

16 Infrastructure

OVERVIEW

The initial sections of this chapter provide information relating to the transport industry: road, rail, air and sea, including data on public transport, road traffic accidents, motor vehicle registrations and drivers' and riders' licences.

The latter part of the chapter deals with communications and energy with respect to communications technology and the usage of household computers, mobile phones, postal and media services, and the supply of electricity and gas reticulation.

TRANSPORT

In Victoria, an extensive transport infrastructure is supported by both Government and business. Road, rail, air and sea transport modes are all critical to the movement of freight and people for commercial and domestic purposes.

Road network

A comprehensive road and freeway network is maintained by the Victorian Roads Corporation (VicRoads) across Victoria. National Highways within Victoria are the Hume Freeway from Melbourne to the New South Wales border at the Murray River, the Western Highway from Melbourne to the South Australian border at Serviceton, the Sturt Highway between the South Australian border and Mildura, and the Goulburn Valley Highway, from its junction with the Hume Freeway near Seymour to the NSW border.

The National Highway system is fully funded by the Commonwealth Government. A lower level of federal funding is available for projects on roads of National importance, such as the Calder Highway from Melbourne to Mildura.

16.1 VICTORIAN ROADS

Road type	Kilometres
Declared roads (at 30 June 1996) –	
National Highways	1 005
State highways and freeways	6 742
Main Roads and tourists roads	14 179
Forest roads	232
Total declared roads	22 158
Other roads (at 30 June 1995)	
Sealed roads	49 188
Formed and surfaced roads	49 123
Natural surface	31 212
Total other roads	129 523
Total roads	151 681

Source: VicRoads, Information Services Department; Victoria Grants Commission.

Highway upgrades include a three-stage by-pass of Ballarat on the Western Highway, with through traffic now by-passing Ballarat, and a freeway standard thoroughfare from the western suburbs of Melbourne to beyond Ballarat. Further road duplication of the Princes Highway east of Melbourne has been opened and more construction work is underway.

In the metropolitan area, major bridgeworks on the South Eastern Arterial road are nearing completion and in the eastern suburbs, a major extension of the Eastern Freeway through to Springvale Road is underway.

During 1997, VicRoads will complete the Western Ring Road, a primary by-pass route between the Princes and West Gate Freeways in the south-western suburbs and the Hume Freeway in the northern suburbs. Major engineering and bridging works are involved in this project which facilitates more efficient movement of both freight and passenger vehicles between the transport corridors linking Sydney, Adelaide, Melbourne ports, Melbourne airport and the provincial centres to the north and west of the State.

Melbourne City Link

The linking of three of Melbourne's major freeways, including substantial upgrading, is the core of the Melbourne City Link project. This project has been described as the largest engineering project undertaken in Australia since the Snowy Mountains Scheme. There are two main facets to the project; a Western Link, involving upgrading of the southern end of the Tullamarine Freeway and construction of a new, elevated, six-lane freeway connection to the West Gate Freeway. This section incorporates a new 23.5 metre high bridge over the eastern end of the port of Melbourne.

The Southern Link comprises a six-lane freeway connection from the West Gate Freeway to the South Eastern Arterial utilising two tunnels under the Kings Domain and Yarra River. The two tunnels will total five kilometres in length. The South Eastern Arterial will also be upgraded at its western end.

A private consortium has undertaken the contract to develop the Melbourne City Link project under a Build, Own, Operate, and Transfer (BOOT) arrangement with the entire project to be handed back to the Government after 34 years of operation by the consortium. Work on the project commenced during 1996 and is expected to be completed by 2000.

Tolls are planned for users of Melbourne City Link and will be collected using vehicle-mounted transponders, debiting the cost of travel against users' accounts. Day passes or temporary accounts will be available for visitors and other short term users. Tolls will be levied on a sectional basis and will vary by vehicle type.

Motor vehicle registrations and drivers licences

There were a total of 2,799,310 motor vehicles (excluding motor cycles) registered in Victoria on 31 May 1995, an increase of 8,416 since the previous motor vehicle census held on 30 June 1993. There were also 70,570 motor cycles registered on 31 May 1995, a decrease of 3,247 since 30 June 1993. Passenger vehicles, excluding buses, were the largest single category of vehicles registered, with 2,315,310 registered in Victoria at 31 May 1995. This represented 514 passenger vehicles per 1,000 people in Victoria. The average age of passenger vehicles other than buses in Victoria was 10.9 years, compared with the average age of passenger vehicles for Australia of 10.4 years.

