

CHAPTER XIV.

TRANSPORT AND COMMUNICATION.

NOTE.—The statistics in this chapter relate in the main to the year 1959–60, 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*, and *Finance, Part I.—Public and Private Finance*, published by this Bureau.

Current information on subjects dealt with in this chapter appears in the *Monthly Review of Business Statistics*, the *Quarterly Summary of Australian Statistics*, the *Digest of Current Economic Statistics*, the *Monthly Bulletin of Registrations of New Motor Vehicles* and a preliminary monthly statement on *Registrations of New Motor Vehicles*.

A. SHIPPING.

§ 1. Control of Shipping.

1. **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, the power in this particular respect 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 was given in *Official Year Book No. 40*, pages 110–2. Amendments to the Principal Act were made by the Navigation Acts of 1952, 1953, 1956 and 1958.

Other shipping Acts under the powers of the Commonwealth are the Sea-Carriage of Goods Act 1924, the Seamen's Compensation Act 1911–1959, and the Seamen's War Pensions and Allowances Act 1940–1959, the Australian Coastal Shipping Commission Act 1956 and the Stevedoring Industry Act 1956–57.

The control of shipping during the 1939–45 War and in the early post-war period, 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 *Official Year Book No. 36*, pages 121–30 and *No. 39*, pages 147–8.

2. **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 30th June, 1960, comprised 43 vessels totalling 182,928 gross tons.

These included 15 vessels with a gross tonnage 500 to 3,000; 13 vessels with a gross tonnage 3,000 to 5,000; 14 vessels with a gross tonnage 5,000 to 8,000; and one vessel with a gross tonnage 10,229, the bulk ore carrier, *Mount Keira*. A similar vessel of the same tonnage was launched at Whyalla on 29th March, 1960, and christened *Mount Kembla*. One of the new additions to the Australian National Line, the *Princess of Tasmania*, which has a carrying capacity of 140 cars, is operating as a passenger and car ferry between Melbourne, Victoria and Devonport, Tasmania. Also, the vehicular deck cargo ferry *Bass Trader* will shortly be entering the sea-road service across Bass Strait.

3. **Australian Shipbuilding Board.**—For an account of the establishment, functions and operations of this Board, *see* Chapter XXX.—Miscellaneous, of this Year Book.

§ 2. 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 § 4, p. 524).

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, only to vessels engaged in the carriage of passengers and/or cargo between Australian States or between Australia and oversea countries.

The volume of the vessel, as distinct from the cargo it carries, is recorded in net tons, i.e., the gross tonnage or internal cubic capacity less certain deductions on account of crew spaces, engine room, water ballast and other spaces not used for passengers or cargo. It is thus a rough measure of the capacity of the vessel for cargo or passengers. The unit of measurement is the *ton register* of 100 cubic feet.

Most of the cargo is recorded in terms of the ton weight of 2,240 lb. However, some additional cargo, mainly bulky commodities, is shipped and recorded on the basis of 40 cubic feet of space used representing 1 ton measurement.

Except in § 5. Shipping at Principal Ports (page 527), 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.

§ 3. Oversea Shipping.

1. **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 1955–56 to 1959–60:—

OVERSEA SHIPPING: ENTRANCES AND CLEARANCES (COMBINED) OF
VESSELS DIRECT, AUSTRALIA.

Particulars.	1955–56.	1956–57.	1957–58.	1958–59.	1959–60.
Number of Vessels	4,882	5,290	5,254	5,463	5,945
Net Tonnage .. '000 tons	22,324	23,659	24,515	26,019	28,874

Particulars of the total oversea movement of shipping for each year from 1822 to 1920–21 were published in Official Year Book No. 15, page 507, and for each year from 1921–22 to 1950–51 in Official Year Book No. 40, page 97.

2. **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 1959–60.

OVERSEA SHIPPING: ENTRANCES AND CLEARANCES OF VESSELS DIRECT, 1959-60.

Particulars.		N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances	No.	1,031	439	456	186	768	50	46	2,976
	'000 net tons	4,641	2,955	1,553	780	4,290	162	97	14,478
Clearances	No.	939	396	586	201	777	31	39	2,969
	'000 net tons	4,288	2,708	2,257	805	4,092	139	107	14,396

3. *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.

OVERSEA SHIPPING: COUNTRIES FROM WHICH ENTERED OR FOR WHICH CLEARED, AUSTRALIA.

('000 Net Tons.)

Country from which Entered or for which Cleared.			With Cargo or in Ballast.	Entered.			Cleared.		
				1957-58.	1958-59.	1959-60.	1957-58.	1958-59.	1959-60.
United Kingdom	..	..	Cargo	1,654	1,656	1,570	1,954	2,079	1,939
			Ballast	35	51	33	4	39	44
New Zealand	..	..	Cargo	762	686	750	1,151	1,061	1,162
			Ballast	483	497	530	55	79	73
Other Commonwealth Countries			Cargo	2,341	2,392	2,646	1,772	1,943	2,202
			Ballast	157	369	265	828	835	959
Arabian States	..	..	Cargo	1,730	1,684	2,189	83	27	195
			Ballast	23	20	17	2,148	2,269	2,453
Indonesia	..	..	Cargo	1,043	1,091	1,291	140	112	104
			Ballast	140	120	114	792	896	775
Iran	..	..	Cargo	991	1,190	798	21	23	86
			Ballast	34	7	20	218	241	245
Japan	..	..	Cargo	494	555	739	847	893	1,288
			Ballast	441	390	893	6	25	27
United States of America	..	..	Cargo	627	674	723	577	590	623
			Ballast	14	4	6	36	17	21
Other Foreign Countries	..	..	Cargo	1,328	1,421	1,741	1,328	1,773	2,064
			Ballast	87	140	153	171	170	136
Total	..	..	Cargo	10,970	11,349	12,447	7,873	8,501	9,663
			Ballast	1,414	1,598	2,031	4,258	4,571	4,733
Total, with Cargo and in Ballast	..	..		12,384	12,947	14,478	12,131	13,072	14,396

4. *Country of Registration of Oversea Shipping.*—Vessels registered at ports in Commonwealth countries accounted for 52.6 per cent. of the net tonnage of shipping entering Australian ports in 1959-60. This proportion has varied considerably since the end of the 1939-45 War. By 1946-47, the proportion had increased from the low level of 43.4 per cent. recorded in 1943-44 to 76.2 per cent., but since then has declined.

Particulars of oversea shipping which entered Australian ports during each of the years 1957-58 to 1959-60 are given in the following table according to country of registration of vessels.

OVERSEA SHIPPING: COUNTRY OF REGISTRATION OF VESSELS ENTERED, AUSTRALIA.

('000 Net Tons.)

Vessels Registered at Ports in—		1957–58.	1958–59.	1959–60.	Vessels Registered at Ports in—		1957–58.	1958–59.	1959–60.
<i>Commonwealth Countries—</i>					<i>Foreign Countries—continued—</i>				
Australia ..		360	382	391	Norway ..		1,459	1,626	1,776
New Zealand ..		503	425	451	Panama ..		558	404	595
United Kingdom ..		5,242	5,393	6,305	Sweden ..		384	510	421
Other ..		467	438	472	U.S.A. ..		385	355	320
					Other ..		421	680	860
In Cargo ..		5,738	5,767	6,574	In Cargo ..		5,232	5,582	5,873
In Ballast ..		834	871	1,045	In Ballast ..		580	727	986
<i>Total Commonwealth Countries</i>		6,572	6,638	7,619	<i>Total Foreign Countries</i>		5,812	6,309	6,859
Proportion of total %		53.1	51.3	52.6	Proportion of total %		46.9	48.7	47.4
<i>Foreign Countries—</i>					<i>All Countries—</i>				
Denmark ..		325	282	331	In Cargo ..		10,970	11,349	12,447
France(a) ..		314	327	342	Proportion of total %		88.6	87.7	86.0
Germany, Federal Republic of ..		140	120	155	In Ballast ..		1,414	1,598	2,031
Italy ..		553	505	532	Proportion of total %		11.4	12.3	14.0
Japan ..		661	752	779					
Netherlands ..		612	748	748	Grand Total ..		12,384	12,947	14,478

(a) Includes New Caledonia.

The Australian tonnage which entered Australian ports from overseas during the year 1959–60 represented 2.7 per cent. of the total tonnage entered and was confined mainly to the New Zealand and Pacific Islands trade.

The proportion of overseas shipping tonnage which entered Australia in cargo was 86.0 per cent. in 1959–60, and has ranged about this figure in recent years. The proportion of shipping which cleared in cargo was considerably lower (67.1 per cent.), also in keeping with the corresponding figures for recent years.

§ 4. Interstate Shipping.

1. **System of Record.**—*Interstate Shipping* comprises two elements: (a) vessels engaged solely in interstate trade; and (b) vessels trading between Australia and overseas countries and in the course of their voyages proceeding from one State to another. (However, these vessels, except under special circumstances, do not engage in interstate carrying. Numerous overseas vessels obtain single voyage permits or exemptions under the Navigation Act. Such vessels include overseas tankers carrying petroleum products interstate, and, since the withdrawal of interstate passenger liners, other overseas vessels, under permit, carrying passengers and frozen cargo on the interstate run). No complexity enters into the record of those in category (a), but with regard to the method of recording the movements of the overseas vessels (b), some explanation is necessary. Each State desires that its shipping statistics should show in full its shipping communication with overseas countries, but at the same time it is necessary to avoid any duplication in the statistics for Australia as a whole. In order to meet these dual requirements, a vessel arriving in any State from an overseas 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 overseas 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 of an overseas 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 and retrace its inward track.

ITINERARY OF AN OVERSEA VESSEL ON THE AUSTRALIAN COAST.

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

2. Interstate Movement.—(i) *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 overseas vessels on interstate direct voyages as in column 2 above) during each of the years 1957–58 to 1959–60.

INTERSTATE MOVEMENT OF SHIPPING: ENTRANCES OF VESSELS
INTERSTATE DIRECT.

State or Territory.	Number.			Net Tons ('000).		
	1957–58.	1958–59.	1959–60.	1957–58.	1958–59.	1959–60.
New South Wales	1,861	1,865	1,903	5,119	5,172	5,493
Victoria	1,673	1,729	1,720	4,231	4,639	4,640
Queensland	690	701	747	1,766	1,853	1,947
South Australia	1,079	1,066	1,060	3,767	3,575	3,518
Western Australia	548	525	596	2,604	2,509	2,759
Tasmania	1,104	1,068	1,073	1,267	1,115	1,257
Northern Territory	47	54	70	86	82	128
Australia	7,002	7,008	7,169	18,840	18,945	19,742

(ii) *Overseas via States.* The figures in the following table show the number of entrances and clearances of vessels to and from overseas countries via other Australian States as in column 3 in the table in para. 1 above, and their aggregate tonnage.

INTERSTATE MOVEMENT OF SHIPPING: ENTRANCES AND CLEARANCES OF VESSELS OVERSEAS VIA OTHER AUSTRALIAN STATES, 1959-60.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances .. No.	745	824	388	513	40	185	2	2,697
'000 net tons	3,691	4,099	1,784	2,448	218	868	7	13,115
Clearances .. No.	726	727	269	434	39	199	3	2,397
'000 net tons	3,361	3,671	1,211	2,071	260	896	5	11,475

(iii) *Total Interstate Movement.* In order to ascertain the aggregate movement of interstate shipping, including the total interstate movement of overseas vessels, the figures in the two preceding tables must be combined. The following table shows, for each State and the Northern Territory, the number of entrances and clearances of vessels from and for other States (including the interstate movement of overseas vessels) during the year 1959-60, together with the aggregate net tonnage.

INTERSTATE MOVEMENT OF SHIPPING: TOTAL, 1959-60.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances .. No.	2,648	2,544	1,135	1,573	636	1,258	72	9,866
'000 net tons	9,184	8,739	3,731	5,965	2,978	2,125	135	32,857
Clearances .. No.	2,687	2,591	1,012	1,557	626	1,273	73	9,819
'000 net tons	9,313	8,993	3,043	5,902	3,143	2,103	125	32,622

The following table shows the total interstate movement of shipping, including overseas vessels travelling overseas via States and interstate direct, for Australia for each of the years 1955-56 to 1959-60.

INTERSTATE MOVEMENT OF SHIPPING: TOTAL, AUSTRALIA.

Particulars.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Entrances .. No.	8,362	8,505	9,093	9,446	9,866
'000 net tons	28,868	27,962	29,464	30,932	32,857
Clearances .. No.	8,460	8,480	9,093	9,425	9,819
'000 net tons	29,095	27,763	29,553	30,842	32,622

3. *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 overseas vessels in continuation of their overseas voyages) during the year 1959-60, together with the net tonnage.

SHIPPING ENGAGED SOLELY IN INTERSTATE TRADE(a): ENTRANCES, 1959-60.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Ships entered ..	1,358	1,180	446	810	214	953	53	5,014
Net tons .. '000	3,190	1,881	681	2,212	691	822	79	9,556

(a) Excluding vessels travelling interstate via ports in the same State.

4. Interstate and Coastal Shipping Services.—The following table shows particulars, so far as they are available, of all vessels engaged in the regular interstate or coastal services (intrastate) at the end of each of the years 1956 to 1960:—

INTERSTATE AND COASTAL SHIPPING SERVICES: AUSTRALIA.

Particulars.	1956.	1957.	1958.	1959.	1960.
Number of companies operating ..	41	41	48	49	47
Number of vessels ..	174	178	196	182	178
Tonnage { Gross ..	511,534	544,842	536,666	512,703	514,710
Net ..	275,337	292,110	282,651	272,488	269,866
Horse-power (Nominal) ..	48,667	51,498	56,265	53,432	67,471
Number of passengers for which licensed(a) { 1st class ..	1,777	1,787	1,799	1,525	1,318
2nd class and steerage ..	526	523	428	350	344
Complement of { Masters and officers ..	682	702	713	689	670
Crew { Engineers ..	776	805	770	740	761
Other ..	4,563	4,552	4,375	3,980	3,825

(a) Excludes purely day-passenger accommodation.

NOTE.—This table excludes particulars of a small number of chartered vessels for which returns could not be obtained.

§ 5. Shipping at Principal Ports.

1. Total Shipping, Australia.—The following table shows the total volume of shipping—oversea, interstate and coastal—which entered the principal ports of Australia during the years 1958-59 and 1959-60. The movements of warships and of other non-commercial vessels are excluded from the table.

TOTAL SHIPPING: ENTRANCES AT PRINCIPAL PORTS, AUSTRALIA.

Port of Entry.	1958-59.		1959-60.		Port of Entry.	1958-59.		1959-60.	
	Num-ber.	Net Tons.	Num-ber.	Net Tons.		Num-ber.	Net Tons.	Num-ber.	Net Tons.
		'000.		'000.			'000.		'000.
<i>New South Wales—</i>					<i>South Australia—</i>				
Sydney(a) ..	4,593	12,129	4,794	13,349	Adelaide ..	2,751	5,448	2,658	5,463
Newcastle ..	2,425	4,530	2,442	4,620	Port Lincoln ..	439	452	431	465
Port Kembla ..	747	2,295	921	2,919	Port Pirie ..	420	915	392	901
					Rapid Bay ..	143	224	112	156
					Wallaroo ..	116	181	45	103
					Whyalla ..	427	1,382	461	1,505
<i>Victoria—</i>					<i>Western Australia—</i>				
Melbourne ..	2,686	9,599	2,743	10,160	Fremantle(b) ..	1,182	6,069	1,273	6,602
Geelong ..	486	2,389	549	2,799	Albany ..	118	484	134	562
					Bunbury ..	111	347	119	409
					Carnarvon ..	92	141	76	117
					Geraldton ..	106	295	97	303
					Yampi ..	130	319	142	413
<i>Queensland—</i>					<i>Tasmania—</i>				
Brisbane ..	1,358	4,289	1,417	4,675	Hobart ..	479	1,116	488	1,237
Bowen ..	63	215	38	119	Burnie ..	298	504	316	550
Cairns ..	314	631	292	658	Devonport ..	257	230	364	463
Gladstone ..	125	351	99	356	Launceston ..	519	608	519	566
Mackay ..	113	299	120	283					
Rockhampton ..	129	333	106	242	<i>Northern Territory—</i>				
Townsville ..	339	1,019	365	1,077	Darwin ..	84	153	118	232

(a) Includes Botany Bay.

(b) Includes Kwinana.

2. **Total Shipping—Australia, New Zealand and the United Kingdom.**—The following table shows the total shipping tonnage which entered the principal ports of Australia during 1959–60 and of New Zealand and the United Kingdom during 1959.

TOTAL SHIPPING: ENTRANCES AT PORTS, AUSTRALIA, NEW ZEALAND AND THE UNITED KINGDOM.

('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.) ..	13,349	Wellington ..	4,379	<i>continued.</i>	
Melbourne (Vic.) ..	10,160	Auckland ..	3,913	Tyne Ports ..	7,388
Fremantle (W.A.) ..	6,602	Lyttleton ..	3,018	Bristol ..	6,073
Adelaide (S.A.) ..	5,463	Dunedin ..	1,320	Hull ..	6,010
Brisbane (Qld.) ..	4,675	Napier ..	859	Dover ..	5,876
Newcastle (N.S.W.)	4,620	New Plymouth ..	773	Swansea ..	4,912
Port Kembla		Bluff ..	572	Middlesbrough ..	4,878
(N.S.W.) ..	2,919			Cardiff ..	3,153
Geelong (Vic.) ..	2,799	ENGLAND AND WALES—		SCOTLAND—	
Whyalla (S.A.) ..	1,505	London ..	43,425	Glasgow ..	7,876
Hobart (Tas.) ..	1,237	Southampton ..	25,162		
Townsville (Qld.) ..	1,077	Liverpool (including		NORTHERN IRELAND—	
Port Pirie (S.A.) ..	901	Birkenhead)	19,617	Belfast ..	7,455
Cairns (Qld.) ..	658	Manchester (including			
Launceston (Tas.) ..	566	Runcorn) ..	8,313		

§ 6. Shipping Cargo.

1. **Oversea and Interstate Cargo.**—(i) *Australia.* The table hereunder shows the aggregate tonnage of overseas and interstate cargo discharged and shipped at Australian ports for the years 1955–56 to 1959–60. Most of the cargo is recorded in terms of the ton weight of 2,240 lb., the remainder, mainly bulky commodities, being shipped and recorded on the basis of 40 cubic feet of space occupied representing 1 ton measurement.

SHIPPING CARGO MOVEMENT: AUSTRALIA.

('000 Tons.)

Year.	Oversea Cargo.				Interstate Cargo.			
	Discharged.		Shipped.		Discharged.		Shipped.	
	Weight.	Meas.	Weight.	Meas.	Weight.	Meas.	Weight.	Meas.
1955–56 ..	12,431	3,421	6,666	1,546	11,184	1,572	11,632	1,315
1956–57 ..	12,596	2,752	8,734	1,378	11,862	1,285	11,899	1,290
1957–58 ..	13,719	2,914	7,366	1,489	12,621	1,335	12,614	1,157
1958–59 ..	14,232	2,666	8,646	1,469	12,236	1,288	12,345	1,047
1959–60 ..	15,458	3,263	10,108	1,479	12,535	1,562	12,923	1,360

(ii) *Principal Ports.* The following table shows the tonnage of oversea and interstate cargo discharged and shipped at the principal ports of Australia during 1959-60.

CARGO DISCHARGED AND SHIPPED AT PRINCIPAL PORTS, 1959-60.

('000 Tons.)

Port.	Discharged.				Shipped.			
	Oversea.		Interstate.		Oversea.		Interstate.	
	Wt.	Meas.	Wt.	Meas.	Wt.	Meas.	Wt.	Meas.
Sydney	2,011	1,294	604	188	1,408	390	546	188
Botany Bay	2,979	..	40	..	58	..	603	..
Newcastle	277	..	1,730	..	1,021	..	2,411	1
Port Kembla	357	21	3,035	..	691	..	598	..
Other .. .. .	..	..	..	..	20	15	5	3
<i>Total, New South Wales</i>	<i>5,624</i>	<i>1,315</i>	<i>5,409</i>	<i>188</i>	<i>3,198</i>	<i>405</i>	<i>4,163</i>	<i>192</i>
Melbourne	2,762	1,152	1,915	490	734	531	513	536
Geelong	2,571	76	584	1	753	1	858	1
Portland	59	..	20	..	16	..	..	..
<i>Total, Victoria</i>	<i>5,392</i>	<i>1,228</i>	<i>2,519</i>	<i>491</i>	<i>1,503</i>	<i>532</i>	<i>1,371</i>	<i>537</i>
Brisbane	287	230	845	123	693	90	48	37
Cairns	36	1	83	15	264	1	53	11
Gladstone	15	8	70	7	73	..	19	..
Mackay	2	..	59	..	251	..	68	..
Townsville	25	1	185	20	310	2	81	2
Other	1	..	22	8	100	3	335	28
<i>Total, Queensland</i>	<i>366</i>	<i>240</i>	<i>1,264</i>	<i>173</i>	<i>1,691</i>	<i>96</i>	<i>604</i>	<i>78</i>
Port Adelaide	396	320	1,716	118	363	167	205	73
Ardrossan .. .. .	..	..	2	..	39	..	157	..
Port Lincoln	38	..	44	..	227	..	30	..
Port Pirie	21	..	182	..	412	..	213	..
Rapid Bay .. .. .	..	..	..	..	..	..	238	..
Whyalla	5	..	238	..	50	..	3,321	..
Other	38	1	1	1	231	2	201	7
<i>Total, South Australia</i>	<i>498</i>	<i>321</i>	<i>2,183</i>	<i>119</i>	<i>1,322</i>	<i>169</i>	<i>4,365</i>	<i>80</i>
Fremantle	3,019	120	398	183	1,488	71	1,105	36
Bunbury	89	..	2	..	222	62	23	21
Geraldton	46	..	..	..	234	1	20	1
Yampi .. .. .	..	..	3	..	..	..	790	..
Other	67	1	40	3	288	11	17	12
<i>Total, Western Australia</i>	<i>3,221</i>	<i>121</i>	<i>443</i>	<i>186</i>	<i>2,232</i>	<i>145</i>	<i>1,955</i>	<i>70</i>
Hobart	125	22	411	163	69	112	208	102
Burnie	37	4	68	28	34	3	46	144
Launceston	117	4	118	47	45	6	63	55
Other	15	8	68	163	2	8	141	98
<i>Total, Tasmania</i>	<i>294</i>	<i>38</i>	<i>665</i>	<i>401</i>	<i>150</i>	<i>129</i>	<i>458</i>	<i>399</i>
Darwin, Northern Territory	63	..	52	4	12	3	7	4
<i>Australia</i>	<i>15,458</i>	<i>3,263</i>	<i>12,535</i>	<i>1,562</i>	<i>10,108</i>	<i>1,479</i>	<i>12,923</i>	<i>1,360</i>

2. **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 1957–58 to 1959–60:—

OVERSEA CARGO DISCHARGED AND SHIPPED: COUNTRY OF REGISTRATION OF VESSELS, AUSTRALIA.

(’000 Tons.)

