Chapter 19

TRANSPORT AND COMMUNICATIONS

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Chapter 19

TRANSPORT and COMMUNICATIONS

Although Tasmania has not seen revolutionary changes in transport, such as proposals for ultra-high-speed trains or suburban monorail systems that have been evident in other States, innovations and improvements have nevertheless taken place. With moves to establish a high-speed catamaran service across Bass Strait, new radio stations and the State's communications network enhanced by a new optical cable link, Tasmania's infrastructure has kept pace with the rest of Australia consistent with its needs.

19.1 TRANSPORT

Almost every sector of the community relies on the transport industry. Without road, water, air and rail transport the lifestyle and conveniences that we take for granted would not be possible.

19.1.1 Roads

New Road Works

The Department of Roads and Transport is responsible for the planning and design of roads and bridges in Tasmania. Actual construction and maintenance work is either tendered or arranged through the Department of Construction.

Highlights of the 1989-90 financial year included:

• the opening of the Deloraine Bypass Stage 1 in June 1990 after five years' work and contract documents for Stage 2 being issued and awarded. The total expenditure on this project to June 1990 was \$16 million;



The central bus interchange, Hobart. Photo: The Mercury

- design of the dual carriageway from West Park to Toorak Court, Burnie, was completed at a cost of \$317 000 in 1989-90;
- along the Midland Highway designs were completed for five sections of overtaking lanes, each of 1.5 kilometres length;
- the Kings Meadows Connector interchange was completed in early 1991. Total expenditure to 30 June 1990 was \$2.1 million;

19.1 MOTOR VEHICLES ON REGISTER TASMANIA (a)

Year	Number of vehicles on register ('000)	Vehicles per 1000 of population (no.)
1910	0.4	2
1920	4.1	20
1930	19.5	89
1940	26.2	109
1950	43.2	156
1960	93.2	271
1970	154.3	398
1980	229.5	542
1990	294.3	644

(a) At 30 June.

(Source: ABS Catalogue No. 9303.6).

- the East Tamar Highway at Fourteen Mile Creek had road approaches and works completed by June 1990 at a cost of \$1 million;
- in the south, the national arterial road system saw the Brooker Highway carriage duplication reach completion from Claremont Link Road to Abbotsfield with expenditure of \$1.3 million; and
- the first 4.2 kilometres of the South Arm Highway was completed in December 1989. It links the Tasman Highway at Mornington with Rokeby Main Road at Howrah.

19.2 MOTOR VEHICLES REGISTERED, AUSTRALIAN STATES, 1990 (a) (b)

State	Number of vehicles on register ('000)	Vehicles per 1000 of population (no.)
NSW	3 134.0	537.8
Vic.	2 584.3	590.0
Qld	1 687.3	580.5
SA	853.8	593.3
WA	1 000.2	612.2
Tas.	287.9	630.5
Australia	9 776.6	572.3

(a)Excluding motorcycles.(b) At 30 June.

(Source: ABS Catalogue No. 9303.6).

Motor Vehicles

Motor vehicle registrations have grown steadily both in the number of vehicles registered and also in terms of vehicles registered for every 1000 people.

At 30 June 1990 Tasmania had the highest rate of vehicle ownership in Australia.

Road Traffic Accidents

In 1990, 71 people were killed and 1905 injured on Tasmanian roads. This was a decrease of 11.3 per cent and 4.6 per cent respectively on the previous year. Alcohol was a contributing factor in 34 per cent of deaths and 20 per cent of injuries. Failing to observe a traffic sign or signal was a prime cause in 12 per cent of injuries but only three per cent of deaths. Inattentive driving was the cause of 10 per cent of the injuries and four per cent of deaths. After alcohol; excessive speed, having regard for the con-

19.3 ROAD ACCIDENTS, TASMANIA, 1990

	Assidents in 1	Number of persons	
Year	Accidents involving casualties	Killed	Injured
1984	1 445	84	2 015
1985	1 495	78	2 070
1986	1 468	91	2 060
1987	1 407	77	1 959
1988	1 457	75	1 925
1989	1 482	80	1 997
1990	1 386	71	1 905

(Source: ABS Catalogue No. 9405.6).

ditions was the major cause of death (17 per cent) although it contributed to only nine per cent of the injuries. Forty four per cent of persons killed and 51 per cent of those injured were under 25 years of age.

