

# Adelaide Airport Master Plan 2019

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FINAL

A large, white, curved sign for the 'Airport Business District' is the central focus. The sign has a green and blue graphic element at the top and the text 'Airport Business District' in blue. The background is a blue sky with a white cloud. The sign is set against a blue background with decorative green and blue diagonal stripes on the right and bottom edges.

**Airport  
Business  
District**



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Approved March 2020



This Master Plan has been prepared by Adelaide Airport Limited (AAL) ACN 075 176 653 for the purpose of satisfying the statutory requirements of the *Airports Act 1996*.

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# Foreword

I am pleased to present Adelaide Airport's 2019 Master Plan, which sets the course for future development over the next 20 years.

Adelaide Airport is a dynamic and diverse environment that links local and global communities, creates jobs and fosters economic development.

Adelaide Airport Ltd (AAL), as the operator of the airport, has a great responsibility in planning for the future and managing the many moving parts of an international airport precinct. This Master Plan is one of our most important documents in that it is our primary planning tool for the next eight years, while presenting our long-term strategic plans from now until 2039.

We have overseen a period of extraordinary growth since AAL began operations in 1998. In that time, our passenger numbers have more than doubled to more than 8.5 million per year, well ahead of original expectations. International passenger numbers have more than quadrupled over the same period and we now cater for more than one million international passengers per annum.

We have more than 300 excellent one-stop connections across Asia, Europe, North America and Africa via global hubs such as Singapore, Guangzhou, Hong Kong, Dubai, Doha, Auckland and Kuala Lumpur.

Since the 2014 Master Plan, we have witnessed significant progress in terms of aeronautical and non-aeronautical infrastructure development. This Master Plan builds on this progress, but with no significant deviations from previous plans.

We have started construction on a \$165 million terminal expansion, which will see a significant upgrade of international passenger processing and dwell areas, and create more retail and dining options for both domestic and international travellers. Meanwhile, our new Atura Hotel is open for business and providing quality accommodation and associated facilities for our leisure and business travellers.

Such developments are about prioritising the customer experience to create a seamless and enjoyable journey from the minute you drive into the airport until you are ready for take-off.

As a major business centre, Adelaide Airport is progressing effectively and strategically to execute its vision to be a globally connected, next generation hub with designated industry clusters. In the past couple of years alone, our Airport Business District has attracted major companies including OZ Minerals, Kennards Self Storage, Otis, Aldi, AFL Max and Australian Clinical Laboratories.

We have overseen significant aeronautical investment on the western boundary, with Royal Flying Doctor Service and Medstar opening new facilities and construction of a Pilatus aircraft base well underway.

Adelaide Airport is the major gateway to South Australia and a major economic generator, contributing \$2.98 billion – or 3.1 per cent – towards Gross State Product. The airport directly employs more than 10,000 people both on and off the airport, and contributes to the generation of a further 12,700 full-time equivalent jobs.

All of this helps facilitate growth in our State's key sectors including defence, food and wine, and we act as an important catalyst for our rapidly expanding tourism industry.

AAL's vision is to be a top tier airport business in Asia Pacific, recognised for delivering exceptional outcomes to its customers, partners, shareholders and community.

The Adelaide Airport of tomorrow will feature new technologies and processes that make the customer experience faster, easier and more intuitive. At the same time, the safety and security of all airport users is paramount, and our facilities are constantly evolving based on regulatory outcomes.


Freight access and distribution to domestic and global networks also requires thoughtful long-term planning, and we continue to develop a dedicated freight, transport and logistics hub in our Airport East Precinct.

We place a high value on the sustainability of our business. We were the first airport in Australia to be recognised by the global Airport Carbon Accreditation program in 2015 for optimising our management and reduction of carbon emissions, and we have secured platinum status for our environmental initiatives for the past two years running from Airport Councils International Asia-Pacific.

Current initiatives include trialling crop irrigation on the airfield and 'cool pavement' technology to reduce the temperature of the aerodrome, particularly on very hot days.

