Papua-New Guinea. (b) Excludes gliders. At 30 June 1965 there were 164 gliders registered. (c) Under the control and management of the Department of Civil Aviation. (d) Under the control and management of a municipality, shire, station owner, private individual, etc. Includes emergency aerodromes. (e) Includes alighting areas.

Accidents and casualties

Particulars of accidents in which persons were killed or injured, involving aircraft on the Australian register, are shown in the following table for the years 1960–61 to 1964–65.

**CIVIL AVIATION: AUSTRALIAN AIRCRAFT^(a), ACCIDENTS
INVOLVING CASUALTIES^(b), 1960-61 TO 1964-65**

—	1960–61	1961–62	1962–63	1963–64	1964–65
Number	40	46	32	33	30
Persons killed	28	52	16	24	20
Persons injured	38	38	26	26	22

(a) Aircraft on Australian register and gliders irrespective of location of accident.

(b) Includes parachutists killed.

**POSTS; INTERNAL AND OVERSEA TELECOMMUNICATION SERVICES;
RADIOCOMMUNICATION STATIONS**

In this division, 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 Office of the Postmaster-General's Department is located in Melbourne, Victoria.

Postmaster-General's Department—General

Under the provisions of the *Post and Telegraph Act 1901–1961*, the Postmaster-General's Department is responsible for the control and operation of postal, telegraphic and telephonic services throughout Australia. The Postmaster-General's Department is also responsible for the provision and operation of the transmitters and technical facilities required for broadcasting and television services by the Australian Broadcasting Commission (see pages 496–8), and, in conjunction with the Overseas Telecommunications Commission (see pages 493–5), with whom there is close co-operation, provides facilities for communication with overseas countries. Subsidiary to its major activities, the Postmaster-General's Department performs a number of important functions for other Commonwealth and State departments, including the payment of pensions, child endowment, and military allotments, the provision of banking facilities on behalf of the Commonwealth Savings Bank, the sale of tax and duty stamps, and the collection of land tax.

Postal facilities

The following table shows the number of post offices, the area in square miles and the number of inhabitants to each post office (including non-official offices), and the number of inhabitants to each 100 square miles in each State and in Australia at 30 June 1965.

**POSTAL FACILITIES: RELATION TO AREA AND POPULATION, STATES
30 JUNE 1965**

—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
Post offices—							
Official	516	329	233	173	149	54	1,454
Non-official	1,899	1,807	990	752	486	440	6,374
Total	2,415	2,136	1,223	925	635	494	7,828
Square miles of territory per office	129	41	545	973	1,537	53	379
Inhabitants per office	1,740	1,465	1,296	1,149	1,244	743	1,423
Inhabitants per 100 square miles .	1,354	3,562	238	118	81	1,392	375

Employees

The number of employees and mail contractors in the Central Office and in each of the States at 30 June 1965 is given in the following table.

POSTAL EMPLOYEES: CENTRAL OFFICE AND STATES, 30 JUNE 1965(a)

Employees	Central Office	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
Full-time—								
Permanent officers	1,531	23,452	16,385	9,964	6,650	4,966	2,579	65,527
Temporary and exempt officers	265	9,998	9,007	2,513	2,517	1,251	790	26,341
<i>Total, full-time</i>	<i>1,796</i>	<i>33,450</i>	<i>25,392</i>	<i>12,477</i>	<i>9,167</i>	<i>6,217</i>	<i>3,369</i>	<i>91,868</i>
Other—								
Non-official postmasters and staff . . . . .	..	2,348	2,427	1,235	931	533	471	7,945
Telephone office-keepers . . . . .	..	294	138	421	108	266	17	1,244
Mail contractors (including persons employed to drive vehicles) . . . . .	..	2,047	998	1,139	363	290	193	5,030
<i>Total, other</i>	<i>..</i>	<i>4,689</i>	<i>3,563</i>	<i>2,795</i>	<i>1,402</i>	<i>1,089</i>	<i>681</i>	<i>14,219</i>
Grand total	1,796	38,139	28,955	15,272	10,569	7,306	4,050	106,087

(a) Excludes 3,147 part-time staff.

Cash revenue, branches—Postmaster-General's Department

The cash revenue (actual collections during year as recorded for Treasury purposes) in respect of each branch of the Department during the year 1964-65 is shown in the following table.

**POSTMASTER-GENERAL'S DEPARTMENT: CASH REVENUE, BY SOURCE
CENTRAL OFFICE AND STATES, 1964-65
(\$'000)**

Source	Central Office	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
Postal	7,078	43,043	30,372	13,210	9,285	6,591	2,603	112,182
Telegraph	2,114	6,196	4,129	2,939	2,186	1,373	415	19,352
Telephone	2,649	93,952	68,027	31,205	23,038	15,061	6,709	240,641
Miscellaneous . . . . .	..	142	209	45	27	37	13	473
Total	11,841	143,333	102,737	47,399	34,536	23,062	9,740	372,648

The following table shows the cash revenue (actual collections) of the Department for each of the five years 1960-61 to 1964-65.