16.2 DRIVER'S AND RIDER'S LICENCES, VICTORIA, 30 JUNE

Type of licence	1991	1992	1993	1994	1995	1996
Driver's	2 785 753	2 826 735	2 855 904	2 873 252	2 894 132	2 928 250
Rider's	157 916	165 825	172 357	174 747	179 080	186 154
Total	2 943 669	2 922 560	3 028 261	3 047 999	3 073 212	3 114 404

Note: Licence holders may hold both a driver's and a rider's licence and be counted in both categories.

Source: VicRoads, Information Services Department

Road accidents

Road traffic fatalities on Victoria's roads have fallen by 24% since 1990, while the number of persons injured fell by 14% over the same period. Strategies designed to curb the incidence of speeding and driving while under the influence of alcohol are given much of the credit for these decreases. Another factor contributing to the reduction in injuries and fatalities has been a concerted attempt to eliminate many accident 'black spots' on Victoria's roads, a project funded by the Transport Accident Corporation (TAC). Television advertisements depicting violent accidents and their aftermath (funded by the TAC), are also believed to have a favourable impact on road users' behaviour.

16.3 ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES, TYPE OF ROAD USER, VICTORIA

Type of road user	1993		1994		1995	
	Killed	Injured	Killed	Injured	Killed	Injured
Drivers of motor vehicles	193	2 660	169	2 684	187	2 905
Motor cyclists	39	714	41	697	41	605
Passengers (any type)	115	1 381	93	1 509	95	1 476
Pedestrians	73	774	64	779	82	808
Pedal cyclists	14	388	11	361	11	308
Other	1	11	—	13	2	12
Total	435	5 928	378	6 043	418	6 114

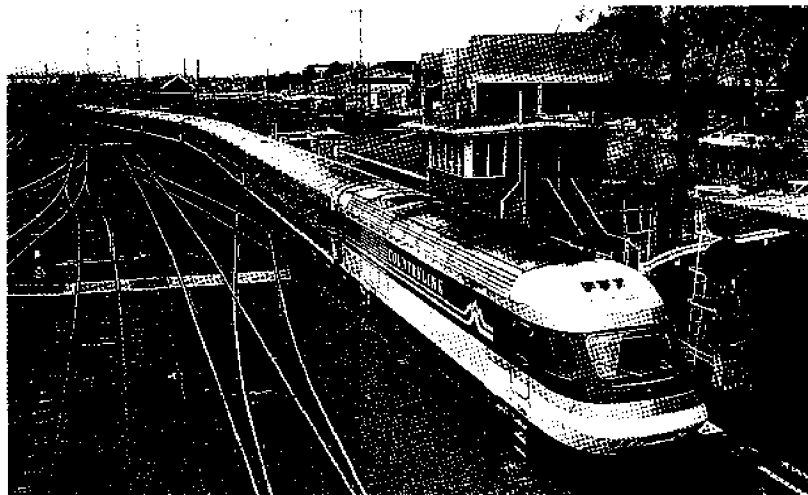
Source: VicRoads, Information Services Department

Public transport

Victoria's Public Transport Corporation through its constituent businesses, Met Trains, Met Tram, Met Bus, V/Line Passenger and V/Line Freight, provide the majority of Victoria's surface public transport. The Met services operate in suburban Melbourne while V/Line services operate in country Victoria.

Buses

Melbourne is serviced by 200 bus routes which operate throughout the entire metropolitan area. A total of 1,300 buses operate, 1,220 are privately owned and 80 are operated by Met Bus. The metropolitan bus network primarily acts as a connecting and feeder bus system to the rail and tram networks and to suburban shopping centres.



Bus services also operate in major urban centres and throughout country Victoria. A total of 300 buses provide services to these areas and inter-town services operate on routes which were previously rail connections.

In 1995-96 metropolitan buses travelled 65 million kilometres and carried 94 million passengers. The country Victorian services travelled 11 million kilometres and carried 11.4 million passengers.

Trains

Met Trains and V/Line Passenger provide rail passenger services in metropolitan and country Victoria. Increasing passenger patronage continued the recent trend, with 236.5 million passenger boardings during 1995-96. Metropolitan services carried 229.5 million passengers, a 4.3% increase over 1994-95. Regular services combined with special services resulted in an increase of 900,000 boardings during the four days of the 1996 Australian Grand Prix motor race at Albert Park.

At 30 June 1996, V/Line had a total of 128 locomotives available for traffic and Met trains had 907 Electrical Multiple Unit carriages available for service. Heritage rail services operate at various sites throughout Victoria, including Maldon, Korumburra, and Queenscliffe, with the well known 'Puffing Billy' narrow gauge steam railway located in the Dandenong Ranges at Belgrave, east of Melbourne.

