

Perth Airport Master Plan 2026





Perth Airport Master Plan 2026

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Executive Summary



Perth Airport is Australia's Western Hub, providing the people of Western Australia with critical links to the State, Australia and the world.



Image supplied by Tourism WA

Perth Airport Master Plan 2026

Perth Airport is Australia's Western Hub, providing the people of Western Australia with critical links to the State, Australia and the world.

As the fourth-largest domestic and international airport in Australia by passenger volume, Perth Airport is currently serviced by more than 30 airlines that operate to 114 destinations.

Perth Airport is located on 2,105 hectares of land owned by the Commonwealth of Australia. The airport is operated by Perth Airport Pty Ltd through a 50-year lease with a 49-year option granted by the Australian Government in 1997.

A new Master Plan is prepared every five years to provide the blueprint for the sustainable and responsible development of Perth Airport over the next 20 years and beyond. It ensures that new infrastructure and facilities are planned and delivered in a timely manner to meet the needs of all airport users, including passengers, airline partners, and the aviation and commercial tenants located across the airport estate. It provides transparency and facilitates public scrutiny of Perth Airport's plans for future development, as well as management of environment and cultural heritage values on the estate.

Master Plan 2026 refreshes the Master Plan 2020 and reflects the next wave of planned infrastructure investment to achieve the long-held vision of hosting all commercial flight services in a central location, giving passengers a seamless, world-class travel experience.

Master Plan 2026 is developed through extensive consultation with stakeholders and the community, including a formal 60 business day public comment period.

Perth Airport Today



24/7

Operations

S

\$6.6в

Contribution to the WA economy



5

Terminals



133

Aircraft parking bays

г ј С ј

2,105на

Hectare site



30

Airlines



\$2.8в

Spent with WA businesses by visitors travelling through Perth Airport



27,297

Aviation and non-aviation jobs within the Perth metro area



138к

Tonnes of domestic and international freight



17.48м

Passengers



21км

of taxiways



28к

Parking bays



200

Businesses located on site



114
Destinations



2

Runways

Perth Airport Master Plan 2026

15

Perth Airport's Purpose is:

Making Western Australia's journey possible

To achieve this purpose, Master Plan 2026 has been aligned to Perth Airport's strategy:

Connectivity and capacity: accelerating international passenger growth, while creating sufficient aviation capacity and supporting infrastructure

Customer experience: enhancing value per customer by delivering exceptional experiences with a focus on convenience and personalisation

Development of our estate: optimising land use and creating long term value through strategic, forward-thinking developments

Social value: creating measurable, lasting benefits for our people, local community and environment by fostering safe, inclusive, and adaptable workplaces, building community trust, and supporting community wellbeing and a healthier environment, and

Designing our future: utilising smart technology, integrated operations and world-class infrastructure to deliver the airport of the future.



Forecast Growth

Perth Airport is a vital public transport facility that operates 24 hours a day, seven days a week. It provides an essential link for business and leisure travel and meets the needs of regional communities, the resource sector, and the freight and export industry.

More than 90 per cent of aircraft movements are related to regular scheduled and charter passenger services. Other aircraft movements incorporate a range of freight and general aviation uses, including emergency services operations.

The COVID-19 pandemic had a dramatic impact on air services at Perth Airport from early 2020 until early 2022 when Western Australia's border closures were lifted. Perth Airport passenger numbers returned to pre-Covid levels in February 2023.

Forecasts of future aviation growth are prepared to support effective infrastructure planning and investment decision making. Master Plan 2026 forecasts that between FY25 and FY46:

- annual passenger numbers will grow from 17.48 million to 30.8 million,
- annual aircraft movements will increase from 160,800 to 222,800 movements, and
- domestic and international air freight could grow from 138,000 tonnes to between 164,000 and 269,000 tonnes.

Investing for Growth

The next 10 years will be a transformative period for Perth Airport, with a multi-billion-dollar investment program set to deliver the long-awaited 'One Airport' for Western Australian travellers. The planning and delivery of the once-in-a-generation program of works will bring all commercial flight services into the Airport Central precinct, with:

- two multi-storey car parks and improvements to the road network, with the first stage of works commencing in late 2024,
- an expansion of Terminal 2 that is due for completion in 2026,
- a 237-room hotel to be operated by Accor, Australia's largest hotel operator, that is planned to be completed in 2027.
- a new 3,000 metre runway located parallel to the existing main runway that is planned to be operational in 2028
- a new domestic terminal for Qantas Group operations that is planned to be operational around 2031, and
- an expansion of Terminal 1 International that is planned to be operational around 2031.

Driving Economic Growth

Perth Airport serves as a critical driving force for Western Australia's economic, social, and cultural development. It generates significant benefits to the local, State and Australian economies through its own operations and the operations of tenants on the estate.

The Perth Airport estate is a major centre of employment. The activities and businesses on the airport estate supported nearly 27,300 full-time jobs within the Perth metropolitan region in FY24 and, with the planned development outlined in Master Plan 2026, this is forecast to increase to 75,400 jobs by FY46.

The total economic contribution of Perth Airport operations to Gross State Product in FY24 was \$6.6 billion, of which \$6.2 billion was contributed to the Gross Regional Product of the Perth metropolitan area. By FY46 this is forecast to reach a \$17 billion contribution to Gross Regional Product. Around two thirds of this contribution is from non-aviation tenants, highlighting their importance to the State's economy.

Perth Airport is essential to the tourism sector, serving as the main gateway into Western Australia for both domestic and international air travellers. In FY24, the visitors that travelled through Perth Airport spent \$2.8 billion with Western Australian businesses, supporting 29,730 jobs and creating a \$4.9 billion contribution to Gross State Product. The contribution to Gross State Product from tourism activity enabled by Perth Airport is expected to reach \$11.8 billion in FY46, of which \$8.7 billion is expected to be realised in the Perth metropolitan area.



30.8м

Annual passenger numbers will grow from 17.48 million to 30.8 million.

200 +

There are currently more than 200 businesses located across the estate.

Making the Best Use of Perth Airport Land

The Perth Airport estate is 2,105 hectares in size and has sufficient land to support Western Australia's demand for commercial aviation services for many decades. Planning for the use of the estate balances the safeguarding of long-term airfield, terminal and aviation support operations with the development of land for aviation and commercial purposes.

The airport estate is divided into five precincts. Two of these precincts are solely aviation-related: the Airfield precinct for aircraft operations, and the Airport Central precinct which supports passenger facilitation. The Airport West, Airport North and Airport South precincts are being developed with a mix of aviation and commercial developments.

There are currently more than 200 businesses located across the estate. The planning for Perth Airport identifies further opportunities for the development of high-quality commercial, industrial, retail, aviation support, and logistics and freight facilities.

Perth Airport's status as a 'Specialised Activity Centre' in State Government strategic plans highlights the importance of the estate in promoting economic development and creating employment opportunities within Western Australia. The State's planning framework also recognises the role of Perth Airport as a critical transport hub, and the focal point for the growth of the tourism industry and efficiency of Western Australia's aviation network.

Transforming the Customer Experience

Perth Airport is at the start of a design journey for a multibillion-dollar terminal expansion and redevelopment that will have a design life into the 2080s. The upcoming delivery of major projects will enable Perth Airport to embed its customer experience vision into built form and drive a step change in the passenger's journey.

The Master Plan outlines Perth Airport's planning for new technologies and innovations that enhance customer experience, improve operational efficiency and maximise sustainable outcomes. This includes opportunities for increased automation of passenger processes and baggage handling, biometric solutions, electric ground support equipment, autonomous vehicles, and advanced air mobility systems.

Perth Airport is committed to creating a world-class travel experience and strives to ensure that airport facilities, information and services are inclusive and accessible for all airport users. The Perth Airport Access and Inclusion Advisory Group meets regularly to consult on projects and consider ways to remove barriers to travel.

Sustainable Design and Development

Sustainability is a key aspect of Perth Airport's business strategy. Sustainability considerations are integrated into planning and decision making processes and have informed the development of this Master Plan 2026.

Key areas of focus have been determined through a comprehensive materiality assessment that considered the input of a wide range of stakeholders, and clear targets established and embedded into Perth Airport's planning and operations to guide progress across environmental, social and governance topics.



Perth Airport is committed to designing and constructing buildings and infrastructure that support resilience, health and wellbeing, and that consider long-term challenges such as climate change and resource efficiency.

Working with the Community

Engagement and consultation with a wide range of stakeholders and the community plays a key role in managing and informing the transformation of Perth Airport.

Master Plan 2026 outlines the ongoing consultation and education mechanisms undertaken by Perth Airport to ensure that the diverse range of interests and needs of stakeholders – including local, State and Federal Government, airline partners, airport tenants, the Noongar people and the surrounding community – is taken into account in the planning and operation of the airport.

Getting to and from Perth Airport

The journey to and from Perth Airport often creates the first and last impression for people visiting Western Australia. Ground transport planning is critical to the continual growth of Perth Airport and ensuring that there are good connections and easy access for people.

Road and public transport infrastructure is planned in collaboration with State and local governments to ensure that airport roads function in harmony with the surrounding road network.

The Australian Government and State Government have made significant investment in surrounding transport infrastructure to support the growth of the airport, including the completion of the \$1.86 billion Forrestfield-Airport rail link and Airport Central Station in 2022 which form an integral component of the consolidation of passenger air services to a centralised precinct.

Master Plan 2026 presents an updated Ground Transport Plan that outlines the key developments to be undertaken over the next five years to further streamline the efficiency of the transport networks. A key focus is ensuring that ground transport infrastructure is in place for the final stage of consolidation, including further improvements to the road network and construction of two multi-storey car parks.



Master Plan 2026 includes an Environmental Strategy which outlines the key areas of environmental, sustainability and heritage focus and identifies 42 initiatives to be implemented over the next five years.

Perth Airport is committed to ongoing engagement with the Traditional Custodians in a manner that recognises the importance of the area to the Noongar community and acknowledges the deep and continuing cultural and spiritual ties that exists with the land on which Perth Airport is located.

Celebrating the Cultural Heritage

Perth Airport is located on the traditional lands of the Whadjuk people, a dialect group of the Noongar Nation which encompassed the entire south-western region of Western Australia.

Where the airport estate once formed part of the traditional travelling networks of the Whadjuk people, today it forms part of a modern travelling network. As a busy domestic and international airport and the first experience many visitors will have with Perth, Western Australia or even Australia, Perth Airport has an important role in caring for and promoting the unique cultural heritage of the Noongar nation to local and global visitors.

Perth Airport is committed to ongoing engagement with the Traditional Custodians in a manner that recognises the importance of the area to the Noongar community and acknowledges the deep and continuing cultural and spiritual ties that exists with the land on which Perth Airport is located.

In 2009, Perth Airport entered into a partnership agreement with Traditional Custodians and other Aboriginal Elders with a long-standing association with the airport estate. The Partnership Agreement Group is a high-level steering group that aims to create a shared vision for reconciliation, focused on preserving Aboriginal heritage and promoting the advancement of Aboriginal people within the airport estate.

Perth Airport became the first major airport in Australia to recognise the Traditional Custodians of each domestic flight destination, with flight information screens and boarding gates enhanced to rotate between the commonly used name of the destination and the name of the language group for the Traditional Custodians of that place.

Looking After the Environment

Perth Airport works to reduce environmental impacts across its operations and has implemented environmental management strategies to help minimise the effects of airport operations and development activities.

While the natural environment of the estate has been significantly altered by historical land uses and its development as an airport, there are remaining natural areas that contain a high level of biological diversity, including environmentally significant areas, wetlands and an extensive drainage network.

Master Plan 2026 includes an Environmental Strategy which outlines the key areas of environmental, sustainability and heritage focus and identifies 42 initiatives to be implemented over the next five years.

Safeguarding Perth Airport

As a critical element of public infrastructure that operates 24 hours a day, seven days a week, the current and future safety, viability and growth of Perth Airport operations must be safeguarded against inappropriate land development and activities in the areas surrounding the airport. Safeguarding is a shared responsibility of Perth Airport and all levels of government.

Master Plan 2026 considers the National Airports
Safeguarding Framework guidelines, which include aircraft
noise management, protecting airspace from intrusions,
managing risk associated with public safety areas,
distractions to pilots from lighting, building induced
windshear, wildlife strikes, and protecting communication,
navigation and surveillance infrastructure.

A Balanced Approach to Aircraft Noise Management

Master Plan 2026 outlines Perth Airport's approach to working with Airservices Australia, all levels of government and the aviation industry to actively manage aircraft noise exposure and its effect on the surrounding community, while balancing the need for critical and safe air services.

Perth Airport has adopted the International Civil Aviation Organization's Balanced Approach to Aircraft Noise Management, which is the only globally recognised policy for managing aircraft noise.

Noise modelling has been produced for current and future operations, including a revised Australian Noise Exposure Forecast (ANEF) which was endorsed by Airservices Australia on 22nd September 2025.

Current flight paths and indicative flight corridors for the new runway and future parallel runway operations are also provided.



About Perth Airport

- 1 Introduction
- 2 Perth Airport Today
- 3 Significance of Perth Airport



1.1 Welcome to the Perth Airport Master Plan 2026



Perth Airport is Australia's Western Hub, connecting Western Australia to the rest of the nation and the world. It operates 24 hours a day, seven days a week, and is a vital public transport infrastructure facility.

Perth's metropolitan community is inextricably linked to Perth Airport. The relative isolation of Perth as an Australian capital city, and the vast distances between major population centres, make air travel and Perth Airport indispensable to the people of Western Australia and to the state's economic, social and cultural development.

As the fourth-largest domestic and international airport in Australia by passenger volume, Perth Airport is currently serviced by more than 30 international, intrastate and interstate airlines that operate to 114 destinations.

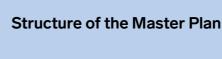
The Perth Airport Master Plan 2026 outlines the vision for the development of Perth Airport over the next 20 years.

Western Australia's aviation sector is soaring, with Perth Airport recording its highest ever annual passenger numbers in FY25, breaking the 17-million passenger mark for the first time.

To provide the capacity for the growing population and aviation sector, Perth Airport has committed to a multi-billion-dollar investment in new infrastructure projects that will deliver one airport for the people of Western Australia and host all flight services in a central location, giving passengers a seamless, world-class travel experience.

The operation and future development of Perth Airport is guided by extensive stakeholder and community consultation. A key part of this engagement is a 60-business day public comment period for each new airport master plan. Written public comment submissions for Master Plan 2026 can be made via www.perthairport.com.au/masterplan or sent to the address below by close of business on Tuesday 23 December 2025.

Master Plan 2026 Perth Airport Pty Ltd PO Box 6 Cloverdale WA 6985



Part A



Part B



About Perth Airport

Section 1 — Introduction

Introduces the Master Plan 2026, the regulatory context and purpose of the Master Plan

Section 2 — Perth Airport Today

Describes the history and development of Perth Airport

Section 3 — Significance of Perth Airport

Details the economic and social importance of Perth Airport to the community and businesses in Western Australia.