**POSTMASTER-GENERAL'S DEPARTMENT: CASH REVENUE
BY SOURCE, AUSTRALIA, 1960-61 TO 1964-65
(\$'000)**

Source	1960-61	1961-62	1962-63	1963-64	1964-65
Postal	91,780	94,208	98,854	105,954	112,182
Telegraph	14,550	14,896	15,838	17,254	19,352
Telephone	165,464	170,332	184,630	205,564	240,641
Miscellaneous	448	192	350	506	473
Total	272,242	279,628	299,672	329,278	372,648

Cash expenditure, Postmaster-General's Department

The following table shows, as far as possible, the distribution of cash expenditure (actual payments during year as recorded for Treasury purposes) in each State and Central Office during 1964-65. The table must not be regarded as a statement of the working expenses of the Department, since items relating to new works, interest, etc., are included therein.

**POSTMASTER-GENERAL'S DEPARTMENT: CASH EXPENDITURE
CENTRAL OFFICE AND STATES, 1964-65**
($\000)

	Central Office	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
Expenditure from ordinary services votes—								
Salaries and payments in the nature of salary	1,954	44,084	32,209	17,357	11,399	7,530	3,957	118,490
Administration	804	5,811	4,785	1,887	1,591	977	525	16,380
Stores and material	178	1,185	953	456	333	226	124	3,455
Mail services	15,171	4,111	2,214	1,932	979	555	264	25,226
Engineering services (other than capital works)	3,008	30,548	23,409	11,016	8,428	5,971	3,173	85,553
Other services	319	..	..	..	..	..	..	319
<i>Total, ordinary services votes</i>	<i>21,434</i>	<i>85,739</i>	<i>63,570</i>	<i>32,648</i>	<i>22,730</i>	<i>15,259</i>	<i>8,043</i>	<i>249,423</i>
Rent, repairs, maintenance . . . . .	..	1,440	1,971	614	481	268	126	4,900
Capital works and services—								
Plant and equipment	(a)1,902	54,325	39,612	17,064	15,225	10,884	5,790	144,802
New buildings, etc. . . . .	..	5,751	3,260	2,996	1,260	1,384	435	15,086
Grand total	23,336	147,255	108,413	53,322	39,696	27,795	14,394	414,211

(a) Includes expenditure on research laboratories.

The following table shows the distribution of cash expenditure (actual payments) of the Department, for Australia as a whole, for each of the years 1960-61 to 1964-65.

**POSTMASTER-GENERAL'S DEPARTMENT: CASH EXPENDITURE
AUSTRALIA, 1960-61 TO 1964-65**
($\000)

	1960-61	1961-62	1962-63	1963-64	1964-65
Expenditure from ordinary services votes—					
Salaries and payments in the nature of salary	97,382	100,860	102,256	107,964	118,490
Administration	11,622	12,230	12,302	14,588	16,380
Stores and material	5,134	4,746	3,594	3,308	3,455
Mail services	20,752	21,770	23,036	24,152	25,226
Engineering services (other than capital works)	82,012	86,370	68,812	77,350	85,553
Other services	284	250	280	280	319
<i>Total, ordinary services votes</i>	<i>217,186</i>	<i>226,226</i>	<i>210,280</i>	<i>227,642</i>	<i>249,423</i>
Rent, repairs, maintenance	3,086	3,318	3,526	4,206	4,900
Capital works and services—					
Plant and equipment	74,592	81,022	111,594	122,406	144,802
New buildings, etc.	9,698	10,856	11,886	14,716	15,086
Other expenditure, not allocated to States	7,856	(a)	(a)	(a)	(a)
Grand total	312,418	321,422	337,286	368,970	414,211

(a) Items no longer debited against Postmaster-General's Department.

Profit or loss, Postmaster-General's Department

The foregoing tables of cash revenue and expenditure represent actual collections and payments made, and cannot be taken to represent the actual results of the working of the Department for the year. The net results after providing for working expenses (including superannuation, pensions and depreciation) and interest charges (including exchange) are shown in the following table for the year 1964-65 together with summarized particulars for the year 1963-64.

**POSTMASTER-GENERAL'S DEPARTMENT: CONSOLIDATED STATEMENT
OF PROFIT AND LOSS, 1963-64 AND 1964-65**
(\$'000)

	1964-65			1963-64
	Postal service	Telecommunications service(a)	All services	All services
<i>Earnings</i>	112,191	257,854	370,045	329,292
<i>Working expenses—</i>				
Operating and general cost	75,070	69,637	144,707	} 217,278
Maintenance of plant and equipment	918	60,269	61,187	
Carriage of mails	28,710	..	28,710	
Depreciation	1,851	59,887	61,738	
Superannuation and furlough liability	6,340	10,244	16,584	49,488
<i>Total working expenses</i>	112,889	200,037	312,926	15,792
<i>Net earnings</i>	-698	57,817	57,119	46,734
<i>Interest</i>	1,920	50,987	52,907	47,328
<i>Profit or loss</i>	-2,618	6,830	4,212	-594

(a) Includes the categories 'Telephone' and 'Telegraph' which were available separately for previous years.
Minus sign (-) denotes loss.

Fixed assets, Postmaster-General's Department

The following table shows particulars of the fixed assets of the Postmaster-General's Department from 1 July 1964 to 30 June 1965.

