

THE AIRPORT

3



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3.1 Airport Site

Adelaide Airport is located approximately six kilometres west of Adelaide’s CBD with its western boundary one kilometre from the shores of Gulf St Vincent. The airport occupies a site of approximately 785 hectares and is well-connected to the City of Adelaide, surrounding suburbs and other major locations in the State through road links.

The airport lies principally within the local government area of the City of West Torrens, with a small portion in the City of Charles Sturt. The southern boundary of the airport is adjacent to the City of Holdfast Bay. The airport shares its location with sport and recreational reserves, low and medium density residential areas and light-to-heavy industrial complexes. The Adelaide Shores Complex, a significant holiday and recreational area, is located immediately to the west of the site.

Figure 3.1 shows the local council boundaries surrounding the Adelaide Airport site.

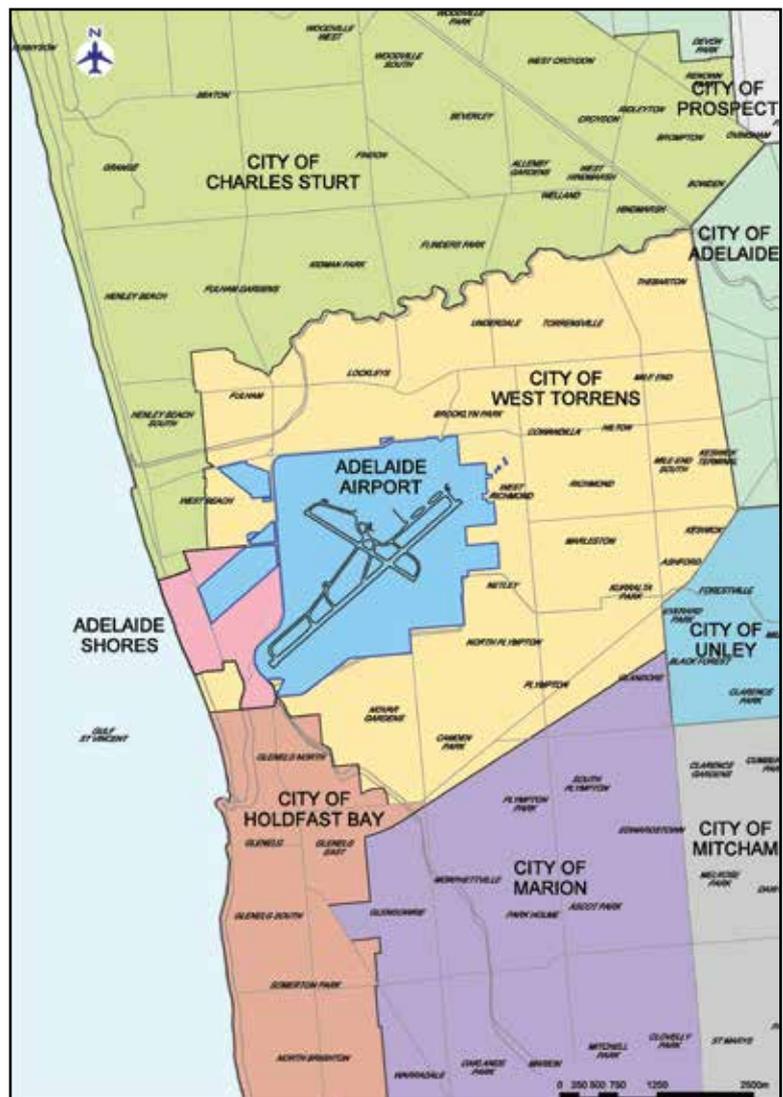


Figure 3.1 Council Boundaries around Adelaide Airport

3.2 Airport History

Air travel in South Australia commenced during the early part of the 1900s with airfields at various places throughout the State, including Northfield and what is now the location of the suburb of St Clair (formerly Cheltenham racecourse).

However, it was not until immediately following World War I that Adelaide saw its first official operational airport. Known as Captain Butler's Aerodrome, it was located at what is now the suburb of Hendon, nine kilometres north-west of the city, and was used as a base for an Adelaide to Sydney airmail service.

Adelaide's aviation needs continued to grow and in 1927 the existing Parafield Airport site was acquired. By 1941 it became evident that the location of this site was operationally unsuitable for the expanded future aviation needs of Adelaide, and investigations for an alternate site for the city's major airport commenced.

Following exhaustive topographical, geographical and meteorological testing over the period 1941 to 1944, the present site between the Adelaide CBD and the coast was chosen (see Figure 3.2). World War II slowed the acquisition and development program for the Adelaide Airport site, but the 10 years following the war saw the site developed for domestic services.

In December 1954, the Department of Civil Aviation commenced operational testing of the airport, which received its licence and opened for domestic operations in February 1955.

