

Transport and Communications

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THE TRANSPORT INDUSTRY

The transport industry consists of businesses mainly engaged in passenger and freight transport by road, rail, water and air, and associated storage facilities and services. In 1992-93 the gross product of the transport industry was \$19,967 million, 4.9 per cent of the gross domestic product for all industries, and it employed 373,000 people.

Detailed statistics providing a comprehensive view across all sections of the industry have only been collected once, for 1983-84. A summary of these was contained in the 1994

and earlier editions of *Year Book Australia*. However, the latest available statistics on the road, rail, water and air sections of the transport industry, obtained from a variety of sources, are contained in this chapter.

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.

21.1 LENGTHS OF ROADS OPEN FOR GENERAL TRAFFIC, 30 JUNE
(kilometres)

	<i>NSW(a)</i> 1990	<i>Vic.(b)</i> 1990	<i>Qld</i> 1992	<i>SA</i> 1993	<i>WA(c)</i> 1992	<i>Tas.(d)</i> 1992	<i>NT(e)</i> 1993	<i>ACT</i> 1993
<i>Surface of roads</i>								
Bitumen or concrete	77,803	68,408	60,701	25,042	43,134	9,515	6,018	2,345
Gravel, crushed stone or other improved surface	64,572	48,287	50,039	—	45,955	12,968	6,780	80
Formed only	32,438	23,580	48,611	69,773	36,328	233	4,846	—
Cleared only	20,616	21,009	15,078	—	17,726	1,874	2,688	—
Total	195,429	161,284	174,429	94,815	143,143	24,590	20,332	2,425

(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 kilometres of forestry roads. (d) Forestry roads have been reclassified from cleared only to gravel. (e) Excludes roads in towns and Local Government Areas. There have been some roads transferred to Local Government Areas since 1992, 8,200 kilometres of roads on Aboriginal land, and 1,400 kilometres of park roads.

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

Registered motor vehicles

Censuses of registered motor vehicles have been conducted in respect of 31 December 1955 and 1962; 30 September 1971, 1976, 1979, 1982, 1985, 1988 and 1991, and 30 June 1993. 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 10,505,900 registered motor vehicles (excluding tractors, plant and equipment, caravans and trailers) in Australia at 30 June 1993 (table 21.2). This represents an increase of 405,900 vehicles (4.0%) since 30 September 1991.

Table 21.3 shows the average age of vehicle by type of vehicle. The average age of the total motor vehicle fleet increased by 0.6 from 9.8 years in 1991 to 10.4 years in 1993. Just over three-quarters of all vehicles on register (7,899,100) are five or more years old. The average age of buses went down, in contrast to the average age of other vehicles which went up.

As shown in table 21.4, the number of motor vehicles (excluding motor cycles) steadily increased every year between 1988 and 1993 except in 1991. In contrast, the number of motor cycles decreased over the same period.

Registered motor vehicles (excluding motor cycles) per 1,000 of population has followed the same trend as the total number of motor vehicles. The figure of 575 vehicles per 1,000 of population in 1993 was the highest ever (table 21.5).

21.2 MOTOR VEHICLE CENSUS, 30 JUNE 1993 (^{'000})

State/Territory	Passenger vehicles	Light comm-ercials	Trucks		Non-freight carrying	Buses	Motor cycles	Total(a)
			Rigid	Artic-ulated				
New South Wales	2,561.5	405.8	102.3	13.1	9.3	11.3	69.2	3,172.4
Victoria	2,304.8	358.8	87.3	15.3	11.5	13.2	73.8	2,864.7
Queensland	1,385.8	311.9	60.9	10.0	6.0	8.9	63.6	1,847.2
South Australia	752.3	109.2	26.9	5.3	6.7	3.3	29.2	932.8
Western Australia	838.2	175.9	42.3	6.0	8.8	5.5	37.7	1,114.5
Tasmania	232.2	54.9	11.3	1.6	3.3	2.0	6.6	311.9
Northern Territory	54.7	20.5	2.5	1.0	0.2	1.4	3.9	84.2
Australian Capital Territory	150.8	17.2	3.0	0.3	0.8	1.3	4.8	178.2
Australia	8,280.2	1,454.3	336.6	52.5	46.6	46.9	288.8	10,505.9

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

Source: Motor Vehicle Census: Australia (9309.0).

21.3 AVERAGE AGE OF VEHICLE, 30 JUNE 1993 AND 1991 (years)

Type of vehicle	State/Territory of registration								1993	1991
	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.	Aust.
Passenger vehicles	9.3	10.8	10.0	11.2	10.5	11.6	9.4	9.8	10.2	9.7
Light commercial vehicles	9.9	11.6	10.7	11.7	11.1	12.1	9.8	9.8	10.9	10.0
Rigid trucks	11.0	14.3	12.0	15.1	14.3	14.3	9.9	9.0	12.8	12.1
Articulated trucks	9.7	11.4	10.6	10.2	12.1	9.6	10.5	7.9	10.7	9.9
Non-freight carrying trucks	13.2	14.2	13.2	14.1	15.9	15.3	11.2	14.1	14.3	12.8
Buses	8.8	9.7	9.0	10.8	8.5	12.3	5.2	6.9	9.2	9.8
Motor cycles	9.0	9.4	9.8	8.9	10.0	9.7	8.3	8.9	9.4	8.6
Total	9.5	11.0	10.2	11.4	10.8	11.8	9.4	9.8	10.4	9.8

Source: Motor Vehicle Census, Australia (supplementary ABS statistics).

21.4 MOTOR VEHICLES ON REGISTER (^{'000})

30 June	Passenger vehicles(a)	Light commercial vehicles(b), trucks, non-freight carrying trucks(c)	Total (excludes motor cycles)	Motor cycles
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
1991	7,734.1	1,915.4	9,649.5	284.6
1992(d)	7,913.2	2,041.3	9,954.5	292.4
1993	8,050.0	2,089.8	10,139.8	291.7

(a) Formerly described as motor cars and station wagons. From 1 July 1991 includes forward control passenger vehicles of less than 10 seats. (b) Combination of utilities and panel vans. From 1 July 1991 includes cab chassis vehicles 3.5 tonnes gross vehicle mass or less. (c) Formerly 'Other truck type vehicles'. (d) From 1 July 1991 some vehicles were reclassified from rigid trucks into light commercial vehicles and from buses into passenger vehicles.

Source: Motor Vehicle Registrations, Australia (9304.0).

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

30 June	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
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
1991	508.1	611.6	535.9	569.2	617.4	635.3	486.1	522.1	558.4
1992	525.3	587.3	584.8	590.8	629.7	633.2	456.7	543.5	569.3
1993	527.0	593.5	590.5	600.6	641.6	644.9	474.7	564.2	575.2

(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 table 21.6 and graph 21.7.