How Perth Airport is Planned

Section 4 — Planning Context

Describes how Perth Airport is planned

Section 5 — Development Approach

Sets out the vision and approach for the development of Perth Airport

Section 6 — Aviation Forecasts

Provides the forecasts for aviation growth for the next 20 years

Section 7 — Sustainability and Social Value

Describes the framework that guides the sustainable operation and development of the Perth Airport estate

Section 8 – Connection to Country

Outlines Perth Airport's management of Aboriginal cultural heritage

Part C



Part D



Environment Strategy

Section 9 - Environmental Management

Outlines Perth Airport's environmental management framework and systems

Section 10 — Climate Change and Resource Use

Sets out Perth Airport's approach to climate change and resource use management and outlines a five-year action plan

Section 11 - Land, Air and Biodiversity

Sets out Perth Airport's approach to environmental management and outlines a five-year action plan

The Future Plan for Perth Airport

Section 12 — Land Use Plan

Details the land use plan for the Perth Airport estate

Section 13 — Aviation Development Plan

Describes the proposed aviation developments to support the forecast aviation growth

Section 14 — Non-Aviation Development Plan

Outlines the proposed non-aviation development for the Perth Airport estate

Section 15 — Ground Transport Plan

Sets out the ground transport infrastructure needed to support future plans for Perth Airport

Section 16 — Airport Safeguarding

Describes the measures to safeguard the current and future aircraft operations at Perth Airport

Section 17 — Utilities Development Plan

Details the service infrastructure required to support the future development and growth of Perth Airport

1.2 Purpose of the Master Plan

Perth Airport is located on land owned by the Commonwealth of Australia and is operated in accordance with the requirements of the *Airports Act 1996* (Airports Act). Under the Airports Act, every five years Perth Airport must prepare a new master plan that:

Perth Airport Master Plan 2026

Departures

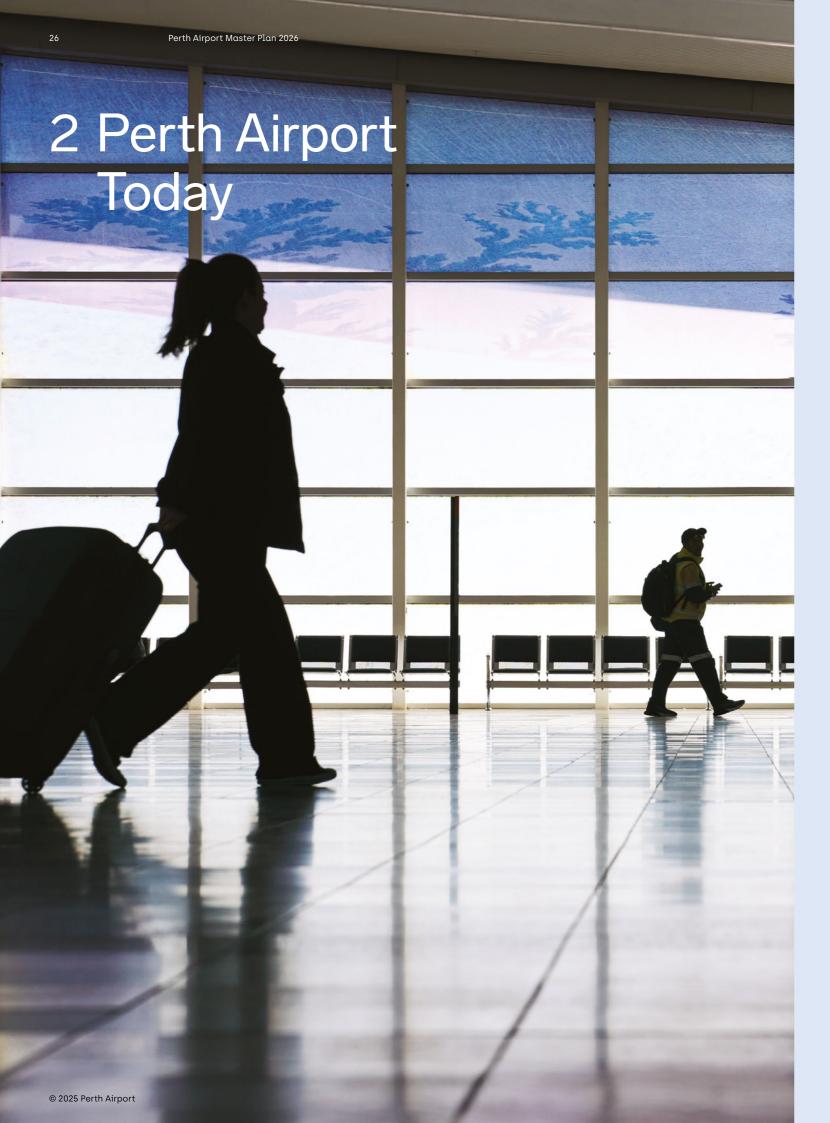
- establishes the strategic direction for efficient and economic development at the airport over the planning period of the master plan
- provides for the development of additional uses of the airport site
- indicates to the public the intended uses of the airport site
- reduces potential conflicts between uses of the airport site, and to ensure that uses of the airport site are compatible with the areas surrounding the airport
- ensures that all operations at the airport are undertaken in accordance with relevant environmental legislation and standards
- establishes a framework for assessing compliance at the airport with relevant environmental legislation and standards, and
- promotes the continual improvement of environmental management at the airport

As part of the master plan process, Perth Airport is required to undertake a 60-business day public comment period where a preliminary draft version of the master plan is made available to stakeholders and the community. Public comments and feedback must be considered before the subsequent draft master plan is submitted to the Federal Minister for Infrastructure for their consideration. Once the draft master plan has been approved by the Minister it becomes the final master plan. All developments at Perth Airport must be consistent with the final master plan.

Master Plan 2026 is the sixth master plan prepared for Perth Airport since the privatisation of the airport in 1997. Once approved by the Minister, this Master Plan 2026 will replace Master Plan 2020.

1.3 Structure of the Master Plan

Master Plan 2026 presents the plans for the operation and development of Perth Airport for the next 20 years. It is presented in four parts.



Background

Perth Airport is Australia's Western Hub, connecting Western Australia to the rest of the nation and the world. It operates 24 hours a day, seven days a week, and is one of the most important infrastructure assets in Western Australia. As the fourth-largest domestic and international airport in Australia by passenger volume, Perth Airport connects to 22 international airports (including major global hubs such as Dubai, Singapore, Hong Kong, Doha and Kuala Lumpur), 13 interstate airports, and 79 regional airports and mine site airstrips in Western Australia.

Within Australia, Perth Airport provides an access point to Western Australia from interstate locations and serves as the central transportation hub for regional destinations, such as significant mining regions and popular tourist destinations. The airport is a vital link in the Western Australian resources sector supply chain, providing connectivity for the fly-in fly-out (FIFO) workforce and for Western Australians who live in remote communities.

The Perth Airport estate is 2,105 hectares in size and has sufficient land to support Western Australia's demand for commercial aviation services well into the future. Perth Airport is located 12 kilometres east of Perth's Central Business District (CBD) and is well connected and integrated with major highway and freeway networks, including Tonkin Highway, Leach Highway and Roe Highway.



Perth Airport connects to 22 international airports, 13 interstate airports and 79 regional airports.



The Perth Airport is the fourth-largest domestic and international airport in Australia by passenger volume.

2.2 Ownership of Perth Airport

In July 1997, the operation and management of Perth Airport was transferred from the Commonwealth of Australia to Westralia Airports Corporation through a 50-year (and 49-year extension option) lease arrangement. In 2011, Westralia Airports Corporation changed its trading name to Perth Airport Pty Ltd. Perth Airport Pty Ltd is a wholly-owned subsidiary of Perth Airport Development Group Pty Ltd (PADG), a privately held corporation owned by institutional investors. The shareholders of PADG, as of January 2025, are shown in Figure 2-1.

Superannuation funds make up 70 per cent of the ownership with the balance comprising of Australia's sovereign wealth. The investment strategies of superannuation funds, which include investing in long-term infrastructure investments, together with their continuing inflow of funds from superannuants, makes them very suitable as shareholders for Perth Airport. Perth Airport funds infrastructure development and maintenance investment through a mix of equity and debt from banks and capital markets.

2.3 Airport Site

Perth Airport is located 12 kilometres east of Perth's Central Business District (CBD) and is well connected and integrated with major highway and freeway networks, including Tonkin Highway, Leach Highway and Roe Highway, as well as the Forrestfield-Airport Link that joined Perth Airport to the metropolitan rail network in 2022. The location of Perth Airport in relation to the Perth metropolitan region and key transport infrastructure is shown in Figure 2-2.

Perth Airport is the largest of four airports in the greater Perth metropolitan region. Jandakot Airport, located about 19 kilometres south-west of Perth Airport, is the region's secondary commercial airport and handles smaller general aviation traffic. The Royal Australian Air Force (RAAF) has two aerodromes in the region, with RAAF Base Pearce and RAAF Base Gingin located about 30 kilometres and 54 kilometres north of Perth Airport respectively. They share airspace with Perth Airport but are not available for commercial aviation.

The estate boundary adjoins the local government areas of the City of Belmont, City of Swan and the City of Kalamunda.

Urban development of the areas surrounding the airport has increased significantly since the airport site was established in 1938, with Perth Airport now surrounded by a mix of commercial and industrial uses, recreational areas and medium-intensity residential development.

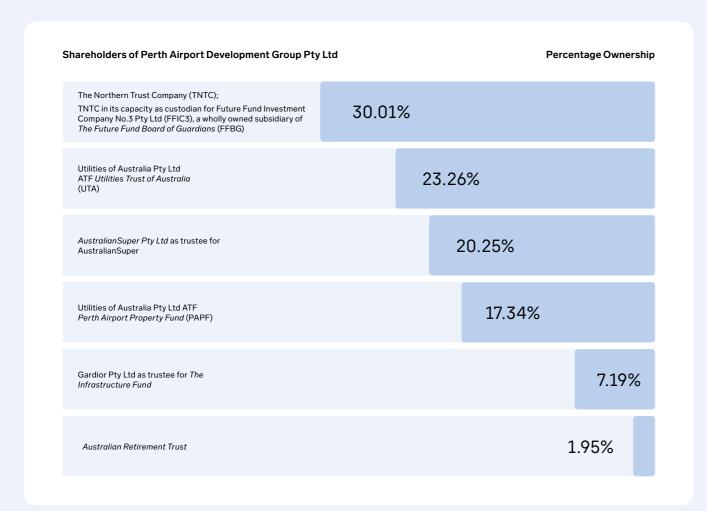
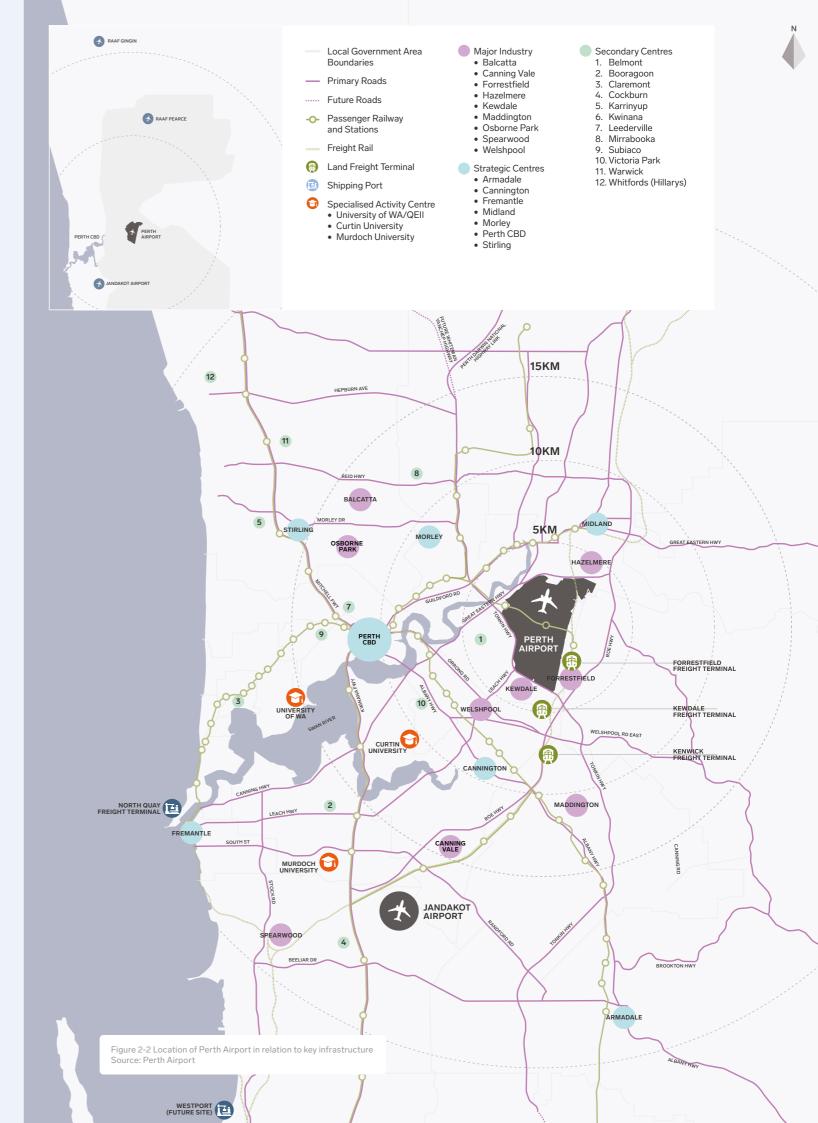


Figure 2-1 Perth Airport Development Group Pty Ltd Shareholders as of January 2025 Source: Perth Airport



30 Perth Airport Master Plan 2026 Part A Section 2: Perth Airport Today

2.4 Airport History

The Perth Airport estate has a long and rich history of activity. Perth Airport sits on the traditional lands of the Whadjuk people of the Noongar Nation which once formed part of their traditional travelling networks. Today, the airport is part of a modern travelling network that takes Western Australians to all corners of the globe and welcomes people from around the world to Western Australia.



An aerial image of Perth Airport in the 1960s.

2.4.1 Aboriginal History

Archaeologists date Aboriginal activity in the Perth area to around 40,000 years ago. The land on which the Perth Airport estate is located forms part of the traditional network of communication routes, meeting places and camping sites of the Noongar people. The Noongar groups traditionally lived throughout the south-west corner of Western Australia, from Geraldton on the west coast and across to Esperance on the south coast.

It is believed that Munday Swamp, a 20-hectare wetland in the east of the airport estate, was named in 1829 after 'Mundy', the young tribal leader of the Beeloo people. The cosmology of Munday Swamp is deeply connected to the landscape and a number of creation or dreaming stories are linked to the network of places surrounding the area.

As the traditional custodians, the Noongar people maintain a strong interest in the airport and its operations.

2.4.2 European Heritage

Early European occupation of the land within the vicinity of the Perth Airport estate dates to the mid-late 1800s and is intrinsically related to the establishment of the Swan River Colony in 1829.

The foundation of Guildford to the north-west of the airport estate occurred within the first years of the colony. It was chosen for its ideal location between the Swan and Helena Rivers. Due to its location, the town site served as an inland river port and market centre for the surrounding agricultural districts.

The estate land contains remains of early 20th-century rural or semi-rural houses, outbuildings, wells, septic tanks, and farm infrastructure. These sites reflect a period in the region's development, transitioning from large estates to smaller farmlets and rural holdings.

1911

The first recorded flight in Western Australia occurred on 9 January 1911.

2.4.3 Early Airport Development

Western Australia can claim to be the birthplace of civil aviation in Australia, with the nation's first significant flight taking place in 1911, and the earliest and largest civil aviation network of any state.

The first recorded flight in Western Australia occurred on 9 January 1911, when Joseph Hammond flew a biplane from a makeshift airstrip at the Belmont Racecourse over the city and Kings Park. In 1919, Sir Norman Brearley started operating demonstration flights and joy flights from the Western Australia Cricket Association ground in East Perth, before moving in 1920 to Langley Park, located along the Swan River adjacent to the Perth city centre.

In 1925, Sir Norman Brearley relocated his fledgling airline, Western Australian Airlines, to the newly constructed Maylands Aerodrome. Maylands Aerodrome quickly grew with increasing air traffic movements and the development of larger aircraft types.

To accommodate air traffic growth, the Dunreath Golf Course and market garden land was acquired in 1938 as the site of the new Guildford Aerodrome (now Perth Airport). In early 1942, this land was converted to an RAAF base. The first runway (the now closed runway 01/19), which was designed for RAAF aircraft, was built in 1943 by Western Australia's Main Roads Department. A second runway (now the cross runway 06/24) was laid down a year later.

Maylands Aerodrome had become too small for the larger passenger aircraft being used, and in 1944 the Australian Government agreed to allow Australian National Airways and the Queensland and Northern Territory Aerial Services Ltd (Qantas) to share Guildford Aerodrome with the RAAF.

Guildford Aerodrome continued to operate as an RAAF base until 1945. A third runway (now the main runway 03/21) was constructed in 1949.

In 1952, Guildford Aerodrome was officially renamed Perth International Airport and facilitated its first international flight to South Africa. In the same year, the first international terminal was built using second-hand wartime materials at a cost of £180,000.

By the mid-1950s less than eight per cent of the Australian population had ever flown. Words like 'tour' and 'holiday' had begun to be included in the marketing of air travel and passenger numbers and demand for flights were rising rapidly.

In 1962, the main domestic airlines moved out of their individual hangars and into the first combined domestic and international terminal, which was opened to coincide with that year's British Empire and Commonwealth Games hosted by Perth.

In 1966, the main runway was extended and upgraded to cater for larger jet aircraft such as the Boeing 707. By the time Qantas flew the first Boeing 747 flight to Perth on 3 September 1971, the facilities at Perth Airport were battling to cope with the demand for domestic and international flights.