Accidents, injuries and deaths were more likely to occur on a Saturday (19 per cent, 20 per cent and 21 per cent respectively). Accidents and injuries are most likely to occur in the afternoon from 4 o'clock to 5 o'clock (10 and 11 per cent respectively).

Bus Services

In Tasmania, the State Government runs buses in the major metropolitan areas through the Metropolitan Transport Trust. In 1989-90 the number of passenger trips by the MTT was

19.4 MTT PASSENGER JOURNEYS, TASMANIA ('000)	
1985-86	13 322
1986-87	12 875
1987-88	13 213
1988-89	12 809
1989-90	12 503

(Source: Department of Roads and Transport, Annual Report 1989-90).

estimated to be 12 503 000. This was a decrease of 2.4 per cent on the previous year.

Development of a proposal for a central city bus station, on St John Street, has continued with the Launceston City Council. A similar project in Elizabeth Street, Hobart, has also commenced. The termini are designed to provide a central pick-up and deposit point in the inner city, reducing congestion in the surrounding streets.

A Metro 10 Day Tripper ticket was introduced to allow adult concession fare passengers 10 days of off-peak travel at a discounted price.

19.5 MTT OPERATING STATISTICS, 1989-90	
Passenger journeys -	
Hobart	9 442 000
Launceston	2 283 000
Burnie	778 000
Vehicle kilometres	9 416 000
Revenue (\$)	9 486 000
Expenditure (\$)	25 747 000
Employment -	
Hobart	412
Launceston	100
Burnie	29

19.1.2 Sea Freight

With the introduction of the *Princess of Tasmania* onto the Devonport to Melbourne route in 1959, Bass Strait shipping entered a new era. Despite this quantum leap in shipping technology, a degree of stagnation had entered the industry by the early 1980s. Three long established lines were operating nine ships. There was limited direct competition and cargo han-

services were Until 1985 Tasmanian dominated by the Australian National Line (ANL) and Union Bulkships. ANL served the Northern ports, Burnie, Devonport and Launceston while Union served Hobart. Both companies ran services to Melbourne and to Sydney and ANL ran to Brisbane and the North Queensland ports. ANL and Union had operated this pattern of services since the introduction of containerised roll-on roll-off freight services in the mid 1960s.

In the early 1980s ANL had a fleet of six ships, the three 'trader' vessels (*Sydney*, *Brisbane* and *Townsville Traders* built in the late 1960s), the larger and more modern *Bass* and *Melbourne Trader* (based on a standard European design built in 1975 and 1976 respectively) and the passenger ferry *Empress of Australia*. Until 1982 Union had used two large gas turbine powered ships and when these became uneconomical they introduced the *Seaway Hobart* and the *Seaway Melbourne* which are sister ships to the *Melbourne Trader*. All these vessels carry containers which are loaded onto the ship by fork lifts. This has been dubbed the STO-RO system.

In 1984 ANL began to rationalise its shipping services and withdrew from Queensland. In Tasmania it ceased cargo services from Devonport and in 1985 withdrew the Empress of Australia. This year saw massive changes to Bass Strait shipping. The Tasmanian Government's TT-Line took on the Melbourne-Devonport passenger/cargo service with its 19 000 tonne Abel Tasman, recently imported from Germany. At the introduced Brambles the same time. 'Mercandian' class vessel Challenger B on a three times weekly service between Burnie and Melbourne.

These two new entrants not only provided a degree of competition in Bass Strait shipping but also introduced new cargo handling arrangements. TT-Line brought back the use of road trailers as the cargo carrying unit in line with the latest European short sea practice. (It had been tried in the early 1960s by ANL.) Brambles used containers but loaded them onto the ship using MAFI trailers. These are low,

BRUNY ISLAND FERRIES

About 1860, George Davis started a ferry service for passengers and goods that crossed the Channel from Three Hut Point (Gordon) to Sheepwash Bay, using a dinghy with oars and sails. He continued this ferry service for about 40 years.

In 1936 a Parliamentary Public Works Committee reported that it was not in favour of a vehicular Ferry Service between Bruny Island and mainland Tasmania.

George Robert Grant from Snug bought the ship *M.L. Taruna* in 1937 to operate as a ferry between Middleton and Simpson's Bay as part of Grant's Channel Bus and Ferry Service.

