

Transport and Communications

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THE TRANSPORT INDUSTRY

The following table provides an overview of the transport industry — that is, those establishments whose prime activity is engaging in one or more of the different modes of transport. These statistics, obtained from the ABS Transport Industry Survey of such establishments, are the latest available

which provide an overview across the industry and while they relate to 1983-84 they give some indication of the size and structure of the industry.

Road freight transport contributed the highest figures for value added and employment, although it was second to rail transport for wages and salaries.

SUMMARY OF OPERATIONS BY THE TRANSPORT INDUSTRY, 1983-84

ASIC Code	Industry description	Establishments at 30 June 1984	Average employment over whole year(a)	Wages and salaries (b)	Turn-over	Stocks		Total purchases, transfers in and selected expenses	Value added	Fixed capital expenditure less disposals
						Opening	Closing			
		no.	no.	\$m	\$m	\$m	\$m	\$m	\$m	\$m
511	Road freight transport	32,943	99,606	902.5	5,187.3	47.4	49.8	2,921.8	2,267.8	237.6
512	Road passenger transport	10,615	45,841	571.2	1,528.6	34.0	37.4	593.5	938.5	56.4
5200	Rail transport	12	86,721	1,688.5	3,314.8	178.9	179.4	1,417.5	1,897.8	406.9
53	Water transport	165	8,978	212.7	1,238.9	14.9	14.7	814.5	424.3	23.2
54	Air transport	334	23,597	600.8	2,958.0	20.4	19.9	1,747.9	1,209.6	178.1
51-54	Total transport	44,069	264,743	3,975.7	14,227.6	295.6	301.2	7,495.2	6,738.0	902.2

(a) Includes working proprietors and partners. (b) Excludes the drawings of working proprietors and partners.

Source: *Transport Establishments: Details of Operations by Industry Class, Australia (9104.0)*.

As the above table shows, road freight transport is the biggest component of the transport industry in terms of most of the items. However, road freight also comprises a substantial part of the activity of establishments engaged primarily in activities other than transport, such as wholesale and retail trade. For this reason, to provide a complete picture of road freight transport, the ABS complemented the Transport Industry Survey by also conducting the Business Vehicle Survey in respect of 1983-84, which covered enterprises which engaged in road freight transport as part of some other main activity. Statistics from this survey are contained in the later section in this chapter on road freight activity.

Other sections of the chapter provide information on other aspects and activities of

transport, which, although they may fall outside the transport industry as defined in the Australian Standard Industrial Classification, nevertheless provide a broad picture of the subject. Because of their different sources and periods to which they relate the various statistics may not be strictly compatible and comparable.

ROAD TRANSPORT

Length of road system

Information on lengths of roads open for general traffic in Australia, at the latest dates available, classified according to certain broad surface groups as defined by the respective States and Territories are as follows.

ALL ROADS OPEN FOR GENERAL TRAFFIC: LENGTHS, 30 JUNE 1990
(kilometres)

<i>Surface of roads</i>	<i>NSW(a)</i>	<i>Vic.(b)</i>	<i>Qld</i>	<i>SA</i>	<i>WA(c)</i>	<i>Tas.(d)</i>	<i>NT(e)</i>	<i>ACT</i>	<i>Aust.</i>
Bitumen or concrete	77,803	68,408	57,652	24,347	43,031	9,475	5,701	2,445	288,702
Gravel, crushed stone or other improved surface	64,572	48,287	45,187	—	45,751	13,512	5,940	170	217,932
Formed only	32,438	23,580	51,356	70,560	36,523	235	4,605	—	223,509
Cleared only	20,616	21,009	16,637	—	17,624	166	4,144	—	82,121
Total	195,429	161,284	170,832	94,907	142,929	23,388	20,390	2,615	810,264

(a) Excludes roads designated but not trafficable. Excludes Lord Howe Island and the unincorporated area of the Western Division. (b) Excludes roads coming under the responsibility of the State Electricity Commission and Forests Commission. (c) Excludes approximately 25,300 km of forestry roads. (d) Forestry roads have been reclassified from cleared only to gravel. (e) Excludes roads in towns and Local Government Areas.

Source: Derived mainly from local government sources in each State and the ACT Department of Urban Services.

The following table indicates the lengths of various classes of roads proclaimed or declared under the State transport Acts.

PROCLAIMED OR DECLARED ROADS: LENGTHS, 30 JUNE 1988(a)
(kilometres)

<i>Class of road</i>	<i>NSW(b)</i>	<i>Vic.</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas.</i>	<i>Aust.</i>
State highways and freeways	10,397	7,537	10,417	—	7,949	1,919	38,219
Trunk roads	—	—	225	12,449	—	—	n.a.
Ordinary main roads	(c)25,124	14,793	8,224	—	7,460	1,259	n.a.
Total main roads	35,521	22,330	18,866	12,449	15,409	3,178	107,753
Secondary roads	n.a.	n.a.	6,373	—	8,645	296	n.a.
Development roads	n.a.	n.a.	8,712	—	—	45	n.a.
Tourist roads	n.a.	n.a.	—	—	—	211	n.a.
Other roads	n.a.	n.a.	—	—	—	—	n.a.
Total other roads	n.a.	n.a.	15,085	—	8,645	552	n.a.
Total	n.a.	n.a.	33,951	12,449	24,054	3,730	n.a.

(a) Latest data available. (b) Includes ACT. (c) A combination of trunk and ordinary main roads.

Source: Derived mainly from local government sources in each State and the ACT Department of Urban Services.

Registered motor vehicles

Censuses of registered motor vehicles have been conducted in respect of 31 December 1955 and 1962 and 30 September 1971, 1976, 1979, 1982, 1985 and 1988 (a further survey, not yet published, was conducted in October 1991). Summary details of registered motor vehicles are also compiled as at 30 June each year from information supplied by the various motor vehicle registration authorities in the States and Territories. They cover vehicles owned by private individuals, local government authorities, State Governments, and the Commonwealth Government (excluding those belonging to the defence services). Figures from the censuses

differ from the corresponding year's figures compiled for the annual vehicles on register series. These inconsistencies result from different dates of recording and because, for some States and Territories, the annual figures include vehicles where the registration has lapsed but the details have not been removed from the register, whereas the census excludes such vehicles.

There were 9,418,007 registered motor vehicles (excluding tractors, plant and equipment, caravans and trailers) in Australia at 30 September 1988. This represents an increase of 458,278 vehicles (5.1%) since 30 September 1985, the smallest three year increase since the triennial Motor Vehicle Census was introduced in 1976.

MOTOR VEHICLE CENSUS, 30 SEPTEMBER 1988
(^{'000})

State/Territory	Motor cars and station wagons	Utilities and panel vans	Trucks			Buses	Motor cycles	Total (a)
			Rigid	Articulated	Non-freight-carrying			
New South Wales	2,258.7	390.0	171.8	14.9	14.2	54.1	89.9	2,993.6
Victoria	2,042.8	196.0	205.1	13.7	13.4	14.3	70.8	2,556.0
Queensland	1,131.1	297.7	53.8	8.4	5.4	10.5	60.4	1,567.2
South Australia	681.5	90.0	48.7	4.1	7.4	3.0	34.4	869.1
Western Australia	679.1	136.7	74.5	5.1	8.7	7.5	35.4	947.0
Tasmania	211.0	43.2	17.1	1.6	3.2	1.9	6.4	284.3
Northern Territory	35.7	18.2	1.7	1.0	0.3	0.7	3.1	60.7
Australian Capital Territory	118.9	11.7	3.7	0.3	0.7	1.2	3.7	140.2
Australia	7,158.8	1,183.5	576.3	48.9	53.4	93.2	304.0	9,418.0

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

Source: Motor Vehicle Census: Australia (9309.0).

As shown in the following table, the number of motor vehicles (excluding motor cycles) has steadily increased in every year between

1985 and 1990. In contrast, the number of motor cycles has decreased markedly over the same period.

MOTOR VEHICLES ON REGISTER, BY TYPE OF VEHICLE
(^{'000})

30 June	Motor cars and station wagons	Utilities, trucks, panel vans, other truck type vehicles and buses	Total (excludes motor cycles)	Motor cycles
1985	6,842.5	1,886.5	8,729.1	389.2
1986	6,985.4	1,930.6	8,916.0	374.5
1987	7,072.8	1,949.8	9,022.7	351.0
1988	7,243.6	1,977.6	9,221.1	323.3
1989	7,442.2	2,047.3	9,489.5	316.6
1990	7,672.3	2,104.3	9,776.6	304.0

Source: Motor Vehicle Registrations, Australia (9304.0).

Motor vehicles (excluding motor cycles) on register per 1,000 of population were also higher in 1990 than in 1985 for every State

and Territory. Tasmania had the highest ratio in 1990 with 630.5 vehicles for every 1,000 people.

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

30 June	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
1985	520.7	571.1	573.7	572.0	589.4	588.0	467.4	488.8	553.9
1986	526.0	575.1	574.3	582.5	590.7	596.8	478.1	483.2	558.2
1987	522.3	581.0	562.6	575.5	582.0	598.1	459.7	497.3	555.3
1988	523.8	589.8	568.0	580.3	587.4	607.2	440.5	498.5	559.9
1989	532.7	583.3	574.9	584.9	597.0	617.0	465.8	512.3	564.6
1990	537.8	590.0	580.5	593.3	612.2	630.5	479.7	539.2	572.3

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

Source: Motor Vehicle Registrations, Australia (9304.0).

Registrations of new motor vehicles

States and Territories are shown in the following table and chart.

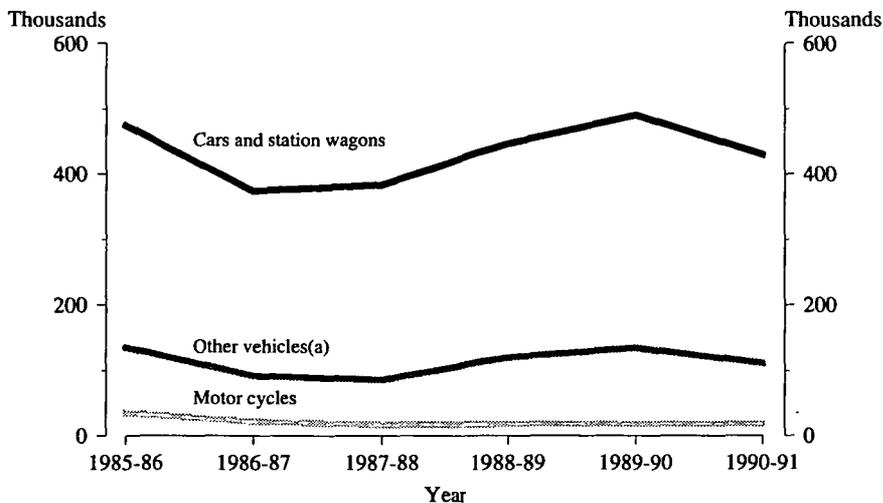
Registrations of new vehicles processed by motor vehicle registration authorities in all

REGISTRATIONS OF NEW MOTOR VEHICLES, BY TYPE OF VEHICLE

	Motor cars and station wagons	Utilities	Panel vans	Trucks		Other truck type vehicles	Buses	Total (excludes motor cycles)	Motor cycles
				Rigid	Articulated				
1984-85	510,893	54,507	45,582	44,422	3,627	1,952	13,847	674,830	45,879
1985-86	476,488	46,499	33,138	39,033	4,029	2,159	10,868	612,214	35,906
1986-87	376,080	32,485	20,143	28,693	3,149	1,664	6,587	468,801	23,199
1987-88	384,203	29,821	18,292	28,596	2,811	1,602	5,495	470,820	18,532
1988-89	447,913	44,260	28,070	36,973	3,669	1,668	6,671	569,224	19,076
1989-90	492,235	49,404	32,617	41,074	4,065	1,815	6,552	627,762	20,453
1990-91	430,874	42,499	29,896	29,173	2,142	1,648	6,222	542,454	20,506
1990-91									
NSW	149,753	13,277	20,229	10,429	800	427	3,971	198,886	6,151
Vic.	107,645	5,039	649	10,377	523	278	521	125,032	4,513
Qld	78,121	14,295	3,656	2,068	410	448	658	99,656	4,267
SA	34,924	2,991	1,588	1,627	148	357	197	41,832	1,510
WA	36,926	3,899	2,608	3,497	138	74	658	47,800	2,784
Tas.	9,968	1,248	526	769	64	40	102	12,717	446
NT	3,407	1,213	193	89	53	12	56	5,223	461
ACT	10,130	537	447	317	6	12	59	11,508	374

Source: Motor Vehicle Registrations, Australia (9304.0).