Rail freight

V/Line freight carried a total of 6.88 million tonnes of freight during 1995-96, an increase of 20.3% over the total for the previous year. The major freight categories contributing to the increase were grain (up from 38,308,000 tonnes to 53,658,000 tonnes) and containers (from 11,953,000 tonnes to 17,012,000 tonnes). The recently re-opened container terminal at Tocumwal has provided strong traffic growth. Much of the traffic increase is related to improved rural conditions. Driver-only train operation has been expanded from passenger services to selected freight services, resulting in productivity improvements.

The National Rail Freight Corporation, which was established by the Federal and State Governments, consolidates the interstate rail freight operations of the existing government rail networks. It operates rail freight services over the main interstate rail freight corridors of mainland Australia. In Victoria, this constitutes the standard gauge routes to Sydney and Adelaide and the broad gauge route servicing the steel traffic into and out of Long Island, near Hastings on Westernport Bay.

Trams

Melbourne's tramway and light rail network is the fourth largest in the world and the largest outside Europe. Melbourne is the only Australian city to retain a comprehensive tramway network. The decision made in the 1960s by the Victorian Government to keep trams has been vindicated by the increasing use of the tramway network and the expansions to route mileage undertaken in recent years. Other cities across the world are re-instating trams for both public transport and tourism purposes and trams retired from service on Melbourne streets are seen on some of these lines.

A modern fleet of 472 trams operate on the network of 240 km around Melbourne and suburbs. Refurbished, historic W class trams operate on selected tourist routes. A free city circle route utilising distinctively painted W class trams was commissioned during 1994 and now carries over three million passengers per year. The City Circle tram service was Melbourne's third most visited tourist attraction. Met Trams recorded 21,900,000 vehicle kilometres during 1995-96, carrying 114,150,000 passengers.

Heritage tramways operate for tourism purposes in the provincial centres of Bendigo and Ballarat, based on the remains of tramway services operated until 1971 by the State Electricity Commission. A tramway museum is located at Bylands, north of Melbourne.

Air

Victoria's main airport, Melbourne Airport, is located at Tullamarine, 22 kilometres north-west of the Central Business District of Melbourne. At June 1996, 44 international airlines and 8 domestic airlines were using the airport. Facilities provided by the Federal Airports Corporation at Melbourne Airport include a total of 55 aircraft stands, with 14 for international passenger aircraft and 28 for domestic passenger aircraft. The primary North-South (numbers 16/34) runway is 3,657 metres long with the East-West (09/27) runway measuring 2,286 metres in length. The recently completed extensions to the terminal building provide capacity to handle passenger throughput of up to 1,800 per hour. Aircraft operations are curfew free and aircraft movements reached almost 134,000 in 1995-96, a 4% increase on 1994-95.

Current expansion plans provide for an additional domestic terminal concourse at the northern end of the existing building, maintaining all terminal operations under the one roof. A major expansion of the freight complex located to the south of the passenger terminal is also planned.

The total number of passenger movements through Melbourne Airport in 1995-96 was 12.9 million, an increase of 8% over 1994-95. Freight and mail tonnages also increased. International passenger movements accounted for 2.1 million (16%) of total passenger movements, with domestic passengers representing 10.4 million or 80% and regional passengers 0.5 million, or 4%.

The Area Approach Control Centre at Melbourne Airport supervises safe operation of all aircraft in most of southern and central Australia to within 160 nautical miles of Perth.

Both QANTAS and Ansett Australia operate large aircraft maintenance facilities at Melbourne Airport.

Secondary metropolitan airports are located at Essendon and Moorabbin. These airports primarily service the general aviation and recreational markets. The other major airport in Victoria is at Avalon, between Melbourne and Geelong. It is primarily used for training purposes although it is the site of the bi-annual Airshow DownUnder. Smaller regional airports are located throughout Victoria, serviced by regional airlines.

