# 11 Transport and Communication



# TRANSPORT INTRODUCTION

In 1988-89 the Transport, storage, and communication industry sector contributed 7.8 per cent of the total Victorian Gross Domestic Product (GDP) at factor cost. The contribution of this sector has remained relatively stationary since 1983-84.

In 1988-89, Victoria's percentage share of the national GDP at factor cost for the Transport, storage, and communication industry sector was 25.0 per cent. There has been a gradual increase from the 23.3 per cent recorded in 1983-84.

TABLE 11.1 TRANSPORT, STORAGE, AND COMMUNICATION INDUSTRY - GROSS DOMESTIC PRODUCT AT FACTOR COST

	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
Australia (\$m)	r14,834	r16,721	r18,460	r20,583	23,234	25,271
Victoria (\$m)	r3,459	r3,876	r4,370	r5,102	5,858	6,314
Victoria as a percentage		-10.3,	17.00			
of Australia	r23.3	r23.2	r23.7	r24.8	25.2	25.0

### Metropolitan transport

Since 1983, the Metropolitan Transit Authority (MTA) has been responsible for the operations of the Melbourne metropolitan public transport system which utilises trains, trams, and buses. In 1988-89, the total number of vehicles in use had increased by 83 from the 1986-87 figure of 2078; the number of passengers had increased by 5.0 per cent to 306 million from the 1986-87 figure of 291 million, and

TABLE 11.2 METROPOLITAN TRANSIT AUTHORITY OPERATIONS AND SERVICES, VICTORIA

Particulars	1986-87	1987-88	1988-89
Vehicles in service -	7/3134.55		
Rail (excluding trams)	162	146	152
Tram	627	620	633
Government bus	323	335	339
Private bus	966	1000	1,037
Total	2,078	2,101	2,161
Passengers - boarding (millions)	291	296	306
Fares revenue (Sm)	176	187	189
Subsidies provided by Victorian Government (\$m)	271	329	353
Net annual deficit (\$m)	48	69	108

Source: Annual Reports of Melbourne Transit Authority





# CONSTRUCTION

Above - Earthworks in progress for the Hume Highway bypass of Euroa. (VicRoads)

Below - Construction work at the Monash Medical Centre extensions. (Ministry of Housing and Construction)





# TRANSPORT AND COMMUNICATION

Above - An accoustics testing laboratory.

Left - Computer software inspection control (Department of Industry and Economic Planning)

Below - Locomotive N-46 on the Bendigo Passenger Train at Macedon. (V/Line State Transport Authority)



fares revenue had increased by 7.0 per cent from \$176m in 1986-87 to \$189m. The net annual deficit in 1988-89 was \$108m, a 56.0 per cent increase on the \$69m in 1987-88.

#### Rail and Bus

Over the period 1983-84 to 1988-89, there was a 12.0 per cent decrease in the average number of kilometres open for rail traffic. Goods train traffic kilometres have also decreased, with the 1988-89 number (5.8m) being 37.0 per cent less than in 1983-84 (9.2m). The number of suburban passenger journeys increased steadily from 83.5 million in 1983-84 to 93.5 million in 1988-89. Country and interstate passenger journeys have fluctuated in number over the period but at 5.8 million in 1988-89 they were 47.4 per cent more than in 1983-84 (4.0 million).

TABLE 11.3 RAILWAYS TRAFFIC, EXCLUDING ROAD MOTOR SERVICES, VICTORIA

Traffic	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
Average number of kilometres						
open for traffic	5,760	5,760	r5,372	5,257	5,150	5,047
			('000)	ı		
Traffic train kilometres -			,			
Country and interstate	7,552	7,047	7,857	7,507	7,045	7,225
Suburban	14,483	13,983	14,200	13,600	13,800	13,800
Goods	9,170	9,258	7,752	7,292	6,590	5,801
Total	31,205	30,288	29,809	28,399	27,435	26,826
Passenger journeys -						
Country and interstate	3,952	4,293	4,963	5,222	5,478	5,825
Suburban (a)	83,500	86,300	89,300	92,600	88,609	93,500
Total	87,452	90,593	94,263	97,822	94,087	99,325

<sup>(</sup>a) These figures exlude suburban rail journeys made on multi-modal tickets purchased on trams or buses. Source: Ministry of Transport, Victoria.

