

## CHAPTER VII.

### TRANSPORT AND COMMUNICATION.

NOTE.—The statistics in some divisions of this chapter cover the year 1953-54; in other divisions, however, it has been possible to include 1954-55 figures. In these cases corresponding figures for 1953-54 will be found in *Transport and Communication Bulletin* No. 45 unless otherwise specifically indicated.

#### A. SHIPPING.

##### § 1. 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* § 5 following, paragraph 1).

On arrival at, or departure from, a port in Australia, whether from or for an oversea country or from 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 this Bureau. This arrangement has been in operation since 1st July, 1924.

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.

Cargo is recorded in *tons weight* or in *tons measurement* (40 cubic feet).

From 1st July, 1914 the Trade and Shipping of Australia have been recorded for the financial years ending 30th June.

##### § 2. 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 1949-50 to 1954-55 :—

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

Particulars.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Number of Vessels . . .	3,907	3,903	4,136	4,041	4,127	4,505
Net Tonnage '000 tons	17,378	17,307	18,225	17,571	17,733	20,003

The average net tonnage per vessel has risen from 2,919 tons per vessel in 1921-22 to 4,440 tons in 1954-55.

Particulars of the total oversea movement of shipping for each year from 1822 to 1920-21 will be found in Official Year Book No. 15, p. 507, and for years subsequent thereto, but not shown in the table above, in Official Year Book No. 40, p. 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 overseas countries, and the aggregate net tonnage, during the year 1954-55 :—

**OVERSEA SHIPPING : ENTRANCES AND CLEARANCES OF VESSELS DIRECT. STATES, 1954-55.**

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances	No. 640	452	328	211	561	37	16	2,245
'ooo net tons	2,588	2,103	1,072	831	3,175	124	46	9,939
Clearances	No. 555	393	480	201	578	39	14	2,260
'ooo net tons	2,328	1,826	1,780	821	3,027	230	52	10,064

3. **Shipping Communication with Various Countries.**—Records of the number and tonnage of vessels arriving from and departing to particular countries, as they are invariably made, may be misleading for the reason that the tonnage of a vessel can be recorded against one country only, notwithstanding that the same vessel on the same voyage may carry cargo or passengers to or from Australia from or to several countries. For instance, a mail steamer on a voyage from the United Kingdom to Australia, through the Suez Canal, may call at Marseilles, Genoa, Port Said, Aden and Colombo, yet can be credited only to the United Kingdom, the country where the voyage commenced, to the exclusion of all of the others from the records. Also a number of vessels touch at New Zealand ports on their voyages to and from the United States of America and Canada, but their tonnages are not included in the records of Australian shipping trade with New Zealand. Similarly, the record of shipping engaged in trade between Australia and the United Kingdom via South African ports does not show tonnage to and from South Africa, the whole of it being included in the figures for the United Kingdom. In view of this defect, statistics relating to the direction of the shipping to and from Australia are restricted to the following tables in which countries situated on the main trade routes are grouped together. This grouping into larger geographical divisions to some extent avoids the limitations referred to, except, as already pointed out, in the case of Africa and New Zealand.

**OVERSEA SHIPPING : COUNTRY GROUPS FROM WHICH ENTERED OR FOR WHICH CLEARED, AUSTRALIA.**

Country Group.	With Cargo or in Ballast.	Net Tonnage Entered ('ooo).			Net Tonnage Cleared ('ooo).		
		1952-53.	1953-54.	1954-55.	1952-53.	1953-54.	1954-55.
United Kingdom and European Countries .. .. .	Cargo	2,484	2,786	3,072	3,276	2,860	2,760
	Ballast	35	43	12	38	93	428
New Zealand(a) .. .. .	Cargo	541	521	642	719	761	912
	Ballast	358	255	339	34	91	100
Asiatic Countries and Pacific Islands .. .. .	Cargo	3,401	3,623	4,471	1,969	2,001	1,971
	Ballast	892	791	403	1,927	2,087	3,128
Africa(a) .. .. .	Cargo	97	96	95	94	101	61
	Ballast	99	48	18	27	22	45
North and Central America .. .. .	Cargo	740	674	842	442	455	452
	Ballast	3	9	5	337	376	198
South America .. .. .	Cargo	49	35	40	4	..	..
	Ballast	5	..	..	..	3	4
Antarctica .. .. .	Cargo	..	1	..	..	1	..
	Ballast	..	..	..	..	..	1
Total .. .. .	Cargo	7,312	7,736	9,162	6,504	6,179	6,157
	Ballast	1,392	1,146	777	2,363	2,677	3,907
Total Cargo and Ballast..	..	8,704	8,882	9,939	8,867	8,851	10,064

(a) See explanation above.

4. **Nationality of Oversea Shipping.**—Owing to war conditions, the proportion of shipping of British nationality progressively declined from 72.82 per cent. of the total tonnage entered in 1938-39 to 43.40 per cent. in 1943-44. On the other hand, the proportion of American (U.S.) shipping visiting Australia during the same period advanced from 2.61 per cent. in 1938-39 to 33.07 per cent. in 1943-44. Thereafter the trend was reversed, and in 1950-51 the proportion of British shipping entered was 70.83 per cent. and of American 2.34 per cent. In 1954-55 the proportion of British shipping entered had fallen to 62.56 per cent.

Particulars of the nationality of overseas shipping which entered Australia during each of the years 1952-53 to 1954-55 are given in the following table :—

**OVERSEA SHIPPING : NATIONALITY OF VESSELS ENTERED, AUSTRALIA.**  
(’000 Net Tons.)

Nationality.	1952-53.	1953-54.	1954-55.	Nationality.	1952-53.	1953-54.	1954-55.
<b>BRITISH—</b>				<b>FOREIGN—continued.</b>			
Australian ..	229	300	347	Japanese ..	161	142	209
Canadian ..	17	4	..	Norwegian ..	719	776	1,129
New Zealand ..	375	400	423	Panamanian ..	386	310	382
United Kingdom ..	4,839	4,933	5,207	Swedish ..	267	329	326
Other British ..	189	199	241	Other Foreign ..	213	223	163
 In Cargo ..	 4,732	 5,107	 5,694	 In Cargo ..	 2,580	 2,629	 3,467
In Ballast ..	917	729	524	In Ballast ..	475	417	254
 Total British Proportion total ..	 5,649 of	 5,836 %	 6,218 %	 Total Foreign Proportion total ..	 3,055 of	 3,046 %	 3,721 %
	64.90	65.71	62.56		35.10	34.29	37.44
<b>FOREIGN—</b>				<b>ALL NATIONALITIES—</b>			
American (U.S.) ..	205	160	160	In Cargo ..	7,312	7,736	9,161
Danish ..	109	144	173	Proportion of total% ..	84.01	87.10	92.17
Dutch ..	470	531	608	In Ballast ..	1,392	1,146	778
French ..	148	163	185	Proportion of total% ..	15.99	12.90	7.83
German ..	10	2	54	 Total, All Nationalities	 8,704	 8,882	 9,939
Italian ..	367	266	332				

The Australian tonnage which entered Australian ports from overseas during the year 1954-55 represented 3.49 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 fell from 88.87 per cent. in 1938-39 to 79.37 per cent. in 1947-48. In 1954-55 it was 92.17 per cent. The proportion of shipping which cleared in cargo, however, declined from 87.64 per cent. in 1938-39 to 66.12 per cent. in 1951-52, the trend over the period being generally downward. A further fall, to 61.17 per cent., occurred in 1954-55.

### § 3. Shipping at Principal Ports.

1. **Total Shipping, Australia.**—The following table shows the total volume of shipping—overseas, interstate and coastwise—which entered the principal ports of Australia during the years 1953-54 and 1954-55. Warships are excluded from the table. Corresponding figures for each year from 1948-49 will be found in *Transport and Communication Bulletin* No. 45.

## TOTAL SHIPPING : ENTRANCES AT PRINCIPAL PORTS, AUSTRALIA.

Port of Entry.	1953-54.		1954-55.		Port of Entry.	1953-54.		1954-55.	
	Num-ber.	Net Tons.	Num-ber.	Net Tons.		Num-ber.	Net Tons.	Num-ber.	Net Tons.
		'000.		'000.			'000.		'000.
<b>New South Wales—</b>					<b>South Australia—</b>				
Sydney ..	4,538	9,357	4,399	9,702	Adelaide ..	3,003	5,358	2,621	5,215
Newcastle ..	2,370	3,665	2,261	3,516	Port Lincoln ..	284	383	298	372
Port Kembla ..	534	1,586	611	1,885	Port Pirie ..	353	903	352	892
					Rapid Bay ..	65	184	79	192
					Wallaroo ..	87	134	105	124
					Whyalla ..	467	1,358	475	1,373
<b>Victoria—</b>					<b>Western Australia—</b>				
Melbourne ..	2,496	8,643	2,527	9,029	Fremantle ..	931	4,870	1,078	5,708
Geelong ..	384	1,106	474	1,611	Albany ..	54	229	62	289
					Bunbury ..	72	200	64	168
					Carnarvon ..	108	159	115	152
					Geraldton ..	91	247	105	307
					Yampi ..	135	324	132	330
<b>Queensland—</b>					<b>Tasmania—</b>				
Brisbane ..	1,062	3,425	1,167	3,707	Hobart ..	360	807	360	856
Bowen ..	88	262	77	235	Burnie ..	221	286	229	331
Cairns ..	311	650	279	622	Devonport ..	247	244	260	209
Gladstone ..	75	247	80	248	Launceston ..	409	463	433	461
Mackay ..	106	280	93	271	<b>Northern Territory—</b>				
Rockhampton ..	100	203	112	217	Darwin ..	53	81	58	134
Townsville ..	296	1,026	294	987					

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 1954-55, New Zealand during 1954 and the United Kingdom during 1953.

## 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.
<b>AUSTRALIA—</b>		<b>AUSTRALIA—continued.</b>		<b>ENGLAND AND WALES—</b>	
Sydney (N.S.W.)	9,702	Albany (W.A.) ..	289	<i>continued.</i>	
Melbourne (Vic.)	9,029	Mackay (Qld.) ..	271	Hull ..	4,968
Fremantle (W.A.)	5,768			Manchester (Including Runcorn) ..	4,187
Adelaide (S.A.) ..	5,215	<b>NEW ZEALAND—</b>		Dover ..	3,860
Brisbane (Qld.) ..	3,707	Wellington ..	3,660	Swansea ..	3,455
Newcastle (N.S.W.)	3,516	Auckland ..	2,650	Bristol ..	3,393
Port Kembla (N.S.W.) ..	1,885	Lyttleton ..	2,527	Harwich ..	3,261
Geelong (Vic.) ..	1,611	Otago ..	1,056	Tyne Ports ..	3,216
Whyalla (S.A.) ..	1,373	Napier ..	517	Middlesbrough ..	2,897
Townsville (Qld.) ..	987	Tinianu ..	446	Plymouth ..	1,947
Port Pirie (S.A.) ..	892	Bluff ..	431		
Hobart (Tas.) ..	856			<b>SCOTLAND—</b>	
Cairns (Qld.) ..	622	<b>ENGLAND AND WALES—</b>		Glasgow ..	4,736
Launceston (Tas.)	461	London ..	22,899		
Port Lincoln (S.A.)	372	Liverpool (including		<b>NORTHERN IRELAND—</b>	
Burnie (Tas.) ..	331	Birkenhead) ..	15,084	Belfast ..	977
Yampi (W.A.) ..	330	Southampton ..	14,581		
Geraldton (W.A.) ..	307				

## § 4. Vessels Built and Registered.

1. Vessels Built.—The following table shows the number and tonnage of vessels built in Australia during each of the calendar years 1949 to 1954, so far as such information can be ascertained from the Shipping Registers of the various States. The Merchant Shipping Act, under which vessels are registered in Australia, does not, however, 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.				
		Gross.	Net.		Gross.	Net.		Gross.	Net.			
1949 ..	2	9,673	5,427	9	726	383	..	..	..	11	10,399	5,810
1950 ..	2	8,005	4,141	9	1 213	648	..	..	..	11	9,218	4,789
1951 ..	2	13,515	7,522	9	5,435	2,843	..	..	..	11	18,950	10,365
1952 ..	1	4,054	2,070	7	2,520	1,382	1	5	3	9	6,579	3,455
1953 ..	3	11,744	6,647	4	7,886	4,051	3	23	22	10	19,056	10,720
1954 ..	2	11,289	5,706	12	11,896	6,546	..	..	..	14	23,179	12,252

(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 on 31st December, 1954 :—

## VESSELS ON STATE REGISTERS, 31st DECEMBER, 1954.

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	303	69,081	27	2,097	92	1,282	10	948	432	73,408
Victoria ..	192	183,579	49	595	52	1,545	40	16,069	333	201,788
Queensland ..	95	31,309	61	741	63	854	11	1,421	230	34,325
South Australia	82	28,212	15	307	41	2,116	39	6,172	177	36,807
Western Australia	79	7,096	211	3,144	59	1,475	4	351	353	12,066
Tasmania ..	41	6,411	44	1,458	89	2,270	2	513	176	10,652
Northern Territory	..	..	16	154	9	177	..	..	25	331
Australia ..	792	325,688	423	8,496	405	9,719	106	25,474	1,726	369,377

3. World Shipping Tonnage.—Issues of the Official Year Book prior to No. 39 contained tables, compiled from *Lloyd's Register of Shipping*, showing the number and gross tonnage of steam, motor and sailing vessels owned by the various maritime countries of the world. The tables are not repeated in this issue, but the following information is derived from the same source.

At 1st July, 1953, the total steamers, motorships and sailing vessels of 100 gross tons and upwards throughout the world amounted to 32,603 with a gross tonnage of 93,978,000. Of these totals, steamers numbered 17,864 for 64,237,000 gross tons, motorships 13,933 for 29,115,000 gross tons and sailing vessels and barges 806 for 626,000 gross tons. In addition, there were 3,210 oil tankers of 100 gross tons and upwards with a gross tonnage of 21,964,000. Australian steamers, motor-ships and sailing vessels, 364 for 579,000 gross tons, constituted 1.12 per cent. and 0.62 per cent. respectively of the total numbers and tonnage. There were no Australian oil tankers of 100 gross tons and upwards registered.

## § 5. 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 voyage proceeding from one State to another. (It should be mentioned that these vessels, except under special circumstances, do not engage in interstate carrying.) 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 (which are prepared in this Bureau) 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 *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 *via* other 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 movement, must for the individual States be recorded as “Oversea *via* other States” or “Interstate” according to the direction of the movement. The significance of the record of these movements will be more clearly seen from the following tabular presentation of the inward and outward voyages to and from Australia of a mail steamer 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.
<b>Inward Voyage—</b>		
Enters Fremantle from United Kingdom	Oversea direct	
Clears Fremantle for Adelaide	.. ..	Interstate direct
Enters Adelaide from United Kingdom	.. ..	
<i>via</i> Fremantle	.. ..	Oversea <i>via</i> States
Clears Adelaide for Melbourne	.. ..	Interstate direct
Enters Melbourne from United Kingdom	.. ..	
<i>via</i> Adelaide	.. ..	Oversea <i>via</i> States
Clears Melbourne for Sydney	.. ..	Interstate direct
Enters Sydney from United Kingdom <i>via</i> Melbourne	.. ..	Oversea <i>via</i> States
<b>Outward Voyage—</b>		
Clears Sydney for United Kingdom <i>via</i> Melbourne	.. ..	Oversea <i>via</i> States
Enters Melbourne from Sydney	.. ..	Interstate direct
Clears Melbourne for United Kingdom <i>via</i> Adelaide	.. ..	Oversea <i>via</i> States
Enters Adelaide from Melbourne	.. ..	Interstate direct
Clears Adelaide for United Kingdom <i>via</i> Fremantle	.. ..	Oversea <i>via</i> 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*”, to furnish figures showing the total interstate movement of shipping.

It should be remembered, however, that all overseas vessels do not follow the same itinerary as the vessel in the table above.

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) during each of the years 1952–53 to 1954–55. The shipping of the Murray River, between the States of New South Wales, Victoria and South Australia, is excluded.

## INTERSTATE MOVEMENT OF SHIPPING : ENTRANCES OF VESSELS INTERSTATE DIRECT.

State or Territory.	Number.			Net Tons ('000).		
	1952-53.	1953-54.	1954-55.	1952-53.	1953-54.	1954-55.
New South Wales .. ..	1,460	1,595	1,584	4,141	4,470	4,552
Victoria .. ..	1,540	1,586	1,555	3,934	4,030	4,057
Queensland .. ..	404	559	598	1,162	1,409	1,541
South Australia .. ..	859	928	963	3,054	3,301	3,475
Western Australia .. ..	497	491	524	2,575	2,428	2,725
Tasmania .. ..	864	965	960	759	1,068	1,085
Northern Territory .. ..	29	30	40	40	41	77
Australia .. ..	5,761	6,154	6,224	15,665	16,747	17,512

From 1938-39 the total net tonnage of interstate shipping declined steadily each year until 1942-43, when it represented only 38 per cent. of the total for the pre-war year. It remained practically unchanged during the next three years, but increased by almost one-third in 1946-47. By 1954-55 the total had risen to 88 per cent. of the 1938-39 total.

(ii) *Overseas via States.* To ascertain the aggregate movement of shipping between the States, including the total interstate movement of overseas vessels, the figures in the following table, which show the number of entrances and clearances of vessels to and from overseas countries via other Australian States and the aggregate tonnage, must be added to those in the preceding table.

## INTERSTATE MOVEMENT OF SHIPPING : ENTRANCES AND CLEARANCES OF VESSELS OVERSEA VIA OTHER AUSTRALIAN STATES, 1954-55.

Particulars.		N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances	No.	623	711	269	337	50	84	2	2,076
	'000 net tons	3,337	3,790	1,392	1,816	244	410	10	10,999
Clearances	No.	469	473	176	299	34	102	..	1,553
	'000 net tons	2,391	2,632	863	1,529	201	436	..	8,052

Overseas vessels moving interstate are with few exceptions not engaged in the active interstate trade of Australia, but are merely proceeding to the several States in continuation of their overseas voyages.

(iii) *Total, Australia.* The following table shows the total interstate movement of shipping, including overseas vessels travelling overseas via States and interstate direct, for each of the years 1949-50 to 1954-55 :—

## INTERSTATE MOVEMENT OF SHIPPING : TOTAL, AUSTRALIA.

Particulars.			1949-50.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Entrances	..	No.	6,588	6,723	6,694	7,525	7,983	8,300
		'000 net tons	23,110	23,852	24,072	25,583	26,925	28,515
Clearances	..	No.	6,710	6,754	6,652	7,481	8,036	8,151
		'000 net tons	23,296	23,946	23,875	25,359	27,190	28,292

(iv) *Total, States.* 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 1954-55, together with the aggregate net tonnage.

## INTERSTATE MOVEMENT OF SHIPPING : TOTAL, STATES, 1954-55.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Aust.
Entrances No.	2,207	2,266	867	1,300	574	1,044	42	8,300
'000 net tons	7,889	7,849	2,933	5,292	2,969	1,496	87	28,515
Clearances No.	2,280	2,331	734	1,321	558	887	40	8,151
'000 net tons	8,088	8,123	2,241	5,338	3,117	1,313	72	28,292

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 during the year 1954-55, together with the net tonnage.

## SHIPPING ENGAGED SOLELY IN INTERSTATE TRADE : ENTRANCES, 1954-55.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	Australia.
Ships Entered ..	1,241	1,206	363	743	176	877	38	4,644
Net Tons '000	3,054	2,038	650	2,256	678	667	61	9,404

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 at the end of each of the years 1950 to 1954 :—

## INTERSTATE AND COASTAL SHIPPING SERVICES : AUSTRALIA.

Particulars.	1950.	1951.	1952.	1953.	1954.
Number of companies operating ..	31	32	31	31	28
Number of vessels .. ..	179	173	173	172	174
Tonnage { Gross .. ..	490,496	492,558	494,580	501,782	524,975
Net .. ..	272,801	272,003	273,824	277,294	289,854
Horse-power (Nominal) ..	57,500	47,027	47,126	49,159	53,017
Number of passen- gers for which licensed(a) { 1st class ..	2,003	2,171	2,244	2,208	2,198
2nd class ..					
steerage ..	559	706	648	621	626
Complement of { Masters and officers ..	650	629	652	650	675
Engineers ..	736	738	742	751	785
Crew { Other .. ..	4,985	4,907	4,884	4,886	4,950

(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.

## § 6. Shipping Cargo.

1. *Oversea and Interstate Cargo.*—(i) *Australia.* The table hereunder shows the aggregate tonnage of oversea cargo discharged and shipped and the tonnage of interstate cargo shipped in Australian ports for the years 1949-50 to 1954-55. Cargo which was stated in cubic feet has been converted to tons measurement on the basis of 40 cubic feet to the ton.

## SHIPPING CARGO MOVEMENT : AUSTRALIA.

('000.)

Year.	Oversea Cargo.				Interstate Cargo.	
	Discharged.		Shipped.		Shipped.	
	Tons Weight.	Tons Meas.	Tons Weight.	Tons Meas.	Tons Weight.	Tons Meas.
1949-50 ..	7,686	3,576	5,061	1,388	6,419	1,207
1950-51 ..	9,084	3,989	5,405	1,295	6,723	1,326
1951-52 ..	9,727	4,682	4,487	1,231	7,697	1,324
1952-53 ..	7,733	1,029	6,045	1,452	8,447	1,275
1953-54 ..	8,520	2,812	5,765	1,355	9,105	1,539
1954-55 ..	10,993	3,402	6,084	1,420	10,212	1,472



(ii) *Principal Ports.* The following table shows the tonnage of oversea and interstate cargo discharged and shipped at principal ports during 1954-55.