16.4 MELBOURNE AIRPORT (TULLAMARINE) - PASSENGER MOVEMENTS

	1990-91	1991-92	1992-93	1993-94	1994-95 p	1995-96 p
Domestic and regional passenger movements ('000)	6 669	8 442	8 467	9 012	10 064	10 829
International passenger movements ('000)	1 677	1 754	1 789	1 872	1 931	2 095
Total freight and mail (tonnes)	175 306	172 230	183 218	199 527	226 675	233 284
Regular public transport aircraft movements	102 204	110 530	119 862	118 503	128 637	133 980

Source: Department of Transport and Regional Development

Ports and shipping

The four major commercial ports serving Victoria are located at Melbourne, Geelong, Portland and Hastings. Significant reforms to commercial port operations were announced in 1995, leading to the sale during 1996 of the ports of Geelong and Portland. The port of Melbourne will remain in Government ownership under the auspices of the Melbourne Port Corporation. Responsibility for management of channels, lights, etc. in the four commercial ports is undertaken by the Victorian Channels Authority. Responsibility for administration and enforcement of shipping, navigation and general safety regulation resides with the Marine Board of Victoria, together with responsibility for the Victorian Marine Pollution Contingency Plan.

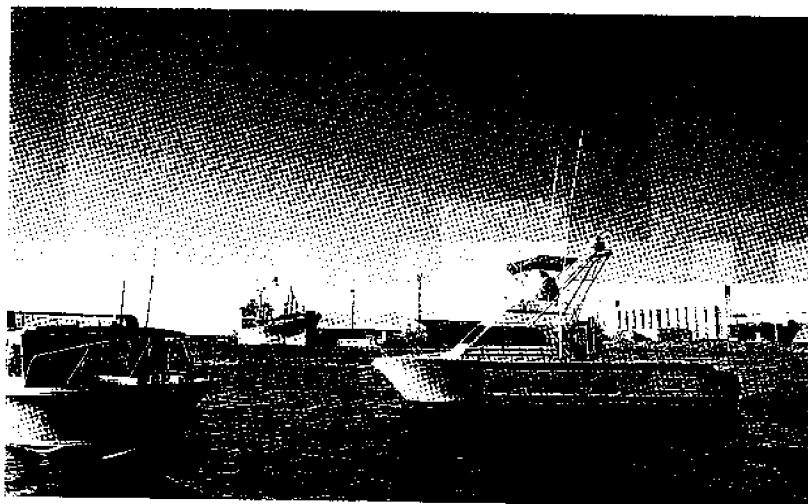
Reforms introduced at Victorian ports have led to reductions in port authority charges of approximately 20% between 1993-94 and 1995-96.

Cargo and freight services

The port of Geelong serviced 406 vessels during 1995-96 with total trade of 8,050,000 mass tonnes, an increase of almost 12% over 1994-95. The main products shipped from Geelong were petroleum products, grain (primarily bulk), woodchips and pine logs. Crude oil and petroleum products were the major cargoes landed at Geelong, followed by fertiliser (raw materials and manufactured) and steel and aluminium raw materials.

At Hastings, 202 vessels docked during 1995-96 for a total trade of 5,083,000 mass tonnes, 27% less than in 1994-95. Major products shipped from the port are crude oil, liquified petroleum gas and steel. Steel and unleaded petrol are landed at the port. Declining oil and gas production from the Bass Strait fields are the primary cause of the decline in tonnages handled at the port of Hastings.

The largest single commodity handled through the port of Portland is woodchips for export, followed by alumina (imports), grain (export) and aluminium ingot (export). The port comprises six berths, one of which is dedicated to the nearby aluminium smelter. Although data for 1995-96 are not yet available, a record annual tonnage is forecast with growth areas being woodchips, grain, fertilisers and product for Portland Aluminium.



The level of container traffic into and out of the port of Melbourne makes it the largest container and general cargo port in Australia, with a total of 2,767 ship visits in 1995-96. Total container throughput during 1995-96 was 923,461 twenty-foot equivalent units (TEUs). In 1995-96, container trade represented 11,050,000 mass tonnes or 62% of total trade through the port.

16.5 VICTORIAN PORTS, SHIP VISITS AND TRADE

Port	1993-94		1994-95		1995-96	
	Ship visits	Mass tonnes '000	Ship visits	Mass tonnes '000	Ship visits	Mass tonnes '000
Geelong	425	8 241	363	7 213	406	8 050
Hastings	265	7 629	251	6 943	202	5 083
Melbourne	2 581	14 054	2 692	15 789	2 767	17 844
Portland	187	3 129	173	2 710	n.a.	(a)3 200
Total	3 458	33 053	3 479	32 655	n.a.	(a)34 177

(a) Estimated.

Source: Melbourne Ports Corporation, TNT Geelong Port Pty Ltd, Port of Hastings, Port of Portland Pty Ltd

The commercial operations of the port of Melbourne include South Wharf, Victoria Dock, Appleton Dock, Swanson Dock, Yarraville and Maribyrnong berths, Webb Dock, Gellibrand and Breakwater Piers at Williamstown and Station Pier at Port Melbourne. Victoria Dock east of no. 22 berth, and South Wharf east of no. 19 berth, will be closed due to the building of the City Link bridge. It is anticipated that this part of the port will ultimately form part of the Docklands development.

