

Chapter 14 Transport and Communication

Key Points

- Good transport and communication links are critical to the Territory's development, given the small size of the local market, relative isolation from major markets in southern Australia and the small and widely dispersed Territory population.
- In 2004-05, the transport and communication sector accounted for 6.3 per cent of gross state product and represents about 6.9 per cent of total Territory employment.
- The completion of the Adelaide to Darwin rail link in late 2003 represents a major milestone in the development of the Territory's transport infrastructure. Rail is now the dominant mode of transport for the north-south freight route. It also provides opportunities for regional development, particularly as a cost-effective method for the transport of bulk commodities.
- The volume of freight through the Port of Darwin continues to increase, and is expected to grow further with recent improvements to facilities at East Arm, including a bulk liquids terminal and equipment to facilitate the transfer of oil.
- Both international and domestic air capacity has grown strongly over the last 12 months, with Tiger Airways commencing operations on the Darwin-Singapore route and the arrival of Qantas subsidiary Jetstar.
- A new contract with Telstra to provide Territory Government information and communication technology (ICT) services includes an industry development program that is expected to generate 170 new jobs.

Transport and communication industries are critical drivers of economic growth. Of particular importance to the Territory economy are the roles of long-distance and interstate freight transportation and remote telecommunications infrastructure, given the Territory's size, remoteness and widely dispersed population. Transport and communication represented 6.3 per cent of the Northern Territory's gross state product (GSP) in 2004-05.

The four major segments of the Territory's transport sector are road, rail, sea and air. Until recently, road has been the key mode of freight transportation in the Territory, however the completion of the railway in 2004 has seen rail emerge as the dominant freight link between Adelaide and Darwin. The rail link also has implications for future development in Darwin's port infrastructure, with the potential for Darwin to develop as a regional transport and logistics hub, more closely linking Australia with markets in Asia.

Table 14.1: Transport and Communications Production as a Proportion of GSP/GDP, 2004-05

	Transport %	Communication %	Total %
New South Wales	3.7	2.6	6.3
Victoria	3.5	3.3	6.8
Queensland	4.4	2.5	6.9
South Australia	4.0	2.3	6.3
Western Australia	4.2	2.3	6.5
Tasmania	4.0	2.5	6.5
Northern Territory	3.8	2.5	6.3
Australian Capital Territory	2.1	2.7	4.9
Australia	3.8	2.7	6.5

Source: ABS Cat. No. 5220.0

Transport

Transport-related activity accounted for about \$395 million or 3.8 per cent of Territory GSP in 2004-05 and represents about 5.0 per cent of total Territory employment.

Rail In 2005, rail transported 592 800 tonnes of freight, compared to 557 400 tonnes in 2004, representing growth of 6.4 per cent.

Currently, rail freight is dominated by domestic product, although import and export volumes are growing steadily. About 85 per cent of freight between Darwin and Adelaide is now carried by rail. Rail transport has increased the dominance of the central corridor in freight movements into and out of the Territory. Although road transport may still hold the comparative advantage for short haul and time-sensitive perishable and chilled products, indications are that this could be decreasing, as demonstrated by the use of rail transport during the peak mango season in October 2005.

For the international market, the railway has a comparative advantage over shipping due to its speed and its capacity to move bulk commodities to Darwin for export. The frequency of shipping services to and from Darwin is not currently sufficient to capitalise on recent improvements in port infrastructure and to maximise the railway's potential. Commencement of a regular monthly Shanghai-Darwin service in January 2006, and interest in Indonesia and southern China services, are important recent developments.

A direct Darwin-Melbourne (via Adelaide) freight product was introduced in July 2005, helping to streamline movements between the two cities.

In 2005, the Katherine Freight Terminal experienced a 65 per cent increase in container movements, which included a significant increase in horticultural produce during the peak mango season. A proposal to develop a cluster facility for freight forwarders at Katherine Freight Terminal, incorporating cold stores and a common user transport depot, is now under consideration.