Vessels Registered at Ports in—	1957–58.		1958–59.		1959–60.	
	Weight.	Meas.	Weight.	Meas.	Weight.	Meas.
Commonwealth Countries—						
Australia	387	94	363	92	484	113
Hong Kong	241	40	213	40	218	68
New Zealand	593	407	540	327	617	380
United Kingdom	7,933	2,488	8,758	2,253	10,606	2,527
Other	558	163	456	182	568	164
Total, Commonwealth Countries	9,712	3,192	10,330	2,894	12,493	3,252
Proportion of Total %	46.1	72.5	45.2	70.0	48.9	68.6
Foreign Countries—						
Denmark	785	30	708	38	841	46
France and New Caledonia	343	37	580	55	527	81
Germany, Federal Republic of	263	91	323	81	423	141
Italy	509	68	439	59	428	58
Japan	1,251	102	1,587	131	1,539	154
Netherlands	1,025	238	1,136	260	916	322
Norway	3,734	217	3,912	207	4,117	260
Panama	1,249	21	865	12	1,259	10
Sweden	798	164	1,218	186	953	202
United States of America	288	196	244	191	305	181
Other	1,128	47	1,536	21	1,765	35
Total, Foreign Countries	11,373	1,211	12,548	1,241	13,073	1,490
Proportion of Total %	53.9	27.5	54.8	30.0	51.1	31.4
Grand Total	21,085	4,403	22,878	4,135	25,566	4,742

§ 7. Vessels Built and Registered.

1. **Vessels Built.**—The following table shows the number and tonnage of vessels built and registered in Australia during each of the calendar years 1956 to 1960, so far as such information can be ascertained from the Shipping Registers of the various States. However, the Merchant Shipping Act, under which vessels are registered in Australia, does not make it compulsory to register vessels under 15 tons burden if engaged in river or coastal trade. Larger vessels are also exempt from registration if not engaged in trade. Yachts and small trading vessels may be, and frequently are, registered at the request of the owners.

VESSELS BUILT AND REGISTERED IN AUSTRALIA.

Year.	Steam.			Motor.(a)			Sailing.			Total.			
	No.	Tonnage.		No.	Tonnage.		No.	Tonnage.		No.	Tonnage.		
		Gross.	Net.		Gross.	Net.		Gross.	Net.		Gross.	Net.	
1956	..	1	7,583	4,203	22	14,552	8,432	1	3	3	24	22,138	12,638
1957	..	2	15,166	8,202	25	19,211	11,164	..	..	..	27	34,377	19,366
1958	..	1	7,274	4,343	21	15,293	9,341	1	24	16	23	22,591	13,700
1959	..	1	14,039	7,145	23	12,896	7,167	..	..	..	24	26,935	14,312
1960	33	11,270	5,651	6	107	81	39	11,377	5,732

(a) Includes vessels with auxiliary motors.

2. **Vessels Registered.**—The following table shows the number and net tonnage of steam, sailing and other vessels on the register of each State and the Northern Territory at 31st December, 1960:—

VESSELS REGISTERED, 31st DECEMBER, 1960.

State or Territory.	Steam and Motor.		Sailing.				Barges, Hulks, Dredges, etc., not Self-propelled.		Total.	
	No.	Net Tons.	Propelled by Sail only.		Fitted with Auxiliary Power.		No.	Net Tons.	No.	Net Tons.
			No.	Net Tons.	No.	Net Tons.				
New South Wales ..	293	52,644	29	2,135	107	1,323	10	948	439	57,050
Victoria ..	171	175,284	48	1,094	70	1,356	26	9,403	315	187,137
Queensland ..	89	36,574	30	582	46	518	4	830	169	38,504
South Australia ..	78	31,097	10	192	55	2,413	30	4,263	173	37,965
Western Australia ..	97	11,885	209	3,153	80	1,866	5	478	391	17,382
Tasmania ..	49	12,569	42	693	107	2,551	3	690	201	16,503
Northern Territory	..	..	16	154	8	151	..	..	24	305
Australia ..	777	320,053	384	8,003	473	10,178	78	16,612	1,712	354,846

3. **World Shipping Tonnage.**—At 1st July, 1960, the total steamships, motorships and auxiliaries of 100 gross tons and upwards throughout the world amounted to 36,311, with a gross tonnage of 129,769,500. Of these totals, steamships numbered 14,265 for 73,717,500 gross tons, motorships 21,205 for 55,891,704 gross tons, and auxiliaries 841 for 160,296 gross tons. Included therein were 4,543 oil tankers of 100 gross tons and upwards, with a gross tonnage of 41,465,102. Australian steamships, motorships and auxiliaries, 330 for 619,996 gross tons, constituted 0.91 per cent. and 0.48 per cent. respectively of the total number and tonnage. This information has been derived from *Lloyd's Register of Shipping*.

§ 8. Miscellaneous.

1. **Lighthouses.**—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.

2. **Distances by Sea.**—The distances by sea between the ports of the capital cities of Australia and the most important ports in other countries which trade with Australia are published in the annual bulletin, *Transport and Communication*.

3. **Shipping Freight Rates.**—The *Quarterly Summary of Australian Statistics* shows a list of the ruling freight rates for general merchandise in respect of both oversea and interstate shipments. At 31st December, 1960, the rate for general merchandise from Australia to the United Kingdom and the Continent was 214s. per ton weight or measurement.

Rates for the following important particular commodities were: Butter (refrigerator), United Kingdom, 10s. 11½d. per box (56 lb.), Continent, 11s. 6½d.; meats preserved by cold process—beef, 3½d. per lb., lamb, 4½d. per lb., mutton, 3½d. per lb.; sugar (refined) (30th September, 1960), 326s. per ton weight; wheat (parcels), 90s. per ton weight; flour (wheat), 105s. per ton weight; wool (greasy), 3.56d. per lb. less 7 per cent.; sheep skins, 2½d. per lb.; zinc ingots, 104s. per ton weight; copper ingots, 127s. 6d. per ton weight; lead, 111s. 6d. per ton weight; steel billets (20 ft. up to 30 ft.), 100s. per ton weight. These rates, which are expressed in sterling, are subject to an adjustment of 25½ per cent. when freight is prepaid in Australia.

Interstate rates per ton weight or measurement for general cargo at 31st December, 1960 (expressed in Australian currency) were:—Sydney–Melbourne, 155s.; Sydney–Brisbane, 155s.; Sydney–Adelaide, 180s.; Sydney–Fremantle, 235s.; Sydney–Hobart, 147s.; Sydney–Darwin, 258s. 6d.

4. **Depth of Water at Main Ports.**—A table showing the depth of water available and tides at principal ports of Australia is published in the annual bulletin, *Transport and Communication*.

5. **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 1956 to 1960 are shown in the table below.

SHIPPING CASUALTIES TO OVERSEA AND INTERSTATE STEAM AND MOTOR VESSELS: AUSTRALIA.

Year.	Shipping Losses.			Other Shipping Casualties.			Total Shipping Casualties.		
	Vessels.	Net Tons.	Lives Lost.	Vessels.	Net Tons.	Lives Lost.	Vessels.	Net Tons.	Lives Lost.
1956 ..	2	529	18	237	771,418	..	239	771,947	18
1957 ..	1	249	..	224	709,432	..	225	709,681	..
1958 ..	1	98	5	179	525,528	..	180	525,626	5
1959 ..	2	346	1	200	623,475	9	202	623,821	10
1960 ..	..	..	..	183	570,987	..	183	570,987	..

6. **Ports and Harbours.**—Information on ports and harbours will be found in Chapter XIX.—Local Government.

A report on "The Turn-round of Ships in Australian Ports" was submitted to the Commonwealth Government by Henry Basten, C.M.G., on 4th January, 1952. The report deals with all factors affecting the turn-round of ships and congestion in Australian ports and the measures that might be taken to effect improvement on both short-term and long-term bases.

B. GOVERNMENT RAILWAYS.

1. **General.**—The first steam-operated railway in Australia, between Melbourne and Port Melbourne, a distance of 2 miles, was opened on 12th September, 1854. It was owned and operated by the Melbourne and Hobson's Bay Railway Company. In the next 100 years, the mileage increased greatly and at 30th June, 1954, 26,624 route-miles (excluding several hundred miles of privately-owned line) were open for traffic. However, the operation of Australia-wide services is greatly hampered by the presence of many break-of-gauge stations, necessitated by the several gauges at present in use, although progress has been made towards the standardization of main trunk routes (*see para. 5 following*). The policy of government ownership and control of railways has been adopted in each State and at 30th June, 1960, 23,996 route-miles were owned by the State Governments and 2,252 route-miles by the Commonwealth Government. In the following tables, details of the four lines owned 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*.

In some States, there are privately-owned railway systems offering passenger and freight services to the public. Details of these private railways were included in Official Year Book No. 39 and previous issues, but owing to their relative unimportance and the incomplete nature of the statistics available, the series has been discontinued.

2. **Railway Communication in Australia.**—An account of the progress of railway construction in Australia since the opening of the first line in 1854 was given in Official Year Book No. 6, page 681, and in No. 22, page 259. The main ports on the mainland are connected by lines running approximately parallel to the coast and are the focal points of lines which radiate inland to the agricultural, mining and pastoral areas of the continent to a distance of up to 600 miles at some points. However, Darwin in the Northern Territory is not connected by rail to any other port. A 3 ft. 6 in. gauge railway extends southward from Darwin to Birdum, a distance of 317 miles, and from Port Augusta in South Australia a 4 ft. 8½ in. gauge railway of 217 miles extends northwards to Marree and thence as a 3 ft. 6 in. gauge of 540 miles to Alice Springs.

In recent years, besides the construction of air-conditioned passenger trains and high-capacity goods rolling stock, many new locomotives have been built and others purchased. Also, there has been a significant development of diesel-electric traction, the number of diesel-electric locomotives in service having risen from two at 30th June, 1949, to 451 at 30th June, 1960.

3. **Distances between Capital Cities.**—The distances by rail between the capital cities of Australia are published in the annual bulletin, *Transport and Communication*.

4. **Government Railways Development.**—In spite of the great extensions of State railways since 1875 and the construction of various railways by the Commonwealth Government, there are still, in some States, immense areas of country which are as yet practically undeveloped, and in which little in the nature of permanent settlement has been accomplished. The general policy of the States was to extend the existing lines inland in the form of light railways as settlement increased, and while it is true that lines which were not likely to be commercially successful in the immediate future were constructed from time to time for the purpose of encouraging settlement, the general principle that the railways should be self-supporting was kept in view.

The greatest recorded route-mileage of government railways was 27,234 at 30th June, 1941. Although short lengths of line have been opened since that date, most railway construction is being confined to the duplication and electrification of existing main lines. The closure of other lines (mainly developmental branch lines whose retention would have been uneconomic) has resulted in a considerable decrease in route-mileage. Variations in route-mileage in each State and Territory during the ten years ended 30th June, 1960, are shown in the following table:—

GOVERNMENT RAILWAYS: VARIATIONS IN ROUTE-MILEAGE, 1950 TO 1960.

State or Territory.	Route-mileage at 30th June, 1950.	Variations during Ten Years ended 30th June, 1960, due to—		Route-mileage at 30th June, 1960.
		Route Miles Opened.	Route Miles Closed.	
New South Wales	6,354	2	7	6,349
Victoria	4,446	24	421	4,049
Queensland	6,560	..	153	6,407
South Australia	3,805	229	198	3,836
Western Australia	4,706	19	151	4,574
Tasmania	613	2	77	538
Northern Territory	490	..	..	490
Australian Capital Territory ..	5	..	..	5
Australia	26,979	276	1,007	26,248

5. **Standardization of Railway Gauges.**—The first step towards uniform gauge railway communication between the capitals of the mainland States was effected in 1930 with the construction of the 4 ft. 8½ in. gauge line from Grafton to South Brisbane. The finance required for the construction was provided by the Commonwealth Government. For details of the agreement between the Commonwealth and New South Wales and Queensland, see Official Year Book No. 31, page 122.

This line is operated by the New South Wales Railways, and details of operations in New South Wales are included with those of the New South Wales system. Details of operations on the Queensland portion are included with Queensland railway statistics unless otherwise specified.

In March, 1944, the late Sir Harold Clapp, Director-General of Land Transport, Commonwealth Department of Transport, and formerly Chairman of Commissioners, Victorian Railways, was requested by the Commonwealth Government to submit a report and recommendation regarding the standardization of Australia's railway gauges on the basis of a 4 ft. 8½ in. gauge. A summary of his report and recommendations, made in March, 1945, together with an outline of the agreement between the Commonwealth Government and the States of New South Wales, Victoria and South Australia regarding the standardization of railway gauges in their respective States, was published in Official Year Book No. 37, pages 146-9. The agreement, which was signed in 1946, was ratified by the Governments of the Commonwealth, of Victoria and of South Australia, but not by the New South Wales Government. After some time had elapsed and New South Wales had failed to ratify the agreement, the Commonwealth Government decided to enter into a separate agreement with South Australia, and the necessary legislation was enacted in 1949 by each Government concerned. The Commonwealth-South Australia Agreement provides for the same standardization work to be carried out in South Australia as would have been carried out had New South Wales ratified the original Commonwealth-Three States Agreement, and that over a period of years the Commonwealth should contribute 70 per cent. and South Australia be responsible for the remaining 30 per cent. of the estimated cost.

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.

Preparatory work in the field on the uniform gauge between Albury and Melbourne commenced in November, 1957. The work has been concerned with the duplication of bridges, extension of culverts and the establishment of camps. Funds for this project are being advanced by the Commonwealth to enable the work to proceed. An agreement was reached between the Commonwealth and the two States, New South Wales and Victoria, whereby the Commonwealth will meet 70 per cent. of the cost of unification and the two States will share equally the remaining 30 per cent., with the Commonwealth advancing the whole of the necessary funds initially, and the States' portion, plus interest, being repayable over 50 years. Legislation was enacted by the Commonwealth and the two State Governments in three separate Acts assented to towards the close of 1958. Estimated total cost is about £11.9 million, just over £5.7 million having been spent to 30th June, 1960.

A map showing the railway systems of Australia according to gauge appears on page 547.

6. **Mileage Open for Traffic, all Lines.**—Almost all the railways open for general traffic in Australia are owned and controlled by the State or Commonwealth Governments. Private lines have been laid down for the purpose of opening up forest lands, mining districts or sugar areas. These lines are not generally used for the conveyance of passengers or the public conveyance of goods.

The following table shows the route-mileage of Commonwealth and State lines open in each State and Territory at various periods since the inauguration of railways in Australia in 1854:—

GOVERNMENT RAILWAYS: ROUTE-MILEAGE OPEN.
(Miles.)

At 30th 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	3,898	4,634	665	317	5	26,809
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
1960 ..	6,349	4,049	6,407	3,836	4,574	538	490	5	26,248

(a) At 31st December.

At 30th June, 1960, 262 route-miles in Victoria and 233 route-miles in New South Wales were electrified.

The next table shows for each State and Territory the length of government lines open in relation to both population and area at 30th June, 1960.

GOVERNMENT RAILWAYS: ROUTE-MILEAGE OPEN AT 30th JUNE, 1960.
(Miles.)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Route-mileage open ..	6,349	4,049	6,407	3,836	4,574	538	490	5	26,248
Per 1,000 of population ..	1.66	1.40	4.38	4.06	6.26	1.55	22.27	0.10	2.55
Per 1,000 square miles ..	20.55	46.01	9.61	10.09	4.69	20.69	0.94	5.32	8.83

7. **Classification of Lines according to Gauge, at 30th June, 1960.**—The next table shows the route-mileage of government railways open in each State and Territory at 30th June, 1960, classified according to gauge.

GOVERNMENT RAILWAYS: GAUGES, AT 30th JUNE, 1960.
(Route-miles.)

Gauge.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
5 ft. 3 in. ..	(a) 241	4,015	..	1,674	..	..	..	..	5,930
4 ft. 8½ in. ..	6,108	..	(b) 69	(c) 871	(c) 454	..	..	(c) 5	7,507
3 ft. 6 in. ..	..	..	6,308	(d) 1,291	4,120	538	(c) 490	..	12,747
2 ft. 6 in. ..	..	34	..	..	..	..	..	..	34
2 ft. 0 in. ..	..	..	30	..	..	..	..	..	30
Total ..	6,349	4,049	6,407	3,836	4,574	538	490	5	26,248

(a) Portion of Victorian system. (b) Queensland section of Grafton-South Brisbane Uniform Gauge Line. (c) Portion of Commonwealth system. (d) Includes 432 miles of Commonwealth system.

8. **Summary of Operations.**—In the following table a summary is shown of the operations of government railways open in Australia during 1959-60:—

GOVERNMENT RAILWAYS: SUMMARY OF OPERATIONS, 1959-60.

Particulars.	Commonwealth Railways.	State Railways.	Total.
Route-mileage miles	2,252	23,996	26,248
Gross earnings £'000	5,327	188,836	194,163
" " per revenue train-mile pence	597	501	503
Working expenses £'000	(a) 4,154	189,981	194,135
" " per revenue train-mile pence	465	504	503
Net earnings £'000	(a) 1,173	—1,145	28
" " per revenue train-mile pence	131	—3	..
Revenue train-miles '000	2,141	90,518	92,659
Passenger-journeys '000	275	478,440	478,715
Goods and livestock carried '000 tons	1,482	49,690	51,172
Average number of employees(b)	2,648	133,107	135,755
" wages and salaries paid £	1,073	1,051	1,051

(a) Excludes amounts paid for Commissioner's salary, government contributions under the Superannuation Act, Accident and Insurance Fund and proportion of salaries of Auditor-General's staff—total, £123,367. (b) Excludes construction staff except in respect of Victoria.

NOTE.—Minus sign (—) denotes loss.

A graph showing the route-mileage and traffic of government railways from 1870 to 1959-60 appears on page 548.

9. *Summary, States.*—The following table shows, for government railways in Australia, particulars of the mileage open, passengers and goods carried and revenue train-miles run during 1959–60.

GOVERNMENT RAILWAYS: SUMMARY, STATES, 1959–60.

Railway System.	Mileage Open.(a)		Passenger-journeys. (‘000.)	Goods and Livestock Carried. (‘000 tons.)	Revenue Train-miles. (‘000.)
	Route-miles.	Track-miles.			
New South Wales	6,108	8,507	254,590	22,127	36,781
Victoria	4,290	5,711	158,294	9,687	18,282
Queensland	6,407	7,462	32,347	8,116	19,056
South Australia	2,533	3,156	17,038	4,036	6,887
Western Australia	4,120	4,726	13,879	4,533	7,962
Tasmania	538	633	2,292	1,191	1,550
Commonwealth	2,252	2,454	275	1,482	2,141
Australia	26,248	32,649	478,715	51,172	92,659

(a) At 30th June.

10. *Gross Earnings.*—(i) *General.* Gross earnings are composed of earnings from (a) coaching traffic, including the carriage of mails, horses, parcels, etc., by passenger trains; (b) carriage of goods and livestock; and (c) rents and miscellaneous items. State Government grants are excluded. Details of these grants made during 1959–60 are shown in para. 13, page 538.

(ii) *Coaching, Goods and Miscellaneous Earnings.* (a) *Summary.* In the following table, gross earnings are shown for the years 1957–58 to 1959–60, together with earnings per average route-mile worked and per revenue train-mile:—

GOVERNMENT RAILWAYS: GROSS EARNINGS.(a)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
GROSS EARNINGS. (£'000.)								
1957–58 ..	74,433	35,954	34,636	13,160	12,788	2,569	4,605	178,145
1958–59 ..	75,930	38,150	36,169	12,856	13,516	2,707	4,817	184,145
1959–60 ..	83,563	39,190	35,671	12,758	14,846	2,808	5,327	194,163
GROSS EARNINGS PER AVERAGE ROUTE-MILE WORKED. (£.)								
1957–58 ..	12,195	8,168	5,365	5,193	3,106	4,492	2,041	6,738
1958–59 ..	12,441	8,756	5,628	5,075	3,283	4,782	2,139	6,987
1959–60 ..	13,681	9,130	5,562	5,037	3,603	4,978	2,365	7,388
GROSS EARNINGS PER REVENUE TRAIN-MILE. (Pence.)								
1957–58 ..	510.11	470.15	436.78	446.05	418.89	393.28	578.47	473.52
1958–59 ..	517.78	496.89	444.96	447.80	420.87	421.99	572.76	484.13
1959–60 ..	545.26	514.47	449.26	444.59	447.53	434.79	596.86	502.90

(a) Excludes government grants; see para. 13, page 538.

(b) *Distribution.* The following table shows gross earnings for the year 1959–60 classified according to the three main sources of earnings.

GOVERNMENT RAILWAYS: DISTRIBUTION OF GROSS EARNINGS(a), 1959-60.

Railway System.	Gross Earnings. (£'000.)			Proportion of Total. (Per Cent.)		
	Coaching.	Goods and Livestock.	Miscellaneous.	Coaching.	Goods and Livestock.	Miscellaneous.
New South Wales ..	22,131	57,598	3,834	26.48	68.93	4.59
Victoria ..	13,537	22,876	2,777	34.54	58.37	7.09
Queensland ..	4,637	30,046	988	13.00	84.23	2.77
South Australia ..	2,043	9,840	875	16.01	77.12	6.87
Western Australia ..	1,622	12,251	973	10.93	82.52	6.55
Tasmania ..	190	2,537	81	6.75	90.34	2.91
Commonwealth ..	993	3,963	371	18.63	74.40	6.97
Australia ..	45,153	139,111	9,899	23.25	71.64	5.11

(a) Excludes government grants; see para. 10 (i) on p. 536.

11. *Working Expenses.*—(i) *General.* In comparing the working expenses of the several States and Territories, allowance should be made for the variation of gauges and of physical and traffic conditions, not only on the different systems of the State and Commonwealth railways, but also on different portions of the same system. When traffic is light, the proportion of working expenses to earnings is naturally greater than when traffic is heavy; and this is especially true in Australia, where ton-mile rates are in many cases based on a tapering principle—i.e., a lower rate per ton-mile is charged upon merchandise from remote interior districts—and where on many of the lines there is but little back loading. Density or sparseness of population, area to be served, and alternative methods of transport available are other factors to be taken into account.

Working expenses, wherever presented in the Railways section of this chapter, include reserves for depreciation in South Australia, Western Australia and Tasmania but exclude interest, sinking fund, exchange and certain other payments (see para. 13 following).

(ii) *Working Expenses.* 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 1957-58 to 1959-60.

GOVERNMENT RAILWAYS: WORKING EXPENSES.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth. (a)	Aust.
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**TOTAL WORKING EXPENSES.
(£'000.)**

1957-58 ..	72,534	38,174	36,894	15,953	16,091	3,218	3,611	186,475
1958-59 ..	71,102	38,119	37,504	15,102	16,307	3,215	3,647	184,996
1959-60 ..	76,491	39,542	38,353	15,325	16,907	3,363	4,154	194,135

**RATIO OF WORKING EXPENSES TO GROSS EARNINGS.
(Per Cent.)**

1957-58 ..	97.45	106.17	106.52	121.23	125.83	125.24	78.43	104.68
1958-59 ..	93.64	99.92	103.69	117.47	120.65	118.79	75.72	100.46
1959-60 ..	91.54	100.89	107.52	120.11	113.88	119.77	77.98	99.98

**WORKING EXPENSES PER AVERAGE ROUTE-MILE WORKED.
(£.)**

1957-58 ..	11,884	8,672	5,715	6,296	3,908	5,625	1,601	7,053
1958-59 ..	11,650	8,749	5,836	5,962	3,961	5,680	1,620	7,019
1959-60 ..	12,523	9,213	5,980	6,050	4,103	5,963	1,845	7,387

**WORKING EXPENSES PER REVENUE TRAIN-MILE.
(Pence.)**

1957-58 ..	497.09	499.18	465.25	540.73	527.06	492.53	453.67	495.66
1958-59 ..	484.85	496.49	461.38	526.04	507.78	501.28	433.68	486.36
1959-60 ..	499.12	519.09	483.04	534.03	509.63	520.72	465.43	502.83

(a) See para. 8, note (a), p. 535.

