

Chapter 16

Infrastructure

Photo:

Loop tram

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OVERVIEW

This chapter provides 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.

Information is also provided about 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 VicRoads across Victoria. National Highways within Victoria are the Hume Freeway from Melbourne to the border with New South Wales at the Murray River, the Western Highway from Melbourne to the border with South Australia near 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 New South Wales border.

Since January 1996 some re-measuring of road lengths has taken place by both VicRoads and Local Government. Care should be taken when comparing road lengths to previous periods.

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 January 1997)	
National highways	1 005
State highways and freeways	6 739
Main roads	12 693
Tourist roads and forest roads	1 713
Total declared roads	22 150
Other roads (at 30 June 1996)	
Sealed roads	49 837
Formed and surfaced roads	49 654
Natural surface	28 827
Total other roads	128 318
Total roads	150 468

Source: VicRoads Pavement Condition Summary; Victoria Grants Commission.

In the metropolitan area, major bridgeworks on the South Eastern Arterial between Warrigal Road and Toorak Road are complete and in the eastern suburbs, a major extension of the Eastern Freeway from Doncaster Road through to Springvale Road (approximately 7 kilometers) opened on 8 December 1997.

In the western suburbs of Melbourne, VicRoads has completed 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 were 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.

Links to north-eastern suburbs by extending the Ring Road in an easterly direction beyond the Hume Highway are planned while long term planning includes a link to the Scoresby Freeway in the eastern suburbs. The Princes Highway duplication between Yarragon and Trafalgar, to Melbourne's east is also complete.

During 1998 Vic Roads will complete major highway improvements including construction of the Bulla - Diggers Rest interchange and duplication between Diggers Rest and Gisborne on the Calder Freeway, the completion of the Ballarat Bypass on the Western Freeway and the duplication of the southern approaches to Shepparton on the Goulburn Valley Highway.

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. Between 6,000 and 8,000 jobs will be generated in Victoria during the construction phase, due for completion in 2000. 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 30 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. The City Link project is on schedule.

In June 1997, the Government announced an addition to the City Link project in the form of an extension in a southerly direction of Exhibition Street to join Batman Avenue near the National Tennis Centre. This will provide alternative access to the South Eastern Arterial, facilitating movements to and from the major events precinct and the Central Activities District.

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.

A public display centre has been opened near the eastern portal of the Domain tunnel.

Motor vehicle registrations and drivers licences

There were a total of 2,819,174 motor vehicles (excluding motor cycles) registered in Victoria on 31 October 1996, an increase of 19,864 since the previous motor vehicle census held on 31 May 1995. There were also 69,790 motor cycles registered on 31 October 1996, a decrease of 780 since 31 May 1995. Passenger vehicles, excluding buses, were the largest single category of vehicles registered, with 2,335,426 registered in Victoria at 31 October 1996. This represented 512 passenger vehicles per 1,000 people in Victoria. The average age of passenger vehicles other than buses in Victoria was 11.0 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	1997*
Driver's	2 785 753	2 826 735	2 855 904	2 873 252	2 894 132	2 928 250	2 981 882
Rider's	157 916	165 825	172 357	174 747	179 080	186 154	194 621
Total	2 943 669	2 922 560	3 028 261	3 047 999	3 073 212	3 114 404	3 176 503

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

* 1997 data are for 16 July.

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 seriously injured fell by 11% 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		1996	
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
Drivers of motor vehicles	194	2 669	169	2 684	187	2 907	198	2 790
Motor cyclists	39	720	41	697	41	608	35	588
Passengers (any type)	115	1 389	93	1 509	95	1 480	94	1 455
Pedestrians	73	776	64	779	82	808	76	849
Pedal cyclists	14	388	11	363	11	309	13	341
Other	1	11	—	13	2	12	1	30
Total	436	5 953	378	6 045	418	6 124	417	6 053

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 remaining Government operated bus services are to be privatised during 1998. 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 119.9 million passenger boardings during 1996–97. Metropolitan services carried 112.6 million passengers, a 3.2 per cent increase over 1995–96. Punctuality has improved with 92.4 per cent of peak period suburban trains running to time in 1996–97 compared with 89.5 per cent in 1995–96. Developments underway include the phased introduction of automated ticketing and the closure of Flinders Street rail yards with the associated development of secure stabling sidings in suburban areas. Country rail passenger services were improved by V/Line Passenger with a new daily Sprinter rail car service to Albury and a weekend Sprinter service to Echuca introduced, the first regular passenger train service to Echuca since 1981. Passenger services to Warrnambool and Shepparton are provided by private companies.