The cost effectiveness of rail for large volumes of mineral ore is a potentially significant stimulus for mining in regional areas. For example, from 2006 about 650 000 tonnes of manganese ore per year will be transported from the new Bootu Creek mine (near Tennant Creek) to Darwin for export. Frances Creek mine (near Pine Creek) is also in the process of reopening operations and plans to export about 1.5 million tonnes of iron ore to China via Darwin from early 2007.

Passenger numbers on the Ghan increased by 12 per cent to about 74 000 passengers in 2005. Following a successful three month trial in 2005, the number of Adelaide-Darwin services has been increased from one to two per week.

Sea Transport As the Territory's main port, the Port of Darwin handles freight for domestic consumption, cruise ships, and is a hub for offshore oil exploration supply and the railway. In addition, a number of private ports service coastal mining communities directly for supplies and mineral exports, including Bing Bong near Borroloola, Alyangula on Groote Eylandt and Nhulunbuy in East Arnhem Land.

In 2004-05, total cargo tonnage through the Port of Darwin increased by 73 per cent to a record 1.9 million tonnes. The increase includes about 600 000 tonnes of armour rock shipped from Darwin for the construction of the Bayu-Undan sub-sea gas pipeline and a 33 per cent increase in trading vessel calls (registered visits).

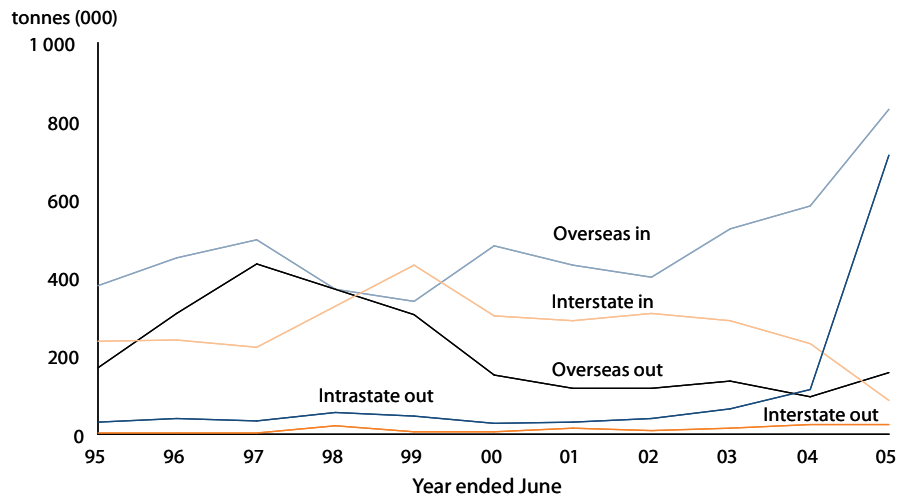
Also in 2004-05, petroleum products accounted for 60 per cent of total import tonnage through Darwin. Other significant imports include cement clinker and metal products. Key exports included armour rock, livestock and metal products.



Further, a shift in the source of petroleum products resulted in a significant increase in overseas imports and a corresponding decrease in interstate imports (Chart 14.1). The continued recovery of livestock exports (a 51 per cent increase in 2004-05) was the major contributor to increasing overseas exports in 2004-05.

In 2005, cruise ship visits increased by 50 per cent to a total of 33 visits, and passenger numbers increased by 6 per cent to about 11 000 passengers. Visits are expected to increase to 45 cruise ships in 2006.

Chart 14.1: Trade through Port of Darwin



Note: The large increase in 'Intrastate Out' in 2004-05 is armour rock used for the construction of the Bayu-Undan sub-sea gas pipeline

Source: Department of Planning and Infrastructure

Swire Shipping has committed to a continuation of its fortnightly Darwin-Singapore shuttle service that began in 2003. In January 2006, Hai Win Shipping announced a regular monthly Shanghai-Darwin service following successful trials during 2005, whereby two-thirds of the containerised freight from the trial was distributed across Australia by rail and the remainder by road.