**CARGO DISCHARGED AND SHIPPED AT PRINCIPAL PORTS, 1954-55.**  
( '000.)

Port.	Discharged.				Shipped.			
	Oversea.		Interstate.		Oversea.		Interstate.	
	Tons Wt.	Tons Meas.	Tons Wt.	Tons Meas.	Tons Wt.	Tons Meas.	Tons Wt.	Tons Meas.
Sydney .. .. .	2,381	1,320	618	349	687	426	370	399
Newcastle .. .. .	539	9	1,411	..	304	10	2,667	..
Port Kembla .. .. .	206	..	2,482	..	165	..	585	..
Other.. .. .	..	..	..	..	22	16	7	..
<b>Total, New South Wales ..</b>	<b>3,126</b>	<b>1,329</b>	<b>4,511</b>	<b>349</b>	<b>1,178</b>	<b>452</b>	<b>3,629</b>	<b>399</b>
Melbourne .. .. .	2,371	1,239	1,980	353	553	554	412	423
Geelong .. .. .	1,529	43	239	1	699	..	471	..
Portland .. .. .	38	4	3	..	12	2	..	..
<b>Total, Victoria .. ..</b>	<b>3,938</b>	<b>1,286</b>	<b>2,222</b>	<b>354</b>	<b>1,264</b>	<b>556</b>	<b>883</b>	<b>423</b>
Brisbane .. .. .	703	177	304	259	428	95	47	81
Cairns .. .. .	74	3	16	21	185	5	104	25
Gladstone .. .. .	54	..	8	..	29	2	144	..
Mackay .. .. .	16	..	14	..	198	..	82	..
Townsville .. .. .	78	3	48	31	243	10	78	5
Other.. .. .	2	2	17	18	203	10	63	5
<b>Total, Queensland ..</b>	<b>927</b>	<b>185</b>	<b>407</b>	<b>329</b>	<b>1,286</b>	<b>122</b>	<b>518</b>	<b>116</b>
Port Adelaide .. .. .	718	359	1,436	178	379	117	227	193
Ardrossan .. .. .	..	..	..	..	160	..	97	..
Port Pirie .. .. .	151	..	108	..	409	..	210	..
Rapid Bay .. .. .	..	..	..	..	..	..	346	..
Whyalla .. .. .	6	..	289	4	44	..	2,764	..
Other.. .. .	90	..	66	..	332	6	167	..
<b>Total, South Australia ..</b>	<b>965</b>	<b>359</b>	<b>1,899</b>	<b>182</b>	<b>1,324</b>	<b>123</b>	<b>3,811</b>	<b>193</b>
Fremantle .. .. .	1,612	201	384	234	580	68	234	47
Geraldton .. .. .	34	..	15	..	202	16	37	1
Yampl .. .. .	..	..	1	..	..	..	581	..
Other.. .. .	112	6	31	4	116	26	22	51
<b>Total, Western Australia ..</b>	<b>1,758</b>	<b>207</b>	<b>431</b>	<b>238</b>	<b>898</b>	<b>110</b>	<b>874</b>	<b>99</b>
Hobart .. .. .	133	20	434	4	95	36	233	6
Burnie .. .. .	30	6	29	37	21	1	75	85
Launceston .. .. .	57	10	91	75	17	14	41	87
Other.. .. .	18	..	76	53	..	5	144	64
<b>Total, Tasmania .. ..</b>	<b>238</b>	<b>36</b>	<b>630</b>	<b>169</b>	<b>133</b>	<b>56</b>	<b>493</b>	<b>242</b>
Darwin (Northern Territory) ..	41	..	36	..	1	1	4	..
<b>AUSTRALIA .. .. .</b>	<b>10,993</b>	<b>3,402</b>	<b>10,136</b>	<b>1,621</b>	<b>6,084</b>	<b>1,420</b>	<b>10,212</b>	<b>1,472</b>

Corresponding figures for the year 1953-54 may be found in *Transport and Communication Bulletin* No. 45, p. 45.

2. Oversea Cargo by Nationality of Vessels.—The following table shows the total oversea cargo discharged and shipped combined, according to the nationality of the vessels, during the years 1952-53 to 1954-55 :—

**OVERSEA CARGO DISCHARGED AND SHIPPED : NATIONALITY OF VESSELS.**  
**AUSTRALIA.**

('000.)

Vessels Registered at Ports In—	1952-53.		1953-54.		1954-55.	
	Tons Wt.	Tons Meas.	Tons Wt.	Tons Meas.	Tons Wt.	Tons Meas.
<b>British Countries—</b>						
Australia .. ..	162	83	218	108	357	106
Canada .. ..	45	..	9	1	<del>460</del>	<del>35</del>
New Zealand .. ..	334	231	452	298	472	327
United Kingdom .. ..	7,294	2,286	7,678	2,801	8,792	3,014
Other British .. ..	232	87	272	115	<del>274</del> 434	<del>134</del> 169
<b>Total British .. ..</b>	<b>8,067</b>	<b>2,687</b>	<b>8,629</b>	<b>3,323</b>	<b>10,055</b>	<b>3,616</b>
<b>Proportion of Total %</b>	<b>58.55</b>	<b>79.45</b>	<b>60.41</b>	<b>79.75</b>	<b>58.88</b>	<b>74.97</b>
<b>Foreign Countries—</b>						
Denmark .. ..	298	20	310	32	388	44
France .. ..	226	29	229	31	242	41
Germany .. ..	35	..	20	4	134	69
Italy .. ..	299	43	148	52	217	71
Japan .. ..	291	4	247	17	432	63
Netherlands .. ..	822	138	862	168	1,091	198
Norway .. ..	1,681	121	1,814	168	2,499	246
Panama .. ..	684	37	627	10	765	27
Sweden .. ..	576	118	749	156	719	221
United States of America ..	347	151	192	188	235	174
Other Foreign .. ..	451	34	458	18	299	53
<b>Total Foreign .. ..</b>	<b>5,710</b>	<b>695</b>	<b>5,656</b>	<b>844</b>	<b>7,021</b>	<b>1,207</b>
<b>Proportion of Total %</b>	<b>41.45</b>	<b>20.55</b>	<b>39.59</b>	<b>20.25</b>	<b>41.12</b>	<b>25.03</b>
<b>Grand Total .. ..</b>	<b>13,777</b>	<b>3,382</b>	<b>14,285</b>	<b>4,167</b>	<b>17,076</b>	<b>4,823</b>

Owing to war conditions the proportion of cargo carried in British vessels decreased from 72.43 per cent. in 1938-39 to 41.37 per cent. in 1943-44, but increased to 77.51 per cent. in 1946-47. It has since declined, and in 1954-55 was 62.42 per cent.

### § 7. Control of Shipping.

1. War-time Control.—An account of the action taken by the Commonwealth Government to control and regulate shipping throughout Australian waters during the 1939-45 War was given in Official Year Book No. 36, pp. 121-130.

2. Post-war Control and Developments.—A brief account of the post-war control of shipping and the establishment of the Australian Stevedoring Industry Board and the Australian Shipping Board will be found in Official Year Book No. 39, pp. 147-8.

The Maritime Industry Commission established during the 1939-45 War under National Security legislation was abolished on 19th December, 1952. Permanent legislation to cover many of the matters formerly dealt with by the Commission was enacted in 1952 in the form of amendments to the Navigation Act 1912-1950 by Act No. 109 of 1952 (see page 224).

As at 30th June, 1955, the Australian Shipping Board operated 46 vessels totalling 168,490 gross tons, of which five vessels totalling 25,169 gross tons were operated on time charter from private owners. The Government-owned shipping, totalling 41 vessels of 143,320 gross tons (of which two vessels totalling 4,601 gross tons were on charter to private companies or other shipping organizations), comprised thirteen "A" or River Class vessels of an average of 5,133 gross tons, four "B" Class vessels of an average of 3,930 gross tons, seven "D" Class vessels of an average of 2,334 gross tons, two "D/A" Class vessels of an average of 2,407 gross tons, five "E" Class vessels of an average of 584 gross tons, two "Y" Class vessels of an average of 3,460 gross tons and a collier of 4,887 gross tons, all of which were built in Australian yards, plus seven vessels, totalling 24,992 gross tons, which were built overseas.

In the international sphere, ratification is still being awaited from 21 ship-owning nations of a Convention establishing an Inter-Governmental Maritime Consultative Organization within the framework of the United Nations. The major objectives of this organization are to provide machinery for co-operation among governments with shipping engaged in international trade, and to encourage the removal by governments of discriminatory action and unnecessary restrictions regarding such shipping.

This organization is designed to replace the United Maritime Consultative Council which was established on a tentative basis after the expiry of the war-time United Maritime Authority and Combined Adjustment Board.

Up to 1st July, 1955, ratifications by seventeen countries had been lodged, and there is a possibility of the four others ratifying in the near future, thus bringing the organization into force.

## § 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 shown in *Transport and Communication Bulletin* No. 45.

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, 1955, the rate for general merchandise from Australia to the United Kingdom and Continent was £8 6s. 6d. per ton weight or measurement while the rates for wheat (bagged) and wool (greasy) were respectively £8 15s. per ton weight and 2.76d. less 7 per cent. per lb. These rates, which are expressed in sterling, are subject to an adjustment of 25½ per cent. when freight is prepaid in Australia.

4. Depth of Water at Main Ports.—A table, compiled from information supplied by the Director of Navigation, showing the depth of water available and tides at principal ports of Australia at 1st January, 1955, is included in *Transport and Communication Bulletin* No. 45.

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 casualties reported on or near the coast during the years 1950 to 1954 are shown in the table below. This information also was furnished by the Director of Navigation.

#### SHIPPING LOSSES AND CASUALTIES : AUSTRALIA.

Year.	Shipping Losses.			Shipping Casualties.		
	Vessels.	Net Tons.	Lives Lost.	Vessels.	Net Tons.	Lives Lost.
1950 ..	4	9,735	20	191	611,084	22
1951 ..	5	2,908	5	205	650,718	5
1952 ..	1	197	16	153	431,851	16
1953 ..	..	..	..	85	242,972	..
1954 ..	..	..	..	149	426,878	..

6. 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.

A review of the introduction and development of the Navigation Act 1912–1950 was given in Official Year Book No. 40, pp. 110–2. Amendments to the Principal Act were made by the Navigation Act 1952, the provisions of which covered the settlement of maritime industrial disputes, standards of accommodation to be provided on ships and the engagement and discipline of seamen.

Other shipping Acts under the Trade and Commerce power of the Commonwealth are the Sea-Carriage of Goods Act 1924, the Seamen's Compensation Act 1911–1954, and the Seamen's War Pensions and Allowances Act 1940–1955.

7. Ports and Harbours.—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 two miles, was opened on 12th September, 1854. It was owned and operated by the Melbourne and Hobson's Bay Railway. In the next one hundred years the mileage increased greatly and at 30th June, 1954, 26,633 route-miles (excluding several hundred miles of privately-owned line) were open for traffic. The operation of Australia-wide services is, however, greatly hampered by the presence of many break-of-gauge stations, necessitated by the several gauges at present in use. The policy of Government ownership and control of railways has been adopted in each State and at 30th June, 1954, 24,432 route-miles were owned by the State Governments and 2,201 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 *Transport and Communication Bulletin* issued by this Bureau.

In some States there are comparatively small 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 will be found in Official Year Books No. 6, p. 681 and No. 22, p. 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 which reaches 600 miles at some points. However, Darwin in the Northern Territory is not connected by rail to any other port in Australia. 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 northwards to Alice Springs in Central Australia, a distance of 771 miles. The report by the late Sir Harold Clapp to the Commonwealth Government, details of which appear in Official Year Book No. 37, p. 146, did not recommend the linking of the termini at Alice Springs and Birdum.\* An all-weather road was built to cover the intervening distance and much goods traffic now passes along this road. The travelling times of trains on the main lines of Australia are being lessened and the haulage capacity increased by the introduction of diesel railcars and diesel-electric locomotives. Eleven diesel-electric locomotives now operate all train services on the Trans-Australia Railway between Port Pirie and Kalgoorlie, and, in the near future, steam locomotive power on the Central and North Australia Railways will be replaced by diesel-electric power. The State railway systems also are making increasing use of diesel-electric locomotives, particularly to lessen the time taken on long-distance passenger and goods services.

3. **Government Railways Development.**—In spite of the great extensions of State railways since 1875 and also 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 have been 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 27,251 at 30th June, 1940. 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), especially in Victoria and Western Australia, 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, 1954 are shown in the following table.

**GOVERNMENT RAILWAYS : VARIATIONS IN ROUTE-MILEAGE, TEN YEARS ENDED 30th JUNE, 1954.**  
(Miles.)

State or Territory.	Route-mileage at 30th June, 1944.	Variations during Ten Years ended 30th June, 1954 due to—		Route-mileage at 30th June, 1954.
		Lines Opened.	Lines Closed.	
New South Wales .. ..	6,369	..	27	6,342
Victoria .. ..	4,507	15	281	4,241
Queensland .. ..	6,566	..	6	6,560
South Australia .. ..	3,799	17	..	3,816
Western Australia .. ..	4,835	8	278	4,565
Tasmania .. ..	642	..	28	614
Northern Territory .. ..	490	..	..	490
Australian Capital Territory ..	5	..	..	5
<b>Australia .. ..</b>	<b>27,213</b>	<b>40</b>	<b>620</b>	<b>26,633</b>

\* This is, however, provided for in the Commonwealth-South Australia Agreement referred to in para. 4.

4. **Standardization of Railway Gauges.**—A summary of the report and recommendations relating to the standardization of Australia's railway gauges on the basis of a 4 ft. 8½ in. gauge, made in March, 1945 at the request of the Commonwealth Government by the late Sir Harold Clapp, then Director-General of Land Transport, Commonwealth Department of Transport, 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 is contained in Official Year Book No. 37, pp. 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. Action was also taken to invite the Victorian Government to discuss the subject of a separate agreement, but to date there has been no legislative action. 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.

5. **Grafton-South Brisbane (Uniform Gauge) Line.**—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, p.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.

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 at different periods since the inauguration of railways in Australia in 1854 up to the year 1953-54:—

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

At 30th June—	N.S.W. (a)	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
1855(b) ..	14	2	..	7	..	..	..	..	23
1861(b) ..	73	114	..	56	..	..	..	..	243
1871(b) ..	358	276	218	133	..	45	..	..	1,030
1881(b) ..	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	23,206
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	605	490	5	26,946
1954 ..	6,342	4,241	6,560	3,816	4,565	605	490	5	26,624

(a) Includes route-mileage under the control of the Victorian Railways Department as follows—1931, 203 route-miles; 1941 and later years, 241 route-miles. (b) At 31st December.

At 30th June, 1954, 172 route-miles in Victoria and 126 route-miles in New South Wales were electrified.

The next table shows for each State the length of Government lines open in relation to both population and area at 30th June, 1954.

GOVERNMENT RAILWAYS : ROUTE-MILEAGE OPEN AT 30th JUNE, 1954.  
(Miles.)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Route-mileage open	6,342	4,241	6,560	3,816	4,565	605	490	5	26,624
Per 1,000 of population .. ..	1.85	1.73	4.98	4.79	7.14	1.96	29.78	0.17	2.96
Per 1,000 square miles	20.50	48.26	9.78	10.04	4.68	23.08	0.94	5.32	8.95

7. Classification of Lines according to Gauge, 1953-54.—The next table shows the route-mileage of Government railways open in each State and Territory at 30th June, 1954, classified according to gauge.

GOVERNMENT RAILWAYS : GAUGES, AT 30th JUNE, 1954.  
(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	4,197	..	1,596	..	..	..	..	6,034
4 ft. 8½ in. ..	6,101	..	(b) 69	(c) 654	(e) 454	..	..	(e) 5	7,283
3 ft. 6 in. ..	..	..	6,461	(d) 1,566	4,111	605	(e) 490	..	13,233
2 ft. 6 in. ..	..	44	..	..	..	..	..	..	44
2 ft. 0 in. ..	..	..	30	..	..	..	..	..	30
Total ..	6,342	4,241	6,560	3,816	4,565	605	490	5	26,624

(a) Portion of Victorian system. (b) Queensland section of Grafton-South Brisbane Uniform Gauge Line. (c) Portion of Commonwealth system. (d) Includes 598 miles of Commonwealth system. (e) Includes 598 miles of Commonwealth system.

8. Summary of Operations, 1953-54.—In the following table a summary is shown of the working of Government railways open in Australia during the year ended 30th June, 1954 :—

GOVERNMENT RAILWAYS : SUMMARY OF OPERATIONS, 1953 54.

Particulars.	Common-wealth Railways.	State Railways.	Total.
Route-mileage open, 30th June, 1954 .. miles	2,201	24,423	26,624
Gross revenue .. .. £'000	3,402	166,461	169,863
“ “ per traffic train-mile .. pence	418	437	436
Working expenses .. .. £'000	(a) 2,897	165,287	168,184
“ “ per traffic train-mile .. pence	356	433	432
Net revenue .. .. £'000	505	1,174	1,679
“ “ per traffic train-mile .. pence	62	3	4
Traffic train-miles .. .. '000	1,953	91,511	93,464
Passenger-journeys .. .. '000	224	510,457	510,681
Goods and livestock carried .. .. '000 tons	762	46,486	47,248
Average number of employees(b) .. ..	2,490	140,967	143,457
“ earnings per employee .. .. £	780	825	824

(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, £75,327. (b) Excludes construction staff except in respect of Victoria.

9. **Summary, States, 1953-54.**—The following table shows, for Government railways in Australia, particulars of the mileage open, cost of construction and equipment, passengers and goods carried and train-miles run during 1953-54.

**GOVERNMENT RAILWAYS : SUMMARY, 1953-54.**

Railway System.	Mileage Open.(a)		Cost of Construction and Equipment during Year.	Passenger-journeys.	Goods and Livestock Carried.	Traffic Train-miles (b)
	Route.	Track.				
	Miles.	Miles.	£'000.	'000.	'000 tons.	'000.
New South Wales ..	6,101	8,439	13,303	278,904	(c) 20,140	37,506
Victoria ..	4,482	5,875	8,082	166,106	9,200	18,303
Queensland ..	6,560	7,501	8,614	35,879	8,081	19,241
South Australia ..	2,564	3,178	2,069	17,605	4,133	7,359
Western Australia ..	4,111	4,686	6,110	8,678	3,206	7,204
Tasmania ..	605	706	352	3,285	968	1,898
Commonwealth ..	2,201	2,365	1,236	224	762	1,953
<b>Australia ..</b>	<b>26,624</b>	<b>32,750</b>	<b>39,766</b>	<b>510,681</b>	<b>46,790</b>	<b>93,464</b>

(a) At 30th June, 1954.

(b) Excludes non-revenue train-miles and assistant and light locomotive-miles.

(c) Partly estimated.

10. **Gross Revenue.**—(i) *General.* The gross revenue is composed of (a) receipts from coaching traffic, including the carriage of mails, horses, parcels, etc., by passenger trains; (b) receipts from the carriage of goods and livestock; and (c) rents and miscellaneous items. State Government grants are excluded. Details of these grants made during 1953-54 are as follows:—£1,000,000 for the working of country development lines and £800,000 to subsidize payments from Superannuation Account in New South Wales; £1,930,908 to limit interest payments to 1 per cent. on loan liability in Victoria; £3,200,000 towards working expenses and £800,000 towards debt charges in South Australia; and £10,000 for sick leave funds in Tasmania.

(ii) *Coaching, Goods and Miscellaneous Receipts.* (a) *Summary.* In the following table the gross revenue is shown for the years 1951-52 to 1953-54, together with the revenue per average route-mile worked and per traffic train-mile:—

**GOVERNMENT RAILWAYS : GROSS REVENUE.(a)**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
<b>TOTAL GROSS REVENUE.</b>								
(£'000.)								
1951-52 ..	68,910	24,186	23,357	9,457	8,885	1,798	2,925	139,518
1952-53 ..	72,676	31,864	25,985	11,891	7,667	2,039	2,710	154,832
1953-54 ..	74,569	35,707	30,223	12,718	11,111	2,133	3,402	169,863

**GROSS REVENUE PER AVERAGE ROUTE-MILE WORKED.**

(£.)								
1951-52 ..	11,273	5,160	3,561	3,704	2,160	2,972	1,329	5,198
1952-53 ..	11,889	6,811	3,061	4,658	1,866	3,370	1,231	5,777
1953-54 ..	12,222	7,806	4,607	4,960	2,703	3,526	1,546	6,380

(a) Excludes Government grants; see para. 10 (i) above.



GOVERNMENT RAILWAYS: GROSS REVENUE(a)—*continued*.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust
GROSS REVENUE PER TRAFFIC TRAIN-MILE. (Pence.)								
1951-52 ..	413.33	341.99	300.54	326.86	313.53	206.24	371.70	358.63
1952-53 ..	480.65	432.29	335.94	396.40	350.13	245.96	374.16	418.81
1953-54 ..	477.16	468.21	376.98	414.78	370.17	269.72	418.09	436.18

(a) Excludes Government grants; see para. 10 (i) above.

(b) *Distribution*. The following table shows the gross revenue for the year 1953-54 classified according to the main three sources of receipts and the proportion of the total receipts obtained from each source.

## GOVERNMENT RAILWAYS: DISTRIBUTION OF GROSS REVENUE, 1953-54.

Railway System.	Gross Revenue.			Proportion of Total.		
	Coaching.	Goods and Livestock.	Miscellaneous.	Coaching.	Goods and Livestock.	Miscellaneous.
	£'000.	£'000.	£'000.	%	%	%
New South Wales ..	18,041	52,847	3,681	24.19	70.87	4.94
Victoria ..	11,013	22,655	2,039	30.84	63.45	5.71
Queensland ..	4,593	24,815	815	15.20	82.10	2.70
South Australia ..	1,823	10,007	888	14.34	78.68	6.98
Western Australia ..	1,251	9,308	552	11.26	83.77	4.97
Tasmania ..	216	1,855	62	10.12	86.99	2.89
Commonwealth ..	789	2,320	293	23.19	68.20	8.61
Australia ..	37,726	123,807	8,330	22.21	72.89	4.90

NOTE.—Details of gross revenue classified according to coaching, goods and livestock and miscellaneous receipts for the years 1944-45 to 1953-54 are shown in *Transport and Communication Bulletin* No. 45.

11. *Working Expenses*.—(i) *General*. In order to make an adequate comparison of the working expenses as between 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 revenue 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.

Working expenses, wherever presented in the Railways section of this chapter, exclude interest, sinking fund, exchange and certain other payments (see paras. 12 and 13 following).

During the war years large amounts were set aside by the railways as reserves, mainly to provide for depreciation and accrued leave, to be expended as circumstances permit. Particulars of these amounts, which were included in working expenses and which in the year 1942-43 aggregated nearly £10 million and over the whole period about £30 million, were given in *Official Year Book* No. 38, page 175.

(ii) *Working Expenses.* The following table shows the total working expenses, the ratio of working expenses to gross revenue and working expenses per average route-mile worked and per traffic train-mile for the years 1951-52 to 1953-54 :—

**GOVERNMENT RAILWAYS : WORKING EXPENSES.**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth. (a)	Aust.
<b>TOTAL WORKING EXPENSES.</b> (£'000.)								
1951-52 ..	64,020	29,612	24,646	13,505	11,016	2,567	2,808	148,174
1952-53 ..	66,452	34,008	27,979	15,013	12,510	2,864	2,728	161,554
1953-54 ..	68,197	35,951	29,103	14,934	14,298	2,804	2,897	168,184
<b>RATIO OF WORKING EXPENSES TO GROSS REVENUE.</b> (Per cent.)								
1951-52 ..	92.90	122.43	105.51	142.81	123.98	142.81	95.99	106.20
1952-53 ..	91.44	106.73	103.67	126.26	163.18	140.44	100.66	104.34
1953-54 ..	91.45	100.68	96.30	117.42	128.68	131.48	85.14	99.01
<b>WORKING EXPENSES PER AVERAGE ROUTE-MILE WORKED.</b> (£.)								
1951-52 ..	10,473	6,318	3,757	5,290	2,678	4,243	1,276	5,521
1952-53 ..	10,871	7,270	4,265	5,881	3,045	4,734	1,239	6,028
1953-54 ..	11,178	7,860	4,436	5,825	3,478	4,635	1,316	6,317
<b>WORKING EXPENSES PER TRAFFIC TRAIN-MILE.</b> (Pence.)								
1951-52 ..	384.00	418.72	317.11	466.79	388.72	294.54	356.80	380.88
1952-53 ..	439.49	461.38	361.71	500.49	571.34	345.42	376.63	436.69
1953-54 ..	436.39	471.41	363.01	487.05	476.35	354.64	355.98	431.86

(a) See para. 8, note (a), page 227.

(iii) *Distribution.* The following table shows the total working expenses for the year 1953-54 classified according to the main four expenditure headings.