At 30 June 1996, V/Line had a total of 124 locomotives available for traffic and Met trains had 904 Electrical Multiple Unit carriages available for service. V/Line also operates a road transferable locomotive, primarily in the north of the State on lightly trafficked branch lines.

A number of steam locomotives are maintained for special services on the Victorian rail network by preservation groups. These locomotives can be seen operating over the network during the cooler months. Heritage rail services also operate at various sites throughout Victoria, including Maldon, Korumburra, and Queenscliff, with the well known 'Puffing Billy' narrow gauge steam railway located in the Dandenong Ranges at Belgrave, east of Melbourne. The Puffing Billy service will be extended to run from Belgrave to Gembrook before the end of the century.

The Victorian Government plans to privatise V/Line Passenger and V/Line Freight during 1998. Met trains are to be split into two separate businesses and also offered for sale.

Photo:

Trains - (CROP TOP AS INDICATED ON SLIDE)

Delete keylines

Rail freight

V/Line freight carried a total of 8.19 million tonnes of freight during 1996–97, an increase of 19.0% over the total for the previous year. The major freight categories contributing to the increase were grain (up from 3,896,000 tonnes to 4,541,000 tonnes) and containers (from 1,116,000 tonnes to 1,904,000 tonnes). Much of the traffic increase is related to strong performances by the rural sector. 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 towards Sydney and Adelaide and the broad gauge route servicing the steel traffic into and out of Long Island, near Hastings on Westernport Bay. A. Goninan and Co. has opened a new locomotive servicing facility at Spotswood to service the National Rail locomotive fleet.

Three freight forwarding companies have entered agreements with rail operators, including V/Line, and dedicated freight train services are operated on their behalf between Melbourne and a number of other State capitals.

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 537 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 21,914,000 vehicle kilometres during 1996-97, carrying 115.4 million passengers. A new tram servicing depot was opened at Southbank during the year replacing an old depot on Kingsway, South Melbourne.

A restaurant tram service provided by three converted W class trams travelling around inner Melbourne has proven a major tourism feature for many visitors to Melbourne and provided a special night out for many Melbourne residents.

Met Trams are to be split into two separate businesses prior to privatisation.

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 Melbourne's Central Business District.

Melbourne Airport became a privately operated airport on 2 July 1997. The new operators, Australia Pacific Airports Corporation, are a majority Australian owned organisation with headquarters based in Melbourne.

Melbourne Airport is ranked one of the world's top 3 airports in 1997's International Air Transport Associations Airport Monitor (survey of 50,000 international passengers) and ranked in the top 10 since 1993. It is Australia's only major single terminal airport with domestic and international terminals under one roof making passenger transfers easier and reducing airline costs. There is no operating curfew and this benefits both international passenger and freight movements. The airport is also benefiting from the major roadway developments with the Western Ring Road work improving access to the airport from the Hume and Princes Freeways. The completion of the City Link project will improve access to the Airport from the south-eastern region.

Total passenger movements for financial year 1996–97 were 13,710,351; of which 2,421,221 were international passengers and 11,072,478 domestic. The remainder were transit passengers. Total growth in passenger numbers/movements for financial year 1996–97 was 2.2% and international passenger growth was 8.2% on the previous year. There are 27 international airlines using the airport with approximately 180 international arrivals per week.

Total freight for financial year 1996–97 was 340,000 tonnes, of which 192,000 tonnes was international. Total growth for financial year 1996–97 was 2.6% and international freight growth was 3.6% on the previous year.

The airport is building on the development program of the last five years that has seen the major expansion of the common user international terminal and the domestic terminal operated by Ansett and Qantas. The recent completion of the multilevel carpark has increased short term parking from 1,800 spaces to approx. 3,100. The airport now offers undercover casual parking with covered walkways linked directly to the terminals. A pay-on-foot system has been established to handle the increased number of cars and has the feature of being able to process credit card transactions. This feature itself required technology new to Australia. The project was completed in September 1997.