Perth Airport Master Plan 2026

2.4.4 Airport Expansion

In 1973, a Joint State and Federal Working Group completed a study which confirmed that the Perth Airport site would continue as the sole regular public passenger transport airport for the Perth region.

A final report on the aviation requirements for the Perth Region was released by the Federal Department of Transport in 1979. The Working Group concluded that Perth Airport should be developed as the primary airport for the Perth metropolitan region and that it be based on a future parallel runway system.

Following the Working Group's recommendations, additional land was acquired to the east of the airport to accommodate the planned long-term expansion, including a proposed parallel runway system. During this period, the main runway was also extended by 300 metres to its current length of 3,444 metres.

Formalising the planning from the Joint Working Group, the Federal Department of Aviation released Perth Airport's first public Master Plan in 1985. The Master Plan 1985 outlined:

- the planning concept for consolidation of terminals into a central location
- the alignment and location for a parallel runway system, comprising the existing main runway and a new runway
- an aircraft noise footprint, in the form of an Australian Noise Exposure Forecast (ANEF), for the future runway infrastructure options, and
- the need to ensure appropriate land-use development around the airport to minimise the impact of future operations on surrounding communities.

In 1986 a new \$60 million International Terminal Complex (T1 International) on the eastern side of the airport was opened, along with a new Air Traffic Control tower.

In the late 1980s, Qantas Group constructed the now Terminal 4 (T4) and Ansett Australia constructed the now Terminal 3 (T3) for their individual domestic operations on the western side of the estate.

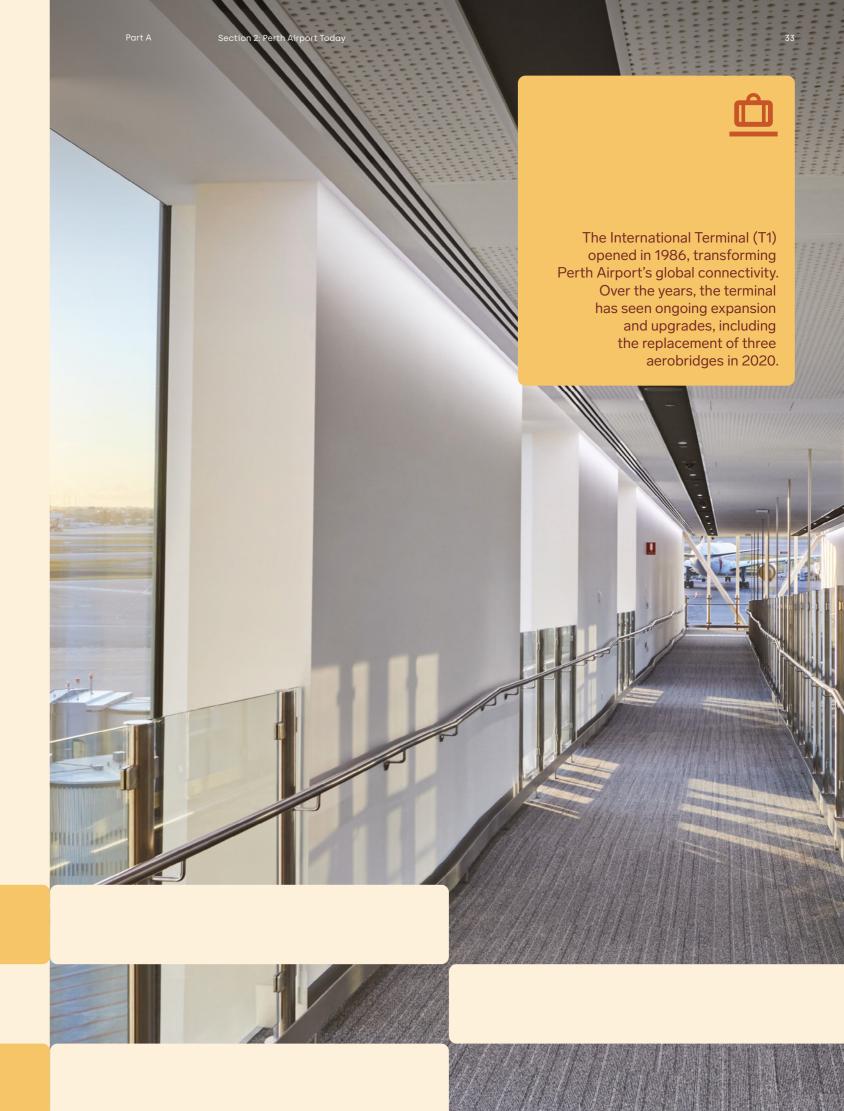
The Federal Airports Corporation (FAC) was formed in 1988 to manage Australia's largest and busiest airports, including Perth Airport, as a self-funding commercial entity. In 1992, FAC continued compulsory acquisition of land for the long-term development of the Perth Airport site.

2.4.5 Privatisation

As a result of the increasing cost of maintaining ageing airfield infrastructure and the need for major redevelopment of airport facilities, the Australian Government commenced the privatisation of 21 Australian airports on a leasehold basis. As part of the first phase of the privatisation process, in 1997 control of Perth Airport was transferred to Westralia Airports Corporation (now Perth Airport Pty Ltd) under a 50-year plus 49-year option leasehold option.

As a condition of the lease with the Commonwealth of Australia, Perth Airport was required to gain approval for a new master plan. The Federal Minister for Transport and Regional Services approved Master Plan 1999 which outlined future developments on the estate. The approved Master Plan 1999 remained consistent with the earlier Master Plan 1985 that saw a future central terminal precinct and a parallel runway system. Since privatisation, a revised master plan has been prepared by Perth Airport and approved by the relevant Federal Minister every five years.

In 2001, Perth Airport purchased T3 following the financial collapse of Ansett. T3 became a multi-user terminal, initially servicing Skywest and Virgin Blue, and later Alliance Airlines, Ozjet Airlines and Tiger Airways operations.



Perth Airport Master Plan 2026 Par

2.4.6 Airport Development

In May 2008, Perth Airport released its Vision for the Future which, through a staged major redevelopment, would see all commercial air services consolidated in terminal facilities within the Airport Central precinct.

Perth Airport committed to the first stage of consolidation with a privately funded investment program worth more than \$1 billion, including 92 projects each valued over \$5 million.

The opening of the \$121 million Terminal 2 (T2), adjacent to T1 International, in March 2013 marked the first stage of consolidation, with Alliance Airlines and Virgin Australia Regional Airlines (formerly Skywest) relocating from T3 into the new T2.

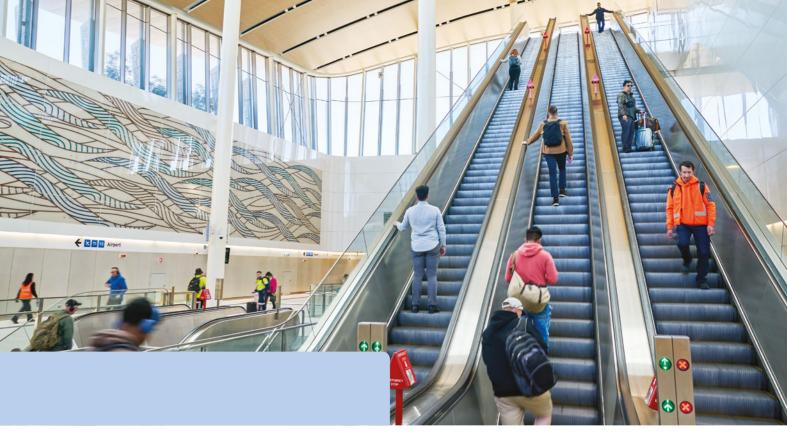
The transformation of the T1 International arrivals experience was completed in late 2014. The \$80 million project substantially expanded and enhanced customs, baggage reclaim, biosecurity and duty-free retail areas. In 2015 a further \$41 million was spent to upgrade the international departures experience, with outbound immigration, passenger security screening and retail areas expanded and renewed.

The year 2015 also saw the opening of the new Terminal 1 Domestic (T1 Domestic) pier and completion of the T1 International departures expansion. The \$338 million Domestic pier allowed Virgin Australia to consolidate its services into Airport Central and provides passengers with a seamless transfer between regional, interstate and international services in one convenient location. Its design facilitates 'swing gate' operations for up to four aircraft, enabling the gates to be used for either international or domestic aircraft optimising the use of both the terminal infrastructure and aircraft parking bays. The pier also included innovative sustainable design features to reduce energy consumption, particularly the use of natural light and a façade providing shade during the summer months.

Included in this program of works were significant airfield infrastructure upgrades, with \$250 million invested in new taxiways, taxiway widening, enhanced lighting and approach equipment as well as runway overlays.

In 2016, Perth Airport began a \$36 million investment to upgrade its airfield infrastructure to Category III to allow landings in reduced visibility during adverse weather, such as fog. Although fog and periods of severe low visibility at Perth Airport occur infrequently each year, the upgrade improves Perth Airport's operational effectiveness and provides greater certainty to passengers and businesses by reducing the likelihood of air services requiring delay or cancellation, or worst case, diversion to alternative airports. The upgrade to Category III infrastructure was completed in 2018.

The completion of the \$1.86
billion Forrestfield-Airport
Link in 2022 has provided
passengers, staff and members
of the public with an alternative
travel option for arriving at and
departing from the airport.



Airport Central Station

On 24 March 2018, Qantas Group commenced direct Perth-London flights using new Boeing 787-9 Dreamliner aircraft. Perth Airport and Qantas Group undertook significant works to enable international services to operate from T3 and provide Qantas customers with an integrated travel experience. The \$28 million upgrade provided an integrated terminal that can alternate between domestic and international operations and provide flexibility and a seamless journey for passengers who are transiting from international to a regional destination. The international wing features a large outdoor deck with alfresco seating, an immigration and customs area, additional food and beverage outlets, and a new duty-free store.

The operation of T4, including terminal management, security screening, facilities maintenance, advertising, food and beverage and speciality retail, was transferred to Perth Airport from the Qantas Group on 31 January 2019, following the expiry of a 30-year lease. Since taking over the operation of T4, Perth Airport has invested \$51 million to upgrade the facilities.

Perth Airport has also undertaken significant investment in commercial and industrial property development on land not required for aeronautical development. The estate currently hosts more than 200 tenants, with planned further expansion. This includes expansion of ground transport networks, in consultation with Main Roads WA and the Public Transport Authority, as well as expansion of the utilities infrastructure to accommodate the planned development. The airport is recognised as a prime location for transport, logistics and resource sector companies due to its efficient access to multiple transport modes, coupled with high safety and security standards.

Perth Airport has invested significantly in commercial developments that provide employment opportunities and growth in the economic prosperity of the eastern metropolitan region of Perth and Western Australia. Developments over the past five years include:

Section 2: Perth Airport Today

- the Costco Wholesale retail facility
- · nine logistics warehouse facilities
- Dunreath Village, comprised of a Woolworths supermarket and other specialty retail tenancies, and
- a highway services development which includes McDonald's, KFC and car wash facilities.

The combination of extensive aviation-related and commercial developments has underpinned the transformation of Perth Airport from a pure aviation-support facility into an integrated transportation and logistics hub with other commercial operations.

In addition to the Perth Airport funded projects, both the Western Australian and Australian governments have contributed significantly to fund infrastructure supporting the transformation of Perth Airport, improving road and public transport access to the airport to support the consolidation of all commercial air services to the Airport Central precinct.

The \$1 billion Gateway WA project, Western Australia's largest-ever road project, was completed in 2016 and greatly improved access to Perth Airport as well as enhancing the safety and efficiency of one of the state's most important freight transport corridors. The Australian Government provided \$676 million, and the Western Australian Government contributed \$310 million to fund the

development, with Perth Airport supporting the project through the contribution of nearly 30 hectares of land, financial input, and the construction of roadworks valued at \$35 million within the estate.

The completion of the \$1.86 billion Forrestfield-Airport Link in 2022 has provided passengers, staff and members of the public with an alternative travel option for arriving at and departing from the airport. The 8.5-kilometre underground extension of the Perth rail network, from Bayswater to Forrestfield, includes 3.8 kilometres located within the Perth Airport estate and forms an integral component of Perth's long-term public transport network to meet existing and future public transport demand. The rail service provides improved connectivity between Perth Airport, the Perth CBD and the wider metropolitan area, as well as providing a viable alternative to car travel between these destinations.

The Forrestfield-Airport Link project included the Airport Central Station—constructed next to the Air Traffic Control tower in the Airport Central precinct—and Redcliffe Station and High Wycombe Station located outside the airport estate. The Airport Central Station gives passengers access to T1 and T2 via a 280-metre long elevated 'Skybridge' walkway constructed by Perth Airport.

The Forrestfield-Airport Link was jointly funded by the Australian Government (\$490 million) and Western Australian Government (\$1.37 billion) and delivered by the Western Australian Government. Perth Airport contributed 2.2 hectares of land for the Airport Central Station, Redcliffe Station and the Redcliffe Station car park.

The Perth Airport estate is shown in Figure 2-3.

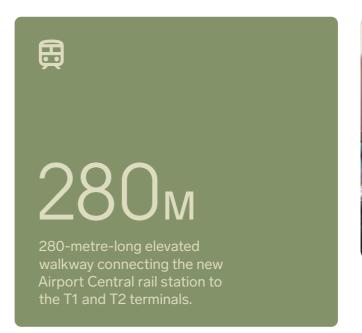
Figure 2-3 Perth Airport estate Source: Perth Airport

© 2025 Perth Airport

2.5 Significant Developments Since 2020

Table 2-1 outlines the aviation and non-aviation developments that were completed during the term of the Master Plan 2020.

Projects completed in 2020		
T2 Apron Expansion	Provision of two additional Code C aircraft standoff parking positions and reconfiguration of existing standoff bays	
T1 Common Use Self Service Kiosk and Bag Drop —Stage 1	Installation of 36 common use self-service check-in kiosks, 16 bag drops and six airline workstations to improve the efficiency of passenger check-in	
Singapore Airlines Lounge Expansion	Expansion of the Singapore Airlines premium lounge in T1 International	
T1 International Departure Gates 52-54 Upgrade	Replacement of three aerobridges with dual head apron drive aerobridges, and installation of ramps and lifts at each of these gates, eliminating the need for passenger boarding via stairs from the second-floor departure lounge	
Skybridge	280-metre-long elevated walkway connecting the new Airport Central rail station to the T1 and T2 terminals	
Costco Wholesale	New 14,000 square metre large format retail warehouse, including an optical centre, hearing aid centre, tyre centre and petrol station	
Geodis	2,900 square metre office and warehouse facility utilised by Geodis as its primary WA warehousing and distribution centre	





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Projects completed in 2021		
T1 Auto Boarding—Gate 53	Implementation of automatic boarding gate technology on Gate 53	
Service Animal Respite Areas	Service Animal Respite Areas constructed at T1, T3 and T4 to provide passengers travelling with assistance-animals the availability of in-terminal facilities to toilet their animals	
Westrac	2.6-hectare industrial development with distribution warehouse and office facilities	
Westrac	3.2-hectare industrial development with workshop and office facilities	
Pacific Energy	1.6-hectare purpose-built industrial office and warehouse development for a leading renewable energy service provider	
Cummins	New 6,342 square metre industrial warehouse and office facility constructed for diesel and alternative-fuel engine parts	



3.2на

3.2-hectare industrial development with workshop and office facilities.



Projects completed in 2022		
T1 Landside Remix Project	An internal refurbishment of the landside retail area, including a new decompression zone, which provides additional space for retail development.	
Security Screening Reform Project	Introduction of enhanced security screening equipment for passenger screening and checked baggage screening in T1, T2, T3 and T4	
T1 Changing Places Facility	Construction of a Changing Places facility to provide secure, suitable amenities for people who cannot use standard accessible toilets in T1	
T1 Level 2 Aspire Lounge	Award winning passenger lounge in T1 that features panoramic views of the airfield and Perth city skyline, offering passengers a cost-effective, high-quality lounge experience	
Airport Central Station and Forrestfield-Airport Link	Completion of the Public Transport Authority's new rail station in the Airport Central precinct and commencement of the Forrestfield-Airport Link	
United Petroleum	24/7 petrol station with a variety of food outlets, a convenience store, vehicle washing facilities, and indoor and outdoor rest and fatigue facilities	



2.2-hectare shopping centre development with 50kW rooftop solar that targeted 4-Star Green Star rating.