**REGISTRATIONS OF NEW MOTOR VEHICLES
TYPE OF VEHICLE**



(a) Other motor vehicles include utilities, trucks, panel vans, other truck type vehicles and buses.

Source: Motor Vehicle Registrations, Australia (9304.0).

Use of motor vehicles

A Survey of Motor Vehicle Use is undertaken by the ABS every three years. The following information is taken from the 1988 survey (a further survey was conducted in October 1991, for which the results are not yet available).

Motor vehicles in Australia travelled a total of 153,915 million kilometres in the twelve months ending September 1988, an increase of almost 10 per cent over the corresponding period in 1985. The average distance travelled

annually by all vehicles was 16,640 kilometres, an increase of almost four per cent over the corresponding 1985 period. Of this, 21 per cent was for business purposes, 26 per cent for travel to and from work and 53 per cent for private purposes. Rigid trucks travelled a total of 7,840 million kilometres, while articulated trucks travelled 3,836 million kilometres. Average distances travelled for all vehicle types except non-freight carrying trucks and motor cycles showed increases on 1985.

TOTAL ANNUAL KILOMETRES TRAVELLED, BY VEHICLE TYPE AND PURPOSE OF TRAVEL TWELVE MONTHS ENDED 30 SEPTEMBER 1988 (million kilometres)

Type of vehicle	Laden business	Unladen business	Total business(a)	To and from work, paid and unpaid		Private	Total
Cars and station wagons	..	..	24,761.9	29,743.4	62,134.5	116,639.8
Motor cycles	..	..	195.2	696.5	1,032.3	1,924.0
Utilities and panel vans	9,834.0	3,284.7	13,333.6	3,470.9	5,177.1	21,981.6	
Rigid trucks	5,441.5	1,857.6	7,299.1	280.6	260.3	7,839.9	
Articulated trucks	2,892.4	932.2	3,824.6	10.0	1.2	3,835.71	
Non-freight-carrying trucks	..	..	237.1	13.9	10.1	261.1
Buses	..	..	1,409.2	7.7	15.9	1,432.8
Total	18,167.9	6,074.5	51,060.5	34,223.0	68,631.4	153,914.9	

(a) Includes the total kilometres travelled for business purposes of cars, station wagons, motor cycles and utilities and panel vans predominantly used for private purposes. The dissection of business travel into laden/unladen was not sought for these vehicles.
Source: Survey of Motor Vehicle Use, Australia (9208.0).

AVERAGE KILOMETRES TRAVELLED BY TYPE OF VEHICLE AND AREA OF OPERATION TWELVE MONTHS ENDED 30 SEPTEMBER 1988 ('000 kilometres)

Type of vehicle	Area of operation					
	Capital city(a)	Provincial urban	Other areas of State or Territory	Total within State of registration	Interstate	Australia
Cars and station wagons	11.7	6.0	6.5	15.1	4.0	15.8
Motor cycles	6.2	3.5	3.6	6.2	3.9	6.5
Utilities and panel vans	15.7	9.2	12.1	18.1	6.2	18.6
Rigid trucks	20.2	12.5	11.8	19.0	9.1	19.4
Articulated trucks	27.5	22.9	44.4	59.2	64.2	78.7
Non-freight-carrying trucks	12.2	7.8	5.7	11.1	3.9	11.3
Buses	27.6	17.4	22.5	31.9	34.8	35.3
Total	12.3	6.6	7.7	15.7	4.9	16.4

(a) Includes all of ACT for ACT registered vehicles.

Source: Survey of Motor Vehicle Use, Australia (9208.0).

The following information relates the State or Territory of commercial vehicle registration to the area in which vehicles actually operated. For example, for vehicles registered in New

South Wales, 86 per cent of the tonne-kilometres travelled were within the State, whereas for the Australian Capital Territory, it was only 62 per cent.

**TOTAL ANNUAL TONNE-KILOMETRES(a) TRAVELLED: STATE/TERRITORY OF REGISTRATION
BY AREA OF OPERATION, TWELVE MONTHS ENDED 30 SEPTEMBER 1988**
(million tonne-kilometres)

State/Territory of registration	Capital city(b)	Provincial urban	Other areas of State/Territory	Total within State of registration	Interstate	Australia
New South Wales	7,741.4	3,194.9	10,546.9	21,483.2	3,443.7	24,926.9
Victoria	6,927.9	1,677.1	8,089.4	16,694.5	6,190.3	22,884.8
Queensland	2,797.7	2,631.3	4,750.7	10,179.7	3,154.0	13,333.8
South Australia	1,631.4	..	3,725.4	5,356.8	3,056.3	8,413.0
Western Australia	2,504.7	..	7,120.9	9,625.7	536.4	10,162.1
Tasmania	490.1	914.1	1,078.3	2,482.5	40.4	2,522.8
Northern Territory	262.6	..	1,727.9	1,990.5	696.6	2,687.0
Australian Capital Territory	226.0	..	..	226.0	372.3	598.3
Australia	22,581.9	8,417.4	37,039.6	68,038.8	17,490.1	85,528.8

(a) Total annual tonne-kilometres is the product of reported average load and total business kilometres travelled while laden, for each vehicle. (b) Includes all of ACT for ACT registered vehicles.

Source: Survey of Motor Vehicle Use, Australia (9208.0).

Drivers' and riders' licences

DRIVERS' AND RIDERS' LICENCES, 30 JUNE 1991
(number)

Type of licence	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Motor vehicle	3,639,704	2,785,753	1,831,458	978,108	817,354	247,152	92,387	170,118	10,562,034
Motor cycle	317,520	157,916	323,124	196,428	126,650	214	19,734	—	1,141,586
Combined	—	—	—	—	—	34,203	—	22,636	56,839
Total	3,957,224	2,943,669	2,154,582	1,174,536	944,004	281,569	112,121	192,754	11,760,459

Source: Motor Registry in each State and Territory.

Road traffic accidents

The number of persons killed in Australia as a result of road traffic accidents has fallen

significantly between 1985 and 1990. This decline is reflected in all States and Territories, but less so in Tasmania and the Northern Territory.

ROAD TRAFFIC ACCIDENTS INVOLVING FATALITIES

Year	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
ACCIDENTS INVOLVING FATALITIES									
1985	954	605	452	239	219	69	59	30	2,627
1986	908	610	421	259	208	78	63	30	2,577
1987	858	626	400	230	193	67	80	33	2,487
1988	912	615	483	204	199	68	46	32	2,559
1989	783	681	376	201	214	68	56	28	2,407
1990	702	490	346	187	181	63	54	22	2,045
PERSONS KILLED									
1985	1,067	683	502	268	243	78	67	33	2,941
1986	1,029	668	481	288	228	91	71	32	2,888
1987	959	705	442	256	213	77	84	36	2,772
1988	1,037	701	539	223	230	75	51	32	2,888
1989	960	776	428	222	242	80	61	34	2,803
1990	797	548	399	226	196	71	68	24	2,329

Source: Road Traffic Accidents Involving Fatalities, Australia (9401.0).

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a) (ADMISSIONS TO HOSPITALS)
NUMBER OF ACCIDENTS, PERSONS KILLED OR INJURED, 1989

State/ Territory	Number of accidents	Persons killed	Persons injured	Per 100,000 of mean population			Per 10,000 motor vehicles registered(b)		
				Number of accidents	Persons killed	Persons injured	Number of accidents	Persons killed	Persons injured
NSW	7,315	960	8,263	126.8	16.6	143.1	23.1	3.0	26.1
Vic.	7,951	776	9,356	184.0	18.0	216.5	30.7	3.0	36.2
Qld	3,455	428	3,955	122.0	15.1	139.6	20.4	2.5	23.4
SA	2,132	222	2,492	149.6	15.6	174.9	24.7	2.6	28.9
WA	2,526	242	2,996	158.4	15.2	187.9	25.6	2.5	30.4
Tas.	610	80	705	135.2	17.7	156.2	21.5	2.8	24.8
NT	400	61	495	255.6	39.0	316.3	52.2	8.0	64.5
ACT	210	34	221	75.3	12.2	79.3	14.3	2.3	15.1
Australia	24,599	2,803	28,483	146.1	16.7	169.2	25.1	2.9	29.0

(a) Accidents reported to the police or other relevant authority which occurred in public thoroughfares and which resulted in death within thirty days or personal injury to the extent that the injured person was admitted to hospital. (b) Number of motor vehicles (excluding tractors, plant and equipment) on register at 30 June 1988.

Source: Road Traffic Accidents Involving Casualties, Australia (9405.0).

Road freight activity

Concurrent with the 1983-84 Transport Industry Survey (TIS), the Bureau conducted a Business Vehicle Survey (BVS) to obtain a complete picture of road freight transport activity in Australia. The BVS involved the collection of road freight transport information from a sample of private enterprises whose main activity was not road freight transport but who operated at least one truck with a gross vehicle mass of 2.7 tonnes or more and used that truck to carry freight on public roads. Results from the TIS and BVS were combined to produce the following estimates of road freight activity.

As would be expected the transport and storage industry carried the greatest amount of freight during the 1983-84 financial year. However, the agriculture, forestry, fishing and hunting industry had the most enterprises engaged in road freight activities, while the construction and wholesale and retail trade industries also had a substantial number of such enterprises.

Current statistics of interstate road freight movement are collected quarterly and are the basis of the road freight component in the graph in the following section.