Extension of the southern freight apron was completed in the second part of this year and has increased freight handling ability from four to five B747 freighters simultaneously. Major extension of the Qantas terminal has begun which involves building an additional Qantas domestic concourse, developing a new concrete apron area to handle an additional 10 aircraft, developing a new terminal services building for holding emergency generators and water chilling facilities and repositioning the elevated road and roadwork on the main intersection.

Development of the new BOC Cargo Services freight terminal is underway and the 4,500 square metre facility is expected to be completed early next year. (BOC Cargo Services is an independent operator.) This is the first of many expected developments in the high potential freight area.

16.4 MELBOURNE AIRPORT (TULLAMARINE)—PASSENGER MOVEMENTS

	1991–92	1992–93	1993–94	1994–95	1995–96	1996–97
Domestic and regional passenger movements ('000)	8 442	8 467	9 012	10 064	10 829	11 072
International passenger movements ('000)	1 754	1 789	1 872	1 931	2 095	2 421
Total freight and mail (tonnes)	172 230	183 218	199 527	226 675	233 284	340 000
Regular public transport aircraft movements	110 530	119 862	118 503	128 637	133 980	n.y.a.

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 and the port of Hastings has subsequently been sold. 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%.

Cargo and freight services

The port of Geelong serviced 461 vessels during 1996–97 with total trade of 9,724,000 mass tonnes, an increase of almost 21% over 1995–96. 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, 175 vessels docked during 1996–97 for a total trade of 5,388,000 mass tonnes, 6 per cent more than in 1995–96. Major products shipped from the port are crude oil, liquefied petroleum gas and steel. Steel and unleaded petrol are landed at the port. Small increases in the volume of steel and petroleum products handled by the port has led to the increase 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. Growth areas for the port of Portland include woodchips, grain, fertilisers and product for Portland Aluminium. The year 1997 saw the largest single shipment from Portland of 57,750 tonnes of barley on board the M.V. Naravino. The year also saw a record tonnage through the port of 3,653,542 tonnes with a monthly record for throughput in April 1997 of 502,244 tonnes. The record is attributed to a strong performance by the Wimmera grain growing area as much of the output from the Wimmera is shipped from Portland.

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 2,882 ship visits in 1996–97. In 1996–97, container trade represented 11,859,000 mass tonnes or 64% of total trade through the port (in mass tonne terms).

Photo:

Container truck

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16.5 VICTORIAN PORTS, SHIP VISITS AND TRADE

Port	1993–94		1994–95		1995–96		1996–97	
	Ship visits	Mass tonnes '000	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	461	9 724
Hastings	265	7 629	251	6 943	202	5 083	175	5 388
Melbourne	2 581	14 054	2 692	15 789	2 767	17 844	2 882	18 563
Portland	187	3 129	173	2 710	189	3 189	244	3 654
Total	3 458	33 053	3 479	32 655	3 564	34 166	3 762	37 329

Source: Melbourne Ports Corporation, TNT GeelongPort Pty Ltd, TNT WesternPort Pty Ltd, 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, 1996–97

	mass tonnes
Foodstuffs	2 419 107
Crude oil and petroleum products	2 839 813
Chemicals	873 198
Iron and steel	498 665

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 12 visiting during 1996–97 and 15 during 1995–96. A total of 169 passenger ship movements occurred in the port of Melbourne during 1996–97.

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	*4.4	*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).

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.

16.11 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 778,000 per day (Monday to Friday), 878,000 for Saturday and 729,000 for Sunday. The Herald-Sun has the larger circulation with an average of 568,000 Monday to Friday, 518,000 on Saturday and 522,000 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.

16.12 POSTAL ARTICLES HANDLED BY AUSTRALIA POST, VICTORIA

Period	Mail posted in Victoria (million)	
	Letters	Parcels
1990-91	1 016.2	21.5
1991-92	1 001.0	22.3
1992-93	1 030.5	24.3
1993-94	1 049.0	25.7
1994-95	1 114.8	28.2
1995-96	1 170.9	30.1
1996-97	1 315.6	31.1

Source: Australian Postal Corporation.

ENERGY REFORM IN VICTORIA

Electricity

The National Competition Policy, which encourages the opening up of industry to competitive forces, has created an impetus for the reform of industries throughout Australia. This underlies the reform of Victoria's electricity industry. In the Victorian electricity industry, competition now works at two main levels:

- generators compete against each other (and against parties able to manage demand) to sell power into the wholesale market ('the Pool')
- retailers compete against each other to supply contestable customers which will comprise the entire market by 2001. Contestable customers may also purchase energy from the Pool and bypass retailers.