Annual registrations of new vehicles processed by motor vehicle registration authorities in all

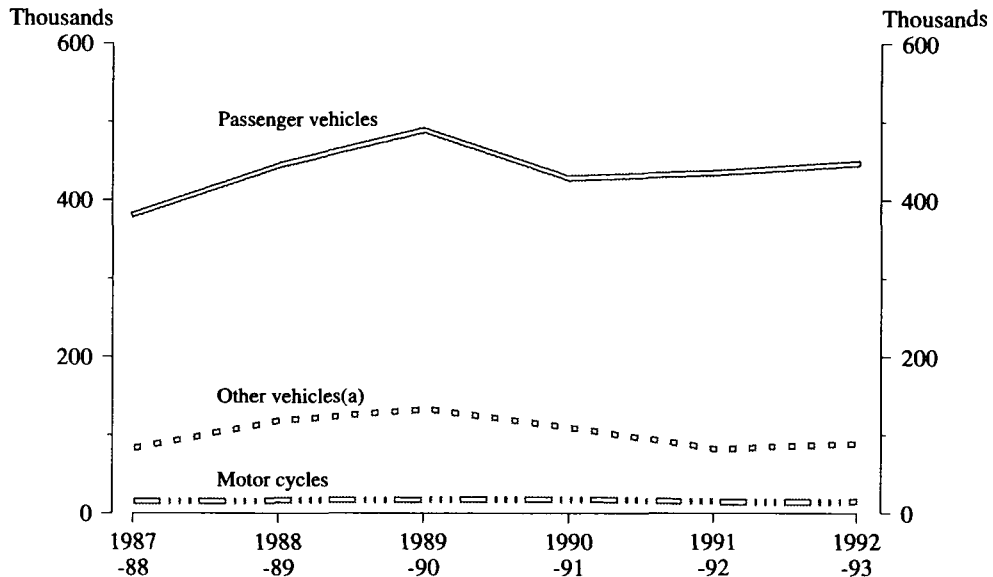
21.6 REGISTRATIONS OF NEW MOTOR VEHICLES

Year	Passenger vehicles(a)	Light commercial vehicles(b)	Trucks		Non-freight carrying trucks(c)	Buses	Total (excludes motor cycles)	Motor cycles
			Rigid	Articulated				
1987-88	384,203	48,113	28,596	2,811	1,602	5,495	470,820	18,532
1988-89	447,913	72,330	36,973	3,669	1,668	6,671	569,224	19,076
1989-90	492,235	82,021	41,074	4,065	1,815	6,552	627,762	20,453
1990-91	430,874	72,395	29,173	2,142	1,648	6,222	542,454	20,506
1991-92(d)	437,075	67,804	9,924	1,634	787	3,848	521,072	16,675
1992-93	449,843	74,748	9,780	2,199	708	4,230	541,508	17,513
1992-93								
NSW	160,087	23,062	3,518	633	203	1,143	188,646	4,597
Vic.	106,215	14,134	2,009	571	166	795	123,890	4,528
Qld	81,657	18,916	2,316	524	91	899	104,403	3,865
SA	32,894	4,555	519	224	103	176	38,471	1,469
WA	45,568	9,578	1,008	125	84	757	57,120	2,118
Tas.	10,039	2,193	175	72	44	85	12,608	364
NT	3,999	1,334	120	40	11	307	5,811	329
ACT	9,384	976	115	10	6	68	10,559	243

(a) Formerly described as motor cars and station wagons. From 1 July 1991 includes forward control passenger vehicles of less than 10 seats. (b) Combination of utilities and panel vans. From 1 July 1991 includes cab chassis vehicles 3.5 tonnes gross vehicle mass or less. (c) Formerly 'Other truck type vehicles'. (d) From 1 July 1991 some vehicles were reclassified from rigid trucks into light commercial vehicles and from buses into passenger vehicles.

Source: Motor Vehicle Registrations, Australia (9304.0).

21.7 REGISTRATIONS OF NEW MOTOR VEHICLES, BY TYPE OF VEHICLE



(a) Other motor vehicles include trucks, light commercial vehicles, non-freight carrying trucks and buses.

Source: *Motor Vehicle Registrations, Australia (9304.0)*.

Use of motor vehicles

A Survey of Motor Vehicle Use has been undertaken by the ABS every three years since 1976. The following are some of the main statistics from the latest survey, undertaken in 1991.

Motor vehicles in Australia are estimated to have travelled a total of 151,154 million kilometres in the 12 months ending September 1991, a decrease of 1.8 per cent over the corresponding period in 1988. 34.8 per cent of the total distance travelled was for business purposes, 22.5 per cent for travel to and from work and 42.7 per cent for private purposes. Passenger vehicles accounted for 76.2 per cent of total distance travelled in Australia; freight carrying vehicles (including light commercial vehicles,

rigid trucks and articulated trucks) 21.8 per cent; motor cycles 1.1 per cent; and buses 0.9 per cent (table 21.8).

The average distance travelled annually by all vehicles was 15,000 kilometres (15,300 kilometres if unused vehicles are disregarded), a decrease of approximately 8.5 per cent over the corresponding 1988 period. Table 21.9 shows the average kilometres travelled by different types of vehicles, and where they travelled.

Total tonne-kilometres by load carrying vehicles was estimated to be 88,449.3 million tonne-kilometres (table 21.10), with vehicles registered in New South Wales and Victoria accounting for about 52.1 per cent of the total (23,213.0 and 22,907.7 million tonne-kilometres, respectively).

21.8 TOTAL KILOMETRES TRAVELLED, BY TYPE OF VEHICLE AND PURPOSE
TWELVE MONTHS ENDED 30 SEPTEMBER 1991
(million kilometres)

Type of vehicle				Purpose		
	Laden	Unladen	Business Total(a)	Total to and from work	Private	Total
Passenger vehicles	..	..	27,709.4	28,566.9	58,739.1	115,015.4
Motor cycles	..	..	165.5	643.5	806.5	1,615.4
Light commercial vehicles	9,831.4	2,883.1	13,566.8	4,495.9	4,791.0	22,853.7
Rigid trucks	4,328.5	1,386.2	5,798.9	247.0	113.8	6,159.7
Articulated trucks	2,935.2	1,000.4	3,935.6	25.0	4.3	3,964.9
Other truck types	..	..	158.1	2.5	1.6	162.2
Buses	..	..	1,302.5	27.1	52.9	1,382.4
Total	17,095.1	5,269.6	52,636.7	34,007.9	64,509.1	151,153.7

(a) Includes business travel of non-load carrying vehicles except for articulated trucks.