ROAD FREIGHT ACTIVITY OF PRIVATE ENTERPRISES, BY INDUSTRY, 1983-84

ASIC Code	Industry description	Enter-prises at 30 June 1984 no.	Trucks operated at 30 June 1984			Truck drivers at 30 June 1984			Wages and salaries paid to truck drivers(a) \$	Freight carried on trucks (b) million tonnes
			Rigid no.	Artic-ulated no.	Total no.	Working pro- prietors/ partners no.	Em- ployees no.	Total no.		
A	Agriculture, forestry, fishing and hunting	85,796	105,446	8,163	113,609	11,727	3,416	15,143	35.3	58.5
B	Mining	557	2,151	424	2,575	62	1,810	1,872	37.6	17.3
C	Manufacturing	8,109	21,545	2,867	24,413	694	16,049	16,743	279.0	43.8
E	Construction	12,383	18,327	1,494	19,822	2,066	4,860	6,926	79.8	40.1
F	Wholesale and retail trade	19,333	34,222	3,544	37,766	4,070	16,885	20,955	297.9	55.8
511	Road freight transport	32,616	36,535	21,307	57,842	28,147	27,818	55,966	501.5	362.1
512—										
580	Other transport and storage	742	1,237	251	1,488	157	684	841	13.0	5.2
G	Total transport and storage	33,358	37,772	21,558	59,330	28,305	28,502	56,807	514.5	367.3
I	Finance, property and business services	1,718	3,725	922	4,647	97	2,612	2,710	51.0	11.4
K	Community services	1,055	2,277	42	2,319	500	1,187	1,688	20.4	6.5
L	Recreation, personal and other services	1,773	2,523	159	2,682	247	677	924	10.0	6.2
Total		164,081	227,988	39,174	267,161	47,769	75,999	123,768	1,325.5	606.9

(a) Excludes the drawings of working proprietors and partners. (b) Estimates of freight carried relate to freight uplifted by trucks and therefore, to the extent that transshipment occurs (i.e., the transfer of freight from one truck to another), estimates of freight carried will overstate the actual physical quantity of freight moved.

NOTE: Road freight activity data collected from road freight establishments included in the TIS has been tabulated against the industry to which the enterprise of the road freight transport establishment is classified, e.g., the figures for a road freight establishment of a manufacturing enterprise would be tabulated against ASIC Division C.

Source: Road Freight Transport Activity of Private Enterprises by Industry Division, Australia and States (9107.0).

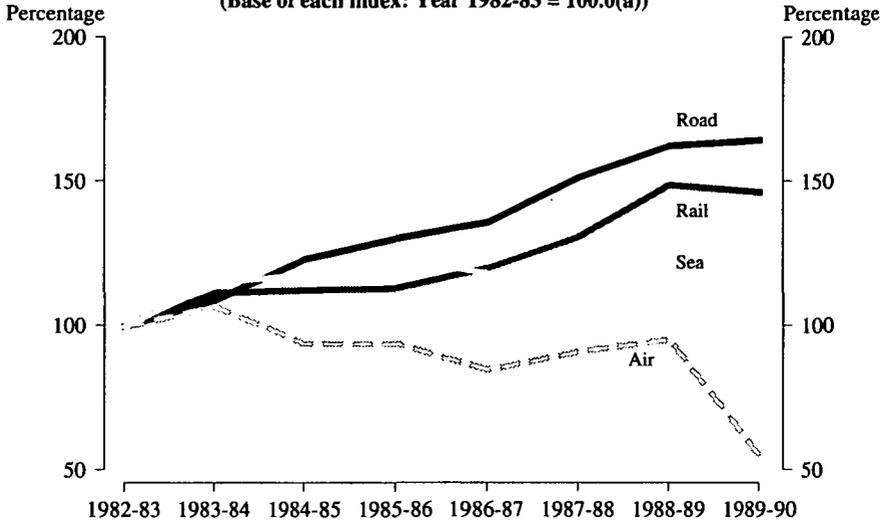
Interstate freight movement

The following graph compares trends in freight movements by different modes of transport over time. The graph indicates relative movements from a common base year and cannot be used to compare actual levels of activity. Since 1982-83, movements of freight

interstate by road and rail have shown significant increases. Movements by sea have shown a relative decline since reaching a peak in 1985-86. Transport of freight interstate by air has declined significantly. The large decline in freight moved by air in 1989-90 was mainly due to the airline pilot's dispute.

**INDEXES OF INTERSTATE FREIGHT MOVEMENTS
MODE OF TRANSPORT**

(Base of each index: Year 1982-83 = 100.0(a))



(a) 1982-83 was chosen as the base year as it was the first year for which comparable information was collected for each mode of transport.
Source: *Interstate Freight Movement, Australia (9212.0)*.

Bus and tram services

Bus services are operated by government or municipal authorities and private operators. Statistics are collected for government and municipal bus services which are located in all capital cities and Newcastle, New South Wales; Rockhampton, Queensland; Launceston and Burnie, Tasmania; and for country road services operated by the Victorian Railways, the State Rail Authority of New South Wales, the Western Australian Government Railways and the Australian National Railways.

Tram services operate in Melbourne and Adelaide. Additionally, services are operated in Ballarat and Bendigo on an irregular basis, generally during holiday periods as a tourist attraction.

In 1989-90 the Melbourne tram fleet was upgraded with 40 new light rail vehicles. The light rail vehicles operate on selected lines throughout the system and on the St. Kilda and Port Melbourne lines which were converted from trains to light rail operation during 1987.

BUS AND TRAM SERVICES: GOVERNMENT AND MUNICIPAL, 1989-90

	NSW	Vic.(a)	Qld	SA	WA(b)	Tas.	NT	ACT	Aust.
Route-kilometres at 30 June									
Bus (kilometres)	1,260	n.a.	865	1,057	7,639	505.5	534	1,548	n.a.
Tram (kilometres)	..	228	..	11	..	..	..	..	239
Vehicle-kilometres									
Bus ('000)	68,948	67,990	30,164	40,039	50,045	9,416	2,698	19,991	289,291
Tram ('000)	..	24,220	..	720	..	..	..	..	24,940
Rolling stock at 30 June									
Bus (number)	1,474	1,408	642	739	930	255	46	463	5,957
Tram (number)	..	663	..	21	..	..	..	..	684
Passenger journeys									
Bus ('000)	193,842	92,650	43,411	47,131	55,386	12,503	2,848	24,999	472,770
Tram ('000)	..	95,600	..	1,993	..	..	..	..	97,593
Gross revenue(c)									
Bus and tram (\$'000)	311,127	n.a.	47,849	58,061	71,944	9,486	2,581	69,497	n.a.
Working expenses(d)									
Bus and tram (\$'000)	296,363	n.a.	89,380	132,923	121,267	25,747	7,595	73,005	n.a.
Net revenue (\$'000)	14,764	n.a.	-41,532	-74,862	-49,323	-16,261	-5,014	-3,508	n.a.
Employees at 30 June									
Bus and tram (number)	4,916	n.a.	1,678	n.a.	2,208	541	103	1,075	n.a.

(a) Public and private transport state-wide merged into the Public Transport Corporation. (b) Excludes operations of Eastern Goldfields Transport Board. (c) Excludes government grants. (d) Includes provision of reserves for depreciation, etc. where possible.

Source: Various State and Territory bus and tram authorities.

BUS AND TRAM SERVICES: GOVERNMENT AND MUNICIPAL

	1984-85(a)	1985-86	1986-87	1987-88(b)	1988-89(b)	1989-90(c)
Route-kilometres at 30 June						
Bus (kilometres)	n.a.	n.a.	n.a.	n.a.	16,217	n.a.
Tram (kilometres)	340	340	343	343	351	239
Vehicle kilometres						
Bus ('000)	252,038	255,753	266,516	214,687	254,355	289,291
Tram ('000)	24,747	24,778	24,863	24,621	24,971	24,940
Rolling stock at 30 June						
Bus (number)	5,942	5,918	5,939	5,962	5,950	5,957
Tram (number)	683	663	648	641	651	684
Passenger journeys						
Bus ('000)	454,460	460,281	463,670	387,601	494,476	472,770
Tram ('000)	112,071	115,111	115,758	117,876	121,444	97,593

(a) Excludes operations of Eastern Goldfields Transport Board in Western Australia. (b) Excludes details of metropolitan bus and tram services in South Australia. (c) Victorian public and private transport state-wide merged into the Public Transport Corporation in 1989-90.

Source: Various State and Territory tram and bus authorities.

RAIL TRANSPORT

Government railways

The six government owned railway systems are operated by:

- the State Rail Authority of New South Wales;
- the State Transport Authority of Victoria (operating 'V/Line');

- the Queensland Department of Transport;
- the Western Australian Government Railways Commission (Westrail);
- the State Transport Authority of South Australia; and
- the Australian National Railways Commission.

The Australian National system includes routes in more than one State, and the Victorian

system extends into New South Wales, therefore the system route-kilometres shown in the following table do not represent

route-kilometres exclusively within each State and Territory.

GOVERNMENT RAILWAYS: ROUTE-KILOMETRES OPEN, BY SYSTEM
(kilometres)

30 June	NSW	Vic.	Qld	SA	WA	Australian National	Aust.
1985	9,908	5,894	10,231	153	5,563	7,465	39,214
1986	9,909	5,518	10,224	153	5,553	7,333	38,710
1987	9,909	5,403	10,210	149	5,553	7,315	38,539
1988	9,917	5,289	10,089	127	5,553	7,187	38,162
1989	7,755	5,200	10,094	125	5,553	7,050	35,777
1990	7,747	5,196	10,107	125	5,554	6,757	35,486

Source: Various rail authorities, the Rail Industry Council and Australian Bureau of Statistics.

The following information relating to train-kilometres, passenger journeys, freight-tonnes carried, and freight

tonne-kilometres refers only to operations for which revenue was received.

GOVERNMENT RAILWAYS: SUMMARY OF OPERATIONS, 1989-90

	NSW	Vic.	Qld	SA	WA	Australian National	Aust.
Train-kilometres ('000)(a)(b)							
Suburban passenger	33,847	13,307	6,919	n.a.	2,661	—	n.a.
Country passenger	5,218	7,127	2,483	—	1,211	2,396	18,435
Goods(b)	21,377	5,898	23,526	—	7,001	8,259	66,061
Total	60,442	26,332	32,928	n.a.	10,873	10,655	n.a.
Passenger journeys ('000)(c)							
Suburban	248,398	95,600	43,248	7,741	8,451	—	403,428
Country(d)	2,649	6,065	892	—	336	388	10,330
Total	251,047	101,665	44,140	7,741	8,787	388	413,769
Freight							
Tonnes carried ('000)(d)	53,700	10,250	82,543	—	24,906	14,132	185,531
Net tonne-kilometres (million)(e)	14,100	3,672	22,579	—	4,872	8,115	53,338

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

Source: Various rail authorities, the Rail Industry Council and the Australian Bureau of Statistics.

GOVERNMENT RAILWAYS: TRAIN-KILOMETRES(a)
(‘000 kilometres)

Year	NSW	Vic.	Qld	SA	WA	Australian National	Aust.
1984-85	66,025	30,794	34,293	n.a.	11,098	11,306	n.a.
1985-86	62,237	29,809	35,116	n.a.	10,364	10,513	n.a.
1986-87	n.a.	28,399	35,051	n.a.	9,436	10,581	n.a.
1987-88	61,954	27,435	34,099	n.a.	9,465	10,680	n.a.
1988-89	61,503	26,826	33,572	n.a.	9,472	10,654	n.a.
1989-90	60,442	26,332	32,927	n.a.	10,873	11,363	n.a.

(a) One train (i.e., a complete unit of locomotive and vehicles, electric train set, or rail motor) travelling one kilometre for revenue purpose.

Source: Various rail authorities, the Rail Industry Council and the Australian Bureau of Statistics.