Recently completed port facilities at East Arm include a wharf extension, a bulk liquids terminal, internodal facilities, a container wharf and the installation of pipelines and equipment for oil transfer. The completion of the bulk handling facility, shiploader and supporting infrastructure in the Darwin Business Park will further promote Darwin as a transport hub.

Road Transport

The Northern Territory is served by three national highways which provide links to Queensland (Barkly Highway), South Australia (Stuart Highway) and Western Australia (Victoria Highway). The National Highway network is the backbone of the road network system across the Territory and provides the only sealed road link between the Territory and the rest of Australia.

The Territory road network consists of more than 35 000 kilometres of road. About 12 per cent are classified as national highways, 19 per cent as arterial roads, 45 per cent as secondary roads (to distribute traffic within regions) and 24 per cent as local roads. A further 13 200 kilometres of roads, primarily for distributing traffic within local areas, are administered by local government.

All three levels of government are responsible for developing and maintaining the road networks in the Northern Territory. AusLink is the Australian Government funding program designed to allocate funding to the land transport network. In 2005-06, AusLink expenditure on roads in the Territory is estimated at \$39 million. This includes major works on the Victoria and Stuart highways, bridge works on the Stuart Highway as well as upgrades to 'blackspot' locations, roads servicing the pastoral, tourism and mining industries and improved access for remote communities.

Northern Territory Government expenditure on Territory roads in 2005-06 is estimated at \$27 million for capital works and \$32 million for repairs and maintenance. Improving roads to tourist destinations such as the continuation of sealing both the Mereenie and Litchfield loop roads is a priority in 2006-07.

Air-International Seven airlines operate regular international services from Darwin:

- Qantas (Denpasar, Singapore, Mumbai);
- Garuda (Denpasar);
- Tiger Airways (Singapore);
- Merpati (Kupang);
- Air North (Dili);
- Royal Brunei (Brunei); and
- Australian Airlines (Singapore).

International airline capacity decreased significantly between June 2001 and June 2003 (Chart 14.2). Since May 2004, capacity has increased steadily from 1761 to 2576 seats per week in March 2006, with the highest weekly seat capacity level since April 2001 reached in January 2006 (2558 seats per week). Further growth is expected with the introduction of several new services.

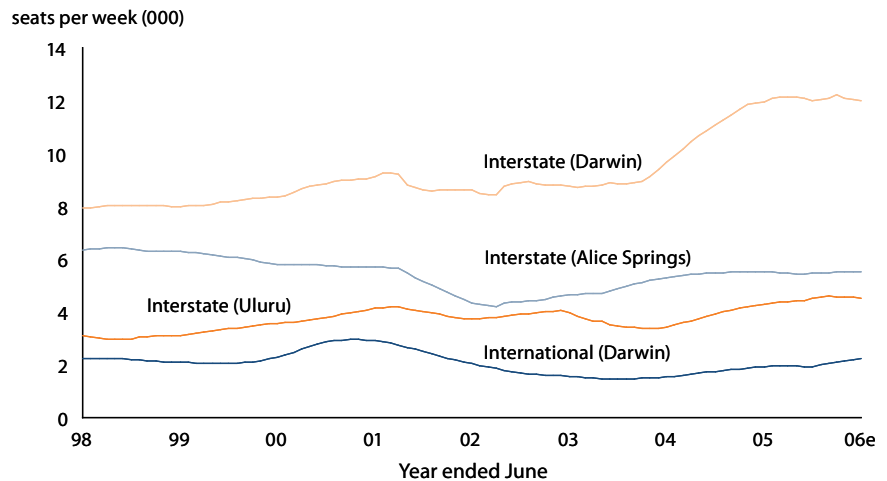
In December 2005, low cost carrier Tiger Airways began operating the Darwin-Singapore route, increasing capacity by about 40 per cent or 720 seats per week. In January 2006, Qantas commenced its new three times a week service from Sydney to Mumbai via Darwin. Royal Brunei announced in April 2006 that services to Darwin would temporarily be reduced from three to two flights per week.