**POSTMASTER-GENERAL'S DEPARTMENT: TRANSACTIONS AFFECTING
FIXED ASSETS, 1964-65**
(\$'000)

Class of plant	Value at 1 July 1964	Adjustments to values	Additions during year	Installments of plant written out	Value at 30 June 1965
Telecommunications plant	1,259,259	-12,409	152,081	-11,672	a1,387,259
Postal plant	7,802	..	2,106	-54	9,854
Engineers' moveable plant	29,777	..	3,691	-979	32,489
Motor vehicles	22,714	..	5,380	-3,957	24,136
Other plant and equipment	25,820	314	3,642	-635	29,142
Buildings	143,532	..	16,053	..	(b) 159,585
Land	18,547	..	428	..	18,975
Total	1,507,451	-12,094	183,381	-17,298	1,661,440

(a) Includes plant valued at \$66,989,552 under construction. (b) Includes buildings valued at \$11,323,134 under construction.

Minus sign (-) denotes reduction in values or assets.

Postal services

Mail delivery points

The numbers of mail delivery points located in each State at 30 June 1965 are shown in the following table.

MAIL DELIVERY POINTS: STATES, 30 JUNE 1965

State	Postmen's delivery	Roadside delivery	Private boxes	Private mail bag services
New South Wales	1,186,332	47,895	62,505	6,641
Victoria	788,746	31,166	38,580	6,415
Queensland	395,154	27,107	31,880	4,770
South Australia	296,141	938	23,447	2,882
Western Australia	190,135	15,970	17,147	725
Tasmania	72,798	930	6,980	1,665
Australia	2,929,306	124,006	180,539	23,098

Postal articles handled

The following two tables show the number of postal articles handled by the Australian Post Office during the year 1964-65. Mail matter posted in Australia for delivery therein is necessarily handled at least twice, but only the number of distinct articles handled is included in the following tables.

POSTAL ARTICLES HANDLED(a): STATES, 1964-65

('000)

State	Letters (b)	Newspapers and packets (c)	Parcels (d)	Registered articles (e)	Letters (b)	Newspapers and packets (c)	Parcels (d)	Registered articles (e)
	Posted for delivery within Australia				Posted for delivery overseas			
New South Wales	689,257	143,763	6,272	3,472	47,820	11,474	272	983
Victoria	542,554	89,312	5,183	2,313	27,281	4,481	163	515
Queensland	235,787	30,828	2,346	1,403	9,782	1,091	39	43
South Australia	165,279	16,901	1,326	696	7,247	1,184	47	59
Western Australia	136,287	11,873	1,001	575	4,697	721	28	62
Tasmania	46,849	7,475	239	365	546	75	10	3
Australia	1,816,013	300,152	16,367	8,824	97,373	19,026	559	1,665
	Received from overseas				Total postal matter dealt with			
New South Wales	56,494	29,961	574	1,006	793,571	185,198	7,118	5,461
Victoria	44,207	11,867	380	544	614,042	105,660	5,726	3,372
Queensland	6,946	5,129	104	32	252,515	37,048	2,489	1,478
South Australia	5,571	5,467	88	30	178,097	23,552	1,461	786
Western Australia	3,970	6,577	70	46	144,954	19,171	1,099	683
Tasmania	1,713	1,999	14	4	49,108	9,549	263	371
Australia	118,901	61,000	1,230	1,662	2,032,287	380,178	18,156	12,151

(a) Number of distinct articles handled. (b) Includes letters, cards and other postal articles enclosed in envelopes and sorted with letters. (c) Includes newspapers and postal articles not included in letter mail. (d) Includes registered, cash on delivery and duty parcels. (e) Includes registered articles other than parcels.

The next table shows the total postal articles handled in Australia during each of the years 1960-61 to 1964-65.

POSTAL ARTICLES HANDLED(a): AUSTRALIA, 1960-61 TO 1964-65
(*000)

Year	Letters(b)	Newspapers and Packets(c)	Parcels(d)	Registered articles(e)	Total postal articles handled
1960-61 . . .	1,700,544	318,614	15,976	12,935	2,048,069
1961-62 . . .	1,748,054	324,694	15,854	12,357	2,100,959
1962-63 . . .	1,835,869	337,644	16,545	12,339	2,202,397
1963-64 . . .	1,952,029	360,510	17,010	12,315	2,341,864
1964-65 . . .	2,032,287	380,178	18,156	12,151	2,442,772

For footnotes see previous table.

During 1964-65 the total amounts paid for the carriage of mails, as disclosed by the Profit and Loss Account of the Postal Branch, were as follows: road, \$8,918,882; railway, \$3,462,384; sea, \$567,012; air—internal, \$3,314,886, oversea, \$12,446,966; grand total, \$28,710,130.

Money orders and postal notes

The issue of money orders and postal notes is regulated by sections 74-79 of the *Post and Telegraph Act* 1901-1961. The maximum amount for which a single money order payable within Australia may be obtained is \$80, but additional orders will be issued upon request when larger amounts are to be remitted. The maximum amount permitted to be sent by any one person to a person or persons outside Australia is \$A20 a week. A postal note is not available for a sum larger than two dollars. The following table shows the number and value of money orders and postal notes issued in Australia in each of the years 1960-61 to 1964-65 and the income therefrom which has accrued to the Post Office.