**GOVERNMENT RAILWAYS: FREIGHT CARRIED, NET TONNE-KILOMETRES
AND FREIGHT EARNINGS**

<i>Year</i>	<i>NSW</i>	<i>Vic.</i>	<i>Qld</i>	<i>WA</i>	<i>Australian National</i>	<i>Aust.</i>
FREIGHT CARRIED ('000 tonnes)						
1984-85	47,800	11,892	65,452	22,085	12,870	160,099
1985-86	53,800	10,516	73,599	20,877	13,049	171,841
1986-87	54,747	10,597	75,169	21,264	12,900	174,677
1987-88	54,412	10,901	74,893	21,946	11,269	173,421
1988-89	50,188	9,950	80,508	24,294	13,821	178,761
1989-90	53,700	10,250	82,543	24,906	14,132	185,531
NET TONNE-KILOMETRES (million)						
1984-85	12,393	3,543	18,438	4,328	6,270	44,972
1985-86	r13,415	3,094	20,450	4,005	7,081	48,045
1986-87	13,540	r3,588	20,871	4,062	6,873	48,934
1987-88	14,212	r3,474	20,676	4,203	7,165	49,730
1988-89	13,552	r3,365	20,884	4,881	8,082	50,764
1989-90	14,100	r3,672	22,579	4,872	8,115	53,338
FREIGHT EARNINGS (\$'000)						
1984-85	641,100	182,259	828,926	209,627	213,698	2,075,610
1985-86	736,795	168,641	905,494	200,974	237,345	2,249,249
1986-87	739,250	174,700	960,950	200,731	238,097	2,313,728
1987-88	767,820	176,161	910,409	204,330	236,782	2,295,502
1988-89	667,038	166,526	1,021,272	231,749	284,905	2,137,490
1989-90	667,000	172,603	1,021,854	235,983	282,638	2,380,078

Source: Various rail authorities, the Rail Industry Council and the Australian Bureau of Statistics.

Non-government railways

The Australian non-government railways detailed in this section are those with a route

distance exceeding two kilometres which operate outside industrial estates, harbour precincts, mines and quarries.

ACTIVITIES OF AUSTRALIAN NON-GOVERNMENT RAILWAYS

<i>Year</i>	<i>Iron ore railways</i>	<i>Sugar tramways</i>	<i>Coal railways(a)</i>	<i>Other non-government railways</i>	<i>Total(a)</i>
TONNES CARRIED (million)					
1984-85	86.9	24.0	7.9	11.1	129.9
1985-86	86.8	21.6	8.1	10.3	126.8
1986-87	91.1	23.1	7.8	11.1	133.1
1987-88	94.6	23.6	8.5	10.7	137.3
1988-89	90.5	23.6	7.4	14.1	135.6
1989-90	103.9	24.4	8.7	13.2	150.2
TONNE-KILOMETRES (million)					
1984-85	27,649	408	98	223	28,378
1985-86	28,517	368	116	201	29,202
1986-87	29,552	393	116	220	30,281
1987-88	30,218	425	126	230	30,998
1988-89	27,866	425	106	274	28,671
1989-90	31,654	438	123	263	32,478

(a) Includes transfers to and from government railways.

Source: Bureau of Transport and Communications Economics.

WATER TRANSPORT

Australia. The majority of these ships are used for non-commercial purposes.

The Australian fleet

Together, New South Wales and Queensland account for 57 per cent of ships registered in

SHIPS REGISTERED(a) IN AUSTRALIA AT 30 JUNE 1990

Location	Nature of registration					Total
	Demise chartered (b)	Other(c)	Government	Fishing	Pleasure	
New South Wales	6	239	3	272	1,357	1,877
Victoria	4	104	5	177	453	743
Queensland	5	284	28	628	944	1,889
Western Australia	5	126	3	382	427	943
South Australia	—	40	3	262	210	515
Tasmania	—	56	4	214	170	444
Northern Territory	2	18	1	56	159	236
Total	22	867	47	1,991	3,720	6,647

(a) Any Australian ship longer than 24 metres must be registered. Any Australian ships travelling overseas must be registered regardless of length. A ship less than 24 metres may be registered, but this is not required by law. (b) A demise chartered ship is a foreign owned ship chartered by way of a charter party to an Australian based operator, who is an Australian national and who under the charter party has whole possession and control of the ship, including the right to appoint the master and crew of the ship. (c) Relates to vessels used for commercial purposes.

Source: Department of Transport and Communications.

Of the 75 ships which comprise the major Australian trading fleet (2,000 dead weight tonnes and over), 60 per cent operated on coastal routes.

**SUMMARY OF THE AUSTRALIAN TRADING FLEET OF SHIPS
150 GROSS TONNES OR MORE, 30 JUNE 1990**

Ships	Number	DWT(a)	Gross tonnes
Major Australian fleet(b)			
Coastal			
Australian owned and registered	36	1,198,182	801,079
Australian owned, overseas registered	1	35,244	20,570
Overseas owned, Australian registered	6	92,798	60,356
Overseas owned and registered	2	7,100	14,426
Coastal fleet	45	1,333,324	886,431
Overseas			
Australian owned and registered	19	1,586,580	926,977
Australian owned, overseas registered	1	41,151	29,223
Overseas owned, Australian registered	8	541,981	384,505
Overseas owned and registered	2	30,224	19,425
Overseas fleet	30	2,199,936	1,360,134
Major Australian fleet	75	3,533,260	2,246,565
Other trading ships			
Australian owned and registered	18	7,998	9,831
Australian trading fleet	93	3,541,258	2,256,396

(a) Dead weight tonnage. (b) 2,000 DWT and over.

Source: Department of Transport and Communications.

Coastal shipping cargo

The following table shows the gross weight of shipping cargo loaded at an Australian port for

discharge at another Australian port. Both interstate and intrastate cargo movements are included. Cargo loaded or to be discharged at an overseas port is excluded.

COASTAL CARGO LOADED AND DISCHARGED AT AUSTRALIAN PORTS, 1989-90
(*'000 gross weight tonnes*)

<i>Australian port</i>	<i>Loaded</i>			<i>Discharged</i>		
	<i>Interstate</i>	<i>Intrastate</i>	<i>Total</i>	<i>Interstate</i>	<i>Intrastate</i>	<i>Total</i>
New South Wales						
Sydney	174	—	174	3,017	671	3,688
Port Kembla	1,791	11	1,802	5,884	—	5,884
Botany Bay	310	198	508	3,095	—	3,095
Other	301	1,661	1,962	2,470	873	3,343
<i>Total</i>	<i>2,576</i>	<i>1,870</i>	<i>4,446</i>	<i>14,466</i>	<i>1,544</i>	<i>16,010</i>
Victoria						
Melbourne	1,620	—	1,620	2,454	—	2,454
Geelong	1,312	73	1,385	657	29	686
Westernport	6,148	52	6,200	752	—	752
Other	3	10	13	609	104	710
<i>Total</i>	<i>9,083</i>	<i>135</i>	<i>9,218</i>	<i>4,469</i>	<i>133</i>	<i>4,602</i>
Queensland						
Brisbane	879	1,249	2,128	5,151	511	5,662
Gladstone	937	562	1,499	89	6,963	7,052
Other	1,062	6,770	7,832	—	1,180	1,180
<i>Total</i>	<i>2,878</i>	<i>8,581</i>	<i>11,459</i>	<i>5,240</i>	<i>8,654</i>	<i>13,894</i>
South Australia						
Adelaide	555	44	599	496	954	1,450
Port Stanvac	454	5	459	830	698	1,528
Other	3,445	1,875	5,320	1,522	274	1,796
<i>Total</i>	<i>4,454</i>	<i>1,924</i>	<i>6,378</i>	<i>2,848</i>	<i>1,926</i>	<i>4,774</i>
Western Australia						
Fremantle	842	940	1,782	703	736	1,439
Other	6,742	1,018	7,762	79	701	780
<i>Total</i>	<i>7,584</i>	<i>1,958</i>	<i>9,544</i>	<i>782</i>	<i>1,437</i>	<i>2,219</i>
Tasmania						
Hobart	513	—	513	1,098	—	1,098
Burnie	672	174	846	630	—	630
Devonport	444	—	444	359	1	360
Launceston	312	11	323	1,089	48	1,093
Other	706	26	732	57	16	73
<i>Total</i>	<i>2,647</i>	<i>211</i>	<i>2,857</i>	<i>3,233</i>	<i>21</i>	<i>3,254</i>
Northern Territory						
Darwin	2	40	42	195	4	199
Other	416	4	420	5	38	43
<i>Total</i>	<i>418</i>	<i>44</i>	<i>462</i>	<i>200</i>	<i>42</i>	<i>242</i>
Total all ports	29,640	14,723	44,364	31,237	13,757	44,994

Source: Department of Transport and Communications.

OVERSEAS SHIPPING

Ship arrivals and departures

The following table shows particulars of ship arrivals and departures according to the country of registration of the ships.

OVERSEAS SHIPPING: SHIP ARRIVALS AND DEPARTURES BY COUNTRY OF SHIP REGISTRATION, 1989-90

Country of registration	Ship Arrivals		Ship Departures	
	Ship calls	DWT(a) ('000 tonnes)	Ship calls	DWT(a) ('000 tonnes)
Australia	810	22,597	792	26,647
China	846	11,405	813	22,025
Denmark	74	668	57	720
Germany, Federal Republic of	1,267	21,167	873	15,071
Greece	456	13,045	524	21,759
Hong Kong	374	17,776	573	26,496
India	165	3,502	174	5,652
Japan	812	19,963	1,140	94,122
Korea, Republic of	226	6,079	396	24,736
Liberia	785	24,696	803	31,276
Malaysia	475	8,352	418	8,068
Netherlands	528	10,532	271	4,888
New Zealand	420	7,956	354	6,600
Norway	190	5,365	107	3,805
Panama	1,670	29,402	1,679	44,283
Philippines	495	10,313	748	26,079
Singapore	668	13,928	635	16,383
Sweden	111	3,851	70	2,876
Taiwan	320	9,574	336	20,414
United Kingdom	1,298	39,885	1,095	34,081
United States of America	63	1,978	24	265
USSR	656	8,936	594	8,304
Other countries	2,812	71,060	2,896	82,673
Total all countries	15,521	362,030	15,372	527,223

(a) Dead weight tonnage.

Source: Shipping and Air Cargo Commodity Statistics, Australia (9206.0).

Shipping at principal ports

Ship and cargo movements to and from Australian ports during 1989-90 are shown below.