**GOVERNMENT RAILWAYS : DISTRIBUTION OF WORKING EXPENSES, 1953-54.**  
(£'000.)

Railway System.	Maintenance of Way and Works.	Motive Power.(a)	Traffic.	Other Charges.	Total Working Expenses.
New South Wales ..	12,409	27,369	15,777	12,642	68,197
Victoria ..	7,774	12,054	8,818	7,305	35,951
Queensland ..	7,089	13,572	6,733	1,709	29,103
South Australia ..	2,536	7,429	3,514	1,455	14,934
Western Australia ..	2,456	6,814	3,031	1,997	14,298
Tasmania ..	676	1,198	597	333	2,804
Commonwealth(b) ..	782	1,396	526	193	2,897
<b>Australia..</b> ..	<b>33,722</b>	<b>69,832</b>	<b>38,996</b>	<b>25,634</b>	<b>168,184</b>

(a) Includes maintenance of rolling stock.

(b) See para. 8, note (a), page 227.

12. Net Revenue.—The following table shows for the years 1951-52 to 1953-54 the net revenue, i.e., the excess of gross revenue over working expenses, the amount of such net revenue per average route-mile worked and per traffic train-mile, the interest on railway loan expenditure and the profit or loss after paying interest :—

## GOVERNMENT RAILWAYS : NET REVENUE, INTEREST, AND PROFIT OR LOSS.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
TOTAL NET REVENUE.								
(£'000.)								
1951-52 ..	4,890	-5,426	-1,288	-4,048	-2,131	-770	(a) 117	-8,656
1952-53 ..	6,224	-2,144	-1,993	-3,122	-4,844	-825	(a) - 18	-6,722
1953-54 ..	6,372	- 244	1,120	-2,216	-3,187	-671	(a) 505	1,679

## NET REVENUE PER AVERAGE ROUTE-MILE WORKED.

(£.)

1951-52 ..	800	-1,158	-196	-1,586	- 518	-1,271	(a) 53	-323
1952-53 ..	1,018	- 459	-304	-1,223	-1,179	-1,364	(a) - 5	-251
1953-54 ..	1,044	- 54	171	- 865	- 775	-1,109	(a) 230	63

## NET REVENUE PER TRAFFIC TRAIN-MILE.

(Pence.)

1951-52 ..	29.33	-76.73	-16.57	-139.93	- 75.19	-88.30	(a) 14.90	-22.25
1952-53 ..	41.16	-29.09	-25.77	-104.09	-221.21	-99.46	(a) -2.47	-18.18
1953-54 ..	40.77	- 3.20	13.97	- 72.27	-106.18	-84.92	(a) 62.11	4.32

## INTEREST PAYMENTS.

(£'000.)

1951-52 ..	6,121	2,041	1,669	1,064	717	196	290	(b) 12,180
1952-53 ..	6,342	2,128	1,874	1,076	841	222	290	(b) 12,855
1953-54 ..	6,523	2,303	2,211	1,162	1,134	254	(c) 404	(b) 14,073

## NET PROFIT OR LOSS.

(£'000.)

1951-52 ..	-1,232	-7,447	-2,957	-5,113	-2,847	- 966	(a) -173	-20,837
1952-53 ..	- 118	-4,272	-3,867	-4,199	-5,685	-1,047	(a) -308	-19,578
1953-54 ..	- 151	-2,547	-1,091	-3,378	-4,321	- 925	(a) 101	-12,394

(a) See para. 8, note (a), page 227.  
Uniform Gauge Railway. £82,375.

(b) Includes Commonwealth Government share of interest on  
(c) Includes exchange.

NOTE.—Minus sign (—) denotes loss.

In the graphs accompanying this chapter the gross and net revenue and working expenses are shown from 1870 to 1954.

13. *Exchange.*—Exchange on interest payments abroad and certain other charges are not included in the table above. These items are not charged against the railways in Queensland and Western Australia and have been excluded for the purposes of comparison. In the remaining States the amounts paid on account of exchange during 1953-54 were :—New South Wales, £527,000; Victoria, £126,506; South Australia, £67,877; and Tasmania, £5,432.

14. *Traffic.*—(i) *General.* Reference has already been made to the difference in the traffic conditions 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 confined to a fringe of country near the coast, more especially in the eastern and southern districts. A large proportion of the railway traffic between the chief centres of population is therefore carried over lines in the neighbourhood of the coast, and is thus, in some cases, open to seaborne competition. In recent years competition from road and air transport has become an important factor.

The following table shows particulars of railway traffic for the years 1951-52 to 1953-54 :—

#### GOVERNMENT RAILWAYS : TRAFFIC.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Aust.
PASSENGER-JOURNEYS. ('000.)								
1951-52 ..	268,168	165,131	35,003	18,269	10,536	3,186	101	500,484
1952-53 ..	271,699	162,857	35,819	17,565	6,339	3,151	190	497,620
1953-54 ..	278,904	166,106	35,879	17,605	8,678	3,285	224	510,681
PASSENGER-JOURNEYS PER AVERAGE ROUTE-MILE WORKED. (Number.)								
1951-52 ..	43,868	35,232	5,336	7,156	2,562	5,266	87	18,648
1952-53 ..	44,446	34,813	5,460	6,880	1,543	5,208	86	18,568
1953-54 ..	45,714	36,315	5,469	6,866	2,111	5,430	102	19,181
GOODS AND LIVESTOCK CARRIED. ('000 Tons.)								
	(a)							
1951-52 ..	19,817	9,204	6,741	3,941	3,063	889	694	44,349
1952-53 ..	19,121	9,192	7,351	4,147	2,619	897	660	43,987
1953-54 ..	20,140	9,200	8,081	4,433	3,206	968	762	46,790
GOODS, ETC., CARRIED PER AVERAGE ROUTE-MILE WORKED. (Tons.)								
1951-52 ..	3,242	1,964	1,028	1,544	745	1,469	315	1,652
1952-53 ..	3,128	1,905	1,121	1,674	638	1,483	300	1,641
1953-54 ..	3,301	2,011	1,232	1,729	780	1,600	346	1,757

(a) Partly estimated.

(ii) *Metropolitan and Country Passenger Traffic and Revenue, 1953-54.* A further indication of the difference in passenger traffic conditions is obtained from the comparison of the volume of metropolitan and suburban and country traffic during 1953-54 shown below.

**GOVERNMENT RAILWAYS : METROPOLITAN AND SUBURBAN AND COUNTRY  
PASSENGER TRAFFIC AND RECEIPTS, 1953-54.**

Railway System.	Passenger-journeys. (‘000.)			Revenue. (£’000.)		
	Metro- politan and Suburban.	Country.	Total.	Metro- politan and Suburban.	Country.	Total.
New South Wales ..	(a)	(a)	278,904	(a)	(a)	(b) 16,210
Victoria ..	157,659	8,447	166,106	5,856	3,963	9,819
Queensland ..	29,475	6,404	35,879	755	2,616	3,371
South Australia ..	16,122	1,483	17,605	531	865	1,396
Western Australia ..	7,816	862	8,678	238	645	883
Tasmania ..	2,509	776	3,285	53	121	174
Commonwealth ..	..	224	224	..	605	605
Australia ..	(a)	(a)	510,681	(a)	(a)	32,458

(a) Not available.

(b) Estimated.

(iii) *Goods Traffic.* (a) *Classification.* Some indication of the differing conditions of the traffic in each system may be gained by an examination of the tonnage of the various classes of commodities carried, and of the revenue derived therefrom. The following table shows the number of tons of various commodities carried during 1953-54.

**GOVERNMENT RAILWAYS : CLASSIFICATION OF COMMODITIES CARRIED.  
1953-54.  
(‘000 Tons.)**

Railway System.	Coal, Coke and Shale.	Other Minerals.	Grain and Flour.	Wool.	Live- stock.	All Other Com- modities.	Total
New South Wales ..	(a)	(a)	(b) 1,222	(c) 197	(c) 789	17,932	20,140
Victoria ..	1,855	114	1,511	120	579	5,021	9,200
Queensland ..	(d) 1,667	(e) 641	(f) 3,288	68	761	1,656	8,081
South Australia ..	601	974	988	44	227	1,599	4,433
Western Australia ..	536	271	852	51	123	1,373	3,206
Tasmania ..	207	43	(f) 43	3	20	652	968
Commonwealth ..	476	8	6	5	84	183	762
Australia ..	(g)	(g)	(g)	488	2,583	28,416	46,790

(a) Included with "All Other Commodities". (b) Grain only. (c) Estimated.  
(d) Excludes shale. (e) Includes shale. (f) Agricultural produce. (g) Not available.

(b) *Revenue.* The following table shows the revenue derived from goods and live-stock traffic during 1953-54 :—

**GOVERNMENT RAILWAYS : REVENUE FROM GOODS AND LIVESTOCK TRAFFIC.  
1953-54.  
(£’000.)**

Railway System.	Coal, Coke and Shale.	Other Minerals.	Grain and Flour.	Wool.	Live- stock.	All Other Com- modities.	Total.
New South Wales ..	9,015	(a)	(a)	(a)	3,930	39,902	52,847
Victoria ..	2,165	171	4,590	738	1,633	13,358	22,655
Queensland ..	(b) 2,972	(c) 1,819	(d) 4,995	1,032	3,130	10,867	24,815
South Australia ..	391	2,580	1,342	243	725	4,726	10,007
Western Australia ..	987	549	1,507	275	344	5,646	9,308
Tasmania ..	428	78	82	10	50	1,207	1,855
Commonwealth ..	721	14	10	27	270	1,278	2,320
Australia ..	16,679	(e)	(e)	(e)	10,082	76,984	123,807

(a) Included with revenue from "All Other Commodities". (b) Excludes revenue from shale  
(c) Includes revenue from shale. (d) Agricultural produce. (e) Not available.

(iv) *Passenger-mileage.* The following table shows particulars of passenger-mileage in respect of the Government railways in Australia for the years 1951-52 to 1953-54.

### GOVERNMENT RAILWAYS : PASSENGER-MILEAGE SUMMARY.

Year ended 30th June—	Passenger Train-miles.  (‘000.)	Total Passenger-miles.  (‘000.)	Average Number of Passengers per Train-mile.	Average Mileage per Passenger-journey.  (Miles.)	Passenger Earnings.				Density of Traffic. (a)
					Gross.  (£‘000.)	Per Average Route-mile Worked.  (£)	Per Passenger-mile.  (Pence.)	Per Passenger Train-mile.  (Pence.)	
NEW SOUTH WALES.									
1952	(b)	(b)	(b)	(b)	c 15,474	2,531	(b)	(b)	(b)
1953	21,925	(b)	(b)	(b)	c 15,871	2,596	(b)	174	(b)
1954	22,157	(b)	(b)	(b)	c 16,210	2,657	(b)	176	(b)
VICTORIA.									
1952	11,196	1,780,854	159	10.78	8,116	1,732	1.09	174	380,037
1953	11,933	1,805,506	151	11.09	9,371	2,003	1.25	188	385,957
1954	12,808	1,857,959	145	11.19	9,819	2,147	1.27	184	406,200
QUEENSLAND.(d)									
1952	6,916	(b)	(b)	(b)	2,915	444	(b)	101	(b)
1953	7,087	(b)	(b)	(b)	2,971	453	(b)	101	(b)
1954	7,155	(b)	(b)	(b)	3,242	500	(b)	109	(b)
SOUTH AUSTRALIA.									
1952	3,951	281,364	71	15.40	1,279	501	1.09	78	110,029
1953	4,052	275,341	68	15.68	1,359	532	1.18	81	107,850
1954	4,157	280,524	67	15.93	1,396	544	1.19	81	109,409
WESTERN AUSTRALIA.									
1952	2,147	147,907	69	14.04	911	221	1.48	102	35,961
1953	1,584	109,574	69	17.28	698	170	1.53	106	26,673
1954	2,216	135,841	61	15.65	883	215	1.56	96	33,043
TASMANIA.									
1952	927	38,539	42	12.09	177	293	1.10	46	63,701
1953	887	36,039	41	11.44	173	286	1.15	47	57,569
1954	878	37,751	43	11.49	174	288	1.11	48	61,398
COMMONWEALTH.(e)									
1952	583	60,446	104	316.58	501	228	1.99	206	27,463
1953	641	62,885	98	330.71	516	234	1.97	193	28,571
1954	740	73,370	99	327.54	605	275	1.98	197	33,335

(a) Total passenger-miles per average route-mile worked. (b) Not available. (c) Estimated.  
 (d) Excludes Queensland portion of Grafton-South Brisbane (Uniform Gauge) Line. (e) Railways controlled by Commonwealth Government.

NOTE.—Train-miles refer to traffic mileages only and exclude non-revenue train-miles and assistant and light locomotive-miles.

(v) *Ton-mileage.* Particulars of ton-mileage in respect of Government railways in Australia are shown in the following table for each of the years 1951-52 to 1953-54.

## GOVERNMENT RAILWAYS: TON-MILEAGE SUMMARY.

Year ended 30th June—	Goods Train-miles.	Total Net Ton-miles.	Average Train Load (Paving Traffic).	Average Haul per Ton.	Goods and Livestock Earnings.				Density of Traffic. (a)
					Gross.	Per Average Route-mile Worked.	Per Net Ton-mile.	Per Goods Train-mile.	
(‘000.)	(‘000.)	(Tons.)	(Miles.)	(£’000.)	(£)	(Pence.)	(Pence.)		
NEW SOUTH WALES.									
1952	(b)	2,906,947	(b)	147	43,361	7.093	3.58	(b)	475.535
1953	14,364	2,800,366	195	146	48,728	7.971	4.18	814	458.100
1954	15,349	2,849,803	186	142	52,847	8.662	4.45	826	467.104
VICTORIA.									
1952	5.777	1,280,191	222	139	13,319	2.842	2.50	553	273.136
1953	5.757	1,262,454	219	137	19,381	4.143	3.68	808	269.870
1954	5.495	1,269,772	231	138	22,655	4.926	4.28	990	277.606
QUEENSLAND.(d)									
1952	11,506	1,265,664	110	196	17,887	2.756	3.39	373	194.988
1953	11,252	1,275,179	113	180	20,390	3.241	3.84	435	106.453
1954	11,883	1,355,948	114	173	24,217	3.756	4.27	489	208.897
SOUTH AUSTRALIA.									
1952	2,993	592,818	198	136	7,062	2.766	2.86	566	232.205
1953	3,148	613,771	195	135	9,233	3.617	3.61	704	260.412
1954	3,202	684,848	214	140	10,007	3.903	3.51	791	267.101
WESTERN AUSTRALIA.									
1952	4,654	469,748	101	153	7,150	1.739	3.65	369	114.210
1953	3,671	409,591	112	156	6,203	1.510	3.63	406	99.706
1954	4,988	537,799	108	168	9,308	2.226	4.15	440	130.819
TASMANIA.									
1952	1,164	88,696	76	100	1,539	2.511	4.16	317	146.005
1953	1,102	83,689	76	93	1,776	2.636	5.09	387	138.329
1954	1,020	87,533	86	90	1,855	3.066	5.09	437	144.683
COMMONWEALTH.(e)									
1952	1,306	151,248	116	218	2,009	913	3.19	369	68.718
1953	1,097	128,408	117	194	1,798	817	3.36	391	58.341
1954	1,213	167,468	138	220	2,320	1,054	3.33	459	76.087

(a) Total ton-miles per average route-mile worked. (b) Not available. (c) Partly estimated.  
(d) Excludes Queensland portion of Grafton-South Brisbane (Uniform Gauge) Line. (e) Railways controlled by the Commonwealth Government.

NOTE.—Train-miles refer to traffic mileages only and exclude non-revenue train-miles and assistant and light locomotive miles.

15. *Rolling Stock.*—The following table shows the number of rolling stock of Government railways at 30th June, 1954. Further details may be found in *Transport and Communication Bulletin* No. 45.

## GOVERNMENT RAILWAYS : ROLLING STOCK(a) AT 30th JUNE, 1954.

Railway System.	Locomotives.				Coaching Stock.(b)	Goods Stock.	Service Stock.
	Steam.	Diesel-electric.	Other.	Total.			
New South Wales ..	1,192	31	5	1,228	3,859	25,792	1,131
Victoria ..	533	39	35	607	(c) 2,413	21,922	(d) 1,049
Queensland ..	842	19	2	863	1,502	26,748	1,333
South Australia ..	366	12	..	378	(c) 720	8,774	(d) 498
Western Australia ..	413	13	10	436	634	12,962	665
Tasmania ..	101	32	6	139	184	2,584	104
Commonwealth ..	151	15	..	166	182	1,787	472
Australia ..	3,598	161	58	3,817	(e) 9,545	100,569	(e) 5,253

(a) Included in Capital Account. (b) Includes all brake vans. (c) Excludes 51 interstate coaching stock owned jointly by Victoria and South Australia. (d) Excludes one dynamometer car owned jointly by Victoria and South Australia. (e) 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 1953-54 :—

## GOVERNMENT RAILWAYS : ACCIDENTS(a), 1953-54.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	C'wth.	Aust.
Persons killed ..	55	56	17	18	21	2	1	170
Persons injured ..	1,013	544	110	72	205	15	5	1,964

(a) Excludes accidents to railway employees.

Corresponding figures for earlier years will be found in the *Transport and Communication Bulletin*.

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 1953-54 :—

## GOVERNMENT RAILWAYS : COAL, OIL AND PETROL CONSUMED, 1953-54.

Railway System.	Coal.		Oil.				Petrol for Rail Cars.
	Locomotives.	Other Purposes.	Lubrication.	Diesel and Distillate.	Furnace Oil.	Other Purposes.	
	'000 tons.	'000 tons.	'000 gals.	'000 gals.	'000 gals.	'000 gals.	'000 gals.
New South Wales ..	1,478	23	440	16,120	352	125	115
Victoria ..	286	10	323	4,212	11,204	1,178	21
Queensland ..	724	21	338	1,248	522	49	124
South Australia ..	242	8	(a)	1,346	17,647	(a)	268
Western Australia ..	392	4	138	(b) 3,379	(c)	779	..
Tasmania ..	41	(d)	47	972	79	56	..
Commonwealth ..	45	1	65	1,457	216	634	6
Australia ..	3,208	67	(a)	(e) 28,734	(e) 30,020	(a)	534

(a) Not available. (b) Includes furnace oil. (c) Included with " Diesel and Distillate ".  
(d) 240 tons. (e) See notes (b) and (c).

Particulars of the value of coal, oil and petrol consumed during 1953-54 will be found in *Transport and Communication Bulletin* No. 45.

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 1953-54. Corresponding figures for 1952-53 will be found in *Transport and Communication Bulletin* No. 44.



**GOVERNMENT RAILWAYS: AVERAGE STAFF EMPLOYED, AND SALARIES  
AND WAGES PAID, 1953-54.**

Railway System.	Number of Operating Staff.			Number of Construction Staff. (a)			Total Salaries and Wages Paid.	Average Earnings Per Employee.
	Salaried.	Wages.	Total.	Salaried.	Wages.	Total.		
New South Wales ..	9,543	45,467	55,010	23	182	205	£'500.	£
Victoria ..	(b) 5,059	24,121	29,180	(c)	(c)	(c)	46,808	851
Queensland ..	4,343	23,661	28,004	9	390	399	24,973	856
South Australia ..	1,911	8,770	10,681	12	1,275	1,287	22,172	792
Western Australia ..	2,086	13,294	15,380	1	10	11	10,105	946
Tasmania ..	351	2,361	2,712	15	132	147	10,459	680
Commonwealth ..	382	2,108	2,490	5	185	190	1,802	664
Australia ..	d 23,675	d 119,782	d 143,457	65	2,174	2,239	1,041	780
							2,230	824

(a) In Victoria, Queensland and Western Australia a considerable amount of construction work is carried out by private contractors and the staff engaged are therefore not under the control of the Railways Commissioners. (b) Includes construction staff. (c) Included with operating staff. (d) Includes construction staff, Victoria.

**C. TRAMWAYS.**

NOTE.—Particulars of trolley-bus services in New South Wales, South Australia, Western Australia and Tasmania are included in this section. Particulars of those in Queensland are included with government and municipal omnibus services (see page 240).

1. Systems in Operation.—(i) *General.* Tramway systems are in operation in all the capital cities and in a number of the larger towns of Australia.

Since 1st April, 1947, all systems have been operated by government or municipal authorities. Tramway systems are located in the following cities—New South Wales, Sydney; Victoria, Melbourne, Geelong, Bendigo and Ballarat; Queensland, Brisbane; South Australia, Adelaide; Western Australia, Perth; and Tasmania, Hobart. In Sydney, Brisbane, Adelaide, Perth and Hobart, tramway systems are supplemented by trolley-bus services whilst in Launceston, Tasmania, trolley-buses have completely replaced trams. From 1941-42 all systems have been 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) *Total Mileage Open and Classification of Lines.* The following table shows, for each State, the total route-mileage of tramway lines open for general passenger traffic at 30th June, 1955, classified (a) according to the controlling authority; (b) according to gauge. Trolley-bus route-mileage also is shown.

**ELECTRIC TRAMWAYS: ROUTE-MILEAGE OPEN AT 30th JUNE, 1955.**

(Miles.)

Particulars—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
ACCORDING TO CONTROLLING AUTHORITY.							
Government ..	117	175	..	..	31	..	323
Municipal ..	..	..	67	92	..	30	189
Total ..	117	175	67	92	31	30	512

**ACCORDING TO GAUGE.**

Tramways—							
5 ft. 3 in. ..	..	5	..	..	..	..	5
4 ft. 8½ in. ..	III	170	67	69	..	..	417
3 ft. 6 in. ..	..	..	..	..	11	9	20
Trolley-buses ..	6	..	(a)	23	20	21	(b) 70
Total ..	117	175	(a) 67	92	31	30	(b) 512

(a) Excludes 13 trolley-bus route-miles which are included with the Brisbane Municipal Omnibus Service. (b) Excludes 13 trolley-bus route-miles in Queensland.

2. Summary of Operations, Australia.—The following table gives a summary of the working of all tramway systems in Australia for the years 1950-51 to 1954-55 :—

**ELECTRIC TRAMWAYS : SUMMARY OF OPERATIONS, AUSTRALIA.(a)**

Particulars.	Unit.	1950-51.	1951-52.	1952-53	1953-54.	1954-55.
Average mileage open for traffic ..	route-mile	546	542	525	522	516
	truck-mile	998	988	981	978	973
Tramcars(b) .. .. .	..	3,085	2,984	2,814	2,694	2,600
Net increase in capital equipment during year .. .. .	£'000	1.205	2.075	911	861	910
Gross revenue(c) .. .. .	..	13,610	15,121	15,968	15,780	15,267
Working expenses(d) .. .. .	..	14,553	17,109	18,420	18,181	17,797
Net revenue .. .. .	..	943	1,988	2,452	2,401	2,530
Interest .. .. .	..	491	536	628	656	714
Ratio of working expenses to gross revenue .. .. .	per cent.	106.93	113.15	115.36	115.22	116.57
Car-miles .. .. .	'000	71,746	67,923	65,895	63,762	60,275
Gross revenue per car-mile .. .. .	d.	45.53	53.43	58.16	59.40	60.79
Working expenses per car-mile .. .. .	d.	48.68	60.45	67.09	68.43	70.86
Net revenue per car-mile .. .. .	d.	3.15	7.02	8.93	9.03	10.07
Passenger-journeys .. .. .	'000	749,138	685,724	647,417	629,557	609,254
Passenger-journeys per car-mile .. .. .	..	10.44	10.10	9.82	9.87	10.11
Average gross revenue per passenger-journey .. .. .	d.	4.36	5.29	5.92	6.01	6.01
Persons employed at end of year(e) ..	..	16,566	18,309	16,051	15,743	15,030
Accidents—						
Persons killed .. .. .	..	71	72	72	59	58
„ injured .. .. .	..	5,409	5,448	3,255	2,933	3,177

(a) Includes particulars of Hobart Municipal Council Omnibus Service 1950-51 to 1951-55 and Launceston Municipal Council Omnibus Service 1951-52 to 1954-55. (b) Includes trolley-buses. (c) Excludes Government grants. (d) Includes provision of reserves for depreciation, etc. (e) Includes motor omnibus employees, South Australia, but excludes a number of employees in New South Wales who cannot be distributed between tramways and omnibuses.

