20 TRANSPORT AND COMMUNICATON

REFERENCES

Definitions

Value of building commenced, or under construction, represents the anticipated completion value based, where practicable, on the estimated market or contract price of building jobs excluding the value of land and landscaping. Site preparation costs are included. Where building jobs proceed over several quarters the anticipated completion value reported on the return for the first (commencement) quarter may be amended on returns for subsequent (under construction) quarters as the job nears completion.

Value of building completed represents the actual completion value based, where practicable, on the market or contract price of building jobs including site preparation costs and excluding the value of land and landscaping.

Value of building work done during the period represents the estimated value of building work actually carried out during the quarter on building jobs which have commenced.

Value of building work yet to be done represents the difference between the anticipated completion value and the estimated value of work done on building jobs up to the end of the period.

Data sources

The Building Activity Survey involves a sample survey of private sector house construction activity and a complete enumeration of building jobs other than private sector house construction. Only residential building jobs with an approval value of $10,000 or more were included in the survey. Non-residential building jobs with an approval value of $30,000 or more were included before the September quarter 1990, but after that date only jobs with an approval value of $50,000 or more were included.

The Building Commencements collection is based on building permits issued by local government authorities and licensed private building surveyors, and contracts let by or day labour work authorised by Commonwealth, State, semi-government, and local government authorities.

The Secured Housing Finance Commitments Survey covers loan commitments made by significant lenders for the construction or purchase of owner-occupied dwellings. Significant lenders cover over 95% of all finance commitments for housing in Victoria.

The Engineering Construction Survey is based on a sample of all construction enterprises operating in Australia, in both the private and public sectors. The survey aims to measure the value of all engineering construction work undertaken in Victoria. For the Engineering Construction Survey, all enterprises recorded on the ABS central register of economic units and classified to the construction industry, and all other units known to be undertaking engineering construction work (from trade journals, newspapers, etc.), are included in the survey framework.

ABS publications

Dwelling Unit Commencements Reported by Approving Authorities, Victoria (8741.2)
Building Activity, Victoria (8752.2)

Introduction

This chapter contains data relevant to the transport industry and information regarding the changing communications industry, particularly telecommunications.

TRANSPORT

Overview

In 1993-94 the Transport and storage industry sector contributed 4.6% of the total Victorian Gross State Product (GSP) at factor cost. Victoria's percentage share of the national GDP at factor cost for the Transport and storage industry sector was 23.2%.

Rail

Victoria's Public Transport Corporation, through V/Line, provides passenger and rail freight services throughout Victoria and parts of southern New South Wales.

Passenger trains operated by V/Line run to the provincial centres of Geelong, Ballarat, Swan Hill, Albury, Sale, Stony Point and intermediate locations. Private operators run passenger trains to Warrnambool and Shepparton using rolling stock leased from or provided by V/Line. Australian National runs 'The Overland' each night between Melbourne and Adelaide and the New South Wales State Rail Authority operates the Melbourne-Sydney passenger rail link using its XPT rolling stock.

Freight services within Victoria and that part of southern New South Wales serviced by the Victorian rail network are operated by V/Line freight, while interstate freight services are now operated by the National Rail Freight Corporation. V/Line Freight carried 5.72 million tonnes of freight in 1994-95. However revenue fell by 25% compared with 1993-94, a direct consequence of a drought in much of south-eastern Australia.

The first private rail freight service to operate on V/Line's rail infrastructure was operated on 5 July 1995 by Specialised Container Transport (SCT), a privately owned freight forwarder. The service operates between Melbourne and Perth. SCT plan to establish major new freight terminals, including rail sidings, in Perth and Melbourne.

The rail line between Strathmerton and Tocumwal (NSW) was re-opened during 1995, having been closed for some years due to bushfire damage to bridges. A major infrastructure project in 1995 involved the commissioning of a new standard gauge rail line between Newport and North Geelong. Existing lines between Tottenham and Newport, North Geelong to the South Australian border (via Gheringhap, Cressy and Ararat), Maroona to Portland, Murtoa to Hopetoun and Dimboola to Yaapeet were converted to standard gauge. Much of this work was funded by the Federal Government under the 'One Nation' gauge standardisation project to provide a continuous standard gauge rail line between each of the mainland capital cities (other than Darwin). Rail services between Heywood and Mt. Gambier (SA), Ballarat and Ararat, and Stratford Junction and Maffra were suspended during the year.