OVERSEAS SHIP AND CARGO MOVEMENTS AT AUSTRALIAN PORTS, 1989-90

Australian port	Ship Arrivals		Gross weight of cargo discharged ('000 tonnes)	Ship Departures		Gross weight of cargo loaded ('000 tonnes)
	Ship calls	DWT(a) ('000 tonnes)		Ship calls	DWT(a) ('000 tonnes)	
New South Wales						
Sydney	4,344	96,736	5,108	2,546	56,233	7,792
Botany Bay	460	10,554	88	748	16,577	465
Newcastle	166	5,335	1,905	691	42,445	31,702
Port Kembla	92	5,134	1,440	306	17,027	13,388
Other	109	3,834	2,212	74	1,262	159
Total	5,171	121,593	10,703	4,365	133,544	53,506
Victoria						
Melbourne	3,942	86,640	4,898	2,646	55,458	5,188
Geelong	128	4,935	1,741	127	3,101	1,624
Other	18	650	223	184	6,437	2,630
Total	4,088	92,225	6,862	2,957	64,996	9,442
Queensland						
Brisbane	2,216	50,008	2,299	1,804	39,773	7,467
Cairns	71	1,567	110	126	2,264	651
Townsville	198	3,035	1,175	299	4,845	2,068
Other	132	3,503	861	1,170	79,936	66,807
Total	2,617	58,113	4,445	3,399	126,818	76,993
South Australia						
Port Adelaide	871	21,683	637	622	15,163	1,645
Port Pirie	2	37	21	60	1,589	788
Other	52	2,956	1,220	215	7,449	3,502
Total	925	24,676	1,878	897	24,201	5,935
Western Australia						
Fremantle	1,519	33,756	1,761	1,076	27,613	18,142
Port Hedland	33	391	33	332	28,321	27,963
Other	276	10,613	5,076	1,235	87,307	77,559
Total	1,828	44,760	6,870	2,643	143,241	123,664
Tasmania						
Hobart	71	1,698	124	125	2,905	166
Launceston	81	2,417	233	146	4,697	1,807
Burnie	125	3,007	112	156	3,951	435
Other	20	741	60	76	3,313	2,266
Total	297	7,863	529	503	14,866	4,674
Northern Territory						
Darwin	177	3,021	439	181	4,621	2,420
Other	27	1,435	749	162	7,837	6,254
Total	204	4,456	1,188	343	12,458	8,674
Total Australia	15,130	353,686	32,475	15,107	520,158	282,888

(a) Dead weight tonnage.

Source: Shipping and Air Cargo Commodity Statistics, Australia (9206.0).

Overseas cargo

Details of cargo discharged in Australia from overseas, and cargo loaded in Australia for

discharge overseas, classified according to the various trade areas of the world and by ship type are shown in the following tables.

**INWARD OVERSEAS SEA CARGO, BY TRADE AREA OF PORT OF LOADING
BY SHIP TYPE, 1989-90
(^{'000 tonnes})**

<i>Trade area</i>	<i>General cargo</i>	<i>Tanker</i>	<i>Bulk carrier</i>	<i>Other ships</i>	<i>Total ships</i>
Europe — Atlantic	1,144	259	587	89	2,079
Europe — Baltic — Western	198	—	16	—	214
Europe — Baltic — Eastern	23	10	—	2	35
Europe — Mediterranean — Western	431	270	182	40	923
Europe — Mediterranean — Eastern	61	58	43	—	162
East Asia	889	65	108	15	1,077
Japan and North Asia	1,256	279	1,770	54	3,359
North America — West Coast	824	222	2,386	60	3,492
North America — East Coast	696	636	1,053	52	2,437
Central America and Caribbean	10	2	211	1	224
South America — West Coast	40	—	141	2	183
South America — East Coast	203	218	789	—	1,210
Africa — West and Mediterranean	3	30	345	—	378
South and East Africa	43	5	123	5	176
Red Sea and Mediterranean Middle East	58	201	37	—	296
Middle East Gulf	101	6,964	342	—	7,407
West India	61	—	361	10	432
East India	41	—	150	10	201
South-East Asia	807	2,420	388	383	3,598
New Zealand	288	962	619	244	2,113
Papua New Guinea and Solomon Islands	37	3	4	4	48
Pacific Islands and other countries	63	1	1,018	17	1,099
Trade area not available	71	26	41	2	140
Total inward overseas cargo	7,348	12,631	11,314	990	32,283

Source: *Shipping and Air Cargo Commodity Statistics, Australia (9206.0)*.

**OUTWARD OVERSEAS SEA CARGO, BY TRADE AREA OF PORT OF DISCHARGE
BY SHIP TYPE, 1989-90
(^{'000 tonnes})**

<i>Trade area</i>	<i>General cargo</i>	<i>Tanker</i>	<i>Bulk carrier</i>	<i>Other ships</i>	<i>Total ships</i>
Europe — Atlantic	1,075	605	30,890	453	33,023
Europe — Baltic — Western	9	—	847	—	856
Europe — Baltic — Eastern	109	39	363	50	561
Europe — Mediterranean — Western	495	64	5,944	115	6,618
Europe — Mediterranean — Eastern	68	—	3,927	3	3,998
East Asia	2,239	706	28,893	1,462	33,300
Japan and North Asia	7,165	4,069	134,319	5,263	150,816
North America — West Coast	1,004	1,959	4,235	42	7,240
North America — East Coast	384	341	3,964	148	4,837
Central America and Caribbean	11	78	152	—	241
South America — West Coast	119	28	391	3	541
South America — East Coast	57	—	1,370	40	1,467

... continued

OUTWARD OVERSEAS SEA CARGO, BY TRADE AREA OF PORT OF DISCHARGE
BY SHIP TYPE, 1989-90 — continued
('000 tonnes)

<i>Trade area</i>	<i>General cargo</i>	<i>Tanker</i>	<i>Bulk carrier</i>	<i>Other ships</i>	<i>Total ships</i>
Africa — Mediterranean and West	122	42	2,805	108	3,077
South and East Africa	79	37	196	5	317
Red Sea and Mediterranean Middle East	127	—	1,573	98	1,798
Middle East Gulf	519	30	4,414	423	5,386
West India	344	103	5,338	60	5,845
East India	204	32	1,172	23	1,431
South-East Asia	1,344	2,268	4,431	642	8,685
New Zealand	417	171	1,216	254	2,058
Papua New Guinea and Solomon Islands	520	391	1,160	36	2,107
Pacific Islands and other countries	1,285	477	379	46	2,187
Trade area not available	366	256	5,652	122	6,396
Total outward overseas cargo	18,062	11,696	243,631	9,396	282,785

Source: *Shipping and Air Cargo Commodity Statistics, Australia (9206.0)*.

Overseas cargo commodity details

The tables in this section provide details of inward and outward overseas sea cargo movements classified according to the Australian Transport Freight Commodity Classification (ATFCC).

Road vehicles were the single largest commodity category of inward sea cargo in

1989-90, contributing 13.1 per cent (\$4,946 million) of the total value of such movements. The largest single contributor to outward cargo movements in 1989-90 was textile fibres and their wastes (largely wool), contributing 11 per cent (\$4,520 million) to total outward overseas cargo movements.

INWARD AND OUTWARD OVERSEAS SEA CARGO BY COMMODITY, 1989-90(a)
(\$ million)

<i>ATFCC Division</i>	<i>Title</i>	<i>Inward cargo</i>	<i>Outward cargo</i>
00	Live animals	1	153
01	Meat and meat preparations	14	2,746
02	Dairy products and birds' eggs	101	693
03	Fish, crustaceans, molluscs and aquatic invertebrates	388	541
04	Cereals and cereal preparations(b)	90	3,282
05	Vegetables and fruit	392	462
06	Sugar, sugar preparations and honey	50	1,089
07	Coffee, tea, cocoa, spices and manufactures thereof(b)	243	26
08	Feeding stuff for animals	66	230
09	Miscellaneous edible products and preparations	290	136
11	Beverages(b)	301	160
12	Tobacco and tobacco manufactures(c)	91	14
21	Hides, skins and furskins(b)	10	250
22	Oil seeds and oleaginous fruits(c)	26	49
23	Crude rubber(b)(c)	87	7
24	Cork and wood(b)	512	18
25	Pulp and waste paper	237	24
26	Textile fibres and their wastes(b)	149	4,520
27	Fertilisers and minerals, crude(b)	203	181
28	Metalliferous ores and metal scrap(b)	138	2,800
29	Crude animal and vegetable materials, n.e.s.(b)(c)	73	116

For footnotes see end of table.

INWARD AND OUTWARD OVERSEAS SEA CARGO BY COMMODITY, 1989-90(a) — continued
(\$ million)

<i>ATFCC Division</i>	<i>Title</i>	<i>Inward cargo</i>	<i>Outward cargo</i>
32	Coal, coke and briquettes(b)	18	3,226
33	Petroleum, petroleum products and related materials(b)	2,354	1,554
34	Gases, natural and manufactured(b)(c)	16	35
41	Animals oils and fats(b)	2	18
42	Fixed vegetable oils and fats, crude, refined or fractionated(b)(c)	112	1
43	Animal and vegetable fats and oils, processed, and waxes of animal or vegetable origin(b)(c)	11	3
51	Organic chemicals(b)	802	37
52	Inorganic chemicals(b)	363	157
53	Dyeing, tanning and colouring materials(b)	209	252
54	Medicinal and pharmaceutical products	297	82
55	Essential oils, perfume materials(b)	255	69
56	Fertilisers, manufactured	248	10
57	Plastics in primary forms(b)	326	116
58	Plastics in non-primary forms(b)	393	29
59	Chemical materials and products(b)	543	103
61	Leather, leather manufactures(c)	59	132
62	Rubber manufactures(b)	566	57
63	Cork and wood manufactures(b)	216	15
64	Paper, paperboard and articles of paper	1,267	149
65	Textile yarn, fabrics, made-up articles, n.e.s.(b)	1,645	79
66	Non-metallic mineral manufactures, n.e.s.(b)	825	114
67	Iron and steel(b)	885	738
68	Non-ferrous metals(b)	276	3,441
69	Manufactures of metal, n.e.s.(b)	1,040	298
71	Power generating machinery and equipment	1,024	267
72	Machinery specialised for particular industries(b)	2,388	312
73	Metalworking machinery	342	42
74	General industrialised machinery and equipment(b)	2,094	236
75	Office machines and ADP equipment	1,083	54
76	Telecommunications and sound recording or reproducing apparatus and equipment(b)	918	36
77	Electrical machinery, apparatus and appliances(b)	1,483	168
78	Road vehicles	4,946	474
79	Other transport equipment	168	103
81	Prefabricated buildings, sanitary plumbing, heat and light fixtures and fittings(c)	130	22
82	Furniture and parts thereof	325	37
83	Travel goods, handbags and similar containers(c)	150	1
84	Articles of apparel and clothing accessories	641	24
85	Footwear	283	7
87	Professional, scientific and controlling apparatus(b)	444	47
88	Photographic apparatus, equipment and supplies(b)	323	65
89	Miscellaneous manufactured articles(b)	1,988	227
93	Special transactions and commodities not classified by kind(c)	11	242
96	Coins, not being legal tender(c)	1	—
97	Gold, non-monetary(c)	13	13
99	Other commodities and transactions(d)	2,668	10,478
Total all commodities		37,613	41,067

(a) The recorded value of inward cargo is the free on board (f.o.b.) Customs value. The value of outward cargo is the f.o.b. transactions value expressed in Australian dollars. (b) Excludes import commodities regarded as confidential. These items are included in Division 99. (c) Excludes export commodities regarded as confidential. These items are included in Division 99. (d) Includes commodities regarded as confidential.

Source: *Shipping and Air Cargo Commodity Statistics, Australia (9206.0)*.