Since that time, the civil aviation world has been revolutionised – firstly with jet aircraft, followed by wide-bodied aircraft, and more recently the advent of low-cost carriers encouraging the carriage of passenger loads unheard of in the 1950s. Adelaide Airport has developed along with this aviation revolution and the increased demands of the South Australian community.

In the late 1960s, the main runway was first extended, along with one of many extensions to the domestic terminal to accommodate the public's adoption of aviation as a transport medium. The development and commissioning of state-of-the-art navigational and flight safety communications systems also took place at that time.

In November 1982, Adelaide Airport's international terminal was opened and the first scheduled international services into and out of South Australia commenced.

At around the same time the Commonwealth Government was laying the foundations for privatisation of its airports. The legislative processes for the first stage of this program were put in place by the development and promulgation of the *Federal Airports Corporation Act 1986* and the creation of the Federal Airports Corporation (FAC) under Section 5 of that Act.



Figure 3.2 View of the original Adelaide Airport Site 1947

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When the FAC took over management of Adelaide Airport in 1988, plans were formulated to commence upgrading the facilities. Following a planning and review period, the FAC embarked on a significant improvement program, and committed to the improvement of roads, power, water and sewerage capacity, landscaping, terminal development, and aircraft aprons and taxiways at a cost in the vicinity of \$20 million over a 10-year period, together with the extension of Runway 05.

The final stage of the privatisation program for Adelaide took place in May 1998, when AAL commenced the long-term lease of Adelaide Airport, inheriting identified staff, facilities and equipment from the FAC.

Since 1998, AAL has successfully completed major development works to position Adelaide Airport as one of the most modern and accessible airports in Australia. In October 2005, AAL completed the construction of the T1 terminal which was the first 'multi-user' type terminal in Australia (see Figure 3.3).

In 2011, AAL successfully completed a major resurfacing of runways and aprons.

Following the successful opening of and enhancements to the T1 terminal, AAL designed, constructed and opened the multi-level car park alongside the terminal in August 2012 (see Figure 3.4). The area between the terminal and the car park was developed as a pedestrian plaza, which was completed in March 2013.

Along with the terminal and car park developments, AAL has reconfigured the internal road network to provide enhanced accessibility to terminal precinct infrastructure and better external road access and egress.

All of these major projects were undertaken with little interruption to the workings of the airport and minimal interference to passengers. The success of these projects is testament to the project planning and management, and the consultative approach by AAL with all relevant stakeholders.

As a result of these significant infrastructure works completed in previous years and the planned works for the coming years, the airport is well placed to serve South Australia's air transportation needs for the next 20 years and beyond.