Access to and from Adelaide Airport is a critical component of our future planning. We are well connected to Adelaide's Central Business District and major arterial routes, but it is essential we maintain and improve these links for all ground transport users, including customers, staff, tenants, taxis and ride share operators, public transport users, freight and cyclists.





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AAL recognises the vital role our local community and stakeholders play in the operation of the airport. This Master Plan provides our stakeholders with a detailed vision and a level of certainty that any future development is compatible with surrounding land uses.

This document covers all aspects of airport planning and operations – from forecast aeronautical growth and associated development through to ground transport, airport safeguarding, land uses, environment strategies, aircraft noise and commercial development.

The Master Plan, while an essential blueprint for our forecast development, is just one component of our wide-ranging stakeholder management strategy. We will continue to engage and consult with our stakeholders on a regular basis.

AAL welcomes the approval of the Adelaide Airport Master Plan 2019 by the Deputy Prime Minister and Minister for Infrastructure, Transport and Regional Development, the Hon Michael McCormack on 2 March 2020.

Mark Young

Managing Director, Adelaide Airport Ltd

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**AAL's vision is to be  
a top tier airport  
business in Asia Pacific,  
recognised for delivering  
exceptional outcomes to  
its customers, partners,  
shareholders and  
community.**

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# Executive Summary

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# Introduction

Adelaide Airport is the aviation gateway to Adelaide and South Australia. The airport's significance to both Adelaide and South Australia continues to increase; not only in terms of being an essential passenger and freight hub situated only six kilometres from the Adelaide CBD, but also as a major employment and business centre.

Adelaide Airport is operated by Adelaide Airport Ltd (AAL). Adelaide Airport was transferred from the Commonwealth Government to AAL in May 1998, with a 50-year lease and an option to extend the lease for a further 49 years. The lease requires AAL to operate the site as an airport, as well as allowing for other development to support the economic viability of the airport.

AAL has an excellent track record in delivering on previous Master Plans, with significant investment in passenger and commercial facilities and infrastructure since privatisation of the airport, including construction recently commencing on a \$165 million terminal expansion.

The Adelaide Airport Master Plan 2019 (Master Plan 2019) outlines the vision for the growth of Adelaide Airport over the next 20 years, in terms of both aviation capacity and commercial developments. It sets out the requirements for future facilities, infrastructure, ground transport and services that will ensure that the airport continues to deliver on investments to meet customers and passenger needs and continues to develop as an airport that South Australians can be proud of.

The Master Plan has been developed through extensive stakeholder and community consultation, including a 60 business day public comment period. The Master Plan was approved by the Commonwealth Minister for Infrastructure, Transport and Regional Development on 2 March 2020.

# Delivering Exceptional Outcomes

**AAL's vision is:**

***"...to be a top tier airport business in Asia Pacific, recognised for delivering exceptional outcomes to its customers, partners, shareholders and community".***

In delivering on AAL's vision for the airport, developments outlined in this Master Plan focus on achieving greater customer experience, striving for innovative solutions and achieving sustainable outcomes.

The following development objectives guide future investments in facilities and infrastructure for the airport.



**Contribute to Adelaide and South Australia's economic growth**



**Work closely with airlines, government, and the community**



**Embed sustainability in all that we do**



**Prioritise customer experience**



**Protect the safety and security of assets and people**



**Deliver innovative solutions for all airport users**



**Deliver infrastructure to support operations and the commercial viability of the airport**

# Driving South Australia's Economy

Adelaide Airport is a significant transport hub, moving passengers and freight to and from destinations in South Australia, nationally and internationally. The airport connects people, places, communities and businesses, and makes a significant contribution to the State's economy.

Since Master Plan 2014, total employment at Adelaide Airport (direct and induced) has significantly grown by over 5,000 jobs, and the airport's contribution to the Gross State Product (GSP) has risen by over \$1 billion to some \$2.98 billion equivalent to 3.1 per cent of South Australia's economic growth.