OVERSEAS SEA CARGO BY COMMODITY BY TYPE OF LINER SERVICE, 1989-90(a)
(\$ million)

ATFCC Section and title	Liner Service			
	Conference(a)	Non-conference	Other	Total
INWARD(b)				
0 Food and live animals(c)	913	331	394	1,638
1 Beverages and tobacco(c)	179	121	92	392
2 Crude materials, inedible, except fuels(c)	439	318	680	1,437
3 Mineral fuels, lubricants and related materials(c)	42	9	2,338	2,389
4 Animal and vegetable oils, fats and waxes(c)	33	10	81	124
5 Chemicals and related products(c)	1,426	666	1,345	3,437
6 Manufactured goods classified chiefly by material(c)	3,121	1,492	2,165	6,778
7 Machinery and transport equipment(c)	6,222	1,949	6,275	14,446
8 Miscellaneous manufactured articles(c)	2,112	955	1,218	4,285
9 Other commodities and transactions(d)	1,006	343	1,339	2,688
Total all commodities	15,493	6,194	15,927	37,614
OUTWARD(b)				
0 Food and live animals(c)	3,125	945	5,135	9,205
1 Beverages and tobacco(c)	94	40	42	176
2 Crude materials, inedible, except fuels(c)	2,654	1,319	3,993	7,966
3 Mineral fuels, lubricants and related materials(c)	22	18	4,776	4,816
4 Animal and vegetable oils, fats and waxes(c)	6	6	11	23
5 Chemicals and related products(c)	379	194	281	854
6 Manufactured goods, classified chiefly by material(c)	1,323	807	2,894	5,024
7 Machinery and transport equipment(c)	874	260	558	1,692
8 Miscellaneous manufactured articles(c)	209	88	133	430
9 Other commodities and transactions(d)	1,016	362	9,523	10,901
Total all commodities	9,702	4,039	27,346	41,087

(a) An association of ship owners which regulates the freight rates and terms and conditions of the carriage of goods in any particular trade. (b) The recorded value of inward cargo is the free on board (f.o.b.) Customs value. The value of outward cargo is the f.o.b. transactions value expressed in Australian dollars. (c) Excludes commodities regarded as confidential. These items are included in Section 9. (d) Includes commodities regarded as confidential.

Source: *Shipping and Air Cargo Commodity Statistics, Australia (9206.0)*.

AIR TRANSPORT

International activity

International scheduled services

At 31 July 1991, 37 international airlines were operating regular scheduled air services to and from Australia. The carriers (and contracting states) were:

Aerolineas Argentinas	(Argentina)	Cathay Pacific Airways	(UK)
Air Caledonie International	(France)	Continental Airlines	(USA)
Air China International	(People's Republic of China)	Federal Express	(USA)
Air India	(India)	Garuda Indonesia Airways	(Indonesia)
Air Nauru	(Nauru)	Gulf Airlines	(Bahrain)
Air New Zealand	(New Zealand)	Japan Airlines	(Japan)
Air Niugini	(Papua New Guinea)	JAT Yugoslav Airlines	(Yugoslavia)
Air Pacific	(Fiji)	KLM Royal Dutch Airlines	(Netherlands)
Air Vanuatu	(Vanuatu)	Korean Airlines	(Korea)
Alitalia	(Italy)	Lauda Air	(Austria)
All Nippon Airways	(Japan)	Lufthansa German Airlines	(Germany)
American Airlines	(USA)	Malaysia Airlines System	(Malaysia)
British Airways	(UK)	Merpati Nusantara Airlines	(Indonesia)
		Northwest Airlines	(USA)
		Olympic Airways	(Greece)
		Philippine Airlines	(Philippines)
		Polynesian Airlines	(Western Samoa)
		Qantas	(Australia)
		Royal Brunei Airlines	(Brunei)
		Singapore Airlines Ltd	(Singapore)
		Solomon Airlines	(Solomon Islands)
		Thai Airways International	(Thailand)
		United Airlines	(USA)
		Union de Transport Aeriens	(France)

Canadian Airlines International operates a code-share arrangement with Qantas: CAI operates the Canada-Honolulu sector whilst Qantas operates the Australia-Honolulu sector of the code-share flights.

Polynesian Airlines Ltd also operates services on behalf of Cook Islands International (Cook Islands) and Air Pacific operates services on behalf of Solomon Islands Airlines (Solomon Islands) and Qantas.

Qantas, Australia's international airline, operates a fleet of 27 Boeing 747 and 15 Boeing 767 jet aircraft. All shares in Qantas Airways Limited are owned by the Commonwealth Government.

International non-scheduled services

Australia's passenger and freight charter policies encourage in-bound tourism and freight carriage by non-scheduled services, particularly over routes not served by the scheduled carriers.

International traffic

Particulars of scheduled international airline traffic during 1989-90 moving into and out of an area which embraces Australia and Norfolk Island are shown below. These figures do not include traffic between Australia and Norfolk Island.

SCHEDULED INTERNATIONAL AIRLINE TRAFFIC TO AND FROM AUSTRALIA(a), 1989-90

Type of traffic	Number of flights(b)(c)	Passengers	Freight tonnes	Mail tonnes
Traffic to Australia				
Qantas Airways Limited	8,326	1,635,326	66,483	1,285
Other airlines	12,993	2,540,065	110,752	7,844
All airlines	21,319	4,175,391	177,235	9,129
Traffic from Australia				
Qantas Airways Limited	8,186	1,594,466	58,517	4,603
Other airlines	12,806	2,484,453	119,043	2,227
All airlines	20,992	4,078,919	177,560	6,830

(a) Australia and Norfolk Island. (b) Includes Qantas flights using aircraft leased from other airlines and vice versa. (c) The difference between in/out numbers arises because some outward flights are operated as non-scheduled, and thus not counted in the above table. Source: Department of Transport and Communications.

Statistics detailing the operations of Australia's regular overseas services are shown in the following table. These operations include all

stages of Qantas flights linking Australia with overseas countries.

OPERATIONS OF AUSTRALIA'S SCHEDULED OVERSEAS AIRLINE SERVICES

		1984-85	1985-86	1986-87	1987-88	1988-89	1989-90
Hours flown	number	89,952	100,648	117,383	126,812	140,172	148,706
Kilometres flown	'000	71,046	79,050	91,874	98,999	109,102	115,783
Passengers							
Embarkations	number	2,449,596	2,671,486	3,052,411	3,612,197	3,947,544	4,078,669
Passenger-kilometres	'000	16,858,595	18,233,088	21,258,519	24,535,745	26,516,771	27,054,999
Freight							
Tonnes uplifted	tonnes	90,357	91,961	110,389	119,202	130,635	146,937
Tonne-kilometres	'000	637,590	691,352	811,627	855,260	929,458	1,072,999
Mail							
Tonnes uplifted	tonnes	4,744	4,869	5,327	5,858	5,988	5,963
Tonne-kilometres	'000	43,231	45,370	51,819	57,946	61,049	59,398

Source: Department of Transport and Communications.

AIR CARGO BY TRADE AREA, INWARD AND OUTWARD OVERSEAS, 1989-90

Trade area	Inward cargo		Outward cargo	
	Gross weight tonnes	Value \$'000	Gross weight tonnes	Value \$'000
Europe	46,366	3,712,969	12,501	1,475,645
East Asia	13,696	679,381	18,579	1,071,865
Japan and North Asia	13,752	1,271,144	30,766	1,380,042
North America — East Coast	26,246	2,268,743	4,811	418,067
North America — West Coast	17,170	2,223,622	9,976	671,964
Central America and Caribbean	192	25,330	67	8,297
South America — East Coast	508	23,588	32	5,695
South America — West Coast	123	4,828	72	6,340
Africa — Mediterranean and West	201	16,304	39	3,114
South and East Africa	484	10,690	412	21,926
Red Sea and Mediterranean				
Middle East	179	95,942	343	20,962
Middle East Gulf	62	4,650	10,052	48,433
West India	1,345	67,537	301	20,920
East India	2,135	54,998	351	13,063
South-East Asia	10,546	679,715	30,242	1,637,770
New Zealand	36,330	761,360	38,010	1,021,617
Papua New Guinea and Solomon Islands	251	54,881	3,385	119,546
Pacific Islands and other countries	2,540	77,014	10,078	140,498
Trade area not specified	21	7,608	16,660	227,961
Total	172,147	12,040,304	186,677	8,313,725

Source: Australian Customs Service.

Domestic activity

The Commonwealth Government deregulated domestic aviation in Australia and opened the nation's interstate air services to free competition from 31 October 1990.

Major airlines

At 30 June 1991, the Ansett group's fleet consisted of eight Airbus A320s, five Boeing 767-200s, six Boeing 727-200s, 12 Boeing 737-300s, five Fokker F28-1000s, one Fokker F28-4000, and seven Fokker F50s.

Australian Airline's fleet consisted of four Airbus A300s, one Boeing 727-100, 10 Boeing 727-200s, and 15 Boeing 737-300s.

East-West Airlines operated a fleet of two Fokker F28-3000s and five Fokker F28-4000s.

Compass Airlines commenced operations on 1 December 1990, and operated a fleet of four A300-600Rs and one A310-300. It ceased operations on 21 December 1991.

The Interstate Parcel Express Company Australia Pty Ltd, trading as IPEC Aviation, operates cargo airline services using two DC9 aircraft.

Commuter services

At December 1991, 43 commuter operators provided regular public transport air services to approximately 250 ports in Australia.

The aircraft types used by commuter operators are predominantly in the six to nine seat category, such as the Piper PA31 and Cessna 310, 402 and 404 series. Larger types used include Twin Otter Beach King Air, Metroliner, Embraer Bandeirante, British Aerospace Jetstream 31 and Shorts 330 and 360. During 1990-91, commuter operators carried an estimated 1.5 million passengers.

Scheduled domestic airline services

Statistics of all regular domestic airline services and the number of domestic airline passengers passing through airports are set out in the following tables.

DOMESTIC AIRLINE ACTIVITY

<i>Domestic airlines</i>	1986-87	1987-88	1988-89	1989-90	1990-91
Domestic Airlines					
Passengers (thousands)	12,506.7	13,647.9	14,012.1	9,905.2	14,098.6
Passenger kilometres performed (millions)	12,046.6	13,267.2	13,732.7	9,989.5	14,505.0
Revenue passenger load factor (per cent)	72.1	75.2	76.4	72.2	70.8
Cargo tonnes (thousands)(a)	154.3	164.1	169.1	96.0	136.3
Cargo tonnes kilometres (millions)(a)	146.6	157.1	161.4	93.7	140.8
Total tonnes kilometres (millions)	1,230.8	1,351.2	1,397.4	992.3	1,446.3
Revenue weight load factor (per cent)	61.6	63.1	63.7	59.4	57.0
Hours flown (thousands)	276.7	285.3	290.3	385.9	583.4
Aircraft movements (thousands)	433.8	429.8	420.0	256.4	375.0
Commuter airlines					
Passenger (thousands)	1,169.2	1,224.7	1,324.1	1560.4	p1448.1
Cargo tonnes (thousands)(a)	3.7	3.9	n.a.	2.4	p1.6

(a) Includes freight and mail.

Source: Department of Transport and Communications — AVSTATS.

SCHEDULED MAJOR DOMESTIC AIRLINES PASSENGER UPLIFTS AND DISCHARGES AT PRINCIPAL AUSTRALIAN AIRPORTS

	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
Sydney	6,330,523	6,660,129	7,374,065	7,541,281	5,497,040	7,599,616
Melbourne	5,155,985	5,313,403	5,827,494	5,999,957	4,835,608	6,388,802
Brisbane	2,799,420	2,973,743	3,312,524	3,581,535	2,657,313	3,828,124
Adelaide	1,824,983	1,704,871	1,833,001	1,876,691	1,414,557	2,014,778
Perth	1,245,409	1,352,214	1,437,035	1,478,055	1,055,104	1,563,114
Canberra	990,222	1,006,652	1,087,595	1,073,519	651,897	1,044,850
Coolangatta	731,145	844,581	1,005,622	1,080,222	586,029	976,045
Cairns	495,434	627,703	777,316	823,262	545,497	825,942
Hobart	493,411	474,345	511,308	519,055	430,013	566,437
Townsville	410,260	415,870	400,439	379,362	248,715	316,828
Launceston	361,797	351,432	351,004	371,327	249,373	338,746
Darwin	334,079	341,835	366,639	388,324	302,213	402,403

Source: Department of Transport and Communications — AVSTATS.