With the contraction of the rail network during the second half of this century, a number of heritage groups have established tourist railway operations on disused railway reserves. The best known of these is the Puffing Billy railway in the Dandenong Ranges, east of Melbourne. Rail museums are located at North Williamstown and Menzies Creek. Apart from the summer months, special steam hauled excursion trains are operated to places of interest around Victoria by rail enthusiast groups.

The Public Transport Corporation also provides suburban rail passenger services in Melbourne through Met Trains, which use electric multiple unit rolling stock. The electrified suburban rail network was extended to the south-eastern satellite centre of Cranbourne in March 1995, a Commonwealth-funded initiative. Passenger journeys on the suburban system have increased by over 4% during 1994-95. A major change in operation was the introduction of single person operation of trains (extended to 95% of metropolitan services during 1994-95).

TABLE 20.1   RAIL TRAFFIC, VICTORIA

Route kilometres open for traffic	5 196	5 180	5 107	5 107	5 107	4 917
Train kilometres						
Passenger - country ('000)	7 127	7 113	7 083	7 036	6 095	5 612
Suburban ('000) (a)	n.a.	n.a.	n.a.	13 149	13 400	13 400
Goods ('000) (b)	5 898	5 531	4 883	5 387	6 402	3 134
Total	n.a.	n.a.	n.a.	25 572	25 897	22 546
Passenger boardings						
Country ('000) (c)	n.a.	n.a.	n.a.	n.a.	6 196	6 390
Suburban ('000)	108 000	106 800	108 900	106 000	101 000	105 400
Total	n.a.	n.a	n.a.	n.a.	107 196	111 790

(a) Prior to 1992-93, a different system of measuring suburban train kilometres was used.

(b) Goods train kilometres for 1994-95 exclude interstate services now operated by the National Rail Corporation.

(c) Prior to 1993-94, a different method of measuring country passenger travel was used. Interstate travel is now measured by the service provider, Australian National or the New South Wales State Rail Authority.

Source: Public Transport Corporation, Victoria

Tram

Melbourne is the only Australian city to retain a comprehensive tramway network. A modern fleet of more than 500 trams operate on the network of 238 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, carrying over 2 million passengers in its first year and in the process becoming Melbourne's third most visited tourist attraction. Met Trams recorded 21,700,000 vehicle kilometres during 1994-95, carrying 108,550,000 passengers. An extension of the tramway network to Mill Park in Melbourne's north east opened during 1995, following an extension of the East Burwood service in the previous year.

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.

Bus

Metropolitan Melbourne is served by both Government and privately owned buses. From 1 July 1983, bus services in Victorian country areas and provincial areas have come under the control of the Public Transport Corporation (V/Line). These services are operated by private bus companies, some of which are under contract to V/Line to provide road coach services connecting with or extending the rail network.

In the metropolitan area of Melbourne, services are provided by Met Bus, a unit of the Public Transport Corporation, and private operators of various sizes. Many bus services provide feeder services to the tram and train networks while cross-suburban services and suburb to central Melbourne services are also provided. In 1993-94, Met Buses recorded 13,577,000 boardings, falling to 6,390,000 in 1994-95 after the National Bus Company commenced operations on eastern and northern routes previously operated by Met Bus.

Road

There were 2.9 million motor vehicles on register in Victoria at 31 December 1995, 79% of which were passenger vehicles.

TABLE 20.2   MOTOR VEHICLES ON REGISTER, 30 JUNE, VICTORIA

	'000					
Passenger vehicles	2 137.8	2 226.3	2 178.1	2 206.6	2 231.9	2 277.9
Light commercial vehicles (a) (b)	405.4	349.2	322.5	324.9	376.8	384.7
Trucks -						
Rigid (a)	n.a.	87.0	73.0	74.2	86.1	87.9
Articulated	14.2	14.6	14.3	14.6	15.3	15.9
Non freight carrying	13.0	11.3	11.4	11.7	11.8	12.5
Buses	13.8	14.4	15.6	15.9	16.6	17.4
Motor cycles	67.9	72.2	69.9	70.4	69.6	72.6
Total -Victoria.	2 720.0	2 775.2	2 684.8	2 718.4	2 808.1	2 868.9
Total - Australia	12 116.8	9 934.1	10 246.9	10 431.5	10 699.2	10 935.4
Victoria as a percentage of Australia	22.4	27.9	26.2	26.0	26.2	26.2

(a)   Data as at 31 December 1994.