The *M.L. Gayclite*, sister ship to the *Taruna*, was brought into service in 1943. It commenced running between Snug and Dennes Point. With the Snug jetty in need of major repairs, the terminal was relocated for a short time at the Margate Fish Factory jetty before Tinderbox - Dennes Point was chosen as the crossing to serve North Bruny.

In 1948 the State Government decided that a vehicular ferry service be introduced with terminals at Tinderbox and Dennes Point.

Grant's passenger ferry service between Simpson's Bay and Middleton finally closed in 1950. Passenger traffic was directed to the Tinderbox - Dennes Point crossing with the ferry *Gayclite*.

An effort to establish a vehicular crossing between Tinderbox and Dennes Point was thwarted by a severe storm in 1950, and the project was brought to a halt. In 1953 the Government decided to move the proposed crossing from Tinderbox and Dennes Point to the much longer, but sheltered, route between Kettering and Barnes Bay.

The *Melba*, which was purchased in 1951, started the new service between Kettering and Barnes Bay in 1954. After five years in operation, the *Melba*, with a capacity of 18 cars, was becoming a problem to peak traffic, causing delays and frustration to residents and travellers.

The Government of the day purchased two replacement ferries from New Zealand. They were the *Ewen W. Alison* and *Alex Alison*. The latter unfortunately sank while being towed to Tasmania. The Ewen W. Alison was refitted and renamed Mangana and was brought into service in March 1961. It had a capacity of 34 cars, nearly double that of the Melba, which was retained as a standby vessel.

Following the collapse of the Tasman Bridge in 1975, the Government purchased a vehicular ferry, the *Man On*, for the trans-Derwent crossing. It was refitted and renamed the *Harry O'May* and was converted for the Bruny Island service to replace the *Melba*, commencing in March 1978.

New terminals were constructed at Roberts Point and Kettering in 1983.

With the advanced ages of the two existing ferries, *Mangana* (60 years) and the *Harry* O'May (39 years), and the escalating maintenance cost of both vessels, the State Government decided on the construction of a new replacement vehicular/passenger ferry.

In December 1986 ship design consultants (Ship Technology Unit) were engaged to assist the then Marine Division of Transport Tasmania in the design of the new ferry.

Tenders were called in February 1989 and in June a contract was signed with shipbuilder Launceston Marine Industries Pty Ltd for the construction of a new replacement Bruny Island vehicular/passenger ferry, the *Mirambeena*, at a net cost of \$5.2 million.

Mirambeena's Specifications

Length overall: 52 metres

Breadth moulded: 12.75 metres Depth moulded: 3.7 metres Load draft: 2.7 metres Vehicle capacity: 74 medium-size vehicles Passenger capacity: 400 persons Service speed: 10 knots Main engines: 2 x Calleson Propulsion units: 2 x Voith Schneider

(Article courtesy of the Tasmanian Department of Roads and Transport.)



rigid trailers with only one axle, capable of carrying four containers at a time, and are loaded prior to the arrival of the ship.

When the ship arrives in port the MAFI trailers on the ship are towed off and the previously loaded MAFIs ashore are towed on. This greatly speeds up cargo handling rates compared to the STO-RO system and also uses less shore labour.

Following the withdrawal of its Queensland services ANL progressively phased out its 'Trader' vessels between 1985 and 1987. In early 1988 ANL lost a large contract for carrying paper for APPM to Brambles and sold the *Melbourne Trader*. Thus, in less than four years, ANL had reduced its operations in Tasmania from six ships to one, the *Bass Trader*. Brambles chartered the small Swedish RO-RO, the *Gute*, to help carry the increased volume of cargo on its Burnie-Melbourne service.

Currently Tasmania is served by nine regular general vessels operated by five shipping lines, as well as several special-purpose ships, such as the cement carrier *Goliath*. Of the ships recently introduced, the *Challenger B* has been replaced already by the *Tasmania B*, and ANL has introduced the *Searoad Mersey*. A replacement has The Mirambeena. Photo: The Mercury

also been contracted to replace the TT-Line's *Abel Tasman*.

Ferries

Bass Strait Service

Record passenger figures highlighted a successful year for the TT-Line's ferry *Abel Tasman*. In the twelve months to June 1990, the TT-Line recorded an operating surplus of \$8.3 million. A total of 246 718 passengers travelled on the *Abel Tasman* during 1989-90, an increase of 14 per cent on the previous financial year. The number of vehicles carried increased by 6 per cent to 58 558.