NOTE.—Minus sign (—) denotes loss.

3. Traffic and Accidents.—Particulars of the traffic of electric tramways and the accidents which occurred in the movement of rolling stock during 1954-55 are shown for each State in the following table :—

**ELECTRIC TRAMWAYS : TRAFFIC AND ACCIDENTS, 1954-55.**

State.	Average Mileage Open for Traffic.		Number of Tram-cars. (a)	Car-miles.	Passenger-journeys.	Average Number of Passenger-journeys per Car-mile.	Accidents.	
	Route-miles.	Track-miles.					Persons—	
							Killed	Injured.
New South Wales ..	122	233	835	'000. 14,663	'000. 191,958	13.09	(b) 21	(b) 946
Victoria ..	175	324	829	23,173	220,095	9.50	15	1,268
Queensland ..	67	124	407	9,642	101,885	10.57	11	578
South Australia ..	92	178	269	7,646	54,909	7.18	(c) 11	(c) 207
Western Australia ..	30	57	130	2,205	17,289	7.84	..	154
Tasmania ..	30	57	130	(d) 2,946	(d) 23,118	(d) 7.85	..	(d) 21
Australia ..	516	973	2,600	60,275	609,254	10.11	58	3,177

(a) Includes trolley-buses, except for 26 in Queensland which are included with motor omnibuses. (b) Excludes accidents to employees. (c) Includes particulars for municipal-owned omnibus services. (d) Includes particulars of Hobart and Launceston Municipal Council Omnibus Services.

4. State Details.—(i) *General.* For details of the various systems operating in the several States see Official Year Book No. 37 and issues prior to No. 32.

(ii) *Summary of Operations.* The following table shows particulars of the working of electric tramways in each State for the years 1952-53 to 1954-55.

## ELECTRIC TRAMWAYS : SUMMARY OF OPERATIONS.

Year ended 30th June—	Mileage Open for Traffic at 30th June. (Route-miles.)	Net Increase in Capital Equipment during year. (£'000.)	Gross Revenue. (a) (£'000.)	Working Expenses. (b) (£'000.)	Net Revenue. (£'000.)	Interest. (£'000.)	Ratio of Working Expenses to Gross Revenue. (Per cent.)	Car-miles. (°000.)	Passenger-journeys. (°000.)	Persons employed at end of year.
-----------------------	----------------------------------------------------------	------------------------------------------------------------	-----------------------------------	--------------------------------------	--------------------------	-----------------------	------------------------------------------------------------	-----------------------	--------------------------------	----------------------------------

## NEW SOUTH WALES.

1953	126	151	5,245	7,285	-2,040	174	138.90	18,134	210,173	(d) 4,831
1954	126	-135	5,056	6,883	-1,827	183	136.15	16,542	203,508	(d) 4,656
1955	117	-829	4,731	6,416	-1,685	194	135.61	14,663	191,958	(e) 4,073

## VICTORIA.

1953	174	195	5,463	5,359	104	111	98.10	24,341	225,213	5,414
1954	175	667	5,441	5,588	-147	114	102.70	24,130	222,541	5,408
1955	175	1,389	5,345	5,092	-347	132	106.48	23,173	220,095	5,409

## QUEENSLAND.(f)

1953	67	96	2,171	2,137	34	107	98.42	9,839	107,891	2,397
1954	67	63	2,293	2,237	56	105	97.55	9,879	104,790	2,420
1955	67	140	2,306	2,317	-11	111	100.46	9,642	101,885	2,481

## SOUTH AUSTRALIA.

1953	96(g)	244	1,851	2,371	-520	170	128.10	8,020	57,926(h)	2,290
1954	92(g)	161	1,776	2,236	-460	190	125.93	7,916	56,966(h)	2,216
1955	92(g)	130	1,787	2,133	-346	206	119.39	7,646	54,909(h)	2,054

## WESTERN AUSTRALIA.

1953	33	113	588	673	-85	33	114.37	2,565	20,611	537
1954	30	33	509	610	-101	37	119.82	2,307	18,743	470
1955	31	32	487	573	-86	34	117.63	2,205	17,289	445

## TASMANIA.(i)

1953	(j) 27	112	650	595	55	33	91.61	2,996	25,603	582
1954	(j) 30	72	705	627	78	27	88.94	2,988	23,009	573
1955	(j) 30	48	611	666	-55	37	109.14	2,946	23,118	568

## AUSTRALIA.(k)

1953	5.3	911	15,968	18,420	-2,452	628	115.36	65,895	647,417	16,051
1954	5.20	861	15,780	18,181	-2,401	656	115.22	63,762	629,557	15,743
1955	5.12	910	15,267	17,797	-2,530	714	116.57	60,275	609,254	15,030

(a) Excludes Government grants. (b) Includes provision of reserves for depreciation, etc. (c) Estimated. (d) Excludes administrative staff not distributable between omnibus and tramway services. (e) Excludes 1,447 administrative staff and 566 salaried staff who cannot be distributed between omnibus and tramway services. (f) Excludes trolley-bus services, particulars of which are included with omnibus services. (g) Includes capital expenditure on motor omnibus services. (h) Includes motor omnibus employees of Adelaide Municipal Tramways Trust. (i) Includes particulars of Hobart and Launceston Municipal Council Omnibus Services. (j) Tramway and trolley-bus mileage only. At 30th June, 1955. Hobart and Launceston Municipal Council Omnibus route-mileage was 29 miles. (k) See notes (a) to (j).

## D. MOTOR OMNIBUS SERVICES.

1. General.—Motor omnibus services have been in operation for some years in the capital cities and many of the larger towns of the States of Australia, and in the Australian Capital Territory.

(Government and municipal authorities operate certain services and the others are run by private operators; in the States the former are run in conjunction with the existing electric tramway systems.

2. Government and Municipal Services.—(i) *Summary of Operations, 1953-54.* The following table gives a summary of the operations during the year ended 30th June, 1954 of omnibus systems controlled by government and municipal authorities.

### MOTOR OMNIBUS SERVICES : GOVERNMENT AND MUNICIPAL, 1953-54.

Particulars.	N.S.W.	Vic.	Qld. (a)	S.A.	W.A.	Tas. (b)	A.C.T.	Aust.
Length of route .. miles	463	64	409	38	3,036	563	46	4,619
Omnibuses .. ..	1,258	336	272	104	209	44	65	2,282
Net increase in capital equipment during year .. £'000	359	169	139	(c)	28	13	3	711
Gross revenue(d) .. £'000	4,612	1,477	849	296	1,020	207	134	8,595
Working expenses .. £'000	(e) 7,216	1,462	890	442	960	194	200	11,373
Omnibus-miles .. '000	31,820	7,897	5,954	2,251	7,370	1,156	866	57,318
Passenger-journeys .. '000	212,200	59,111	33,934	10,006	26,474	1,785	(f) 3,800	347,310
Persons employed .. ..	(g) 4,906	1,290	616	(h)	(i) 160	75	167	(j) 7,308

(a) Includes particulars of trolley-bus services. (b) Excludes Hobart and Launceston Municipal Council Services. (c) Separate particulars for trams and omnibuses not available—total included with tramways (see p. 239). (d) Excludes Government grants. (e) Includes estimate of administrative and general charges. (f) Estimated. (g) Excludes administrative staff not distributable between omnibus and tramway services. (h) Not available; employees are interchangeable with electric tramway employees and are included therewith (see p. 239). (i) Excludes 567 government employees. (j) See notes (g) to (i).

(ii) *Summary of Operations, Australia.* The following table gives a summary of the working of motor omnibus services in Australia under government and municipal control during each of the years 1949-50 to 1953-54.

### MOTOR OMNIBUS SERVICES : GOVERNMENT AND MUNICIPAL, AUSTRALIA.

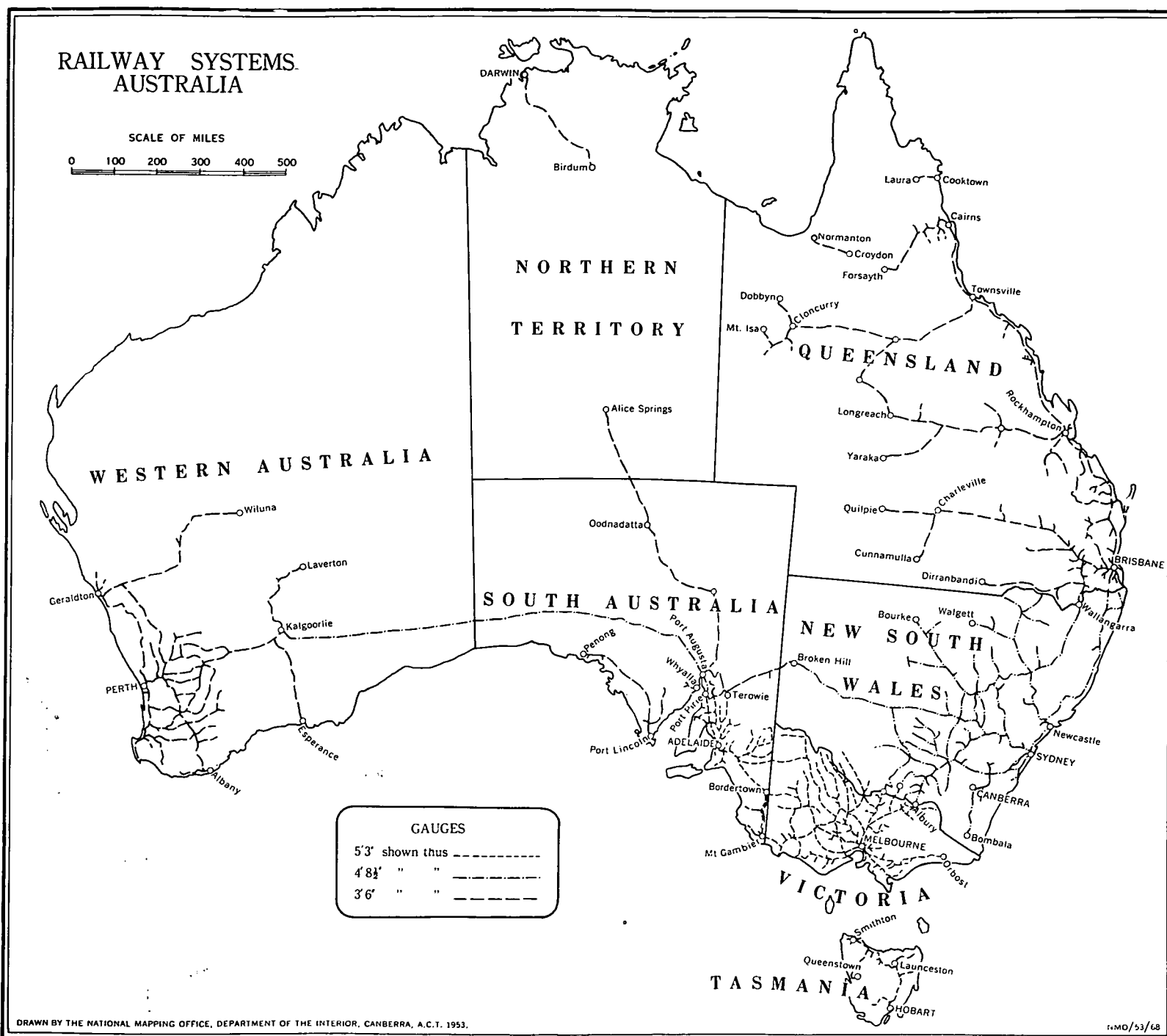
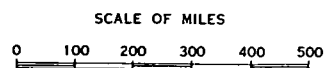
Particulars.	Unit.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Length of route .. ..	miles	3,208	3,994	4,491	4,569	4,619
Number of omnibuses .. ..	..	1,962	1,981	2,160	2,230	2,282
Capital cost during year(a) ..	£'000	(b)	1,600	2,334	(c) 1,494	(c) 711
Gross revenue(a) .. ..	£'000	6,307	7,572	8,542	9,320	8,853
Working expenses(a) .. ..	£'000	6,743	8,234	10,298	11,465	11,387
Net revenue(a) .. ..	£'000	-436	-662	-1,756	-2,145	-2,534
Ratio of working expenses to gross revenue(a) .. ..	per cent.	106.91	108.74	120.56	123.01	128.61
Omnibus-miles(a) .. ..	'000	53,817	53,548	54,124	55,672	57,318
Gross revenue per omnibus-mile(a) .. ..	d.	28.12	33.94	37.87	40.18	37.07
Working expenses per omnibus-mile(a) .. ..	d.	30.06	36.90	45.66	49.43	47.68
Net revenue per omnibus-mile(a) .. ..	d.	-1.94	-2.96	-7.79	-9.25	-10.61
Passenger-journeys(a) .. ..	'000	325,079	340,314	333,200	340,477	347,310
Passenger-journeys per omnibus-mile(a) .. ..	..	6.04	6.36	6.16	6.12	6.06
Average gross revenue per passenger-journey(a) .. ..	d.	4.66	5.34	6.15	6.57	6.12
Number of persons employed (a) (d) .. ..	..	7,721	7,720	8,174	7,663	7,308

(a) Excludes Hobart Municipal Council Service 1948-49 to 1952-53 and Launceston Municipal Council Service 1951-52 and 1952-53. (b) Not available. (c) Excludes South Australia. (d) See relevant notes to table above.

NOTE.—Minus sign (—) denotes loss.

3. *Private Services.*—(i) *General.* 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 only.

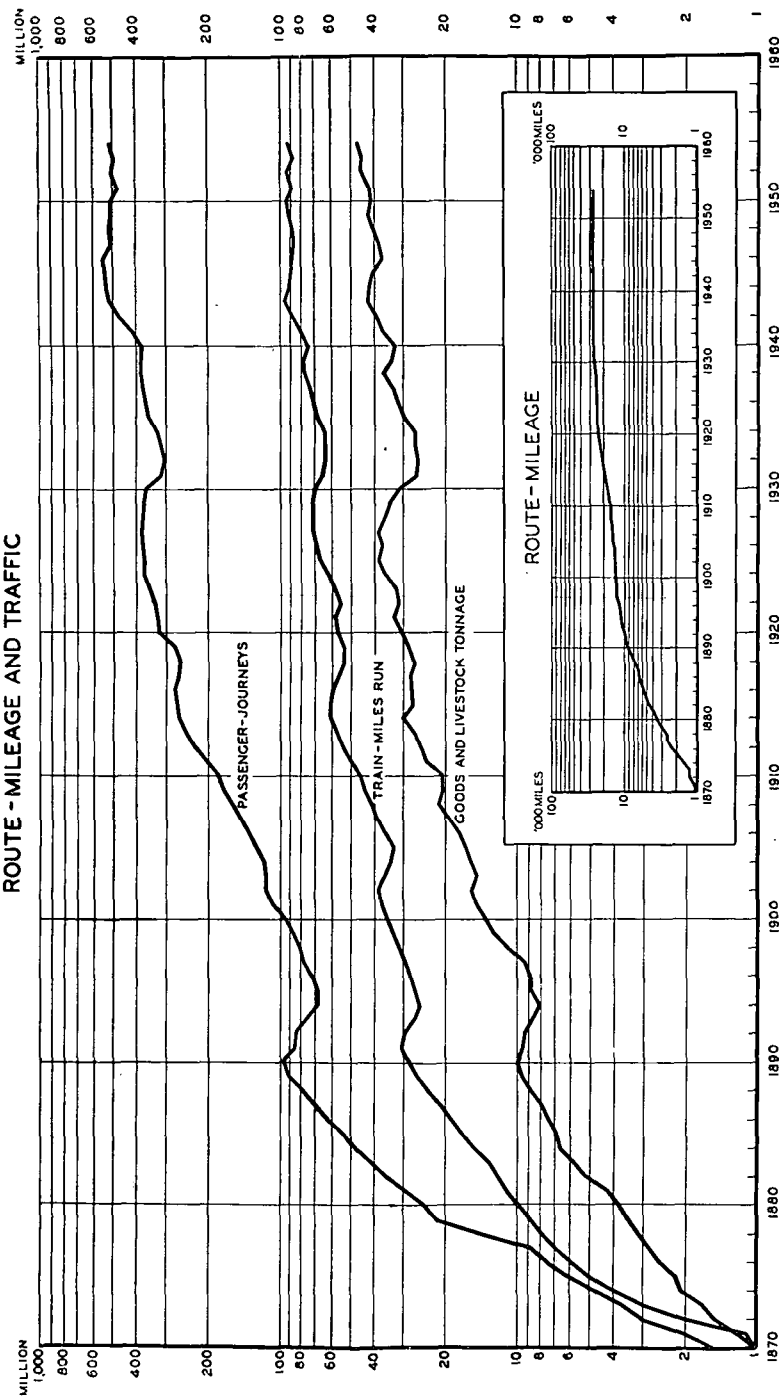
# RAILWAY SYSTEMS. AUSTRALIA



# GOVERNMENT RAILWAYS: AUSTRALIA, 1870 TO 1954

RATIO GRAPH

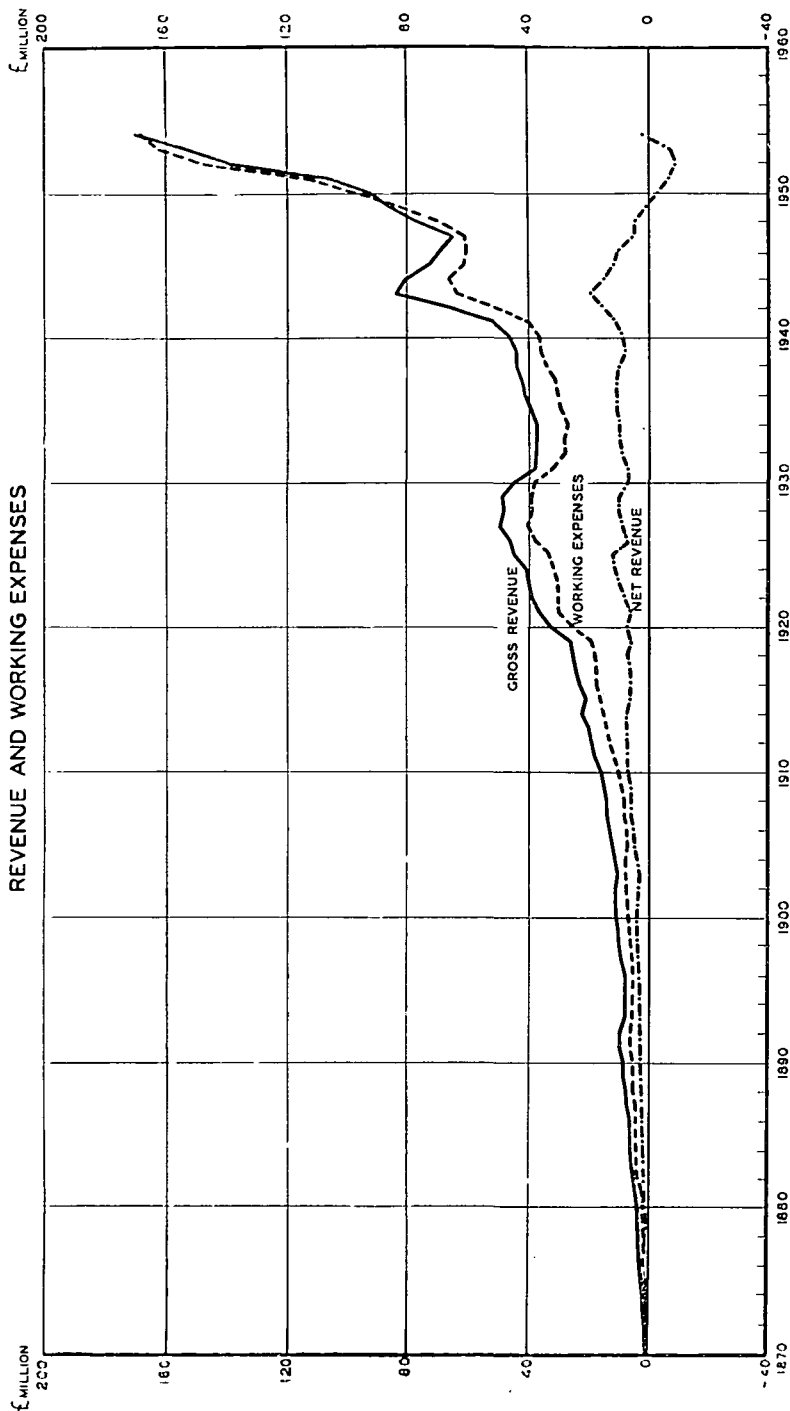
## ROUTE - MILEAGE AND TRAFFIC



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

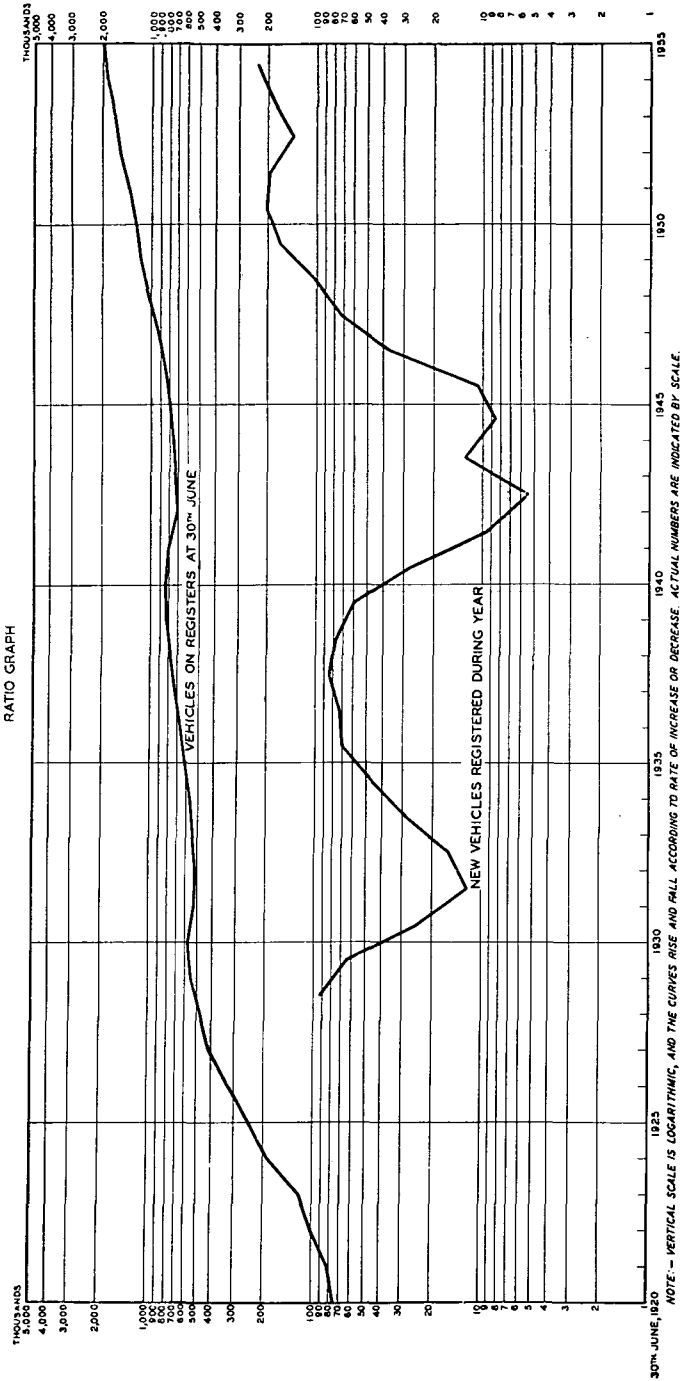
# GOVERNMENT RAILWAYS: AUSTRALIA, 1870 TO 1954

## REVENUE AND WORKING EXPENSES



NOTE—Gross Revenue excludes Government Grants.