TABLE 11.4 COUNTRY AND PROVINCIAL ROAD PASSENGER SERVICES, VICTORIA

	(000)		
Particulars	1986-87	1987-88	1988-89
	PRIVATE BUS SERVICE	S	
Country services -			
Passengers	3,763	3,852	3,938
Bus kilometres	8,565	8,968	8,744
Revenue (\$)	4,858	4,789	5,067
Subsidy (\$)	3,280	3,447	3,706
Urban services (a) -			
Passengers	7,410	8,382	8,497
Bus kilometres	5,719	5,837	5,764
Revenue (\$)	3,927	3,808	3,376
Subsidy (\$)	7,550	7,735	8,863
	CONTRACT SERVICES		
Passengers	428	512	459
Bus kilometres	4,043	n.a.	4,302
Contract costs (\$)	3,909	4,419	5,117

<sup>(</sup>a) Covers the Geelong, Ballarat, Bendigo, and La Trobe Valley areas.

Metropolitan Melbourne is served by both Government and private buses. From 1 July 1983, bus services in Victorian country areas and provincial centres came under the control of the State Transport Authority (V/Line). The services are operated by private bus companies, some of which are under contract to V/Line to provide coach services connecting with or extending the rail network.

TABLE 11.5 ROAD CONSTRUCTION AUTHORITY, EXPENDITURE ON ROADS AND BRIDGES, VICTORIA (a)

(2,000)									
Particulars	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89			
State highways -									
Construction	73,475	78,633	81,065	74,527	82,716	94,195			
Maintenance	33,669	33,427	36,921	37,107	41,565	49,910			
Freeways -									
Construction	80,310	94,571	114,498	123,696	100,452	111,283			
Maintenance	8,051	8,627	7,474	10,619	11,933	15,142			
Main roads -	48,197	53,675	55,873	51,865	51,642	59,813			
Construction									
Maintenance	26,141	27,845	28,850	30,969	35,285	39,030			
Unclassified roads -									
Construction	59,225	58,556	60,344	53,578	59,724	48,629			
Maintenance	12,957	13,315	15,558	10,198	10,313	12,460			
Tourist roads -									
Construction	6,024	4,962	6,184	6,155	3,556	2,560			
Maintenance	3,891	4,225	3,996	4,870	5,078	6,110			
Forest roads -									
Construction	1,306	1,358	1,378	1,189	1,423	1,414			
Maintenance	1,725	1,828	1,981	2,163	2,351	2,528			
Rail-over road bridge protection		1000		-	-				
Traffic Facilities Program-works									
expenditure	12,644	14,340	12,953	14,743	7,635	7,515			
Murray River bridges and punts	514	758	142	527	474	653			
Traffic line marking	3,833	3,852	4,023	3,514	4,411	6,797			
Wage Pause Employment Program	1,209	31	-	-	-	-			
Metropolitan street name signing		1	476	703	189	-			
Commonwealth Employment Program	-	78	124	260	-	-			
Total construction	268,537	291,755	319,342	311,010	299,513	317,894			
Total maintenance	86,434	89,267	94,780	95,926	106,525	125,180			
Total other	18,200	19,060	17,718	19,747	12,709	14,965			
Total expenditure-works	373,171	400,082	431,840	426,683	418,747	458,039			

<sup>(</sup>a) Expenditure 1986-87 is on an accrual basis of accounting while previous years are on a/from cash basis.

# Motor Vehicles on Register

There were 2,585,200 motor vehicles on register in Victoria at 30 June 1989, a 10.4 per cent increase on the 2,341,800 at 30 June 1984. The greatest proportionate increases were in rigid trucks and utilities, with increases of 22.6 and 9.9 per cent, respectively. Between 1984 and 1989 the most significant decrease was in panel vans; from 60,400 in 1985 to 49,106 in 1989, a decrease of 18.7 per cent. As a proportion of the Australian total of motor vehicles on register, the Victorian component decreased from 26.5 per cent in 1984 to 22.5 per cent in 1989.