Projects completed in 2023		
New Singapore Airlines Lounge	Internal refurbishment of existing vacant airline lounge to deliver a new departure lounge for Singapore Airlines	
T2 Boarding Gate Expansion	Construction of two new boarding gates in T2	
T3/T4 Car Park Expansion	Car park expansions to add 155 shaded car bays to Long Term B Car Park and 216 additional undercover bays within the T4 Premium Car Park	
T3/T4 Short Term Saver Car Park	A new Short Term Saver Car Park at T3/T4, providing an additional 533 car parking bays	
T3/T4 Forecourt Management System	Implementation of an express pick up/drop off system for the T3/ T4 forecourt, including an additional 20 car bays, redesign of ACROD bays, and improvements to pedestrian flow by upgrading the pedestrian crossing and installing traffic lights	
T3/T4 Long Term Car Park E	Construction of new Long Term Car Park E to provide an additional 576 car parking bays	
T3/T4 Staff A Car Park Expansion	Expansion of Staff A Car Park to provide an additional 175 car parking bays	
Noongar Welcome Signage Installation	Installation of illuminated welcome signs in the Noongar language at the entries to the Airport Central and Airport West precincts	
Pedestrian Path between Redcliffe Station and T3/T4	New pedestrian pathway between Redcliffe Station and T3/T4	
Air Radiators	Construction of 2,400 square metre industrial workshop and office facility with 50kW of rooftop solar that achieved 4-Star Green Star Design and As-Built v1.3 sustainability certification	
Dunreath Village—Stage 1	2.2-hectare shopping centre development with 50kW rooftop solar that targeted 4-Star Green Star rating. Tenants include Woolworths, Priceline and other speciality retail shops	
Officeworks Customer Fulfilment Centre	Purpose-built 15,000 square metre warehouse with 100kW rooftop solar that achieved 4-Star Green Star Design and As-Built v1.3 sustainability certification, modernising the Officeworks supply chain.	

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Projects completed in 2024		
T1 Auto Boarding Gates 50-54	Implementation of automatic boarding gate technology on Gates 50, 51, 52 and 54	
T1 Sensory Room	A safe, comfortable enclosed space in the T1 departures lounge for passengers who experience sensory processing difficulties, where they may decompress prior to their flight. This is the first room of its type at a major Australian airport.	
T2 Expansion—Stage 1	Refurbishment and expansion of the T2 departures lounge and terminal amenities to provide additional seating and enhanced retail opportunities	
Long Term H Car Park Conversion	Conversion of 1,000 car bays within the Long Term H Car Park (Airport Central) into dedicated airport staff parking facilities	
Long Term L Car Park	New 2,300 bay long term car park within the Airport Central precinct	
Long Term K Car Park Expansion	Expansion to existing Long Term K Car Park within Airport Central, creating an additional 1,000 car bays	
Virgin Australia Regional Airlines Maintenance Hangar	5,000 square metre maintenance hangar with 39kW rooftop solar and 10,000 square metre new apron area (submitted for 4-Star Green Star Design and As-Built v1.3 sustainability certification)	
Aviation Support Precinct—Stage 1	Civil works to support four aviation support sites and one commercial development site, including a new access road from Paltridge Road and reconfiguration of the Gate 1 airside access facility	
Border Express	13,000 square metre logistics warehouse and office facility that achieved 4-Star Green Star Design and As-Built v1.3 sustainability certification	
Highway Services	1.67-hectare commercial development with McDonalds, KFC and IMO car wash facilities	
Capital Group Transport	1.15-hectare industrial development with warehouse and office facilities	
Dnata	1.7-hectare industrial warehouse and office facilities (submitted for 4-Star Green Star Design and As-Built v1.3 sustainability certification)	



A safe, comfortable enclosed space in the T1 departures lounge for passengers who experience sensory processing difficulties, where they may decompress prior to their flight. This is the first room of its type at a major Australian airport.



Projects underway/completed in 2025	
T2 Apron Expansion—Stage 1	Additional 42,000 square metres of aircraft apron constructed to the south of T2, providing six new aircraft parking stands
T1 Level 2 Departures Lounge Upgrade	Reconfiguration of seating adjacent to Gates 53-56 to improve range and choice of seating, together with additional food and beverage and speciality retail stores to improve the overall passenger experience
T1 International Arrivals Experience	A combination of static and digital artwork along the T1 International arrivals journey, including a cultural art activation
T1 Level 2 Duty Free Refurbishment and Expansion	Expansion and reconfiguration of the duty-free facilities to enhance the choice and range of goods for sale and improve passenger circulation through the store
T1 Domestic Kids Play Area	Play area design with inclusive features for all children, with natural wood tones, a slide and interactive zones
T2 Forecourt Reversal	Conversion of Sugarbird Lady Road to a one-way (southbound) traffic flow that provides two lanes for vehicles exiting the T2 forecourt
Dunreath Village—Stage 2	1,250 square metre Dan Murphy's Liquor Store, connected to Dunreath Village
Arc Infrastructure Office	New 4,630 square metre office development in Airport West precinct, targeting 4-Star Green Star Buildings sustainability certification (due for completion 2026)

Table 2-1 Perth Airport aviation and non-aviation developments completed since 2020 Source: Perth Airport



A combination of static and digita artwork along the T1 Internationa arrivals journey, including a cultural art activation.



2.6 Achievements Since 2020

2020

In 2020, Perth Airport became the first Australian airport to receive the newly established Airport Health Accreditation from the Airports Council International, which set a global standard for airports in keeping passengers and airport workers safe.

2021

In 2021 and 2022, Perth Airport achieved the No. 1 ranking among participating Oceania airports and Sector Leader Status in transport, by the international GRESB process that rates the environmental, social and governance performance of major infrastructure assets.

2022

In 2022, Perth Airport introduced its Hidden Disabilities program and constructed Changing Places facilities and Service Animal Respite Areas in T1 and T4 to facilitate travel for those with disabilities

Perth Airport's Aspire Lounge was named the Best Airport Lounge in Oceania at the World Travel Awards in September 2022, and also won the Airport Excellence Commercial Award at the National Airport Industry Awards in 2022. The T1 International Aspire Lounge opened in March 2022 and features panoramic views of the airfield and Perth city skyline, offering passengers a cost-effective, high-quality lounge experience.

2024

Perth Airport was awarded Best
Airport Staff Service in Australia and
Pacific at the 2024 World Airport
Awards. Testament to Perth Airport's
commitment to providing an
outstanding and world-class customer
experience for passengers travelling
through its terminals, the award is
determined through the largest annual
global airport customer satisfaction
survey that evaluates the customer
experience across all front-line areas
of airport service and facilities at over
550 airports: from check in, arrivals,
transfers, shopping, security and
immigration, to departure at the gate.

At the 2024 Australian Airports Association Industry Awards, Perth Airport's Dunreath Village development, located in the heart of the Airport West precinct, won the Commercial Airport Excellence Award.

2025

In 2025, Perth Airport was the first major Australian Airport to open a Sensory Room in its T1 International departures lounge for individuals who experience sensory processing difficulties. The project won the Iwan Iwanhoff Award for Small Project Architecture at the 2025 Australian Institute of Architects (AIA) WA Chapter Awards.



2.7 Facilities And Infrastructure

Perth Airport has the following aviation infrastructure within the estate:

- two runways, comprising the main runway 03/21 which is 3,444 metres long, and the cross runway 06/24 which is 2,163 metres long
- 21 kilometres of aircraft taxiways
- 587,080 square metres of aircraft apron
- five passenger terminals
- short- and long-stay car-parking
- taxi, car rental, rideshare, car-share, public bus, rideshare and cycling facilities
- air freight facilities, including direct airside access and cold storage
- aircraft maintenance hangars and associated facilities
- · in-flight catering
- · general aviation and helicopter facilities
- · aviation rescue and firefighting facilities
- air traffic control tower, and
- · aviation fuel infrastructure.

 $3,444_{M}$

Main runway 03/21 is 3,444 metres long.

2,163м

Cross runway 06/24 is 2,163 metres long.

2.8 Operations

Perth Airport operates 24 hours, seven days a week, providing an essential link for business and leisure travel, and meeting the needs of:

- · regional communities and the resource sector
- · interstate domestic travel
- · international access to multiple global destinations, and
- freight, including express and time critical supplies.

Maintaining operational flexibility is critical to supporting Western Australia's economy. Perth Airport is part of a national and global aviation network and, as such, its flight times and schedules are not determined locally. The viability of many of Perth's international air services depend on linking with connecting networks through hub airports, such as Dubai and Singapore. Any restrictions on the operations of Perth Airport would lead to a significant loss of air services, which may result in a reduction of service levels and an increase in the cost of flying for both businesses and members of the community.

The operational conditions at Perth Airport are also critical to maintaining and supporting effective freight and logistics. A multitude of industries from minerals such as gold and diamonds, primary produce such as seafood and meat, and a variety of specialist imports rely on the extensive dedicated freight and passenger aircraft 'belly freight' to support industry. The period between 11.00 pm and 6.00 am currently represents 29 per cent of international flights, including freight services, and 14 per cent of regional flights.

The type and size of aircraft operating at Perth Airport varies greatly, from small propeller engine aircraft to the largest passenger jet in service, the Airbus A380.

Perth Airport plays a key role in facilitating FIFO operations vital for the mining industry. A key focus of regional airlines is transporting personnel to and from remote locations, with FIFO workers representing around 83 per cent of regional travellers in Western Australia. FIFO passenger volumes play a key role in guiding infrastructure planning at Perth Airport, directly influencing the sizing of all domestic terminal facilities and airfield capacity. The operations of Perth Airport are dependent on the wide range of functions undertaken by the organisations outlined in Table 2-2.



Function	Description	Organisation/Agency
Airport operator	Provides, operates and maintains the necessary airport infrastructure	Perth Airport Pty Ltd
Airlines and aircraft operators	Provide aircraft, passenger and freight services	Currently more than 35 commercial aircraft operators at Perth Airport
Air navigation service	Management of Perth Airport airspace, aeronautical information, aviation communications, and radio navigational aids	Airservices Australia
Rescue and firefighting services	Response to aircraft and other emergencies within the airport estate	Airservices Australia WA Department of Fire and Emergency Services St John Ambulance Australia Western Australia Police
Aviation fuel infrastructure	Provide fuel storage and aircraft refuelling operations	Perth Airport Pty Ltd
Ground transport operators	Provide services for passengers and airport staff to access the airport	Multiple private operators Public Transport Authority
Border protection and security	Ensure that the airport is secure and that international operations are conducted in accordance with relevant legislation	Federal Department of Home Affairs Federal Department of Agriculture, Fisheries and Forestry Australian Federal Police Western Australia Police Private contractors
Ground handling services	Provide various services to facilitate the efficient turnaround and operation of aircraft	Multiple companies, including Swissport and Menzies Aviation
Retail and other commercial operations	Provide services for passengers and airport staff as well as providing non-aviation employment and services to the wider community	Currently over 200 tenants on the estate

Table 2-2 Perth Airport current operations Source: Perth Airport 46 Perth Airport Master Plan 2026 Part A Section 2: Perth Airport Today

2.9 Current Initiatives

2.9.1 Airport Consolidation

The next 10 years will be a transformative period for Perth Airport, with a multi-billion-dollar investment program set to deliver the long-awaited 'one airport' for Western Australian travellers.

The planning and delivery of the once-in-a-generation program of works will bring all commercial flight services into the Airport Central precinct, with a new runway, new and expanded terminal facilities, two multi-storey car parks, improvements to the road network, and the airport's first hotel.

The centralisation of passenger operations into a single precinct was first identified as a primary state planning objective in the 1970s that considered the airport infrastructure required to meet future aviation needs of the Perth region. The site of the new international terminal and relocation of the control tower into the precinct in the 1980s were consistent with this strategy and the initial step to consolidation which was then expected to be completed within the coming decade. Significant development works within the Airport Central precinct undertaken primarily by Perth Airport have advanced the consolidation vision, with the construction of T2 and the T1 Domestic Pier, and the opening of the Forrestfield-Airport rail link and Airport Central Station in 2022.

A crucial component of the next wave of capital investment program is an historic 12-year commercial agreement between Perth Airport and Qantas Group, reached on 31 May 2024. Qantas Group committed to relocating all services to a new terminal in the Airport Central precinct, enabling the growth required to turn Western Australia into a major domestic and international hub.

In September 2024, Jetstar relocated its domestic services to T2, where it is expected to operate until moving into the new terminal facilities to be constructed.

Perth Airport is also investing in further upgrades to T3 and T4, the current home of Qantas domestic and international flights, to create additional capacity while the new terminal is being built.

2.9.1.1 New Runway

The new runway is a key component in the consolidation of operations into the Airport Central precinct. The 3,000-metre new runway, which will be located parallel to the existing main runway 03/21, is critical to enabling the full and intended operation of all passenger operations from a centralised precinct. The development of the new runway and taxiway system will support the terminal developments by providing access for arrivals and departures, balanced on either side of the Airport Central precinct.

The plans for the new runway have been included in all of Perth Airport's Master Plans since 1985, with planning studies and initial stakeholder engagement dating back to the 1970s.

The new runway will deliver additional airfield capacity and higher levels of operational efficiency. It will ensure that airlines and passengers can rely on WA's aviation industry to operate without persistent delay and congestion, and to provide greater connectivity to regional, domestic and international destinations.

Following a comprehensive stakeholder and public comment process, the Major Development Plan for the new runway was approved. The planning for the new runway has undergone extensive stakeholder and community engagement since 2014, with formal public comment completed in 2018. The Major Development Plan for the project was approved by the Federal Minister for Infrastructure, Transport and Regional Development on 21 November 2020. A subsequent environmental Offset Strategy for the project was approved in May 2024.

Construction works commenced in early 2025 and the runway is expected to be operational in 2028.

3,000м

Construction works commenced in early 2025 of the new 3,000-metre runway.



Figure 2-4 Artist's impression of the future consolidated Airport Central precinct Source: Perth Airport



Figure 2-5 Artist's impression of Perth Airport's new runway Source: Perth Airport

2.9.1.2 Terminal 2 Expansion

T2 was opened in 2013 as Western Australia's regional terminal. It was designed primarily to meet the needs of the resource sector workforce by facilitating significant peak periods of passenger movement in a simple, intuitive single-level terminal that could be easily and cost effectively expanded.

The growth of the resource industry has increased both the number of passengers and the size of aircraft operating from T2 since the terminal opened, requiring expansion of associated facilities. Perth Airport completed the first stage of development in late 2024 through an initial expansion of the departure lounge and upgrade of amenities.

The second stage of expansion will include further extension to the departures lounge area, increase of the baggage make up area, provision of additional retail facilities and accommodation for airlines, and the introduction of common use self-service kiosks in the check-in area. Innovation is at the heart of the planning, as the design of the proposed departure lounge extension will allow it to be closed during non-peak periods, thereby reducing energy consumption and operational costs.

2.9.1.3 New Terminal

Design work for Perth's new terminal has already commenced: the new domestic terminal and expansion of T1 International are anticipated to be completed and operational around 2031 to accommodate Qantas Group operations and provide capacity for international passenger growth in T1.

The new terminal will reflect the essence of a modern, vibrant and dynamic Western Australia.

The terminal will reflect the essence of a modern, vibrant and dynamic Western Australia. Passenger-centric and fit for purpose, it is being designed to create a seamless and intuitive terminal experience for all passengers, whether they are starting their journey, transferring or returning home. Its sustainable design and proven technology will drive new levels of efficiency for airline partners.

The new terminal will deliver:

- functionality—ensuring fit-for-purpose, efficient, and safe infrastructure with sufficient capacity for operations, while enabling future growth, easy maintenance, and minimal disruption through thoughtful planning and flexible spaces
- frictionless journeys—prioritising seamless movement, preserving the benefits of a smaller airport with minimised walking distances, clear sightlines and free-flowing circulation
- passenger comfort—open, welcoming, inclusive infrastructure with a calming ambience, a progressive approach to accessibility, and dedicated facilities for all types of travellers
- a smart terminal—leveraging proven technology for enhanced customer experience and operational efficiency, and future-ready solutions to streamline passenger processing and journey control
- sense of place—creating a distinctive identity for Perth Airport as Australia's Western hub, and
- vibrant, integrated commercial offer—thoughtful integration of commercial tenancies to enhance the customer experience, while offering diverse, multicultural dining and shopping options.