(b)   Split of data for years prior to 1991 are not comparable.

Source: ABS Special data service - Product No. 9303.0.40.003

TABLE 20.3   DRIVERS' AND RIDERS' LICENCES, JUNE 30, VICTORIA

Drivers'	2 725 835	2 785 753	2 826 735	2 855 904	2 873 252	2 894 132
Riders'	149 454	157 916	165 825	172 357	174 747	179 080
Total	2 875 289	2 943 669	2 922 560	3 028 261	3 047 999	3 073 212

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

At the end of June 1995, there were 245,256 probationary licences on issue in Victoria, together with 149,580 learners permits. A total of 61,050 licences were subject to suspension, disqualification or cancellation.

TABLE 20.4 ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES, NUMBER OF PERSONS KILLED OR INJURED, VICTORIA

1989	681	7 951	776	9 356
1990	492	6 219	548	7 084
1991	435	5 371	503	6 162
1992	365	5 111	396	5 905
1993	381	5 192	435	5 928
1994	346	5 184	378	6 023

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

(b) Admitted to hospital.

Source: VicRoads Information Services Department

Road traffic fatalities on Victoria's roads have fallen by 51% since 1989, while the the number of persons injured fell by 36% 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. Television advertisements depicting violent accidents and their aftermath, also funded by the TAC, have attracted considerable public comment and are also believed to have had the desired impact on road users' behaviour.

TABLE 20.5 ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES, BY TYPE OF ROAD USER, VICTORIA

	1992		1993		1994	
Type of road user	Killed	Injured	Killed	Injured	Killed	Injured
Drivers of motor vehicles	144	2 536	193	2 660	169	2 678
Motor cyclists	48	681	39	714	41	693
Passengers (any type)	100	1 483	115	1 381	93	1 505
Pedestrians	89	799	73	774	64	775
Pedal cyclists	13	393	14	388	11	359
Other	2	13	1	11	0	13
Total	**396**	**5 905**	**435**	**5 928**	**378**	**6 023**

Source: VicRoads Information Services Department

Air

Victoria is served by a network of airports with major facilities located at Melbourne Airport, Tullamarine, 22 kilometres North-West of the City centre. Secondary metropolitan airports are located at Essendon and Moorabbin, primarily servicing general aviation and charter airline operators. Melbourne, Essendon and Moorabbin Airports are operated by the Federal Airports Corporation (FAC). Avalon Airport, located between Geelong and Melbourne and operated by Aerospace Technologies of Australia, is primarily a technical services site providing some airline services for the Geelong area. Simultaneous movement operations for both runways in place at Melbourne Airport since 1991 have minimised delays associated with holding patterns apart from the busiest periods. The primary north-south runway is 3,657 metres long and the east-west runway has a length of 2,286 metres, thus equipping Melbourne Airport to handle the largest and fastest aircraft now flying. Melbourne Airport is not subject to any curfew, operating 24 hours per day.

Melbourne Airport opened in 1970 and has received several upgrades and expansions since then. Work in hand in 1995 included a major refurbishment and expansion of the International Terminal area including a new satellite at the end of the existing concourse with eight aerobridges. Current plans include a major expansion of the freight complex to the South of the main terminal building and construction of a multi-level carpark on the site of the existing open car park. Longer term strategies allow for an additional two runways and an extension of the existing runways allowing for up to 350,000 aircraft movements annually. Other expansion plans provide for the eventual provision of a second international terminal facility.

Virtually all air passenger journeys commencing or finishing in Victoria involve Melbourne Airport. In 1993-94, there were over 11 million air passenger movements in Victoria involving FAC airports. Of these, fewer than 40,000 were to or from Essendon or Moorabbin. Twenty-seven international passenger airlines use Melbourne Airport together with a further twelve purely freight airlines. On the domestic and regional side, seven airlines use Melbourne Airport with one further domestic freight specialist airline also.