MONEY ORDERS AND POSTAL NOTES: TRANSACTIONS, AUSTRALIA
1960-61 TO 1964-65

Year	Money orders			Postal notes		
	Issued		Net commission received	Issued		Poundage
	Number	Value		Number	Value	
	'000	\$'000	\$'000	'000	\$'000	\$'000
1960-61 . . .	9,652	201,520	1,734	15,959	16,388	614
1961-62 . . .	(a) 10,176	(a) 264,992	1,752	15,514	16,192	614
1962-63 . . .	(a) 11,076	(a) 306,866	1,858	16,330	17,240	642
1963-64 . . .	(a) 11,838	(a) 338,674	2,004	15,987	17,234	634
1964-65 . . .	(a) 12,176	(a) 376,356	2,103	15,338	16,737	618

(a) Includes official money orders used in bringing to account telephone accounts and collections on War Service Homes repayments.

Of the total money orders issued in Australia during 1964-65, 11,746,719 valued at \$373,606,462 were payable in Australia, and 429,554 valued at \$2,749,122 were payable overseas. Of the total money orders paid in Australia during 1964-65, 11,756,029 (\$372,832,788) were issued in Australia, and 176,746 (\$2,671,744) were issued overseas.

Of the total postal notes paid in Australia during 1964-65 (15,626,991 valued at \$17,106,624), 10,566,493 (\$12,083,294) were paid in the State in which issued, and 5,060,498 (\$5,023,330) were paid in States other than those in which issued.

Internal telecommunication services

A review of the development of telegraph services in Australia up to 1921 appeared in Year Book No. 15, page 625, and subsequent developments of importance have been dealt with in later issues. Internal telecommunication operations now comprise telephone, telegraph and telegraph exchange (telex) services.

Wire and pole mileages

At 30 June 1965 there were 13,841,000 single wire miles of cable and 1,331,000 miles of aerial wire used for telecommunication purposes in Australia. The aerial wires were mounted on 120,630 miles of pole routes, and joint use is made of these poles for both power and telecommunication reticulation.

Telephone services in operation

In recent years there has been a noticeable increase in the number of telephone services in operation, with the two-millionth service being connected in May 1965. The following table shows the number of services in operation in each State at 30 June 1965 classified according to type of service, type of exchange to which connected, and location.

TELEPHONE SERVICES IN OPERATION: STATES, 30 JUNE 1965

—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
Type of service—							
Ordinary exchange services	634,793	543,097	223,679	158,973	105,316	52,975	1,718,833
Duplex services	29,262	20,972	154	1,624	296	810	53,118
Party line services	5,203	2,868	2,922	1,510	1,320	377	14,200
Private branch exchange services	86,471	57,734	19,516	17,615	11,208	3,853	196,397
Public telephones	10,525	7,279	4,215	2,527	1,941	1,089	27,576
Connected to—							
Automatic exchanges	640,336	540,556	188,234	148,158	96,361	45,917	1,659,562
Manual exchanges	125,918	91,394	62,252	34,091	23,720	13,187	350,562
Located in—							
Metropolitan areas	483,836	417,858	121,773	118,093	81,404	21,962	1,244,926
Country areas	282,418	214,092	128,713	64,156	38,677	37,142	765,198
Total	766,254	631,950	250,486	182,249	120,081	59,104	2,010,124

The number of services in operation in Australia at 30 June 1961 to 1965 is set out hereunder.

TELEPHONE SERVICES IN OPERATION: AUSTRALIA, 1961 TO 1965

Services connected to—	30 June—				
	1961	1962	1963	1964	1965
Metropolitan exchanges—					
Automatic	1,005,984	1,065,326	1,123,391	1,188,264	1,244,926
Manual	1,510	551	..	..	..
Country exchanges—					
Automatic	256,610	288,021	322,187	361,368	414,636
Manual	366,980	364,671	366,603	369,248	350,562
All exchanges—					
Automatic	1,262,594	1,353,347	1,445,578	1,549,632	1,659,562
Manual	368,490	365,222	366,603	369,248	350,562
Total services	1,631,084	1,718,569	1,812,181	1,918,880	2,010,124

Telephone instruments connected

The number of telephone instruments in each State at 30 June 1961 to 1965 is shown in the following table together with the number of instruments at 30 June 1965 related to the population.

TELEPHONE INSTRUMENTS IN SERVICE: STATES, 1961 TO 1965
(’000)

30 June—	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	Aust.
1961	889	708	277	199	126	67	2,266
1962	949	729	289	211	134	71	2,383
1963	999	773	306	225	145	75	2,523
1964	1,053	819	324	241	155	78	2,670
1965	1,107	861	341	256	164	82	2,811
Number at 30 June 1965 per 100 population	25.9	26.8	21.2	23.5	20.4	22.5	24.7

Internal telephone traffic

Local and trunk telephone calls made in Australia during the years 1960–61 to 1964–65 are set out hereunder.

LOCAL AND TRUNK LINE TELEPHONE CALLS: AUSTRALIA, 1960-61 TO 1964-65

Year	Effective paid local calls		Trunk line calls		Total calls
	Total	Per service	Total	Per service	
	’000	number	’000	number	’000
1960–61	1,625,000	997	75,000	46	1,700,000
1961–62	1,650,000	960	76,500	45	1,726,500
1962–63	1,809,000	998	84,500	47	1,893,500
1963–64	1,958,000	1,020	95,700	50	2,053,700
1964–65	2,043,000	1,016	106,500	53	2,149,500

Subscriber trunk dialling (S.T.D.) facilities were introduced during the year 1961–62 from Canberra to the Sydney network and from Warragul (Victoria) to Melbourne. At the end of 1965 subscriber trunk dialling was in operation at fifty-two exchanges, serving some 116,000 subscribers.