A fast passenger service across Bass Strait became a reality with the launch in October 1990 of the 74 metre *SeaCat Tasmania*. The catamaran is capable of carrying 350 passengers and more than 80 cars on each trip. The trip takes four and a half hours from George Town, in Tasmania, to Port Welshpool, in Victoria. It is operated by Tasmanian Ferry Services. The SeaCat was designed and built by International Catamarans, of Prince of Wales Bay in Hobart.

19.6 BRUNY ISLAND FERRY 12 MONTHS TO 30 JUNE 1990

Total vehicles	103 704
Other vehicles	6
Concession vehicles	44 056
Vehicles 14-16m	310
Vehicles 10-14m	278
Vehicles 6-10m	3 446
Vehicles 5-6m	1 640
Vehicles under 5m	53 482
Motorcycles	486
Trips	6 978

(Source: Department of Roads & Transport, Annual Report 1989-90).

Bruny Island Service

Transport Tasmania recently purchased a new ferry for the Kettering to Roberts Point run connecting Bruny Island to the mainland. The *Mirambeena* replaced the *Mangana* which has been put up for sale. The *Harry O'May* has become the standby ferry.

19.7 BRUNY ISLAND FERRY VEHICLES CARRIED

Year	Total Vehicles
1985-86	89 078
1986-87	84 896
1987-88	87 622
1988-89	89 860
1989-90	103 690

(Source: Department of Roads and Transport, Annual Report 1989-90).

19.1.3 Air

Air transport provides a vital role in the maintenance and development of passenger and freight flows between Tasmania and the mainland - a role far more important than in other States, where alternative additional transport modes for interstate movement of passengers and freight exist.

Australian, Ansett, East-West, Eastern, Chartered Airlines of Australia and Kendall provide regular domestic services to and from Tasmania. Air New Zealand provides international flights by flying regularly to Christchurch, and Airlines of Tasmania, Wilderness Air, Western Aviation and Tasair provide passenger, charter and tourist flights within the State. Airlines of Tasmania, Flinders Island Airways and Promair connect King and Flinders Islands and also provide services to Melbourne.

Hobart Airport is located 18 kilometres from the city and handles around 535 000 passengers each year. The airport has been developed to accommodate Boeing 747 aircraft. The runway is 2251 metres long and is served by modern radar navigation aids to provide all-weather capability. In 1988 the Federal Airports Corporation was vested with the operation of Hobart Airport as well as 16 other major airports throughout Australia, including Cambridge and Launceston. In 1989 a further six airports were added to the FAC network.

Launceston Airport is located some 16 kilometres south-east of Launceston city. It is the major freight-handling airport of Tasmania for Ipec, Ansett and Australian as well as charter and non-scheduled operators. This airport is ranked fifth in Australia for the movement of freight.

The airport is the base for the Royal Flying Doctor Service, and is used for commuter operations, flying training, light aircraft charter and other aerial-work operations.

Tasmania has nine other aerodromes, at Cambridge, Devonport, Flinders Island, King Island, Smithton, St Helens, Queenstown, Strahan and Wynyard. Devonport and Wynyard airports have runways large enough to carry jet aircraft and handle regular passenger services to Victoria. All of the others handle internal commuter, charter, private aircraft and some interstate freight services.

19.8 DOMESTIC AIR TRANSPORT,	1990
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Airports	Aircraft movements	Passengers ('000)	Freight (tonnes)
Hobart	6 967	535	4 354
Launceston	6 9 7 6	318	24 700
Devonport	3 044	133	
Total	16 987	986	29 054

(Source: Department of Transport and Communications, Annual Report 1990).

19.9 TASF	AIL FREIGHT 1985-90	
	'000 tonnes)	

Year	Freight	
1985-86	2 186	
1986-87	2 214	
1987-88	2 361	
1988-89	2 293	
1989-90	2 025	

(Source: Australian National Railways Commission, Annual Report 1989-90).

19.1.4 Rail

On 1 July 1975 control of the State's railway system was transferred to the Commonwealth Government. All regular passenger train services in Tasmania ceased in 1978, as the railways had carried relatively few passengers for decades and budget constraints forced cutbacks in public expenditure. Today the State's rail system is used only to transport goods or to run an occasional tourist excursion.

Operational and financial responsibility for the Tasmanian railways was assumed by the Australian National Railways Commission in 1978. In 1985 the Commonwealth Government advised of future funding for the Tasmanian region, to be called Tasrail, with a contract for three years and requirements that certain achievements had to be met.