(iii) *Distribution.* The following table shows the total working expenses for the year 1959-60 classified according to the four main expenditure headings.

GOVERNMENT RAILWAYS: DISTRIBUTION OF WORKING EXPENSES, 1959-60.
(£'000.)

Railway System.	Mainten- ance of Way and Works.	Motive Power.(a)	Traffic.	Other Charges.	Total Working Expenses.
New South Wales	13,412	28,331	18,582	16,166	76,491
Victoria	8,081	11,494	10,671	9,296	39,542
Queensland	10,294	17,417	8,536	2,106	38,353
South Australia(b)	3,317	6,615	3,654	1,739	15,325
Western Australia(b)	2,738	7,184	3,520	3,465	16,907
Tasmania(b)	818	1,309	757	479	3,363
Commonwealth(c)	1,497	1,469	843	345	4,154
Australia	40,157	73,819	46,563	33,596	194,135

(a) Includes maintenance of rolling stock. (b) Includes provision of reserves for depreciation.
(c) See para. 8, note (a), p. 535.

12. *Net Earnings.*—The following table shows, for the years 1957-58 to 1959-60, 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.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth. (a)	Aust.
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TOTAL NET EARNINGS.
(£'000.)

1957-58 ..	1,899	— 2,220	— 2,258	— 2,793	— 3,303	— 649	994	— 8,330
1958-59 ..	4,828	— 31	— 1,335	— 2,246	— 2,791	— 508	1,170	— 851
1959-60 ..	7,072	— 352	— 2,682	— 2,567	— 2,061	— 555	1,173	— 28

NET EARNINGS PER AVERAGE ROUTE-MILE WORKED.
(£.)

1957-58 ..	311	— 504	— 350	— 1,103	— 802	— 1,133	440	— 315
1958-59 ..	791	— 7	— 208	— 837	— 678	— 898	519	— 32
1959-60 ..	1,158	— 83	— 418	— 1,013	— 500	— 985	520	— 1

NET EARNINGS PER REVENUE TRAIN-MILE.
(Pence.)

1957-58 ..	13.02	—29.03	—28.47	—94.68	—108.17	— 99.25	124.80	—22.14
1958-59 ..	32.93	0.40	—16.42	—78.24	— 86.91	— 79.29	139.08	— 2.23
1959-60 ..	46.14	— 4.62	—33.78	—89.44	— 62.10	— 85.93	131.43	0.07

(a) See para. 8, note (a), p. 535.
NOTE.—Minus sign (—) denotes loss.

A graph showing the gross and net earnings and working expenses from 1870 to 1959-60 appears on page 549.

13. *Net Earnings, Grants to Railways, Interest, Sinking Fund, Surplus or Deficit, 1959-60.*—The following table shows, for each railway system for the year 1959-60, (i) net earnings as in para. 12 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 in regard to costs other than operative charged against railways 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 can not, of course, be made between the results shown in the table.

GOVERNMENT RAILWAYS: SURPLUS OR DEFICIT AT 30th JUNE, 1960.
(£.)

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. ..	7,071,279	(b)1,800,000	10,627,970	2,176,300	175,230	..	12,979,500	— 4,108,221
Victoria ..	— 352,016	(c) 8,446	3,809,574	208,036	..	(d)32,624	4,050,234	e— 4,393,804
Queensland ..	—2,682,240	(f) 54,703	3,765,211	..	..	g 194,773	3,959,984	h— 6,587,521
S. Australia ..	—2,566,488	(i)4,200,000	2,016,472	..	..	(j)89,031	2,105,503	e— 471,991
W. Australia ..	—2,060,135	..	2,336,499	..	..	(k) 57	2,336,556	e— 4,396,691
Tasmania ..	— 555,104	..	377,789	..	..	..	377,789	— 932,893
Total States ..	—1,144,704	6,063,149	22,933,515	2,384,336	175,230	316,485	25,809,566	—20,891,121
Commonwealth ..	1,172,890	..	368,166	208,140	32	123,367	699,705	+ 473,185
Australia ..	28,186	6,063,149	23,301,681	2,592,476	175,262	439,852	26,509,271	—20,417,936

(a) See para. 12, page 538. (b) Grants to meet losses on country development lines, £1,000,000 and to subsidize payments due from superannuation account, £800,000. (c) Kerang-Koondrook Tramway recoup from Treasury. (d) Net loss on road motor services not included in previous pages. (e) Includes road motor services.

(f) Adjustment for net loss on Queensland portion of Uniform Gauge Railway as included in foregoing tables. (g) Interest on unopened lines. (h) Excludes Queensland portion of Uniform Gauge Railway. (i) Grants towards working expenses, £3,400,000 and debt charges, £800,000. (j) Net loss on road motors not included in foregoing tables, £439, and interest and repayment under Railways Standardization Agreement, £88,592. (k) Net loss on road motor services. (l) Includes salary of Railway Commissioner, Government contributions under Superannuation Act, expenditure from Railway Accident and Insurance Fund and proportion of salaries of Auditor-General's staff.

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

14. Traffic.—(i) *General.* Reference has already been made to the differing conditions of the traffic on many of the lines. These conditions differ not only in the several State and Commonwealth systems, but also on different lines in the same system, and apply to both passenger and goods traffic. By far the greater part of the population of Australia is located in a fringe of country near the coast, more especially in the eastern and southern districts, and a large proportion of the railway traffic between the chief centres of population is therefore open to competition from road and air transport.

The following table shows particulars of railway traffic for the years 1957–58 to 1959–60:—

GOVERNMENT RAILWAYS: TRAFFIC.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
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PASSENGER-JOURNEYS (SUBURBAN AND COUNTRY).
(‘000.)

1957–58 ..	258,651	167,662	33,665	17,564	14,106	2,444	238	494,330
1958–59 ..	254,055	163,483	33,457	16,805	14,615	2,344	259	485,018
1959–60 ..	254,590	158,294	32,347	17,038	13,879	2,292	275	478,715

PASSENGER-JOURNEYS (SUBURBAN AND COUNTRY) PER AVERAGE ROUTE-MILE WORKED.
(Number.)

1957–58 ..	42,381	38,088	5,214	6,931	3,426	4,273	106	18,696
1958–59 ..	41,628	37,522	5,207	6,634	3,550	4,141	115	18,404
1959–60 ..	41,681	36,881	5,044	6,726	3,369	4,065	122	18,214

GOVERNMENT RAILWAYS: TRAFFIC—*continued.*

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
GOODS AND LIVESTOCK CARRIED. (^{'000} Tons.)								
1957-58 ..	a 18,502	8,892	7,766	4,146	3,589	1,096	1,259	45,250
1958-59 ..	19,700	9,295	8,373	4,207	3,913	1,138	1,405	48,031
1959-60 ..	22,127	9,687	8,116	4,036	4,533	1,191	1,482	51,172
GOODS AND LIVESTOCK CARRIED PER AVERAGE ROUTE-MILE WORKED. (Tons.)								
1957-58 ..	3,032	2,020	1,203	1,636	872	1,916	558	1,711
1958-59 ..	3,228	2,133	1,303	1,661	950	2,010	624	1,823
1959-60 ..	3,623	2,257	1,266	1,594	1,100	2,111	658	1,947

(a) Partly estimated.

(ii) *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, whilst traffic classed as "country" originates or terminates at stations outside of this suburban area. Particulars of suburban and country passenger traffic are shown separately in the two tables following.

(a) *Suburban Passenger Traffic.* The following table shows a summary of suburban passenger operations for the years 1957-58 to 1959-60. Most of the suburban services in New South Wales and Victoria are operated within electrified areas.

GOVERNMENT RAILWAYS: SUBURBAN PASSENGER SUMMARY.

Year.	Suburban Passenger-journeys.	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.)	(Pence.)	(Pence.)	(Pence.)
NEW SOUTH WALES.									
1957-58	a 244,188	11,158	} (b)	(b)	(b) {	(b)	(b)	(b)	(b)
1958-59	239,738	11,175				12,027	12.04	(b)	258
1959-60	239,805	11,212				12,222	12.23	(b)	262
VICTORIA.									
1957-58	162,632	8,353	1,433,794	172	8.82	7,613	11.24	1.27	219
1958-59	158,613	8,310	1,364,884	164	8.61	8,511	12.88	1.50	246
1959-60	153,660	7,999	1,349,319	169	8.79	8,826	13.78	1.57	265
QUEENSLAND.									
1957-58	28,524	2,082	} (b)	(b)	(b) {	890	7.49	(b)	103
1958-59	28,398	2,127				889	7.52	(b)	100
1959-60	27,548	2,131				865	7.54	(b)	97
SOUTH AUSTRALIA.									
1957-58	16,390	2,065	131,179	80	8.00	702	10.28	1.28	82
1958-59	15,704	2,087	125,391	60	7.98	706	10.79	1.35	81
1959-60	15,997	2,134	128,183	60	8.01	792	11.89	1.48	89

NOTE.—For footnotes see next page.

GOVERNMENT RAILWAYS: SUBURBAN PASSENGER SUMMARY—*continued*.

Year.	Suburban Passenger-journeys.	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.)	(Pence.)	(Pence.)	(Pence.)

WESTERN AUSTRALIA.

1957-58	13,353	1,323	91,755	69	6.87	420	7.54	1.10	76
1958-59	13,880	1,320	93,958	71	6.77	434	7.50	1.11	79
1959-60	13,171	1,343	90,003	67	6.83	478	8.70	1.27	85

TASMANIA.

1957-58	2,122	204	12,895	63	6.08	54	6.14	1.01	64
1958-59	2,092	210	12,632	60	6.04	53	6.11	1.01	61
1959-60	2,031	206	12,438	60	6.12	51	5.98	0.98	59

(a) Estimated.

(b) Not available.

NOTE.—Train-miles refer to revenue mileages only.

(b) *Country Passenger Traffic.* The following table shows a summary of country passenger operations for the years 1957-58 to 1959-60.

GOVERNMENT RAILWAYS: COUNTRY PASSENGER SUMMARY.

Year.	Country Passenger-journeys.	Country Passenger Train-miles. (a)	Country Passenger-miles.	Average Number of Passengers per Train-mile.	Average Mileage per Passenger-journey.	Country Passenger Earnings.			
						Gross.	Per Passenger-journey.	Per Passenger-mile.	Per Passenger Train-mile.
	('000.)	('000.)	('000.)		(Miles.)	(£'000.)	(Pence.)	(Pence.)	(Pence.)

NEW SOUTH WALES.

1957-58	14,463	9,762	(b)	(b)	(b)	(b)	(b)	(b)	(b)
1958-59	14,317	9,497				6,984	117.08	(b)	169
1959-60	14,785	9,613				6,570	106.64	(b)	158

VICTORIA.

1957-58	5,030	4,682	418,012	89	83.10	3,493	166.64	2.01	179
1958-59	4,870	4,699	414,539	88	85.12	3,466	170.80	2.01	177
1959-60	4,634	4,588	394,690	86	85.16	3,291	170.44	2.00	172

QUEENSLAND.

1957-58	(c) 5,141	4,935	(b)	(b)	(b)	2,560	119.53	(b)	118
1958-59	(c) 5,059	4,824				2,452	116.31	(b)	116
1959-60	(c) 4,799	4,728				2,273	113.70	(b)	110

SOUTH AUSTRALIA.

1957-58	1,174	2,112	112,781	52	96.05	803	164.18	1.71	89
1958-59	1,101	2,058	106,506	51	96.70	778	169.55	1.75	89
1959-60	1,041	2,045	105,386	50	101.31	806	185.89	1.83	93

WESTERN AUSTRALIA.

1957-58	753	1,565	80,171	51	106.41	670	213.51	2.01	103
1958-59	735	1,591	79,155	50	107.64	653	213.23	1.98	99
1959-60	708	1,504	77,450	51	109.32	666	225.56	2.06	106

NOTE.—For footnotes see next page.

GOVERNMENT RAILWAYS: COUNTRY PASSENGER SUMMARY—*continued.*

Year.	Country Passenger-journeys. (⁰ 000.)	Country Passenger Train-miles. (a) (⁰ 000.)	Country Passenger-miles. (⁰ 000.)	Average Number of Passengers per Train-mile.	Average Mileage per Passenger-journey. (Miles.)	Country Passenger Earnings.			
						Gross. (£'000.)	Per Passenger-journey. (Pence.)	Per Passenger-mile. (Pence.)	Per Passenger Train-mile. (Pence.)

TASMANIA.									
1957-58	322	367	14,471	37	44.91	91	67.53	1.50	55
1958-59	252	252	13,361	41	53.03	86	81.78	1.54	63
1959-60	261	251	13,805	42	52.92	86	79.07	1.49	63

COMMONWEALTH.(d)

1957-58	238	718	81,038	113	339.63	736	740.52	2.18	247
1958-59	259	781	80,910	108	312.92	739	685.90	2.19	236
1959-60	275	783	84,371	106	307.57	749	654.89	2.13	225

(a) Excludes mixed-train miles. (b) Not available. (c) Traffic originating on the 3 ft. 6 in. gauge system and continuing on the Uniform Gauge Railway has been counted once only. (d) Railways controlled by Commonwealth Government.

NOTE.—Train-miles refer to revenue mileages only.

(iii) *Freight Traffic.* (a) *Commodities Carried and Earnings.* The following table shows the quantities of various commodities carried on the various systems and the earnings derived during 1959-60.

GOVERNMENT RAILWAYS: COMMODITIES CARRIED AND EARNINGS, 1959-60.

Railway System.	Coal, Coke and Briquettes.	Other Minerals. (a)	Agricultural Produce. (b)	Wool.	Live-stock.	All Other Commodities.	Total.
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QUANTITY CARRIED. (⁰ 000 Tons.)							
New South Wales ..	9,555	1,810	2,533	253	631	7,345	22,127
Victoria ..	2,452	124	2,082	151	407	4,471	9,687
Queensland(c) ..	1,576	(d) 1,003	2,879	58	740	(e) 1,860	8,116
South Australia ..	130	1,149	884	45	243	1,585	4,036
Western Australia ..	566	271	1,853	68	161	1,614	4,533
Tasmania ..	322	34	35	4	35	761	1,191
Commonwealth ..	726	194	25	6	109	422	1,482
Australia ..	15,327	4,585	10,291	585	2,326	18,058	51,172

FREIGHT EARNINGS.
(£'000.)

New South Wales ..	(f)	(f)	(f)	(f)	3,676	(f)	57,598
Victoria ..	3,231	171	4,728	695	1,397	12,654	22,876
Queensland(c) ..	2,919	(d) 2,929	6,082	1,066	3,765	e 13,285	30,046
South Australia ..	120	3,126	1,441	250	777	4,126	9,840
Western Australia ..	994	563	3,606	415	465	6,208	12,251
Tasmania ..	650	46	83	17	94	1,647	2,537
Commonwealth ..	414	339	128	33	266	2,783	3,963
Australia ..	(f)	(f)	(f)	(f)	10,440	(f)	139,111

(a) Includes sand and gravel. (b) Includes wheat and fruit. (c) Includes Queensland portion of Uniform Gauge Railway. Tonnages carried over both systems have been counted once only. (d) Includes cement. (e) Excludes cement. (f) Not available.

(b) *Freight Summary.* A summary of freight traffic on each railway system for each of the years 1957-58 to 1959-60 is shown in the following table.

GOVERNMENT RAILWAYS: FREIGHT SUMMARY.

Year.	Revenue Goods Train-miles. (a)	Revenue Net Ton-miles. (c)	Average Train Load (Paying Traffic). (Tons.)	Average Haul per Ton. (Miles.)	Goods and Livestock Earnings.				Density of Traffic. (b)
					Gross. (£'000.)	Per Average Route-mile Worked. (£.)	Per Revenue Net Ton-mile. (Pence.)	Per Revenue Goods Train-mile. (Pence.)	
	('000.)	('000.)	(Tons.)	(Miles.)	(£'000.)	(£.)	(Pence.)	(Pence.)	
NEW SOUTH WALES.									
1957-58	13,290	2,571,166	186	139	48,229	7,902	4.50	837	421,295
1958-59	13,710	2,735,635	194	139	50,524	8,279	4.43	859	448,244
1959-60	15,169	3,215,560	202	146	57,598	9,430	4.30	925	526,450
VICTORIA.									
1957-58	5,286	1,260,136	238	142	20,849	4,736	3.98	944	286,265
1958-59	5,394	1,352,516	250	146	22,126	5,078	3.93	982	310,424
1959-60	5,672	1,384,773	244	143	22,876	5,330	3.96	966	322,641
QUEENSLAND.(d)									
1957-58	10,304	1,326,030	114	177	27,974	4,380	5.06	578	207,614
1958-59	10,876	1,462,621	120	181	29,493	4,639	4.84	582	230,080
1959-60	10,561	1,515,242	126	196	29,420	4,637	4.66	586	238,846
SOUTH AUSTRALIA.									
1957-58	2,638	611,032	214	147	10,302	4,065	4.05	867	241,133
1958-59	2,501	605,377	224	144	10,054	3,969	3.99	893	238,996
1959-60	2,479	596,311	224	148	9,840	3,885	3.96	886	235,417
WESTERN AUSTRALIA.									
1957-58	4,440	572,176	129	159	10,506	2,552	4.41	568	138,979
1958-59	4,797	632,284	132	162	11,243	2,731	4.27	563	153,579
1959-60	5,115	705,245	138	156	12,251	2,974	4.17	575	171,176
TASMANIA.									
1957-58	919	102,164	105	93	2,290	4,004	5.38	566	178,609
1958-59	913	110,447	110	97	2,426	4,287	5.27	580	195,136
1959-60	929	118,632	116	100	2,537	4,498	5.13	597	210,340
COMMONWEALTH.(e)									
1957-58	918	341,721	286	272	3,265	1,447	2.29	655	151,472
1958-59	960	394,346	311	281	3,476	1,543	2.12	658	175,109
1959-60	1,084	437,963	326	296	3,963	1,760	2.17	708	194,478

(a) Excludes mixed train-miles. (b) Total ton-miles per average route-mile worked. (c) Partly estimated. (d) Excludes Queensland portion of Grafton-South Brisbane (Uniform Gauge) Line. (e) Railways controlled by the Commonwealth Government.

15. **Rolling Stock.**—The following table shows the number of rolling stock of Government railways at 30th June, 1960.

GOVERNMENT RAILWAYS: ROLLING STOCK(a) AT 30th JUNE, 1960.

Railway System.	Locomotives.				Coaching Stock.(b)	Goods Stock.	Service Stock.
	Steam.	Diesel-electric.	Other.	Total.			
New South Wales ..	1,009	106	45	1,160	3,691	24,040	849
Victoria ..	354	87	68	509	(c) 2,424	20,995	(d) 1,635
Queensland ..	743	63	7	813	1,491	25,371	2,036
South Australia ..	225	52	..	277	(c) 679	7,855	(d) 467
Western Australia ..	323	67	10	400	611	11,396	993
Tasmania ..	57	32	17	106	142	(e) 2,699	137
Commonwealth ..	64	44	..	108	189	2,087	484
Australia ..	2,775	451	147	3,373	(f) 9,287	94,443	(f) 6,602

(a) Included in capital account. (b) Includes all brake vans. (c) Excludes 60 interstate coaching stock owned jointly by Victoria and South Australia. (d) Excludes one dynamometer car owned jointly by Victoria and South Australia. (e) Includes 83 privately-owned goods stock vehicles. (f) Includes stock owned jointly by Victoria and South Australia.

16. **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 1959–60:—

GOVERNMENT RAILWAYS: ACCIDENTS(a), 1959-60.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	C'wth.	Aust.
Persons killed ..	45	58	17	7	11	5	2	145
Persons injured ..	852	644	169	80	191	16	12	1,964

(a) Excludes accidents to railway employees.

17. **Consumption of Coal, Oil and Petrol.**—The following table shows the quantities of coal, oil and petrol consumed by the various government railways during 1959–60:—

GOVERNMENT RAILWAYS: COAL, OIL AND PETROL CONSUMED, 1959-60.

Railway System.	Coal.		Oil.				Petrol for Rail Cars.
	Locomotives.	Other Purposes.	Diesel Oil.(a)	Fuel Oil.(b)	Lubrication.	Other Purposes.	
	'000 tons.	'000 tons.	'000 gal.	'000 gal.	'000 gal.	'000 gal.	'000 gal.
New South Wales ..	1,021	14	12,104	5,071	716	801	(c)
Victoria ..	101	2	8,681	9,533	383	1,765	..
Queensland ..	500	12	6,206	..	267	189	27
South Australia ..	79	5	5,468	6,970	(d)	(d)	77
Western Australia ..	285	7	3,414	66	303	905	46
Tasmania ..	16	(e)	1,334	..	35	129	..
Commonwealth ..	(f)	(g)	3,883	..	94	464	6
Australia ..	2,002	40	41,090	21,640	(h) 1,798	(h) 4,253	156

(a) Used in internal combustion engines of locomotives and rail cars. (b) Used in oil-fired furnaces of steam locomotives. (c) 422 gallons. (d) Not available. (e) 377 tons. (f) 53 tons. (g) 255 tons. (h) Excludes South Australia.

18. **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 1959–60.

GOVERNMENT RAILWAYS: AVERAGE NUMBER OF EMPLOYEES AND SALARIES AND WAGES PAID, 1959-60.

Railway System.	Operating Staff.			Construction Staff.			Total Salaries and Wages Paid (£'000.)	Average Earnings Per Employee (£.)
	Salaried.	Wages.	Total.	Salaried.	Wages.	Total.		
New South Wales ..	9,205	41,131	50,336	..	25	25	54,666	1,085
Victoria ..	(a) 5,329	a 24,144	a 29,473	(b)	(b)	(b)	31,068	1,054
Queensland(c) ..	4,445	24,121	28,566	43	804	847	30,537	1,038
South Australia ..	1,820	7,561	9,381	5	860	865	10,576	1,032
Western Australia ..	1,963	10,994	12,957	(d)	(d)	(d)	12,596	972
Tasmania ..	366	2,028	2,394	23	173	196	2,466	952
Commonwealth ..	402	2,246	2,648	..	..	..	2,843	1,073
Australia ..	e 23,530	e112,225	e135,755	71	1,862	1,933	144,752	1,052

(a) Includes construction staff. (b) Included with operating staff. (c) Excludes Queensland portion of Uniform Gauge Railway. (d) Construction work is carried out by private contractors and the staff engaged is therefore not under the control of the Railway Commissioner. (e) Includes construction staff, Victoria.