Figure 3.3 Adelaide Airport Terminal 1



Figure 3.4 Multi-Level Car Park

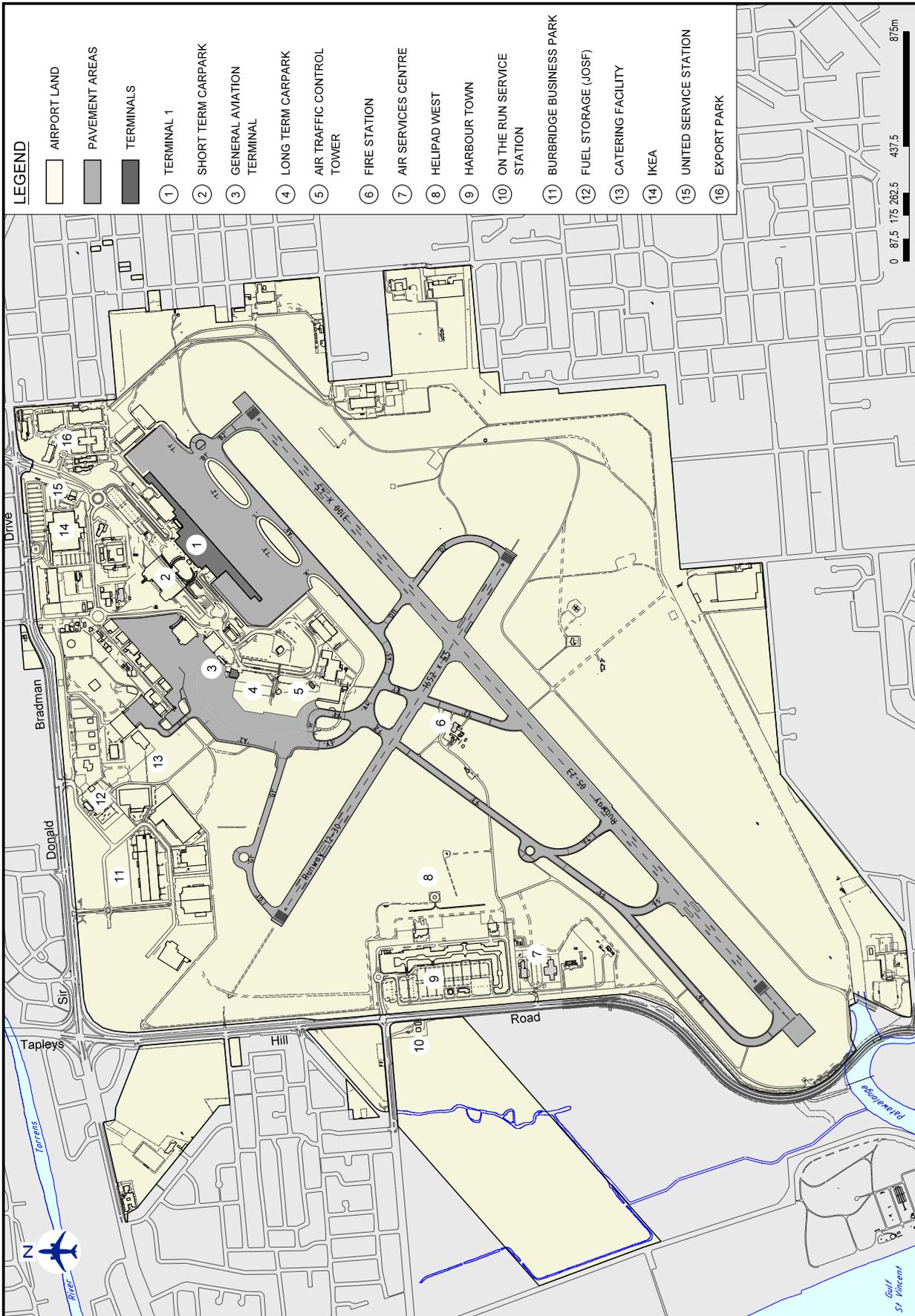


Figure 3.5 Layout of Existing Facilities at Adelaide Airport

3.3 Facilities

Adelaide Airport is a Certified Airport (as certified by CASA) and has facilities to provide for international, domestic and regional passenger airlines, freight services, general aviation, charters and helicopter operations. It also has dedicated facilities for the handling of freight including perishable and other time-sensitive products.

The principal aviation-related facilities at Adelaide Airport include:

- a two-runway system comprising the main 05/23 runway (3100 metres) and a secondary 12/30 runway (1652 metres) together with associated taxiways and apron;
- a multi-user integrated terminal serving international, domestic and regional customers in an efficient and economical manner;
- on-airport car parking facilities offering both short-and-long-stay car parking, and disabled car parking choices;
- taxi, hire car and bus parking;
- rental vehicle parking;
- air freight facilities including a six-metre pallet loader and cold storage facilities;
- aircraft maintenance hangars and associated facilities;
- in-flight catering facilities;
- general aviation facilities (including terminals) and helicopter facilities;
- rescue and fire-fighting facilities;
- air traffic control facilities;
- public transport access;
- meteorological facilities; and
- aviation fuel facilities.

The layout of the facilities at Adelaide Airport is illustrated in Figure 3.5 on the previous page.

The terminal (T1) and associated infrastructure provides 14 aerobridges and the capacity to handle 3,000 passengers per hour; offering state-of-the-art amenities for passenger comfort, quality processing and leisure.

3.4 Relationship to Other Airports

Adelaide Airport is the hub airport for the major regional centres of South Australia and has direct services to all mainland capital cities and significant tourism icons. Figures 3.6 and 3.7 demonstrate the current and possible domestic and regional locations that have or might be serviced by flights from Adelaide Airport on a weekly basis, and included at Table 3.1.

Adelaide Airport's main runway length of 3,100 metres is more than adequate to meet the demands of interstate and intrastate operations. It is also of sufficient length for the departure requirements, in all seasons, of critical long-haul international routes.

Current international direct services are provided to the cities of Dubai, Hong Kong, Singapore, Kuala Lumpur, Denpasar and Auckland, with additional one-stop links to the rest of the world. The international routes are shown in Figure 3.8, and outlined in Table 3.2 that follows.

The airport operates on a 24-hour basis that, under a curfew, restricts the operation of passenger-carrying jet aircraft between 11.00pm and 6.00am due to the surrounding residential areas. Shoulder periods of one hour exist at each end of the curfew timeframe for international regular public transport services, with a maximum extent of eight arrivals per week (subject to Commonwealth dispensation) and no departures.

AAL continues to work in partnership with all airlines, State Government agencies, the freight and cargo industry and the tourism and hospitality industry, to develop sustainable airline services that meet the air travel, import and export needs and social demands of South Australia.