During 1989-90 financial year the locomotive fleet was further rationalised. This resulted in 44 Z-class locomotives being assigned to mainline tasks with eight lighter engines performing shunting duties, conducting services on the Derwent Valley line and operating the sole remaining vacuum-braked rail service between

19.10 TASRAIL FREIGHT GOODS CARRIED ('000)			
Commodity	1988-89	1989-90	
Woodchip logs	754.2	634.9	
Other logs	270.4	214.2	
Sawn timber	8.6	0.5	
Coal	375.4	369.1	
Cement	376.0	326.3	
Containers	247.5	198.3	
Sulphuric acid	131.2	126.6	
Fertilizer	72.7	91.1	
Minerals	56.6	64.0	
Other goods		0.1	
Total	2 292.6	2 025.1	

(Source: Australian National Railways Commission, Annual Report 1989-90).

Railton and Devonport. The freight moved in the 10 years following 1978 had grown by 74 per cent. However, this tendency has reversed in the past two years.

The railways play a vital role in Tasmania's prosperity. In 1989-90 Tasrail moved two million tonnes, a decline of 13 per cent from the previous year. Tasrail aims to get bulk tonnage onto rail, thus making the highways safer for the general public and encouraging the tourist industry.

In 1988 the Federal Government agreed to continue to support rail operations in Tasmania for a further five years in order to ensure a measure of stability and predictability. Recently there have been many cost cutting and rationalising measures introduced which have seen a large decline in the local workforce.



Tasmanian steam train, circa 1900. Photo: Archives Office of Tasmania

19.2 TELECOMMUNICATIONS

Australia's telecommunications infrastructure is currently undergoing dramatic changes. In January 1989 Telecom became a corporation. At the same time areas that had previously been the exclusive preserve of Telecom, such as cabling and wiring of customer premises, PABX maintenance and telephone supply and maintenance, have been opened to private competition. The Australian Government is now in the process of opening the provision of actual calling services to at least one other provider.

Tasmania has obtained considerably upgraded facilities with the provision of large quantities of optical fibre lines in place of the traditional cables. By 1995 the target is to have the optical fibre transmission network linked around the nation. This includes the laying of an optical fibre submarine cable to Tasmania.

Recent new changes include the provision of 0055 Information Services calls. These generated 21.3 million calls in Australia with over 4000 services now being available. Pre-payment for phone calls is now available with the introduction of Phonecard for public phones. This is available in denominations of \$2, \$5, \$10 and \$20. Of more use to the general public is the bringing in of itemised accounts for STD, ISD and 0055. This enables consumers to check that all calls charged were made and will assist in preventing unnecessary complaints.

The Integrated Services Digital Network (ISDN) Macrolink commercial service allows voice, text, data, video and image services to be carried on one network. Recent efforts have led to the introduction of ISDN Microlink which provides identical facilities and flexibility for the lower volume user, with a lower cost structure.

19.3 POSTAL SERVICES

The first of July 1989 marked a major milestone in the development of the Australian postal service. Australia Post became a corporation on that date. The Australian Postal Corporation Act requires the provision of a letter service at a universal price and the meeting of minimum financial targets. The Act also provides Australia Post with the freedom to offer a whole range of services and products not available under previous legislation.

Australia Post provides surface and airmail services, both within Australia and to and from other countries, for the carriage of letters, cards, aerogrammes, newspapers and parcels. It also operates an express courier service and electronic postal and money transfer services and sells a range of packaging products, postal stationery and philatelic items.

At 30 June 1990 Australia Post employed 1058 staff in Tasmania. This comprised 898 post office agents and assistants, as well as 160 mail contractors. There are 40 post offices and 170 post office agencies. Mail was distributed to 185 618 delivery points throughout the State during 1989-90; 169 326 households and 16 292 businesses.

19.4 RADIO AND TELEVISION SERVICES

Radio and television broadcasting fall within the jurisdiction of the Commonwealth Government and are the responsibility of the Minister for Transport and Communications.

The Australian broadcasting system consists of three types of services:

- national radio and television services provided by the ABC and SBS;
- commercial radio and television services provided by commercial companies under licence; and
- public radio services provided by nonprofit making corporations under licence.