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

21.9 AVERAGE KILOMETRES TRAVELLED(a), BY TYPE OF VEHICLE AND AREA OF OPERATION, TWELVE MONTHS ENDED 30 SEPTEMBER 1991
('000 kilometres)

Type of vehicle	Area of operation					
	Capital city(b)	Provincial urban	Other areas of State or Territory	Total within State of registration	Interstate	Australia
Passenger vehicles	10.8	5.4	6.7	14.1	3.8	14.6
Motor cycles	5.4	4.1	3.4	5.8	3.7	6.1
Light commercial vehicles	14.6	8.8	11.2	16.8	6.5	17.3
Rigid trucks	19.8	13.0	11.5	18.5	12.1	19.1
Articulated trucks	26.0	24.3	47.2	59.0	68.1	77.8
Non-freight carrying types	18.9	11.2	6.2	13.1	8.4	13.2
Buses	26.2	17.1	20.8	30.7	23.0	33.6
Total	11.4	6.0	7.7	14.6	4.9	15.3

(a) As this table relates to actual vehicle usage, vehicles which travelled zero distance are excluded from the calculation of averages.

(b) Includes all of Australian Capital Territory for Australian Capital Territory registered vehicles.

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

21.10 TOTAL TONNE-KILOMETRES(a), BY TYPE OF VEHICLE AND STATE/TERRITORY OF REGISTRATION, TWELVE MONTHS ENDED 30 SEPTEMBER 1991
(million tonne-kilometres)

Type of vehicle	State of registration							
	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT
Light commercial vehicles	1,386.9	1,102.2	995.2	384.8	614.8	118.8	86.2	76.5
Rigid trucks	5,608.7	5,078.1	4,468.9	1,628.8	2,559.8	786.0	265.5	261.5
Articulated trucks	16,217.5	16,727.3	11,453.0	6,062.0	7,725.9	1,624.8	2,832.3	383.7
Total	23,213.0	22,907.7	16,917.0	8,075.6	10,900.5	2,529.7	3,184.0	721.7

(a) Total tonne-kilometres is the product of reported average load and total business kilometres travelled while laden.

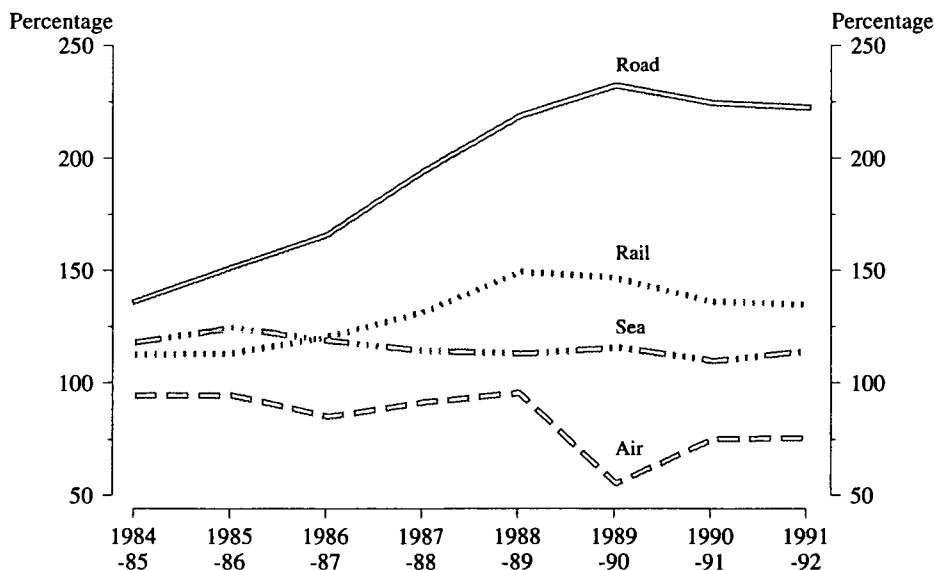
Source: Survey of Motor Vehicle Use, Australia (9208.0).

Interstate freight movement

Graph 21.11 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. Movements of freight interstate by

road and rail have declined somewhat since peaking in the late 1980s. Movements by sea have shown a relative decline since reaching a peak in 1985-86. Transport of freight interstate by air partly recovered after the large decline in freight moved by air in 1989-90 which was mainly due to the airline pilot's dispute.

21.11 INDEXES OF INTERSTATE FREIGHT MOVEMENTS: MODE OF TRANSPORT
(Reference base year 1982-83 = 100.0)



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.

Tables 21.12 and 21.13 contain selected statistics on bus and tram services.

21.12 BUS AND TRAM SERVICES: GOVERNMENT AND MUNICIPAL, BY STATE/TERRITORY, 1992-93

	NSW	Vic.(a)	Qld	SA	WA(b)	Tas.	NT	ACT
Route-kilometres at 30 June								
Bus (kilometres)	1,260	n.a.	999	1,121	8,416	524.4	528	n.a.
Tram (kilometres)	..	236	..	11	..	..	..	..
Vehicle-kilometres								
Bus ('000)	67,800	63,860	31,319	38,189	52,415	10,592	2,606	20,180
Tram ('000)	..	21,380	..	773	..	..	..	..
Rolling stock at 30 June								
Bus (number)	1,442	1,360	599	714	924	243	53	422
Tram (number)	..	616	..	21	..	..	..	..
Passenger journeys								
Bus ('000)	189,091	91,619	44,099	40,088	39,777	11,958	2,866	23,760
Tram ('000)	..	100,658	..	1,469	..	..	..	..
Gross revenue(c)(d)								
Bus and tram (\$'000)	283,072	n.a.	46,571	n.a.	45,156	15,614	2,471	17,024
Working expenses(d)								
Bus and tram (\$'000)	281,395	n.a.	112,947	n.a.	127,150	31,252	7,053	75,495
Net revenue(d)								
Bus and tram (\$'000)	1,677	n.a.	-66,376	n.a.	-81,994	-15,638	-4,582	-58,471
Employees at 30 June								
Bus and tram (number)	3,520	3,937	1,678	n.a.	2,269	508	75	1,003

(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) Figures are not comparable with those shown for previous years because of the adoption of accrual accounting concepts for the Brisbane City Council. The most significant differences are the inclusion of depreciation and the use of the revenue concepts adopted by the council. Figures include river ferry operation.

Source: Various State and Territory bus and tram authorities.

21.13 BUS AND TRAM SERVICES: GOVERNMENT AND MUNICIPAL

	1987-88(a)	1988-89(a)	1989-90(b)	1990-91	1991-92	1992-93
Route-kilometres at 30 June						
Bus (kilometres)	n.a.	n.a.	n.a.	16,217	n.a.	n.a.
Tram (kilometres)	343	351	239	239	246	247
Vehicle kilometres						
Bus ('000)	214,687	254,355	289,291	287,201	287,404	286,961
Tram ('000)	24,621	24,971	24,940	23,183	23,425	22,113
Rolling stock at 30 June						
Bus (number)	5,962	5,950	5,957	5,967	5,876	5,762
Tram (number)	641	651	684	626	656	637
Passenger journeys						
Bus ('000)	387,601	494,476	472,770	441,683	453,192	443,258
Tram ('000)	117,876	121,444	97,593	109,343	113,721	102,127

(a) Excludes details of metropolitan bus and tram services in South Australia. (b) 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.