2.9.1.4 Ground Transport Consolidation

A critical component of consolidation is the provision of necessary ground transport infrastructure and upgrades. In November 2021, a Major Development Plan for Airport Central Ground Transport Upgrades was approved by the Federal Minister for Infrastructure. The project comprises infrastructure relocation and upgrades to accommodate the forecast passenger demand associated with the future terminal expansion and associated growth in the number of visitors. The upgrades will consolidate all vehicular movement and parking for T1 and T2 through:

- two new multi-modal transport interchanges, including passenger drop-off and pick-up facilities on the ground level, and multi-storey car parks on the upper levels
- upgraded road network, including full or partial grade separation at key intersections and widening of sections of Airport Drive, and
- converting the existing Airport Drive passenger drop-off access road into a pedestrian forecourt.

Works commenced in late 2024 on the first multi-storey car park and road network upgrades.

2.9.1.5 Airport Hotel

Perth Airport has partnered with Australia's largest hotel operator, Accor, to operate the first hotel on the airport estate under the Pullman Hotels and Resorts brand.

The landmark development is planned to be an eight-storey, 237-room hotel building that includes lounge areas, meeting and conference rooms, a wellness centre, swimming pool, and a range of food and beverage offerings, all within a landscaped setting. The building's design and use of materials are informed by the Western Australian landscape and cultural characteristics.

The Major Development Plan for the new hotel was approved by the Federal Minister for Infrastructure in August 2025. Works should commence in 2026 and be completed in 2027.

2.9.1.6 Terminal 3 and 4

Perth Airport is delivering a series of upgrades at T3 and T4, facilitating ongoing operations and future growth opportunities of Qantas' domestic and international services, ahead of relocation to the new terminal in the Airport Central precinct.



3.1 Introduction



Perth Airport serves as a critical driving force for Western Australia's economic, social, and cultural development. It connects communities, facilitates trade, and underpins a vibrant regional tourism sector.

Central to providing these benefits are the activities of Perth Airport, airlines and the State Government in expanding both the range of destinations that can be accessed directly from Perth and the number of flights. More than 30 airlines operate services from Perth Airport, reaching 114 intrastate, interstate and international destinations. The intrastate, interstate and international destinations currently served by Perth Airport are shown in Figure 3-1 to Figure 3-3.

Beyond connecting people and fostering cultural exchange, Perth Airport plays a pivotal role in driving economic growth by supporting businesses, enabling them to access markets, service customers, and expand their operations. It facilitates trade, enabling the seamless flow of goods, including e-commerce shipments, and the fly-in fly-out workforce for the resources sector. Perth Airport additionally serves as a key gateway for international investment and tourism, contributing significantly to the State's economic diversification.

Perth Airport operates 24 hours, seven days a week, providing an essential link for business and leisure travel, and meeting the needs of:

- · regional communities and the resource sector
- online shopping and overnight road and air freight
- interstate domestic travel
- international access to multiple global hub airports, and
- search and rescue and emergency services operations.

Perth Airport's 24/7 operation ensures uninterrupted connectivity, facilitating seamless travel within Western Australia and Australia and providing vital links to major global hubs. Maintaining operational flexibility is paramount to supporting Western Australia's dynamic economy. Strong connections to key international hubs are crucial for sustaining competitive international air services. Any restrictions on Perth Airport's operations and operating hours would lead to a significant loss of air services, increasing travel costs and impacting on tourism and industries dependent on timely travel and air freight.

Perth Airport is also a major employment hub, with 200 tenants located across the airport estate providing a range of aviation and non-aviation services, including freight, maintenance, transport, retail, commercial, warehousing and logistics.

3.2 Economic Importance of Perth Airport

3.2.1 Current Economic Importance

Perth Airport generates significant benefits to the local, State and Australian economies through its own operations and the operations of tenants on the estate.

Perth Airport contributes to the economy through investment in infrastructure and expenditure on goods and services, its employment of local people, and through the initiatives it supports in the local community.

The 200 aviation and non-aviation tenants located across the airport estate also contribute to the economy through the production and expenditure on goods and services, and the payment of direct wages to their workforces.

The total economic contribution of Perth Airport operations to Gross State Product in FY24 was \$6.6 billion, of which \$6.2 billion was contributed to the Gross Regional Product of the Perth metropolitan area. See Figure 3-1 for annual economic benefit of Perth Airport in FY24.

The Perth Airport estate is a major centre of employment in the Perth metropolitan area. In FY24, the estate directly supported 12,326 full-time equivalent jobs. This comprises staff directly employed by Perth Airport and the employees of the aviation and non-aviation tenants located across the estate.

There is also a flow-on contribution to job creation in the broader economy, which is generated through Perth Airport's expenditure with businesses to support the operation of the airport estate, and the expenditure of tenants on the estate. In FY24, these activities indirectly supported the creation of 40,145 jobs, including 27,297 jobs within the Perth metropolitan area. This means that for every direct job supported by Perth Airport and its tenants, a further 1.5 jobs were created in the Western Australian economy. See Figure 3-2 for annual employment benefit of Perth Airport in FY24.

Perth Airport also facilitates other economic benefits in the wider economy and society that would not take place, or would be reduced, if there was not the continuity of aviation activity supported by the airport. Day-return or overnight business trips, short leisure trips and urgent freight deliveries would all be difficult or logistically impossible without aviation. Aviation results in lower transport costs—after allowing for the value of time—as well as improvements in transport quality.

Perth Airport not only contributes to the Perth, Western Australian and Australian economies directly through the aviation-related and non-aviation activities within the estate, but it also acts as an enabler for many other activities that impact those economies, such as mining, tourism, education exports, and agricultural exports.

Perth Airport contributed \$6.6 billion to Western Australia's economy in FY24.





Metropolitan Area

Employment

Perth Airport Master Plan 2026
Part A Section 3: Significance of Perth Airport

3.2.1.1 Resource Sector

The success of the Western Australian resources sector, which accounts for nearly half of the economic activity in the State, is intrinsically linked to the fly-in fly-out (FIFO) employment model.

Due to the remote location of many of Western Australia's oil, gas and mining sector developments, resource companies rely heavily on the air transport of FIFO workers from the Perth metropolitan area to meet their workforce requirements. The FIFO workforce model enables workers to commute to remote work sites while maintaining their residency in their home communities, preserving their economic and social networks.

There are approximately 140 productive mines in Western Australia, employing around 139,000 workers. In FY24, the value of mineral and energy production in Western Australia reached \$238 billion, exceeding 63 per cent of Australia's total mineral and energy production value.

FIFO passengers account for approximately 83 per cent of intrastate travellers travelling through Perth Airport and are primarily serviced by seven airlines, as well as several charter operators. In 2024, an estimated five million resource-related FIFO passengers flew between Perth Airport and regional destinations. The majority of FIFO workers are employed in iron ore and LNG operations within the Pilbara region, with iron ore operations responsible for approximately 52.9 per cent of FIFO passenger movements in 2024. The Goldfields-Esperance region, with its significant gold and nickel mining, and the emerging lithium sector, also contribute substantially to FIFO passenger numbers.

The Western Australian Department of Mines, Industry Regulation and Safety identified that more than \$32 billion was invested in the State's resource sector in FY24, marking 14 straight quarters of increased spending, indicating a strong continued demand for FIFO services operating through Perth Airport.

The resource industry is also dependent on freight and charter operations at Perth Airport to supply goods and services to mine sites

3.2.1.2 Tourism

Perth Airport is pivotal to the tourism sector, serving as the main gateway into Western Australia for both domestic and international air travellers.

By facilitating air travel, Perth Airport enables significant tourism spending by both domestic and international visitors. Interstate and international visitation is an integral part of the success of the local tourism industry with these segments spending significantly more per capita compared to intrastate travellers. In FY24, visitors who travelled through Perth Airport spent \$2.8 billion with Western Australian businesses, creating a \$4.9 billion contribution to Gross State Product.

The introduction of one new international daily flight is conservatively estimated to deliver up to an additional \$70 million to the State's economy and create more than 600 additional jobs.

In FY24, there were 17,950 people employed in the State's tourism sector attributable to aviation operations at Perth Airport.







Tourism enabled economic contribution



Figure 3-3 Tourism enabled employment and economic benefit of Perth Airport in FY24 Source: ACII Allen

Part A Section 3: Significance of Perth Airport

3.2.1.3 Education

International student education has emerged as a significant contributor to the Australian and State economy. There were 825,000 international student enrolments in Australia in 2024—a substantial increase from fewer than 100,000 in 1994.

In the 12 months to September 2024, nearly seven per cent of international arrivals at Perth Airport cited education as their primary travel purpose.

Western Australia is home to a vibrant and growing international student community from 155 different countries. In 2023, Western Australia's education and training institutions saw a record high of 72,215 international student enrolments. Higher education accounts for 47 per cent of international student enrolments and vocational education and training accounts for 32 per cent.

The growth in international students has made international education an increasingly important source of income for Western Australia. Education-related income has more than tripled since FY02 and in FY23 accounted for \$2.4 billion, which is the State's largest service export and more than a third of the service export income from Western Australia.

It is estimated that spending by international students and their families, and their role in the State's workforce, contributed \$2.8 billion to the Western Australian economy and supported 11,275 direct and indirect jobs within the State in 2023. International students are a source of employment, particularly within the tourism sector where they provide a critical source of labour year-round in Perth and during peak tourism seasons in the regions.

Approximately 46.4 per cent of international student expenditure in Western Australian universities is directed towards tuition fees, followed by 34.4 per cent on food, drink and accommodation.

The number of international students is projected to continue to grow into the future, supported by consistent and cost-effective air services.



\$13в

\$13 billion of agricultural exports in FY24.

3.2.1.4 Agriculture and Aquaculture

Air freight plays a crucial role in connecting Western Australian agricultural producers to domestic and international markets, particularly for time-sensitive and perishable goods. Perth Airport serves as a vital hub for the export of a diverse range of agricultural products, including fresh fruits and vegetables, honey, seafood, fresh meat and live animals.

The majority of agricultural freight is transported as cargo on regular passenger flights.

The COVID-19 pandemic led to a significant decline in agricultural exports, particularly time-sensitive produce, which is heavily reliant on passenger flights, being typically exported in low volumes at regular frequencies so as to maintain freshness.

In FY24, Western Australia exported \$13 billion of agriculture products, representing approximately 80 per cent of the State's agricultural and aquacultural output.

Perth Airport is instrumental in facilitating the movement of perishable goods to international markets and the continued growth of agricultural exports relies heavily on the provision of appropriate airport infrastructure and strategic air linkages.

3.2.2 Future Economic Importance

As described in Section 2.9, Perth Airport is embarking on a multi-billion-dollar investment program to deliver a new runway, a new terminal, upgrades to existing terminals, ground transport upgrades and multi-storey car parks, as well as the airport's first hotel. Complementing these developments are new retail and commercial space across the estate.

Over the period from FY24 to FY46, it is estimated that the capital expenditure associated with the construction of the planned projects at Perth Airport will result in the creation of over 3,200 jobs and contribute \$2.2 billion to Gross State Product.

Taking into consideration the development of the estate proposed in this Master Plan 2026, as well as forecast passenger and aircraft volumes, it is estimated that by FY31 the operation of Perth Airport will support 62,168 jobs within the Perth metropolitan area and contribute \$12.8 billion to Gross Regional Product. By FY46, this will increase to 75,401 jobs within the Perth metropolitan area and \$17 billion-contribution to Gross Regional Product. Around two-thirds of this contribution is from non-aviation tenants, highlighting their importance to the State's economy.

The future employment and economic contribution from the operation of Perth Airport is shown in Table 3-1 and Table 3-2.

Passenger volumes through Perth Airport are forecast to grow from 16.1 million passengers in FY24 to 21.1 million passengers in FY31 and 30.8 million passengers in FY46. As shown in Table 3-3, the contribution to Gross State Product from tourism activity enabled by Perth Airport is expected to reach \$11.8 billion in FY46, of which \$8.7 billion is expected to be realised in the Perth metropolitan area.

Financial Year	Source	Perth Metropolitan Area	Western Australia	Australia
2031	Perth Airport	2,136	2,276	2,951
	Aviation tenants	14,582	15,176	21,331
	Non-aviation tenants	45,450	47,382	62,024
	Total	62,168	64,834	86,307
2046	Perth Airport	2,502	2,655	3,408
	Aviation tenants	18,581	19,274	26,446
	Non-aviation tenants	54,318	56,374	71,996
	Total	75,401	78,303	101,850

Table 3-1 Annual employment benefit of Perth Airport in FY31 and FY46

Source	Contribution to Gross Regional Product	Contribution to Gross State Product	Contribution to Gross Domestic Product
Perth Airport	\$1.045 billion	\$1.080 billion	\$1.207 billion
Aviation tenants	\$3.216 billion	\$3.360 billion	\$4.407 billion
Non-aviation tenants	\$8.564 billion	\$9.068 billion	\$11.757 billion
Total	\$12.825 billion	\$13.509 billion	\$17.373 billion
Perth Airport	\$1.596 billion	\$1.641 billion	\$1.811 billion
Aviation tenants	\$4.506 billion	\$4.708 billion	\$6.162 billion
Non-aviation tenants	\$10.918 billion	\$11.560 billion	\$14.991 billion
Total	\$17.021 billion	\$17.909 billion	\$22.964 billion
	Perth Airport Aviation tenants Non-aviation tenants Total Perth Airport Aviation tenants Non-aviation tenants	Source Gross Regional Product Perth Airport \$1.045 billion Aviation tenants \$3.216 billion Non-aviation tenants \$8.564 billion Total \$12.825 billion Perth Airport \$1.596 billion Aviation tenants \$4.506 billion Non-aviation tenants \$10.918 billion	Source Gross Regional Product Gross State Product Perth Airport \$1.045 billion \$1.080 billion Aviation tenants \$3.216 billion \$3.360 billion Non-aviation tenants \$8.564 billion \$9.068 billion Total \$12.825 billion \$13.509 billion Perth Airport \$1.596 billion \$1.641 billion Aviation tenants \$4.506 billion \$4.708 billion Non-aviation tenants \$10.918 billion \$11.560 billion

Table 3-2 Annual economic benefit of Perth Airport in FY31 and FY46 Source: ACII Allen

Financial Year	Tourism Enabled	Perth Metropolitan Area	Western Australia	Australia
2031	Employment	32,133	42,550	55,606
	Economic contribution	\$5.484 billion	\$7.424 billion	\$9.666 billion
2046	Employment	42,873	56,795	74,223
	Economic contribution	\$8.751 billion	\$11.852 billion	\$15.430 billion

Table 3-3 Tourism enabled employment and economic benefit of Perth Airport in FY31 and FY46 Source: ACIL Allen

Perth Airport Today

Perth Airport Future



4тн

largest domestic and international airport in Australia



international airports connected to WA



flights each hour



17.48 M

passengers in FY25



138к

tonnes of air freight



83%

of regional travellers are FIFO employees



of visitors spending to WA economy enabled by Perth Airport



12,326

FTE direct jobs at Perth Airport in 2024.



passengers in 2031



growth in freight between 2024 and 2031



growth in international flights between 2024 and 2031



35,220

FTE direct jobs at Perth Airport in 2031



annual aircraft movements in 2046, growing from current 160,900 flights



30.8м

passengers in 2046



tonnes of domestic and international airfreight by 2046



FTE direct jobs at Perth Airport in 2046

Perth Airport Today

Perth Airport in 2031



contribution to WA's Gross State Product





\$13.5в contribution to WA's

Gross State Product



contribution to real



64,800

Perth Airport in 2046





78,300

FTE job creation in WA

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3.3 Connectivity

Perth Airport occupies a unique position within Australia, significantly impacting the lives of Western Australians. The State's vast geographic expanse, isolation from other major population centres, and proximity to Southeast Asia necessitate a strong reliance on air travel.

Perth Airport makes a critical contribution to the social fabric of the State through connecting people and providing critical services to assist people in need.

Western Australians travel by air more frequently and over longer distances than most other Australians, utilising air transport for work, education, leisure, healthcare, and visiting friends and family. Without robust air connectivity, personal travel beyond approximately 300 kilometres would become significantly more challenging. Extended travel times by road, rail, or bus would reduce productivity, limit the ability to attend important family events, and restrict access to leisure and cultural opportunities.



© 2025 Perth Airport

Perth Airport's role extends beyond the provision and operation of airport infrastructure. Significant effort is invested in collaborating with airline partners and the State Government to expand air service options and enhance connectivity for all Western Australians.