The Area Approach Control Centre located at Melbourne Airport is responsible for the safe operation of all aircraft flying in Victoria, Tasmania, southern New South Wales, most of South Australia, the southern Northern Territory and west to within 160 nautical miles of Perth. The centre is presently served by six radars which cover most of south eastern Australia. Melbourne will be one of the two Australian sites for The Australian Advanced Air Traffic System (TAAATS), the new air traffic management system scheduled to be introduced in 1998. Brisbane has been selected as the other Australian site.

Both QANTAS and Ansett Australia operate large aircraft maintenance facilities on the south side of Melbourne Airport.

Federal Government plans provide for the sale of the lease of Melbourne Airport by the end of 1996.

TABLE 20.6 MELBOURNE AIRPORT (TULLAMARINE) - PASSENGER MOVEMENTS

Domestic and regional passenger movements ('000)	4 782	6 649	8 362	8 470	8 987	10 082
International passenger movements ('000)	1 771	1 812	1 933	1 953	1 995	2 055
Regular public transport aircraft movements	67 620	93 882	115 042	119 882	121 252	136 614

Source: Federal Airports Corporation

TABLE 20.7 MELBOURNE AIRPORT (TULLAMARINE) - FREIGHT MOVEMENTS

Domestic services						
Freight (Tonnes)	49 389	70 246	66 111	65 179	66 894	n.y.a.
Mail (Tonnes)	5 676	11 062	10 331	12 128	11 847	n.y.a.
International services						
Freight (Tonnes)	91 270	89 401	91 217	101 014	114 847	n.y.a.
Mail (Tonnes)	4 361	4 483	4 454	4 779	5 224	n.y.a.

Source: Department of Transport

COMMUNICATIONS

Overview

In 1993-94 the Communications industry sector contributed 2.9% of the Victorian Gross State Product (GSP) at factor cost. Victoria's percentage share of the national GDP at factor cost for the Communications industry sector was 27.4%.

Telecommunications

AUSTEL

The Australian Telecommunications Authority (AUSTEL), is the telecommunications industry regulator. AUSTEL is an independent statutory authority which commenced operations on 21 June 1989.

Key functions under AUSTEL's charter are:

* the active facilitation of competition in the Australian telecommunications industry, to ensure an equitable environment in which consumer benefits are maximised.

* the promotion and protection of consumer interests. During 1994-95 AUSTEL recorded 4,153 consumer enquiries and complaints, of which 2,050 were dealt with through provision of information to the consumer or through more detailed investigation. The remaining 2,103 consumers were referred to other organisations, chiefly Telstra or Optus.

* managing the numbering of telecommunications services in Australia. AUSTEL is supervising Australia's move to eight digit local phone numbers, a process which commenced in July 1994. By November 1998 all local numbers will be eight digits long plus a two digit area code.

* responsibility for monitoring carrier compliance with their licence conditions. The authority is also responsible for the licensing of individuals to install telecommunications cabling.

Telecommunications developments in the 1990s

This decade has seen major changes in the telecommunications industry. The lead up to an open market from July 1997 has seen the end of the Telecom monopoly via the establishment of new carriers.

In November 1991, the Federal Government selected Optus to be the second telecommunications carrier in Australia. Vodaphone, the third carrier, was licensed in December 1992. Dealing exclusively in mobile digital telecommunications, Vodaphone services were extended to all capital cities by March 1994. The Vodaphone network is expected to cover 80% of the Australian population by the end of 1995.

Australia now has the fourth highest penetration of mobile phones per head of population in the OECD, behind Sweden, Finland and Denmark, all of which introduced mobiles in 1982, five years earlier than Australia.

Digital GSM (Global System for Mobile communications) mobile services were introduced in April and May 1993 by Telecom and Optus, respectively. The mobile network is to change progressively from analogue to digital, with the analogue service to cease from 1 January 2000. GSM technology provides built-in scrambling to ensure privacy, a feature not available with analogue services. In June 1995, the digital network covered about 83% of the country, up from 70% at the start of the financial year.

Telstra (formerly Telecom) has undergone considerable internal restructuring to meet the challenges of the new market. Telstra's origins date back to 1901, when the Postmaster General's Department (PMG) was established to manage all domestic telephone, telegraph and postal services. The Overseas Telecommunications Commission was established in 1946 to manage Australia's international telecommunications.