Internal telegraphs

Telegrams can be lodged at any post office, telephone office or from any public telephone equipped for multi-coin operation. In addition, telegrams can be despatched from any subscriber’s telephone or telegraph exchange (telex) equipment. The number of telegrams of various types transmitted within the Commonwealth during the years 1960–61 to 1964–65 is set out hereunder.

INTERNAL TELEGRAPH TRAFFIC: AUSTRALIA, 1960-61 TO 1964-65
(’000)

Year	Ordinary (a)	Urgent	Press	Letter- grams	Meteoro- logical service	Unpaid (depart- mental)	Total telegrams
1960–61	16,522	592	145	98	886	631	18,874
1961–62	16,429	558	147	89	914	602	18,739
1962–63	16,663	492	148	91	948	582	18,924
1963–64	17,783	545	130	86	920	621	20,085
1964–65	18,302	532	96	65	912	643	20,550

(a) Includes radiograms.

Of the total number of 20,550,000 internal telegrams despatched during 1964-65, 10,496,500 or 51 per cent were lodged by telephone and 1,594,000 were lodged by telex subscribers.

Teleprinter exchange service (Telex)

Particulars of the operations of the teleprinter exchange network, which are additional to the telegraph traffic shown above, are given hereunder.

TELEPRINTER EXCHANGE NETWORK (TELEX) AUSTRALIA, 1960-61 TO 1964-65

Year	Subscribers at end of year	Local calls	Trunk calls
1960-61 . .	976	23,984	488,349
1961-62 . .	1,215	36,210	696,482
1962-63 . .	1,439	68,769	931,783
1963-64 . .	1,815	101,315	1,311,023
1964-65 . .	2,179	143,631	1,634,359

Oversea telecommunication services

The Overseas Telecommunications Commission (Australia) is the authority responsible for the establishment, maintenance, operation and development of Australia's oversea public telegraph, phototelegraph and telex services by cable and by radio, and the provision, maintenance, and development of cable and radio facilities for the conduct of Australia's oversea telephone services and of the facilities for radiotelephone services with ships at sea.

The Commission was established under the *Overseas Telecommunications Act 1946-1963*. This Act implemented, in Australia, a recommendation of the 1945 Commonwealth Telecommunications Conference for national ownership of the external telecommunication services of the British Commonwealth countries concerned and for the establishment of a representative advisory board, the Commonwealth Telecommunications Board, to co-ordinate their development.

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

Details of oversea 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.

To meet Australia's increasing demand for oversea communication channels, and because of limitations to performance and capacity inherent in current forms of telegraph cables and high frequency radio systems, the Commission, in partnership with the oversea telecommunications authorities of Britain, Canada and New Zealand, installed a large capacity telephone cable across the Pacific Ocean, connecting Australia, New Zealand and Canada via Suva and Honolulu. This project stemmed from the Pacific Cable Conference between representatives of Britain, Canada, Australia and New Zealand held in Sydney during 1959. Work was commenced in August 1960, and the cable (COMPAC) was opened in December 1963. This cable forms part of the British Commonwealth round-the-world large capacity cable scheme, in which a complementary cable between Britain and Canada (CANTAT) was officially opened in December 1961. The two cable connections are linked across Canada by a microwave system. The Commonwealth cable system feeds into the United States of America network at Hawaii, and into the European network at London.

The next stage of the system, the south-east Asia cable project (SEACOM), will extend the large capacity telephone cable from Sydney to Singapore and Kuala Lumpur via Cairns, Madang, Guam, Hong Kong and Jesselton. The Singapore-Jesselton section was opened for service on 15 January 1965, and the Jesselton-Hong Kong section on 31 March 1965. The whole project is scheduled for opening early in 1967.

Separate management committees, comprising representatives of the overseas telecommunication authorities and the partner Governments, Britain, Canada, Australia and New Zealand, with the addition, for SEACOM, of Malaysia and Singapore, administered COMPAC and SEACOM projects up to November 1965, when these committees were amalgamated into the Commonwealth Cable Management Committee.

Two years of international discussion and negotiations were climaxed by the signing in August 1964 by a number of countries, including Australia, of agreements to establish the first global commercial communications satellite system, of which the 'space segment' is estimated to cost \$US200 million. 'Space segment' is a broad description of the communications satellites and the tracking, control, command and related facilities required to support operation of the satellites. An Australian ground station, owned and operated by the Overseas Telecommunications Commission, is being built at Carnarvon, Western Australia, at a cost exceeding \$A2 million.

International telecommunication traffic

Particulars of the volume of international telegram business, originating and terminating in Australia, transacted over the cable and radio services during 1964-65 are shown in the following table.