In 2005, international arrivals into Darwin increased by 2.4 per cent to 80 700.

Occasional charter service flights also bring tourists directly from Japan to Alice Springs to visit Uluru. Since 2003, there have been nine flights, bringing more than 2700 tourists to the Territory.



Chart 14.2: Territory Airline Capacity (moving annual average)



e: estimate

Note: Cairns-Gove and Cairns-Groote Eylandt services are not included. The Cairns-Gove service has a capacity of 805 seats per week; the Cairns-Groote Eylandt service ceased in 2003.

Source: Department of Planning and Infrastructure

Air-Interstate Qantas, Virgin Blue, Airnorth, Skywest and Jetstar operate about 170 inbound interstate flights (about 23 000 seats) per week. These services provide daily connections between the Northern Territory and all Australian capital cities and major regional centres.

Interstate weekly seat capacity has increased dramatically in recent years, from 17 407 in 2001-02 to 22 301 in 2004-05, due largely to the arrival of Virgin Blue. Capacity increased to an estimated 22 738 seats in 2005-06, due in part to the operation of larger aircraft by Qantas during the wet season.

In September 2005, Virgin Blue withdrew its Darwin-Sydney and Alice Springs-Adelaide services (1680 seats per week). In May 2006, Qantas subsidiary Jetstar began operating on the Darwin-Brisbane, Darwin-Melbourne and Darwin-Adelaide routes, while Qantas has withdrawn its Darwin-Melbourne service, representing a net increase of 900 seats per week from July 2006.

In 2005 domestic arrivals into the Territory increased by 2.3 per cent to 535 600.

Air-Intrastate Four airlines operate regular services within the Territory:

- Qantas (Darwin, Nhulunbuy, Alice Springs and Uluru);
- Aboriginal Air Services (AAS) (Darwin, Arnhem Land, Tiwi Islands, Katherine, Tennant Creek, Alice Springs and Uluru, and Gove and Ngukkur from July 2006);
- Airnorth (Darwin, Gove, Groote Eylandt and Maningrida); and
- Vincent Air (Darwin and Groote Eylandt).

Air freight to remote communities is also important for the delivery of perishables, household items and mail.

Communications

The communications industry accounted for about \$265 million or 2.5 per cent of Territory GSP in 2004-05 and represents about 1 per cent of total Territory employment.

Technological developments have reduced the isolation faced by many Territorians, particularly those living in remote localities. Increased access to information technology infrastructure has enabled the delivery of a wider range of mainstream services to remote areas and innovations in service delivery. Despite significant investment and ongoing improvement, the gap between the Territory and other jurisdictions in their access and capability to deliver information and communication technology (ICT) based services remains large, particularly in remote areas.

Remote areas in the Territory have benefited from increased access to telecommunications services, however the low volume of network traffic and lack of competition means that unit costs for electronic services remain high.

Remote Access

Connect Australia, the Australian Government's new telecommunications program for remote Australia, was announced in September 2005. The \$1.1 billion package aims to improve remote and regional telecommunications. The Territory Government is liaising with the Australian Government to ensure that specific needs of the Territory are addressed. In particular, broadband and mobile access in remote areas and a second fibre-optic cable from Adelaide to Darwin to improve wholesale telecommunications competition.