The Australian Telecommunications Commission, trading as Telecom Australia, was created as a separate entity in July 1975, following the break-up of the PMG. OTC and Telecom Australia became the Australian and Overseas Telecommunications Corporation (AOTC) following a merger in February 1992. Telstra Corporation Limited became the legal corporate name of the merged entity in April 1993. The domestic trading name, Telecom Australia, was changed to Telstra on 1 July 1995. The Corporation has been trading as Telstra internationally since 1993.

Telstra has committed to building a broad band cable network. This $3.9 billion cable rollout program had passed 407,000 Australian homes by the end of 1994-95. By 1999, more than four million homes will have access to the network. The first service will be provided by FOXTEL, a cable television joint venture between Telstra and The News Corporation.

Optus initially used Telstra's existing networks for both mobile and conventional phone services but began laying its own optical fibre network in March 1992. By 30 June 1994, the Optus fibre network stretched from Brisbane to Adelaide via Sydney, Canberra and Melbourne, with fibre optic rings around all mainland state capital cities. Optus expects to complete both fixed and mobile networks in 1997, at a cost of about $2 billion. By 30 June 1994, Optus had achieved a 34% share of the growing mobile services market, with over 400,000 customers.

In June 1992 the minister declared Telstra as the sole universal service carrier for Australia, giving it a Universal Service Obligation (USO) to provide pay phone and standard telephone service on a reasonably equitable basis to all regions of the nation. The cost of USO operations is shared with the other carriers by proportion timed telecommunication traffic. AUSTEL and the three carriers are progressively monitoring this model.

Australian Broadcasting Authority

The Australian Broadcasting Authority is the broadcasting regulator for radio and television in Australia. As well as planning the availability of segments of the broadcasting services bands (VHF/UHF television, FM and AM radio), the Authority has the power to allocate, renew, suspend and cancel licences and collect any fees payable for those licences.

The Authority is also empowered to conduct research into community attitudes on programming matters, develop program standards relating to broadcasting in Australia, assist broadcasting service providers (licensees) develop codes of practice, and monitor and investigate complaints about licensees.

The Authority monitors the suitability of licensees to ensure compliance with the ownership and control provisions of the ACT. In addition, the Authority is required to inform itself and the Minister about advances and trends in broadcasting technology.

Postal services

The Australian Postal Corporation, trading as Australia Post, is obliged under the *Australian Postal Corporation Act 1989* to provide all Australians with a universal letter service which is equitable, reasonably accessible and reasonably meets community needs. Furthermore, it is obliged to apply a uniform price to standard letters carried within Australia by ordinary post.

Australia Post's core business activities are letter and parcel delivery - domestic and international - and retail agency business. Customers can access these services, as well as philatelic products, financial services and related products, through some 4,300 postal outlets throughout Australia.

The Corporation employs some 31,600 full-time and 4,000 part-time members, and supports an extensive mail-processing and delivery network. It services 7.7 million delivery points nationally. In 1994-95, 93.6% of standard letters were delivered on time and 98.8% were delivered within one additional day.

Australia Post is a Government Business Enterprise owned by the Commonwealth of Australia. In 1994-95, annual revenue totalled $2.8 billion and profit reached $331.6 million before tax and abnormals.

TABLE 20.8   POSTAL ARTICLES HANDLED BY AUSTRALIA POST, VICTORIA

Posted in Victoria for delivery within Australia			
	'000		
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
Posted in Victoria for delivery overseas and received in Victoria from overseas			
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

Source: Australian Postal Corporation

REFERENCES

Data sources

The statistics on railways and country and provincial road passenger services have been obtained through the Public Transport Corporation Victoria. Drivers' and riders' licence figures and data on road traffic accidents were provided by the VicRoads Information Services Department.

The statistics on air transport were obtained from the Federal Airports Corporation and the Commonwealth Department of Transport.

Information relating to telecommunications was obtained from the Austel, Australian Broadcasting Authority, and Telstra Annual Reports and the Optus Review. Postal data was provided by the Australian Postal Corporation.

ABS

ABS Special Data Service - Product No. 9303.0.40.003

Non-ABS

Australian Postal Corporation

Public Transport Corporation, Victoria

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Australian Broadcasting Authority - Annual Report

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