Domestic

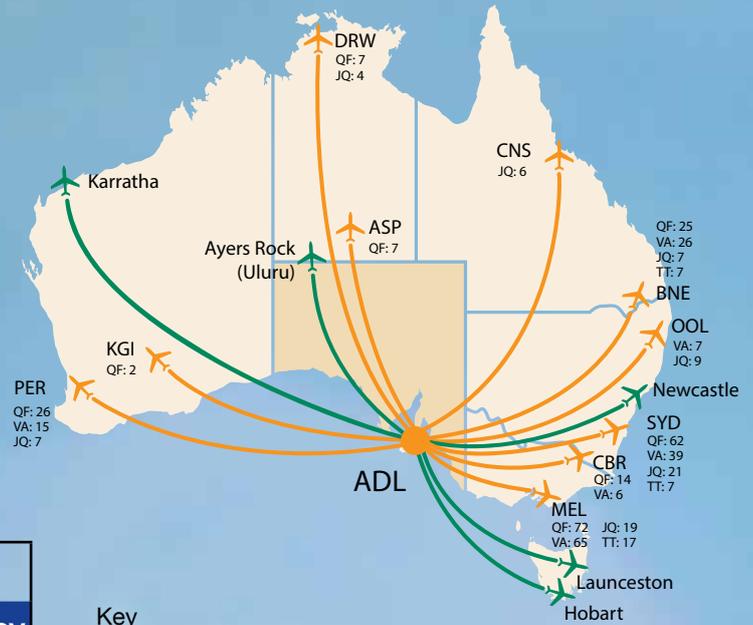


Table 3.1 Domestic and Regional Direct Services in Operation – 2014

Domestic / Regional				
Airline	Destination		Frequency (weekly)	
Qantas Airways	Alice Springs (ASP)		7	
	Brisbane (BNE)		25	
	Canberra (CBR)		14	
	Darwin (DRW)		7	
	Kalgoorlie (KGI)		2	
	Melbourne (MEL)		72	
	Olympic Dam (OLP)		21	
	Perth (PER)		26	
	Port Lincoln (PLO)		22	
	Sydney (SYD)		62	
Virgin Australia	Brisbane (BNE)		26	
	Canberra (CBR)		6	
	Gold Coast (OOL)		7	
	Melbourne (MEL)		66	
	Perth (PER)		15	
	Sydney (SYD)		39	
Regional Express	Broken Hill (BHQ)		13	
	Ceduna (CED)		12	
	Cooper Pedy (CPD)		6	
	Kingscote (KGC)		16	
	Mildura (MQL)		6	
	Mount Gambier (MGB)		23	
	Port Lincoln (PLO)		48	
	Whyalla (WYA)		31	
	Sharp Aviation	Port Augusta (PUG)		11
	Jetstar	Sydney (SYD)		21
Melbourne (MEL)			19	
Brisbane (BNE)			7	
Perth (PER)			7	
Darwin (DRW)			4	
Gold Coast (OOL)			9	
Cairns (CNS)			6	
Tiger	Melbourne (MEL)		17	
	Sydney (SYD)		7	
	Brisbane (BNE)		7	

Key

- orange: existing destinations
- green: potential destinations

Note: Frequencies per week by carrier (capacity for NS13 / 30 weeks)
 (Source: OAG, Aspirion Analysis)