MOTOR VEHICLE REGISTRATIONS : AUSTRALIA, 1920 TO 1955  
(EXCLUDING MOTOR CYCLES)



(See pages 247-48.)



In New South Wales, particulars are compiled for the Metropolitan and Newcastle Transport districts only, and in Victoria for the Metropolitan district only, but in South Australia and in Western Australia particulars of all services throughout the State are included.

(ii) *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 ended June, 1952 to 1954 :—

## MOTOR OMNIBUS SERVICES : PRIVATE.

Year.	Number of Omnibuses.	Omnibus-miles Run. (‘000 miles.)	Passenger-journeys. (‘000).	Value of Plant and Equipment. (£‘000.)	Gross Revenue. (£‘000.)	Persons Employed.
NEW SOUTH WALES.(a)						
1951-52 ..	790	17,358	94,917	999	2,342	1,289
1952-53 ..	792	20,613	87,274	950	2,347	1,273
1953-54 ..	806	20,195	88,639	990	2,426	1,369
VICTORIA.(b)						
1951-52 ..	(c) 407	17,985	79,928	(d)	1,601	972
1952-53 ..	420	17,548	84,006	(e) 473	1,839	905
1953-54 ..	433	(f) 17,606	(f) 83,771	(e)(f) 456	(f) 1,885	(f) 911
SOUTH AUSTRALIA.						
1951-52 ..	(b) 116	5,926	12,516	(d)	593	(d)
1952-53 ..	116	5,972	12,816	(d)	633	(d)
1953-54 ..	112	5,845	13,373	(d)	658	(d)
WESTERN AUSTRALIA.						
1951-52 ..	393	12,331	34,546	910	1,432	976
1952-53 ..	379	11,976	34,592	1,047	1,576	944
1953-54 ..	423	12,550	34,211	1,124	1,661	971

(a) Metropolitan and Newcastle Transport districts only. (b) Metropolitan area only.  
(c) Excludes omnibuses held in reserve. (d) Not available. (e) Vehicles only. (f) Estimated.

## E. FERRY (PASSENGER) SERVICES.

1. *General.*—Ferry services to transport passengers are operated in Sydney and Newcastle, New South Wales, on the Swan River at Perth in Western Australia, and on the Derwent River at Hobart and in Devonport, Tasmania. Control is exercised both by governmental authorities and by private operators. In Victoria and Queensland the services operated are not extensive, and there are no ferry 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 1951-52 to 1953-54 are summarized in the following table. Particulars of passengers carried on vehicular ferries are not included.

## FERRY (PASSENGER) SERVICES.

Year.			Number of Vessels.	Passenger Accom- modation.	Passenger- Journeys. (‘000.)	Gross Revenue. (£.)	Persons Employed.
NEW SOUTH WALES—SYDNEY AND NEWCASTLE.							
1951-52	..	..	38	24,135	20,874	717,565	512
1952-53	..	..	38	22,244	20,184	739,590	473
1953-54	..	..	38	21,388	19,294	771,697	466
WESTERN AUSTRALIA—PERTH.							
1951-52	..	..	4	785	670	11,472	16
1952-53	..	..	4	785	577	12,383	17
1953-54	..	..	4	785	530	10,754	12
TASMANIA—HOBART AND DEVONPORT.							
1951-52	..	..	6	1,537	944	23,556	27
1952-53	..	..	6	1,537	1,112	26,908	27
1953-54	..	..	5	1,512	1,253	29,165	25

## F. MOTOR VEHICLES.

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

2. **Registration.**—The arrangements for the registration of motor vehicles and the licensing of drivers and riders are not uniform throughout Australia. Particulars regarding methods of registration, licences, fees payable, etc., in each State and Territory at 30th June, 1952 were given in Official Year Book No. 40, pp. 135-8.

3. **Taxi-cabs and Other Hire Vehicles.**—In the capital cities of the States and in many 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 Divisions C. and D. of this chapter.*)

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 1954-55 and a summary for Australia for each of the years 1950-51 to 1954-55. 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 1920 to 1955 will be found on p. 244.

## MOTOR VEHICLES : REGISTRATIONS AND REVENUE.

(Including Commonwealth-owned vehicles other than those of the Departments of Army and Air.)

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', etc., Licences.	Other Sources.	Total.
							(£'000.)	(£'000.)	(£'000.)	(£'000.)
STATES AND TERRITORIES, 1954-55.										
N. S. Wales	441,896	227,353	39,787	709,036	203	999,751	8,788	783	1,490	11,061
Victoria(d)	456,024	143,930	29,193	629,147	249	725,826	5,263	363	965	6,591
Queensland	163,697	122,623	21,401	307,721	229	(e)	4,112	129	915	5,156
S. Australia	142,733	65,129	21,640	229,502	286	275,798	2,880	373	91	3,344
W. Aust. ..	90,255	63,891	14,662	168,808	256	191,051	1,228	112	151	1,491
Tasmania ..	44,884	21,483	5,306	71,673	228	83,775	600	42	147	789
Nor. Terr...	1,601	2,836	562	4,999	283	7,310	33	5	..	38
A.C.T. ..	5,992	2,364	478	8,834	272	12,343	47	7	1	55
Australia ..	1,347,082	649,609	133,029	2,129,720	231	2,295,854	22,951	1,814	3,760	28,525

## SUMMARY, AUSTRALIA.

	(d)	(d)			(g)					
1950-51(h)	88,455	548,373	145,132	1,575,960	187	1,985,821	12,333	1,141	2,404	15,878
1951-52(h)	1,030,992	380,502	153,933	1,765,427	205	2,194,167	15,996	1,336	3,607	20,939
1952-53 ..	1,107,659	579,444	147,639	1,834,742	208	2,288,370	18,780	1,403	3,708	23,891
1953-54 ..	1,199,833	606,899	140,614	1,947,346	218	2,148,119	20,450	1,932	4,311	26,411
1954-55 ..	1,347,082	649,609	133,029	2,129,720	231	2,295,854	22,951	1,814	3,760	28,525

(a) Excludes, at 30th June, 1955, trailers (118,742), road tractors, etc. (25,895), and dealers' plates (8,225). Excludes Northern Territory registrations prior to 1953-54. (b) Includes taxis and hire cars. (c) Includes lorries, vans, omnibuses and utilities. (d) See para. 5 on previous page. (e) As from 1st October, 1952, drivers' and riders' licences have not been issued on an annual basis in Queensland. (f) Excludes Queensland. (g) Includes Queensland prior to 1953-54. (h) Prior to 12th November, 1951, primary producers' cars registered in Victoria were included with commercial vehicles.

(ii) *Relation to Population.* The table hereunder shows the number of vehicles (excluding motor cycles) registered per 1,000 of population in each State and Territory at 31st December, 1921, and at 30th June for each of the years 1939 and 1951 to 1955.

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

(Including Commonwealth-owned vehicles other than those of the Departments of Army and Air.)

Date.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
31st Dec., 1921 ..	15	16	8	24	12	13	(a)	..	(b) 15
30th June, 1939 ..	107	125	118	137	133	96	218	174	118
" 1951 ..	152	180	178	206	179	153	(a)	206	170
" 1952 ..	163	212	184	224	195	167	(a)	223	187
" 1953 ..	168	211	188	234	204	180	(a)	226	192
" 1954 ..	179	215	199	245	217	193	206	241	201
" 1955 ..	193	241	216	257	238	212	269	267	220

(a) Not available.

(b) Excludes Northern Territory.

6. *New Vehicles Registered.*—(i) *States and Territories, 1954-55.* The following table shows the number of new vehicles registered in each State and Territory during 1954-55. A graph showing the number of new motor vehicles (excluding motor cycles) registered during each of the years 1929 to 1955 will be found on p. 244.

## NEW MOTOR VEHICLES REGISTERED, 1954-55.

(Including Commonwealth-owned vehicles other than those of the Departments of Army and Air.)

Vehicles.	N.S.W.	Vic. (a)	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Total.
Motor cars(b) ..	56,202	52,416	20,579	18,218	12,406	5,738	210	1,032	166,801
Commercial vehicles, etc.(c) ..	24,915	14,479	11,954	6,845	6,065	2,328	331	271	67,188
Motor cycles ..	3,437	2,348	1,583	2,185	1,206	417	47	59	11,282
Total ..	84,554	69,243	34,116	27,248	19,677	8,483	588	1,362	245,271

(a) See para. 5 on page 246.  
vans, omnibuses and utilities.

(b) Includes taxis and hire cars.

(c) Includes lorries,

(ii) *Australia*. Particulars of the number of new vehicles registered in Australia during each of the years 1949-50 to 1954-55 are shown in the following table :—

## NEW MOTOR VEHICLES REGISTERED : AUSTRALIA.(a)

(Including Commonwealth-owned vehicles other than those of the Departments of Army and Air.)

Vehicles.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Motor cars(b) ..	115,012	128,067	125,760	93,417	125,595	166,801
Commercial vehicles, etc.(c) ..	57,946	77,537	73,020	52,290	57,402	67,188
Motor cycles ..	26,782	27,151	22,155	(d) 11,289	10,860	11,282
Total ..	199,740	232,755	220,935	d 156,996	193,857	245,271

(a) Excludes Northern Territory for years prior to 1952-53. (b) Includes taxis and hire cars, except those registered in Victoria in 1949-50. (c) Includes lorries, vans, omnibuses, utilities, and, for 1949-50, taxis and hire cars registered in Victoria. (d) Excludes motor cycles registered in the Northern Territory. (e) See para. 5 on page 246.

7. *World Motor Vehicle Statistics, 1955*.—Particulars of motor vehicle registrations throughout the world were included in issues of the Official Year Book prior to No. 39. This information was derived from the results of the World Motor Census, conducted by the *American Automobile* magazine. Detailed information is not repeated in this issue, but the following particulars from the same source show that there were 87,035,434 motor cars, trucks and omnibuses registered in various countries of the world at 1st January, 1955. This was an increase of 11 per cent. on the figure for the previous year, 81,903,496, and was the highest figure attained to that date. Of these vehicles, 57,595,376 or 66 per cent. of the world total were in the United States of America, and Australian registrations amounted to 2 per cent.

8. *Survey of Motor Vehicles, 1947-48*.—A survey of motor vehicles (excluding motor cycles) on the roads during 1947-48 was carried out by the Commonwealth Statistician in collaboration with the Government Statisticians and Road Transport authorities in the States. Results were published in a series of bulletins dealing with each State separately and with Australia as a whole, and summarized particulars were included in *Transport and Communication Bulletin* No. 40, 1948-49 published by this Bureau. Similar surveys, but of modified scope, have been carried out for later periods in respect of new vehicles only. The results have been published by this Bureau in the *Transport and Communication Bulletin* and, since July, 1951, in the *Monthly Bulletin of Registrations of New Motor Vehicles*. Information contained in the latter includes the make, type and R.A.C. horse-power of new motor vehicles registered in each State and Territory.

## G. ROAD TRAFFIC ACCIDENTS.

1. **General.**—Prior to the year 1949–50 it was not possible to make proper comparisons between States of the number of accidents recorded, because of the differences in legislation regarding the reporting of accidents and the degree to which the legislation could be enforced. However, arrangements were made, in co-operation with the Australian Road Safety Council and the various police and transport authorities concerned, to obtain the numbers of road traffic accidents on a comparable basis from all States in respect of the year ended 30th June, 1950 and subsequent years. This has been achieved by restricting the statistics so that they relate only to those accidents which result in death or bodily injury to any person, or in damage in excess of £10 to property. It should be noted, however, that the comparability of the statistics between States even on this basis still depends on the degree to which accidents so defined are in fact recorded by the police. It is considered that there was little difference in the recording of accidents as between States for the years 1949–50 to 1953–54, except in the case of Western Australia where statistics shown relate to all accidents which occurred in the metropolitan area and, in the remainder of the State, for periods prior to 1st January, 1953, only to those which involved fatal or “near-fatal” injury. Since that date statistics for Western Australia have been collected on a basis comparable with that for the other States. Under legislation passed in Tasmania on 10th August, 1954, it is no longer obligatory to report accidents involving only damage to property. The figures for Tasmania in the tables below are not, however, affected by this legislation.

For further particulars of traffic accidents see the *Transport and Communication Bulletin*.

2. **Total Accidents Recorded, 1953–54.**—(i) *Summary.* The following table shows, for each State and the Australian Capital Territory, the total number of accidents recorded by the police, the number involving casualties, and the number of persons killed or injured during the year 1953–54, together with the number of persons killed or injured per 100,000 of mean population and per 10,000 motor vehicles registered.

**ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES : ACCIDENTS RECORDED AND CASUALTIES, 1953–54.**

State or Territory.	Total Accidents Recorded. (a)	Accidents Involving Casualties. (b)	Persons Killed.			Persons Injured.(c)		
			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.
N.S. Wales ..	29,514	11,691	728	21	11	14,660	430	224
Victoria ..	16,314	10,537	569	23	10	13,351	551	239
Queensland ..	17,875	6,349	278	21	10	7,933	110	279
South Australia ..	10,320	2,742	153	19	7	3,420	435	157
W. Australia ..	8,979	3,079	175	28	11	3,935	624	257
Tasmania ..	3,957	982	67	22	10	1,156	374	178
Aust. Cap. Ter.	265	143	6	20	8	171	591	218
<b>Total, 1953–54</b>	<b>87,224</b>	<b>35,523</b>	<b>1,976</b>	<b>22</b>	<b>10</b>	<b>41,679</b>	<b>507</b>	<b>230</b>

(a) Total accidents causing death or injury to persons or damage exceeding £10 to property.

(b) Accidents involving persons killed, and persons injured to an extent requiring surgical or medical treatment.

(c) Persons injured 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 1953–54 in each State and the Australian Capital Territory, classified into riders, drivers, pedestrians, etc.

**ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGH-FARES : RIDERS, DRIVERS, PEDESTRIANS, ETC., KILLED OR INJURED, 1953-54.**

Riders, Drivers, Pedestrians, etc.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
<b>PERSONS KILLED.</b>								
Drivers of Motor Vehicles	132	106	44	27	32	10	2	353
Motor Cyclists	124	75	65	40	28	13	2	347
Pedal Cyclists	33	39	20	17	12	6	1	128
Passengers (all types) (a)	217	146	81	29	49	16	..	538
Pedestrians	220	202	62	39	54	21	1	599
Other Classes (b)	2	1	6	1	..	1	..	11
Total	728	569	278	153	175	67	6	1,976

<b>PERSONS INJURED.(c)</b>								
Drivers of Motor Vehicles	2,997	2,764	1,464	631	704	240	44	8,844
Motor Cyclists	2,158	1,687	1,671	972	810	257	29	7,584
Pedal Cyclists	1,086	1,520	1,023	330	481	114	35	4,589
Passengers (all types) (a)	5,353	4,541	2,678	1,016	1,333	350	48	15,319
Pedestrians	3,017	2,778	1,071	468	598	192	18	8,142
Other Classes (b)	43	61	26	3	9	3	..	145
Not Stated	6	..	..	..	..	..	..	6
Total	14,660	13,351	7,033	3,420	3,035	1,156	174	44,629

(a) Includes pillion riders. (b) Includes tram drivers, riders of horses and drivers of animal-drawn vehicles. (c) Persons injured to an extent requiring surgical or medical treatment.

(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 1953-54 :—

**ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGH-FARES : AGES OF PERSONS KILLED OR INJURED, 1953-54.**

Age Group (Years).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
<b>PERSONS KILLED.</b>								
Under 5	35	24	5	3	9	5	..	81
5 and under 7	13	15	5	2	6	..	..	41
7 " " 17	40	38	22	10	13	5	..	128
17 " " 21	82	46	47	18	19	5	1	218
21 " " 30	143	116	64	42	32	15	1	413
30 " " 40	115	62	39	18	24	10	1	269
40 " " 50	82	71	27	12	18	7	3	220
50 " " 60	66	57	31	14	19	7	..	194
60 and over	152	118	38	22	31	12	..	373
Not Stated	..	22	..	12	4	1	..	39
Total	728	569	278	153	175	67	6	1,976

<b>PERSONS INJURED.(a)</b>								
Under 5	511	454	203	101	128	34	5	1,436
5 and under 7	342	377	165	89	102	37	..	1,112
7 " " 17	1,723	1,596	1,053	336	465	154	16	5,343
17 " " 21	2,001	1,516	1,426	504	587	194	21	6,249
21 " " 30	3,429	3,240	1,963	876	847	254	50	10,659
30 " " 40	2,205	2,147	1,064	648	450	155	38	6,707
40 " " 50	1,580	1,574	820	404	337	96	18	4,829
50 " " 60	1,144	1,129	592	221	235	62	15	3,398
60 and over	1,259	1,125	623	241	250	72	9	3,579
Not Stated	466	193	24	..	534	08	2	1,317
Total	14,660	13,351	7,033	3,420	3,035	1,156	174	44,629

(a) Persons injured 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 1953-54, the number of accidents in which each of several classes of vehicles, road users, etc., was involved. The accidents involving casualties and persons killed and injured are similarly classified.

**ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGH-FARES : ACCIDENTS RECORDED AND CASUALTIES, CLASSIFIED ACCORDING TO TYPE OF VEHICLE, ROAD USER, ETC., INVOLVED, AUSTRALIA, 1953-54.(a)**

Particulars.	Motor Vehicle.	Motor Cycle.	Pedal Cycle.	Tram.	Animal and Animal-drawn Vehicle.	Pedestrian.	Fixed Object.	Other Vehicle.
Total Accidents Reported <i>b</i>	81,020	11,977	5,233	1,949	2,759	8,282	7,666	398
Accidents Involving								
Casualties ..	29,958	9,040	4,910	840	658	8,209	2,033	184
Persons Killed ..	1,703	424	134	42	30	593	136	60
Persons Injured(c) ..	38,244	10,513	5,190	981	769	8,282	2,715	238

(a) It should be noted that, 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 table excludes 117 accidents recorded for which no cause was stated, of which 60 involved casualties—9 persons killed and 57 persons injured. (b) Total accidents causing death or injury to persons or damage exceeding £10 to property. (c) Persons injured to an extent requiring surgical or medical treatment.

It will be seen, therefore, that motor vehicles were involved in 81,020 accidents, of which 29,958 involved casualties (1,703 persons killed and 38,244 persons injured). The 81,020 accidents in which motor vehicles were involved comprised 39,177 collisions with other motor vehicles, 7,671 with motor cycles, 3,730 with pedal cycles, 1,266 with trams, 2,245 with animals and animal-drawn vehicles, 6,892 with pedestrians, 7,126 with fixed objects, 347 with vehicles other than those mentioned, 11,890 instances of overturning or leaving the roadway, and 676 accidents to passengers only. The particulars of accidents in which motor cycles, pedal cycles, etc., were involved with motor vehicles are also included under their respective headings in the table above. Consequently, since the figures in each column refer to the *total* accidents in which the particular type of vehicle, etc., was involved, any aggregation across would result, through duplication, in considerable overstatement of the actual totals.

**3. Persons Killed or Injured in Road Traffic Accidents.**—The following table shows the numbers of persons killed or injured in road traffic accidents in each State and the Australian Capital Territory during each of the years 1948-49 to 1953-54 :—

**ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGH-FARES : PERSONS KILLED OR INJURED.**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.	Per 10,000 Motor Vehicles Registered.
-------	--------	------	---------	----------	----------	------	--------	--------	---------------------------------------

**PERSONS KILLED.**

1948-49 ..	564	426	169	119	90	53	3	1,424	12
1949-50 ..	561	501	202	170	142	64	3	1,643	12
1950-51 ..	699	581	218	107	167	57	7	1,926	12
1951-52 ..	741	603	251	172	194	87	6	2,054	12
1952-53 ..	663	515	301	136	182	56	3	1,856	10
1953-54 ..	728	569	278	153	175	67	6	1,976	10

**PERSONS INJURED.(a)**

1948-49 ..	9,253	8,223	4,017	2,025	(b) 747	952	91	25,310	207
1949-50 ..	10,405	10,538	4,771	2,514	(c) 1,929	1,154	136	31,447	224
1950-51 ..	11,817	11,364	5,512	2,332	(c) 2,686	1,212	172	33,095	223
1951-52 ..	12,637	12,531	6,561	2,497	(c) 2,771	1,215	164	38,376	217
1952-53 ..	12,459	12,564	7,152	2,449	(c) 3,373	1,246	162	39,405	215
1953-54 ..	14,660	13,351	7,933	3,420	3,935	1,156	174	44,629	230

(a) Persons injured to an extent requiring surgical or medical treatment. (b) Includes persons injured and detained in hospital only. (c) Includes all persons injured (i.e., requiring surgical or medical treatment) in the metropolitan area but in the remainder of the State, prior to 1st January, 1953, only those suffering "near-fatal" injuries.

## H. 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, pp. 334-5.

2. **Foundation and Administration of Civil Aviation.**—A brief account of the foundation and objects of this Administration will be found in Official Year Book No. 19, p. 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 was partially re-organized in June, 1954 to provide for the more effective distribution of duties and responsibilities among senior officers. This included the appointment of an additional Assistant Director-General to the executive staff to control all ground facilities. The number of Divisions was increased from six to nine—the three administrative Divisions (Air Transport and External Relations; Administration, Personnel and Establishments; and Finance and Stores) remained unchanged, while in the technical field the Division of Airports remained unchanged; the Division of Air Navigation became the Division of Flying Operations; the Division of Airways was divided into two—Division of Airways Operations and Division of Airways Engineering; and the status of two Branches—Aviation Medicine and Accident Investigation and Analysis—was raised to that of Divisions.