C. TRAMWAY, TROLLEY-BUS AND OMNIBUS SERVICES.

1. **Systems in Operation.**—(i) *Tramway and Trolley-bus.* Since 1st April, 1947, all systems have been operated by government or municipal authorities. During the year 1959–60, tramway systems were in operation in the following cities—Sydney, Melbourne, Bendigo, Ballarat, Brisbane, Adelaide, and Hobart. Trolley-bus services operated in Brisbane, Adelaide, Perth, Hobart and Launceston. All systems were electric.

In many parts of Australia, private lines used for special purposes in connexion 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 conveyance of passengers, which are dealt with in the present section.

(ii) *Motor Omnibus.* Government and municipal authorities operate certain services and the others are run by private operators. Statistics are collected for government and municipal omnibus services located in all State capital cities, Canberra, Newcastle, Maryborough, Rockhampton, Fremantle, Eastern Goldfield's area of Western Australia and in respect of country road services operated by the Western Australian Government Railways. In Sydney, the government tramway system has now been replaced by omnibus services and in Perth the Metropolitan Passenger Transport Trust has acquired a number of formerly privately owned metropolitan services.

Particulars of motor omnibus services under the control of private operators are recorded in the States of New South Wales, Victoria, South Australia and Western Australia. In New South Wales particulars of private services are compiled for the Sydney Metropolitan and Newcastle transport district and the city of Greater Wollongong. In Victoria they relate to the Melbourne Metropolitan area only, and in South Australia to services licensed by the Metropolitan Transport Trust and the Transport Control Board. In Western Australia, particulars of all private services throughout the State are included.

2. **Government and Municipal Services.**—(i) *Summary of Operations, States.* 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. For tramway services, there were, at 30th June, 1960, 270 route miles of 4 ft. 8½ in. gauge and 5 route miles of 3 ft. 6in. gauge.

The following table gives a summary of the operations of tramway, trolley-bus and omnibus systems controlled by Government and Municipal authorities, for 1959–60.

**TRAMWAY, TROLLEY-BUS AND OMNIBUS SERVICES: GOVERNMENT
AND MUNICIPAL, 1959–60.**

Particulars.	N.S.W. (a)	Vic.	Qld.	S.A.	W.A.	Tas.	A.C.T.	Aust.
Route-miles at 30th June—								
Tram miles	32	165	66	7	..	5	..	275
Trolley-bus .. .. "	..	..	20	23	22	27	..	92
Omnibus "	539	58	430	107	3,799	785	55	5,773
Vehicle miles—								
Tram '000	4,500	20,585	8,086	616	..	592	..	34,379
Trolley-bus .. .. "	..	..	1,098	1,555	1,194	1,597	..	5,444
Omnibus "	41,005	5,836	5,741	9,782	14,303	3,934	1,154	81,755
Rolling Stock at 30th June—								
Tram No.	258	830	367	30	..	29	..	1,514
Trolley-bus .. .. "	..	..	36	56	75	79	..	246
Omnibus "	1,638	210	268	364	450	172	63	3,165
Passenger journeys—								
Tram '000	45,173	184,069	80,670	3,001	..	27,979	..	758,676
Trolley-bus .. .. "	..	..	11,081	7,562	6,760	{	..	
Omnibus "	237,936	31,286	30,102	47,605	41,583		3,869	
Net increase in capital equipment during year—								
Tram, Trolley-bus and Omnibus £'000	-21	639	349	22	(b)	255	62 (c)	1,306
Gross revenue (d)—								
Tram, Trolley-bus and Omnibus £'000	14,079	8,845	3,638	2,820	2,239	1,156	159	32,936
Working expenses (e)—								
Tram, Trolley-bus and Omnibus £'000	14,456	8,629	3,707	2,785	2,473	1,357	222	33,629
Net revenue—								
Tram, Trolley-bus and Omnibus £'000	-376	216	-70	36	-235	-201	-63	-693
Ratio of working expenses to gross revenue—								
Tram, Trolley-bus and Omnibus percent.	102.67	97.56	101.91	98.74	110.49	117.38	139.47	102.10
Employees—								
Tram, Trolley-bus and Omnibus No.	8,871	5,533	2,905 (f)	1,788	1,592	756	110	21,555
Accidents—								
Tram and Trolley-bus (g)—								
Persons killed No.	4	17	5	1	..	2	..	29
Persons injured "	234	1,136	327	469	95	70	..	2,331

(a) Trolley buses ceased to operate in New South Wales on 30th August, 1959. (b) Not available.
(c) Excludes Western Australia. (d) Excludes government grants. (e) Includes provision of reserves for depreciation, etc., where possible. (f) Average. (g) Includes accidents relating to omnibuses operated by the Adelaide Municipal Tramways Trust and the Hobart and Launceston Metropolitan Transport Trust, and excludes accidents to employees in New South Wales.

NOTE.—Minus sign (—) denotes deficit.

RAILWAY SYSTEMS AUSTRALIA

SCALE OF MILES

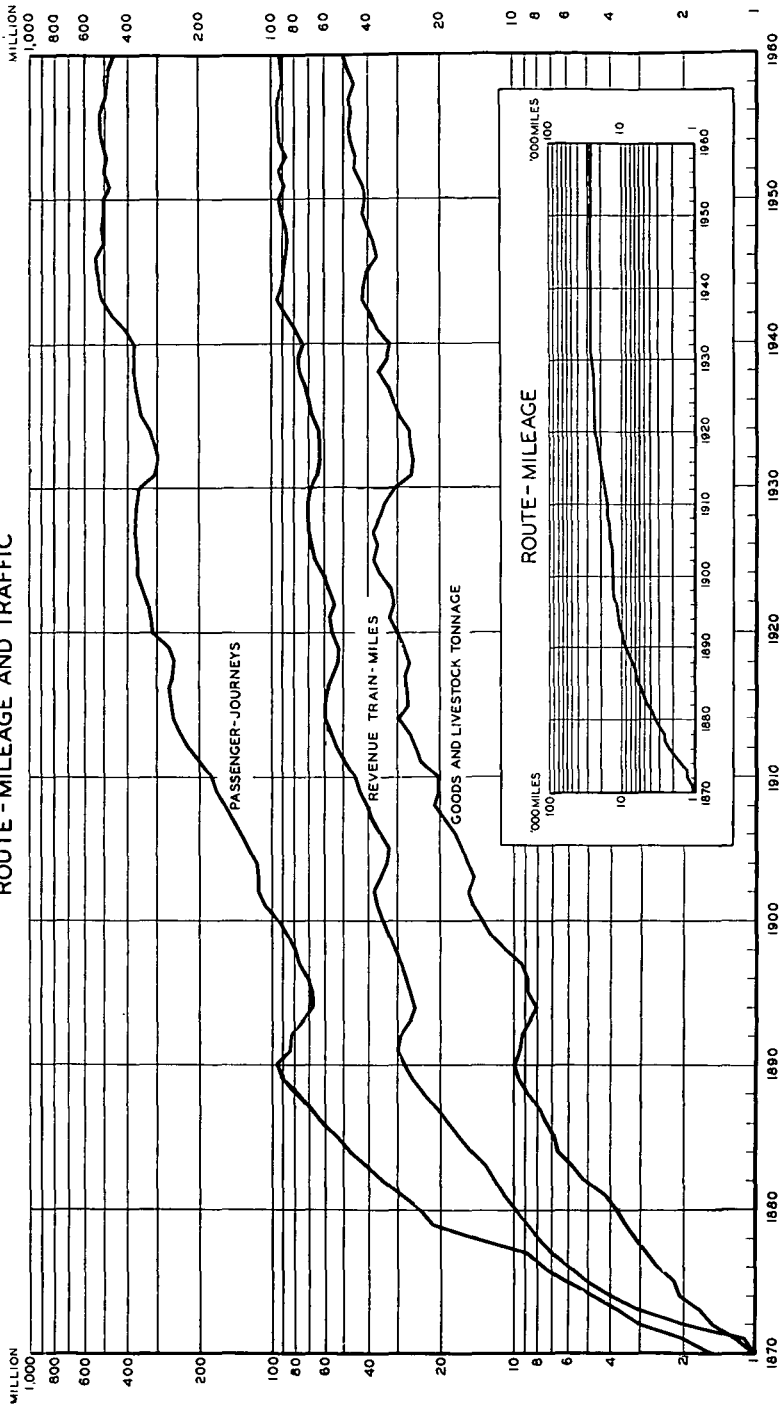
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GOVERNMENT RAILWAYS: AUSTRALIA, 1870 TO 1960

RATIO GRAPH

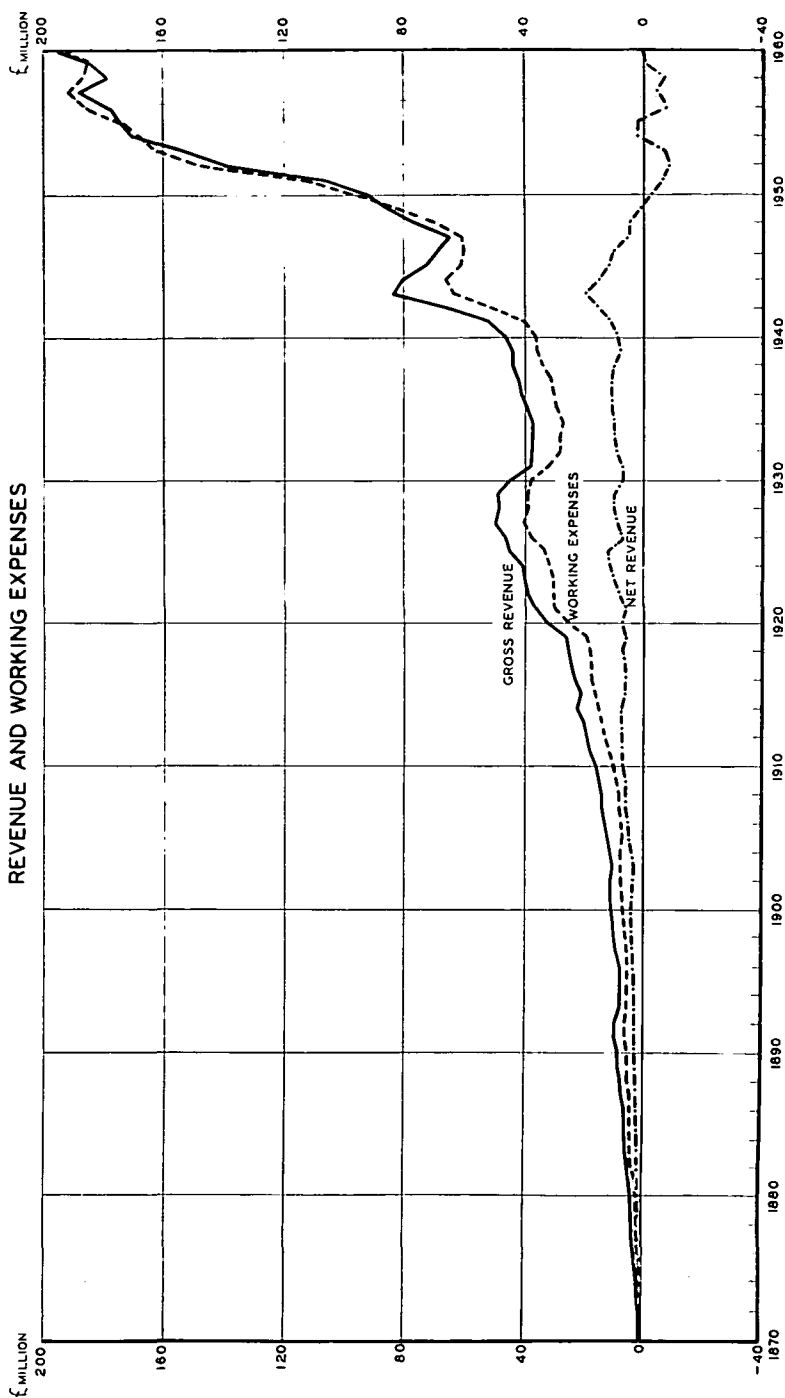
ROUTE - MILEAGE AND TRAFFIC



NOTE:— VERTICAL SCALE IS LOGARITHMIC, AND THE CURVES RISE AND FALL ACCORDING TO RATE OF INCREASE OR DECREASE. ACTUAL NUMBERS ARE INDICATED BY SCALE.

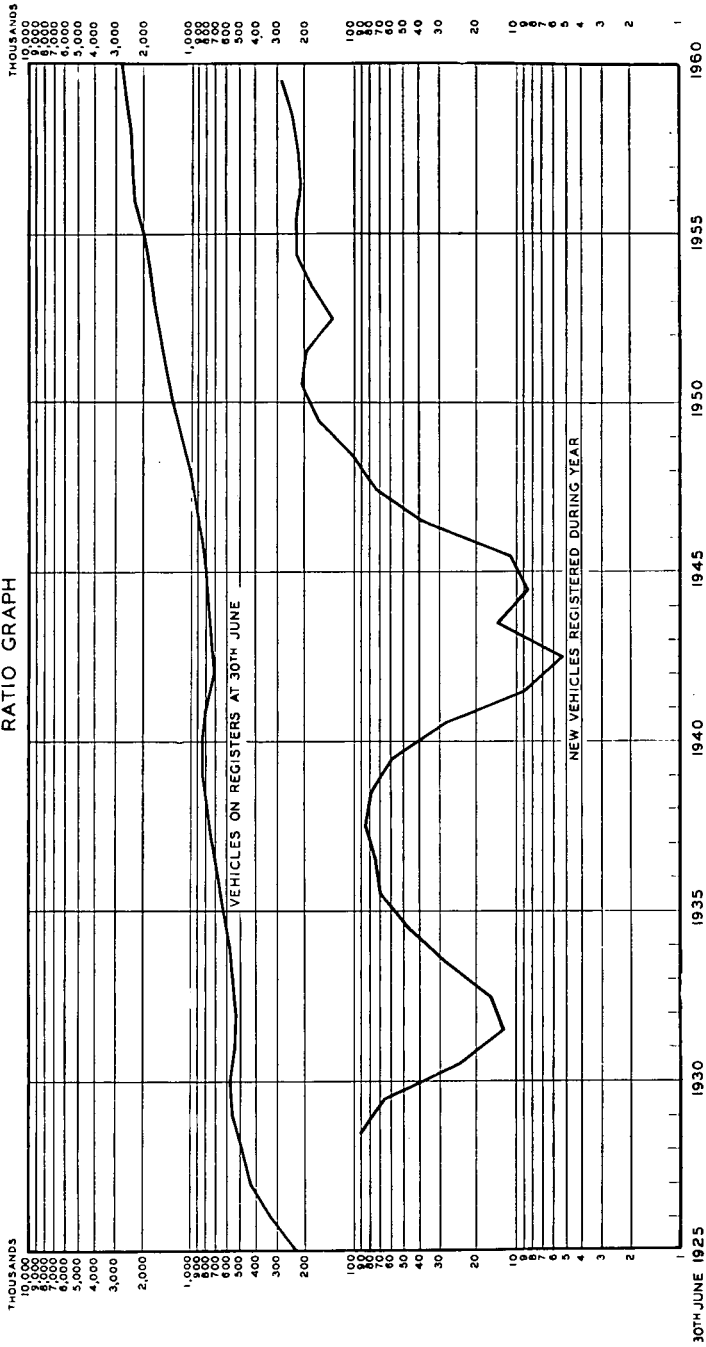
GOVERNMENT RAILWAYS : AUSTRALIA, 1870 TO 1960

REVENUE AND WORKING EXPENSES



MOTOR VEHICLE REGISTRATIONS: AUSTRALIA, 1925 TO 1960

(EXCLUDING MOTOR CYCLES)



(ii) *Summary of Operations, Australia.* 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 1955-56 to 1959-60.

TRAMWAY, TROLLEY-BUS AND OMNIBUS SERVICES: GOVERNMENT AND MUNICIPAL, AUSTRALIA.

Particulars.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Route-miles at 30th June—					
Tram miles	427	398	344	286	275
Trolley-bus "	91	96	98	105	92
Omnibus "	4,571	4,869	4,803	5,664	5,773
Vehicle miles—					
Tram(a) '000	51,630	(b)50,601	43,813	37,659	34,379
Trolley-bus "	6,273	6,053	5,803	5,277	5,444
Omnibus "	58,789	60,007	64,878	78,881	81,755
Rolling stock at 30th June—					
Tram No.	2,303	2,106	1,796	1,584	1,514
Trolley-bus "	316	310	305	279	246
Omnibus "	2,392	2,474	2,730	3,027	3,165
Passenger-journeys—					
Tram(a) '000	534,266	479,399	423,471	346,957	312,913
Trolley-bus "	34,185	32,263	28,607	25,720	25,403
Omnibus(c) "	358,593	320,605	350,652	404,676	420,360
Net increase in capital equipment during year—					
Tram, Trolley-bus and Omnibus .. £'000	1,799	2,770	2,932	1,880	(d) 1,306
Gross revenue(e)—					
Tram, Trolley-bus and Omnibus "	25,471	29,473	28,762	30,162	32,936
Working expenses(f)—					
Tram, Trolley-bus and Omnibus "	31,528	31,986	31,701	32,338	33,629
Net revenue—					
Tram, Trolley-bus and Omnibus "	-6,057	-2,513	-2,939	-2,176	-693
Ratio of working expenses to gross revenue—					
Tram, Trolley-bus and Omnibus per cent.	123.78	108.53	110.22	107.21	102.10
Employees—					
Tram, Trolley-bus and Omnibus No.	24,336	23,887	22,679	22,569	21,555
Accidents—					
Tram and Trolley-bus(g)—					
Persons killed .. No.	42	45	36	31	29
Persons injured .. "	3,077	3,158	2,969	2,399	2,331

(a) Includes particulars for New South Wales trolley-buses up to cessation of operation in August, 1959.

(b) Tramway vehicle miles compiled on a revised basis for New South Wales; therefore figures from 1956-57 are not comparable with those for previous years.

(c) Includes particulars for Tasmanian trams and trolley-buses.

(d) Excludes Western Australia.

(e) Excludes government grants.

(f) Includes provision of reserves for depreciation, etc., where possible.

(g) Includes accidents relating to omnibuses operated by the Adelaide Municipal Tramways Trust and the Hobart and Launceston Metropolitan Transport Trust, and excludes accidents to employees in New South Wales.

NOTE.—Minus sign (—) denotes deficit.

3. *Private Services.—Summary of Operations.* The following table shows the operations of motor omnibus services under the control of private operators in New South Wales, Victoria, South Australia and Western Australia during each of the years 1955–56 to 1959–60:—

MOTOR OMNIBUS SERVICES: PRIVATE.

Year. —	Number of Omnibuses.	Omnibus-miles. (‘000.)	Passenger-journeys. (‘000.)	Value of Plant and Equipment. (£‘000.)	Gross Revenue. (£‘000.)	Persons Employed.
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NEW SOUTH WALES.(a)

1955–56..	808	24,335	96,759	1,384	3,216	1,583
1956–57..	848	24,449	93,761	1,424	3,676	1,635
1957–58..	901	25,385	96,803	1,584	3,722	1,704
1958–59..	916	25,496	95,457	1,586	3,721	1,545
1959–60..	936	26,676	98,303	1,661	4,025	1,679

VICTORIA.(b)

1955–56..	467	16,064	78,698	(c) 519	1,994	(d) 735
1956–57..	459	16,094	74,026	655	2,196	732
1957–58(e)	472	15,701	73,020	670	2,219	714
1958–59(e)	469	15,592	72,005	670	2,206	750
1959–60(e)	477	15,448	70,719	759	2,319	705

SOUTH AUSTRALIA.(f)

1955–56..	113	6,082	13,508	(g) {	707	(g) }
1956–57..	117	6,045	13,254		712	
1957–58..	113	6,096	12,713		726	
1958–59..	116	6,042	12,107		732	
1959–60..	117	6,208	11,457		833	

WESTERN AUSTRALIA.(h)

1955–56..	372	12,172	32,607	1,125	1,581	827
1956–57..	378	11,801	30,802	1,142	1,594	837
1957–58..	383	11,644	29,881	1,030	1,577	800
1958–59(i)	146	6,028	15,846	260	804	287
1959–60..	137	4,142	11,183	243	585	272

(a) Metropolitan, Newcastle and Wollongong transport districts only. (b) Metropolitan area only. (c) Vehicles only. (d) Drivers only. (e) Partly estimated. (f) Services licensed by the Metropolitan Transport Trust and the Transport Control Board. (g) Not available. (h) Includes services operated in metropolitan and rural areas. (i) During 1958–59, five private services were taken over by the Metropolitan Transport Trust.

D. FERRY (PASSENGER) SERVICES.

1. *General.*—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 Derwent River at Hobart, on the Mersey River at Devonport and across D’Entrecasteaux Channel to Bruny Island. Control is exercised both by governmental authorities and by private operators. In Victoria and Queensland the services operated are not extensive. There are no ferry passenger services in South Australia.

2. **Summary of Operations.**—The operations of ferry passenger services in New South Wales, Western Australia and Tasmania during the years 1955-56 to 1959-60 are summarized in the following table. Particulars of passengers carried on vehicular ferries are not included.

FERRY (PASSENGER) SERVICES.

Year.	Number of Vessels.	Passenger Accommodation.	Passenger-journeys. (‘000.)	Gross Revenue. (£.)	Persons Employed.
NEW SOUTH WALES—SYDNEY AND NEWCASTLE.					
1955-56	39	22,696	18,056	741,695	346
1956-57	40	22,950	16,810	875,000	341
1957-58	39	22,179	16,375	846,000	318
1958-59	37	19,300	15,906	800,196	308
1959-60	37	19,191	15,365	835,700	298
WESTERN AUSTRALIA—PERTH.					
1955-56	4	785	437	9,944	10
1956-57	4	785	445	12,836	11
1957-58	4	785	442	13,520	11
1958-59	4	785	407	13,504	11
1959-60	4	785	362	12,219	7
TASMANIA—HOBART AND DEVONPORT.					
1955-56	5	1,582	1,034	29,531	33
1956-57	5	1,602	707	29,632	24
1957-58	5	1,602	493	22,399	23
1958-59	5	1,602	445	22,202	23
1959-60	5	1,562	465	22,427	22

E. MOTOR VEHICLES.

1. **Motor Industry.**—Chapter VI.—Manufacturing Industry contains summarized information on the motor industry of Australia and includes some data on the imports of motor bodies and chassis. Chapter XIII.—Trade contains further data on imports, including those of petroleum products.

2. **Registration.**—(i) *General.* 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. The following statement indicates the procedure followed at 30th June, 1960, in each of the States and Territories, and the fees for registration and licensing and the amount of motor tax payable where this tax is not incorporated in the registration fees. Complete or partial exemption from the payment of registration fees or motor tax is usually granted for certain vehicles, such as ambulances, fire-brigade vehicles, those owned by farmers and used solely for carting the produce of, or requisites for, their farms, Government-owned vehicles, etc.

In all States except South Australia, before a licence to drive a motor vehicle or ride a motor cycle is issued, the applicant must, by passing the prescribed test, satisfy the competent authority that he or she is capable of driving or riding the vehicle concerned. All vehicles before being registered must be tested for road-worthiness.