TABLE 11.6 MOTOR VEHICLES ON REGISTER AT 30 JUNE ('000)

Type of vehicle	1984	1985	1986	1987	1988	1989
Motor cars and station wagons	1,859.7	1,936.8	1,972.9	2,010.2	2,064.7	2,076.2
Utilities	133.4	137.8	139.2	142.8	145.4	146.2
Panel vans	60.4	59.0	56.0	57.4	51.5	49.1
Trucks -						
Rigid	168.5	181.1	187.0	193.1	201.7	206.5
Articulated	12.5	13.0	13.3	13.7	13.8	13.1
Other truck type vehicles	12.6	13.0	12.9	13.6	13.7	11.7
Buses	12.9	13.5	13.8	14.1	14.3	13.9
Motor cycles	81.7	83.4	81.8	84.5	70.1	68.1
Total - Victoria	2,341.8	2,437.7	2,476.8	2,529.4	2,575.2	2,585.2
Total - Australia	8,832.8	9,118.3	9,290.5	9,374.3	9,544.4	11,485.3
Victoria as a		,				
percentage of Australia	26.5	26.7	26.7	27.0	26.9	22.5

#### Drivers' and Riders' Licences

There were 149,454 riders' licences in force at the end of June 1990, an increase of 33 per cent on the 112,532 at the end of June 1985. Motor cycles on register at the end of June 1989 were 68,100 in number, which represented an decrease of 17.0 per cent on the 1984 figure of 81,700. In contrast, drivers' licences in force at the end of June 1990 numbered 2,725,835, an increase of 16.5 per cent on the 2,338,907 in 1984. Motor vehicles (excluding motor cycles) on register increased by 11.4 per cent from 2,260,100 in 1984 to 2,517,100 in 1989.

TABLE 11.7 DRIVERS' AND RIDERS' LICENCES (a) IN FORCE AT 30 JUNE, VICTORIA

Type of Licence	1985	1986	1987	1988	1989	1990
Drivers'	2,338,907	2,390,888	2,472,057	2,566,312	2,650,700	2,725,835
Riders'	112,532	109,557	118,301	130,394	140,612	149,454
Total	2,451,439	2,500,445	2,590,358	2,696,706	2,791,312	2,875,289

(a) A licence holder may hold both a drivers' and a riders' licence and be counted in both categories.

TABLE 11.8 ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES, NUMBER OF PERSONS KILLED OR INJURED, VICTORIA

					Per 100,000 of mean population				
Period	Fatal accidents	Total accidents(a)	Persons killed	Persons injured(b)	Fatal accidents	Injury accidents	Persons killed	Persons injured(b)	
1983	610	6,884	664	8,039	15.1	155.4	16.5	199.2	
1984	584	6,965	657	8,264	14.3	156.5	16.1	202.6	
1985	605	7,221	683	8,642	14.7	160.5	16.6	209.7	
1986	610	7,348	668	8,866	14.7	161.9	16.1	213.1	
1987	626	8,246	705	9,892	14.9	181.1	16.8	235.0	
1988	627	8,427	701	10,333	14.7	183.0	16.4	242.4	

<sup>(</sup>a) Resulting in death or in one or more injured persons being admitted to hospital.

<sup>(</sup>b) Admitted to hospital.

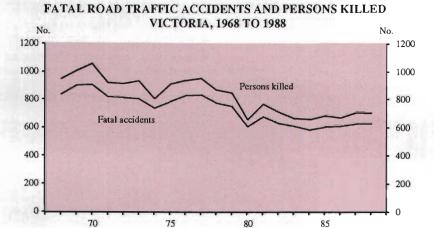
TABLE 11.9 ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES, VICTORIA AS A PERCENTAGE OF AUSTRALIA

Particulars		1986	1987	1988
Accidents -	Fatal	23.7	25.2	24.4
	Serious injury (a)	29.7	33.1	34.2
Casualties -	Persons killed	23.1	25.4	24.3
	Persons admitted to hospital	30.4	33.3	34.8
Estimated me	ean resident population	26.0	25.9	25.7
	es on register at 30 June	26.7	27.0	26.9

<sup>(</sup>a) A non-fatal road vehicle accident resulting in one or more persons being admitted to hospital.