There are several other Australian Government funded programs aimed at improving access to ICT in remote areas of the Territory:

- The Regional Mobile Phone Program has established CDMA mobile services to Daly River, Gapuwiyak, Milikapiti, Pirlangimpi, Ali Curung and Warawi. Coverage will be extended to Barunga, Beswick, Coinda, Daguragu/Kalkaringi, Galiwinku, Maningrida and Milingimbi in 2006.
- The Commonwealth Coordinated Communications Infrastructure Fund (CCIF) and Telstra provided a \$2 million grant for telecommunications and broadband fibre-optic infrastructure to Peppimenarti, Palumpa and Wadeye that is to be completed in late 2006.
- The Australian Government and Telstra, through the Community Phones Program, began to install fixed public telephones in about 80 remote communities in the Northern Territory in 2006 to provide cheaper call rates.
- The IT Training and Technical Support Program provided \$1.22 million to train 1500 Indigenous people in remote communities north of Tennant Creek during 2006.

Northern Territory Government

Since June 2005, Telstra has provided Territory Government voice, data and internet services that were previously provided by SingTel Optus. The new contract includes an expansion of bandwidth and coverage, as well as a \$65 million industry development program aimed at expanding the Territory's ICT Sector. The program includes a customer contact centre and an Indigenous call centre, and is expected to generate 170 new jobs. The Government's Local Area Network (LAN) will also be moved from the current service provider to Telstra in 2006, which is expected to deliver a cost saving to Government of about \$4 million over four years.



There are two Department of Employment, Education and Training (DEET) programs aimed at improving ICT service delivery access and use in schools:

- Learning and Technology in Schools (LATIS) aims to provide ICT to every school in the Territory. To date, the program has delivered broadband to 155 schools, 54 of these via satellite.
- Interactive Distance Learning (IDL), which has replaced the two-way radio from the School of the Air, is using satellite technology to deliver interactive specialist tuition to 200 remote homesteads, schools and training centres in the Territory. The technology is now used for secondary tuition, but in the future may be applied to training needs, including vocational education and training.

Both programs will progressively move to terrestrial services, where appropriate, under the Telstra contract.

Television Darwin is served by the ABC (including the ABC2 digital service), SBS, Channel Nine and Southern Cross Television (SCTV – formerly Channel 7) networks. Additionally, Info Television broadcasts tourist-oriented information in Darwin via the free-to-air and cable networks. Other major centres receive a combination of Imparja, SCTV, Central Queensland Satellite Television (Channel 10), the ABC and SBS. Austar pay television is available via direct cable in Darwin and via satellite in Alice Springs and other parts of Territory.

In December 2005, a third commercial digital-only channel was approved for Darwin and is expected to begin broadcasting by the end of 2007. Channel 9 and SCTV have first option to purchase the licence.

Radio Darwin, Alice Springs and smaller centres in the Territory are serviced by a number of radio stations, including the ABC, commercial and community stations. The Australian Government policy framework for transition to digital radio was announced in September 2005, although no firm date for the Territory has been set.

Outlook

Transport Improved port facilities, more frequent shipping services and private sector infrastructure investment indicates that rail and complementary infrastructure will continue to have the greatest impact on the transport sector in the short to medium term. Into 2006-07 and beyond, transportation of bulk mineral exports and supplies for the mining sector will emerge as a significant market for rail transport. In addition to this, future expansion of trials and the development of infrastructure networks in Darwin, Katherine and Tennant Creek will continue to improve the growth potential of rail transport. Over time, rail is expected to be increasingly used by adjacent economic regions in the Kimberley and north-west Queensland, via the depots at Katherine and Tennant Creek, providing additional business opportunities in these centres. In the longer term, it is expected that Darwin will become increasingly utilised as a regional transport hub.

Continued economic growth, a more stable global environment and commencement of Tiger Airways and Jetstar services to Darwin are expected to see international airline capacity increase through 2006-07, leading to increased tourism opportunities.

Communications Telstra have announced a three year plan to roll out Third Generation (3G) mobile coverage to the Northern Territory, including remote towns and communities. The 3G service will replace CDMA coverage, giving users broadband speed mobile connection, including video calling.