16.6 MAJOR PRODUCTS HANDLED THROUGH THE PORT OF MELBOURNE, 1995-96

	mass tonnes
Foodstuffs	1 956 000
Crude oil and petroleum products	1 896 000
Chemicals	634 000
Iron and steel	480 000

Source: Melbourne Ports Corporation

Passenger services

Passenger services are largely confined to the overnight Bass Strait service operated from Station Pier. Station Pier also serves as the passenger terminal for cruise liners visiting Melbourne, with 11 visiting during 1994-95 and 15 during 1995-96. A total of 163 passenger ship movements occurred in the port of Melbourne during 1995-96.

Ship building

Williamstown, on the western side of Hobsons Bay, is the site of shipbuilding operations in Victoria. The former Williamstown Naval Dockyard, is the site of construction of ANZAC class frigates for the Royal Australian Navy (RAN) and the Royal New Zealand Navy (RNZN) by Transfield Defence Systems. Transfield are prime contractors for the \$5 billion (current prices) contract for production of ten frigates for the RAN and two for the RNZN. The frigates are 113 metres in length, displace 3,600 tonnes in operational condition and are capable of more than 27 knots with a range of 6,000 nautical miles at cruising speed.

COMMUNICATIONS

Communications technology and the communications industry have undergone significant change over the past decade, with the extension of satellite technology, the growth of personal computer usage and, in the last two years, the advent of the Internet and World Wide Web.

Recent studies of personal and household use of computers and communications technologies (such as the mobile phone) confirm Australia's reputation as a major user of new technologies.

Household use of computers has grown from 23% of Australian households in February 1994 to 30% of households in February 1996, an increase of 500,000 households purchasing or paying for a computer. The growth was particularly high in non-urban areas where household usage grew from 16% to 24%.

16.7 HOUSEHOLDS USING COMPUTERS/DEDICATED GAMES MACHINES BY REGION, AUSTRALIA

	February 1994			February 1996		
	Capital cities %	Remainder of Australia %	Total Australia %	Capital cities %	Remainder of Australia %	Total Australia %
Computers	26.8	16.3	22.9	32.8	24.0	29.5
Dedicated games machines	18.7	16.1	17.8	16.8	14.5	15.9
Total number of households in Australia ('000)	3 999	2 389	6 388	4 173	2 472	6 645

Source: Household Use of Information Technology, Australia (8128.0)

The household use of peripheral information technology equipment has also increased. Usage of CD-ROM drives grew significantly (29%) between 1994 and 1996. Rapid growth was also evident in the use of facsimile machines which more than doubled from 4% to 9% over the same period.

16.8 USE OF PERIPHERAL IT EQUIPMENT BY HOUSEHOLDS BY REGION, AUSTRALIA

	February 1994			February 1996		
	Capital cities %	Remainder of Australia %	Total Australia %	Capital cities %	Remainder of Australia %	Total Australia %
Printers	81.7	74.4	79.7	81.6	84.2	82.4
Character or image readers and scanners	5.7	8.2	6.3	7.2	5.9	6.8
CD-ROM	11.6	15.1	12.5	42.0	39.9	41.3
Modems	20.1	8.3	17.0	24.8	20.2	23.4
Facsimile machines	5.1	3.2	4.4	10.7	8.1	9.7
Other equipment (a)	15.9	11.6	14.8	17.1	12.1	15.6
Total number of households where a computer is used ('000)	1 071	389	1 460	1 368	593	1 960

(a) Includes additional keyboards, add-on storage, etc.

Source: Household Use of Information Technology, Australia (8128.0)

Domestic computer access

In 1996, there were a total of 262,000 households using their computers to access the Internet, with an additional 141,000 households using their computers for e-mail. The largest proportion of internet users was in the 26-40 age group (38%).

Of the persons who used computer games and accessed educational products over 50% were in the age group 5-17 years. People in this age group were also the largest users of computers for work relevant to studies (46%).

Fifty per cent of persons who accessed 'adult' entertainment products and other on-line services and who conducted work relevant to business and employment via home-based computer, were in the 26-40 year age group.