The Broadcasting Act 1942 (as amended) governs the establishment and operation of commercial and public services. It also contains provisions relating to the SBS and the Australian Broadcasting Tribunal (ABT). The Australian Broadcasting Corporation Act 1983 provides for the ABC. Applications for broadcasting licences and matters relating to their general renewal are handled by the ABT. Although Tasmania has only four television broadcasters, they hold a variety of licences between

Call Sign	Classification	Location
7AD	Commercial	Devonport
7BU	Commercial	Burnie
7EX	Commercial	Launceston
7FG (a)	National	Fingal Valley
7HT	Commercial	Hobart
7LA	Commercial	Launceston
7NT	ABC	Launceston
7PB	ABC	Hobart
7QN (a)	ABC	Queenstown
7RN	ABC	Hobart
7SD	Commercial	Scottsdale
7SH (a)	ABC	St Helens
7XS	Commercial	Queenstown
7ZR	ABC	Hobart
7ABCFM	ABC	Hobart, Nth and
		East Tas.
7DBS	Public - Community	Wynyard
7HFC	Public - Community	Hobart
7HO	Commercial	Hobart
7JJJ	ABC	Hobart
7LTN	Public - Community	Launceston
7QN/T	ABC	Queenstown
		Zeehan,Rosebery,
		Savage River,
		Waratah & Strahan
7RG	Public - Community	Geeveston
7THE	Public - Community	Hobart
7TTT	Commercial	Hobart
7WAY	Public - Community	Launceston
7XS/T	Commercial	Rosebery

19.11 RADIO STATIONS IN OPERATION AT 30 JUNE 1991

(a) Transmits, in the main, programs originating from 7NT.

(Source: Department of Transport and Communications).

them. This is necessary due to the poor reception conditions in Tasmania. The ABC has 24 sites across the State, each of which has a relay transmitter at least. Southern Cross has 15 current sites in the north and TVT has eight in the south. These numbers and locations will change as aggregation progresses. SBS currently has only three, but this should also increase.

19.4.1 National Broadcasting Services

The ABC currently provides one television service nationally, four radio services (two AM and two FM) in the capital cities and two radio services (one AM and one FM) in regional areas (although not all areas are yet receiving ABC FM). The ABC is a major user of the new Australian satellite system, Optus Communications (formerly Aussat), and this enables people to receive ABC television and three ABC radio services although they live in remote areas or areas in which it is extremely difficult to receive broadcasting signals by terrestrial means. However, reception via satellite will only be possible with the necessary equipment. It is planned that SBS services will be extended into the north of the State in 1993.

19.4.2 Commercial Broadcasting Services

A commercial radio or television licensee is required under the Broadcasting Act to undertake to provide an adequate and comprehensive service to people within the service area of the licensee and to encourage the use of Australian resources.

Whether a licensee has met the undertaking is a matter of judgement for the Tribunal after considering all relevant information, including views and comment from interested members of the public through the licensing process. Commercial broadcasters receive most of their income from the broadcasting of advertisements. Commercial broadcasting licensees are required to pay licence fees annually.

It is planned in the future to extend the services of both TVT Hobart and TNT North-East Tasmania to cover the whole State, thus providing all viewers with two competing commercial services. Commercial radio services on the FM band are also being extended throughout the State.

19.4.3 Public Broadcasting Services

Public radio services have expanded rapidly throughout Australia since 1978, when the then Minister announced policy guidelines for their development. From 12 stations in 1978, the sector now comprises over 70 stations. There are six public radio stations in Tasmania.

Funds for these services may come from a variety of sources including government and nongovernment grants, subscriptions and sponsorship announcements. Public radio services are essentially local in focus, and may program material which reflects the wide range of informational, cultural and educational interests in each service area.

19.5 BIBLIOGRAPHY

ABS Publications Produced by the Tasmanian Office:

Motor Vehicle Registrations, Tasmania (9303.6), monthly. Road Traffic Accidents Involving Casualties (9405.6), quarterly.

Other Publications:

Australian National Railways Commission, Annual Report 1989-90, ANRC, Canberra, 1990. Australian Postal Commission, Annual Report 1990, APC, Canberra, 1990.

- Australian Telecommunications Commission, *Annual Report 1990*, ATC, Canberra, 1990.
- Department of Roads and Transport Annual Report 1989-90, DRT, Hobart, 1990.
- Department of Transport & Communications, Annual Report 1990, DTC, Canberra, 1990

Department of Transport & Communications, Radio & Television Broadcasting Stations 1991, DTC, Canberra, 1991.