Other aviation matters

In addition to scheduled services, there is a wide range of other activities undertaken by the aviation industry, including business flying, aerial agriculture, charter, training and private flying. Charter operations and training have, in recent years, made up about 45 per cent of general aviation hours flown. Charter operations involve the use of aircraft in operations for the carriage of passengers and cargo for hire or reward which are not scheduled or available to the public.

Aerodromes

At 30 June 1991, there were 428 Commonwealth or licenced aerodromes in Australia and its Territories. Of these, 23 were

owned and operated by the Federal Airports Corporation, three of them being shared with the Department of Defence. A further 42 were owned by the Commonwealth under the control of Commonwealth departments. The remaining 363 were owned by either local authorities or private organisations.

Capital expenditure in 1990-91 on facilities at Commonwealth civil aerodromes was \$1.1 million. Maintenance grants paid to licenced aerodromes under the Aerodrome Local Ownership Plan (ALOP) totalled \$6.3 million. A further \$8.0 million was paid for development works including funding for the withdrawal from the ALOP and transfer of responsibilities from Commonwealth to local government authorities by various aerodromes.

Air transport registrations and licences in force in Australia

At 31 December 1991, there were 9,318 aircraft registered in Australia. At the same time there were 52,689 current aeroplane pilot licence holders, including 26,690 private pilots, 6,515 commercial pilots, 1,271 senior commercial pilots, 4,246 air transport pilots and 11,162 student pilots.

In addition, there were 2,710 current helicopter pilot licence holders of which 432 were private pilots, 1,342 commercial pilots, 134 senior commercial pilots, 111 air transport pilots and 691 student pilots. There were also 11 gyroplane, 82 commercial balloon, 907 flight engineer and 18 navigator licences in force.

Accidents and casualties

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

	1984	1985	1986	1987	1988	1989
Number	40	31	40	44	53	49
Persons killed	45	43	44	33	63	66
Persons seriously injured	25	27	31	42	32	36

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

Source: Department of Transport and Communications.

GOVERNMENT TRANSPORT ORGANISATIONS

General

The Australian Transport Advisory Council

The Australian Transport Advisory Council comprises Commonwealth, State and Territory ministers responsible for transport, roads and marine matters. The New Zealand Minister for Transport, Civil Aviation and Meteorological Services is also represented on the Council as an observer.

The Council meets annually and its primary role is to review and coordinate various aspects of transport policy, development and administration. The Council initiates discussion and reports on issues raised by Council members, and provides advice on policies which will promote better coordination and development of transport to the benefit of Australia.

Australian Road Transport Advisory Committee

This Committee was established in April 1990 as part of the continuing push to reform the land transport sector.

Its function is to provide the Minister for Land Transport with direct industry based

advice on all aspects of the road transport industry. The specialist advice from the Committee also assists the task of integrating road and rail with other forms of transport.

Bureau of Transport and Communications Economics

The Bureau is a centre for applied economic research in the Department of Transport and Communications. It undertakes studies and investigations that contribute to an improved understanding of the factors influencing the efficiency and growth of the transport and communications sector and the development of effective transport and communication policies.

Road and Rail

AUSTROADS

AUSTROADS, the national association of road and traffic authorities, provides strategic direction for the development, management and use of Australia's road system through consultation and discussion with peak bodies that have a stake in the road industry. Its functions are the coordination of research, preparation of guides and standards, and improvements in and harmonisation of practices within an agreed national policy framework.

Australian Road Research Board

The ARRB is a non-profit national organisation owned by the Federal Department of Transport and Communications, the State and Territory road/transport authorities and the Australian local Government Association. It conducts research into all aspects of roads and road transport including freight and heavy vehicles, human behaviour, intersection design and capacity, the environment, road safety, construction and maintenance of infrastructure, and the development of equipment for traffic analysis and road condition measurement. This work is undertaken for all three levels of government and for industry. The ARRB disseminates road research information through its major biennial conferences and regular symposiums, seminars and workshops and through its publications. ARRB also maintains a unique library of road literature and operates a computer based information service which abstracts and indexes road related literature and research in progress.

The ARRB acts as the Australian member of the OECD's International Road Research Documentation (IRRD) system. IRRD information from all member countries is available to Australians through ARRB's computer search services. ARRB also maintains close contacts with road research organisations in other countries.

Water

ANL Limited

ANL Limited, Australia's national shipping line, is an incorporated public company, all the shares of which are owned by the Commonwealth.

ANL is Australia's major international liner shipping company, providing services to North and South-East Asia, Europe and New Zealand. In addition, ANL is prominent in bulk and liner coastal trades. During the year ANL took delivery of three new vessels. As at 30 June 1991, ANL operated a fleet of 14 ships comprising eight ships in overseas trades and six in coastal trades. Seven overseas vessels are liner ships, the remaining vessel is a specialised car carrier. On the coast, ANL operates three bulk carriers and three ships that serve Bass Strait.

The Line has also moved into shipping related activities, particularly container management, freight forwarding, ship agency, customs agency and ship management services in an effort to broaden its revenue base and provide a more integrated transport service.

ANL is majority shareholder in National Terminals (Australian) Limited with terminals in Sydney, Melbourne, Fremantle and Tasmanian ports.

Air

Civil Aviation Authority

The CAA is an independent government business enterprise established under the *Civil Aviation Act 1988* and is responsible for the safety regulation of civil aviation in Australia. It also provides air route and airway facilities and associated services to the aviation industry including air traffic control, flight service, rescue and fire fighting, search and rescue and aeronautical information.

Federal Airports Corporation

The Federal Airports Corporation owns, manages and develops Australia's major airports and oversees the commercial activities in the airports including arrangements with airlines and other operators for the use of airports and for leasing of property and the letting of business concessions. The Corporation is a statutory transport business undertaking of the Commonwealth and is required to be financially self supporting. It has been established with a capital base and debt/equity ratio determined by the Commonwealth Government.

International organisations

Australia is one of the 162 members (at 30 June 1991) of the International Civil Aviation Organisation (ICAO). Australia has been a member of the governing Council since ICAO was established in 1947. Australia is also represented on the 15 member Air Navigation Commission which is responsible for drawing up international standards and procedures for the safety and efficiency of air navigation. In addition, Australia participates in the Commonwealth Air Transport Council, the South Pacific Regional Civil Aviation Council, the Airport Operators Council International and the International Civil Airports Association.

International agreements

Australia had air service agreements with 28 countries at 30 June 1991. These agreements have full treaty status. Australia also has 10 air service arrangements, with less than treaty status and two of these, with Argentina and Switzerland, will be upgraded to treaty status when draft agreements are ratified. Under these agreements and arrangements, Qantas, Australia's designated airline, and the foreign carriers of Australia's bilateral partners are entitled to operate services to and over their respective territories. Australia also has an agreement with the Commonwealth of Independent States (formerly the USSR) relating principally to over-flight rights and charter services.

COMMUNICATIONS

Radio and television broadcasting

Radio and television broadcasting falls within the jurisdiction of the Commonwealth Minister for Transport and Communications. Commonwealth bodies which are involved include the Australian Telecommunications Corporation (Telecom), the Australian Broadcasting Corporation (ABC), the Special Broadcasting Service (SBS), the Australian Broadcasting Tribunal (ABT), the Department of Transport and Communications, the Overseas Telecommunications Corporation (OTC), AUSTEL and AUSSAT Pty Ltd.

Basically, the Australian broadcasting system comprises the following types of services:

- national radio and television services broadcasting programs produced by the Australian Broadcasting Corporation and the Special Broadcasting Service;
- commercial radio and television services operated by companies under licence; and
- public radio services operated by incorporated associations under licence on a non-profit basis.

The Australian Broadcasting Corporation

The Australian Broadcasting Corporation (ABC) is an independent statutory corporation funded primarily by appropriation from the Commonwealth Parliament.

The *Australian Broadcasting Act 1983* requires the ABC to:

- provide within Australia innovative and comprehensive radio and television services of a high standard;
- provide programs that contribute to a sense of national identity, inform and entertain, and reflect the cultural diversity of the Australian community;
- provide radio and television programs of an educational nature;
- promote Australia's musical, dramatic and other performing arts; and
- transmit to other countries radio and television programs of news, current affairs, entertainment and cultural enrichment.

The ABC provides:

- five main radio services across Australia on 410 transmitters;
- a national television service carried on 511 transmitters with television production and transmission centres in all State capitals, Darwin and Canberra; and
- ABC concerts (the ABC is also responsible for six Symphony Orchestras).

Television and radio programs produced by the ABC are broadcast through transmitters operated by Telecom Australia on behalf of the ABC and the Department of Transport and Communications.

International broadcasting service

The international shortwave service known as Radio Australia provides an emphasis on news and current affairs, information programs and sports coverage serving the needs and interests of the Asia/Pacific region.

The broadcasts — in English, Indonesian, Standard Chinese, Cantonese, Tok Pisin, French, Thai, Japanese and Vietnamese — are directed to the Pacific, South-East/South Asia and North Asia. The English Service is also heard in the Middle East, United Kingdom, Europe and North and South America. Overall, the services reach an estimated 50 million regular listeners.

The Special Broadcasting Service

The Special Broadcasting Service (SBS) was established by the Commonwealth Government on 1 January 1978 to provide multilingual radio services and, was authorised by regulations from August 1978, to provide multilingual television services.

Commercial radio and television services

At 30 June 1991, there were 149 commercial radio services (including three supplementary licences) and 43 commercial television services in operation in Australia.

At 30 June 1991, there were three remote commercial television services licenced, transmitting their programs via satellite to remote localities in the Western Zone (Western Australia), Central Zone (Northern Territory, South Australia, Western New South Wales and North-Western Victoria) and North-East Zone (Queensland and North-Western New South Wales). There was also one remote

radio service providing a monophonic service via satellite to remote localities in the Western Zone.

Public broadcasting services

At 30 June 1991, 96 public radio services were broadcasting programs ranging from fine music to ethnic languages and programs produced by and directed towards specific communities. Some public radio services are associated with tertiary educational institutions. There are no public television services operating permanently in Australia.

Broadcasting stations

BROADCASTING STATIONS, 30 JUNE 1991

Type of station	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
National ABC									
Medium frequency (AM)	25	9	22	11	25	7	6	3	108
High frequency (HF)	—	—	2	—	3	—	9	—	14
Very high frequency (FM)	38	11	98	28	77	7	27	2	288
National SBS									
Medium frequency (AM)	3	1	—	—	—	—	—	—	4
Very high frequency (FM)	—	—	—	—	—	—	—	—	—
International									
Short wave (Radio Australia)	—	6	2	—	3	—	3	—	14
Commercial									
Medium frequency (AM)	47	18	34	8	21	7	3	2	140
Very high frequency (FM)	9	7	6	4	31	3	1	2	63
Public									
Medium frequency (AM)	2	2	2	2	1	1	—	2	12
Very high frequency (FM)	34	24	10	9	5	6	17	1	106

Source: Department of Transport and Communications.