16.9 COMPUTER ACTIVITIES OF PERSONS BY AGE, AUSTRALIA, FEBRUARY 1996

Activity	Age group (years)					Total %	Total '000
	5-17 %	18-25 %	26-40 %	41-55 %	Over 55 %		
Playing computer games	50.4	13.3	19.9	13.3	3.1	100.0	2 346
Using mainly educational products	58.9	7.3	17.4	13.0	3.4	100.0	1 052
Doing work relevant to studies	45.8	20.6	21.1	11.2	*1.4	100.0	1 620
Doing work for the home-based business	*0.4	*3.6	43.3	38.6	14.1	100.0	422
Doing work relevant to my business (excl. home-based)	*0.1	*8.9	47.2	36.3	*7.6	100.0	379
Doing work relevant to my employment (excl. own business)	*0.8	16.6	44.1	35.8	*2.8	100.0	833
Doing other paid work from home via computer	—	*1.4	*26.4	*36.1	*36.1	100.0	23
Keeping personal or family records	*3.3	12.6	41.5	33.3	9.3	100.0	900
'Adult' entertainment products		*20.9	*55.5	*23.7	—	100.0	28
Electronic mail	*1.4	*14.3	49.3	24.5	*7.5	100.0	141
Accessing the Internet	*10.7	18.0	37.6	28.0	*5.7	100.0	262
Accessing other on-line services and databases	*9.5	*17.4	50.6	*14.9	*7.5	100.0	116
Other	*6.0	12.9	26.9	35.7	18.5	100.0	263

Source: Household Use of Information Technology, Australia (8128.0)

Communication technology

Answering machines have extensive usage throughout Australia, with units in 25% of households. Usage in the capital cities (30%) was significantly higher than that in the remainder of Australia where the proportion was 19%.

Whilst nearly 97% of households had a telephone connected, more than 52% of households did not own or pay for other technologies, such as mobile phones, faxes or pagers.

16.10 HOUSEHOLDS OWNING/PAYING FOR SELECTED COMMUNICATIONS TECHNOLOGIES BY REGION, AUSTRALIA, FEBRUARY 1996

	Capital cities %	Remainder of Australia %	Total Australia %
Facsimile machine	10.7	8.1	9.7
Mobile phone	27.5	18.5	24.1
Car phone	4.3	4.3	4.3
Cordless phone	15.0	10.8	13.4
Answering machine	29.5	18.6	25.4
Pager	3.1	1.4	2.4
Voice mail	4.0	*1.2	3.0
Pay TV (a)	4.1	*1.3	3.0
Other	*0.5	*0.6	0.5
None of the above	47.3	61.0	52.4
Telephone connected	97.8	95.2	96.8
Total number of households ('000)	4 173	2 472	6 645

(a) Pay TV services are not widely available in all areas of Australia.

Source: Household Use of Information Technology, Australia (8128.0)

Mobile telephones

Australian households and businesses own three and a half million mobile telephones, with usage increasing at a rate of 100,000 a month during 1996.

Australia has the second highest take-up rate on mobile telephones in the world, behind the Scandinavian countries (where mobile telephones came on to the market five years earlier than in Australia).

In December 1995, there were 2,549,243 subscribers to the analogue networks, which represented a growth of 480,912 (23%) for the six months to July 1995. The total number of digital subscribers was 920,000.

16.11 ANALOGUE MOBILE TELEPHONE MARKET

	Subscribers No.	Telstra MobileNet %	Optus %
July 1995	2 068 331	70.3	29.7
August 1995	2 126 595	70.0	30.0
September 1995	2 185 272	69.9	30.1
October 1995	2 299 388	71.0	29.0
November 1995	2 357 420	70.7	29.3
December 1995	2 549 243	70.6	29.4

Source: Telstra MobileNet

The federal government is committed to phase out the analogue network by January 1, 2000. Digital mobile coverage over the Australian landmass at June 1996 was: Telstra over 90%; Optus over 86%; and Vodafone 78%, compared to 91% for analogue.

16.12 DIGITAL MOBILE MARKET

	Subscribers No.	Market share %
Telstra	350 000	38
Optus	350 000	38
Vodafone	220 000	24
Total	920 000	100

Source: Paul Budde Communications Pty Ltd, Telecommunications Strategies Report 1996-97

Media services

In 1993-94, there were 77 businesses providing television and radio services in Victoria, with total employees of 4,104. Gross income for radio and television businesses was \$884.6 million.

There were three public broadcasters in radio and two public broadcasters in television accounting for 40% and 33% respectively of total employment in radio and television.

Private broadcasters accounted for 88% of gross income from television broadcasting while 64% of gross income from radio broadcasting came from private broadcasters.