During this period, annual passenger movements have steadily increased from almost 7.5 million to 8.5 million now connecting to over 300 destinations directly or via one stop

The following is a snapshot of Adelaide Airport in 2018.

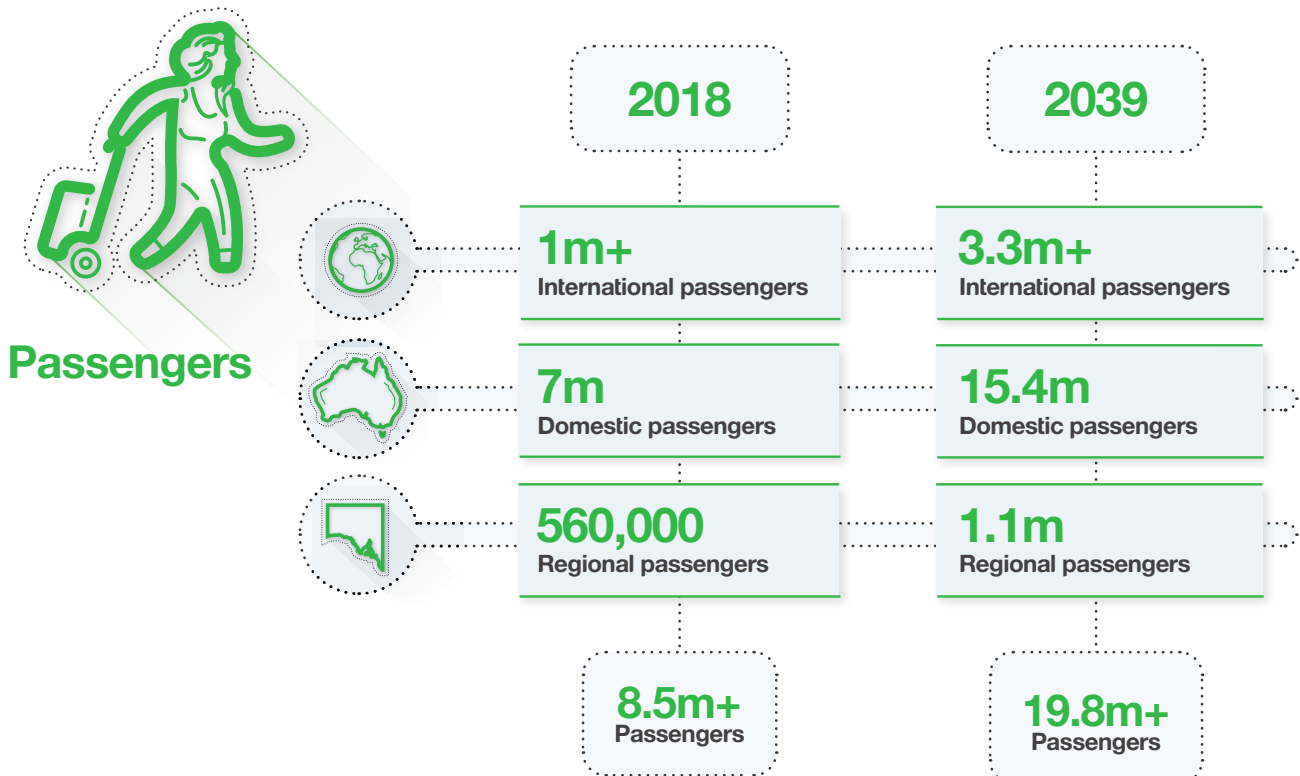
## Snapshot of Adelaide Airport in 2018



# Planning for Growth

Passenger movements at Adelaide Airport are forecast to increase from 8.5 million in 2018 to 19.8 million in 2039. This passenger growth is supported by additional aircraft movements, however aircraft movement growth is anticipated to grow at a significantly lower rate from 106,000 movements in 2018 to 168,500 movements in 2039.