Drivers' and riders' licences

21.14 DRIVERS' AND RIDERS' LICENCES, 30 JUNE 1993

Type of licence	NSW	Vic.	Qld(a)	SA	WA	Tas.	NT	ACT
Motor vehicle	3,670,695	2,858,683	n.a.	n.a.	n.a.	260,737	114,185	253,679
Motor cycle	332,501	172,357	315,897	n.a.	n.a.	180	18,594	34,481
Combined	(a)332,589	—	1,781,886	—	—	27,493	—	22,924
Total	4,335,785	3,031,040	2,498,497	947,134	1,100,478	288,410	132,779	311,084

(a) As at 31 December 1993.

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 1993. This decline is reflected in all States and Territories, with the most notable falls in New South Wales, Victoria and Queensland.

21.15 ROAD TRAFFIC ACCIDENTS INVOLVING FATALITIES

Year	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
ACCIDENTS INVOLVING FATALITIES									
1988	926	615	483	204	200	68	45	32	2,573
1989	783	681	376	201	213	68	57	27	2,406
1990	702	492	346	187	181	63	54	24	2,049
1991	585	435	362	166	187	65	60	16	1,876
1992	578	365	364	142	171	56	42	18	1,734
1993	524	373	356	191	189	46	40	11	1,730
PERSONS KILLED									
1988	1,037	701	539	223	230	75	51	32	2,888
1989	960	776	428	222	242	83	61	32	2,804
1990	797	548	399	226	196	71	68	26	2,331
1991	663	503	395	184	207	75	67	17	2,113
1992	649	396	416	165	200	74	54	20	1,974
1993	586	437	395	218	208	57	43	12	1,956

Source: Federal Office of Road Safety, Road Fatality Statistics.

**21.16 ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a)
NUMBER OF PERSONS KILLED OR INJURED, 1990**

State/ Territory	Persons killed	Persons injured	Per 100,000 of mean population		Per 10,000 motor vehicles registered(b)	
			Persons killed	Persons injured	Persons killed	Persons injured
NSW	797	7,546	13.6	130.2	2.5	21.4
Vic.	548	7,084	12.4	163.2	2.0	26.7
Qld	399	3,965	13.6	138.4	2.2	22.6
SA	226	2,397	15.6	168.3	2.5	27.1
WA	196	2,644	11.9	165.9	1.8	25.5
Tas.	71	609	15.5	132.7	2.4	20.7
NT	68	521	42.9	320.8	8.4	65.5
ACT	26	207	9.0	74.3	1.6	13.1
Australia	2,331	24,973	13.5	147.6	2.3	24.8

(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 1990.

Source: Federal Office of Road Safety.

RAIL TRANSPORT

Government railways

The six government owned railway systems are operated by:

- the State Rail Authority of New South Wales;
- the Public Transport Corporation Victoria (operating 'V/Line' and 'The Met');
- Queensland Rail;
- the Western Australian Government Railways (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 table 21.17 do not represent route-kilometres exclusively within each State and Territory.

The National Rail Corporation (operating as 'National Rail') was incorporated on 19 September 1991. Its shareholders are the Commonwealth Government, and the Governments of New South Wales, Victoria and Western Australia.

National Rail will take over interstate rail freight operations and the ownership of rail assets, including infrastructure, in mainland States during the next few years.

**21.17 GOVERNMENT RAILWAYS: ROUTE-KILOMETRES OPERATED
(kilometres)**

30 June	NSW	Vic.	Qld	SA	WA	Australian National	Aust.
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
1991	9,810	5,179	10,015	125	5,554	6,612	37,295
1992	9,810	5,179	10,011	120	5,554	6,559	37,233
1993	9,810	5,107	9,797	120	5,583	6,235	36,652

Source: Various rail authorities and the Rail Industry Council.

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.

21.18 GOVERNMENT RAILWAYS: SUMMARY OF OPERATIONS, 1992-93

	NSW	Vic.	Qld	SA	WA	Australian National	Aust.
Train-kilometres ('000)(a)(b)							
Suburban passenger	31,291	15,981	7,090	n.a.	7,957	—	n.a.
Country passenger	3,874	7,036	2,488	—	957	1,078	15,433
Goods(b)	17,172	5,387	19,346	—	6,061	7,905	55,870
Total	52,337	28,404	28,924	n.a.	14,975	8,983	n.a.
Passenger journeys ('000)(c)							
Suburban	229,814	106,015	39,404	7,540	10,315	—	393,088
Country(d)	1,540	5,309	988	—	269	200	8,306
Total	231,354	111,324	40,392	7,540	10,584	200	401,394
Freight							
Tonnes carried ('000)(d)	61,597	9,646	90,303	—	2,654	13,899	178,099
Net tonne-kilometres (million)(e)	14,813	3,678	24,614	—	4,970	8,480	56,555

(a) One train (that is, 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 and the Rail Industry Council.

21.19 GOVERNMENT RAILWAYS: TRAIN-KILOMETRES TRAVELLED(a) ('000 kilometres)

Year	NSW	Vic.	Qld	SA	WA	Australian National	Aust.
1987-88	61,954	27,435	34,099	n.a.	9,465	r10,754	n.a.
1988-89	61,503	26,826	33,572	n.a.	9,472	r11,329	n.a.
1989-90	60,442	26,332	32,927	n.a.	10,873	r10,379	n.a.
1990-91	54,540	25,519	31,744	n.a.	10,250	9,733	n.a.
1991-92	n.a.	24,428	29,509	n.a.	13,197	8,679	n.a.
1992-93	52,337	28,404	28,925	n.a.	14,975	8,983	n.a.

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

Source: Various rail authorities and the Rail Industry Council.

**21.20 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)						
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
1990-91	58,266	9,659	82,965	24,410	13,189	188,489
1991-92	57,341	8,475	90,658	25,890	13,082	195,446
1992-93	61,597	9,646	90,303	26,524	13,899	201,969
NET TONNE-KILOMETRES (million)						
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
1990-91	14,222	3,700	22,869	4,583	7,789	53,163
1991-92	13,811	2,704	24,719	4,878	7,799	53,911
1992-93	14,813	3,678	24,614	4,970	8,480	56,555
FREIGHT EARNINGS (\$'000)						
1987-88	767,820	176,161	910,409	204,330	236,782	2,295,502
1988-89	667,038	166,526	r1,021,854	231,749	284,905	r2,372,072
1989-90	667,000	172,603	r1,062,988	235,983	282,638	r2,421,212
1990-91	783,602	164,175	1,124,800	235,420	275,294	2,583,291
1991-92	789,236	135,393	1,154,813	254,619	266,194	2,600,253
1992-93	815,336	151,311	1,192,523	248,314	276,553	2,684,037

Source: Various rail authorities and the Rail Industry Council.