16.13 RADIO AND TELEVISION SERVICES, VICTORIA, 1993-94

Category	Businesses at June 30 No.	Employment at June 30 No.	Gross income \$m
Radio			
Private broadcasters	60	931	134.8
Public broadcasters	3	610	75.2
Total broadcasters	63	1 541	210.0
Television -			
Private broadcasters	12	1 730	594.6
Public broadcasters	2	833	80.0
Total broadcasters	14	2 563	674.6
Total radio and television	77	4 104	884.6

Source: *Radio and Television Services, Australia* (8680.0)

Print media

In the area of print media, Victoria's two main daily newspapers, *The Age* and the *Herald-Sun*, have a joint average circulation of 775,000 per day (Monday to Friday), 879,000 for Saturday and 723,000 for Sunday. The *Herald-Sun* has the larger circulation with an average of 566,000 Monday to Friday, 523,000 on Saturday and 513,000 on Sunday.

Victoria also has a wide range of regional, metropolitan and community newspapers, together with a large number of special interest newspapers.

Postal services

The Australian Postal Corporation (Australia Post), has a charter under the *Australian Postal Corporation Act 1989*, to provide all Australians with a universal letter service. It is a Government Business Enterprise owned by the Commonwealth of Australia with revenue totalling \$2.9 billion in 1995-96.

As at 30 June 1996, Australia Post was Australia's seventh-largest employer with 32,040 full-time and 5,689 part-time staff. It services 7.92 million delivery points nationally. In 1995-96, Australia Post's 37 mail, 14 parcel and 233 delivery centres processed an average 16 million mail articles every working day. Australia Post has extended the price 'freeze' on the 45-cent standard letter (which was first applied in January 1992) until June 1998.

16.14 POSTAL ARTICLES HANDLED BY AUSTRALIA POST, VICTORIA

Posted in Victoria for delivery within Australia ('000)

Period	Standard	Registered articles excl. parcels	Non-standard articles	Parcels
1990-91	890 276	452	147 617	10 129
1991-92	877 739	398	144 533	9 926
1992-93	898 928	747	154 042	9 539
1993-94	896 369	988	178 409	10 202
1994-95	945 465	694	198 113	11 751
1994-96	1 006 800	597	192 403	12 540

Posted in Victoria for delivery overseas and received in Victoria from overseas ('000)

1990-91	90 435	994	24 412	1 485
1991-92	77 281	984	20 732	1 338
1992-93	75 698	937	19 660	1 291
1993-94	74 477	939	19 244	1 090
1994-95	71 171	853	18 285	1 113
1995-96	76 139	813	20 367	1 460

Source: *Australian Postal Corporation*

ENERGY

In 1994-95, Victoria contributed 28.3% of the electricity, gas, and water component of Australia's Gross Domestic Product (GDP) at factor cost. The electricity, gas, and water industries represented 3.6% of Victoria's Gross State Product (GSP) at factor cost in 1994-95.

The electricity, gas, and water component of GDP includes the transmission and distribution of gas through reticulation systems. It does not include the extraction of crude petroleum or natural gas.

Electricity

In 1993, the Victorian Government embarked upon a major restructure of the electricity industry along competitive lines. From 1993 to mid-1996 there was considerable structural reform culminating in the sale of all five distribution businesses and one generator company, Yallourn Energy Ltd. Proceeds from the sale of these businesses totalled \$10.736 billion.

The industry has been restructured from a government owned, vertically integrated monopoly into five regulated distribution businesses, five generation businesses, one regulated transmission system business, and a wholesale electricity market and systems operator. To develop a competitive wholesale market for electricity, involving multiple buyers and sellers, customers are being progressively deregulated in order of size, so that by December 2000 all electricity consumers will be able to choose their electricity supplier.

Each distribution business, as part of its licence conditions, will be assessed by the Office of the Regulator-General against an agreed set of performance indicators. Victoria has also become the first state in Australia to introduce an Ombudsman specifically for electricity consumers.

Privatisation

The distribution sector was the first area to be privatised, commencing in the first half of 1995. These businesses had been commercially structured during the reform process and had stable operating environments and predictable revenue flows, with a major part of their operating cashflow derived from regulated distribution charges.