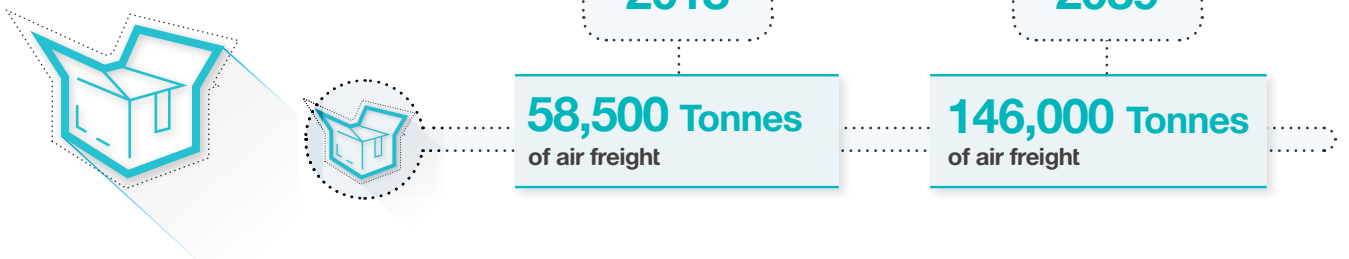
**Passenger and aircraft movement forecasts fundamentally influence the development and timing of infrastructure.**



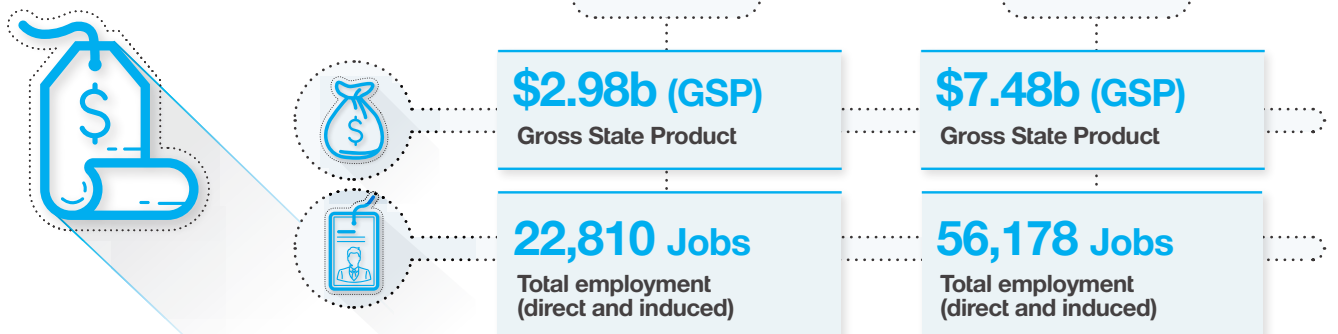
## Aircraft Movements



## Freight



## Economic Contribution





## Facilitating Sustainable Growth in Air Freight

Adelaide Airport will continue to develop Airport East as a major freight, transport and logistics hub with direct access to major arterial routes including the North-South Corridor.

South Australia's total air freight in 2018 was 58,000 tonnes. Air freight capacity at Adelaide Airport is expected to increase as air traffic movements increase. Air freight is expected to more than double over the next 20 years to 146,000 tonnes in 2039, with the majority to continue to be in the cargo hold of scheduled passenger flights.

Air freight also plays a key factor in the sustainability of passenger services – particularly international services – with the success of any new routes or increased capacity predicated on the ability to match passenger growth with air freight growth.

## Delivering Exceptional Customer Experience

The Adelaide Airport Terminal 1 is an integrated terminal for all international, domestic and regional passenger flights. The 71,000 square metre terminal building, over three levels, provides aesthetic, modern and efficient facilities to meet the needs of the travelling public, airlines and operators. It was opened in 2005.