TELEVISION TRANSMITTER STATIONS, 30 JUNE 1991

Type of station and location	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
National	95	52	132	44	114	27	41	6	511
Commercial	136	50	163	43	112	22	30	7	563

Source: Department of Transport and Communications.

The Australian Broadcasting Tribunal

The Australian Broadcasting Tribunal is an independent statutory authority established to regulate aspects of commercial and public radio and commercial television in Australia. The Tribunal is empowered to grant, renew, suspend or revoke licences, to determine program and advertising standards applicable to licenced stations, to authorise changes to the ownership and control of licences, and to collect and make available information about broadcasting in Australia. In particular, the Tribunal is required to conduct public inquiries

into the granting of licences following the invitation of applications by the Minister. The Tribunal may also conduct inquiries into the renewal of licences, the setting of standards of broadcasting practices, alleged breaches of licence conditions and other matters.

Radiocommunication stations

At 30 June 1991, there were 1,400,000 radiocommunication stations authorised for operation in Australia and its Territories. Of these, 826,575 were associated with land mobile services, 80,589 were fixed

services, 75,875 were for marine services, 394,114 were citizen band (CB) stations and amateur stations.

Telecommunications services within Australia

Telecom Australia

The Australian Telecommunications Corporation operates under the trading name Telecom

Australia. It is to merge with OTC Limited in 1992 and there will then be a second carrier in competition with the new organisation which will be named the Australian and Overseas Telecommunications Corporation. The main function of the present corporation is to supply telecommunications services within Australia. A subsidiary function is to carry on, outside Australia, any business or activity relating to telecommunications.

AUSTRALIAN TELECOMMUNICATIONS CORPORATION SUMMARY OF SELECTED STATISTICS

		1987-88	1988-89	1989-90
FINANCIAL				
Revenue	\$ million	7,199.5	7,976.8	8,878.9
Expenses	\$ million	6,423.3	7,003.7	7,588.4
Operating profit	\$ million	776.6	973.1	1,288.2
Rate of return	per cent	12.0	13.8	12.3
Addition to fixed assets	\$ million	2,236.1	2,580.5	2,963.9
Net value of fixed assets	\$ million	12,073.1	13,045.4	16,845.8
TRAFFIC (million)				
Telephone calls				
Local		8,074.7	8,126.5	8,796.8
Trunk		1,488.5	1,652.8	1,794.8
To overseas		65.9	85.1	104.9
Cellular mobile telephone calls		27.9	74.0	156.0
Total		9,657.0	9,938.4	10,852.5
Calls to recorded information services		137.2	124.0	124.7
NETWORK AND OPERATIONS				
Telephone				
Demand for new services		650,809	706,120	665,525
Connection of new services		643,834	682,907	706,010
Services in operation		7,091,549	7,419,982	7,786,889
Data services				
Modems in operation		103,962	97,890	92,310
Digital data service — network terminating units		52,489	68,117	84,189
AUSTPAC service — number of outstations		6,015	9,235	9,664
STAFF				
Average full-time operative staff		84,141	83,293	84,899

Source: Telecom.

Overseas Telecommunications Corporation (OTC)

OTC Limited provides Australia's telecommunications links with the world, and is a founding member of both the International Telecommunications Satellite Organisation (INTELSTAT), and the International Maritime Satellite Organisation (INMARSAT). From the beginning of 1990, it has been providing the opportunity for 15 small nations in the South Pacific to gain access to modern satellite-based communications systems, from the OTC Sydney Satellite Earth Station.

Australian national satellite system

AUSSAT Pty Ltd was established by the Commonwealth Government in November 1981 as a commercial company to own, operate and manage Australia's National Satellite System. AUSSAT provides a telecommunications system for Australia by using space satellites and makes the facilities available for use in telecommunications systems in neighbouring regions.

AUSSAT's first generation satellite system comprises three Hughes Aircraft Company

HS 376 spin stabilised satellites. Geostationary orbit locations are: AUSSAT 1 — 160°E longitude; AUSSAT 2 — 156°E longitude; and AUSSAT 3 at 164°E longitude, some 36,000 kilometres above the earth, directly over the equator.

Each satellite has a minimum design life of seven years. The antenna array enables each satellite to provide national beam coverage of the entire Australian continent and its offshore regions and four spot beams covering:

- North-East (Queensland);
- Central Australia (Northern Territory and South Australia);
- West (Western Australia); and
- South-East (New South Wales, Victoria and Tasmania).

The satellites also have the capability of providing a switched beam to cover Papua New Guinea, and AUSSAT 3 has a switched beam capability covering the south-west Pacific region and New Zealand.

AUSSAT also operates two telemetry, tracking command and monitoring ground stations. The main centre is located in the Sydney suburb of Belrose, and it is from this station that final positioning and maintenance of the satellites in the geostationary orbit is monitored and controlled. A backup to the Belrose Satellite Control Centre is located in the Perth suburb of Lockridge.

Postal communications

Australian Postal Corporation

The Australian Postal Corporation's principal function is to supply postal services within Australia and between Australia and overseas. Its subsidiary function is to carry on any business or activity relating to postal services either domestically or overseas.

The Australian Postal Corporation is the authority for the issue of postage stamps throughout the Commonwealth of Australia and its external territories. The following tables provide details of the Corporation's finances, services and operation.

AUSTRALIAN POSTAL CORPORATION: REVENUE AND EXPENDITURE (\$'000)

	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90
Revenue						
Mail services	1,080,539	1,186,422	1,370,930	1,501,487	1,644,869	1,779,573
Commission on agency services	94,547	87,291	83,328	89,803	88,031	79,780
Postal money order service	11,940	11,846	12,384	13,242	16,792	19,029
Other revenue	24,269	39,832	38,440	51,847	61,516	60,617
Total	1,211,295	1,325,391	1,505,082	1,656,379	1,811,208	1,980,473
Expenditure						
Labour and related expenditure	911,776	973,294	1,049,186	1,131,190	1,251,284	1,235,530
Carriage of mail by contractors	103,551	109,418	121,183	132,832	151,131	158,311
Depreciation and interest	17,159	22,294	27,744	38,454	39,748	44,947
Other expenditure	154,301	189,530	252,079	298,955	323,186	395,878
Total	1,186,787	1,294,536	1,450,192	1,601,431	1,765,349	1,923,390

Source: Australian Postal Corporation.

**AUSTRALIAN POSTAL CORPORATION: PROFIT AND LOSS STATEMENT
FOR THE YEAR ENDED 30 JUNE 1990
(\$'000)**

Revenue	
Mail services	1,779,573
Commission on agency services	79,780
Postal money order services	19,029
Other revenue	60,617
Total	1,980,473
Expenditure	
Labour and related expenditure	1,324,254
Carriage of mail by contractors	158,311
Accommodation	103,601
Stores and supplies	112,055
Depreciation	44,947
Interest	6,246
Other operating expenditure	173,976
Total	1,923,390
Operating Profit	57,083
Appropriations	
Accumulated profit brought forward	116,584
Operating profit for the year	45,859
Adjustments to provision	15,754
Accumulated profit carried forward	178,197

Source: Australian Postal Corporation.

**AUSTRALIAN POSTAL CORPORATION: PERSONS ENGAGED IN PROVIDING
POSTAL SERVICES AT 30 JUNE 1990 AND 1991**

	1991							
	HQ	NSW (incl. ACT)	Vic. and Tas.	Qld	SA (incl. NT)	WA	Aust.	Aust. 1990
Official staff(a)								
Full-time permanent	618	12,519	9,693	4,225	2,509	2,417	31,981	31,981
Full-time temporary	19	1,536	796	415	176	184	3,126	3,126
Part-time	—	1,786	1,153	654	435	521	4,549	4,549
Other staff(b)	—	2,568	2,137	1,850	721	782	8,058	8,058
Total	637	18,409	13,779	7,144	3,841	3,904	47,714	47,714

(a) 'Official staff' are those whose employment is governed by the *Australian Postal Corporation Act 1989*. (b) Includes persons who are not employed under the *Australian Postal Corporation Act*, but who are engaged on the basis of business transacted. Also included are persons or organisations who hold road mail service contracts with the Australian Postal Corporation.

Source: Australian Postal Corporation.

**AUSTRALIAN POSTAL CORPORATION: MAIL DELIVERY NETWORK AND POST OFFICES
AT 30 JUNE 1989 AND 1990
(number)**

<i>Number</i>	1990						<i>Aust. 1989</i>
	<i>NSW (incl. ACT)</i>	<i>Vic. & Tas.</i>	<i>Qld</i>	<i>WA</i>	<i>SA (incl. NT)</i>	<i>Aust.</i>	
Households receiving mail	2,235,857	1,755,224	1,083,537	607,654	595,415	6,277,687	6,068,018
Businesses receiving mail	234,469	158,334	112,010	58,645	59,999	673,020	639,485
Post offices							
1990	496	333	218	143	153	1,372	1,383
1989	490	330	218	141	153	1,356	1,372
Agencies							
1990	925	840	521	390	247	3,060	3,104
1989	904	836	516	380	244	3,045	3,060
Total post offices and agencies	1,394	1,166	734	521	397	4,401	4,432

Source: Australian Postal Corporation.

**AUSTRALIAN POSTAL CORPORATION: TOTAL POSTAL ARTICLES HANDLED
(^{'000})**

<i>Year ended 30 June</i>	<i>Posted for delivery within Australia</i>	<i>Posted for places abroad</i>	<i>Received from abroad</i>	<i>Total postal articles handled</i>
1985	2,877,476	107,783	163,074	3,148,333
1986	2,970,353	115,688	166,444	3,252,485
1987	3,143,251	125,995	169,306	3,438,552
1988	3,342,321	142,280	177,417	3,662,018
1989	3,564,366	157,605	193,988	3,915,959
1990	3,663,664	171,281	213,716	4,048,661

Source: Australian Postal Corporation.

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Interstate Road Freight Movement, Australia (9214.0)

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Motor Vehicle Registrations, Australia (9303.0) — monthly

Motor Vehicle Registrations, Australia (9304.0) — annual

Rail Transport, Australia (9213.0)

Road Freight Transport Activity of Private Enterprises by Industry Division, Australia and States (9107.0)

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Shipping and Air Cargo Commodity Statistics, Australia (9206.0)

Survey of Motor Vehicle Use, Australia (9208.0)

Transport Establishments: Details of Operations by Industry Class, Australia (9104.0)

Transport Establishments: Selected Items of Data Classified by Industry and Size Group, Australia (9105.0)

Transport Establishments: Summary of Operations by Industry Class, Australia and States (9103.0)

Other Publications

Information additional to that contained in ABS publications is available in the annual reports and other statements of the Department of Transport and Communications, the various harbour boards and trusts, the several government railway authorities, the Federal Airports Corporation, the Australian Postal Corporation, the Australian Telecommunications Corporation, and the Australian Broadcasting Corporation.

FOR MORE INFORMATION

The ABS has a far wider range of information on Australia than that contained in the *Year Book*. Information is available in the form of regular publications, electronic data services, special tables and from investigations of published and unpublished data.

For further information contact ABS Information Services at one of the addresses listed on the page facing the Introduction to the *Year Book*.