Figure 3.6 Domestic Destinations Served by Adelaide Airport

Regional

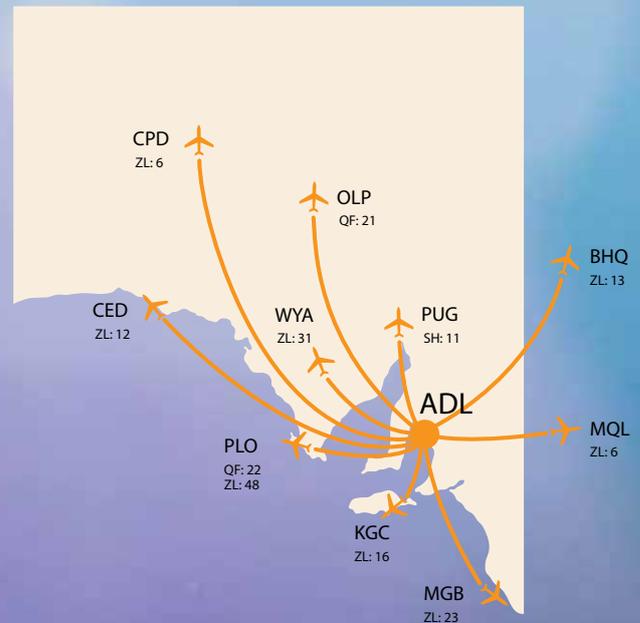


Figure 3.7 Regional Destinations Served by Adelaide Airport

International

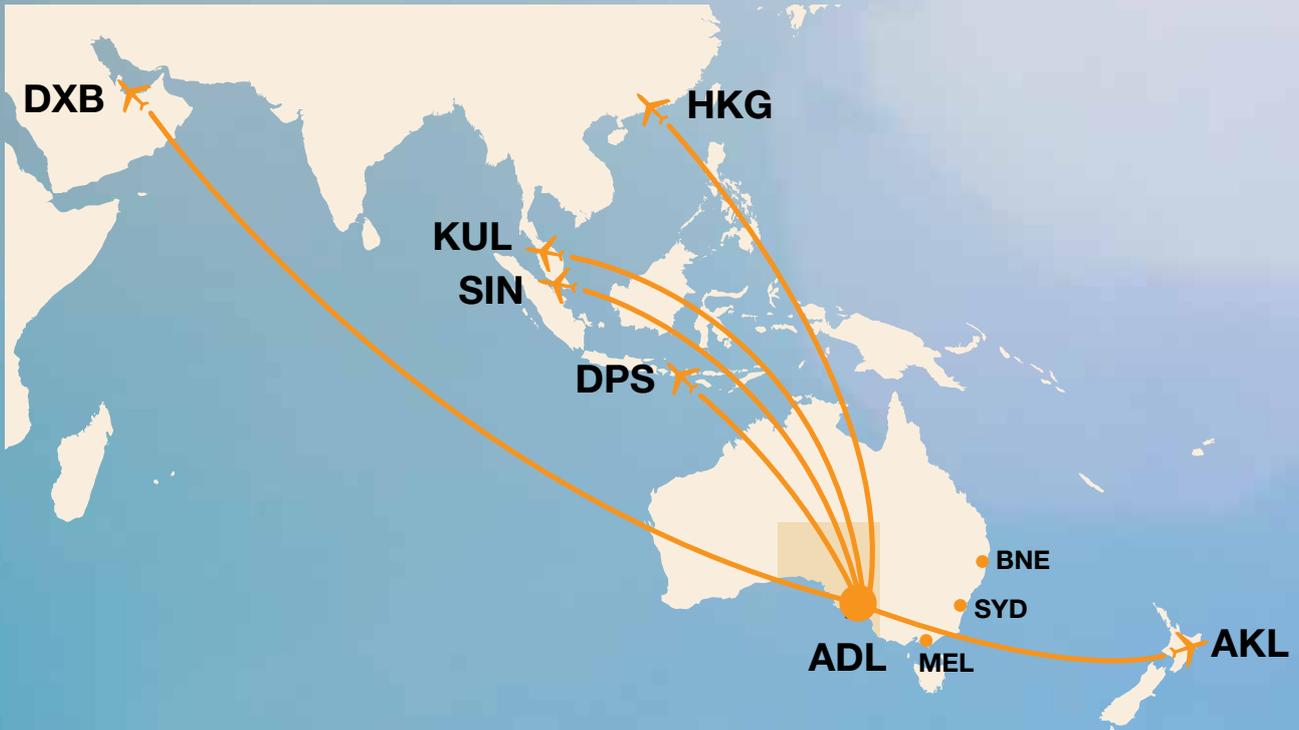


Figure 3.8 Existing International Destinations Served by Adelaide Airport

Table 3.2 Existing International Direct Services in Operation – 2014

International			
Airline	Destination		Frequency (weekly)
Cathay Pacific Airlines	Hong Kong (HKG)		4
Malaysia Airlines	Kuala Lumpur (KUL)		7
Singapore Airlines	Singapore (SIN)		12
Air New Zealand	Auckland (AKL)		5
Virgin Australia	Denpasar, Bali (DPS)		5
Emirates	Dubai (DXB)		7
AirAsia X	Kuala Lumpur (KUL)		4
Jetstar	Denpasar, Bali (DPS)		7
Jetstar	Auckland (AKL)		3

3.5 Economic Significance

Adelaide Airport is the aviation gateway to South Australia. It makes an important contribution to the South Australian economy through employment and value-added production associated with the airport's business activities (both aviation and non-aviation related businesses). This is measured through a combination of a business survey and economic modelling to estimate the direct and indirect (multiplier) economic benefits attributable to airport activity.

3.5.1 Economic Impact

Aircraft movements and the number of passengers at Adelaide Airport has substantially increased in 2013. International passengers increased as a result of Emirates, Singapore Airlines, Cathay Pacific, Air New Zealand and Malaysia Airlines increasing services. Low-cost operator AirAsia X introduced a Kuala Lumpur service in October 2013, while Jetstar began international services to Denpasar (Bali) and Auckland in December 2013.

Adelaide Airport achieved record growth in passenger numbers in 2011, totalling 7.1 million. Passenger movements increased to 7.2 million in 2012, and further increased to 7.5 million in 2013. Of these passengers, 89% were domestic and regional, with the remaining being international passengers.

Adelaide Airport is the single largest employer base in South Australia, directly employing approximately 8,726 persons and indirectly employing an additional 9,033 persons – a total of 17,759 persons¹.