Construction commenced in August 2018 on the \$165 million Terminal Expansion Project (TEx). TEx will significantly upgrade international arrivals and departures and create more retail and dining options for domestic and international travellers. TEx will ensure Adelaide Airport continues to provide the highest level of customer experience for all travellers well into the future. TEx aims to upgrade and expand the main terminal at Adelaide Airport to support the continued increase of international passengers and is scheduled for completion in 2021.

Adelaide Airport will continue to develop and expand Terminal 1 to:

- Meet the growth in new or expanded services
- Improve customer experience and delight customers
- Reduce processing times and ensuing streamlined flows from drop off to aircraft and vice versa
- Adapt to new legislation
- Improve safety, and
- Adapt to new and emerging technologies

No major runway developments are foreseen in the 20-year planning period for this Master Plan. AAL continues to preserve and maintain land for a future third runway.



## Exciting Commercial Developments

Supporting its role as a major transport, employment and economic hub, Adelaide Airport is a major 'business activity centre' within Metropolitan Adelaide. It is vital that any developments on Adelaide Airport land are developed in a manner that is compatible with adjacent land uses and also without compromising the airports operational integrity and economic viability.

The Adelaide Airport Business District, which covers the entire airport site, is divided into seven distinct precincts, including:

- Runways Precinct
- Terminals & Business Precinct
- Airport East Precinct
- Morphett Precinct
- Tapleys Precinct
- West Beach Precinct
- Torrens Precinct

Throughout the seven precincts there are currently over 130 businesses operating at Adelaide Airport. AAL will continue to develop the airport land for both aviation and commercial activities by attracting world class businesses which support employment and economic growth in Adelaide and South Australia.

Key focus areas will be the development of the Airport Business District Office Park in the Terminals & Business Precinct and continued development of Airport East to facilitate streamlined freight and logistic operations.

## Getting to and from Adelaide Airport

Ground transport planning is critical to the efficient operation of Adelaide Airport. Ground transport consists of roads for passenger, staff, taxi/rideshare and freight vehicles, pick-up/drop-off facilities, public transport and cycleways.

Each day there are approximately 54,000 vehicle movements into and out of the airport, and by 2039 this is expected to reach 126,000 daily vehicle movements. As Adelaide Airport grows, it is essential that ground transport infrastructure is expanded or developed to cater for this growth.

Adelaide Airport will continue to work closely with the South Australian Government and surrounding Local Government Authorities to make sure future Adelaide Airport operations are reflected in strategic network planning. In particular, connectivity of the airport to the major North-South Corridor and the Adelaide CBD for both passenger and freight movement together with the introduction of a primarily one-way road network servicing Terminal 1.

The increased use of public transport to Adelaide Airport continues to be a high priority for both the airport and the South Australian Government. Provision for a high capacity public transport corridor servicing the airport is included in this Master Plan.

There have and will continue to be substantial developments in emerging and innovative transport technologies, some of which include autonomous vehicles, air taxis (airborne rideshare) and the use of drones for parcel delivery. While these technological advances have the potential to improve access and connectivity, they may also create challenges for ground transport systems and other infrastructure associated with the airport. Adelaide Airport will continue to monitor and respond to such emerging technologies.



## Safeguarding the Airport

The safety of aircraft operations to and from Adelaide Airport, and the capacity of the airport to operate and respond to growing demand, can be directly impacted by inappropriate land use and activities that occur on the land surrounding the airport.

Long-term and effective protection and safeguarding of Adelaide Airport is critical to ensuring ongoing aviation operations and safety. The safeguarding of the airport, which refers to measures taken to minimise inappropriate land uses and activities, is the shared responsibility of Adelaide Airport and all levels of government.

This Master Plan has been prepared taking into consideration the National Airports Safeguarding Framework (NASF), guidelines to protect the ongoing operation of Australian airports.