3. **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. I.C.A.O. had a membership of 65 nations at 3rd June, 1955. Australia has continued her representation on the Council, a position which she has held since the organization was established in 1947. The Commonwealth was represented at the ninth I.C.A.O. Assembly meeting at Montreal in June, 1955. The ninth meeting of the South Pacific Air Transport Council was held at Waitomo, New Zealand, in July, 1955. Further details will be found in Official Year Book No. 39 and earlier issues.

(ii) *International Air Services.* Major changes in the organization of trans-Pacific and trans-Tasman airline operations were outlined in Official Year Book No. 41. Qantas Empire Airways continues to operate services to the United Kingdom through the Middle East, to Japan via Hong Kong and Manila, to South Africa across the Indian Ocean, to North America, to the British Solomon Islands, and through Noumea to the New Hebrides. Their total route-mileage at 30th June, 1955 was 53,427. Q.E.A. has re-equipped these services with twelve Super Constellation aircraft which are now operating on the Pacific, United Kingdom and Japan services. This type of aircraft will be used on the South African service at an early date. A summary of the operations of overseas services wholly or partly Australian-owned appears on page 256.

In 1955 Douglas DC4 land planes were substituted for flying-boats on the Pacific Islands service. No Australian international services are now operated by flying-boats. DC6 aircraft now link Sydney with both Auckland and Christchurch and Melbourne with Christchurch.

4. **Regular Air Services within Australia.**—Under the Government's rationalization plan, introduced in 1954, it was agreed that services on competitive routes such as in Queensland and the Riverina (New South Wales), should be regulated to avoid wasteful operations.

A summary of the operations of regular air services within Australia appears on page 255 and a map showing air routes on pp. 261-2.



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

During the year 1954-55 the Air Ambulance and Royal Flying Doctor Services continued to provide medical aid for the outback regions of Australia. The Commonwealth Department of Health operates the Northern Territory Aerial Medical Service with two Drover aircraft and two DH84A aircraft. The Royal Flying Doctor Service of Australia, operating from Archerfield (one Beechcraft), Broken Hill (one DH84A and one Drover) and Port Hedland (one DH83) covers a wide area of inland Australia. The Bush Church Aid Society for Australia and Tasmania, supported by funds from the Church of England, maintains two aircraft (one DH84A and one Percival Proctor III at Ceduna). The Federal Methodist Inland Mission (one DH82A) operates services from Meekatharra, Western Australia, and the Queensland Ambulance Transport Brigade operates a service from Cairns with a DH89A aircraft.

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, p. 146.

Payment to the clubs, under a plan initiated in July, 1951, continues to be made as follows:—(i) a maintenance grant (for each aircraft-hour flown) at the following rates per hour subject to certain limitations—(a) at home base, £1 13s. 9d., (b) away from home base, £2 7s. 6d.; (ii) an issue bonus (for each pupil trained *ab initio* to "A" licence standard)—(a) at home base, £84, (b) away from home base, £107 10s.; (iii) a renewal bonus (for each licence renewed on club aircraft)—(a) at home base, £11, (b) away from home base, £15. In addition, the Commonwealth has accepted a contingent liability to contribute at the rate of 10s. per flying hour towards each club's replacement reserve. This amount is intended to supplement the club's reserve for the purchase of aircraft and spares specifically approved by the Department of Civil Aviation.

During the year 1954-55, 305 issue and 1,005 renewal courses were gained by the Assisted Flying Training Organization (non-profit aero clubs and commercial flying schools). Hours flown by the subsidized aero clubs totalled 51,964 and a total subsidy of £139,308 was earned by all training organizations, 17 of which were aero clubs. In addition to civil flying training, 11,992 hours were flown on training for the Royal Australian Air Force, 8,213 of which were carried out by the aero clubs.

7. **Gliding Clubs.**—For the year 1954-55 a total subsidy of £2,000 was distributed among the gliding associations in the various States. Of this amount, £1,500 was distributed among member clubs on an active membership basis, and £500 according to the number of gliding certificates issued.

8. **Aeronautical Telecommunications.**—During the year 1954-55 development and modernization of the aeronautical telecommunications system within Australia was continued. The V.H.F. telephone communication services for aircraft, which were introduced in 1949, were progressively developed with more modern equipment. Teletype and tape relay services are being developed extensively along the major Australian routes and at important overseas terminals with which Australia has direct air communication. The Distance Measuring Equipment programme is expected to be completed during 1956 with 75 beacons installed. In 1954-55 Instrument Landing Systems were operating in part at Sydney and Melbourne, together with high-intensity approach lighting. Full Instrument Landing System service is being provided at these airports and similar installations will be placed progressively at Launceston, Hobart, Adelaide and Canberra.

9. **Air Traffic Control.**—Work of the Air Traffic Control Branch has been concentrated primarily on advances in procedures and planning, the full benefits of which will become apparent in the near future. Control areas were established in the Darwin Flight Information Region, giving positive anti-collision service to both international and domestic

aircraft. A procedure using Distance Measuring Equipment was introduced which significantly reduced the handling delays of aircraft arriving in the terminal areas. Procedures for the handling of jet turbine aircraft have been introduced to permit the utmost flexibility in operating this type of aircraft.

10. *Meteorological Aids to Civil Aviation.*—Professional meteorological officers of the Department of the Interior are on duty at many of Australia's aeradio stations. At the remainder, communications personnel make local weather observations and take barometer and thermometer readings for transmission to Area Meteorological Offices.

11. *Aircraft Parts and Materials.*—At 30th June, 1955 the number of firms and organizations approved by the Department of Civil Aviation to trade in the aircraft industry was 430. With the introduction of gas turbine engines and pressurized aircraft certain firms have been approved to undertake the specialized work of overhaul, repair and maintenance of these engines and of accessories. The major fuel and oil companies have been brought under a system of quality control.

12. *Aircraft Overhaul and Repair.*—Aircraft overhaul and repair is carried out in workshops approved by the Director-General of Civil Aviation. Components and accessories are now certified on release notes signed by approved members of the firms' inspection organization.

13. *Test and Examination of Aircraft Parts and Materials.*—In the past the Department adopted the practice of approving laboratories for this work, but these approvals have now been terminated in favour of test houses and laboratories registered by the National Association of Testing Authorities, except when production is for the manufacturer's own use. Certificates issued under registration by the Association are acceptable to any Commonwealth Government Department.

14. *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 of each of the years 1950 to 1955.

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

Particulars.	At 30th June—					
	1950.	1951.	1952.	1953.	1954.	1955.
Registered Aircraft Owners .. ..	359	351	343	369	384	414
Registered Aircraft .. ..	779	838	786	821	845	887
Pilots' Licences—						
Private .. ..	872	1,065	1,444	1,677	2,035	2,245
Commercial .. ..	469	441	470	518	552	582
Student .. ..	1,778	1,840	2,644	2,639	2,831	3,193
1st Class Airline Transport ..	417	475	513	495	515	548
2nd " " " ..	30	35	35	45	34	25
3rd " " " ..	326	377	400	371	368	390
Navigators' Licences—						
Flight Navigator .. ..	126	139	155	163	166	161
Cadet " " " ..	18	(b)	(b)	(b)	(b)	(b)
Radio Operators' Licences—						
1st Class Flight Radio Telegraphy Operator .. ..	103	96	98	93	88	78
Flight Radio Telephony Operators—						
1st Class .. ..	701	754	825	850	834	820
2nd " " " ..	211	237	258	243	275	309
3rd " " " ..	38	33	41	70	113	137
Flight Engineers' Licences .. ..	40	39	53	58	67	98
Ground Engineers' Licences .. ..	1,684	1,643	1,720	1,790	1,757	1,747
Aerodromes—						
Government .. ..	183	184	189	186	198	185
Public (c) .. ..	213	230	269	260	262	303
Flying Boat Bases .. ..	11	11	11	15	16	13

(a) Except for aerodromes and flying boat bases, includes the Territory of Papua and New Guinea. (b) Category cancelled during 1950-51. (c) Includes emergency landing grounds.

(ii) *Aircraft on the Australian Register.* A summary of aircraft on the Australian register at 30th June, 1955, classified according to the principal types of operation in which they are engaged, is shown in the following table.

**AIRCRAFT ON THE AUSTRALIAN REGISTER(a), 30th JUNE, 1955.**

Type of Aircraft.	Number.	Type of Aircraft.	Number.
(i) <i>Aircraft Engaged in Regular Public Transport—</i>		(iii) <i>Aircraft Used for Private Purposes—</i>	
Douglas DC3 .. .. .	74	Auster (all types) .. .. .	81
Douglas DC4 (Skymaster) .. .. .	19	DH82, DH82A (Tiger Moth) .. .. .	68
Lockheed 1049 (Super Constellation) .. .. .	10	Percival Proctor .. .. .	14
Convair Liners (Types 240 and 340) .. .. .	7	DH94 (Moth Minor) .. .. .	13
Avro Anson .. .. .	7	DH37 (Hornet Moth) .. .. .	10
DH102 (Dove) .. .. .	5	Miles Gemini .. .. .	10
Short Sandringham .. .. .	5	Other Types .. .. .	118
Vickers Viscount 720 .. .. .	5		
Other Types .. .. .	30		
		Total .. .. .	314
Total .. .. .	162		
(ii) <i>Aircraft Available for Air Charter—</i>		(iv) <i>Aircraft Used for other Purposes(b)—</i>	
Auster (all types) .. .. .	39	DH82, DH82A (Tiger Moth) .. .. .	186
Avro Anson .. .. .	22	Auster (all types) .. .. .	26
DH82, DH82A (Tiger Moth) .. .. .	13	DHC-1 (Chipmunk) .. .. .	12
Percival Proctor .. .. .	11	Other Types .. .. .	47
DH84 (Dragon) .. .. .	10		
Other Types .. .. .	45	Total .. .. .	271
Total .. .. .	140	Grand Total .. .. .	887

(a) Includes those based in the Territory of Papua and New Guinea. training, aerial top-dressing, etc.

(b) Flying School

(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 1949-50 to 1954-55.

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

Particulars.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.	1954-55.
Hours flown .. .. .	225,841	252,333	260,947	237,640	251,019	257,787
Miles .. .. .	36,519	40,680	41,831	39,059	41,014	43,513
Paying passengers .. .. .	1,499,816	1,685,089	1,828,506	1,706,446	1,772,357	1,918,125
Paying passenger-miles .. .. .	590,429	669,087	721,573	667,321	702,139	765,652
Freight—						
Tons (a) .. .. .	49,441	59,362	57,464	57,635	69,479	78,711
Ton-miles(a) .. .. .	22,258	27,102	26,684	27,167	32,650	36,984
Mail—						
Tons (a) .. .. .	2,905	3,233	2,681	2,311	2,316	2,317
Ton-miles(a) .. .. .	1,400	1,493	1,285	1,166	1,225	1,257

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

(iv) *Operations of Oversea Services wholly or partly Australian-owned.* The following table furnishes a summary of overseas services, wholly or partly owned by Australian interests, operating between Australia and overseas countries, including Pacific islands, during the years 1949-50 to 1954-55. The operations of Qantas Empire Airways, Tasman Empire Airways Ltd. and British Commonwealth Pacific Airlines are included, but not those of Canadian Pacific Airlines, K.L.M. and Pan-American Airways.

## CIVIL AVIATION : OPERATIONS OF OVERSEA SERVICES.(a)

Particulars.	1949-50.	1950-51	1951-52.	1952-53.	1953-54.	1954-55.
Route-miles at 30th June .. ..	39,217	43,633	43,455	66,558	64,230	63,774
Hours flown .. ..	40,692	48,947	50,336	54,148	53,580	49,326
Miles .. ..	'000 8,768	10,500	10,664	11,565	11,464	11,128
Paying passengers .. ..	59,832	87,599	95,134	97,753	102,965	114,371
Paying passenger-miles .. ..	'000 165,077	241,817	265,756	275,206	290,603	317,565
Freight—						
Tons (b) .. ..	1,256	2,213	2,138	1,957	2,295	2,662
Ton-miles (b) .. ..	'000 4,481	6,960	6,716	7,401	8,331	9,372
Mail—						
Tons (b) .. ..	729	943	1,141	1,168	1,379	1,442
Ton-miles (b) .. ..	'000 3,867	5,367	6,162	6,122	7,718	7,927

(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 and the number of persons killed or injured are shown in the following table for each of the years 1949-50 to 1954-55.

## CIVIL AVIATION : ACCIDENTS INVOLVING AUSTRALIAN AIRCRAFT.(a)

Particulars.	Year ended 30th June—					
	1950.	1951.	1952.	1953.	1954.	1955.
Number .. ..	22	33	25	16	26	22
Persons killed .. ..	61	13	37	5	36	27
Persons injured .. ..	22	35	22	19	27	19

(a) Accidents involving aircraft on the Australian register, irrespective of the location of the accident. Includes gliders.

15. *Papua-New Guinea Activities.*—(i) *General.* Issues of the Official Year Book up to and including No. 34, 1941 showed particulars of the development of civil aviation in New Guinea and of the companies operating at the outbreak of war with Japan, while issues Nos. 35 to 37 carried the accompanying statistical summary of operations up to the end of September, 1941.

(ii) *Territory of Papua and New Guinea.* In this area there are now 24 Government and 11 licensed aerodromes, approximately 120 authorized landing grounds, 10 cleared heliports and 300 helicopter clearings.

Three companies conduct regular services between the major aerodromes. Charter flights can be arranged to almost any locality. Further information may be found in Chapter V.—The Territories of Australia.

During the year ended 30th June, 1954, three accidents occurred in which six people were injured. There were no fatalities. In the year ended 30th June, 1955 there were no accidents.

## I. POSTS, TELEGRAPHS, TELEPHONES AND WIRELESS.

NOTE.—In all the tables 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.

## § 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, being a responsible Minister. The Director-General of Posts and Telegraphs controls the Department under the Postmaster-General, whilst the principal officer in each State is the Deputy-Director of Posts and Telegraphs.

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, 1954. In order to judge clearly the relative postal facilities provided in each State, the area of country to each office as well as the number of inhabitants per office should be taken into account.

**POSTAL FACILITIES : RELATION TO AREA AND POPULATION,  
AT 30th JUNE, 1954.**

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
Number of post offices (a) ..	2,554	2,374	1,270	889	639	518	8,244
Number of square miles of territory per office .. ..	122	37	528	1,017	1,527	51	361
Number of inhabitants per office ..	1,352	1,033	1,038	916	1,001	596	1,090
Number of inhabitants per 100 square miles .. ..	1,113	2,790	197	106	66	1,178	302

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

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

(ii) *Number of Offices.* The following table shows the number of post offices (exclusive of telephone offices) in each State at 30th June, 1954.

**NUMBER OF POST OFFICES AT 30th JUNE, 1954.**

Type of Office.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Official and Semi-official ..	499	301	209	165	151	51	1,376
Non-official .. ..	2,055	2,073	1,061	724	488	467	6,868
Total .. ..	2,554	2,374	1,270	889	639	518	8,244

(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, 1954 are given in the following table:—

**NUMBER OF POSTAL EMPLOYEES AND MAIL CONTRACTORS AT 30th JUNE, 1954.**

Particulars.	Central Office.	N.S.W.	Vic.	Q'land.	S.A.	W. Aust.	Tas.	Aust.
Employees .. ..	962	32,519	23,303	12,624	7,783	5,534	3,152	85,877
Mail Contractors(a) ..	..	2,095	1,026	1,245	374	292	277	5,309

(a) Includes persons employed to drive vehicles.

Particulars of persons employed are shown in greater detail in *Transport and Communication Bulletin No. 45*.

3. **Gross Revenue, Branches**—Postmaster-General's Department.—The gross revenue (actual collections) in respect of each branch of the Department during the year 1953-54 is shown in the table hereunder:—

**POSTMASTER-GENERAL'S DEPARTMENT : GROSS REVENUE(a), 1953-54.  
(£'000.)**

Sources.	N.S.W.	Vic.(b)	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Postage .. ..	8,972	6,799	3,009	1,938	1,499	676	22,893
Money order commission and poundage on postal notes	356	298	92	72	46	23	887
Private boxes and bags ..	62	40	32	20	13	8	175
Miscellaneous .. ..	761	594	302	145	160	58	2,020
Total, Postal .. ..	10,151	7,731	3,435	2,175	1,718	765	25,975
Telegraphs .. ..	1,754	1,246	783	432	377	117	4,709
Telephones .. ..	14,580	11,200	5,013	3,231	2,086	1,003	37,113
Grand Total .. ..	26,485	20,177	9,231	5,838	4,181	1,885	67,797

(a) The figures in this table relate to revenue actually collected during the year as recorded for Treasury purposes. (b) Includes Central Office collections.

Corresponding figures for the year 1952-53 will be found in *Transport and Communication Bulletin* No. 44. For each of the years 1949-50 to 1953-54 the gross revenue for Australia was £38,349,000, £44,777,000, £59,371,000, £64,398,000 and £67,797,000 respectively.

Gross revenue for the year 1953-54 increased by 5.3 per cent. compared with that for the previous year. Revenue of the Postal, Telegraph and Telephone branches increased by 5.3 per cent., 3.6 per cent. and 5.5 per cent. respectively.

4. Expenditure, Postmaster-General's Department.—(i) *Distribution, 1953-54.* The following table shows, as far as possible, the distribution of expenditure (actual payments) on various items in each State during the year ended 30th June, 1954, 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(a),  
1953-54.  
(£'000.)

Particulars.	Central Office.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Expenditure from Ordinary Votes—								
Salaries and payments in the nature of salary ..	328	12,948	8,826	4,858	3,006	1,998	1,179	33,143
General expenses ..	44	1,230	777	381	235	182	80	2,938
Stores and material ..	16	514	344	200	126	108	68	1,376
Mail services ..	(b)2,863	1,250	620	689	314	220	101	6,057
Engineering services (other than capital works) ..	545	8,711	6,035	3,325	1,976	1,549	732	22,873
Other services ..	201	..	..	..	..	..	..	201
Total ..	3,997	24,653	16,602	9,453	5,657	4,057	2,169	66,588
Rent, repairs, maintenance	..	344	221	134	86	74	19	878
Proportion of audit expenses ..	..	12	8	4	3	2	1	30
Capital works and services (c)—								
Telegraph, telephone and wireless ..	30	9,677	6,269	3,037	2,224	1,420	780	23,437
New buildings, etc. ..	..	1,177	1,291	449	426	320	135	3,798
Other expenditure, not allocated to States ..	(d)4,747	..	..	..	..	..	..	4,747
Grand Total ..	8,774	35,863	24,391	13,077	8,396	5,873	3,104	99,478

(a) The figures in this table represent actual payments made during the year as recorded for Treasury purposes.

(b) Expenditure on air-mail services, £2,662,000, and conveyance of Australian mails in other countries, £201,000.

(c) Includes expenditure from loan fund.

(d) Includes expenditure not apportioned to States, i.e., interest on loans, £1,207,000; sinking fund, £2,313,000; superannuation contributions, £1,198,000; transferred officers' pensions and allowances, £5,000; pensions and retiring allowances, £11,000; and loans redemption and conversion, £13,000.

(ii) *Totals.* Actual payments made for each of the years 1949-50 to 1953-54, respectively, were:—£64,297,000, £89,699,000, £93,109,000, £98,344,000 and £99,478,000. Total expenditure increased by 1.2 per cent. during 1953-54.

5. Profit or Loss, Postmaster-General's Department.—(i) *States, 1953-54.* 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 in the several States, after providing for working expenses (including superannuation, pensions and depreciation) and interest charges including exchange, were as follows.

POSTMASTER-GENERAL'S DEPARTMENT : PROFIT OR LOSS, 1953-54.  
(£'000.)

Branch.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Postal .. ..	-1,268	281	-593	-1	-136	-132	-1,849
Telegraph .. ..	-403	-197	-314	-164	-110	-31	-1,219
Telephone .. ..	1,654	1,840	-192	198	-40	-239	3,221
All Branches ..	-17	1,924	-1,099	33	-286	-402	153

NOTE.—Minus sign (—) indicates loss.

(ii) *Branches.* The following statement shows particulars of the operating results of each branch for the years 1948-49 to 1953-54.

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

Branch.	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Postal .. ..	-297	-1,154	-1,813	-544	-2,417	-1,849
Telegraph .. ..	-1,080	-722	-818	-900	-1,453	-1,219
Telephone .. ..	-346	721	-26	2,107	2,932	3,221
All Branches ..	-1,723	-1,155	-2,657	663	-938	153

NOTE.—Minus sign (—) indicates loss.

6. *Fixed Assets.*—(i) *Details, 1953-54.* The following statement shows particulars of the fixed assets of the Postmaster-General's Department from 1st July, 1953 to 30th June, 1954 :—

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

Particulars.	Net Value, 1st July, 1953.	Capital Expendi- ture, 1953-54.	Gross Value, 30th June, 1954.	Deprecia- tion, etc., 1953-54. (a)	Net Value, 30th June, 1954.
Telephone service plant (excluding trunk lines) .. ..	154,184	25,141	179,325	2,158	177,167
Joint trunk and telegraph plant (aerial wires, conduits, and cables) .. ..	27,693	2,901	30,594	224	30,370
Telegraph service plant .. ..	1,823	236	2,059	81	1,978
Postal service plant .. ..	937	95	1,032	..	1,032
Sites, buildings, furniture and office equipment .. ..	28,160	3,969	32,129	471	31,658
Miscellaneous plant .. ..	10,184	1,445	11,629	207	11,422
Total .. ..	222,981	33,787	256,768	3,141	253,627

(a) Includes dismantled assets, depreciation written off, and assets transferred.

(ii) *Net Value.* The net value of the fixed assets of the Postmaster-General's Department at 30th June in each of the years 1950 to 1954, respectively, was :—£134,933,000, £162,046,000, £194,749,000, £222,981,000 and £253,627,000.

§ 2. Posts.

1. *Postal Matter Dealt With.*—(i) *States, 1953-54.* The following table shows summary of the postal matter dealt with in each State during the year 1953-54. 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) : STATES, 1953-54.**  
(<sup>000</sup>.)

State.	Letters. (b)	Papers and Packets. (c)	Parcels. (d)	Regis- tered Articles. (e)	Letters. (b)	Papers and Packets. (c)	Parcels. (d)	Regis- tered Articles. (e)
	Posted for delivery within Australia.				Posted for delivery Overseas.			
New South Wales ..	451,602	96,349	5,969	6,100	13,579	8,942	334	538
Victoria ..	370,531	53,844	4,007	4,135	7,261	3,100	135	202
Queensland ..	154,885	27,349	2,653	1,960	5,288	913	63	68
South Australia ..	101,174	10,773	1,340	1,031	3,213	752	68	50
Western Australia ..	85,289	9,668	1,083	829	3,967	1,359	50	68
Tasmania ..	56,136	7,649	220	543	455	22	20	80
<b>Australia ..</b>	<b>1,219,637</b>	<b>205,632</b>	<b>15,272</b>	<b>14,598</b>	<b>33,763</b>	<b>15,088</b>	<b>720</b>	<b>1,006</b>
	Received from Overseas.				Total postal matter dealt with.			
New South Wales ..	34,978	18,329	299	750	500,159	123,620	6,602	7,388
Victoria ..	9,269	7,717	179	195	387,081	64,661	4,371	4,532
Queensland ..	3,976	3,989	60	30	164,149	32,251	2,776	2,058
South Australia ..	3,478	3,909	46	29	107,865	15,434	1,454	1,110
Western Australia ..	2,802	4,737	47	63	92,058	15,764	1,180	960
Tasmania ..	1,196	1,779	16	32	57,787	9,450	256	655
<b>Australia ..</b>	<b>55,699</b>	<b>40,460</b>	<b>647</b>	<b>1,099</b>	<b>1,309,099</b>	<b>261,180</b>	<b>16,639</b>	<b>16,793</b>

(a) See explanation in para. 1. (i) above. (b) Includes letters, cards and other postal articles enclosed in envelopes and sorted with letters. (c) Includes newspapers and postal articles 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 1948-49 to 1953-54.