In total, the full economic impacts associated with the operations of Adelaide Airport are estimated to be a contribution of \$1,944 million to Gross State Product (GSP) and support for 17,759 FTE jobs. This represents in the order of 2.1% of State economic activity; a significant increase since 1998. Table 3.3 compares the current economic impact findings of employment through Adelaide Airport, with the results of previous studies commissioned by AAL.

While it is estimated that airport activity supports in the order of 2.1% of the State's economic activity, this increases to 2.75% when the public sector contribution to GSP is excluded. State GSP was \$91,928 million in 2011/12 and is estimated to be in the order of \$95,605 million for 2012/13 allowing for indicative growth of 4%. The private sector component of this is estimated to be \$72,023 million of which the airport's total contribution of \$1,944 million is 2.75%.

Some of the most notable aviation-related changes since the 2009 Master Plan include:

- the continued introduction of low cost carriers and more recently, carriers to Asia and the Middle East (e.g. Emirates, AirAsia X and Jetstar);
- a continued decline in airfares due in the main to the entry of low cost carriers;
- higher transport security and regulations in response to terrorism threats since the early 2000s;
- strengthening of the Australian dollar making overseas travel for Australians more attractive (but less attractive for international visitors); and
- Adelaide Airport's new car park, which came into operation in 2012 with substantially improved airport transport facilities and services.

Table 3.3 Comparison of Economic Impact 1998 to 2013

Economic Impact	1998	2003	2006	2008	2013
Direct Employment	3,190	4,602	7,736	8,037	8,726
Onsite	N/A	3,212	5,070	5,267	6,152
Offsite	N/A	1,390	2,666	2,770	2,574
Indirect Employment	4,810	4,875	8,200	8,514	9,033
Total Employment	8,000	9,477	15,936	16,551	17,759
Total Value Added*	\$385 million	\$770 million	N/A	\$1,612 million	\$1,944 million
Gross State Product %	1.00%	1.50%	N/A	2.30%	2.1%

*Contribution to Gross State Product (Direct and Indirect)

¹ Hudson Howells – Socio Economic Impact Assessment – Addendum (March, 2014).

3.5.2 Freight Movements

The South Australian Government's Department of Planning, Transport and Infrastructure (DPTI) identifies the following air freight export data and trends in its most recent *South Australia Exports by Air* report (DPTI 2014):

- In the 2013 calendar year, South Australia exported more than 14,280 tonnes of products worth almost \$570 million by air. The total tonnage exported by air loaded at Adelaide Airport and flown directly to international destinations or transhipped to interstate gateways (by air and road) for export over the past seven years is shown in Figure 3.9. The total exports by value is shown in Figure 3.10.
- 2013 saw a decrease of 782.3 tonnes (or -5.2%) from 2012 in total SA exports by air. The total actually loaded for export at Adelaide Airport, however, increased by 820.1 tonnes or 11.4%, which resulted in the proportion of the total loaded at Adelaide increasing from 47.6% in 2012 to 55.9% in 2013.
- The volume of all product types exported through interstate gateways (via air and road) decreased by more than 1,602 tonnes or 20.3%.

Singapore was SA's biggest export market by volume in 2013 at over 2,215 tonnes, increasing by some 30.6% over 2012 and amounting to 15.5% of total exports, by attracting relatively low volume horticultural products and live animals.

Switzerland ranked first by value of exports at 25.6% of the total, increasing from \$9.7 million in 2012 to \$185 million in 2013, with new exports of wrought silver at 195.4 tonnes, plus fresh beef.

Other significant exports were:

- Vietnam – Fresh beef and lobsters;
- China – Table wine and frozen beef; and
- United Arab Emirates – Fruit and vegetables.

The results of a recent survey undertaken by AAL suggest that Adelaide Airport can expect sustained increases in outbound freight volumes over the next 5 years in the order of 1 to 2% per annum (predominantly manufactured goods and seafood). These results are consistent with the above export results for 2013 and suggest that total outbound air freight volumes (direct export and transhipped) could start to return to those experienced prior to the global financial crisis. For example, 2% growth in freight per annum over the next 5 years would increase SA exports by air (direct and transhipped) from 14,280 tonnes to around 16,000 tonnes per annum.

Notwithstanding this expected growth in outbound air freight, inbound air freight is expected to grow at double the outbound rate and be in the order of 2 to 4% per annum over the next 5 years and between 6.8% and 9.7% per annum over the next 20 years. This highlights the changes taking place in the South Australian economy and a greater reliance on imported manufactured goods.

Air freight statistics for Adelaide Airport indicate that in 2012 there were approximately 6,100 tonnes of freight imported from overseas, with the major source markets being the USA, China, Germany and the United Kingdom. Growth of 4% per annum over the next 5 years could see this volume rise to in the order of 7,420 tonnes per annum.

The above data is consistent with the AAL survey results, with the exceptions of Singapore and Thailand. However, the growth of these inbound markets can be expected given the Australian manufacturing trends already noted above, and as both Singapore and Thailand are already rating in South Australia's top 10 air import markets.