Protection of the airspace around Adelaide Airport is critical to ensure safe and ongoing operations of the airport. Adelaide Airport will endeavour to work with development proponents to ensure buildings are below the Obstacle Limitation Surfaces (OLS), but will not support developments which potentially infringe the Procedures for Air Navigation Services – Operations (PANS-OPS) protected airspace.

## Managing Aircraft Noise

The Master Plan outlines current and future aircraft noise exposure of areas surrounding Adelaide Airport and details the airport's approach to aircraft noise management.

The existing curfew operating at Adelaide Airport between 11:00pm and 6:00am remains unchanged. The *Adelaide Airport Curfew Act (2000)* allows some approved aircraft to operate during curfew hours, mainly for medical emergency flights and delivery of freight and mail.

There are a broad range of programs in place to manage aircraft noise around the airport.

The Australian Noise Exposure Forecast (ANEF) system is the aircraft noise exposure forecasting system currently adopted in Australia for land use planning. The ANEF system provides a scientific measure of noise exposure from aircraft operations around airports, providing guidance on the siting and construction of new buildings against aircraft noise intrusion and on the acoustical adequacy of existing buildings in areas near airports. A revised ANEF for Adelaide Airport is included in the Master Plan.





## Looking After the Environment

Adelaide Airport has developed the Environment Strategy in accordance with the *Airports Act 1996* (Airports Act) and the Airports (Environmental Protection) Regulations 1997 (AEPR). The Airports Act establishes an environmental management regime that focuses on a cooperative approach, supporting and ensuring compliance with environmental standards at federally-leased airports.

Sustainability is at the core of the way Adelaide Airport does business. AAL has developed a Corporate Sustainability Strategy, which is underpinned by the Sustainability Policy and provides a framework for integrating sustainability throughout the business and aims to deliver value to all stakeholders.

The Environment Strategy, building on the recent environmental commitments and achievements of AAL, covers ground-based environmental aspects associated with the operation of Adelaide Airport for the next 8-years, including:

- Energy
- Water resources
- Stormwater and aquatic ecology
- Soil and groundwater
- Ground based noise
- Local air quality
- Waste
- Land and heritage management

AAL is committed to the effective management of environmental impacts across the airport site and Environmental Action Plans are in place for the above environmental aspects.

Central to Adelaide Airport's Environmental Management is the Environmental Management System (EMS). The EMS conforms to the requirements of ISO 14001:2015 and provides a structure for planning, implementing, monitoring, reporting and reviewing environmental management at Adelaide Airport.

## Working Closely with the Community

Adelaide Airport's approach to consultation is focused on creating robust, transparent and collaborative communications, using creative, innovative and engaging techniques to interact with the community.

This Master Plan has been developed in consultation with a wide range of stakeholders. Adelaide Airport will continue to engage with Commonwealth, State and Local Government authorities, aviation operators, airport tenants and the community through a range of techniques and forums.



# Abbreviations

ABBREVIATIONS	
AACC	Adelaide Airport Consultative Committee
AAL	Adelaide Airport Limited
ABC	Airport Building Controller
AEO	Airport Environment Officer
AEPR	Airport (Environmental Protection) Regulation 1997
Airport	Adelaide Airport
Airports Act	<i>Airports Act 1996</i> (Commonwealth)
ANEI	Australian Noise Exposure Index
ANEF	Australian Noise Exposure Forecast
APA Regulations	Airports (Protection of Airspace) Regulations 1996
ARFF	Aviation Rescue and Fire Fighting
ANZECC	Australian and New Zealand Environment and Conservation Council
ASQ	Airport Service Quality
ATC	Air Traffic Control
BITRE	Bureau of Infrastructure, Transport and Regional Economics
CAGR	Compound Annual Growth Rate
CASA	Civil Aviation Safety Authority
CBD	Central Business District
CEMP	Construction Environmental Management Plan
DITRDC	Department of Infrastructure, Transport, Regional Development and Communications (Commonwealth)
DPTI	Department of Planning, Transport and Infrastructure (SA)
EAP	Environmental Action Plan
EMP	Environmental Management Plan
EMS	Environmental Management System
EPA	Environment Protection Authority (SA)
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)