Perth Airport Master Plan 2026

Part A Section 3: Significance of Perth Airport

3.3.1 Regional Connectivity

Perth Airport serves as the essential gateway for Western Australia, connecting the vast, remote regions of the State with the metropolitan hub and the rest of the world. With one-quarter of the State's population residing in regional and rural areas, air travel is not just a convenience but a critical lifeline. Due to the immense distances, air transport is often the only viable mode for business, social, and personal connectivity.



6.24 million regional passengers travelled through Perth Airport in FY25, representing 36 per cent of all passenger movements.

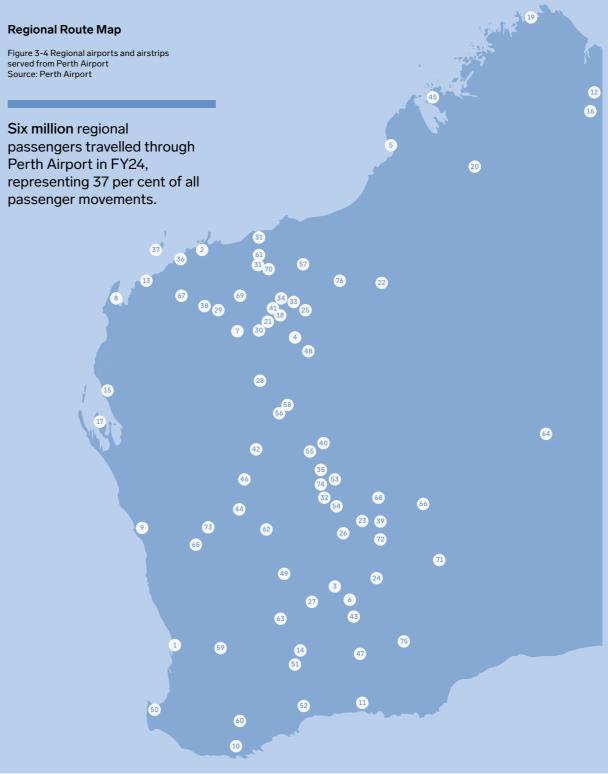
As outlined in 3.2.1.1, the Western Australian resources sector accounts for nearly half of the economic activity in the State and is intrinsically linked to the fly-in fly-out (FIFO) employment model. The development of the unique FIFO employment model within Western Australia's resource sector is largely driven by the state's geographic characteristics. The efficient movement of workers to and from remote resource projects through FIFO arrangements not only supports economic growth, but is also social facilitator, allowing workers to remain living and contributing to their home community while commuting to work. This creates a significant contribution to local economies through the spending by these employees in local businesses in their hometowns, as well as sustaining important social benefits through participation in sporting, cultural and other community activities.

There are currently seven airlines operating regular scheduled services to intrastate locations in Western Australia, as well as multiple charter airlines which provide transport primarily to FIFO work locations.

Beyond the movement of workers, these regional services provide critical connectivity for residents of small and isolated towns. They facilitate access to essential services such as healthcare, education, and legal and financial support, which are often only available in Perth. They also create economic opportunities for regional areas by supporting tourism and the efficient movement of labour.

The Western Australian Government, in recognition of the importance of affordable and accessible regional air travel, has implemented key programs to support this vital connection, which are critically supported by Perth Airport's operations. The Regional Airfare Zone Cap scheme is a flagship initiative that caps the cost of airfares for regional residents travelling to and from Perth for personal reasons. This program ensures that residents of regional Western Australia are not disproportionately burdened by the high cost of air travel, making it more affordable to connect with family, access services, and participate in community life.

Additionally, the Affordable Airfares Program complements this by offering a set number of discounted leisure fares on select routes, between Perth and key tourism destinations of Broome, Exmouth and Kununurra. While primarily aimed at boosting regional tourism, this program also benefits local residents by increasing the availability of affordable fares. These two programs, while distinct in their purpose, work together to enhance the affordability and accessibility of air travel for both residents and visitors, further cementing Perth Airport's role as the indispensable hub for connecting the people of Western Australia.



1	Perth	17	Shark Bay	32	Leinster	48	Karlawinda	64	West Musgrave
2	Karratha	18	Barimunya	33	Christmas Creek	49	Windarling	65	Karara
3	Boundary	19	Truscott-	34	Cloudbreak	50	Busselton	66	Gruyere
4	Newman		Mungalalu	35	Mount Keith	51	Forrestania	67	Kens Bore
5	Broome	20	Fitzroy Crossing	36	Cape Preston	52	Ravensthorpe	68	Duketon
6	Kalgoorlie-Boulder	21	Coondewanna	37	Barrow Island	53	Bronzewing	69	Solomon
7	Paraburdoo	22	Telfer	38	Eliwana	54	Thunderbox	70	Iron Bridge
8	Learmonth	23	Murrin-Murrin	39	Laverton	55	Wiluna	71	Tropicana
9	Geraldton	24	Carosue Dam	40	Jundee	56	Degrussa	72	Sunrise Dam
10	Albany	25	Ginbata	41	Gudai-Darri	57	Marble Bar	73	Golden Grove
11	Esperance	26	Leonora	42	Meekatharra	58	Plutonic	74	Bellevue
12	Kununurra	27	East Jaurdi	43	Kambalda	59	Quairading	75	Nova
13	Onslow	28	Abra	44	Mount Magnet	60	Gnowangerup	76	Woodie Woodie
14	Mount Holland	29	Boolgeeda	45	Koolan Island	61	Wodgina		
15	Carnarvon	30	West Angelas	46	Cue	62	Penny West		
16	Argyle	31	Port Hedland	47	Norseman	63	Southern Cross		

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3.3.2 Connectivity with the Rest of Australia

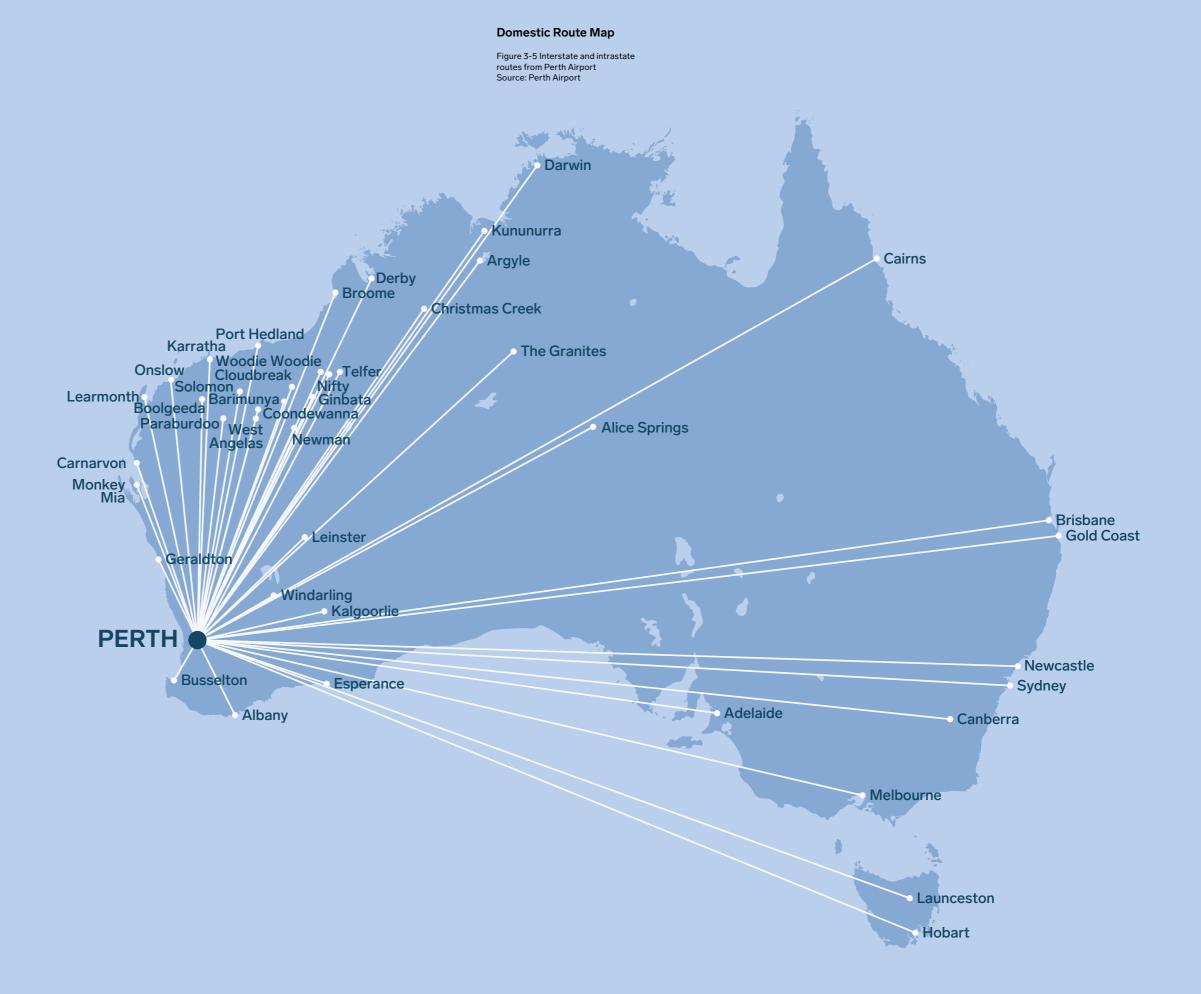
As the largest airport on the west coast of Australia, Perth Airport serves as the primary gateway for air travel to and from Western Australia.

Reflecting this crucial role, domestic passengers constitute the majority of passenger traffic. In FY25, 6.1 million interstate passengers utilised Perth Airport, comprising nearly 35 per cent of all passenger movements. This represents a significant increase from nearly 3.1 million in 2014, highlighting the growing demand for interstate connectivity.

Given the vast distances between Western Australia and other Australian states, air travel remains the most efficient mode of passenger transport. Interstate migration has historically played a vital role in contributing to Western Australia's population growth.

6.1_M

In FY25, 6.1 million interstate passengers utilised Perth Airport, comprising nearly 35 per cent of all passenger movements



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3.3.3 Connectivity with the World

International travel plays a significant role for Western Australians, consistently accounting for a substantial proportion of passenger movements through Perth Airport.

Over the past decade, international passenger numbers have grown at an impressive average annual rate of more than seven per cent.

Perth Airport and the State Government have continued to be successful in attracting international airlines to Perth. As shown in Table 3-4, the number of airlines and destinations has increased from 18 airlines and 19 international ports in FY14, to 24 airlines operating to 22 international airports in FY25.

New and expanded services at Perth Airport include:

- Qantas Airways launched a seasonal service to Rome-Fiumicino in June 2022, operating three-times weekly between June and October
- Philippine Airlines launched a three-times weekly service to Manila in March 2023
- Vietjet Air launched a four-times weekly service to Ho Chi Minh City in November 2023
- Vietnam Airlines launched a three-times weekly service to Ho Chi Minh City in December 2023
- China Eastern Airlines launched a seasonal service to Shanghai in January 2024, operating three-times weekly over the Chinese New Year holiday period
- Qantas Airways launched a three-times weekly service to Paris in July 2024
- Jetstar Airways launched a four-times weekly service to Phuket in August 2024

- Jetstar Airways launched a four-times weekly service to Bangkok in September 2024
- Jetstar Airways launched a six-times weekly service to Singapore in September 2024
- All Nippon Airways recommenced services to Tokyo in October 2024, operating three-times weekly
- Emirates recommenced a second daily service to Dubai in December 2024
- South African Airways added two additional weekly services in January 2025, for a total of five weekly services to Johannesburg
- TransNusa launched a double-daily service to Denpasar in March 2025, and
- Virgin Australia, in partnership with Qatar Airways, launched a daily service to Doha in June 2025



Port	Airline	FY15 Seats	FY15 Flights	FY25 Seats	FY25 Flights	% Change Seats	% Change Flights
Abu Dhabi	Etihad Airways	183,056	698	0	0	-100%	-100%
Auckland	Qantas Airways	18,738	78	0	0	-100%	-100%
	Batik Air Malaysia	0	0	3,708	22		
	Air New Zealand	207,354	689	234,868	735	13%	7%
Bangkok	Jetstar Airways	0	0	79,112	341		
	Thai Airways	161,445	579	201,512	730	25%	26%
Christchurch	Air New Zealand	17,274	76	0	0	-100%	-100%
Christmas Island	Virgin Australia	41,512	306	27,228	159	-34%	-48%
Cocos (Keeling) Island	Virgin Australia	9,272	56	11,868	69	28%	23%
Denpasar Bali	Garuda Indonesia	209,669	705	0	0	-100%	-100%
	Virgin Australia	158,016	896	0	0	-100%	-100%
	TransNusa Airlines	0	0	22,272	136		
	Citilink	0	0	73,440	412		
	Batik Air Malaysia	0	0	125,613	727		
	Batik Air	0	0	115,497	728		
	Jetstar Airways	363,522	2,008	433,144	1,908	19%	-5%
	AirAsia Indonesia	524,736	2,948	615,240	3,418	17%	16%
Doha	Qatar Airways	258,988	730	373,410	726	44%	-1%
Dubai	Emirates	703,350	2,146	503,633	1,143	-28%	-47%
Guangzhou	China Southern Airlines	69,720	312	16,050	58	-77%	-81%
Ho Chi Minh City	Vietnam Airlines	0	0	84,995	298		
	Vietjet Air	0	0	93,820	391		
Hong Kong	Cathay Pacific Airways	276,832	1,038	320,630	975	16%	-6%

Port	Airline	FY15 Seats	FY15 Flights	FY25 Seats	FY25 Flights	% Change Seats	% Chang Flight
Jakarta	Garuda Indonesia	73,520	452	0	0	-100%	-100%
	AirAsia Indonesia	0	0	12,960	72		
	Batik Air	0	0	83,080	526		
Johannesburg	South African Airways	265,521	713	102,212	404	-62%	-439
Kota Kinabalu	Malaysia Airlines	30,784	196	0	0	-100%	-1009
Kuala Lumpur	AirAsia Malaysia	0	0	117,576	535		
	AirAsia X	420,664	1,088	213,766	566	-49%	-489
	Malaysia Airlines	378,156	1,228	248,794	1,211	-34%	-19
	Batik Air Malaysia	0	0	255,483	1,474		
Lombok	Jetstar Airways	21,984	122	0	0	-100%	-1009
London Heathrow	Qantas Airways	0	0	167,088	708		
Manila	Philippine Airlines	0	0	52,080	310		
Mauritius	Air Mauritius	73,024	266	76,426	262	5%	-29
Paris Charles De Gaulle	Qantas Airways	0	0	70,092	297		
Phuket	Virgin Australia	83,796	504	0	0	-100%	-100
	Jetstar Airways	0	0	86,536	376		
Rome-Fiumicino	Qantas Airways	0	0	23,128	98		
Shanghai	China Eastern Airlines	0	0	3,500	14		
Singapore	Jetstar Asia	224,100	1,245	0	0	-100%	-1009
	Jetstar Airways	5,952	32	125,744	542	2013%	15949
	Qantas Airways	17,276	48	201,740	745	1068%	1452
	Scoot	284,874	974	458,558	1,302	61%	349
	Singapore Airlines	845,047	2,889	936,208	2,920	11%	19
Tokyo Narita	All Nippon Airways	0	0	54,058	224		
Grand Total		6,002,600	24,359	5,402,433	21,325	-10.0%	-12.5%

Table 3-4 Comparison of international capacity at Perth Airport for FY15 and FY25 Source: Perth Airport

In FY25, 5.14 million international passengers travelled through Perth Airport on regular scheduled services, equivalent to 29 per cent of all passengers who travelled through the airport.

This high level of international travel reflects several key factors. Western Australia boasts a highly globalised population with a significant proportion of residents born overseas: 38 per cent of the State's population was born overseas and 45 per cent of residents had one or more parents born overseas. These residents maintain strong social and cultural ties with their countries of origin, driving a significant demand for international travel. The State's proximity to Southeast Asia facilitates easy access to popular holiday destinations like Indonesia, Thailand and Malaysia, both for leisure travel and to visit family and friends. Increasing business relationships between Western Australian companies and Southeast Asian nations, particularly China, are further fuelling demand for international travel.