(ii) *New South Wales.* The registration of vehicles, licensing of drivers, and collection of various taxes, fees and charges are functions of the Commissioner for Motor Transport. By arrangement with the Commissioner for Motor Transport, the police effect the registrations and collect the taxes and fees in certain areas. The normal term of registrations and licences and renewals thereof is a year, but quarterly registrations of motor vehicles are permitted under certain conditions. A driver's licence costs £1 a year for a motor vehicle and a rider's licence 15s. a year for a motor cycle. A learner's permit, which has a currency of two months, costs 5s. Annual registration fees are as follows:—Motor cycles, 15s.; motor cars, lorries, trailers, tractors and plant, £1 10s.; taxi cabs, hire cars and motor omnibuses—metropolitan

area and cities of Greater Wollongong and Newcastle, £5; country, £3; traders' plates—motor cycles, £3 3s. 6d., other vehicles, £13 15s. An additional fee of 10s. a year is payable in respect of any vehicle used in trade or business. A motor tax is payable in addition to the registration fee. For motor cycles the tax is:—without side-car, £1 7s.; with side-car or box, £2 7s. 6d. For vehicles other than motor cycles, the tax is payable on the unladen weight of the vehicle. The taxes payable for different classes of vehicles are as follows:—

Motor cars (including taxi-cabs, etc.). The rate commences at 3s. 6d. a $\frac{1}{2}$ cwt. but decreases slightly as the weight of the vehicles increases.

Motor Lorries, Trailers and Plant. The tax payable commences at £1 15s. for a vehicle of 5 cwt. or less, and rises by a proportionately greater amount for each increase of 5 cwt., so that the average amount payable per cwt. increases with the weight of the vehicle.

Tractors. The rates of tax are the same as for motor lorries, subject to a maximum of £31 14s. 6d.

Motor Omnibuses and Tourist Vehicles. The rate commences at 5s. a $\frac{1}{2}$ cwt., but decreases slightly as the weight of the vehicle increases.

In the case of vehicles with solid rubber tyres, the rates shown above are increased by 25 per cent.

(iii) *Victoria*. The registration of motor vehicles and the licensing of drivers and riders are controlled by the Chief Commissioner of Police under the provisions of the Motor Car Act. The annual fees payable for the registration of motor vehicles and licensing of drivers and riders are as follows:—

Motor cycles (without trailer, fore-car or side-car attached)	£1 10s.
Motor cycles (with trailer, etc.) ..	£2 5s.
Motor cars (private use) ..	4s. 6d. for each power-weight unit. (The number of power-weight units equals the sum of the horsepower and the weight in cwt. of a motor car unladen and ready for use.)
Trailers attached to motor cars ..	£1 10s. to £6, according to the unladen weight and type of tyres.
Commercial Passenger Vehicles (omnibus type)—operating under specified licences	£7 10s.
Motor cars used for carrying passengers or goods for hire or in the course of trade	From 5s. 6d. to 13s. 3d. for each power-weight unit, according to the unladen weight and type of tyres.
Motor cars (constructed for the carriage of goods) owned by primary producers and used solely in connexion with their business	From 3s. 9d. to 8s. for each power-weight unit, according to the number of wheels and type of tyres. (When more than one motor car is owned, the rate shall apply to one motor car only.)
Self-propelled mobile cranes used otherwise than for lifting and towing vehicles	£10 (unless a lower fee would otherwise have been payable).
Drivers' and riders' licences (3 years)	£1 10s.

Notwithstanding anything in the foregoing paragraphs, the minimum fee payable for the registration of a motor vehicle (other than a motor cycle) shall be £4 10s.

On 16th November, 1959, the Victorian Government placed a surcharge of £1 on every Third Party Insurance Premium. As from 16th May, 1960, no registration fee shall be payable on certain vehicles incorporating agricultural implements, used within certain limits.

(iv) *Queensland*. The Main Roads Department controls the registration of motor vehicles within the State. The rates are as follows:—Annual registration fees for pneumatic-tyred vehicles propelled by petrol engines are determined by adding the horsepower to the weight in cwt. of the vehicle ready for use, and charging 6s. a unit. For solid-tyred vehicles propelled by petrol engines the sum of the horsepower, weight of the vehicle, and maximum permissible load (in cwt.) is charged at 5s. a unit if the maximum permissible load is not over 2 tons, and 9s. a unit if over 2 tons. Registration fees for trailers are determined at the rate

of 6s. a cwt., and for caravan trailers at the rate of 9s. a cwt. Traction engines are registered at the fixed rate of £3 3s. a year. The fees payable according to these rates on motor cars range from £3 12s. to approximately £27. On pneumatic-tyred trucks and utilities, the fees are from about £12 12s. to over £15 for a truck with a capacity of 1 ton, and up to £30 for 5-ton trucks. Fees for motor cycles are £2 5s., or £3 8s. with a side-car. With the above-mentioned fees, an annual driving fee of 15s. for a motor vehicle or motor cycle must be paid to the Main Roads Department.

The driver of any motor vehicle or the rider of any motor cycle must hold a licence from the Commissioner of Police. Licences are endorsed according to the types of vehicles in the operation of which the holder has shown proficiency and which he or she is permitted to operate. The period of currency of a licence varies according to the age of the applicant, namely:—Aged under 41 years, 10 years; 41 years and under 46 years, until 51st birthday; 46 years and under 62 years, 5 years; 62 years and under 66 years, until 67th birthday; 66 years and over, 1 year.

(v) *South Australia.* Under the provisions of the Motor Vehicles Act 1959, the Registrar of Motor Vehicles controls the registration of all motor vehicles, and the granting of licences. The same fee is prescribed for both a motor vehicle propelled by a compression ignition (diesel) engine and a vehicle of the same horsepower and weight propelled by a petrol engine. The power-weight unit is the basis for the calculation of registration fees. The period of registration is for six or twelve months commencing with the date of registration. Commercial vehicles owned by primary producers, prospectors or fishermen are registered at 50 per cent. of the ordinary fee. The ordinary fees payable for yearly registration of motor vehicles, other than motor cycles and trailers, extend from a minimum of £3 (commercial vehicles £3) for 10 power-weight units or less to £40 10s. (commercial vehicles £56) for 125 power weight units. For each additional 5 power weight units or part thereof in excess of 125, £2 (commercial vehicles £3) is charged. The ordinary fees for motor cycles are:—solo up to 1cwt., £1 10s.; over 1 cwt., £2 5s.; with sidecar attached, £3. Fees for trailers vary according to the weight of the vehicle and range from £2 5s. for 1 ton or less, to £4 10s. for 2 tons or more. An extra 50 per cent. is charged for trailers with solid rubber tyres and 100 per cent. for those with metal tyres. Fees for drivers' and riders' licences are:—for any motor vehicle, £1; for a motor cycle, 10s.

(vi) *Western Australia.* The Traffic Act 1919–1960 provides for the registration of motor vehicles by (i) the Commissioner of Police for the Metropolitan Traffic District and (ii) individual Local Government Authorities (10 Municipalities and 114 District Road Boards) throughout the remainder of the State. Ministerial supervision is exercised by the Minister for Transport. Registration fees for motor vehicles other than motor cycles are assessed on a power-weight unit basis. The power-weight of a vehicle is the weight in cwt. of the vehicle ready for use plus the rated (R.A.C. formula) horsepower. As at 30th June, 1960, annual fees for all types of vehicles were as follows:—cars, 5s. for each power-weight unit; commercial vehicles, from 6s. a unit to 9s. a unit where the number of units exceeds 100; tractors (other than prime movers), 4s. each unit; tractors (prime movers), from 5s. 3d. a unit (maximum 50 units) to 9s. a unit where the number of units exceeds 100. Trailers and caravans are assessed on the unladen weight and semi-trailers (the trailer portion of an articulated vehicle) on a load plus weight basis. Annual fees are:—trailers, from £1 10s. (10 cwt.) to £20 (30 cwt.) and £1 for each cwt. in excess of 30 cwt.; caravans, from 3s. to 5s. a cwt.; semi-trailers, from £1 10s. where the weight of the semi-trailer plus the declared maximum load does not exceed 10cwt., to £72 for the first 10 tons and £6 for each additional ton of load-weight thereafter.

Additional fees are chargeable as follows:—80 per cent. extra if fitted with metal tyres, 40 per cent. if fitted with solid rubber tyres and 10 per cent. if fitted with cushion tyres (i.e., neither solid nor pneumatic), whilst vehicles such as excavators, graders, tractors, etc., using fuel other than petrol are charged at double the assessed fee. Annual fees for motor cycles vary from 15s. (maximum 75 c.c.) to £2 10s. for over 350 c.c. capacity and, with side-car attached, £3 irrespective of the size of the motor cycle. Vehicles used in the carriage of either passengers or goods for hire or reward (other than an omnibus licenced under the State Transport Co-ordination Act 1933–1948) are subject to the additional registration fee of 15s. a wheel or pair of dual wheels (i.e. £1 10s. per axle). The issue of drivers', riders' and conductors' licences, on an annual basis, is the sole prerogative of the Commissioner of Police. The annual driver/rider licence fee is £1 whilst the additional fee to drive an omnibus or taxi (conductor's licence) is 10s. The maximum period for vehicle registration is twelve months, but half-yearly renewals may be effected. Date to date registration periods operate in the Metropolitan traffic area; elsewhere, a quarterly system of "staggering", whereby the last day of each quarter is an expiry date, is in operation.

(vii) *Tasmania*. By the Transport Act 1938 the Transport Commission assumed control of the registration and taxation of motor vehicles, the licensing of drivers and the regulation of commercial transport. Annual registration fees are as follows:—Motor vehicles other than motor cycles and trailers, £1 10s. trailers, £1; motor cycles, £1. Charges for transfer of registration of vehicles and duplicate certificates are 10s. and 2s. 6d. respectively. Charge for the transfer of trailers is 5s. A licence to drive or ride any motor vehicle costs £1 per year. Motor tax is calculated on a power-weight basis—i.e., unladen weight units and horse-power. Separate rates are provided for lorries, trailers, and other motor vehicles. For lorries and trailers, every $\frac{1}{2}$ cwt., and for other motor vehicles, every cwt., constitutes a weight unit. The rate of tax for lorries is 3s. 6d. a unit and for motor vehicles other than lorries and trailers 4s. 6d. a unit. In the case of a trailer, if the number of weight units does not exceed ten, no tax is payable, but for every unit exceeding ten the rate is 3s. 6d. For motor cycles the tax is £2 for less than 1 horse-power, and £2 15s. for 1 horse-power and over.

(viii) *Northern Territory*. The registration of motor vehicles and the licensing of drivers and riders is controlled by the Registrar of Motor Vehicles, under the provisions of the Motor Vehicles Ordinance 1949–1959. Annual registration fees for motor cars, motor lorries and tractors and motor omnibuses vary according to whether the vehicle is fitted with (a) pneumatic, semi-pneumatic rubber or super-resilient tyres or (b) non-pneumatic or solid tyres. The fees payable (for each $\frac{1}{2}$ cwt.) are as follows:—motor cars, (a) 2s. 9d., (b) 3s. 9d.; motor lorries and tractors, (a) 2s. 9d., (b) 3s. 6d.; motor omnibuses, (a) 4s. 3d., (b) 5s. 6d. For British manufactured vehicles these rates are reduced by 6d. a $\frac{1}{2}$ cwt. A concession of 50 per cent. is allowed for (a) a motor lorry or tractor owned and used by a farmer or grazier solely for transporting his own produce or requisites for his business and (b) a motor lorry owned and used by a person engaged, on his own account and not in association with more than two other persons, in mining, hunting or trapping. The maximum fee for a motor tractor is £15. Registration fees for motor cycles are as follows:—without side-car—British manufactured, £1 1s., other, £1 2s. 6d.; with side-car—British manufactured, £1 18s., other, £2. For other motor vehicles the fees are—British manufactured, 3s. a $\frac{1}{2}$ cwt., other, 3s. 6d. a $\frac{1}{2}$ cwt.

The annual fee for a licence to ride a motor cycle is 5s. and to drive any other motor vehicle 10s. Where the licence is in respect of a motor lorry with a carrying capacity of more than one ton, a motor omnibus, a hire car, or a motor vehicle licensed to carry goods or to carry workmen to and from their work, an additional 10s. is payable. The fee for the use of one trader's plate is £1.

(ix) *Australian Capital Territory*. The registration of motor vehicles and the licensing of drivers and riders in the Australian Capital Territory is controlled by the Australian Capital Territory Services Branch of the Department of the Interior under the provisions of the Motor Traffic Ordinance 1936–1960. Annual registration fees for motor cars, lorries and omnibuses are as follows (rates are for each $\frac{1}{2}$ cwt. of unladen weight):—motor cars, 3s. 6d. a $\frac{1}{2}$ cwt.; motor lorries—not over 40 cwt. unladen weight, 3s. 6d.; over 40 to 80 cwt., 4s. 3d.; over 80 to 120 cwt., 5s.; over 120 cwt., 5s. 9d.; motor omnibuses, 5s. Fees for other motor vehicles are:—motor cycles—without side-car, £1 10s., with side-car, £2 10s.; motor tractors—primary producers', £1, other, £5; other motor vehicles, £5. The rates charged for the registration of trailers are:—domestic, social or farmers' purposes only—unladen weight not over 5 cwt., 10s.; over 5 to 10 cwt., £1; over 10 cwt., £1 for every 10 cwt. or part thereof; other trailers—2s. 9d. a $\frac{1}{2}$ cwt. of the unladen weight. Concessions are available in the case of vehicles owned by primary producers, totally and permanently incapacitated ex-servicemen, clergymen and certain members of the staffs of diplomatic missions.

The annual fees for drivers' and riders' licences are:—car, lorry or motor cycle, 10s., other vehicles, 12s. 6d.

3. *Taxi-cabs and Other Hire Vehicles*.—In all the capital cities and in most of the provincial centres, taxi-cabs and other vehicles ply for hire under licence granted by either the Commissioner of Police or the local government authority concerned. As most of these vehicles are independently controlled by individuals or small companies, it has not been possible to obtain complete data in respect of their operations.

4. *Motor Omnibuses*.—In both urban and provincial centres, motor omnibus traffic has assumed considerable proportions during recent years, and in some States the railway and tramway systems run motor services complementary to their main services. There has been a considerable replacement also, during the last few years, of existing tramway services by trolley-bus and motor omnibus services. (See pp. 545–6.)

5. *Motor Vehicles on the Register, etc.—(i) Registrations and Revenue.* The following table shows particulars of the registration of motor vehicles, licences issued and revenue received for 1959–60 and a summary for Australia for each of the years 1955–56 to 1959–60. It should be noted that in Victoria registration is made on the basis of the purpose for which the vehicle is to be used; consequently, motor car registrations are overstated by the inclusion of commercial vehicles registered for private use.

A graph showing, for all motor vehicles other than motor cycles, the registrations in force at 30th June of each year from 1925 to 1960 will be found on page 550.

MOTOR VEHICLES: REGISTRATIONS AND REVENUE.

State or Territory, and Year.	Number of Motor Vehicles Registered at 30th June.(a)					Number of Drivers' and Riders' Licences in force at 30th June.	Gross Revenue derived from—			
	Motor Cars.(b)	Commercial Vehicles.(c)	Motor Cycles.	Total.	Per 1,000 of Population at 30th June.		Vehicle Registrations and Motor Tax.	Drivers' and Riders' Licences.	Other Sources.	Total.
							(£'000.)	(£'000.)	(£'000.)	(£'000.)
STATES AND TERRITORIES, 1959–60.										
N.S.W. . .	628,072	314,832	28,773	971,677	254	1,275,245	11,309	1,324	4,791	17,424
Victoria (d)	652,289	172,535	22,006	846,830	293	967,952	9,759	904	3,543	14,206
Queensland	241,613	147,184	17,946	406,743	278	(e)	5,469	300	1,518	7,287
S. Aust. . .	192,872	67,887	15,934	276,693	293	331,596	3,812	417	101	4,330
W. Aust. . .	127,863	70,325	13,609	211,797	290	246,586	2,437	215	110	2,762
Tasmania	64,751	26,083	3,123	93,957	270	108,205	1,136	108	137	1,381
Nor. Terr.	4,324	4,651	717	9,692	445	10,609	50	8	1	59
A.C.T. . .	12,413	3,757	382	16,552	316	24,659	143	12	2	157
Australia . .	4,192,419	1,807,254	102,490	6,102,163	276	6,298,485	34,115	3,288	10,203	47,606

SUMMARY, AUSTRALIA.

	(d)	(d)		(f)						
1955-56 ..	1,467,252	683,396	125,600	2,276,248	241	2,457,246	24,431	1,874	3,386	29,698
1956-57 ..	1,564,335	707,107	119,963	2,391,405	248	2,575,896	27,37	2,205	4,803	34,387
1957-58 ..	1,675,638	735,171	115,883	2,526,692	257	2,703,328	30,69	2,368	5,467	38,534
1958-59 ..	1,782,852	766,281	110,552	2,659,685	264	2,833,040	31,64	2,721	8,373	42,736
1959-60 ..	1,924,197	807,254	102,490	2,833,941	276	2,984,852	34,115	3,288	10,203	47,606

(a) Excludes, at 30th June, 1960, trailers (215,472), road tractors, etc. (70,451), and dealers' plates (9,715). (b) Includes taxis, hire cars and station wagons. (c) Includes utilities, panel vans, trucks and omnibuses. (d) See reference to Victoria above. (e) Not available. (f) Excludes Queensland.

NOTE.—All Commonwealth-owned vehicles are included except those belonging to the Defence Services. Prior to 1st January, 1956, Department of the Navy vehicles were also included.

(ii) *Relation to Population.* The table following shows the number of vehicles (excluding motor cycles) registered per 1,000 of population in each State and Territory at 30th June for each of the years 1956 to 1960.

MOTOR VEHICLES (EXCLUDING MOTOR CYCLES) REGISTERED PER 1,000 OF POPULATION.

Date.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.	
30th June, 1956	..	204	250	223	257	243	223	272	277	228
" 1957	..	213	255	233	264	245	231	313	274	236
" 1958	..	224	264	243	269	251	241	360	286	245
" 1959	..	234	272	253	267	259	248	370	296	253
" 1960	..	246	285	266	276	271	261	417	309	266

6. **New Vehicles Registered.**—(i) *States and Territories, 1959–60.* The following table shows the number of new vehicles registered in each State and Territory during 1959–60. A graph showing the number of new motor vehicles (excluding motor cycles) registered during each of the years 1928–29 to 1959–60 will be found on page 550.

NEW MOTOR VEHICLES REGISTERED, 1959–60.

Vehicles.	N.S.W.	Vic.(a)	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Motor cars (b) ..	69,353	74,036	25,664	20,847	13,692	6,527	482	1,820	212,421
Commercial vehicles, etc.(c) ..	42,077	16,334	11,859	5,588	5,695	2,114	390	497	84,554
Motor cycles ..	2,211	2,220	1,548	1,561	1,949	97	25	81	9,692
Total ..	113,641	92,590	39,071	27,996	21,336	8,738	897	2,398	306,667

(a) See para. 5(i) on p. 557. (b) Includes taxis, hire cars and station wagons. (c) Includes utilities, panel vans, trucks and omnibuses.

(ii) *Australia.* Particulars of the number of new vehicles registered in Australia during each of the years 1955–56 to 1959–60 are shown in the following table:—

NEW MOTOR VEHICLES REGISTERED: AUSTRALIA.

Vehicles.	1955–56.	1956–57.	1957–58.	1958–59.	1959–60.
Motor cars (a)(b)	163,598	149,695	165,236	170,181	212,421
Commercial vehicles, etc.(b)(c)	69,312	58,967	67,139	74,390	84,554
Motor cycles	10,530	9,655	10,604	9,992	9,692
Total	243,440	218,317	242,979	254,563	306,667

(a) Includes taxis, hire cars and station wagons. (b) See para. 5(i) on p. 557. (c) Includes utilities, panel vans, trucks and omnibuses.

7. **World Motor Vehicle Statistics, 1960.**—At 1st January, 1960 there were 117,788,400 motor cars, trucks and omnibuses registered in various countries of the world. This is an increase of 5.0 per cent. on the figure for the previous year, 112,147,200. Of the 1960 registrations, 70,234,300 or 67.7 per cent. of the world total were in the United States of America, whilst Australian registrations amounted to 2.3 per cent. This information is largely derived from the *American Automobile*, May, 1960.

F. ROADS AND BRIDGES.

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

G. ROAD TRAFFIC ACCIDENTS.

1. **General.**—Statistics of "Total Accidents Recorded" were collected to 31st December, 1957, on a comparable basis for all States except Tasmania, where, under legislation passed on 10th August, 1954, it became no longer obligatory to report accidents involving only damage to property. However, this series was suspended from 1st January, 1958, owing to the inconsistency between States in recording "damage only" accidents.

Details are not available in respect of road traffic accidents which occur in the Northern Territory.

2. **Accidents Involving Casualties.**—(i) *States, 1959–60.* The following table gives a summary of accidents involving casualties in each State and the Australian Capital Territory for the year 1959–60.

**ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): ACCIDENTS
RECORDED AND CASUALTIES, 1959–60.**

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 ..	16,871	939	25	10	22,330	589	230
Victoria ..	12,267	698	24	8	16,595	582	202
Queensland ..	5,720	359	25	9	8,054	556	198
South Australia ..	5,340	203	22	7	6,856	734	248
W. Australia ..	3,656	180	25	8	4,788	660	226
Tasmania ..	743	79	23	8	1,004	289	107
Aust. Cap. Terr. ..	322	10	20	6	477	954	288
Total ..	44,919	2,468	24	9	60,104	591	219

(a) Accidents (reported to the police) which occurred in public thoroughfares and which caused death or injury to persons to an extent requiring surgical or medical treatment.

(ii) *Riders, Drivers, Pedestrians, etc., Killed or Injured.* The following table shows the number of persons killed and the number injured during 1959–60 in each State and the Australian Capital Territory, classified into drivers, riders, pedestrians, etc. Responsibility for cause of accident is not indicated by this classification.

**ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): DRIVERS, RIDERS,
PEDESTRIANS, ETC., KILLED OR INJURED, 1959–60.**

Drivers, Riders, Pedestrians, etc.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
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PERSONS KILLED.

Drivers of Motor Vehicles	244	221	102	55	48	20	4	694
Motor Cyclists ..	49	31	30	16	21	10	..	157
Pedal Cyclists ..	46	48	20	16	6	4	..	140
Passengers (all types)(b) ..	264	197	110	62	57	24	2	716
Pedestrians ..	336	198	96	53	47	21	4	755
Other Classes(c) ..	..	3	1	1	1	..	..	6
Total ..	939	698	359	203	180	79	10	2,468

PERSONS INJURED.