Non-government railways

Statistics shown in table 21.21 relate to non-government railways with a route distance

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

21.21 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)					
1987-88	r94.7	r23.1	r7.6	r11.4	r136.8
1988-89	90.5	23.6	7.4	14.1	135.6
1989-90	103.9	r24.3	8.7	13.2	150.2
1990-91	113.6	22.2	7.9	r14.2	158.0
1991-92	111.1	18.6	9.3	12.0	150.8
1992-93	112.9	26.0	8.5	11.8	159.2
TONNE-KILOMETRES (million)					
1987-88	r30,225	r416	r108	r183	r30,932
1988-89	27,866	425	106	274	28,671
1989-90	31,654	438	123	263	32,478
1990-91	34,533	400	114	r299	35,347
1991-92	34,362	334	123	259	35,078
1992-93	34,929	468	117	253	35,767

(a) Includes transfers to and from government railways.

Source: Bureau of Transport and Communications Economics, Transport Indicators Unit.

WATER TRANSPORT

International shipping carried \$35 billion worth of goods to Australia's ports in 1990-91 and \$43 billion worth of exports from Australia's ports (32 million tonnes and 304 million tonnes respectively). Details of overseas shipping movements and cargo through Australian sea and air ports were contained in the 1994 and earlier Year Books, but since 1990-91 these statistics have not been available for publication.

The Australian fleet

Together, New South Wales and Queensland account for 57 per cent of ships registered in Australia. The majority of these ships are used for non-commercial purposes (table 21.22).

Of the 76 ships which comprise the major Australian trading fleet (2,000 dead weight tonnes and over), 48 operated on coastal routes (table 21.23).

21.22 SHIPS REGISTERED(a) IN AUSTRALIA AT 30 JUNE 1993

Location	Nature of registration					Total
	Recrea- tional	Fishing	Government	Demise chartered(b)	Other(c)	
New South Wales	1,473	288	4	8	232	2,005
Victoria	512	182	1	5	115	815
Queensland	1,167	648	27	7	329	2,178
South Australia	235	284	2	—	42	563
Western Australia	486	411	1	—	126	1,024
Tasmania	191	224	5	1	59	480
Northern Territory	191	52	1	—	19	263
Total	4,255	2,089	41	21	922	7,328

(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: Australian Maritime Safety Authority.

**21.23 SUMMARY OF THE AUSTRALIAN TRADING FLEET OF SHIPS
150 GROSS TONNES OR MORE, 30 JUNE 1993**

Ships	Number	DWT(a)	Gross tonnes
Major Australian fleet(b)			
Coastal			
Australian owned and registered	42	1,254,098	867,929
Overseas owned, Australian registered	4	94,032	55,697
Overseas owned and registered	2	9,590	5,662
Coastal fleet	48	1,357,720	929,288
Overseas			
Australian owned and registered	19	1,505,206	1,082,368
Overseas owned, Australian registered	8	563,204	338,694
Overseas owned and registered	1	4,260	3,236
Overseas fleet	28	2,072,670	1,424,298
Major Australian fleet	76	3,430,390	2,353,586
Other trading ships			
Australian owned and registered	14	5,324	8,071
Australian trading fleet	90	3,435,174	2,361,657

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

Source: Department of Transport.

Coastal shipping cargo

Table 21.24 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.

21.24 COASTAL CARGO LOADED AND DISCHARGED AT AUSTRALIAN PORTS, 1992-93
(*000 gross weight tonnes)

Australian port	Loaded	Discharged
New South Wales		
Sydney	52	1,777
Botany Bay	636	3,781
Newcastle	315	4,715
Port Kembla	2,106	5,935
Other	1,294	111
Total	4,402	16,319
Victoria		
Melbourne	1,716	2,649
Geelong	1,546	856
Hastings	4,994	809
Other	15	648
Total	8,271	4,962
Queensland		
Brisbane	1,299	4,011
Gladstone	1,604	8,341
Other	8,984	1,969
Total	11,887	14,321
South Australia		
Adelaide	875	1,868
Port Stanvac	519	70
Other	4,561	1,415
Total	5,955	3,353
Western Australia		
Fremantle	1,792	1,566
Other	7,930	998
Total	9,722	2,564
Tasmania		
Hobart	475	983
Burnie	893	648
Devonport	651	497
Launceston	335	19
Other	1,099	851
Total	3,453	2,998
Northern Territory		
Darwin	140	358
Other	402	50
Total	542	408
Total all ports	44,232	44,925

Source: Department of Transport.

AIR TRANSPORT

International activity

International scheduled services. At 30 June 1993, 43 international airlines were operating regular scheduled air services to and from Australia. The carriers (and contracting states) were:

Aeroflot Russian International Airlines	(Russia)
Aerolineas Argentinas	(Argentina)
Air Caledonie International	(New Caledonia)
Air China International	(People's Republic of China)
Air France	(France)
Air India	(India)
Air Lanka	(Sri Lanka)
Air Mauritius	(Mauritius)
Air Nauru	(Nauru)
Air New Zealand	(New Zealand)
Air Niugini	(Papua New Guinea)
Air Pacific	(Fiji)
Air Vanuatu	(Vanuatu)
Alitalia	(Italy)
All Nippon Airways	(Japan)
British Airways	(UK)
Canadian Airlines International	(Canada)
Cathay Pacific Airways	(Hong Kong)
Continental Airlines	(USA)
Federal Express	(USA)
Garuda Indonesia Airways	(Indonesia)
Gulf Air	(Bahrain)
Japan Airlines	(Japan)
KLM Royal Dutch Airlines	(Netherlands)
Korean Air	(Korea)
Lauda Air	(Austria)
Lufthansa German Airlines	(Germany)
Malaysia Airline System	(Malaysia)
Mandarin Airlines	(Taiwan)
Merpati Nusantara Airlines	(Indonesia)
Northwest Airlines	(USA)
Olympic Airways	(Greece)
Pel-Air	(New Zealand)
Philippine Airlines	(Philippines)
Polynesian Airlines	(Western Samoa)
PT Sempati Air	(Indonesia)
Qantas	(Australia)
Royal Brunei Airlines	(Brunei)
Singapore Airlines	(Singapore)
Solomon Airlines	(Solomon Islands)
South African Airways	(South Africa)
Thai Airways International	(Thailand)
United Airlines	(USA)

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 also operates services on behalf of Cook Islands International (Cook Islands).

Qantas, Australia's international airline, operates a fleet of 31 Boeing 747 and 20 Boeing 767 jet aircraft. Twenty-five per cent of Qantas

Airways Limited was purchased by British Airways on 10 March 1993.

International non-scheduled services.