**TOTAL POSTAL MATTER DEALT WITH : AUSTRALIA.**

Year.	Letters, Postcards and Letter-cards.		Newspapers and Packets.		Parcels.(a)		Registered Articles other than Parcels.	
	Total ( <sup>000</sup> .)	Per 1,000 of Mean Popula- tion.	Total ( <sup>000</sup> .)	Per 1,000 of Mean Popula- tion.	Total ( <sup>000</sup> .)	Per 1,000 of Mean Popula- tion.	Total ( <sup>000</sup> .)	Per 1,000 of Mean Popula- tion.
1948-49 ..	1,094,617	140,398	238,939	30,647	21,200	2,719	20,705	2,656
1949-50 ..	1,178,837	146,542	247,134	30,721	21,340	2,653	19,165	2,382
1950-51 ..	1,228,285	147,931	257,384	30,999	20,714	2,495	19,400	2,336
1951-52 ..	1,197,990	140,407	249,678	29,275	16,670	1,955	17,948	2,104
1952-53 ..	1,228,685	140,675	244,363	27,978	16,313	1,868	16,479	1,887
1953-54 ..	1,309,099	147,084	261,180	29,345	16,639	1,869	16,703	1,877

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

2. **Cash on Delivery Parcels Post.**—(i) *General.* 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, 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.

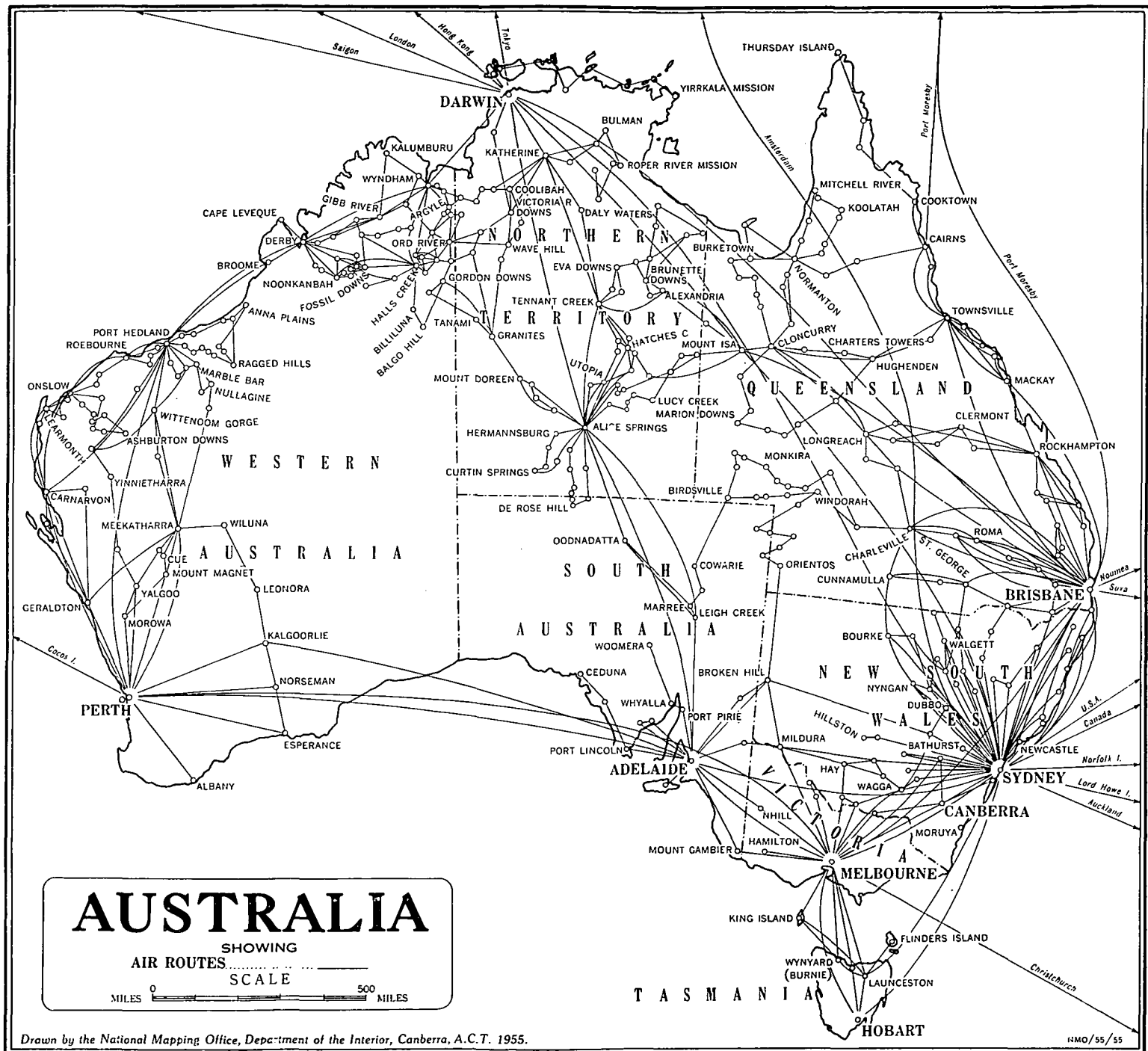
(ii) *States, 1953-54.* The next table shows particulars regarding the cash on delivery parcels posted in each State for the year 1953-54.

**CASH ON DELIVERY PARCELS POST : STATES, 1953-54.**

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Parcels posted <sup>000</sup>	367	175	205	58	80	3	888
Value .. £ <sup>000</sup>	1,304	621	604	175	163	9	2,876
Revenue(a) £ <sup>000</sup>	96	54	50	18	20	1	239

(a) From commission and postage.







(iii) *Australia.* In the following table particulars of cash on delivery parcels posted in Australia are shown for the years 1948-49 to 1953-54.

**CASH ON DELIVERY PARCELS POST : AUSTRALIA.**

Particulars.		1948-49.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Parcels posted ..	'000	1,079	1,106	1,155	899	837	888
Value ..	£'000	2,361	2,697	2,933	2,876	2,656	2,876
Revenue(a) ..	£'000	157	188	212	236	221	239

(a) From commission and postage.

3. **Total Cost of Carriage of Mails.**—During 1953-54 the total amounts paid for the carriage of mails, as disclosed by the Profit and Loss Account of the Postal Branch, were as follows :—Inland mails—road £2,064,000, railway £842,000, air £812,000 ; Coastwise mails—£29,000 ; Oversea mails—sea £356,000, air £1,862,000 ; Grand Total—£5,965,000.

4. **Transactions of the Dead Letter Offices.**—During the year 1953-54 2,085,000 letters were returned to writers or delivered, 298,000 were destroyed in accordance with the Act, and 177,000 were returned to other countries as unclaimed—a total of 2,560,000. Corresponding particulars for packets were—396,000, 240,000, 35,000 and 671,000. There were 3,231,000 articles handled in all.

5. **Money Orders and Postal Notes.**—(i) *General.* The issue of money orders and postal notes is regulated by Sections 74-79 of the Post and Telegraph Act 1901-1949. 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 per month and for remittances to countries outside the dollar area, £A.10 per week. A postal note cannot be issued for a sum larger than twenty shillings.

(ii) *States, 1953-54.* Particulars regarding the business transactions in each State for 1953-54 are shown hereunder :—

**MONEY ORDERS AND POSTAL NOTES : TRANSACTIONS, 1953-54.**

(£'000.)

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Aust.
<b>Money Orders—</b>							
Issued ..	27,174	13,314	6,926	3,750	3,108	1,903	56,175
Paid ..	27,823	13,514	6,539	3,476	2,999	1,731	56,082
Net Commission Received	184	95	56	28	25	14	402
<b>Postal Notes—</b>							
Issued ..	4,393	4,368	942	1,005	534	223	11,465
Poundage Received	170	203	36	44	21	9	483

(iii) *Australia.* The next table shows the number and value of money orders and postal notes issued and paid in Australia in each of the years 1948-49 to 1953-54.

## MONEY ORDERS AND POSTAL NOTES : TRANSACTIONS, AUSTRALIA.

Year.	Money Orders.				Postal Notes.			
	Issued.		Paid.		Issued.		Paid.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
	'000.	£'000.	'000.	£'000.	'000.	£'000.	'000.	£'000.
1948-49 ..	4,194	33,012	4,215	33,262	28,059	11,266	27,810	11,246
1949-50 ..	4,587	37,014	4,626	37,503	30,181	12,206	29,998	12,130
1950-51 ..	5,166	44,110	5,135	43,990	29,440	12,746	29,297	12,680
1951-52 ..	5,404	49,495	5,362	49,439	26,476	11,608	26,590	11,675
1952-53 ..	5,666	53,088	5,578	53,075	26,793	11,658	26,658	11,614
1953-54 ..	6,080	56,175	5,960	56,082	26,168	11,465	26,082	11,441

(iv) *Classification of Money Orders Issued and Paid.* Of the total money orders issued in Australia during 1953-54, 5,838,000 valued at £55,372,000 were payable in Australia, 12,000 (£24,000) in New Zealand, 175,000 (£542,000) in the United Kingdom and 55,000 (£237,000) in other countries. Of the total money orders paid in Australia during 1953-54, 5,824,000 (£55,358,000) were issued in Australia, 36,000 (£97,000) in New Zealand, 61,000 (£314,000) in the United Kingdom and 39,000 (£313,000) in other countries.

Money orders payable or issued in foreign countries, and which have been sent from or to Australia through the General Post Office in London, are included in those payable or issued in the United Kingdom.

(v) *Postal Notes Paid.* The following table shows the number and value of postal notes paid in each State during 1953-54. The number and value of postal notes issued and paid in each of the years 1948-49 to 1953-54 have been given in the previous table.

## POSTAL NOTES PAID : STATE OF ISSUE, 1953-54.

Issued in—	Postal Notes Paid in—						
	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Same State '000	7,419	4,140	1,456	951	741	376	15,083
Value £'000	3,738	2,029	707	487	374	155	7,490
Other States '000	1,331	793	813	117	356	7,589	10,999
Value £'000	571	351	387	60	89	2,493	3,951
Total '000	8,750	4,933	2,269	1,068	1,097	7,965	26,082
Value £'000	4,309	2,380	1,094	547	463	2,648	11,441

## § 3. Telegraphs.

1. *General.*—A review of the development of telegraph services in Australia up to 1921 appeared in Official Year Book No. 15, p. 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 reorganization. The external circulation system of the Australian telegraph service has been considerably modified, and direct communication has been established between cities and towns which formerly were served through intermediate repeating centres.

Telephone subscribers may telephone telegrams for onward transmission, or have messages telephoned to them. The fee for the service is small, and the system means, in effect, that the telegraph system is brought into the home of every telephone subscriber. The number of telegrams lodged by telephone during the year ended 30th June, 1954 was about 7.5 million or approximately 33 per cent. of the total lodgments. The number of telegrams telephoned to subscribers totalled 3.9 million.

A radiogram service is provided to certain isolated places throughout Australia and a number of privately-operated wireless transceiver stations have been established at various centres throughout the Commonwealth, enabling telegrams to be exchanged with departmental telegraph offices. Stations sponsored by the Royal Flying Doctor Service of Australia can communicate by wireless with base stations.

The picturegram service between Melbourne and Sydney, which was established in 1929, but which was suspended during 1942, was restored and extended to Brisbane and Adelaide in 1949, to Perth in 1950 and to Hobart and Newcastle in 1951. The equipment installed at these points also permits the direct transmission and reception of oversea photo-telegrams. Portable picture-transmitting apparatus has been provided for use at country centres in New South Wales and Victoria and was first used for the opening of the 19th Federal Parliament at Canberra on 21st February, 1950. In 1953-54, 9,407 picturegrams were lodged for destinations within Australia, 888 were transmitted to oversea destinations and 1923 were received from other countries. The service between Australia and overseas was extended by the establishment of facilities for the transmission of pictures to and from Denmark, Greece, Portugal, Switzerland, Federal Republic of Germany, Italy and Singapore.

As from 20th May, 1953, the Department authorized the connexion of privately-owned picturegram equipment to the public telephone trunk line network for the transmission of pictures. The new facilities are provided subject to certain restrictions where Departmental picturegram services operate and to payment of appropriate charges to cover the use of trunk line channels and equipment. Pictures from overseas may now be routed direct to private receivers.

Teleprinter services (i.e., typewriting over electrical circuits), affording the great advantage of direct and instantaneous communication between points within the same building or separated by distances up to thousands of miles, and printergram services, that is, leased teleprinter channels between the premises of subscribers and chief telegraph offices for the transmission and reception of telegrams, are available. The number of printergram services rose from 103 to 110 during 1953-54. Messages transmitted over these services totalled 1.8 million.

2. **Telegraph and Telephone Mileages.**—At 30th June, 1954 the combined single-wire mileages for both telegraph and telephone purposes were :—aerial, underground and submarine cables—exchange 5,211,000 miles, trunk telephone and telegraph 186,000 miles ; aerial wires—telephone, trunk and/or telegraph purposes 514,000 miles, exchange and non-exchange service lines 679,000 miles. The mileages of conduits and pole routes were 9,600 duct miles and 123,000 miles respectively. Conduits now include only ducts and conduits with an internal diameter of two inches or over. Those with a diameter of less than two inches are not recorded separately and are included with underground cables. The mileages in each State at 30th June, 1954 may be found in *Transport and Communication Bulletin* No. 45.

3. **Telegraph Offices.**—(i) *States.* The numbers of telegraph offices, including railway telegraph offices, in the various States at 30th June, 1954 were :—New South Wales, 3,256 ; Victoria, 2,385 ; Queensland, 1,750 ; South Australia, 949 ; Western Australia, 998 ; Tasmania, 571.

(ii) *Australia.* The numbers of telegraph offices in Australia at 30th June of each of the years 1950 to 1954 respectively were :—9,700, 9,764, 9,830, 9,902 and 9,909.

4. **Telegrams Dispatched within Australia.**—(i) *States.* The following table shows, for each State, the number of telegrams dispatched to places within the Commonwealth and to adjacent islands and to ships at sea during 1953-54, according to the class of message transmitted :—

### TELEGRAMS DISPATCHED, 1953-54.

('000.)

State.	Paid and Collect.						Unpaid.			Total Telegrams.
	Ordinary.	Urgent.	Press.	Letter-gram.	Radio-gram.	Total.	Service.	Meteorological.	Total.	
N. S. Wales ..	7,254	430	68	21	53	7,826	293	340	633	8,459
Victoria ..	4,521	166	27	19	5	4,738	149	157	306	5,044
Queensland ..	3,443	139	40	13	55	3,690	175	233	408	4,098
South Australia	1,629	64	32	13	39	1,777	56	230	286	2,063
Western Australia	1,732	52	26	17	58	1,885	63	262	325	2,210
Tasmania ..	520	22	7	6	1	556	32	74	106	662
<b>Australia ..</b>	<b>19,099</b>	<b>873</b>	<b>200</b>	<b>89</b>	<b>211</b>	<b>20,472</b>	<b>768</b>	<b>1,296</b>	<b>2,064</b>	<b>22,536</b>

(ii) *Australia.* Telegrams dispatched to destinations within Australia and to adjacent islands and to ships at sea, during each of the years 1949-50 to 1953-54 respectively, numbered :—35,486,000, 34,467,000, 27,080,000, 23,407,000 and 22,536,000.

## § 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 on page 265.

During 1953-54, 64,359 telephone subscribers' lines and 93,007 telephones were added to the system, compared with 58,110 lines and 82,912 telephones in 1952-53. With an average at 30th June, 1954 of one telephone to every six persons, Australia had a telephone density exceeded by that of only six other countries. The trunk line network was increased by 81,195 channel miles and at 30th June, 1954, had reached 773,190 miles; 71,661 of these additional channel miles were obtained by the installation of carrier-wave equipment, some of which was installed on radio-telephone bearers. Carrier-wave facilities enable several speech paths to be obtained from one pair of wires or, in the case of radio-telephone systems, without wires at all, and are designed to transmit the voice with greater fidelity than the wire pairs on which they are based. An alternative aerial route between Melbourne and Sydney has been completed and work is in progress to provide a direct route for traffic from Sydney to Adelaide and Perth. Sixteen additional trunk line channels are being provided between Tasmania and the mainland.

Sixteen automatic exchanges were brought into operation in metropolitan areas during the year, together with 6 country and 153 rural automatic exchanges. At 30th June, 1954 there were 238 automatic exchanges in the metropolitan areas and 709 in country districts, to which 984,000 telephones were connected, representing 67 per cent. of the total number in use in Australia.

2. **Summary for States.**—Particulars relating to the telephone services in each State at 30th June, 1954 are shown in the following table :—

**TELEPHONE SERVICES : SUMMARY, 30th JUNE, 1954.**

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Exchanges .. .. .	2,287	1,745	1,310	681	743	388	7,154
Telephone Offices (including Exchanges) .. .. .	3,372	2,504	1,833	1,004	972	540	10,225
Lines connected .. .. .	393	332	141	93	60	31	1,050
Instruments connected .. .. .	563	471	189	128	83	42	1,476
(i) Subscribers' instruments .. .. .	551	461	185	124	80	40	1,439
(ii) Public telephones .. .. .	6.8	4.6	3.0	1.6	1.2	0.8	18.0
(iii) Other local instruments .. .. .	5.9	5.6	2.9	2.2	1.6	0.8	19.0
Instruments per 1,000 of population	163	193	143	157	130	135	164

Of the total telephones (1,476,000) in service at 30th June, 1954, 545,000 or 37 per cent. were connected to exchanges situated beyond the limits of the metropolitan telephone networks.

3. **Subscribers' Lines and Calling Rates.**—The next table shows the number of subscribers' lines and the daily calling rates at central, suburban and country telephone exchanges in the several States for 1953-54 :—

**TELEPHONES : SUBSCRIBERS' LINES AND DAILY CALLING RATES, 1953-54.**

State.	Central Exchanges.		Suburban Exchanges.		Country Exchanges.	
	Subscribers' Lines Connected.	Average Outward Calls Daily per Line.	Subscribers' Lines Connected.	Average Outward Calls Daily per Line.	Subscribers' Lines Connected.	Average Outward Calls Daily per Line.
New South Wales .. .. .	30,944	9.72	201,726	3.45	137,719	1.81
Victoria .. .. .	20,768	8.28	185,525	3.29	114,148	1.23
Queensland .. .. .	9,861	10.07	55,669	2.49	66,154	1.79
South Australia .. .. .	8,349	8.49	45,246	2.52	33,333	1.20
Western Australia .. .. .	9,465	6.90	26,685	2.90	19,491	1.25
Tasmania .. .. .	5,595	4.42	5,190	2.32	17,969	1.66

A comparison of the average daily calling rates for each class of exchange shows that Queensland registered the greatest number of calls per line at central exchanges, and New South Wales at both suburban and country exchanges.

4. **Effective Paid Local Calls.**—The numbers of effective paid local calls from subscribers' and public telephones in the various States during the year ended 30th June, 1954 appear hereunder.

**TELEPHONES : NUMBER OF EFFECTIVE PAID LOCAL CALLS, 1953-54.**  
(Million.)

Calls.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Subscribers' .. .. .	382	283	109	69	51	21	915
From public telephones .. .. .	53	32	13	10	7	2	117
<b>Total</b> .. .. .	<b>435</b>	<b>315</b>	<b>122</b>	<b>79</b>	<b>58</b>	<b>23</b>	<b>1,032</b>

5. **Trunk Line Calls and Revenue.**—In the next table the number of telephone trunk line calls recorded, the amount of revenue received, and the average revenue per call are shown for each State and Australia for the year 1953-54.

## TELEPHONES : TRUNK LINE CALLS AND REVENUE, 1953-54.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Total calls '000	27,607	23,854	13,673	8,048	4,670	3,921	81,773
Total revenue £'000	4,389	3,227	2,106	1,250	706	424	12,102
Average revenue per call pence	38.16	32.47	36.97	37.27	36.27	25.96	35.52

The number of trunk line calls during 1953-54 increased by 6.8 million, or 9 per cent., compared with the figure for the previous year, whilst the average revenue per call increased by 2.5 per cent.

6. *Oversea Telephone Services.*—During the year 1953-54 radio-telephone services were established between Australia and Japan, Greece, Taiwan and North Borneo, bringing the number of countries with which radio-telephone communication is available to 72. Service is also provided to certain trans-Atlantic liners, ships off the Australian coast, H.M.A. ships, and H.M.N.Z. ships when cruising in Australian waters.

The amount of traffic handled over the radio-telephone services increased by 10 per cent. over that handled in 1952-53. During 1953-54 the number of calls connected was 42,632, comprising 21,599 originating in Australia and 21,033 incoming calls.

7. *Revenue from Telephones.*—Particulars regarding the revenue from telephone services are included in tables in § 1 (*see pp. 256-9*).

8. *World Telephone Statistics, 1954.*—Information derived, in the main, from statistics compiled by the American Telephone and Telegraph Company shows that at 1st January, 1954 there were more than 89 million telephones in use throughout the world. The United States of America, with over 50 million, possessed by far the greatest proportion of these (56.5 per cent.). The United States of America also had the highest recorded number of instruments per 100 of population (*viz.*, 31). Figures for other leading countries were as follows :—Sweden 28, Canada 24, Switzerland 22, New Zealand 22, Denmark 19. At June, 1954 the number of telephones in Australia per 100 persons was 16.

## § 5. Cable and Radio Communication.

1. *General.*—Descriptions of the various cable services between Australia and other countries were given in Official Year Book No. 22, pp. 335-6 and earlier issues.

2. *Merging of Cable and Wireless Interests.*—Following upon the recommendations of the Imperial Wireless and Cable Conference in London in 1928 which examined the situation that had arisen as the result of the competition of the beam wireless with the cable services, Imperial and International Communications Limited (since renamed Cable and Wireless Ltd.) was formed and took over the operations of the Pacific Cable Board and the control of the Eastern Extension Cable Company and the Marconi Wireless Company. For further developments, leading eventually to the establishment of the Overseas Telecommunications Commission, *see* Official Year Book No. 37, pp. 220-4.

3. *Oversea Cable and Radio Traffic.*—(i) *States.* The number of telegrams received from and dispatched overseas in each State during 1953-54 is shown hereunder :—

## INTERNATIONAL TELEGRAMS, 1953-54.

('000.)

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
Number received ..	655	443	65	57	68	20	1,308
„ dispatched	602	429	79	72	81	20	1,283
Total ..	1,257	872	144	129	149	40	2,591



(ii) *Australia. (a) Number of Telegrams.* The following table shows the number of international telegrams received from and dispatched overseas during the years 1948-49 to 1953-54 :—

## INTERNATIONAL TELEGRAMS : AUSTRALIA.

('000.)