Drivers of Motor Vehicles	6,745	5,302	2,456	1,958	1,280	275	168	18,184
Motor Cyclists ..	1,673	881	887	1,095	807	72	29	5,444
Pedal Cyclists ..	1,130	1,332	556	785	412	57	51	4,323
Passengers (all types)(b) ..	8,828	6,373	3,286	2,345	1,666	449	192	23,139
Pedestrians ..	3,909	2,642	856	670	623	151	37	8,888
Other Classes(c) ..	45	65	13	3	..	..	..	126
Total ..	22,330	16,595	8,054	6,856	4,788	1,004	477	60,104

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

(iii) *Ages of Persons Killed or Injured.* The following table shows the age groups of persons killed or injured in traffic accidents in each State and the Australian Capital Territory during 1959–60:—

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a): AGES OF PERSONS KILLED OR INJURED, 1959-60.

Age Group (Years).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
PERSONS KILLED.								
Under 5 ..	20	34	14	7	6	4	..	85
5 and under 7 ..	17	10	11	9	2	..	..	49
7 " " 17 ..	77	57	34	15	15	5	..	203
17 " " 21 ..	115	77	50	26	29	13	..	310
21 " " 30 ..	142	111	53	31	26	14	3	380
30 " " 40 ..	131	90	49	26	20	8	4	328
40 " " 50 ..	112	76	43	22	27	12	2	294
50 " " 60 ..	103	74	34	10	12	10	..	243
60 and over ..	222	160	69	45	43	12	1	552
Not Stated ..	..	9	2	12	..	1	..	24
Total ..	939	698	359	203	180	79	10	2,468

PERSONS INJURED.

Under 5 ..	741	580	248	214	160	26	12	1,981
5 and under 7 ..	489	401	137	126	115	28	10	1,306
7 " " 17 ..	2,758	2,260	1,073	935	645	146	53	7,870
17 " " 21 ..	3,723	2,652	1,600	1,181	1,039	200	83	10,478
21 " " 30 ..	4,732	3,579	1,621	1,210	895	147	128	12,312
30 " " 40 ..	3,347	2,481	1,107	900	522	130	82	8,569
40 " " 50 ..	2,518	1,822	860	642	421	88	78	6,429
50 " " 60 ..	1,826	1,257	646	467	364	80	18	4,658
60 and over ..	1,850	1,247	623	459	302	62	12	4,555
Not Stated ..	346	316	139	722	325	97	1	1,946
Total ..	22,330	16,595	8,054	6,856	4,788	1,004	477	60,104

(a) Accidents (reported to the police) which occurred in public thoroughfares and which caused death or injury to persons to an extent requiring surgical or medical treatment.

(iv) *Accidents Recorded and Casualties, classified according to Type of Vehicle, Road User, etc., Involved.* The following table shows, for the year 1959–60, the number of accidents involving casualties in which each of several classes of vehicles, road users, etc., were involved. The persons killed and injured are similarly classified. As in the table in sub-paragraph (ii) above, responsibility for cause of accident is not indicated by this classification.

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a), CLASSIFIED ACCORDING TO TYPE OF VEHICLE, ROAD USER, ETC., INVOLVED: AUSTRALIA, 1959-60.

Particulars.	Motor Vehicle.	Motor Cycle.	Pedal Cycle.	Tram.	Animal and Animal-drawn Vehicle.	Pedestrian.	Fixed Object.	Other Vehicle.
Accidents Involving ..								
Casualties ..	41,932	6,300	4,492	351	452	9,033	2,693	226
Persons Killed ..	2,341	198	143	26	10	750	167	67
Persons Injured ..	56,729	7,193	4,582	440	550	8,913	3,784	349

(a) Accidents (reported to the police) which occurred in public thoroughfares and which caused death or injury to persons to an extent requiring surgical or medical treatment.

NOTE.—As accidents and casualties classified according to one type of road user, etc., may also be classified according to another, these totals cannot be added across to obtain grand totals.

The 41,932 accidents involving casualties in which motor vehicles were involved comprised 13,829 collisions with other motor vehicles, 4,214 with motor cycles, 3,758 with pedal cycles, 134 with trams, 267 with animals and animal-drawn vehicles, 8,367 with pedestrians, 2,384 with fixed objects, 189 with vehicles other than those mentioned, 8,316 instances of overturning or leaving the roadway, and 474 accidents to passengers only.

3. Road Traffic Accidents Involving Casualties, and Persons Killed or Injured.—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 1955–56 to 1959–60:—

**ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a) AND PERSONS
KILLED OR INJURED.**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.	
								Num-ber.	Per 10,000 Motor Vehicles Registered.
1955–56	12,917	10,606	7,116	2,886	3,211	874	156	37,766	166
1956–57	13,473	10,804	7,527	3,142	3,082	852	186	39,066	167
1957–58	14,646	9,536	6,565	4,372	3,338	779	237	39,473	161
1958–59	15,216	12,462	5,603	3,984	3,450	791	260	41,766	162
1959–60	16,871	12,267	5,720	5,340	3,656	743	322	44,919	164

ACCIDENTS INVOLVING CASUALTIES.

1955–56	..	12,917	10,606	7,116	2,886	3,211	874	156	37,766	166
1956–57	..	13,473	10,804	7,527	3,142	3,082	852	186	39,066	167
1957–58	..	14,646	9,536	6,565	4,372	3,338	779	237	39,473	161
1958–59	..	15,216	12,462	5,603	3,984	3,450	791	260	41,766	162
1959–60	..	16,871	12,267	5,720	5,340	3,656	743	322	44,919	164

PERSONS KILLED.

1955–56	..	808	582	298	167	185	72	7	2,119	10
1956–57	..	774	589	325	185	168	65	7	2,113	9
1957–58	..	794	571	342	200	164	70	5	2,146	9
1958–59	..	833	661	333	185	178	68	6	2,264	9
1959–60	..	939	698	359	203	180	79	10	2,468	9

PERSONS INJURED.

1955–56	..	17,047	13,483	9,170	3,709	4,098	1,046	220	48,773	221
1956–57	..	17,321	14,120	9,800	3,944	3,921	1,107	237	50,450	216
1957–58	..	19,378	13,035	8,739	5,492	4,249	1,000	320	52,213	213
1958–59	..	19,854	16,784	7,700	5,183	4,506	990	342	55,359	214
1959–60	..	22,330	16,595	8,054	6,856	4,788	1,004	477	60,104	219

(a) Accidents (reported to the police) which occurred in public thoroughfares and which caused death or injury to persons to an extent requiring surgical or medical treatment.

4. Road Safety Organizations.—Chapter XXX.—Miscellaneous of this Year Book contains a description of the objects and work performed in the interests of road safety by the National Safety Council of Australia and the Australian Road Safety Council.

H. CIVIL AVIATION.

1. **Historical.**—A short review of the progress of civil aviation in Australia up to the date of foundation of a Civil Aviation Administration was published in Official Year Book No. 16, pages 334–5, and a brief account of the foundation and objects of this Administration was published in Official Year Book No. 19, page 299. Official Year Book No. 38 and earlier issues contain information on the control of civil aviation by the Board (1936) and later (1939) by the Department of that name. The Acts defining the broad principles of operation of the administration of civil aviation and the Regulations amplifying them, and the principal functions of the administration are also described.

The Department of Civil Aviation is divided in twelve Divisions as follows:—Air Transport; International Relations; Administration, Personnel and Establishments; Finance and Stores; Airport Engineering; Aviation Buildings and Property; Flying Operations; Airworthiness; Airways Operations; Airways Engineering; Aviation Medicine; Accident Investigation and Analysis.

2. **International Activity.**—(i) *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 Official Year Book No. 37 and particulars of subsequent activity in the international field were included in issue No. 38. The International Civil Aviation Organization had a membership of 80 nations at the end of June, 1960. Australia has continued her representation on the Council, a position which she has held since I.C.A.O. was established in 1947. The fourteenth meeting of the South Pacific Air Transport Council was held in Melbourne in November, 1960. Further details will be found in Official Year Book No. 40 and earlier issues.

(ii) *International Air Services.* Qantas Empire Airways have introduced into service seven Boeing 707 jet aircraft and four Lockheed Electra aircraft. The Boeing 707 operates to North America and on to the United Kingdom, and also to the United Kingdom via the Middle East. Lockheed Electra aircraft are in service to Japan via Manila and Hong Kong; Super Constellation aircraft provide services to South Africa across the Indian Ocean and a cargo service to United Kingdom via the Middle East; and DC4 aircraft fly to Norfolk Island. Qantas was operating aircraft over 73,463 route-miles on international services at 30th November, 1960. A summary of the operations of oversea services wholly or partly Australian-owned appears on page 565.

Three Lockheed Electra aircraft operated by Tasman Empire Airways Ltd., link Sydney with Auckland, Christchurch and Wellington; Melbourne with Auckland and Christchurch; and Brisbane with Auckland.

3. **Australian National Airlines Commission.**—The Commonwealth Australian National Airlines Act 1945 constituted the Australian National Airlines Commission for the purpose of establishing, maintaining and operating airline services for the transport of passengers and goods between Australian States and/or Territories and within Australian Territories. The Commission may, with the approval of the Minister, undertake services between Australia and places outside Australia, and, in certain circumstances, may engage in intra-state operations.

The operating organization set up to give effect to the Act is Trans-Australia Airlines.

4. **Regular Air Services within Australia.**—Details of the Government's rationalization scheme and the 1957 amendment to the Civil Aviation Agreement Act consequent upon Ansett Transport Industries Ltd. purchasing Australian National Airways Pty. Ltd. will be found in Official Year Book No. 44, pages 420 and 421.

The Airlines Equipment Act, assented to in October, 1958, gave effect to financial arrangements whereby re-equipment programmes would be assisted. An important example of this re-equipment programme was the introduction of Fokker Friendship and Lockheed Electra aircraft into regular air services within Australia.

A summary of the operations of regular air services within Australia appears on page 565 and a map showing air routes on pages 567–8.

5. **Air Ambulance Services.**—A brief statement on the foundation and objects of the Air Ambulance Services will be found in Official Year Book No. 32, pages 145 and 146.

During the year 1959-60, the Air Ambulance and Royal Flying Doctor Services continued to provide medical aid for the outback regions of Australia. The Royal Flying Doctor Service of Australia, operating from Broken Hill, New South Wales, Cloncurry, Queensland, Alice Springs, Northern Territory (operated in conjunction with the Department of Health), covers a wide area of inland Australia. The Bush Church Aid Society for Australia and Tasmania, supported by funds from the Church of England, operates from Ceduna in South Australia. The Federal Methodist Inland Mission operates services from Meekatharra, Western Australia, and the Queensland Ambulance Transport Brigade operates a service from Cairns in Queensland. Recently a Flying Surgeon Service came into operation in Queensland.

6. Training of Air Pilots.—A brief statement of the pre-war policy of the Commonwealth Government regarding assistance to Aero Clubs was given in Official Year Book No. 32, page 146, and details of further assistance granted are given in subsequent Year Books. Year Book No. 44, page 421, contains particulars of the existing system of maintenance grants for hours flown and bonus payments for licences obtained.

During the year 1959-60, the flying training organizations (non-profit aero clubs and commercial flying schools) earned bonuses in respect of 351 private pilot licences, 65 commercial pilot licences and 33 initial instructor ratings. Subsidized hours flown by aero clubs and flying schools numbered 83,899, and the total earnings of all organizations amounted to £183,495. An overall limit placed on the subsidy restricted the total payments to £145,000. There were 34 aero clubs and 7 commercial flying training schools in operation during the year, and, in addition to subsidized civil flying, some 17,320 unsubsidized civil hours and 4,441 service training hours were flown; in all, a total of 105,660 hours.

7. Gliding Clubs.—For the year 1959-60, a total subsidy of £3,000 was distributed to member clubs of the Gliding Federation of Australia, on the basis of £1,500 for membership and £1,500 for gliding certificates issued. In addition, the Federation received a grant of £1,000 towards the cost of operation of its school for instructors and engineers.

8. Airways Engineering.—In the field of airways engineering, which includes the provision of radio navigational facilities, radiocommunication systems, and airport lighting systems, steady progress has continued through 1959-60. A five year plan has been developed for extension of radiocommunication networks to cater for increases in traffic, number of aircraft and increased speed of aircraft. During 1959-60, the main portions of the plan completed included—(a) Darwin to Perth radio teletype network; (b) Port Moresby remote receiving station; (c) Cairns remote receiving station; (d) Mount Canobolas V.H.F. repeater station; (e) V.H.F. point to point network linking Sydney Airways Operations Centre to Mount Canobolas, Sydney remote transmitter station, Sydney remote receiving station, Katoomba and Kings Tableland repeater stations. Mount Canobolas is the main V.H.F. repeater station for Air/Ground/Air communications west of the Blue Mountains and provides direct speech from Sydney to aircraft as far away as Hay, Benalla and Tamworth.

In the field of radio navigational aids the following additional facilities were installed:—3 distance measuring devices, 4 non-directional beacons, 1 visual aural range and 1 visual omni range.

In the field of air traffic control engineering new control towers have been commissioned at Adelaide and Brisbane airports.

9. Meteorological Services.—The Department of Civil Aviation is the greatest user of meteorological services in the Australian Commonwealth and its territories, and therefore the requirements for civil aviation purposes have played a big part in determining the form of meteorological organization that exists at the present time. The Department and the Commonwealth Bureau of Meteorology have completed working arrangements designed to meet the very precise requirements of modern civil aviation in Australia, which specify the standards of service, times and places of operation and facilities required for the provision of meteorological services for civil aviation.

10. Search and Rescue.—On 1st November, 1958, the Department of Civil Aviation assumed full responsibility for co-ordination of search and rescue activity throughout all Australian flight information regions except Darwin, where by arrangement with the Royal

Australian Air Force, search and rescue is co-ordinated by the Officer Commanding. However, in this region, too, the Department will soon be taking on full search and rescue co-ordination responsibilities. The Department also arranges for the availability of search and rescue facilities.

Particulars of system and methods of operation are given in previous issues of the Year Book.

11. *Statistical Summaries.*—(i) *Registrations, Licences, etc.* The following table provides a summary of the civil aviation registrations and licences in force in Australia at 30th June in each of the years 1956 to 1960.

CIVIL AVIATION: REGISTRATIONS, LICENCES, ETC., AUSTRALIA.(a)

Particulars.	At 30th June—				
	1956.	1957.	1958.	1959.	1960.
Registered aircraft owners ..	437	485	570	642	745
Registered aircraft ..	934	1,054	1,180	1,246	1,360
Pilots' Licences—					
Private ..	2,453	2,592	2,628	2,801	3,001
Commercial ..	578	709	845	910	948
Senior Commercial ..	76	99	100	130	132
Helicopter (Commercial) ..	11	21	18	17	30
Student ..	3,272	3,397	3,493	3,465	3,710
1st Class Airline Transport	600	606	656	652	618
2nd " " "	9	7	(b) 389	389	418
3rd " " "	394	414			
Navigators' Licences—					
Flight Navigator ..	177	187	176	177	168
Radio Operators' Licences—					
1st Class Flight Radio-Telegraphy Operator ..	75	69	63	56	55
Flight Radio-Telephone Operator ..	1,386	1,574	1,823	2,203	2,651
Flight Engineers' Licences ..	94	116	176	189	193
Aircraft Maintenance Engineers' Licences ..	1,818	1,915	2,016	2,266	2,382
Aerodromes, Australia—					
Government(c) ..	188	169	168	168	149
Licensed(d) ..	301	313	311	304	323
Flying Boat Bases(e) ..	13	13	13	13	13

(a) Except for aerodromes and flying-boat bases, includes the Territory of Papua and New Guinea.
 (b) 3rd class abolished, and existing licences became 2nd class. (c) Under the control and management of the Department of Civil Aviation. (d) Aerodromes under the control and management of a municipality, shire, station owner, private individual, etc. Includes emergency aerodromes. (e) Includes alighting areas.

(ii) *Types of Aircraft on the Australian Register.* At 31st December, 1960, there were 1,439 aircraft on the Australian register, including aircraft based in New Guinea and Papua. Of these, 168 were engaged in regular public transport, and included 7 Boeing 707, 3 Bristol Freighter, 5 Convair 440, 59 Douglas DC3, 8 Douglas DC4 (Skymaster), 4 Douglas DC6B, 17 Fokker Friendship, 10 Lockheed Electra, 10 Lockheed Super Constellation, and 21 Vickers Viscount. At the same date there were 304 aircraft available for charter, including 47 Auster, 106 Cessna, 44 de Havilland and 39 Piper. Aircraft used for private purposes numbered 576, of which Auster (137), Cessna (117), and de Havilland (123) were the most numerous. Aircraft used for purposes such as flying school training, aerial agricultural work, etc., numbered 391, of which de Havilland (272) were the most numerous, including 199 DH82 Tiger Moth.

(iii) *Operations of Regular Internal Services.* The next table summarizes the flying activities of regular internal services operating within Australia during each of the years 1955–56 to 1959–60.

**CIVIL AVIATION: OPERATIONS OF REGULAR INTERNAL SERVICES,
AUSTRALIA.(a)**

Particulars.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Hours flown	251,900	251,139	237,981	229,396	225,050
Miles '000	43,701	42,120	40,533	40,287	43,199
Paying passengers	2,020,380	2,125,338	2,122,794	2,235,070	2,660,412
Paying passenger-miles '000	827,885	891,196	898,542	944,379	1,132,517
Freight—					
Tons(b)	84,446	75,092	70,003	62,755	65,402
Ton-miles(b) '000	38,909	36,330	32,987	28,841	29,240
Mail—					
Tons(b)	2,478	2,514	2,642	2,727	4,825
Ton-miles(b) '000	1,357	1,404	1,446	1,472	2,567

(a) Includes only services operating within the Australian mainland and Tasmania.
of short tons (2,000 lb.).

(b) In terms

(iv) *Operations of Oversea Services wholly or partly Australian-owned.* The following table furnishes a summary of oversea services, wholly or partly owned by Australian interests, during the years 1955-56 to 1959-60. This table incorporates aggregate particulars of all traffic originating on oversea services of Qantas Empire Airways Limited and Tasman Empire Airways Limited, which, in the case of Qantas, includes considerable traffic which does not enter Australia. The table also includes traffic between Australia and New Guinea and Australia and Norfolk Island.

CIVIL AVIATION: OPERATIONS OF OVERSEA SERVICES.(a)

Particulars.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Route miles (unduplicated) at 30th June ..	58,618	62,675	71,729	74,704	76,125
Hours flown	50,665	56,939	63,917	68,811	54,668
Miles '000	12,028	13,514	15,267	16,486	16,992
Paying passengers	131,934	155,618	164,634	176,120	232,714
Paying passenger-miles '000	383,930	476,831	501,388	534,728	720,099
Freight—					
Tons(b)	2,990	2,957	3,205	3,431	5,150
Ton-miles(b) '000	10,494	11,203	12,051	15,381	24,625
Mail—					
Tons(b)	1,491	1,622	1,749	1,647	2,015
Ton-miles(b) '000	8,458	9,450	9,789	8,834	10,351

(a) Airlines wholly or partly owned by Australian interests.

(b) In terms of short tons (2,000 lb.).

(v) *Accidents and Casualties.* The number of accidents involving aircraft on the Australian register, in which persons were killed or injured, is shown in the following table for the years 1955-56 to 1959-60.

CIVIL AVIATION: ACCIDENTS INVOLVING AUSTRALIAN AIRCRAFT.(a)

Particulars.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Number(b)	31	37	35	39	43
Persons killed	22	24	28	21	44
Persons injured	27	36	31	30	42

(a) Includes accidents and casualties in the Territory of Papua and New Guinea.
all accidents irrespective of whether they involved death or injury.

(b) Includes

12. Territory of Papua and New Guinea.—For brief particulars of civil aviation in Papua and New Guinea see Chapter V.—The Territories of Australia, pages 144 and 151.

I. POSTS; TELEGRAPHS; TELEPHONES; OVERSEA TELECOMMUNICATION SERVICES.

NOTE.—In this Division particulars for the Australian Capital Territory are included with those for New South Wales, while the South Australian figures include particulars for the Northern Territory unless otherwise indicated.

§ 1. General.

1. **The Postmaster-General's Department.**—Under the provisions of the Post and Telegraph Act 1901, the Department was placed under the control of the Postmaster-General. The Director-General of Posts and Telegraphs controls the Department under the Postmaster-General, whilst the principal officer in each State is the Director of Posts and Telegraphs.

The Postmaster-General's Department is responsible for the control and operation of postal, telegraphic and telephonic services throughout Australia, and for the provision and operation of the transmitters and technical facilities required for broadcasting and television services by the Australian Broadcasting Commission (*see* pages 578–83). It also co-operates with the Overseas Telecommunications Commission (*see* page 575) in providing 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, military allotments, etc., the provision of banking facilities on behalf of the Commonwealth Savings Bank, the sale of tax and duty stamps, the collection of land tax, and other services.

2. **Postal Facilities.**—(i) *Relation to Area and Population.* The following statement 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 30th June, 1960.

POSTAL FACILITIES: RELATION TO AREA AND POPULATION AT 30th JUNE, 1960.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
Number of post offices(a)	2,540	2,257	1,263	913	634	511	8,118
Number of square miles of territory per office	122	39	528	990	1,539	51	366
Number of inhabitants per office ..	1,528	1,281	1,159	1,059	1,152	680	1,266
Number of inhabitants per 100 square miles	1,250	3,290	219	107	75	1,325	346

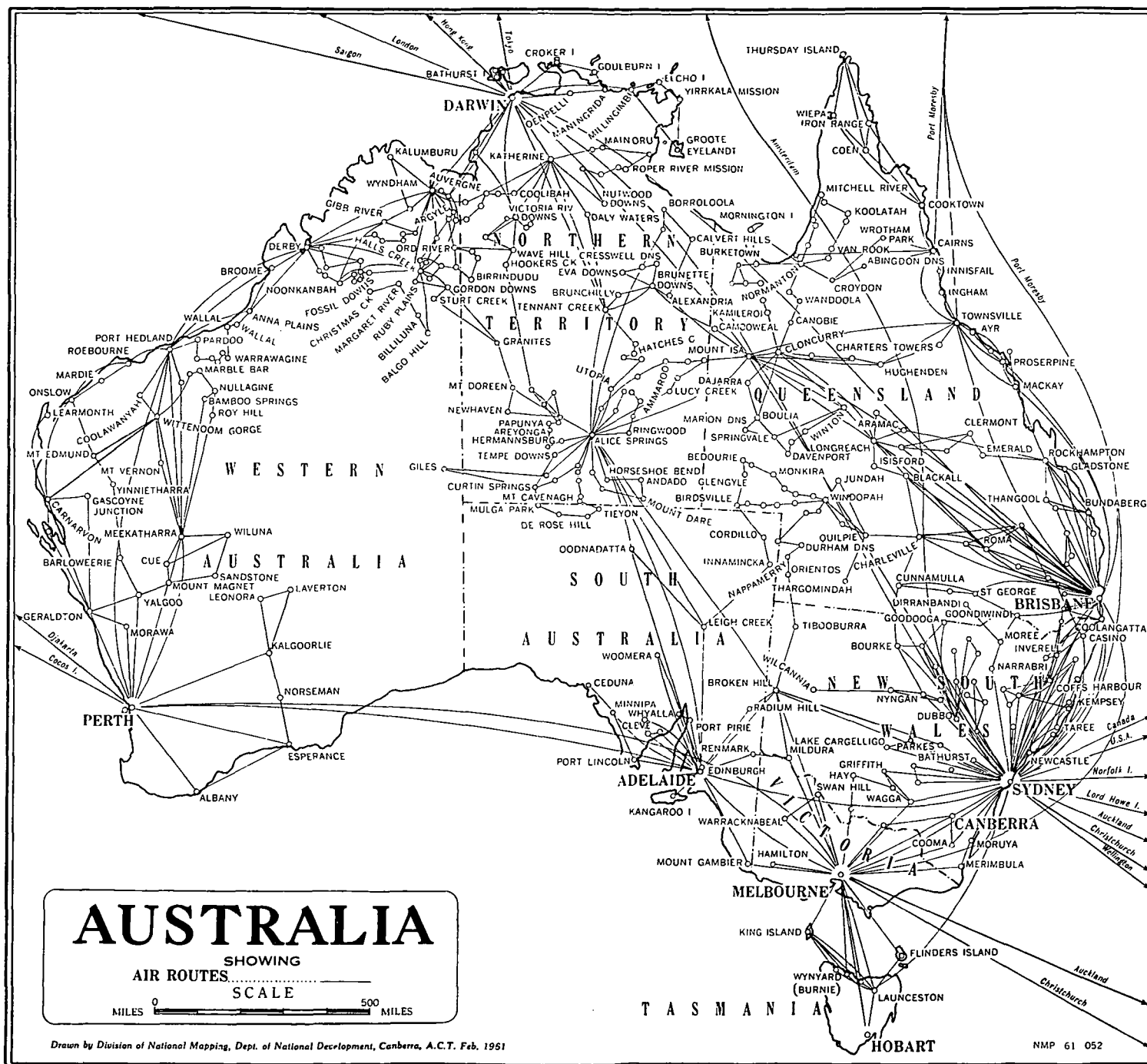
(a) "Official", "semi-official", and "non-official" offices.