Reform began with the State Government dividing the vertically integrated monopoly of the previous State Electricity Company of Victoria into transmission and distribution entities. The retail and distribution sectors are now fully disaggregated and privatised with five retail and distribution companies supplying franchise customers. There are now fourteen retailers operating in Victoria, (including the five previously Government owned entities). More are expected to join as the National Electricity Market (NEM) is phased into operation.

The first stage of the NEM (known as NEM1), commenced on 4 May 1997 allowing electricity trade across borders. The initial participants were Victoria, New South Wales and the Australian Capital Territory; with South Australia participating through the Victorian Market. When the full National Market commences South Australia will participate in its own right with Queensland and Tasmania to join later. It is expected that the full National Market will commence in the first half of 1998.

Generation has also been disaggregated into seven competing companies with the intention that the competitive pressures will reduce the wholesale price of electricity. Four of these generation companies, namely Loy Yang A, Loy Yang B, Yallourn and Hazelwood have been privatised.

Photo:

Electricity sub-station

Delete keylines

Two statutory corporations, PowerNet Victoria (PNV) and Victorian Power Exchange (VPX), have been established to operate the transmission system and the wholesale electricity market. PNV owns and maintains the high voltage transmission network. It has now been privatised. VPX is an independent non-profit organisation which operates the wholesale market and administers system security on behalf of the industry. The goal of VPX is to minimise the cost of electricity to Victoria by matching supply and demand under commercially competitive conditions, while maintaining security and integrity of supply. These key requirements are overseen by the Office of the Regulator General (ORG).

Gas Reform

A comprehensive reform of the Victorian gas industry is now underway. The objective of the reform process is to encourage the development of a fully competitive and integrated energy market in south-eastern Australia. The intention is that the industry will be restructured from the current State-owned monopoly. The key structural changes will include the unbundling of the distribution operations and separation of the retail operations currently performed by Gascor into three gas businesses each comprising a gas distributor and a gas retailer.

The three gas retailers—Kinetik Energy, Energy 21 and Ikon Energy will ultimately be able to compete for customers as and when they become contestable. The three gas distributors—Westar, Stratus and Multinet—will not be aligned with the retailer areas. The existence of overlapping retail and distribution boundaries requires each gas distributor to provide open access to its networks to the two gas retailers which operate the retail franchise in its territory. In addition, following the progressive introduction of contestability, gas distributors will be required to provide open access to their pipeline systems to any gas retailers wanting to sell gas to contestable customers.

The gas distributors and retailers have been operationally effective from July 1997. Legal establishment of all entities is expected in late 1997. The Government proposes to privatise these entities in 1998, however it is not committed to a fixed timetable.

The disaggregation of Gascor into gas retailers and gas distributors ends the monopoly supply and pricing of gas to Victorian consumers and will allow the new gas retailers to compete for consumers on the basis of price and service. It will also allow gas distributors and other distribution businesses to compete for new reticulation projects.

In addition to the unbundling of distribution and retail operations, it is also proposed to introduce a gas spot market administered by an independent system operator, VENCORP, through which system participants will be able to buy and sell gas and thereby maximise their commercial position. Under this proposal, VENCORP will be responsible for balancing the transmission system and managing the spot market. The Gas Transmission Company (GTC) will retain ownership and responsibility for the maintenance of the gas transmission system. The spot market is also intended to provide price transparency, giving existing market participants and potential new participants the information to enable them to better investment, consumption and operational decisions.

In terms of production, the majority of gas supplied to Victoria is from fields owned by ESSO/BHP Petroleum in the Gippsland Basin. The balance is supplied by Cultus Petroleum from gas reserves in the Otway Basin. Victorian consumers are likely to obtain a more diverse gas supply through proposed pipeline developments and connections to NSW. These include the construction of an Albury Wagga transmission pipeline interconnect by GTC and East Australian Pipeline Limited and the possible construction of the Eastern Gas Pipeline between Longford and Wilton, south west of Sydney, by BHP Petroleum and Westcoast Energy Australia.

Source: Department of Premier.

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