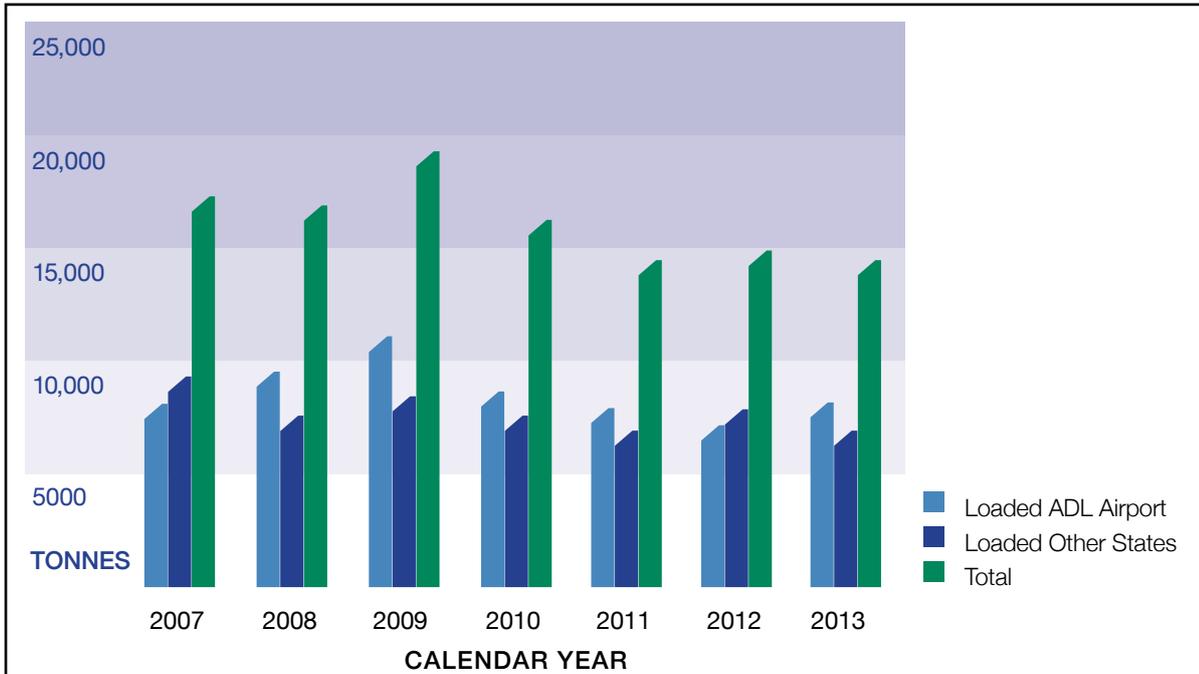


Figure 3.9 SA Exports by Air (Tonnes) 2007-2013 (Source: DPTI, 2013)