16.15 DETAILS OF SALES OF INDIVIDUAL ELECTRICITY BUSINESSES

<i>Distribution Company</i>	<i>Date sold</i>	<i>Gross proceeds</i> \$m
United Energy	7 August 1995	1 553
Solaris Power	30 October 1995	950
Eastern Energy	5 November 1995	2 080
Powercor Australia	16 November 1995	2 150
CitiPower	12 December 1995	1 575

Source: Department of Treasury and Finance

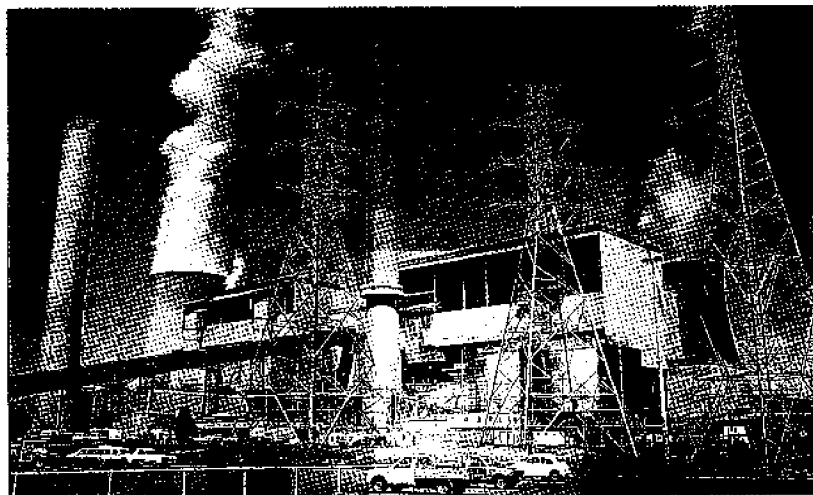
United Energy was sold to Power Partnership, a majority Australian-owned consortium consisting of the AMP Society, the State Authorities Superannuation Board (NSW) and the international electricity company Utilicorp. Solaris Power was sold to a 50-50 joint venture between the Australian Gas Light Company and Energy Initiatives Inc., a wholly owned subsidiary of the US-based power company, General Public Utilities. Eastern Energy was purchased by Texas Utilities Australia, a subsidiary of the international energy company Texas Utilities. Powercor Australia and CitiPower were sold to the US utilities PacifiCorp and Energy Corporation respectively.

16.16 POWER DISTRIBUTION, SELECTED STATISTICS BY UTILITY, VICTORIA 1993-94

Distribution company	Total assets \$m	Total sales \$m	Customers No.	Employees No.	Line length km
Powercor Australia	986	699	526 080	1 500	108 000
Solaris	550	347	233 240	597	4 000
Citipower	800	500	230 822	1 023	4 000
United Energy	1 108	684	514 714	1 111	16 000
Eastern Energy	859	533	457 937	1 388	55 000

Source: Department of Treasury and Finance

The sale of generator company Yallourn Energy Ltd for \$2,428 billion was announced on 5 March 1996. The purchaser was a consortium comprising the British company PowerGen International (49.9%), the Japanese investment company ITOCHU (10.4%), the AMP Society (26%), State Authorities Superannuation Board (8%), and Hastings Funds Management (5.7%). This sale represented the largest ever Australian privatisation.



In addition, the sale of generator companies Hazelwood Power Corporation and Energy Brix to the Hazelwood Power Partnership consortium was announced on 4 August 1996. Proceeds of this sale were unavailable at the time of publication.

National electricity market

The Commonwealth and most of the State Governments are working towards a national electricity market which will operate initially between Victoria, New South Wales and South Australia. The development of the national market is co-ordinated by the National Grid Management Council (NGMC), which was established in 1991 to encourage free trade in electricity between states.

Gas reticulation

The Gas and Fuel Corporation (Gascor) was created under the *Gas Industry Act 1994* with the principal roles of marketing and distributing natural gas. Gascor is Australia's largest natural gas distribution and marketing company, supplying over 1.36 million customers across the Melbourne metropolitan area, throughout regional Victoria, and in Albury and Moama in NSW.

More than 98% of the natural gas distributed is sourced from the offshore gas fields in Bass Strait by Esso-BIIP, under contract, and transported to the metropolitan and regional centres by Gas Transmission Corporation. Gascor distributes gas to households as well as commercial and industrial customers.

The remainder of Gascor's natural gas supply is purchased from Cultus' onshore gas fields near Port Campbell for distribution in Portland, Warrnambool, Allansford, Koroit, Hamilton and Cobden in western Victoria.

In 1995-96, sales revenue of \$1,128 million represented a 1.5% increase over 1994-95. Gas sales totalled 175,006 terajoules, of which 44.3% was to domestic customers and 55.7% was to commercial and industrial customers. Of the 1,364,243 customers at 30 June 1996, 41,761 were commercial and industrial consumers. At 30 June 1996, Gascor personnel numbered 1,815, a 41% decrease from 1995.

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