Western Australians also exhibit a higher propensity for international air travel than residents of other Australian states. This can be attributed to factors like strong family ties overseas, easy access to attractive leisure destinations within Asia, and the State's globally connected economy.



Perth Airport plays a vital role in supporting these travel patterns, facilitating connections that are essential for social, cultural and economic development.

3.4 Social and Community

The physical isolation of Perth, the size of Western Australia and proximity to South-East Asia place Perth Airport in the unique position of being a major contributor to the lives of Western Australians. Western Australian residents rely on air transport more than most other Australians as they travel by air more frequently and over longer distances for work, education, recreation, health and to visit friends and relatives.

Perth Airport believes that its relationship with the Western Australian community is an essential part of company values. Perth Airport is committed to building strong and enduring relationships, working with local communities to build active partnerships and contributing to a wide range of community activities which support organisations, families and not-for-profit groups within six key areas.

1. Youth

Activities aimed at education, skills attainment. self-development and high achievement.

2. Community

Activities such as arts and cultural events that benefit a significant number of members in the communities in which Perth Airport operates.

3. Environment

Projects that engage local community groups or schools and seek to maintain, enhance and protect local environments in which Perth Airport operates, including community-based conservation and rehabilitation programs.

4. Indigenous

Projects that preserve and celebrate the culture of indigenous groups with a focus on the Noongar people connected to airport land.

5. Tourism

Activities that build and promote tourism to the communities in which Perth Airport operates.

6. Sport

Projects or events run by groups within the communities that surround Perth Airport.

Part A Section 3: Significance of Perth Airport Perth Airport Master Plan 2026

The Perth Airport Community Support Program positively impacts the lives of many Western Australians through supporting and engaging with local communities, including:

Major community partnerships

Providing support to key WA charities that positively impact the lives of all West Australians, for example Foodbank, Ronald McDonald House, Perth Children's Hospital Foundation, Lifeline and Telethon.

Community Active

Providing support to the six surrounding local government authorities (Cities of Belmont, Swan, Mundaring, Kalamunda, Gosnells and Canning) to fund local community events.

Community Boost

A twice-yearly program which invites charities and not-for-profit groups within eight surrounding local government areas to apply for a grant of up to \$1,000. Since commencement of the program, Perth Airport has supported more than 160 groups and donated over \$150,000.

Perth Airport Local Schools

Supports schools within the local community through sporting, educational and cultural opportunities. Perth Airport has partnered with organisations such as Dymocks, Black Swan Theatre Group, Perth Glory, West Coast Fever and the Perth Wildcats to offer workshops and experiences for students.

ECU Scholarships

Established in 2010, Perth Airport offers two scholarships each year to Aboriginal and Torres Strait Islander students, valued at \$20,000 per student over the course of their studies. Since commencement of these scholarships, 14 students have graduated from their courses with the support of Perth Airport's Edith Cowan University (ECU) Scholarships.

Terminal Collection Boxes

Collection boxes were introduced in T1 International in 2016 to collect foreign notes and coins from international travellers, and in 2021 the program was expanded to include collection boxes in T1 Domestic, T3 and T4. Every two years a new charity is selected, by a vote of Perth Airport staff members, to receive the funds collected in the boxes.

Containers for Change

Recycling collection bins are located within terminals. Eligible containers are recycled and 10c per item collected donated to a charity partner.

Surrendered Items and Lost Property Auctions

Perth Airport donates the proceeds from auctioning items that are surrendered at the security screening points within T1, T2, T3 and T4, as well as unclaimed lost property items, to local WA charities. Historically, the funds raised have been used to purchase vital equipment for Perth Children's Hospital. More than \$600,000 has been raised and donated since 2009.

Agents of Climate Change Sustainability **Education Program**

Partnering with Millennium Kids Inc to support four local schools to take part in the Agents of Climate Change Sustainability Education Program. Perth Airport also makes a significant contribution to the social fabric of the State through providing critical services.

Perth Children's Hospital

Perth Airport purchased a new robotic arm for Perth Children's Hospital worth \$224,000



Perth Airport at Telethon 2024



more than 160 groups and donated over \$150,000 in their Community Boost program.

Perth Airport was at the forefront of the COVID-19 response for Western

Australia. It was the first Australian airport to receive Airport Health

airport to remain operational 24/7 to service regional and FIFO flights,

Accreditation from the Airports Council International, allowing the

maintain air freight services, and facilitate repatriation flights bringing Western Australians back into the State from overseas and interstate. Perth Airport also hosted a COVID-19 vaccination centre and a testing centre to assist in protecting the health of

Western Australia's residents.

Humanitarian and repatriation

efforts are an important activity at

Trade to help facilitate flights from

disaster hit countries, allowing

died overseas.

Perth Airport. Perth Airport works with

the Department of Foreign Affairs and

Australians to return home, as well as

assisting families to reconnect with

loved ones who are injured or have

Perth Airport serves as one of three

Australian Maritime Safety Authority

(AMSA) bases across Australia, AMSA

is responsible for coordinating search

emergencies like maritime rescues and

remote areas off the coast of Western

operated an average of 150 missions

per year from its Perth Airport base.

and rescue operations in Australian

waters, including rapid response to

aerial searches across the vast and

Australia, Since 2020, AMSA has

Perth Airport is also used by vital emergency service providers such as

Flying Doctor Services.

CareFlight, LifeFlight and the Royal

Perth Airport has supported



Agents of Climate Change Sustainability Education Program



Community Boost program - Emmaus Catholic Primary School new soccer goals.



How Perth Airport is Planned

- 4 Planning Context
- 5 Development Approach
- 6 Aviation Forecasts
- 7 Sustainability and Social Value
- 8 Connection to Country



4.1 Perth Airport Lease



2,105на

Perth Airport Pty Ltd is the lessee of 155 lots of land which make up the 2,105 hectares of airport estate.

The lease with the Commonwealth of Australia commenced on 1 July 1997 for a period of 50 years with an option of a further 49-year extension.

An essential term of the lease is that the lessee must comply with all legislation relating to the airport site, including the Airports Act.

The lease requires Perth Airport to develop the airport site at its own cost and expense and, in doing so, having regard to:

- the actual and anticipated future growth in, and pattern of, traffic demand for the airport site the quality standards reasonably expected of such an airport in Australia and
- good business practice.

The lease not only requires that Perth Airport operate the site as an airport but also allows non-aviation development that supports the economic viability of Perth Airport and in turn the State's economy. All development must be in accordance with the approved master plan.

The transfer of four parcels of land to consolidate the Perth Airport boundary is subject to an ongoing land swap arrangement with the State Government. Included in the agreement is a 4.69-hectare easement located within the construction area for the new runway, and it is anticipated that the transfer agreement will be completed prior to the completion of the new runway.

Perth Airport is located on land owned by the Commonwealth of Australia and, although the day-to-day management of Perth Airport was privatised in 1997, the Australian Government continues to play an important regulatory and oversight role.

4.2 Commonwealth Regulatory Framework

Perth Airport is located on land owned by the Commonwealth of Australia and, although the day-to-day management of Perth Airport was privatised in 1997, the Australian Government continues to play an important regulatory and oversight role. This statutory regime ensures that the public interest is protected.

The key Commonwealth legislation applicable to planning, land use, and development of Perth Airport includes:

- Aboriginal and Torres Strait Islander Heritage Protection Act 1984
- Airports Act 1996
- Airports (Building Control) Regulations 1996
- Airports (Control of On-Airport Activities) Regulations 1997
- Airports (Protection of Airspace) Regulations 1996
- Airports (Environment Protection) Regulations 1997
- Airports Regulations 2024
- Airspace Act 2007
- Aviation Transport Security Act 2004
- Civil Aviation Act 1988
- Civil Aviation Regulations 1988
- Civil Aviation Safety Regulations 1998
- Environment Protection and Biodiversity Conservation Act 1999, and
- Native Title Act 1993.

4.2.1 Airports Act 1996

The Airports Act is the principal statute regulating the ownership, management and operation of the federally leased airports. Part 5 and Part 6 of the Airports Act prescribe controls over land use planning, environment management and development at airports, including the requirements for master plans and major development plans.

The key controls required under the Airports Act for these purposes include:

- airport master plan (this document)
- major development plan for major airport developments, and
- · building activity approvals.

An overview of the regulatory framework required to undertake development is provided in Table 4-1.

Regulatory Framework	Perth Airport Outcomes
MASTER PLAN	
Must be approved by the Federal Minister for Infrastructure	Identifies Perth Airport development objectives
Includes an Environment Strategy and	Identifies the intended land uses on the Perth Airport estate
Ground Transport Plan	Enables other planning authorities to develop plans that align with airport planning Provides information to the public about airport development
Reviewed every five years	Defines the aircraft noise exposure forecast for airport operations
Has a 20-year planning period	Defines the flight paths for the airport
Requires a 60-business day public	Defines a ground transport system for the landside of the airport
comment period	Identifies proposed future non-aviation development
	Identifies future employment levels at Perth Airport
	Provides an Environment Strategy for Perth Airport
	Is developed through stakeholder and community input
MAJOR DEVELOPMENT PLANS	
Must be approved by the Federal Minister	Identifies objectives of the proposed development
for Infrastructure	Provides a detailed outline of the proposed development
Required for major airport developments as defined under section 89 of the <i>Airports</i> Act 1996	Defines the extent to which the future needs of aviation users will be met by the proposed development
The development must be consistent with	Identifies consistency with the Master Plan
the airport master plan	Identifies any impacts on flight paths and noise exposure forecast
Requires a 60-business day public period	Identifies consistency with the airport lease
comment	Includes an assessment of environmental impacts and the measures to mitigate them
	Is developed with stakeholder and community input
BUILDING ACTIVITY APPROVALS	
Perth Airport issues Development	Facilitates safe and efficient development at Perth Airport
Application approvals for major works	Ensures that building activity is compliant with the Airports (Building Control) Regulations 199
Perth Airports issues a Consent for all	National Construction Codes and applicable Australian Standards
building activity within the airport estate	Ensures that required fire safety measures are addressed
Airport Building Controller issues Permits for all building activity within the airport	Ensures that the environmental management of the airport estate is in accordance with the Airports Act and Airports (Environment Protection) Regulations 1997

Table 4-1 Framework for development approvals at Perth Airport Source: Perth Airport

Airport Environment Officer monitors and,

where necessary places conditions on

environmental management

The regulations that are made pursuant to the Airports Act and relevant to Perth Airport planning and development include:

- Airports Regulations 2004—specifies land use, planning and building controls
- Airports (Building Control) Regulations 1996—establishes a system for approving appropriate building activities on the airport site
- Airports (Control of On-Airport Activities) Regulations 1997—details requirements for the control of liquor, commercial trading, gambling, smoking, and landside and airside vehicle control on airports
- Airports (Environment Protection) Regulations 1997 details the process for environmental impact assessment, management, pollution prevention, and reporting, and
- Airports (Protection of Airspace) Regulations 1996 provides for the planning, protection and management of prescribed airspace.

A policy initiative of the Aviation White Paper (described in Section 4.3.2) is that the Australian Government conduct a comprehensive review of the Airports Act by 2030.

Perth Airport Master Plan 2026

Each federally leased airport is required to produce a final master plan. The final master plan is a draft master plan that has been approved by the Federal Minister for Infrastructure. Prior to submitting a draft master plan to the minister, the airport is required to have due regard to public comments. Subsequent developments at the airport must be consistent with the final master plan.

Section 70 of the Airports Act states that the purposes of a master plan for an airport are to:

4.2.1.1 Airport Master Plan

- establish the strategic direction for efficient and economic development at the airport over the planning period of the plan
- provide for the development of additional uses of the airport site
- indicate to the public the intended uses of the airport site
- reduce potential conflicts between uses of the airport site, and to ensure that the uses of the airport site are compatible with the areas surrounding the airport
- ensure that all operations at the airport are undertaken in accordance with relevant environmental legislation and standards
- establish a framework for assessing compliance at the airport with relevant environmental legislation and standards, and
- promote the continual improvement of environmental management at the airport.

Section 71 of the Airports Act requires a master plan to include:

- the airport-lessee company's development objectives for the airport
- the airport-lessee company's assessment of the future needs of civil aviation users of the airport, and other users of the airport, for services and facilities relating to the airport.
- the airport-lessee company's intentions for land use and related development of the airport site, where the uses and developments embrace airside, landside, surface access and land planning/zoning aspects
- an Australian Noise Exposure Forecast (ANEF) for the areas surrounding the airport
- flight paths at the airport
- the airport-lessee company's plans, developed following consultations with the airlines that use the airport and local government bodies in the vicinity of the airport, for managing aircraft noise intrusion in areas forecast to be subject to exposure above the significant ANEF levels
- the airport-lessee company's assessment of environmental issues that might reasonably be expected to be associated with the implementation of the plan and the plans for dealing with the environmental issues (including plans for ameliorating or preventing environmental impacts)
- a plan for a ground transport system on the landside of the airport that details:
- a road network plan
- the facilities for moving people (employees, passengers and other airport users) and freight at the airport
- the linkages between those facilities, the road network and public transport system at the airport



and the road network and public transport system outside the airport

Section 4: Planning Context

Part B

- the arrangements for working with the state or local authorities or other bodies responsible for the road network and the public transport system
- the capacity of the ground transport system at the airport to support operations and other activities at the airport
- the likely effect of the proposed developments in the master plan on the ground transport system and traffic flows at, and surrounding, the airport
- detailed information on the proposed developments in the master plan that are to be used for:
- commercial, community, office or retail purposes
- for any other purpose not related to airport services
- the likely effect of the proposed developments in the master plan on:
- employment levels at the airport
- the local and regional economy and community, including an analysis of how the proposed developments fit within the planning schemes for commercial and retail development in the area adjacent to the airport
- an environment strategy that details:
- the airport-lessee company's objectives for the environmental management of the airport
- the areas (if any) within the airport site which the airport-lessee company, in consultation with State and Federal conservation bodies, identifies as environmentally significant
- the sources of environmental impact associated with airport operations
- the studies, reviews and monitoring to be carried out

by the airport-lessee company in connection with the environmental impact associated with airport operations

- the time frames for completion of those studies and reviews and for reporting on that monitoring
- the specific measures to be carried out by the airport-lessee company for the purposes of preventing, controlling or reducing the environmental impact associated with airport operations
- the time frames for completion of those specific measures
- details of the consultations undertaken in preparing the strategy (including the outcome of the consultations), and
- such other matters (if any) as are specified in the regulations.

In accordance with these requirements, master plans for Perth Airport have been prepared and approved by the Federal Minister in 1999, 2004, 2009, 2014 and 2020.

In response to the Aviation White Paper (see Section 4.3.2), the Australian Government will be amending the *Airports Regulations 2024* to require an airport master plan to include additional information about how development of the airport will:

- a) support appropriate access for people with a disability
- b) minimise carbon emissions
- c) enhance resilience to climate impacts, and
- d) address the requirements of the National Airports Safeguarding Framework.

A compliance matrix for this Master Plan 2026 against the relevant requirements of the Airports Act and associated regulations is shown in Table 4-2.