Particulars.	1948-49.	1949-50.	1950-51.	1951-52.	1952-53.	1953-54.
Number received ..	1,123	1,233	1,322	1,357	1,187	1,308
„ dispatched ..	1,123	1,242	1,396	1,329	1,207	1,283
Total ..	2,246	2,475	2,718	2,686	2,394	2,591

(b) *Number of Words, 1953-54.* The following statement shows particulars of the international business, originating and terminating in Australia, transacted over the cable and radio services during the year ended 30th June, 1954.

## INTERNATIONAL TELEGRAMS, AUSTRALIA, 1953-54.(a)

('000 Words.)

Class of Telegram.	Number of Words Transmitted to—			Number of Words Received from—		
	United Kingdom.	Other Places.	Total.	United Kingdom.	Other Places.	Total.
Ordinary ..	4,605	6,252	10,857	3,976	5,212	9,188
Letter ..	6,096	8,077	14,173	5,555	6,603	12,158
Press ..	3,531	3,224	6,755	10,113	2,863	12,976
Government ..	464	1,059	1,523	1,220	1,551	2,771
Greetings ..	1,084	718	1,802	930	767	1,697
Other ..	..	69	69	..	191	191
Total ..	15,780	19,399	35,179	21,794	17,187	38,981

(a) International business, originating and terminating in Australia, transacted over the cable and radio services.

Words transmitted to "Other places" included 2,922,000 to the United States of America and 5,411,000 to New Zealand and the Pacific Islands. Words received from "Other places" included 2,820,000 from the United States of America and 4,302,000 from New Zealand and the Pacific Islands.

4. *Coast Stations.*—At 30th June, 1955 there were 43 wireless stations established at points around the Australian coast and 11 about the coast of Papua and New Guinea. During 1954-55 these stations handled 530,718 messages (456,601 paying, 12,412 free traffic and 61,705 meteorological) with a total of 8,891,062 paying words. For further information see the *Transport and Communication Bulletin*.

5. *Radio-communication Stations Authorized.*—(i) *States and Territories, 30th June, 1955.* The following table shows particulars of the different classes of radio-communication stations authorized in Australia and Papua-New Guinea at 30th June, 1955. Figures relate to radio-communication (radio telegraph and radio telephone) stations only; particulars of broadcasting stations and of broadcast listeners' licences are shown in § 6, following.

## RADIO-COMMUNICATION STATIONS AUTHORIZED, 30th JUNE, 1955.

State or Territory for which Authorized.	Transmitting and Receiving.						Receiving Only.			Grand Total.
	Amateur.	Aero-nautical. (a)	Coast. (b)	Land. (c)	Mobile (General). (d)	Miscellaneous.	Land. (c)	Mobile (General). (d)	Total.	
N.S.W. ...	1,058	13	8	637	2,660	43	95	1	96	4,515
Vic. ...	1,007	5	7	399	2,375	28	3,821	199	30	4,050
Q'land ...	322	21	8	508	1,081	8	1,948	64	6	2,018
S. Aust. ...	361	7	5	214	899	7	1,493	3	...	1,496
W. Aust. ...	190	20	7	371	626	7	1,221	33	13	1,267
Tas. ...	126	7	7	86	203	4	433	1	...	434
Nor. Terr. ...	22	5	1	162	22	...	212	3	...	215
A.C.T. ...	8	1	...	10	61	1	81	...	...	81
Total, Aust. ...	3,094	70	43	2,387	7,927	98	13,628	398	50	14,076
Papua-New Guinea ...	50	12	11	288	60	...	421	...	...	421
Grand Total	3,144	91	54	2,675	8,070	98	14,049	398	50	14,222

(a) Ground stations (aeradio stations) for communication with aircraft stations. (b) Ground stations for communication with ship stations. (c) Stations established at fixed locations on land for the conduct of point-to-point services and for communication with mobile stations. (d) Stations installed in motor vehicles and small harbour vessels not falling within the definition of ship stations or aircraft stations, and stations comprising small portable apparatus used for various purposes. (e) Includes 261 aircraft stations, 1,059 ship stations and 412 "other" stations which cannot be classified according to States, etc.

Corresponding figures for 30th June, 1954 will be found in *Transport and Communication Bulletin* No. 45.

(ii) *Australia and Papua-New Guinea, 30th June, 1950 to 1955.* The following table shows the total number of radio-communication stations authorized in Australia and Papua-New Guinea at 30th June of the years 1950 to 1955.

## RADIO-COMMUNICATION STATIONS AUTHORIZED : AUSTRALIA AND PAPUA-NEW GUINEA.

At 30th June—	Transmitting and Receiving.								Miscel- lan- eous.	Receiving Only.		Grand Total.
	Ama- teur.	Aero- nauti- cal. (a)	Coast. (b)	Land. (c)	Mobile.(d)					Land. (c)	Mobili- (Gene- ral). (d)	
					Gene- ral.	Ship.	Air- craft.	Other.				
1950 ..	2,826	68	29	1,517	2,011	617	226	139	49	375	311	8,168
1951 ..	2,897	70	33	1,747	2,361	656	218	146	60	371	207	8,766
1952 ..	2,937	70	39	1,835	3,063	708	230	177	66	387	181	9,693
1953 ..	2,977	84	42	2,107	4,144	755	230	247	72	390	165	11,213
1954 ..	2,980	91	49	2,359	5,327	808	232	266	83	382	73	12,650
1955 ..	3,144	91	54	2,675	7,987	1,059	261	412	98	398	50	16,220

See notes to previous table.

## § 6. Broadcasting and Television.

1. **General.**—Broadcasting services in Australia operate under the Broadcasting Act 1942-1954 and comprise the National Broadcasting Service and the Commercial Broadcasting Service. The following table shows the number of broadcasting stations in operation at 30th June, 1955 :—

## BROADCASTING STATIONS, 30th JUNE, 1955.

Type of Station.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Papua-New Guinea.	Total.
National—										
Medium Frequency ..	14	5	12	5	5	4	2	2	1	50
Short-wave ..	1	3	2	...	2	...	...	...	1	9
Commercial ..	36	20	20	8	13	8	...	1	...	106

2. The Australian Broadcasting Control Board.—The Board, which was constituted on 15th March, 1949 under the above Act, operates under the Ministerial jurisdiction of the Postmaster-General, and its principal functions, as set out in Section 6K of the Act, are to ensure :—(a) the provision of services by broadcasting stations, television stations and facsimile stations, and services of a like kind, in accordance with plans from time to time prepared 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 ; and (c) that adequate and comprehensive programmes are provided by such stations to serve the best interests of the general public.

In addition, the Board may exercise such other functions as are prescribed by regulation in relation to broadcasting stations, television stations and facsimile stations.

In the exercise of its functions in respect of programmes, the Board is required—(a) to consult the Australian Broadcasting Commission and representatives of licensees of commercial broadcasting stations in relation respectively to the programmes of the national and commercial broadcasting services ; and (b) in particular to—(i) ensure reasonable variety of programmes ; (ii) ensure that divine worship or other matter of a religious nature is broadcast for adequate periods and at appropriate times, and that no matter which is not of a religious nature is broadcast by a station during any period during which divine worship or other matter of a religious nature is broadcast by that station ; (iii) ensure that facilities are provided on an equitable basis for the broadcasting of political or controversial matter ; (iv) determine the extent to which advertisements may be broadcast in the programme of any commercial broadcasting station ; and (v) fix the hours of service of broadcasting stations, television stations and facsimile stations.

The Board is empowered to make recommendations to the Minister as to the exercise by him of any power under Division 1 of Part III. of the Act, which prescribes the conditions under which licences are granted to commercial broadcasting stations.

The Board also has power, subject to the directions of the Minister—(a) to determine the situation and operating power of any broadcasting station, television station or facsimile station ; (b) to determine the frequency of each broadcasting station, television station or facsimile station, within bands of frequencies notified to the Board by the Postmaster-General as being available for such stations ; (c) after consultation with the Commission to determine the conditions upon which a commercial broadcasting station may broadcast a programme of the National Broadcasting Service ; and (d) to regulate the establishment of networks of broadcasting stations and the making of agreements or arrangements by licensees of commercial broadcasting stations for the provision of programmes or the broadcasting of advertisements.

Subject to the approval of the Minister and of the Treasurer, the Board may provide financial and other assistance to commercial broadcasting stations for the purpose of ensuring that programmes of adequate extent, standard and variety are provided in the areas served by these stations.

The Board also has certain powers in connexion with the general control of the broadcasting service, particularly in relation to the operations and programmes of commercial stations.

Section 6B of the Act provides that the Board shall consist of five members (including two part-time members) appointed by the Governor-General, one of whom, other than a part-time member, shall be chairman. No person shall be appointed as a member of the Board who—(a) has any financial interest, whether direct or indirect, in any company which is the licensee of, or an applicant for a licence for, a commercial broadcasting station or a commercial television station or manufactures or deals in equipment for the transmission or reception of broadcasting, television or facsimile programmes ; (b) is a member of the governing body of any company or other association of persons which is the licensee of, or an applicant for a licence for, a commercial broadcasting station or a commercial television station ; or (c) is the licensee of, or an applicant for a licence for, a commercial broadcasting station or a commercial television station.

3. **The National Broadcasting Service.**—(i) *General.* The programmes of the National Broadcasting Service are provided by the Australian Broadcasting Commission and the technical facilities for the transmission of such programmes by the Postmaster-General's Department.

(ii) *The Australian Broadcasting Commission.* The Commission comprises seven Commissioners, one of whom is an officer of the Department of the Treasury and one an officer of the Postmaster-General's Department.

Under the provisions of the Act the Commission "shall provide and shall broadcast from the national broadcasting stations adequate and comprehensive programmes and shall take in the interests of the community all such measures as, in the opinion of the Commission, are conducive to the full development of suitable broadcasting programmes."

The Commission prepares estimates of its receipts and expenditure for each financial year and submits these estimates to the Minister. Appropriations are made by Parliament for the purposes of the Commission and these, together with all other moneys received by the Commission, are paid into an account in the Commonwealth Bank of Australia. From this account are defrayed all costs, charges, expenses, etc., incurred by the Commission in the exercise of its powers and functions under the Act. For particulars of the financial operations of the Commission see Chapter XX.—Public Finance.

(iii) *Technical Facilities.* At 30th June, 1955, the National Broadcasting Service comprised 59 transmitting stations as follows :—

*Medium-wave Stations—*

2CN and 2CY Canberra, 2BL and 2FC Sydney, 2BA Bega, 2CO Corowa, 2CR Cummoek, 2KP Smithtown, 2LG Lithgow, 2ML Murwillumbah, 2NA and 2NC Newcastle, 2NB Broken Hill, 2NR Grafton, 2NU Manilla, 2TR Taree, 3AR and 3LO Melbourne, 3WL Warrnambool, 3GI Sale, 3WV Dooen, 4QG and 4QR Brisbane, 4AT Atherton, 4GM Gympie, 4QA Mackay, 4QB Pinalba, 4QL Longreach, 4QN Townsville, 4QS Dalby, 4QY Cairns, 4RK Rockhampton, 4SO Southport, 5AN and 5CL Adelaide, 5CK Crystal Brook, 5LN Port Lincoln, 5WM Woomera, 5AL Alice Springs, 5DR Darwin, 6WF and 6WN Perth, 6GF Kalgoorlie, 6GN Geraldton 6WA Wagin, 7ZL and 7ZR Hobart, 7NT Kelso, 7QN Queenstown, 9PA Port Moresby, Papua.

*Short-wave Stations—*

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

The medium-wave transmitters operate in the medium frequency broadcast band 540 to 1,600 kilocycles per second. From the short-wave stations, using frequencies within the band 3 to 30 megacycles per second, service is given 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.

Programmes for country stations are normally relayed from the control studio of the nearest capital city, 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 frequently this system is extended to connect both the national and commercial broadcasting stations.

In June, 1955, 36 of the medium-wave stations were situated outside the capital cities and additional country stations are to be constructed. When these additions have been made the medium-wave and short-wave stations together will provide for clear reception of the programmes of the National Broadcasting Service in practically every part of Australia.

(iv) *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 1954-55 was as follows :—Classical Music, 23.4

per cent. ; Light Music, 14.7 per cent. ; Variety, 17.8 per cent. ; Drama and Features, 3.9 per cent. ; Youth Education, 3.6 per cent. ; Children's Session, 2.3 per cent. ; Talks, 7.0 per cent. ; Parliament, 3.8 per cent. ; Religion, 3.6 per cent. ; News, 7.7 per cent. ; Sport, 5.4 per cent. ; Rural Broadcasts, 1.7 per cent. ; Non-departmental, 5.1 per cent.

(b) *Music.* The A.B.C. is to-day the biggest concert-giving organization in the Commonwealth, and the immense growth of interest in music in this country is illustrated by the fact that Australian listeners in increasing numbers now welcome the opportunity of hearing fine music on the air and in the concert hall and have magnificently supported the presentation of orchestral concerts and of recitals by the best musicians from their own country and from overseas. In 1936 small regular orchestras were formed by the A.B.C. in Sydney, Melbourne, Brisbane, Adelaide, Perth and Hobart, and from these foundations have grown our present orchestras. Those in Sydney and Melbourne measure up to first-class orchestras overseas, whilst those in the other capital cities are showing rapid improvement and are now the equal of those in many places of comparable size in Europe or America. Until 1946 the cost of these orchestras was met solely by the A.B.C., but since then State Governments and major municipal bodies in all States have agreed to contribute towards the expense.

The close co-operation between a broadcasting organization, city authorities and State Governments to establish and maintain symphony orchestras is unique in the world.

In 1954-55, the A.B.C. organized 539 public orchestral concerts (including 153 free concerts for school children and 40 free concerts for adults) and 244 public recitals by famous artists throughout the Commonwealth. Of these concerts, 256 were given outside the capital cities, including 78 free orchestral concerts for school children.

The policy of the A.B.C. so far as individual artists are concerned has always been to develop local talent and at the same time give its audiences the opportunity of hearing famous international musicians.

(c) *Drama and Features.* Drama programmes are designed to give listeners opportunities, which they might not otherwise have, of hearing the great plays of all nations as well as adaptations of the best modern stage plays and also those written specially for broadcasting. The main regular drama programmes are broadcast on Saturday and Monday evenings, and special series of longer plays are also given at various times during the year.

In recent years the technique of the feature programme has also been developed in this country. 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, and it may deal with a very wide variety of subjects ranging from history and current events to science and the arts. A number of Australian writers have become interested in this form of entertainment and about 97 per cent. of the features broadcast are written by Australians. Local writers also contribute a large proportion of the plays broadcast and every effort is made to assist and encourage their work.

(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, 1955 was 8,308 or about 84 per cent. of all schools, State and private, throughout the Commonwealth. Many of the school broadcasts are presented in dramatized form, as this method makes the material more vivid and interesting to the young listener. For the very young children, the Commission broadcasts every week-day the "Kindergarten of the Air", a type of broadcast which originated in Australia. (See also Chapter XII.—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. The most complete of these built-up programmes is the documentary, in which radio goes into the field to analyse or to describe, using the actual sounds and voices recorded on location.

Controversial topics are covered in two sessions—the weekly discussion broadcast, in which the main conflicting points of view on a current topic are discussed by competent authorities, and the "Nation's Forum of the Air", using the debating technique with

questions in person from the studio audience and telephoned from listeners. Another outstanding session is "News Review", containing at least five 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 was commenced in 1945 to serve the needs of country listeners. It has proved to be of great value to men and women on the land throughout Australia, by giving them the latest market reports and information on general conditions, and by keeping them informed on rural development overseas. The interstate market report is the only Australia-wide market service available to the Australian rural population. Programmes are exchanged with radio organizations in England, Canada, the United States of America and elsewhere, and several visits to Australia by well-known farm radio personalities have also been arranged. The department has encouraged the work of Junior Farmers' Clubs in Australia, and has sponsored competitions for members in connexion with the Royal Agricultural Shows in Sydney and Melbourne.

(g) *News.* On 1st June, 1947, the Australian Broadcasting Commission's independent News Service came into full operation. Since that date the Commission has collected the news for its bulletins independently of the press and it now has, in addition to a large staff throughout Australia, a London news room for the selection and transmission of overseas news secured from the great news agencies. Nine national news bulletins are broadcast daily, and are followed by State bulletins of news of State interest. In addition, two or more regional bulletins are broadcast by local stations in country areas on most days of the week, and for remote country districts special bulletins are broadcast on short-wave. For overseas listeners 19 bulletins daily are broadcast through the Radio Australia transmitters. These bulletins, which are given in English, French, Malay and Thai, are directed to every continent, but concentrate on the Pacific and Asian areas. The A.B.C. also rebroadcasts for Australian listeners, by arrangement with the British Broadcasting Corporation, two B.B.C. news bulletins each day.

(h) *Other Activities.* The broadcasting of the proceedings of Federal Parliament commenced as a regular service in July, 1946, and Australian listeners are now able to hear debates from the House of Representatives and from the Senate. At present these broadcasts are confined to one of the two transmitters in each capital city, but it is hoped that eventually country listeners will also be able to hear them.

The National Children's Hour, presented seven days a week, is composed of over 40 programme items, including stories, music, games, and items about art, literature, natural history and sport. There is a children's newsreel and a Brain's Trust, discussing, through children, topics of wide general interest. The Argonauts' Club is an important part of the session and encourages children between the ages of 7 and 17 in self-expression and the appreciation of cultural subjects, but the provision of entertainment suitable for children is the main purpose of the session.

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. In its variety sessions the A.B.C. does everything possible 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. The A.B.C. dance bands in Sydney and Melbourne are regarded as being two of the most outstanding bands in Australia.

The coverage of sport at home and abroad by the A.B.C. is comprehensive. On Saturday afternoons the sporting panel provides listeners with progress results, scores and descriptions from half a dozen or more 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. In covering events overseas, the A.B.C. is indebted to the British Broadcasting Corporation for its collaboration in Great Britain, and to the New Zealand Broadcasting Service for events in New Zealand.

4. **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 Australian Broadcasting Control Board. The maximum initial period of a licence is three years, and renewals are granted for a period of one year. Licences are granted on conditions which ensure satisfactory alternative programmes for listeners. The fee for a broadcasting station licence is £25 per annum in respect of the first period for which the licence is granted and, in the case of a renewal, £25 plus one-half of one per cent. of the gross earnings from the operations of the station if it has made a profit in the preceding year. Licensees of these stations rely for their income on revenue received from the broadcasting of advertisements and other publicity. At 30th June, 1955, there were 106 commercial broadcasting stations in operation. A table showing the call sign, location, frequency and aerial power of each of these stations may be found in *Transport and Communication Bulletin* No. 45.

5. **Overseas Broadcasting Service.**—There are three short-wave stations at Shepparton, Victoria (VLA, VLB, VLC) for use only in the oversea service known as "Radio Australia". As in the case of the National Broadcasting Service, these stations are maintained by the Postmaster-General's Department and their programmes are arranged by the A.B.C. During certain periods station VLG Lyndhurst, a unit of the National Broadcasting Service, is also used for the purpose of oversea transmissions. 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. Twenty-two of the regular transmissions are in foreign languages. The oversea audience has grown very substantially in recent years, as evidenced by a large and increasing number of letters from listeners abroad.

6. **Television.**—(i) *General.* Under the Television Act 1953, the Postmaster-General may establish National television stations or may grant licences for commercial television stations after taking into consideration any recommendations which have been made by the Australian Broadcasting Control Board.

(ii) *Royal Commission on Television, 1953.* The question of the introduction of television services in Australia was the subject of an investigation during 1953 by a Royal Commission. The principal recommendations of the Royal Commission were that—

- (a) Television should be introduced on a gradual basis.
- (b) The first national television station should be erected in Sydney and the second in Melbourne, and expansion to other State capital cities and to other centres of population should proceed as soon as finances become available.
- (c) The authority for providing the programmes for the National Television Service should be the Australian Broadcasting Commission.
- (d) Initially, licences should be issued for two commercial television stations in both Sydney and Melbourne.
- (e) Before any licence is granted a public hearing should be conducted by the Australian Broadcasting Control Board.

(iii) *Establishment of Services.* Following the Royal Commission on Television, the Government adopted the recommendations set out in (ii) above and the Postmaster-General invited applications for the grant of licences for four commercial television stations—two in Sydney and two in Melbourne. Following public hearings held by the Board, the Government approved of the grant of licences to—

- (a) Amalgamated Television Services Pty. Ltd. for a station in Sydney.
- (b) Television Corporation Ltd. for a station in Sydney.
- (c) General Television Corporation Pty. Ltd. for a station in Melbourne.
- (d) Herald and Weekly Times Ltd., on behalf of a company to be formed, for a station in Melbourne.

Contracts have been placed for the supply of equipment for the national television stations in Sydney and Melbourne, and the stations are in the course of being established.

7. **Broadcast Listeners' Licences.**—(i) *General.* Broadcast listeners' licences are issued at Post Offices in accordance with Section 96 of the Broadcasting Act 1942–1954. A single licence authorizes every broadcast 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; 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 licence may be granted at one-quarter of the ordinary fee to any person who (a) is in receipt of a pension under Part III. or Part IV. of the Social Services Act 1947–1955 or a service pension, or a pension in respect of total and permanent incapacity, under the Repatriation Act 1920–1955; and (b) lives alone or with any person whose income does not exceed the maximum amount of income and pension allowed under Part III. or Part IV. of the Social Services Act 1947–1955 or Section 87 of the Repatriation Act 1920–1955.

Licences are granted free of charge to blind persons over 16 years of age and also to schools.

(ii) *Licences in Force.* The following table shows the number of broadcast listeners' licences in force at 30th June, 1925, 1930, 1935, 1940, 1945 and 1950 to 1955 :—

**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 .. ..	458,256	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
1951(c) .. ..	679,232	522,502	270,587	204,695	139,669	68,149	1,884,834
1952 .. ..	741,355	520,364	279,852	208,691	141,950	68,832	1,961,044
1953 .. ..	742,002	533,329	282,338	212,104	145,141	70,741	1,985,655
1954 .. ..	769,478	545,148	287,683	220,065	148,192	71,047	2,041,613
1955 .. ..	746,050	549,690	293,512	223,593	150,199	71,602	2,034,676

(a) Includes Australian Capital Territory. (b) Includes 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 2,034,676 broadcast listeners' licences in force at 30th June, 1955, 1,181,601 or 58.1 per cent. were held by persons situated in metropolitan areas and 853,075 or 41.9 per cent. by persons in country areas. Of the latter, only 12,247 were in respect of Zone 2.

8. **Radio-inductive Interference.**—In each State of the Commonwealth, the Postmaster-General's Department maintains a staff of experts with suitable equipment and transport, for the purpose of investigating complaints of radio-inductive interference to the reception of broadcast programmes and to defence and civil radio-communication services.

During the year 1954–55, 10,381 sources of trouble were eliminated as a result of Departmental efforts or by other action. More than 3,700 suppressors were fitted to offending appliances as recommended by investigating officers, who carried out 30,093 inspections in metropolitan and country areas.

9. **Prosecutions under the Broadcasting Act.**—Persons convicted during the year ended 30th June, 1955 for operating unlicensed broadcast receivers numbered 3,810. Fines and costs amounting to £15,871 were imposed.