ABBREVIATIONS	
FAC	Federal Airports Corporation
GRP	Gross Regional Product
GSP	Gross State Product
HLS	Helicopter Landing Site
ICAO	International Civil Aviation Organization
IFR	Instrument Flight Rules
ILS	Instrument Landing System
JOSF	Joint Oil Storage Facility
LAHSO	Land and Hold Short Operations
MARS	Multiple Aircraft Ramp Systems
NASAG	National Airports Safeguarding Advisory Group
NASF	National Airports Safeguarding Framework
NEMP	National Environment Management Plan
OECD	Organisation for Economic Co-operation and Development
OEMP	Operational Environment Management Plan
OLS	Obstacle Limitation Surfaces
PANS-OPS	Procedures for Air Navigational Services – Aircraft Operations
PCF	Planning Coordination Forum
PFAS	Per and Poly-fluro Alkyl Substances
PFAS NEMP	PFAS National Environmental Management Plan
RAAF	Royal Australian Air Force
RPT	Regular Passenger Transport
SA	South Australia
SAPN	South Australian Power Network
TEx	Terminal Expansion Project
TFI	Tourism Futures International



# Glossary

GLOSSARY	
Aerodrome/Airport	A defined area on land or water (including any buildings installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.
Ancillary Development	<p>Structures and/or uses that are subordinate or subservient to the dominant structure and/or use. If a component serves the dominant purpose, it is ancillary to that dominant purpose; whereas if a component serves its own purpose, it is not a component of the dominant purpose but an independent use on the same land (a dominant use in its own right).</p> <p>Examples of ancillary uses include: car parking, roads, driveways, utilities, civil works, fire safety equipment, fencing, lighting, landscaping, flood mitigation measures, security, surveillance, monitoring, signage, technical instruments (such as navigational aids and meteorological instruments), facilities with the primary purpose of providing in-house training to staff of an organisation conducting operations at the airport and sleeping quarters/respite facilities (temporary accommodation associated with business operations).</p>
Airport Operator	The airport operator is the person(s) or organisation whose name appears on the licence document and/or in aeronautical aviation publication En Route Supplement Australia. (For the purposes of this Master Plan, Adelaide Airport Limited, ACN-075176653, is the airport operator at Adelaide Airport).
Air Traffic Control	Airspace management provided by Airservices Australia.
Airport Master Plan	The principal planning document required under the <i>Airports Act 1996</i> , setting out a 20-year plan for each leased Commonwealth airport.
Airservices Australia	The Australian Government agency that provides air traffic control management and related airside services to the aviation industry.
Airside	The aircraft movement area of an airport, adjacent land and buildings that is access controlled.
Aircraft Apron	The part of an airport where aircraft are parked and serviced, enabling passengers to board and disembark and cargo to be loaded and unloaded.
Aviation-Related Support Industry	Includes aircraft hangars, catering services, freight terminals, car rental and valet facilities, car parking, vehicle storage, taxi holding area amenities, fuel depots and hydrants, storage facilities, warehousing, offices, engineering support, and maintenance activities, passenger terminals and aviation educational establishments.
Aviation Security	A combination of measures and human and material resources intended to safeguard civil aviation against acts of unlawful interference.
Australian Noise Exposure Index (ANEI)	A set of aircraft noise contours based on actual aircraft operations at an airport.
Australian Noise Exposure Forecast (ANEF)	A system developed as a land-use planning tool aimed at controlling encroachment on airports by noise-sensitive buildings. The system underpins <i>Australian Standard AS2021 'Acoustics – Aircraft noise intrusion – Building siting and construction'</i> . The Standard contains advice on the acceptability of building sites based on ANEF zones. ANEFs are the official forecasts of future noise-exposure patterns around an airport and they constitute the contours on which land-use planning authorities base their controls.