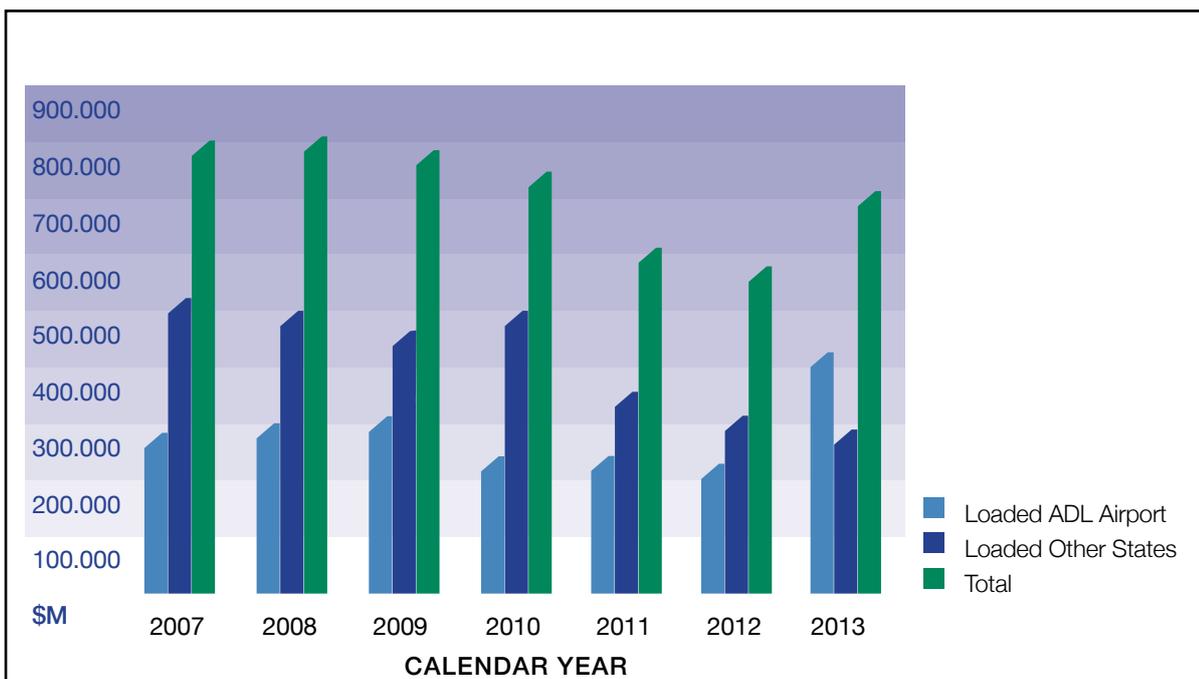


Figure 3.10 SA Exports by Air (\$M) 2007-2013 (Source: DPTI, 2013)

3.5.3 Employment

It is estimated that entities currently operating at Adelaide Airport directly employ 6,152 people (Full Time Equivalent – FTEs) on site and 2,574 people (FTEs) off-site, for a total of 8,726 FTEs, as shown in Tables 3.3 and 3.4. Steady increases have occurred over the last 10 years in direct employment, with a marginal decrease evident in off-site employment since 2008, attributed to a combination of business re-structuring and consolidation mainly from the Global Financial Crisis. The slight reduction of the business entities in number is similarly attributed to the dynamic of business consolidation leading to larger entities. These airport employees have gross wages and salaries of an estimated \$520 million. Returns to capital (i.e. other value-added) are estimated at \$342 million from industry averages, giving a total value-added of \$862 million.

Table 3.4 below outlines the direct employment impacts from entities operating at Adelaide Airport over the most recent 10-year period.

Through direct purchases by operators based at Adelaide Airport and the on-spend of direct wages, there is an estimated indirect (or multiplier) contribution of 9,033 jobs created for the South Australian economy. In total, the full employment impacts associated with the operations of Adelaide Airport are therefore estimated to be 17,759 FTE jobs in 2013/14, compared with 16,551 in 2008.

Additionally, through the direct purchases by airport operators, and the on-spend of the direct wages, there is also an included contribution to value-added (salaries, wages and profits) in the State estimated to be in the order of \$1,055 million; giving a total value-added of \$1,944 million per annum.

3.6 Planning Context

The objectives for Adelaide Airport's development have been considered relative to Commonwealth, State and Local Government planning regimes.

The Adelaide Airport Master Plan is a strategic planning tool for ensuring the operational integrity and continued viability of the airport is preserved, while also having due regard to relevant State and Local government land use planning legislation and significant State land use and transport planning policies. The State and Local Government Planning Strategies of relevance to Adelaide Airport are discussed in detail in Chapter 7 – Land Use Planning.

The airport land is owned by the Commonwealth of Australia and leased to AAL. Adelaide Airport is identified in legislation as a 'regulated airport', as are Parafield and other federally leased State and Territory airports that comply with the *Airports Act 1996* and associated Regulations.

Any project or development proposed for the airport must be assessed by the appointed statutory officer, the Airport Building Controller (ABC), who ensures that the project is consistent with the approved Master Plan, and that it complies with relevant building codes and Australian Standards.

Any new project, development or change to existing facilities is also considered by the Airport Environment Officer (AEO) who monitors AAL's compliance with the Master Plan, the Airport Environment Strategy and compliance with the *Airports (Environment Protection) Regulations 1997*.

For as long as the airport land remains in the custody of the Commonwealth, this planning approval regime will remain under the legislative direction of the Commonwealth Minister, who is ultimately accountable for what happens on Commonwealth land.

Table 3.4 Direct Employment Impacts by Year 2003-2013

	2003	2006	2008	2013
Number of Entities	140	117	146	133
Direct Employment at Adelaide Airport	3,212	5,070	5,267	6,152
Other Employees	1,390	2,666	2,770	2,574
Total Direct Employment	4,602	7,736	8,037	8,726

Accordingly, the principal development objectives for Adelaide Airport include:

- airport capacity to meet future demand from the aviation industry;
- the continuing commercial viability of the airport as a business;
- safe and efficient aircraft operations at the airport into the future; and
- environmental protection from noise and other potential impacts;
- provision of safe and efficient access into and within the airport for ground transport.

The master planning process ensures that sufficient land has been identified to meet the community's demand for air transport growth and supporting activities. Additionally, the Master Plan assists in ensuring structured development of commercial and industrial areas to guarantee the ongoing viability of the airport as a major component of the State's transport infrastructure.

The planning assessment process for development on airport land addresses issues such as the height of developments, wildlife hazards and the impact of lighting on aircraft operations in the vicinity of the airport. The planning assessment process and development principles are further discussed in Chapter 7 – Land Use Planning.