TABLE 11.10 ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES, TYPE OF ROAD USER KILLED OR INJURED, VICTORIA

	1986		1987		1988	
Type of road user	Killed	Injured	Killed	Injured	Killed	Injured
Drivers of motor vehicles	280	3,759	309	4,301	284	4,546
Motor cyclists	67	909	64	1,027	58	928
Passengers (any type)	165	2,658	170	2,789	187	3,012
Pedestrians	139	1,095	136	1,159	154	1,194
Pedal cyclists	16	400	25	549	17	602
Other	1	45	1	67	1	51
Total	668	8,866	705	9,892	701	10,333



#### Air transport

In 1989 there were 4.6 million passengers embarking and disembarking at Melbourne (Tullamarine) airport from 47,954 domestic aircraft movements. Because of the domestic airline pilots' dispute, the number of domestic passenger movements was down 23.4 per cent on the 1988 peak of 6.034 million while domestic aircraft movements showed an even greater decrease of 30.7 per cent. Relative to 1984, domestic passenger movements in 1989 fell by 0.5 per cent, with aircraft movements down by a significant 16.5 per cent. International air transport was relatively unaffected, with 1989 passenger and aircraft movements showing substantial increases over 1984 of 56.2 per cent and 39.0 per cent respectively.

TABLE 11.11 MELBOURNE (TULLAMARINE) AIRPORT

Particulars	1984	1985	1986	1987	1988	1989
Domestic aircraft movements	57,437	60,570	63,640	r67,314	69,227	47,954
Domestic passengers						
embarked ('000)	2,322	2,519	2,606	r2,785	3,022	2,302
Domestic passengers						
disembarked ('000)	2,324	2,521	2,614	2,785	3,012	2,321
International aircraft movements	10,575	11,359	12,691	r13,619	13,864	14,497
Passengers arriving from/departing						
to overseas	1,043,546 1	,156,681	1,261,913	r1,418,691	r1,529,270	1,629,931

Source: Department of Transport and Communications.

TABLE 11.12 REGULAR DOMESTIC INTERSTATE AIR SERVICES TERMINATING IN VICTORIA

Particulars	1984(a)	1985	1986	1987	1988	1989
Kilometres flown ('000)	43,752	46,577	49,313	52,254	56,281	43,527
Passenger kilometres ('000)	3,905,837	4,254,598	4,472,940	4,812,800	5,318,418	4,162,577
Freight -						
Tonnes	99,455	102,961	94,121	90,132	99,005	68,481
Tonne kilometres ('000)	82,511	84,565	80,001	77,410	79,945	55,152
Mail -						
Tonnes	7,954	8,151	8,054	8,906	10,474	7,577
Tonne kilometres ('000)	7,342	7,779	8,054	8,760	9,901	7,380

<sup>(</sup>a) Not comparable with previous series. From 1984, the statistics are based on traffic on board direct domestic interstate flights to or from Tullamarine and Essendon Airports.

Source: Department of Transport and Communications.

#### COMMUNICATIONS

In 1989 there were 2.9 million telephone installations in Victoria, a ratio of 661 per 1,000 of the population. This ratio, which excluded switchboards and switching equipment, has increased from 579 in 1984. The number of public telephones in 1989 was 6,500, an increase of 0.2 per cent from 6,487 in 1984, but a decrease of 5.9 per cent when compared with the 6910 recorded in 1988.

There were 942 million standard articles posted in Victoria and received from overseas in Victoria in 1988-89. This was 35.0 per cent more than in 1983-84 (698 million). The corresponding figure for registered articles (excluding registered parcels) in 1988-89 was 1.8 million, a decrease of 9.0 per cent on 1983-84 (2.0 million).

The number of television stations has decreased by one in 1989, however air radio broadcasting stations increased by 3 over the previous year.

TABLE 11.13 TELEPHONE SERVICES AT 30 JUNE, VICTORIA

Particulars	1984	1985	1986	1987	1988	1989
Telephone exchanges	1,103	1,167	1,096	1,097	1,099	1,299
Public telephones	6,487	6,556	6,084	6,920	6,910	6,500
Services in operation ('000)	1,593	1,671	1,740	1,839	1,919	1,950
Instruments connected (a) ('000)	2,358	2,446	2,554	2,656	2,772	2,850
Instruments per 1,000 of population	579	593	611	631	653	661

<sup>(</sup>a) Telephone installations excluding switchboards and switching equipment.

Source: Australian Telecommunications Commission.