INTERNATIONAL TELEGRAPHIC TRAFFIC: AUSTRALIA, 1964-65(a)
(^{'000} words)

Class of traffic	Words transmitted to—			Words received from—		
	Common-wealth countries	Foreign countries	Total	Common-wealth countries	Foreign countries	Total
Letter	9,479	9,624	19,103	8,678	8,425	17,103
Ordinary	9,405	7,275	16,680	8,890	5,542	14,432
Press	3,170	162	3,332	9,449	481	9,930
Greetings	1,341	..	1,341	1,511	..	1,511
Government	406	462	868	714	1,181	1,895
Urgent	559	148	707	397	95	492
Other	10	..	10	67	..	67
Total	24,370	17,671	(b) 42,041	29,706	15,724	(c) 45,430

(a) Year ended 31 March. (b) Excludes 3,298,000 words to Australian external Territories.
(c) Excludes 5,163,000 words from Australian external Territories.

The following table shows particulars of overseas telecommunication traffic other than telegraphic between Australia and overseas countries for the year ended 31 March 1965.

INTERNATIONAL TELECOMMUNICATION TRAFFIC OTHER THAN TELEGRAPHIC
AUSTRALIA, 1964-65(a)

Service	Transmissions to—			Transmissions from—		
	Common-wealth countries	Foreign countries	Total (b)	Common-wealth countries	Foreign countries	Total (c)
Telephone paid minutes	774,378	371,487	1,145,865	892,648	350,481	1,243,129
Telex paid minutes	279,419	433,967	713,386	274,730	504,111	778,841
Phototelegrams pictures	931	40	971	8,627	91	8,718

(a) Year ended 31 March. (b) Excludes 55,735 paid telephone minutes and 1,240 paid telex minutes transmitted to Australian external Territories. (c) Excludes 76,692 paid telephone minutes, 594 paid telex minutes and 28 phototelegram pictures transmitted from Australian external Territories.

Coast stations

The Overseas Telecommunications Commission operates fifteen coastal radio stations at points around the Australian coast, five around the Papua-New Guinea coast and one at Norfolk Island. During the year ended 31 March 1965 the coastal radio service handled 4,272,136 paid words to ships and 2,750,969 words from ships. Ship calls over the radio telephone service extended over 24,414 paid minutes.

Radiocommunication stations authorized

The following table shows particulars of the different classes of radiocommunication stations authorized in Australia at 30 June 1965. Figures relate to radiocommunication (radio telegraph and radiotelephone) stations only; particulars of broadcasting stations and of broadcast listeners' licences are shown on pages 497 and 499 respectively.

**RADIOCOMMUNICATION STATIONS AUTHORIZED, STATES AND TERRITORIES
30 JUNE 1965**

Class of station	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Transmitting and receiving—									
Fixed(a)—									
Aeronautical	11	4	12	5	14	9	5	1	61
Services with other countries	60	13	4	..	12	..	3	..	92
Outpost(b)	244	1	538	179	410	17	184	..	1,573
Other	314	221	209	57	109	38	54	4	1,006
Land(c)—									
Aeronautical	67	20	33	8	22	8	24	1	183
Base—									
Land mobile services	1,719	1,158	799	467	353	243	23	76	4,838
Harbour mobile services	30	24	24	7	27	6	..	..	118
Coast(d)	27	15	20	16	20	21	4	..	123
Special experimental	154	135	49	51	53	16	6	..	464
Mobile(e)—									
Aeronautical	495	316	286	121	203	32	35	..	1,488
Land mobile services	18,438	13,128	7,046	5,546	3,406	1,650	316	332	49,862
Harbour mobile services	203	162	65	45	93	50	..	..	618
Outpost	237	..	359	227	359	35	646	..	1,863
Ship	1,493	407	873	312	349	279	40	..	(f)3,937
Amateur	1,612	1,511	550	649	383	170	17	54	4,946
Total, transmitting and receiving	25,104	17,115	10,867	7,690	5,813	2,574	1,357	468	71,172
Receiving only—									
Fixed(a)	152	193	86	..	49	..	..	..	480
Total, receiving only	152	193	86	..	49	..	..	..	480
Grand total	25,256	17,308	10,953	7,690	5,862	2,574	1,357	468	71,652

(a) Stations established at fixed locations for communication with other stations similarly established. (b) Stations established in out-back areas for communication with control stations such as those of the Royal Flying Doctor Service. (c) Stations established at fixed locations for communication with mobile stations. (d) Land stations for communication with ocean-going vessels. (e) Equipment installed in aircraft (aeronautical), motor vehicles (land mobile services), harbour vessels (harbour mobile services) and ocean-going vessels (ships), and mobile equipment of organizations such as the Royal Flying Doctor Service. (f) Includes 184 stations which cannot be classified according to State or Territory.

BROADCASTING AND TELEVISION

Broadcasting and television services in Australia operate under the *Broadcasting and Television Act 1942-1965* and comprise the National Broadcasting Service, the National Television Service, the Commercial Broadcasting Service and the Commercial Television Service. General control of these services is a function of the Australian Broadcasting Control Board. Licence fees for commercial broadcasting and television stations are payable under the *Broadcasting Stations Licence Fees Act 1964* and the *Television Stations Licence Fees Act 1964* respectively.

Particulars of the composition, functions and responsibilities of the Australian Broadcasting Control Board are shown in Year Book No. 51, pages 594-5.

Broadcasting services

The National Broadcasting Service

In sound broadcasting the programmes of the National Broadcasting Service are provided by the Australian Broadcasting Commission through transmitters operated by the Postmaster-General's Department.

Technical facilities. At 30 June 1965 the National Broadcasting Service comprised seventy-one transmitting stations, of which sixty-three were medium frequency and eight high frequency.