Passenger and freight charter policies in Australia 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 operations and passenger traffic during 1992-93 and freight traffic during 1992-93 moving into and out of an area which embraces Australia and Norfolk Island are shown in tables 21.25 and 21.26. These figures do not include traffic between Australia and Norfolk Island. Statistics of the operations of Australia's regular overseas services include all stages of Qantas flights linking Australia with overseas countries.

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 1993, the Ansett group's fleet consisted of 12 Airbus A320s, 5 Boeing 767-200s, 5 Boeing 727-200s, 16 Boeing 737-300s, 5 Fokker F28-1000s, 2 Fokker F28-3000s, 7 Fokker F28-4000s, 5 Fokker F50's and 6 British Aerospace 146-200s.

Australian Airlines (owned by Qantas Ltd) operates a fleet of 4 Airbus A300s, 16 Boeing 737-300s and 15 Boeing 737-400s.

Australian Airlink (a fully owned subsidiary of Australian Airlines) operates four British Aerospace 146-100 series aircraft on routes previously serviced by Australian Airlines.

Eastwest Airlines operated a fleet of one Boeing 727-200s and six British Aerospace 146-300s.

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

Regional services. At 31 December 1992, 49 regional operators provided regular public transport air services to approximately 220 ports in Australia.

The aircraft types used by regional operators are predominantly in the six to nine seats

category, such as the Piper PA31 and Cessna 310, 402 and 404 series. However, an increasing number of larger types utilised include De Havilland Canada Twin Otter and Dash 8, Embraer Bandeirante and Brasilia, Shorts 330 and 360, the SAAB 340 and the Metroliner. During 1992-93, regional operators carried an estimated 2.3 million passengers.

Scheduled domestic air services. Statistics of all regular domestic airline services and the number of domestic airline passengers passing through airports are set out in tables 21.27 and 21.28.

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 over 50 per cent of general aviation hours flown. Charter operations involve the use of aircraft in non-scheduled operations for the carriage of passengers and cargo for hire or reward.

Aerodromes. At 30 June 1992, there were 395 licensed aerodromes in Australia and its Territories of which 11 were international airports. The majority of licensed airports were owned and operated by local councils, State government departments and private companies. The remaining 65 airports were owned and operated by the Federal Airports Corporation, the Department of Defence or the Department of Transport and Communications.

Air transport registrations and licences in force in Australia. At 30 June 1993, there were 9,321 aircraft registered in Australia. At the same time there were 35,135 current aeroplane pilot licence holders, including 20,811 private pilots, 8,033 commercial and senior commercial pilots and 5,261 air transport pilots.

In addition, there were 1,911 current helicopter pilot licence holders of which 369 were private pilots, 1,588 commercial and senior commercial pilots and 320 air transport pilots. There were also 67 commercial balloon, 867 flight engineer and 14 navigator licences in force.

21.25 SCHEDULED INTERNATIONAL AIRLINE TRAFFIC TO AND FROM AUSTRALIA(a), 1992-93

Type of traffic	Number of flights(b)(c)	Passengers	Freight tonnes	Mail tonnes
Traffic to Australia				
Qantas Airways Limited	8,234	1,941,384	70,132	2,150
Other airlines	17,973	2,961,309	121,369	7,743
All airlines	26,207	4,902,693	191,500	9,893
Traffic from Australia				
Qantas Airways Limited	8,224	1,910,149	87,796	5,111
Other airlines	17,864	2,945,423	153,514	2,169
All airlines	26,088	4,855,572	241,310	7,280

(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.

21.26 OPERATIONS OF AUSTRALIA'S SCHEDULED OVERSEAS AIRLINE SERVICES

		1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
Hours flown	number	126,812	140,172	148,706	163,332	r174,568	188,818
Kilometres flown	'000	98,999	109,102	115,783	127,421	136,533	160,520
Passengers							
Embarkations	number	3,612,197	3,947,544	4,078,669	3,880,533	4,468,149	5,222,783
Passenger-kilometres	'000	24,535,745	26,516,771	27,054,999	26,774,074	28,396,869	33,189,062
Freight							
Tonnes uplifted	tonnes	119,202	130,635	146,937	155,638	172,790	197,249
Tonne-kilometres	'000	855,260	929,458	1,072,999	1,131,729	1,140,519	1,269,456
Mail							
Tonnes uplifted	tonnes	5,858	5,988	5,963	6,992	8,324	8,737
Tonne-kilometres	'000	57,946	61,049	59,398	75,110	70,488	73,442

Source: Department of Transport.

21.27 DOMESTIC AIRLINE ACTIVITY

Domestic airlines	1988-89	r1989-90	r1990-91	1991-92	1992-93
Domestic airlines					
Passengers carried (thousands)(a)	15,133.2	10,401.9	14,753.3	18,490.2	18,577.6
Passenger kilometres performed (millions)	13,742.8	9,997.1	14,516.0	19,081.6	18,996.3
Revenue passenger load factor (per cent)	76.3	72.2	70.8	78.4	76.7
Cargo tonnes (thousands)(b)	176.6	99.0	139.8	138.1	144.1
Cargo tonnes kilometres (millions)(b)	161.6	93.9	141.0	156.3	170.9
Total tonnes kilometres (millions)	1,398.4	993.6	1,447.4	1,873.7	1,880.6
Revenue weight load factor (per cent)	63.7	59.4	57.0	61.3	60.2
Hours flown (thousands)	290.3	192.9	281.7	336.8	356.5
Aircraft movements (thousands)	420.0	256.4	375.0	427.3	448.8
Regional airlines(c)					
Passenger (thousands)	1,330.6	1,493.9	1,793.6	2,049.7	p2,325
Cargo tonnes (thousands)(b)	4	2.7	2.9	2.8	p2.6

(a) Measurement has been changed to passengers on board and adjusted for previous years. (b) Includes freight and mail. (c) Data has been revised.

Source: Department of Transport.

21.28 SCHEDULED MAJOR DOMESTIC AIRLINES PASSENGER UPLIFTS AND DISCHARGES AT PRINCIPAL AUSTRALIAN AIRPORTS(a)

	1987-88	1988-89	1989-90(b)	1990-91	1991-92	1992-93
Sydney	7,388,889	7,582,179	5,518,578	7,638,310,	10,003,034	10,042,329
Melbourne	5,831,588	6,003,133	4,643,905	6,421,644	8,146,380	8,111,797
Brisbane	3,361,044	3,650,719	2,702,822	3,916,012	5,078,712	5,139,481
Adelaide	1,845,523	1,889,251	1,418,577	2,023,096	2,558,179	2,552,132
Perth	1,437,425	1,479,853	1,056,551	1,563,444	2,083,363	1,943,425
Canberra	1,104,623	1,080,215	677,200	1,058,602	1,267,842	1,260,161
Coolangatta	1,113,136	1,251,040	646,451	1,075,806	1,478,099	1,543,469
Cairns	778,114	824,952	545,964	827,926	1,184,103	1,183,958
Hobart	512,490	519,405	430,041	566,437	666,523	689,123
Townsville(c)	932,711	824,674	379,769	418,486	379,771	446,332
Launceston(d)	579,800	553,579	269,664	347,980	401,949	402,138
Darwin	371,470	390,154	304,927	404,861	452,641	478,715

(a) The unit of measurement is passengers on board. (b) Data is severely affected by Pilots' dispute. (c) Prior to August 1989, Townsville formed part of the major route to/from Cairns, accounting for the large number of passengers transiting this port. Services are now more direct, with far less transit activity at Townsville airport. (d) Launceston data was inflated with transiting passengers on the Hobart route.