The foregoing table does not include "telephone" offices at which no postal business is transacted.

(ii) *Number of Offices.* The following table shows the number of post offices (exclusive of telephone offices) in each State at 30th June, 1960.

NUMBER OF POST OFFICES AT 30th JUNE, 1960.

Type of Office.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Official and Semi-official ..	513	320	225	169	148	52	1,427
Non-official	2,027	1,937	1,038	744	486	459	6,691
Total	2,540	2,257	1,263	913	634	511	8,118



(iii) *Employees and Mail Contractors.* The number of employees and mail contractors in the Central Office and in each of the States at 30th June, 1960 is given in the following table:—

**NUMBER OF POSTAL EMPLOYEES AND MAIL CONTRACTORS AT
30th JUNE, 1960.**

Particulars.	Central Office.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
Employees ..	1,305	35,803	26,739	14,119	9,500	6,737	3,751	97,954
Mail Contractors ..	..	2,057	1,164	1,218	370	295	244	5,348

3. *Gross Revenue, Branches—Postmaster-General's Department.*—(i) *States, 1959–60.* The gross revenue (actual collections) in respect of each branch of the Department during the year 1959–60 is shown in the following table:—

**POSTMASTER-GENERAL'S DEPARTMENT: GROSS REVENUE, 1959-60.(a)
(£'000.)**

Source.	Central Office.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Postage ..	b 1,313	15,413	11,140	4,743	3,295	2,338	925	39,167
Telegraphs ..	100	2,201	1,689	1,278	743	590	203	6,804
Telephones ..	68	28,377	21,110	9,304	6,352	4,004	1,994	71,209
Money order commission and poundage on postal notes ..	..	466	294	120	115	63	30	1,088
Private boxes and bags ..	..	97	63	48	32	23	13	276
Miscellaneous ..	2	1,188	980	389	238	184	106	3,087
Total ..	1,483	47,742	35,276	15,882	10,775	7,202	3,271	121,631

(a) The figures in this table relate to revenue actually collected during the year as recorded for Treasury purposes. (b) Revenue from airmail services.

(ii) *Australia.* The following table shows the gross revenue (actual collections) of the Department for each of the five years 1955–56 to 1959–60:—

**POSTMASTER-GENERAL'S DEPARTMENT: GROSS REVENUE, AUSTRALIA.(a)
(£'000.)**

Source.	1955–56.	1956–57.	1957–58.	1958–59.	1959–60.
Postage ..	26,581	29,464	31,339	33,166	39,167
Telegraphs ..	4,961	5,904	6,169	6,321	6,804
Telephones ..	44,351	51,002	55,344	59,717	71,209
Money order commission and poundage on postal notes ..	934	926	932	956	1,088
Private boxes and bags ..	185	240	247	258	276
Miscellaneous ..	2,329	2,538	2,745	3,049	3,087
Total ..	79,341	90,074	96,776	103,467	121,631

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

4. *Expenditure, Postmaster-General's Department.*—(i) *States.* The following table shows, as far as possible, the distribution of expenditure (actual payments) in each State during 1959–60, as shown by records kept for Treasury purposes. 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: DISTRIBUTION OF
EXPENDITURE, 1959-60.(a)**

(£'000.)

Particulars.	Central Office.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
Expenditure from Ordinary Votes—								
Salaries and payments in the nature of salary	701	18,164	13,079	7,058	4,485	2,935	1,752	48,174
General expenses	121	2,153	1,501	562	455	307	156	5,255
Stores and material	45	776	651	383	365	211	132	2,563
Mail services	(b) 5,325	1,726	908	860	438	253	127	9,637
Engineering services (other than capital works)	1,178	15,083	10,973	5,670	3,514	2,703	1,483	40,604
Other services	108	..	..	..	..	..	..	108
Total	7,478	37,902	27,112	14,533	9,257	6,409	3,650	106,341
Rent, repairs, maintenance] .. ..	.. 4	478	445	170	151	79	51	1,374
Proportion of audit expenses .. ..	.. ..	22	16	9	6	4	2	63
Capital works and services—								
Telegraph and telephone	70	14,119	10,604	3,767	3,520	2,395	1,183	35,658
New buildings, etc. .. ..	..	1,542	1,153	643	577	187	177	4,279
Other expenditure, not allocated to States	(c) 3,816	..	..	..	..	..	..	3,816
Grand Total	11,368	54,063	39,330	19,122	13,511	9,074	5,063	151,531

(a) The figures in this table represent actual payments made during the year as recorded for Treasury purposes. (b) Expenditure on airmail services. (c) Includes expenditure not apportioned to States, i.e., interest on loans, £766,000; sinking fund, £647,000; superannuation contributions, £2,398,000; transferred officers' pensions and allowances, £2,000 and pensions and retiring allowances, £3,000.

(ii) *Australia.* The following table shows the distribution of expenditure (actual payments) of the Department for Australia as a whole for each of the years 1955-56 to 1959-60:—

POSTMASTER-GENERAL'S DEPARTMENT: EXPENDITURE, AUSTRALIA.(a)

(£'000.)

Particulars.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Expenditure from Ordinary Votes—					
Salaries and payments in the nature of salary	37,519	39,763	41,802	42,842	48,174
General expenses	3,853	4,292	4,532	4,729	5,255
Stores and material	1,835	2,042	2,332	2,508	2,563
Mail Services	8,053	8,313	8,626	8,741	9,637
Engineering services other than capital works	29,144	31,765	34,353	36,342	40,604
Other services	60	79	84	88	108
Total	80,464	86,254	91,729	95,250	106,341
Rent, repairs, maintenance	1,054	1,118	1,339	1,376	1,374
Proportion of audit expenses	40	45	48	55	63
Capital works and services—					
Telegraph and telephone	24,846	27,452	29,998	32,209	35,658
New buildings, etc.	3,924	3,269	4,313	4,144	4,279
Other expenditure, not allocated to States	3,929	3,779	3,836	3,799	3,816
Grand Total	114,257	121,917	131,263	136,833	151,531

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

5. **Profit or Loss, Postmaster-General's Department.**—The foregoing statements of gross 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 for each branch, after providing for working expenses (including superannuation, pensions and depreciation) and interest charges including exchange, are shown in the following table for the years 1958–59 and 1959–60.

POSTMASTER-GENERAL'S DEPARTMENT: PROFIT OR LOSS, BRANCHES.
(£'000.)

Particulars.	1959–60.				1958–59.
	Postal.	Tele- phone.	Tele- graph.	All Branches.	All Branches.
Earnings	43,261	75,351	6,975	125,587	105,304
Working Expenses—					
Direct working expenses .. .	37,937	45,537	5,935	89,409	78,519
Management and administration ex- penses	1,525	1,627	347	3,499	3,003
Depreciation	435	10,292	331	11,058	12,194
Superannuation liability and pensions..	2,058	3,339	449	5,846	4,732
Total Working Expenses (excluding Interest)	41,955	60,795	7,062	109,812	98,448
Profit or Loss before charging Interest ..	1,306	14,556	— 87	15,775	6,856
Interest	578	14,427	342	(a) 15,347	813
Profit or Loss after charging Interest ..	728	129	— 429	(b) 428	6,043

(a) Interest on all capital. Prior to 1959–60, interest was payable on loan capital only.
note (a).

(b) See

NOTE.—Minus sign (—) denotes loss.

6. **Fixed Assets.**—The following table shows particulars of the fixed assets of the Postmaster-General's Department from 1st July, 1959 to 30th June, 1960:—

POSTMASTER-GENERAL'S DEPARTMENT: FIXED ASSETS.
(£'000.)

Particulars.	Net Value 1st July, 1959.	Capital Expendi- ture, 1959–60.	Gross Value, 30th June, 1960.	Assets Dis- mantled or Written Off 1959–60.	Net Value, 30th June, 1960.
Telephone and telegraph plant ..	367,806	48,074	415,880	7,955	407,925
Mail-handling plant	720	299	1,019	44	975
Buildings	42,132	4,372	46,504	110	46,394
Motor vehicles	9,225	2,069	11,294	1,211	10,083
Assets subject to direct depreciation(a)	5,305	1,049	6,354	404	5,950
Other fixed assets	18,423	2,203	20,626	332	20,294
Total	443,611	58,066	501,677	10,056	491,621

(a) Includes postal service plant, miscellaneous plant, furniture and office equipment.

The net value of the fixed assets of the Postmaster-General's Department has increased by nearly 54 per cent. from £319,691,000 at 30th June, 1956 to £491,621,000 at 30th June, 1960.

§ 2. Posts.

1. **Postal Matter Dealt With.**—(i) *States, 1959–60.* The following table shows a summary of the postal matter dealt with in each State during the year 1959–60. 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 table.

POSTAL MATTER DEALT WITH(a), 1959–60.

('000.)

State.	Letters. (b)	News- papers and Packets. (c)	Parcels. (d)	Regis- tered Articles. (e)	Letters. (b)	News- papers and Packets. (c)	Parcels. (d)	Regis- tered Articles. (e)
	Posted for delivery within Australia.				Posted for delivery Overseas.			
New South Wales ..	355,507	102,450	5,909	4,460	34,403	9,813	352	592
Victoria ..	442,606	74,609	4,473	3,239	9,708	3,950	129	177
Queensland ..	192,080	28,296	2,166	1,713	5,640	1,061	41	25
South Australia ..	131,634	12,594	1,237	853	5,289	809	42	64
Western Australia ..	97,875	9,676	934	598	5,587	1,119	25	52
Tasmania ..	40,895	7,509	204	444	305	20	12	8
Australia ..	1,455,679	242,134	14,923	11,307	60,932	16,772	601	918
	Received from Overseas.				Total postal matter dealt with.			
	Letters. (b)	News- papers and Packets. (c)	Parcels. (d)	Regis- tered Articles. (e)	Letters. (b)	News- papers and Packets. (c)	Parcels. (d)	Regis- tered Articles. (e)
New South Wales ..	48,594	35,146	396	1,067	633,586	154,409	6,657	6,119
Victoria ..	21,512	9,131	324	244	473,826	87,690	4,926	3,660
Queensland ..	4,523	4,258	67	58	202,243	33,615	2,274	1,796
South Australia ..	7,696	4,531	59	28	144,619	17,934	1,338	945
Western Australia ..	2,074	5,759	46	45	105,536	16,554	1,005	695
Tasmania ..	1,820	2,100	17	4	43,020	9,629	233	456
Australia ..	86,219	60,925	909	1,446	1,602,830	319,831	16,433	13,671

(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.

(ii) *Australia.* The next table shows the total postal matter dealt with in Australia during each of the years 1955–56 to 1959–60.

TOTAL POSTAL MATTER DEALT WITH: AUSTRALIA.

Year.	Letters, Postcards and Letter-cards.		Newspapers and Packets.		Parcels.(a)		Registered Articles other than Parcels.	
	Total ('000.)	Per 1,000 of Mean Population.	Total ('000.)	Per 1,000 of Mean Population.	Total ('000.)	Per 1,000 of Mean Population.	Total ('000.)	Per 1,000 of Mean Population.
1955–56 ..	1,414,222	151,811	291,048	31,243	17,334	1,861	18,376	1,973
1956–57 ..	1,443,337	151,372	306,417	32,136	16,998	1,783	17,007	1,784
1957–58 ..	1,538,509	157,865	323,684	33,213	17,726	1,819	15,566	1,597
1958–59 ..	1,599,400	160,702	317,633	31,914	18,903	1,899	15,156	1,523
1959–60 ..	1,602,830	157,619	319,831	31,452	16,433	1,616	13,671	1,344

(a) Includes registered, cash on delivery and duty parcels.

During 1959–60, 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 £3,842,000; railway £1,351,000; sea £211,000; air—internal £1,091,000, oversea £4,522,000; Grand Total £11,017,000.

2. **Cash on Delivery Parcels Post.**—The Postmaster-General's Department undertakes, upon prepayment of a prescribed commission, to deliver registered articles sent by parcels post within Australia, or between Australia and Lord Howe Island, Norfolk Island, Nauru, the Territory of Papua and New Guinea, or Fiji, to recover from the addressee on delivery a sum of money specified by the sender, and to remit the sum to the sender. The object of the system is to meet the requirements of persons who wish to pay at the time of receipt for articles sent to them, and of traders and others who do not wish their goods to be delivered except on payment.

There were 505,000 such parcels posted in Australia during 1959–60, valued at £1,992,000, and the revenue derived from commission and postage thereon amounted to £197,000. Both number and value of these parcels have decreased substantially and with little interruption in trend since the peak reached in 1950–51 (1,155,000 parcels valued at £2,933,000).

3. **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 1901–1950. The maximum amount for which a single money order payable within Australia may be obtained is £40, but additional orders will be issued upon request when larger amounts are to be remitted. The maximum amount permitted to be sent to any person in the dollar area is £A.5 a month and for remittances to countries outside the dollar area, £A.10 a week. A postal note is not available for a sum larger than twenty shillings.

The following table shows the number and value of money orders and postal notes issued and paid in Australia in each of the years 1955–56 to 1959–60.

MONEY ORDERS AND POSTAL NOTES: TRANSACTIONS, AUSTRALIA.

Year.	Money Orders.			Postal Notes.		
	Issued.		Net Commission Received.	Issued.		Poundage Received.
	Number.	Value.	Value.	Number.	Value.	Value.
	'000.	£'000.	£'000.	'000.	£'000.	£'000.
1955–56.. ..	7,638	70,220	495	23,128	10,450	421
1956–57.. ..	8,127	74,542	551	20,332	9,493	377
1957–58.. ..	8,668	78,411	581	18,937	9,155	340
1958–59.. ..	9,420	87,034	643	18,012	8,845	347
1959–60.. ..	9,535	94,335	805	16,492	8,380	324

Of the total money orders issued in Australia during 1959–60, 9,120,000 valued at £92,997,000 were payable in Australia, and 415,000 valued at £1,339,000 were payable overseas. Of the total money orders paid in Australia during 1959–60, 9,136,000 (£92,964,000) were issued in Australia, and 148,000 (£874,000) were issued overseas.

Of the total postal notes paid in Australia during 1959–60, 16,425,000 valued at £8,345,000, 11,807,000 (£6,248,000) were paid in the State in which issued, and 4,618,000 (£2,097,000) were paid in States other than in which issued.

§ 3. Telegraphs.

1. **General.**—A review of the development of telegraph services in Australia up to 1921 appeared in Official Year Book No. 15, page 625, and subsequent developments of importance have been dealt with in later issues. During the past few years substantial improvements in both the speed and grade of telegraph services throughout Australia have been effected, the entire system being subjected to intensive re-organization, and these matters have been dealt with in some detail in recent issues of this Year Book.

2. **Telegraph and Telephone Mileage.**—At 30th June, 1960, the combined single-wire mileages for both telegraph and telephone purposes were:—aerial, underground and submarine cables, 8,393,000 miles; trunk telephone and telegraph cables, 290,000 miles; aerial wires, 1,350,000 miles. There were 121,000 miles of pole routes. Joint use is made of poles for power and telephone reticulation.

3. **Telegraph Offices.**—The numbers of telegraph offices, including railway telegraph offices, in the various States at 30th June, 1960 were:—New South Wales, 3,001; Victoria, 2,303; Queensland, 1,739; South Australia, 983; Western Australia, 970; Tasmania, 570; total, 9,566.

4. **Telegrams Dispatched within Australia.**—The following table shows the number of telegrams dispatched to places within the Commonwealth and to adjacent islands and to ships at sea, according to the class of message transmitted:—

TELEGRAMS DISPATCHED, 1959-60.
(‘000.)

State.	Paid and Collect.							Unpaid (Depart- mental).	Total Tele- grams.
	Ordin- ary.	Meteor- ological.	Urgent.	Radio- grams.	Press.	Letter- grams.	Total.		
New South Wales	6,212	210	289	62	48	24	6,845	250	7,095
Victoria ..	3,911	141	159	6	22	13	4,252	145	4,397
Queensland ..	3,273	208	124	49	28	13	3,695	139	3,834
South Australia	1,499	96	42	17	26	17	1,697	48	1,745
Western Australia	1,428	143	38	80	16	20	1,725	43	1,768
Tasmania ..	439	45	13	1	4	6	508	29	537
Australia ..	16,762	843	665	215	144	93	18,722	654	19,376

The number of telegrams dispatched to places within the Commonwealth and to adjacent islands and to ships at sea has decreased with few interruptions of trend since the peak of 35,970,000 in 1945-46.

5. **International Telegrams.**—For particulars of telegrams received from, and dispatched to, other countries, see § 5, para. 2, p. 576.

§ 4. Telephones.

1. **General.**—Particulars of the total mileage of lines used exclusively for telephone purposes are not available, but are combined with all other line mileage. Particulars of the total single wire mileage used for telephone, trunk and/or telegraph purposes are shown in § 3, para. 2, above. Developments in the telephone system in recent years have been dealt with in previous issues of this Year Book.

In June, 1959, work was commenced on a coaxial cable link between Sydney, Canberra and Melbourne. The undertaking is expected to take three years to complete at a capital outlay of approximately £5 million. Channels will be made available progressively as the work proceeds.

As well as providing the necessary telephone, telegraph, sound broadcasting and television relay channels between Sydney, Canberra and Melbourne, the scheme will enable all telecommunications services along the route to be improved.

2. **Summary.**—Particulars relating to the telephone services in each State at 30th June, 1960 are shown in the following table:—

TELEPHONE SERVICES: SUMMARY, 30th JUNE, 1960.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Exchanges	2,218	1,783	1,364	727	763	391	7,246
Lines connected	577	470	198	136	87	46	1,514
Instruments connected	846	678	263	193	121	63	2,164
(i) Subscribers' instruments	827	663	256	187	118	61	2,112
(ii) Public telephones	8.9	6.1	3.5	2.0	1.6	1.0	23.1
(iii) Other local instruments	9.4	8.3	4.3	3.4	2.4	1.5	29.3
Instruments per 100 of population	21.8	23.4	18.0	19.9	16.6	18.2	21.1

Of the total telephones (2,163,962) in service at 30th June, 1960, 778,423 or 36 per cent. were connected to exchanges situated beyond the limits of the metropolitan telephone networks.

3. **Trunk Line and Local Calls.**—Because of the introduction of a scheme of extended local service areas on 18th May, 1960, whereby many telephone calls which would previously have been short distance trunk calls became local calls, precise statistics distinguishing between local calls and trunk line calls are no longer available. However, estimates of the local and trunk line traffic during 1959–60, on the basis of the system existing prior to the introduction of the new scheme, are as follows:—effective paid local calls, 1,478,000,000; trunk line calls, 134,000,000, representing averages of 994 local calls and 90 trunk calls per line respectively.

4. **Oversea Telephone Services.**—These services are provided by the Overseas Telecommunications Commission (*see* § 5, para. 1) for operation by the Postmaster-General's Department. During the year 1959–60 a new direct service was opened to Wilkes Base in the Antarctic, and a service was also made available to South Korea, via Hong Kong. At 30th June, 1960, telephone calls could be made from Australia direct to 100 oversea countries. International telephone calls to and from Australia numbered 109,791, an increase of 17,805 or 19 per cent. on 1958–59.

5. **World Telephone Statistics, 1960.**—The following table shows the number of telephones in use in various countries with 2 million or more telephones at 1st January, 1960, together with the number per 100 of population and the proportion in each country to the world total.

WORLD TELEPHONE STATISTICS(a) AT 1st JANUARY, 1960.

Country.	Number of Telephones '000.	Telephones per 100 of Population.	Proportion of Total. (Per cent.)
United States of America(b)	70,597	40	52.8
United Kingdom(c)	7,848	15	5.9
Canada	5,439	31	4.1
Germany, Federal Republic of	5,516	10	4.1
Japan(c)	4,865	5	3.6
France	4,085	9	3.1
U.S.S.R.	4,023	2	3.0
Italy	3,518	7	2.6
Sweden	2,637	35	2.0
Australia	2,122	21	1.6
Other	22,950	(d)	17.2
Total	133,600	(d)	100.0

(a) Partly estimated. Information derived, in the main, from the "World's Telephones" compiled by the American Telephone and Telegraph Company. (b) Excludes Hawaii. (c) At 31st March, 1960. (d) Not available.

§ 5. Oversea Telecommunication Services; Radiocommunication Stations Authorized.

1. **General.**—The establishment, maintenance and operation of radio and cable communication services between Australia and oversea countries is the function of the Overseas Telecommunications Commission (Australia), which was established by the Commonwealth Overseas Telecommunications Act 1946 as Australia's part in a plan for the development of telecommunication services throughout the British Commonwealth. The Act, in order to give effect to this plan, authorized the Commission to acquire for public ownership assets formerly privately owned. Details of the systems of oversea communication in operation in Australia from the early years of the century onward, and of subsequent developments which led eventually to the establishment of the Overseas Telecommunications Commission, were published in Official Year Book No. 37, pages 220–4.

2. *International Telegrams.*—(i) *Number of Telegrams.* The number of telegrams received from and dispatched overseas in each State during 1959–60 is shown hereunder:—

INTERNATIONAL TELEGRAMS, 1959-60.
(’000.)

Particulars.	N.S.W.	Vic.	Q’land.	S. Aust.	W. Aust.	Tas.	Australia.
Received	720	427	(a) 80	71	73	(a) 22	1,393
Dispatched	694	499	91	90	77	21	1,472
Total	1,414	926	171	161	150	43	2,865

(a) Estimated.

The traffic in international telegrams to and from Australia has not varied greatly in recent years.