The medium-frequency transmitters operate in the broadcast band 525 to 1,605 kilocycles a second. The high-frequency stations, using frequencies within the band three to thirty megacycles a second, provide service 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 programmes provided by country stations are relayed from the capital cities, high-quality programme transmission lines being used for the purpose. A number of programme channels are utilized to link national broadcasting stations in the capital cities of Australia, and, when necessary, this system is extended to connect both the national and commercial broadcasting stations.

In June 1965 fifty-one of the Australian medium-frequency stations were situated outside the six State capital cities. Additional country stations are to be established, and, when these additions are complete, the medium-frequency and high-frequency stations together will provide for clear reception of the programmes of the National Broadcasting Service in practically every part of Australia.

Programme facilities. The programmes of the Australian Broadcasting Commission cover a wide range of activities. The proportion of broadcasting time allocated to the various types of programme during 1964-65 was as follows: classical music, 24.6 per cent; light entertainment, 21.4 per cent; news, 8.0 per cent; sporting, 5.9 per cent; light music, 6.4 per cent; talks, 7.0 per cent; drama and features, 3.7 per cent; education, 3.5 per cent; Parliament, 3.8 per cent; religious, 3.1 per cent; children's programmes, 2.5 per cent; rural, 1.6 per cent; and non-departmental and special programmes, 8.5 per cent. 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 Year Book No. 51, pages 596-7.

The Commercial Broadcasting Service

Commercial broadcasting stations are operated under licences granted and renewed by the Postmaster-General after taking into consideration any recommendations which have been made by the Broadcasting Control Board. The initial period of a licence is five years and renewals are granted for a period of one year. The fee payable for a licence is \$50 on the grant of the licence, and thereafter \$50 a year plus an amount ascertained by applying the following rates to 'gross earnings', within the meaning of the *Broadcasting Stations Licence Fees Act 1964*, during the preceding financial year—1 per cent up to \$1,000,000; 2 per cent \$1,000,001 to \$2,000,000; 3 per cent \$2,000,001 to \$4,000,000; and 4 per cent over \$4,000,000.

Overseas Broadcasting Service

There are seven high-frequency stations at Shepparton and one at Lyndhurst, Victoria, 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 Postmaster-General's Department, and their programmes are arranged by the A.B.C. The programmes, which give news and information about Australia presented objectively, as well as entertainment, are directed mainly to south-east Asia and the Pacific. The overseas audience has grown very substantially in recent years, as evidenced by a large and increasing number of letters from listeners abroad.

Broadcasting stations

The following table shows the number of broadcasting stations in operation at 30 June 1965.

BROADCASTING STATIONS: STATES AND TERRITORIES, 30 JUNE 1965

Type of station	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
National—									
Medium frequency . . .	18	5	13	8	9	4	4	2	63
High frequency . . .	1	3	2	..	2	..	..	..	8
Oversea (high frequency)	..	8	..	..	..	..	..	..	8
Commercial (medium frequency)	37	20	22	8	14	8	1	1	111
Total	56	36	37	16	25	12	5	3	190

Tables showing the call sign, location, frequency and aerial power of national and commercial broadcasting stations in operation at 30 June 1965 are shown in *Transport and Communication Bulletin No. 56*.

Television services

The National Television Service

The National Television Service is provided by the Australian Broadcasting Commission through transmitters operated by the Postmaster-General's Department. The first national station (ABN Sydney) commenced regular transmissions on 5 November 1956. At 30 June 1965 twenty-four stations were operating. Ten additional national television stations had been authorized but had not commenced to operate by that date. It is planned that all services will be in operation by the end of 1966.

The television programmes provided by the Australian Broadcasting Commission cover a wide range of activities. The proportion of television time allocated among the A.B.C.'s various departments to 30 June 1965 was as follows: Drama and features, 21.3 per cent; talks, 18.2 per cent; sport 10.7 per cent; children's session, 8.7 per cent; news, 6.4 per cent; light entertainment, 7.2 per cent; education, 14.6 per cent; music, 3.1 per cent; religion, 2.6 per cent; rural services, 2.2 per cent; non-departmental, 5.0 per cent. A summary of the activities of the departments in the field of television is given in the following paragraphs. Transmission time for the year ended 30 June 1965 totalled 68,500 hours.

Further particulars of the operation of the National Television Service in respect of talks, drama and features, music, rural services, education, news and other activities are shown in Year Book No. 51, pages 598-9.

The Commercial Television Service

Commercial television stations are operated under licences granted and renewed by the Postmaster-General. The first commercial station (TCN Sydney) commenced regular transmission on 16 September 1956. At 30 June 1965 thirty-one television stations were operating.

The initial grant of a licence is for a period of five years and thereafter the licence is renewable annually. The fee payable is \$200 for the first year and thereafter \$200 a year plus an amount ascertained by applying the following rates to 'gross earnings', within the meaning of the *Television Stations Licence Fees Act 1964*, during the preceding financial year—1 per cent up to \$1,000,000; 2 per cent \$1,000,001 to \$2,000,000; 3 per cent \$2,000,001 to \$4,000,000; and 4 per cent over \$4,000,000.