Source: Department of Transport.

Accidents and casualties

21.29 AIR TRANSPORT: NUMBER OF ACCIDENTS AND FATALITIES

	Accidents	Fatalities
1987	299	44
1988	325	70
1989	348	83
1990	344	81
1991	323	54
1992	310	61

Source: Department of Transport.

GOVERNMENT TRANSPORT ORGANISATIONS

General

The Australian Transport Advisory Council comprises Commonwealth, State and Territory ministers responsible for transport, roads and marine and ports matters. The New Zealand and the Papua New Guinea Ministers for Transport are also represented on the Council as observers.

The Council meets bi-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.

The Australian Road Transport

Advisory 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.

The Bureau of Transport and

Communications Economics 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, 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.

The Australian Road Research Board

(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.

ARRB provides an information service to many external customers — government, industry, educational and research organisations and the general public. The service is supported by ARRB research staff, an extensive library, and an information network encompassing access to worldwide electronic databases and a network of contacts, both in Australia and abroad.

National Road Transport Commission was established as the result of the Special Premiers Conference in 1991. The principles behind its establishment were that there should be improvements in road safety and transport efficiency and reductions in the cost of the administration of road transport.

The Commission has responsibility for road vehicles, their drivers, other road users and related matters.

Water

ANL Limited was incorporated as a public company on 1 July 1989 taking over all the assets, liabilities and operations of the former Australian Shipping Commission. All shares in ANL Limited are currently held by the Commonwealth Government.

ANL is an integrated international and domestic shipping operation participating in both blue-water and shore-based shipping activities, either in its own right or in joint venture arrangements with private sector interests. ANL has a primary focus on liner (container) trades, both domestic and

international; domestic bulk trades; and through a 50 per cent shareholding in National Terminals (Australia) Ltd, container terminal activities in Australia. The geographic focus of ANL's activities is in the Australasian region.

As at 30 June 1993, ANL Ltd fleet consisted of 14 vessels. The overseas fleet comprised 7 liner vessels totalling 175,967 DWT. The coastal fleet comprised 4 bulk carriers totalling 217,033 DWT, and 3 liner vessels totalling 20,731 DWT.

Australian Maritime Safety Authority is a government business enterprise established under the *Australian Maritime Safety Authority Act 1990* on 1 January 1991. It is responsible for maritime safety regulatory activities in Australia and provision of the Australian marine navigational aids network. It operates the Marine Rescue Co-ordination Centre, which coordinates major maritime search and rescue activities in Australian waters. It is responsible for oil pollution prevention and clean up, and for the registration of Australian vessels.

Air

The Civil Aviation Authority, an independent government business enterprise established under the *Civil Aviation Act 1988*, is responsible for the safety regulation of civil aviation in Australia and of Australian aircraft operating overseas. 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.

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 169 members (at 30 June 1993) 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 services agreements with 33 countries at 30 June 1992. Thirty of these agreements have full treaty status while Hong Kong, Switzerland and Zimbabwe, will be upgraded to treaty status when draft agreements are ratified. Australia also has eight air service arrangements which are of less than treaty status. These agreements and arrangements enable airlines of both Australia and its bilateral partners to operate a network of international air services to and from Australia.

Multiple designation and the International Air Services Commission. In February 1992 the Prime Minister announced a range of reforms to aviation policy including the introduction of multiple designation of Australia's international air services, enabling Australian carriers in addition to Qantas to operate international services. To develop the necessary legislative and administrative framework to implement multiple designation, including a mechanism for the allocation of international aviation capacity and route entitlements, a detailed analysis of overseas practices and views of major Australian carriers was undertaken.

As a result, the International Air Services Commission was established on 1 July 1992, having the role of making determinations on the allocation of international aviation capacity and route entitlements among Australia's international airlines. The Commission determines the merits of competing claims according to a strict public benefit test laid down by the Government. This test includes matters such as tourism and trade, route economies, competition policy benefits and broader national interests. The Commission reports separately to Parliament.

COMMUNICATIONS

Radio and television broadcasting

Radio and television broadcasting falls within the jurisdiction of the Commonwealth Minister for Communications and the Arts. Commonwealth bodies which are involved include the Australian and Overseas Telecommunications Corporation (AOTC), the Australian Broadcasting Corporation (ABC), the Special Broadcasting Service (SBS), the Australian Broadcasting Authority (ABA), the Department of Communications and the Arts, and the Australian Telecommunications Authority AUSTEL.

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;
- public radio services operated by incorporated associations under licence on a non-profit basis; and
- Parliamentary radio service to State capitals, Canberra and Newcastle.

National Transmission Agency (NTA), which is attached to the Department of Communications and the Arts, is responsible for the design, construction, operation and maintenance of a complex network of transmission facilities used primarily for the transmission of the programs for the ABC and the SBS throughout Australia. In regional and remote areas, commercial licensees make extensive use of the NTA's transmission facilities to deliver their services, as do radiocommunications operators.

The Australian Broadcasting

Corporation (ABC) is an independent statutory corporation receiving 90 per cent of its funding from Commonwealth Parliament appropriations and the remainder from sales and other revenue.

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 that encourage awareness of Australia and an international understanding of Australian attitudes on world affairs.

At 30 June 1993, the ABC provided:

- five main radio services across Australia on over 528 transmitters which include Metropolitan Radio, Regional Radio, Radio National, ABC-FM, and the Triple J youth radio network;
- a national television service on over 546 transmitters;
- Radio Australia, the ABC's international broadcasting service;
- an international office network so that an Australian perspective is available on major world events; and
- six State Symphony Orchestras.

Television and radio programs produced by the ABC are broadcast through transmitters operated by the National Transmission Agency.

International broadcasting service. The international short-wave 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 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 (SBS) was established by the Commonwealth Government on 1 January 1978 and provide multilingual radio and television services.

Commercial radio and television services. At 30 June 1993, there were 166 commercial radio services (including four supplementary services) and 44 commercial television services in operation in Australia.

At 30 June 1993, there were three remote commercial television services licensed, 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. As at 30 June 1993, there were 44 commercial television broadcasting licences, 166 commercial radio broadcasting licences and 211 community broadcasting licences. The community broadcasting licences include 82 licences for remote Aboriginal community services.