TABLE 11.14 POSTAL ARTICLES HANDLED BY AUSTRALIA POST, VICTORIA

(*000)								
Period	Standard articles	Registered articles (except parcels)	Non-standard articles	Parcels (including registered,				
	POSTED IN VICTOR	IA FOR DELIVERY W	ITHIN AUSTRALI	IA				
1983-84	622,338	687	110,860	7,962				
1984-85	659,247	700	122,076	8,466				
1985-86	676,452	662	133,487	9,295				
1986-87	722,664	375	142,681	9,401				
1987-88	792,202	311	142,822	9,419				
1988-89	863,060	333	146.081	9,697				
white is		FROM OVERSEAS						
.000.01								
1983-84	75,171	1,234	18,705	1,258				
1984-85	71,033	1,227	20,466	1,360				
1985-86	71,920	1,183	20,012	1,219				
1986-87	71,900	1,309	20,453	1,385				
1987-88	72,614	1,390	21,881	1,396				
1988-89	78,632	1,428	25,462	1,389				
TOTAL PO	OSTED IN VICTORIA	AND RECEIVED FRO	M OVERSEAS IN	VICTORIA				
1983-84	697,509	1,921	129,565	9,220				
1984-85	730,280	1,927	142,542	9,826				
1985-86	748,372	1,845	153,499	10,514				
1986-87	794,564	1,684	163,134	10,786				
1987-88	864,816	1,701	164,703	10,815				
1988-89	941,692	1,761	171,543	11,086				

Source: Australian Postal Commission

TABLE 11.15 BROADCAST AND TELEVISION STATIONS LICENSED AT 30 JUNE, VICTORIA

Particulars	1984	1985	1986	1987	1988	1989
Broadcasting stations -				_		
Commercial	24	24	24	24	24	24
National	13	15	15	16	16	16
Special Broadcasting Service	1	1	1	1	1	1
Public	7	7	8	11	11	14
Total	45	47	48	52	52	55
Television stations -						
Commercial	9	9	9	9	9	8
National	9	9	9	9	9	9
Special Broadcasting Service	1	1	1	1	1	1
Total	19	19	19	19	19	18

Source: Australian Broadcasting Tribunal.

#### REFERENCES

#### Data sources

The latest year for which ABS estimates are available for State Gross Domestic Product at factor cost by industry is 1983-84. For subsequent years, use has been made of estimates for gross operating surplus prepared by the Victorian Department of Management and Budget.

The statistics on Metropolitan Transport, railways, country and provincial road passengers services, and expenditure on roads and bridges have been obtained through the Ministry of Transport, Victoria: lengths of roads and streets is based on information supplied by the Road Construction Authority and municipal councils. Motor vehicles statistics were obtained from the Road Traffic Authority, Victoria, and the Commonwealth Department of Administrative Services (for Australian Government owned vehicles). Drivers' and riders' licences figures were provided by the Road Traffic Authority, Victoria.

Road traffic accident statistics are compiled by the ABS from data provided by the Road Traffic Authority, Victoria. The statistics on air transport were obtained from the Commonwealth Department of Transport and Communications; telephone services statistics from the Australian Telecommunications Commission; postal statistics from the Australian Postal Commission and the numbers of broadcast and television stations from the Australian Broadcasting Tribunal.

Tourist accommodation statistics are derived from the quarterly ABS Accommodation Survey. The survey covers hotels, motels and guest houses with facilities, short and long term caravan parks; and from the September quarter 1987, holiday flats, units, and houses.

#### ABS publications

Tourist Accommodation, Australia (8635.0)

Tourist Accommodation, Victoria (8635.2)

Tourist Accommodation, Four and Five Star Hotels and Motels, Victoria (8646.2)

Shipping and Air Cargo Commodity Statistics, Australia (9206.0)

Motor Vehicle Registrations, Australia (monthly) (9303.0)

Motor Vehicle Registrations, Victoria (9303.2)

Motor Vehicle Registrations, Australia (annual) (9304.0)

Motor Vehicle Census, Australia (9309.0)

Road Traffic Accidents Involving Fatalities, Australia (9401.0)

Road Traffic Accidents Involving Casualties (Admissions to Hospitals), Australia (9405.0)

Road Traffic Accidents Involving Casualties, Victoria (9406.2)