Television stations

During the year ended 30 June 1965 the following national television stations commenced regular transmissions: New South Wales—ABDN channel 2, Grafton-Kempsey area; ABMN channel 0, South Western slopes and Eastern Riverina area; Victoria—ABAV channel 1, Upper Murray area; Queensland—ABTQ channel 3, Townsville area; South Australia—ABNS channel 1, Spencer Gulf North area; Western Australia—ABSW channel 5, Bunbury area. The following commercial television stations also commenced regular transmissions during the year ended 30 June 1965. New South Wales—TEN channel 10, Sydney; NEN channel 9, Upper Namoi area; NRN channel 10, Grafton-Kempsey area; Victoria—ATV channel 0, Melbourne; AMV channel 4, Upper Murray area; Queensland—WBQ channel 8, Wide Bay area; Western Australia—STW channel 9, Bickley area. Particulars of all television stations in operation at 31 December 1964 are shown in Year Book No. 51, pages 598-9. The following table shows the number of television stations in operation at 30 June 1965.

**TELEVISION STATIONS: STATES AND AUSTRALIAN CAPITAL TERRITORY
30 JUNE 1965**

Type of station and location	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Australian Capital Territory	Total
National—								
Metropolitan	1	1	1	1	1	1	1	7
Country	6	5	3	1	1	1	..	17
<i>Total</i>	7	6	4	2	2	2	1	24
Commercial—								
Metropolitan	3	3	2	2	2	1	1	14
Country	7	5	4	..	..	1	..	17
<i>Total</i>	10	8	6	2	2	2	1	31
All stations	17	14	10	4	4	4	2	55

Tables showing the call sign, location, frequencies, polarization, aerial power and weekly hours of transmission of National and Commercial television stations in operation at 30 June 1965 are shown in *Transport and Communication*, Bulletin No. 56.

Broadcast listeners' and television viewers' licences

Broadcast listeners', television viewers', and combined receiving licences are issued at post offices in accordance with the provisions of the *Broadcasting and Television Act 1942-1964*, which stipulates that, except as prescribed, a person shall not use, maintain or have in his possession a broadcast or television receiver unless there is in force a licence which applies to that receiver. A broadcast listener's licence or a television viewer's licence, whichever is appropriate, authorizes the operation of any broadcast receiver or any television receiver, which is: (a) in the possession of the holder of a licence, or of a member of his family, at the address specified in the licence and is ordinarily kept at that address; (b) installed in a vehicle which is ordinarily in the possession of the holder, or a member of his family, and is ordinarily kept at that address when not in use. A person who has both broadcast and television receivers at the one address is required to take out a combined receiving licence, provision for which was introduced by legislation effective from 1 April 1965.

A licence may be granted free of charge to a blind person over 16 years of age or to a person or authority conducting a school, and at a concession rate to certain classes of pensioners. Receivers provided for the use of inmates of an institution (including a hospital) are covered by an appropriate licence held by the institution. Persons residing in Zone 2 may also be granted a broadcast listener's licence at a reduced rate. Zone 1 is the areas within 250 miles of specified broadcasting stations and Zone 2 is the remainder of Australia.

Each broadcast or television receiver let out on hire (except under a hire purchase agreement) must be covered by a hirer's licence held by the person or firm from whom the receiver is hired. The keeper of a lodging house (which includes a hotel, motel, boarding house or any other premises where lodging or sleeping accommodation is provided for reward) must take out a lodging house licence for each broadcast or television receiver provided by the proprietor in any room or part of the lodging house occupied or available for occupation by lodgers.

The fees payable for the various classes of licence are as follows.

The numbers of combined receiving licences included in both of the foregoing tables as at 30 June 1965 are: New South Wales, 162,510; Victoria, 132,413; Queensland, 41,539; South Australia, 49,976; Western Australia, 30,670; Tasmania, 12,906; Australia, 430,014.

Of 2,044,625 television viewers' licences in force at 30 June 1965, 90,389 were held by short-term hirers, and could not be separated into metropolitan licences or country licences. Persons living in the metropolitan area held 1,325,211 or 65 per cent of the remainder. Short-term hirers' licences (included above) at 30 June 1965 were: New South Wales, 32,605; Victoria, 15,686; Queensland, 11,463; South Australia, 19,856; Western Australia, 8,807; and Tasmania, 1,972.

Revenue received from broadcast and television licence fees

The following table shows the revenue received from broadcast listeners' licence fees and television viewers' licence fees during the years 1960-61 to 1964-65. Figures for 1964-65 include revenue from fees for combined licences which took effect on 1 April 1965.

REVENUE RECEIVED FROM BROADCAST AND TELEVISION LICENCE FEES STATES, 1960-61 TO 1964-65 (\$'000)

Year	N.S.W. (a)	Vic.	Qld	S.A. (b)	W.A.	Tas.	Aust.
1960-61 . . .	8,569	6,852	2,737	2,427	1,485	564	22,634
1961-62 . . .	9,161	7,243	2,923	2,531	1,574	645	24,077
1962-63 . . .	9,860	7,968	3,239	2,837	1,737	784	26,425
1963-64 . . .	10,560	8,474	3,590	3,063	1,843	865	28,395
1964-65 . . .	12,400	9,811	4,230	3,586	2,124	1,006	33,157

(a) Includes Australian Capital Territory.

(b) Includes Northern Territory in respect of broadcast licence fees.