21.30 AUTHORISED BROADCASTING FACILITIES

Type and sector	Number of transmitters 30 June 1991	Number of transmitters 30 June 1992	Number of transmitters 30 June 1993
ABC television	474	535	546
ABC AM radio	108	108	108
ABC FM radio	288	341	420
SBS television	37	56	59
SBS AM radio	4	4	4
Commercial television	563	777	815
Commercial AM radio	140	(a)126	127
Commercial FM radio	63	82	84
Community AM radio	10	13	13
Community FM radio	106	111	114
Community television	—	—	—
BRACS FM radio	—	(b)69	69
BRACS television	—	(b)70	71
Narrowcasting radio AM	—	—	2
Narrowcasting radio FM	—	—	(c)280
Narrowcasting television	—	—	6
Total	1,793	2,292	2,718

(a) Decrease is a result of AM to FM conversions. (b) Facilities for the Broadcasting for Remote Aboriginal Communities Scheme were licensed as Limited Licences under the *Broadcasting Act 1942*. BRACS facilities became community broadcasting services under the *Broadcasting Services (Transitional Provisions and Consequential Amendments) Act 1992*. (c) The majority of these services are low-powered (under 1 watt in a residential area, under 10 watts in a non-residential area) tourist information services.

Source: Annual Report, Australian Broadcasting Authority.

The Australian Broadcasting Authority.

From 5 October 1992, the Australian Broadcasting Tribunal was replaced by a new regulatory body, the Australian Broadcasting Authority, established under the Broadcasting Services Act. The Tribunal had been the independent statutory authority established to regulate aspects of commercial and public radio and commercial television in Australia. It was empowered to grant, renew, suspend or revoke licences, to determine program and advertising standards applicable to licensed 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 conducted public inquiries into the granting of licences following the invitation of applications by the Minister.

The Authority subsumed many of the functions of the Tribunal but has wider discretionary powers to support its decisions, and will also assume a significant role in planning of broadcasting services previously undertaken by the Department of Communications and the Arts on behalf of the Minister.

Radiocommunication stations

At 30 June 1993, there were 928,229 radiocommunication stations authorised for operation in Australia and its territories. Of

these, 328,006 were associated with land mobile services, 57,649 were fixed services, 77,371 were for marine services, and 397,176 were citizen band (CB) stations.

Telecommunications services within Australia

Telecom Australia and OTC were merged on 1 February 1992 to form the Australian and Overseas Telecommunications Corporation (AOTC). Telecom was Australia's domestic carrier (the Australian Telecommunications Corporation), supplying telecommunications services within Australia; OTC provided Australia's links with the world, and was a founding member of both the International Telecommunications Satellite Organisation, and the International Maritime Satellite Organisation. AOTC continues to carry out these functions, in competition with a new telecommunications carrier, Optus Communications Pty Ltd.

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.

21.31 AUSTRALIAN POSTAL CORPORATION PROFIT AND LOSS STATEMENT
YEARS ENDING 30 JUNE(a)
(\$'000)

	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
Revenue						
Mail services	1,501,487	1,605,998	1,779,573	1,966,639	2,099,880	2,211,182
Philatelic sales	n.a.	38,871	41,474	41,471	41,424	38,614
Commission on agency services	89,803	88,031	79,780	89,900	91,487	99,767
Postal money order services	13,242	16,792	19,029	21,647	25,768	24,772
Other revenue	51,847	61,516	60,617	63,807	51,527	46,183
Total	1,656,379	1,811,208	1,980,473	2,183,464	2,309,835	2,420,518
Expenditure						
Labour and related expenditure	1,131,190	1,235,530	1,324,254	1,323,253	1,331,501	1,346,376
Carriage of mail by contractors	132,832	151,131	158,311	172,222	172,270	167,292
Accommodation	n.a.	79,334	103,601	124,081	120,802	114,921
Stores and supplies	n.a.	101,801	112,055	106,095	119,177	119,689
Depreciation	(b)38,454	34,466	44,947	54,337	69,534	92,915
Interest	(b)n.a.	5,282	6,246	2,440	3,527	2,641
Other operating expenditure	298,955	142,051	160,976	254,857	317,087	330,317
Total	1,601,431	1,749,595	1,910,390	2,037,285	2,133,898	2,174,151
Operating profit	54,948	61,613	70,083	146,179	175,937	246,367

(a) Does not include appropriations. (b) Depreciation and Interest are combined for 1987-88 data.

Source: Australian Postal Corporation.

21.32 AUSTRALIAN POSTAL CORPORATION: PERSONS ENGAGED IN PROVIDING POSTAL SERVICES AT 30 JUNE 1992 AND 1993

	HQ	1993						1992 Aust.
		NSW (incl. ACT)	Vic. and Tas.	Qld	SA (incl. NT)	WA	Aust.	
Official staff(a)								
Full-time permanent	546	12,209	9,162	3,991	2,413	2,288	30,609	32,332
Full-time temporary	6	486	479	226	48	80	1,325	1,273
Part-time	2	1,572	1,084	596	350	395	3,999	3,979
Other staff(b)	—	2,623	2,348	1,686	664	611	7,932	8,126
Total	554	16,890	13,073	6,499	3,475	3,374	43,865	45,710

(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.

**21.33 AUSTRALIAN POSTAL CORPORATION: MAIL DELIVERY NETWORK
AND POST OFFICES AT 30 JUNE 1992 AND 1993
(number)**

<i>Number</i>	1993						1992
	<i>NSW (incl. ACT)</i>	<i>Vic. & Tas.</i>	<i>Qld</i>	<i>WA</i>	<i>SA (incl. NT)</i>	<i>Aust.</i>	<i>Aust.</i>
Households receiving mail	2,315,177	1,819,742	1,166,804	636,381	625,767	6,563,871	6,448,969
Businesses receiving mail	271,719	192,141	125,561	65,749	63,799	718,969	698,910
Post offices	488	346	225	124	118	1,301	1,348
Agencies	834	979	488	269	362	2,932	2,977
Total post offices and agencies	1,322	1,325	713	393	480	4,233	4,325

Source: Australian Postal Corporation.

**21.34 AUSTRALIAN POSTAL CORPORATION: TOTAL POSTAL ARTICLES HANDLED
(million)**

<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>
1988	3,342.2	142.3	177.4	3,662.0
1989	3,564.4	157.6	194.0	3,916.0
1990	3,665.3	171.3	213.7	4,050.3
1991	3,721.9	176.7	219.9	4,118.5
1992	3,733.1	173.8	213.0	4,119.9
1993	3,793.8	171.3	201.1	4,166.2

Source: Australian Postal Corporation.

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Information additional to that contained in ABS publications is available in the annual reports and other statements of the Departments of Transport and Communications and the Arts, 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*.