## GLOSSARY

Brand Outlet Centre	A shopping centre in which is located one or more discount retail outlets used by retailers to offer stockmade for outlet, centralise the distribution and sale of excess or damaged stock, test limited amounts of new product and provide inventory control together with associated support retail activities such as fast food, restaurants and ancillary retailing and services, including hand wash car wash, either as independent shops or as alternative activities within the Brand Outlet shops themselves. Normally this would involve a shop, or group of shops, with a floor area exceeding 500 square meters, that offers discount clothing, sporting goods and personal effects by retail.
Bulky Goods Retailing	Includes premises that are used for the display, sale and rental of automotive parts, camping and recreational supplies, curtains and fabrics, homewares, hardware, stationary and office supplies and that do not sell food stuffs, personal effects or clothing (other than sold incidentally to the primary purpose of the shop) and retail showrooms and service trade premises.
Civil Aviation Safety Authority (CASA)	An independent statutory body responsible for regulating aviation safety in Australia and the safety of Australian aircraft overseas.
Control Tower	A unit established to provide air traffic control service to airport traffic.
Depot	A building or place used for the storage (but not sale or hire) of plant, machinery or other goods (that support the operations of an existing undertaking) when not required for use but does not include a farm building.
Earthworks or Engineering Works	Works associated with earthworks or engineering works such as flood mitigation works, land reshaping and filling and utility installation.
Emergency Service Facility	A building or place used in connection with the provision of emergency services by an emergency services organisation.
Environmental Protection Works	Works associated with the rehabilitation of land towards its natural state or any work to protect land from environmental degradation, and includes bush regeneration works, wetland protection works, erosion protection works, dune restoration works and the like, but does not include coastal protection works.
Event Activities	An event to be held on airport land such as a circus, live entertainment activity or outdoor deckchair or drive-in cinema
Freight and Distribution Centre	Generally, office/warehousing premises used for storage, but can also focus upon the regular handling of goods within the facility itself for regular and contract distribution by courier or truck to other specific destinations, on other transport services such as aircraft, rail or heavy road transport.
In-flight	In-flight commences when the last external door of the aircraft is closed in preparation for the first movement of the aircraft for the purpose of taking off; or if the aircraft moves before all doors are closed for the purpose of taking off, when it first so moves, until the first external door of the aircraft is opened after the aircraft comes to rest.
Instrument Landing System (ILS)	Instruments capable of providing both directional and glide slope guidance for aircraft on approach to a runway.
Landside	The area of an airport and buildings to which the public normally has free access.
Major Development Plan	A requirement under the <i>Airports Act 1996</i> for airport lessee-companies to gain approval for significant developments on leased Commonwealth airport sites.
Manoeuvring Area	Those parts of an airport used for the take-off, landing and taxiing of aircraft, excluding aprons.



## GLOSSARY

Movement Area	That part of an airport used for the surface movement of aircraft, including manoeuvring areas and aprons.
Retail Showroom	Premises used primarily for the sale, display or offer by retail of furniture, floor coverings, computers, electrical goods and appliances, lighting, outdoor furniture and white goods.
Renewable Energy Generation Facility	Includes wind turbines, field solar arrays, roof-mounted solar panels and other renewable energy generation and storage facilities.
Runway-Related Activities/Facilities	Activities and facilities include runways, taxiways, aprons, clearways, compass swing and engine run-up areas, glide path facilities, helicopter landing, parking and servicing, landing equipment, radar and all aircraft navigational aids.
Taxiway	A path on an airport connecting runways with ramps, hangars, terminals and other facilities.
Temporary Uses and Structures	Temporary structures for private or community events, as well as the following specified temporary uses of land and buildings.
Secretary	The Secretary of the Department of Infrastructure, Transport, Regional Development and Communications.
Soil Treatment Facility	A facility that allows for silt and soil to be removed from watercourses to be stockpiled, tested and safely removed from the site.