(ii) *Number of Words.* Particulars of the international business, originating and terminating in Australia, transacted over the cable and radio services during 1959–60 are shown in the following table:—

INTERNATIONAL TELEGRAMS: NUMBER OF WORDS, AUSTRALIA, 1959-60.
(’000 Words.)

Class of Telegram.	Words Transmitted to—			Words Received from—		
	United Kingdom.	Other Places.	Total.	United Kingdom.	Other Places.	Total.
Ordinary	4,863	9,636	14,499	4,036	7,717	11,753
Letter	4,645	11,128	15,773	4,608	9,281	13,889
Press	2,319	1,005	3,324	7,824	2,955	10,779
Government	172	1,015	1,187	733	1,236	1,969
Greetings	705	648	1,353	594	819	1,413
Other . . . . .	..	11	11	..	137	137
Total	12,704	23,443	36,147	17,795	22,145	39,940

Words transmitted to “Other places” included 4,602,753 to the United States of America and 4,615,363 to New Zealand and the Pacific Islands. Words received from “Other places” included 4,146,139 from the United States of America and 5,446,280 from New Zealand and the Pacific Islands.

3. *Oversea Telephone Services.*—See § 4, para. 4, page 575 for particulars of these services.

4. *Coast Stations.*—At 30th June, 1960, there were 82 radio stations established at points around the Australian coast and 14 about the coast of Papua and New Guinea and other External Territories. During the year ended 31st March, 1960, these stations handled 690,429 messages (570,847 paying, 22,492 free traffic and 97,090 meteorological) with a total of 15,417,282 words.

5. Radiocommunication Stations Authorized.—The following table shows particulars of the different classes of radiocommunication stations authorized in Australia and the External Territories at 30th June, 1960. Figures relate to radiocommunication (radio telegraph and radio telephone) stations only; particulars of broadcasting stations and of broadcast listeners' licences are shown on pages 581 and 583.

The number of radiocommunication stations has increased considerably in recent years, having nearly doubled since June, 1956. While the increase is fairly generally distributed, it is perhaps most noticeable in the mobile services stations.

RADIOCOMMUNICATION STATIONS AUTHORIZED, 30th JUNE, 1960.

Class of Station.	N.S.W.	Vic.	Old.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.	Ext. Terr.	Grand Total.
TRANSMITTING AND RECEIVING.											
Fixed(a)—											
Aeronautical	33	6	15	6	14	7	6	1	88	25	113
Services with other Countries ..	52	15	..	..	9	..	..	..	76	12	88
Outpost(b)	199	..	398	129	324	16	157	..	1,223	405	1,628
Other	287	142	164	56	72	31	31	1	784	79	863
Land(c)—											
Aeronautical	22	9	18	6	13	7	5	1	81	16	97
Base—											
Land Mobile Services ..	1,004	690	477	264	154	98	18	17	2,722	18	2,740
Harbour Mobile Services ..	20	15	10	5	28	..	..	..	78	..	78
Coast(d)	18	10	12	11	10	20	1	..	82	14	96
Special Experimental	58	48	11	22	17	8	..	1	165	8	173
Mobile(e)—											
Aeronautical .. ..	..	..	..	..	..	..	..	..	(f) 508	36	544
Land Mobile Services ..	9,802	6,027	3,282	2,551	1,591	553	111	270	24,187	73	24,260
Harbour Mobile Services ..	139	105	35	38	57	6	..	..	380	18	398
Outpost .. ..	..	..	..	..	..	..	..	..	(f) 963	50	1,013
Ship .. ..	..	..	..	..	..	..	..	..	2,311	131	2,442
Amateur	1,287	1,258	439	481	275	135	13	27	3,915	72	3,987
Total	12,921	8,325	4,861	3,569	2,564	881	342	318	37,563	957	38,520

RECEIVING ONLY.

Fixed(a)	82	190	79	7	35	1	4	..	398	..	398
Land(c) .. ..	..	..	..	..	..	..	..	..	..	..	..
Mobile(e)	1	34	20	..	..	..	..	..	55	..	55
Total	83	224	99	7	35	1	4	..	453	..	453

TOTAL STATIONS AUTHORIZED.

Grand Total ..	13,004	8,549	4,960	3,576	2,599	882	346	318	(g) 38,016	957	(g) 38,973
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(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) Stations which cannot be classified according to States, etc.
 (g) Includes 3,782 mobile transmitting and receiving stations, which cannot be classified according to States, etc.

J. BROADCASTING AND TELEVISION.

§ 1. General.

Broadcasting and television services in Australia operate under the Broadcasting and Television Act 1942–1960 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 (*see below*). Details of each service will be found on pages 578–83. Licence fees for commercial broadcasting and television stations are payable under the Broadcasting and Television Stations Licence Fees Act 1956.

The Australian Broadcasting Control Board, which was constituted on 15th March, 1949, consists of five members (including two part-time), and operates under the Ministerial jurisdiction of the Postmaster-General. Its principal functions, as set out in section 16 of the Broadcasting and Television Act 1942–1960, are to ensure:—(a) that services by broadcasting stations and television stations are provided in accordance with plans prepared from time to time by the Board and approved by the Minister; (b) that the technical equipment and operation of such stations are in accordance with such standards and practices as the Board considers to be appropriate; (c) that adequate and comprehensive programmes are provided by the stations to serve the best interests of the general public; and (d) that sources of interference to the transmission and reception of broadcast and televised programmes be detected and that assistance be given in the detection and prevention of such interference. In addition, the Board may exercise such other functions as are prescribed in relation to broadcasting stations and television stations. For information as to the powers granted to the Board in order to perform its functions *see* Official Year Book No. 46 and earlier issues.

The Australian Broadcasting Commission, which consists of seven members, at least one of whom must be a woman, controls the activities of the National Broadcasting Service and the National Television Service.

§ 2. Broadcasting.

1. **The National Broadcasting Service.**—(i) *General.* In sound broadcasting, the programmes of the National Broadcasting Service are provided by the Australian Broadcasting Commission and the provision and operation of transmitters and technical facilities in the studios are the responsibility of the Postmaster-General's Department.

(ii) *Technical Facilities.* At 30th June, 1960, the National Broadcasting Service comprised 66 transmitting stations, as follows:—

*Medium-frequency Stations—**New South Wales—*

2BL and 2FC Sydney, 2BA Bega, 2CO Albury, 2CR Orange, 2GL Glen Innes, 2KP Kempsey, 2LG Lithgow, 2ML Murwillumbah, 2NA and 2NC Newcastle, 2NB Broken Hill, 2NR Grafton, 2NU Tamworth, 2TR Taree, 2WN Wollongong.

Victoria—

3AR and 3LO Melbourne, 3Gi Sale, 3WL Warrnambool, 3WV Horsham.

Queensland—

4QG and 4QR Brisbane, 4AT Atherton, 4GM Gympie, 4QA Mackay, 4QB Maryborough, 4QL Longreach, 4QN Townsville, 4QS Toowoomba, 4QY Cairns, 4RK Rockhampton, 4SO Southport.

South Australia—

5AN and 5CL Adelaide, 5CK Port Pirie, 5LN Port Lincoln, 5MG Mt. Gambier, 5MV Renmark, 5PA Penola, 5WM Woomera.

Western Australia—

6WF and 6WN Perth, 6AL Albany, 6GF Kalgoorlie, 6GN Geraldton,
6NM Northam, 6WA Wagin.

Tasmania—

7ZL and 7ZR Hobart, 7NT Launceston, 7QN Queenstown.

Northern Territory—

8AL Alice Springs, 8DR Darwin.

Australian Capital Territory—

2CN and 2CY Canberra.

Papua—

9PA Port Moresby.

High-frequency Stations—

VLI Sydney, New South Wales, VLG, V LH and VLR Lyndhurst, Victoria,
VLM and VLQ Brisbane, Queensland, VLW and VLX Perth, Western
Australia, VLT Port Moresby, Papua.

In addition to the services shown above, there are four experimental frequency modulation services operating in Sydney, Melbourne, Brisbane and Adelaide.

The medium-frequency transmitters operate in the broadcast band 555 to 1,605 kilocycles per second. The high-frequency stations, using frequencies within the band 3 to 30 megacycles per 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, and in Papua and New Guinea and adjacent islands.

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, 1960, 44 of the 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.

(iii) *Programme Facilities.* (a) *General.* The programmes of the Australian Broadcasting Commission cover a wide range of activities, which are indicated briefly in the following paragraphs. The proportion of broadcasting time allocated to the various types of programme during 1959–60 was as follows:—Classical Music, 24.8 per cent.; Light Music, 11.8 per cent.; Variety, 19.5 per cent.; News, 7.2 per cent.; Talks, 6.8 per cent.; Sporting, 4.7 per cent.; Parliament, 4.2 per cent.; Youth Education, 3.9 per cent.; Drama and Features, 3.7 per cent.; Religious, 3.7 per cent.; Children's Session, 2.8 per cent.; Rural, 1.7 per cent.; Non-departmental, 5.2 per cent.

(b) *Music.* The A.B.C., in addition to its extensive activities in the field of musical broadcasting, is one of the largest concert-giving organizations in the world. Its regular broadcasts command a large listening audience, and a total of 954,015 people attended A.B.C. concerts during 1959–60. There are symphony orchestras in Sydney, Melbourne, Brisbane, Adelaide, Perth and Hobart, which have developed from the studio broadcasting orchestras set up in 1936.

In 1959–60, the A.B.C. organized 525 public orchestral concerts (including 154 free concerts for school children and 34 free concerts for adults) and 198 public recitals by famous artists throughout the Commonwealth. In 1959, the Czech Philharmonic Orchestra became the first overseas orchestra to visit Australia. It was followed in 1960 by the Boston Symphony Orchestra.

(c) *Drama and Features.* Drama programmes are designed to give listeners opportunities, which they might not otherwise have, of hearing the world's great plays as well as adaptations of the best modern stage plays and also those written specially for broadcasting. The main regular radio drama programmes are broadcast on Sunday afternoons

and Sunday and Monday evenings, and special series of longer plays are also given at various times. In recent years the technique of the feature programme has also been developed. The feature is a form of entertainment which is unique to radio, consisting of specially written programmes designed to present information in an interesting way.

(d) *Youth Education.* The A.B.C. provides a regular series of broadcasts to schools as an addition to normal class-room education. The total number of listening schools at the end of June, 1960 was 9,408 or about 93 per cent. of all schools, State and private, throughout the Commonwealth. (*See also* Chapter XV.—Education, on this subject.)

(e) *Talks.* The aim of the Talks Department is to provide programmes which will keep the listener well informed on current affairs and on general topics. Many of the talks in the first category are now presented in a magazine type of session consisting of a number of short items linked by a narrator. An extension of this type of programme is the documentary. Major controversial topics are covered in sessions such as the "Nation's Forum of the Air" and "I Put it to You". Another session in this type of programme is "News Review", containing comments on the news of the day recorded over landline from all States of the Commonwealth and, in the case of significant world events, from overseas by radio-telephone.

(f) *Rural Broadcasts.* The Rural Broadcasts Department devotes its programmes to weather and market reports and talks, interviews, etc., designed to provide useful information for the man on the land. These programmes are presented on a regional, State and national basis, many being directed to particular districts, because of the diversity of climate and conditions. Separate rural programmes originate at 19 regional stations and are relayed to all other regionals. Other programmes are broadcast throughout each State or on a national relay, depending on whether the information they contain is of general interest or refers only to the rural industries of one State.

During 1959–60, 7,486 talks and interviews on rural topics were broadcast by the A.B.C., as well as 8,684 weather reports and 6,968 interstate and local market reports. In times of emergency, the regular weather reports are supplemented by special services giving flood or fire warnings.

(g) *News.* The Commission collects all its Australian (including Papua and New Guinea) news through its own staff journalists and part-time correspondents. It also maintains a news room in London for the selection and transmission of news obtained from major overseas agencies and has special representatives in South-East Asia. Regional bulletins are broadcast from country centres and also from capital cities to cover near-city districts. Radio Australia (the Overseas Service of the A.B.C.) broadcasts Australian and overseas news daily in English, French, Mandarin, Indonesian, Japanese, Cantonese and Thai, with special attention to Asia and the Pacific. Each day the A.B.C. re-broadcasts two news bulletins from the British Broadcasting Corporation. The A.B.C. broadcasts 160 news bulletins each day, including those given over Radio Australia.

(h) *Other Activities.* The proceedings of the Federal Parliament are broadcast regularly on one of the two national transmitters in each capital city, one in Newcastle and one domestic short-wave station (VLR).

The National Children's Hour, presented seven days a week, is composed of over 40 programme items, including stories, music, games, art, literature, natural history and sport.

In co-operation with the various religious denominations, the A.B.C. broadcasts several religious sessions each week-day in addition to those given on Sundays. These religious broadcasts include relays of normal church services and a variety of special programmes of talks and sacred music. The modern trend towards the use of religious drama is also followed.

The variety and sporting programmes of the A.B.C. provide the lighter side of the service. With its variety session the policy of the A.B.C. is to assist local artists in order to increase the amount of first-class talent in this country, and encouragement is also given to Australian composers of light music.

A comprehensive coverage of sport at home and abroad is provided by the A.B.C. On Saturday afternoons the sporting panel provides listeners with progress results, scores and descriptions from several fields of sport. Events of international interest such as Test matches, the Davis Cup, etc., are covered by simultaneous descriptions from A.B.C. commentators.

2. **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 £25 on the grant of the licence, and thereafter £25 a year plus one per cent. of the gross earnings of the station from the broadcasting of advertisements or other matter during the preceding financial year. Licensees of these stations rely for their income on the broadcasting of advertisements and other publicity.

3. **Oversea Broadcasting Service.**—There are three high-frequency stations at Shepparton, Victoria (VLA, VLB, VLC) 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. During certain periods, station VLG Lyndhurst is also used for the purpose of overseas transmission. 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.

4. **Broadcasting Stations.**—The following table shows the number of broadcasting stations in operation at 30th June, 1960:—

BROADCASTING STATIONS, 30th JUNE, 1960.

Type of Station.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Papua and New Guinea.	Total.
National—										
Medium Frequency ..	16	5	12	8	7	4	2	2	1	57
High Frequency—										
Amplitude Modulation ..	1	3	2	..	2	..	..	..	1	9
Frequency Modulation ..	1	1	1	1	..	..	..	..	..	4
Commercial ..	37	20	20	8	14	8	..	1	..	108

A table showing the call sign, location, frequency and aerial power of broadcasting stations licensed at 30th June, 1960, is shown in *Transport and Communication*, Bulletin No. 51.

§ 3. Television.

1. **General.**—Television services in Australia operate under the Broadcasting and Television Act 1942–1960 and comprise the National Television Service and the Commercial Television Service.

2. **The National Television Service.**—(i) *General.* The A.B.C. provides the programmes for the National Television Service from stations provided and operated by the Postmaster-General. Six stations have been established—ABN Sydney, commenced operation, 5th November, 1956; ABV Melbourne, commenced operation, 18th November, 1956; ABQ Brisbane, commenced operation, 2nd November, 1959; ABS Adelaide, commenced operation,

11th March, 1960; ABW Perth, commenced operation, 7th May, 1960; and ABT Hobart, commenced operation, 4th June, 1960—each of which operates on Channel 2. Each station operates on a frequency of 64.25 megacycles a second for vision and 69.75 megacycles a second for sound.

(ii) *Programme Facilities.* (a) *General.* The television programmes provided by the A.B.C. cover a wide range of activities. The proportion of television time allocated among the A.B.C.'s various departments to 30th June, 1960 was as follows:—Drama and Features, 21.9 per cent.; Talks Department, 18.8 per cent.; Sport, 11.4 per cent.; Children's Session, 10.0 per cent.; News, 8.5 per cent.; Variety, 7.8 per cent.; Youth Education, 4.3 per cent.; Rural Services, 2.4 per cent.; Religion, 2.3 per cent.; Classical Music, 2.0 per cent.; Light Music, 0.3 per cent.; Non-departmental (including trade demonstration films), 10.3 per cent. A summary of the activities of the departments in the field of television is given in the following paragraphs. Transmission hours in Sydney, Melbourne, Brisbane, Adelaide, Perth and Hobart, for the 12 months ended 30th June, 1960, totalled 9,243.

(b) *Talks.* In television, talks cover a very wide field, ranging from commentaries on international affairs to panel games and outside telecasts of public events. Discussions, topical interviews, magazine programmes, women's programmes, demonstrations and film and studio documentaries are all part of the regular output.

(c) *Drama and Features.* A considerable proportion of television time is devoted to drama and features, and "live" television plays featuring Australian artists may usually be seen fortnightly in all State capitals. During 1959, a Television Writers' Workshop was formed to give writers practical advice on television writing. Of 23 live plays produced during the year, 12 were by Australian authors and, in addition, seven half-hour episodes of a locally written serial, "Stormy Petrel"—based on the life of Governor Bligh—were telecast.

(d) *Music.* During 1957, the A.B.C.'s musical activities extended to the field of television. A number of public concerts and studio performances were successfully telecast and there is reason to believe that the new medium will contribute to the further development of musical appreciation in Australia.

(e) *Rural Services.* The emphasis has been on providing information for consumers and on giving city viewers, by means of films, demonstrations, etc., a picture of Australia's rural industries. Regular programmes featuring many facets of Australian agriculture and livestock activities have already been given, and this work will be developed as further facilities become available. Weather reports and forecasts are also telecast on six evenings a week.

(f) *Youth Education.* The A.B.C. provides a television programme for very young children each week-day, under the title "Kindergarten Playtime". Experimental television programmes for schools are being presented.

(g) *News.* Television news bulletins and newsreels have been included in the programmes presented in both Sydney and Melbourne since the television services began in November, 1956. The A.B.C. is a member of the British Commonwealth International Newsfilm Agency (B.C.I.N.A.), through which it receives world-wide television newsfilm and provides newsfilm of Australian origin for international distribution.

(h) *Other Activities.* Special television programmes are presented for children, including filmed material obtained on an exchange basis from overseas television organizations. Special religious services and programmes have also been televised. Outside television cameras have covered a number of sporting events, including the Olympic Games, Davis Cup tennis, Test and Sheffield Shield cricket and swimming championships.

3. *The Commercial Television Service.*—Commercial television stations are operated under licences granted by the Postmaster-General. Licences for commercial television stations have been granted as follows:—Sydney—ATN (Channel 7), TCN (Channel 9); Melbourne—HSV (Channel 7), GTV (Channel 9); Brisbane—BTQ (Channel 7), QTQ (Channel 9); Adelaide—ADS (Channel 7), NWS (Channel 9); Perth—TVW (Channel 7) and Hobart—TVT (Channel 6). The stations commenced operations on the following dates:—ATN, 2nd December, 1956; TCN, 16th September, 1956; HSV, 4th November, 1956; GTV, 19th January, 1957; QTQ, 16th August, 1959; NWS, 5th September, 1959; TVW, 16th October, 1959; ADS, 24th October, 1959; BTQ, 1st November, 1959, and TVT, 23rd May, 1960.

The initial grant of a licence is for a period of five years, and thereafter the licence is renewable annually. The fee payable is £100 for the first year, and thereafter £100 a year plus one per cent. of the station's gross earnings from the televising of advertisements or other matter during the preceding financial year.

4. **Extension of Television Services.**—The Government has approved the establishment of a national and a commercial television station in each of the following provincial and country areas:—

New South Wales—

Newcastle-Hunter River, Illawarra, Richmond-Tweed Heads, Central Tablelands.

Victoria—

Ballarat, Bendigo, Latrobe Valley, Goulburn Valley.

Queensland—

Darling Downs, Rockhampton, Townsville.

Tasmania—

North Eastern Tasmania.

Australian Capital Territory—

Canberra.

When the stations commence operation, it is estimated that 75 per cent. of the Australian people will be able to receive a television service.

§ 4. Licences, etc.

1. **Broadcast Listeners' and Television Viewers' Licences.**—(i) *General.* Broadcast listeners' and television viewers' licences are issued at post offices in accordance with the provisions of the Broadcasting and Television Act 1942–1960, 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 authorizes the operation of any broadcast receiver, and a television viewer's licence 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/or ordinarily kept at that address; (b) installed in a vehicle which is ordinarily in the possession of the holder, or of a member of his family, and is ordinarily kept at that address while not in use.

The fee for a broadcast listener's licence or a renewal thereof is:—Zone 1, £2 15s.; Zone 2, £1 8s. Zone 1 is the area within approximately 250 miles of specified broadcasting stations and Zone 2 is the remainder of the Commonwealth. A television viewer's licence costs £5.

A licence may be granted at reduced rates to persons who are in receipt of certain types of pension and are otherwise qualified to receive this concession.

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. Inmates of a hospital or charitable institution are covered by the licence held by the institution.

(ii) *Licences in Force.* (a) *Broadcast Listeners'.* The following table shows the number of broadcast listeners' licences in force at five year intervals from 1925 to 1960.

BROADCAST LISTENERS' LICENCES IN FORCE.

At 30th June—	N.S.W.(a)	Vic.	Qld.	S.A.(b)	W.A.	Tas.	Aust.
1925	34,857	20,290	1,267	3,331	3,562	567	63,874
1930	111,253	140,072	23,335	25,729	5,755	6,048	312,192
1935	279,166	237,247	67,546	76,515	41,257	20,121	721,852
1940	438,256	348,264	151,152	124,928	87,790	42,191	1,212,581
1945(c) ..	548,074	394,315	180,089	146,611	98,210	47,930	1,415,229
1950(c) ..	683,271	505,078	260,033	195,261	133,199	64,369	1,841,211
1955	746,050	549,690	293,542	223,593	150,199	71,602	2,034,676
1960	832,659	606,587	344,198	249,148	171,693	78,900	2,283,185

(a) Includes the Australian Capital Territory. (b) Includes the Northern Territory. (c) Excludes licences for receivers in excess of one. These licences were introduced in July, 1942, and were abolished on 31st December, 1951.

Of the 2,283,185 broadcast listeners' licences in force at 30th June, 1960, 1,343,741 or 59 per cent. were held by persons living in metropolitan areas and 939,444 or 41 per cent. by persons in country areas.

(b) *Television Viewers*'. The following table shows the number of television viewers' licences in force each year at 30th June and 31st December, 1957 to 1960.

TELEVISION VIEWERS' LICENCES IN FORCE.

Date.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Aust.
30th June, 1957 ..	28,912	44,986	..	..	..	{ 11	73,909
31st December, 1957 ..	74,627	91,922	..	..	..	{ 27	166,576
30th June, 1958 ..	143,422	147,721	..	..	..	{ 43	291,186
31st December, 1958 ..	232,473	222,172	..	..	..	(a) { 51	454,696
30th June, 1959 ..	300,871	270,073	360	6,124	..	{ 74	577,502
31st December, 1959 ..	358,544	307,950	27,590	34,060	9,621	{ 90	737,855
30th June, 1960 ..	409,334	353,091	67,337	84,967	35,604	{ 4,662	954,995
31st December, 1960 ..	456,989	384,375	96,644	110,658	57,792	{ 14,362	1,120,820

(a) These licences were for television sets in the north coast area of Tasmania which were able to receive programmes from Victoria.

Of the 954,995 television viewers' licences in force at 30th June, 1960, 834,909 or 87.4 per cent. were held by persons living in metropolitan areas.