Airports	s Act, Section 70—Final Master Plans	Master Plan Se
(v)	the capacity of the ground transport system at the airport to support operations and other activities at the airport	15
(vi)	the likely effect of the proposed developments in the master plan on the ground transport system and traffic flows at, and surrounding, the airport	15
	elation to the initial period (see subsection (3A) of the master plan—detailed information on the proposed relopments in the master plan that are to be used for:	
(i)	commercial, community, office or retail purposes	14
(ii)	for any other purpose that is not related to airport services	14
	elation to the initial period (see subsection (3A) of the master plan—the likely effect of the proposed relopments in the master plan on:	
(i)	employment levels at the airport	3
(ii)	the local and regional economy and community, including an analysis of how the proposed developments fit within the planning schemes for commercial and retail development in the area that is adjacent to the airport	4
(h) in r	elation to the initial period (see subsection (3A) of the master plan—an environment strategy that details:	
(i)	the airport-lessee company's objectives for the environmental management of the airport	8, 9, 10, 11
(ii)	the areas (if any) within the airport site which the airport-lessee company, in consultation with State and Federal conservation bodies, identifies as environmentally significant	8, 9, 10, 11
(iii)	the sources of environmental impact associated with airport operations	8, 9, 10, 11
(iv)	the studies, reviews and monitoring to be carried out by the airport-lessee company in connection with the environmental impact associated with airport operations	8, 9, 10, 11
(v)	the time frames for completion of those studies and reviews and for reporting on that monitoring	8, 9, 10, 11
(vi)	the specific measures to be carried out by the airport-lessee company for the purposes of preventing, controlling or reducing the environmental impact associated with airport operations	8, 9, 10, 11
(vii)	the time frames for completion of those specific measures	8, 9, 10, 11
(viii) details of the consultations undertaken in preparing the strategy (including the outcome of the consultations)	8, 9, 10, 11
(ix)	any other matters that are prescribed in the regulations	8, 9, 10, 11
j) suc	h other matters (if any) as are specified in the regulations	8, 9, 10, 11
Airports	s Act, Section 71a—Draft or Final Master Plan Must Identify Proposed Sensitive Developments	
1) Ad	raft or final master plan must identify any proposed sensitive development in the plan	12
Airports	s Act, Section 83a—Compliance With Environment Strategy in Final Master Plan	
	e airport-lessee company for the airport must take all reasonable steps to ensure that the environment strategy he master plan is complied with	8, 9, 10, 11
3) Ap	erson (other than the airport-lessee company for the airport) who carries on activities at the airport must take reasonable steps to ensure that the environment strategy in the master plan is complied with	8, 9, 10, 11

Matters Provided By Regulations

1)	For paragraphs 71(2) (j) and (3) (j) of the Act, the following matters are specified as matters that must be set out in a draft or final master plan for an airport:	
	(a) any change to the OLS or PANS-OPS surfaces for the airport concerned that is likely to result if development proceeds in accordance with the master plan	16
	(b) for an area of an airport where a change of use of a kind described in sub-regulation 6.07(2) of the Airports (Environment Protection) Regulations 1997 is proposed:	
	(i) the contents of the report of any examination of the area carried out under regulation 6.09 of those Regulations	12
	(ii) the airport-lessee company's plans for dealing with any soil pollution referred to in the report.	11
2)	If a matter set out in an airport master plan, in accordance with section 71 of the Act, describes intentions for land use and related development embracing landside aspects, the proposals must (as far as possible) be described in an amount of detail that:	
	(a) is equivalent to that required by and	12
	(b) uses terminology (including definitions) consistent with that applying in land use planning, zoning and development legislation in force in the State or Territory in which the airport is located.	12
Airp	ort Regulations 2004, Regulation 16—Contents of a Draft or Final Master Plan — Matters to be Specified in Envir	onment Strategy
2)	The environment strategy must detail the following matters:	
	(a) any areas within the airport site to which the strategy applies that the airport-lessee company for the airport has identified as being a site of indigenous significance, following consultation with:	
	(i) any relevant indigenous communities and organisations and	8, 11
	(ii) any relevant Commonwealth or State body.	8, 9, 10, 11
	(b) the airport-lessee company's strategy for environmental management of areas of the airport site that are, or could be, used for a purpose that is not connected with airport operations	8, 9, 10, 11
	(c) the training necessary for appropriate environment management by persons, or classes of persons, employed on the airport site by the airport-lessee company or by other major employers	8, 9, 10, 11
	(d) the training programs, of which the airport-lessee company is aware, that it considers would meet the training needs of a person mentioned in paragraph (a).	8, 9, 10, 11
3)	In specifying the airport-lessee company's strategy for environmental management under paragraph (2)(b), the airport-lessee company must address the matters mentioned in subsections 17(2) to (6), to the extent that the matters are relevant to that strategy.	8, 9, 10, 11
Airp	ort Regulations 2004, Regulation 17—Contents of Draft or Final Master Plan — Things to be Addressed in Environ	nment Strategy
(2)	In specifying, under subparagraph 71(2)(h)(i) or (3)(h)(i) of the Act, the airport-lessee company's objectives for the environmental management of the airport, the draft or final master plan must address the company's policies and targets for:	
	(a) continuous improvement in the environmental consequences of activities at the airport and	9
	(b) progressive reduction in extant pollution at the airport and	11
	(c) development and adoption of a comprehensive environmental management system for the airport that	9

۱irp	ort Regulations 2024, Regulation 15—Contents of a Draft or Final Master Plan — General	
	(d) identification, and conservation, by the airport-lessee company and other operators of undertakings at the airport, of objects and matters at the airport that have natural, indigenous or heritage value and	8, 11
	(e) involvement of the local community and airport users in development of any future strategy and	8, 9, 10, 11
	(f) dissemination of the strategy to sub-lessees, licensees, other airport users and the local community.	8, 9, 10, 11
, ,	In specifying, under subparagraph 71(2)(h)(ii) or (3)(h)(ii) of the Act, the areas within the airport site which the airport-lessee company, in consultation with State and Federal conservation bodies, identifies as environmentally significant, the draft or final master plan must address:	
	(a) any relevant recommendation of the Australian Heritage Council and	8, 11
	(b) any relevant recommendation of the Environment Department regarding biota, habitat, heritage or similar matters and	8, 11
	(c) any relevant recommendation of a body established in the State in which the airport is located, having responsibilities in relation to conservation of biota, habitat, heritage or similar matters.	8, 11
(4)	In specifying, under subparagraph 71(2)(h)(iii) or (3)(h)(iii) of the Act, the sources of environmental impact associated with airport operations or civil aviation operations at the airport (as appropriate), the draft or final master plan must address:	
	(a) the quality of air at the airport site, and in so much of the regional airshed as is reasonably likely to be affected by airport activities and	11
	(b) water quality, including potentially affected groundwater, estuarine waters and marine waters and	11
	(c) soil quality, including that of land known to be already contaminated and	11
	(d) release, into the air, of substances that deplete stratospheric ozone and	11
	(e) generation and handling of hazardous waste and any other kind of waste and	10
	(f) usage of natural resources (whether renewable or non-renewable) and	10
	(g) usage of energy the production of which generates emissions of greenhouse gases (within the meaning of the National Greenhouse and Energy Reporting Act 2007) and	10
	(h) generation of noise.	11
	In specifying, under subparagraph 71(2)(h)(iv) or (3)(h)(iv) of the Act, the studies, reviews and monitoring to be carried out by the airport-lessee company in connection with the environmental impact associated with airport operations or civil aviation operations at the airport (as the case may be), the draft or final master plan must address:	
	(a) the matters mentioned in paragraph 16(2)(a) and in subsections (3) and (4) of this section and	8, 11
	(b) the scope, identified by the airport-lessee company, for conservation of objects and matters at the airport that have natural, indigenous or heritage value and	8, 11
	(c) the approaches and measures identified by the airport-lessee company as its preferred conservation approaches and measures and	8, 11
	(d) the professional qualifications that must be held by a person carrying out the monitoring and	9
	(e) the proposed systems of testing, measuring and sampling to be carried out for possible, or suspected, pollution or excessive noise and	11
	(f) the proposed frequency of routine reporting of monitoring results to the airport environment officer (if any)	9

Section 4: Planning Context

Airport Regulations 2024, Regulation 15—Contents of a Draft or Final Master Plan – General	
(6) In specifying, under subparagraph 71(2)(h)(vi) or (3)(h)(vi) of the Act, the specific measures to be carried out by the airport-lessee company for the purposes of preventing, controlling or reducing the environmental impact associated with airport operations or civil aviation operations at the airport (as the case may be), the draft or final master plan must address:	
(a) the matters mentioned in subsections (2) to (4) of this section and	9
(b) the means by which the airport-lessee company proposes to achieve the cooperation of other operators of undertakings at the airport in carrying out those measures.	8, 9, 10, 11
Airport Regulations 2024 (Proposed Amendment—As Advised by The Minister by Letter Dated 26 August 2024)	
Airport master plans must include additional information about how development of the airport will:	
support appropriate access for people with disability	5
minimise carbon emissions	10
enhance resilience to climate impacts	
address the requirements of the National Airports Safeguarding Framework.	4, 16
Airport (Environmental Protection) Regulations 1997, Regulation 6.02—Airport Lessee Company to Monitor Pollution	on Levels
(1) An airport-lessee company must monitor, in accordance with its environment strategy:	
(a) the levels of pollution, if any, present in air, water or soil at the airport and	11
(b) the level of noise generated at the airport.	11
(2) Monitoring must be carried out:	
(a) in a way that is consistent with the specification, in the environment strategy, of studies, reviews and monitoring, as affected by sub-regulation 5.02B(5) of the Airports Regulations 1997 and	11
(b) under the direction of a person having the qualifications addressed under paragraph 5.02B(5)(d) of the Airports Regulations 1997 and	11
(c) if it involves testing — in accordance with regulation 1.08 and	11
(d) in a way that is not inconsistent with:	
(i) any international convention, treaty or agreement, relating to environment protection, to which Australia is a party, or	
(ii) a provision of national environment protection measures made under section 14 of the <i>National Environment Protection Council Act 1994</i> .	11

Table 4-2 Master Plan 2026 compliance with the Airports Act and Regulations

Source: Perth Airport

4.2.1.2 Major Development Plans

Approval of this Master Plan 2026 does not automatically constitute approval of subsequent airport developments.

The Airports Act requires that, where a major airport development is proposed, a major development plan (MDP) is prepared for public comment and Australian Government approval.

The types of development that the Airports Act defines as a major airport development include:

- construction of a new runway, or extensions or significant alterations to an existing runway
- construction of a new passenger terminal, or extension to an existing terminal
- · construction of a significant new building not principally used as a passenger terminal
- construction of significant new taxiways, or significant extensions to existing taxiways
- · construction of significant new road or rail access, or significant extensions to existing road or rail access facilities, or
- a development/s which is likely to have a significant environmental impact or significant impact on the local or regional community.

An MDP must be consistent with the final master plan for the airport.

The required contents of an MDP are set out in Section 91 of the Airports Act and include:

- the objectives of the proposed development
- · an assessment of the extent to which the future needs of civil aviation users of the airport and other users of the airport will be met by the development
- a detailed outline of the proposed development
- whether or not the proposed development is consistent with the airport's lease from the Commonwealth of Australia
- whether or not the proposed development is consistent with the final master plan
- if the proposed development could affect flight paths and noise exposure levels at the airport, and the extent of relevant consultation with airlines and local government
- the effect the proposed development will have on traffic flows at the airport and surrounding the airport, employment levels at the airport, and the local and regional economy, and community (including how the proposed development fits within the local planning schemes for commercial and retail developments in the adjacent area)
- an assessment of environmental impacts of the proposed development and the plans for dealing with any such impacts, and
- if the development relates to a sensitive development, the exceptional circumstances that would justify the development at the airport.

The Minister for Infrastructure, who administers the Airports Act, is required to refer an MDP to the Federal Minister for the Environment for their advice pursuant to Section 160 of the EPBC Act.

In the case of Aboriginal heritage, any proposed works which could impact on a registered heritage site requires approval under the provisions of the Western Australian Aboriginal Heritage Act 1972.

4.2.1.3 Building Activity Approvals

The Airports Act and Airports (Building Control) Regulations 1996 require approvals for all building activities within the airport estate.

A Development Approval Application is required for all major works within the airport estate. The Development Approval Application must include plans and relevant information of the proposed development. Perth Airport reviews the application to ensure that the proposed construction is consistent with relevant Perth Airport design guidelines, lease agreements, the final airport master plan and any applicable MDP. An approval issued by Perth Airport may contain conditions that are required to be complied with.

Any requested changes must be made prior to submitting the Perth Airport Consent and Airport Building Controller applications.

All building activity requires Perth Airport Consent assessment and approval. Perth Airport assesses the proposed activity with regard to:

- occupational health and safety
- environmental and heritage impacts
- access, utilities and services
- choice of building materials
- National Airports Safeguarding Framework (described in Section 4.3.3)
- aviation security, and
- consistency with the final master plan, tenant lease agreement and/or MDP.

The approved Perth Airport Consent may contain conditions that must be complied with.

The Regulations require a building Permit to be obtained from the Airport Building Controller (ABC), with advice from the Airport Environment Officer (AEO), for all developments within the airport. The ABC and AEO positions are appointed by DTRDCSA. The ABC is responsible for ensuring that activities at leased airports meet the appropriate building and engineering standards, while the AEO oversees the environmental functions. The ABC assesses the activity under the Airports Act and Regulations, National Construction Codes and applicable Australian Standards. The ABC will also consider any conditions of approval on the Perth Airport Consent.

4.3 Commonwealth Policy and Regulatory Framework

4.3.1 Australian Airspace Policy Statement 2021

The Australian Government recognises airspace as a national resource overlying territorial Australia and adjacent oceanic regions. Legislation and policy relating to airports and aviation, including airspace, is overseen by the Federal Department of Infrastructure, Transport, Regional Development, Communications and the Arts.

The Australian Airspace Policy Statement 2021 sets out the Australian Government's policy objectives and priorities for the administration of airspace as a national resource. The administration of Australian airspace must give priority to the safety of air navigation and:

- shall be in Australia's national interest, consistent with broader government policy
- shall take into account national security requirements
- shall consider the current and future needs of the Australian aviation industry, which includes civil and military aviation
- shall consider cost implications for all airspace users
- shall consider adopting elements of international airspace systems adapted to benefit Australia's aviation
- shall consider the protection of the environment from the effects of the operation and use of aircraft, and
- shall take advantage of advances in technology wherever practicable.

The Civil Aviation Safety Authority is responsible for setting regulations and standards for civil aviation operations in Australia. The Department of Defence is responsible for military aviation operations.

Perth Airport is surrounded by both civil and military airspace. Air traffic services at Perth Airport are provided by Airservices Australia.

4.3.2 Aviation White Paper: Towards 2050

The Aviation White Paper: Towards 2050 was released in August 2024. It builds on the outcomes of the National Aviation Policy White Paper: Flight Path to the Future (December 2009) and sets out the Australian Government's long-term vision for the aviation sector towards 2050, to ensure it remains safe, competitive, productive and sustainable.

The White Paper, and the development of its 56 policy initiatives, was informed by extensive consultation with the aviation industry, state and territory governments, and the Australian community. These 56 policy initiatives cover 10 key areas including:

- a better passenger experience
- a competitive and efficient aviation sector
- a skilled, secure and productive workforce
- maximising aviation's contribution to net zero

- connecting regional Australia
- · regenerating general aviation
- a balanced approach to airport planning and noise
- world leading safety, security and airspace regulation
- · enabling new aviation technologies, and
- · connecting Australia to the world.

Initiative 39 is to require additional information in airport master plans and major development plans (MDPs) about how development of the airport will address climate change resilience, decarbonisation and disability access. When making decisions to approve master plans or MDPs, the Minister for Transport will now also have regard for the appropriateness of the airport's community consultation processes, whether appropriate access to the airport site has been provided for general aviation, and the suitability of the airport's plans for noise mitigation and noise sharing arrangements for any master plans or MDPs that involve new or changed runways. As shown in Table 4-3, Perth Airport has considered and addressed White Paper policy initiatives in this Master Plan 2026.



Airspace is recognised as a national resource — with safety of air navigation as the highest priority.

Aviation White Paper	Master Plan Section
A better passenger experience	
Initiative 4—Make new aviation-specific disability standards as a schedule to the Disability Standards for Accessible Public Transport 2002 under the Disability Discrimination Act (DDA)	5
Initiative 5 —Require airlines and airports to coordinate the facilitation of passenger journeys for people with a disability	5
Initiative 8 — Review industry compliance with the new aviation-specific disability standards. The Australian Government will publicly report on airlines' and airports' compliance with the new aviation-specific disability standards after the rules come into effect	5
Initiative 9—The Australian Government will produce user guides that outline airlines' and airports' legal requirements under the DDA and the new aviation-specific disability standards	5
A competitive and efficient aviation sector	
Initiative 15—Consult on implementing an enhanced version of the ACCC's monitoring of pricing and service quality at Australia's major airports—Sydney, Melbourne, Brisbane and Perth—with the Western Sydney Airport to be included in the price monitoring regime at an appropriate time	5
A skilled, secure and productive workforce	
Initiative 20—Establish a new Gender Equity Charter with the aviation industry. The Australian Government will partner with the aviation industry and unions to commit to employment targets for women in senior and operational roles and elimination of gender pay gaps, as well as improving policies and practices to support traditionally feminised sections of the aviation industry	3
Initiative 21—Plan for the future workforce needs of the aviation sector. These plans will identify aviation skills and set out training priorities, including support for decarbonisation and the rollout of new technologies	3, 5, 12
Maximising aviation's contribution to net zero	
Initiative 22—Consult with industry and the community on the introduction of Low Carbon Liquid Fuels demand-side measures, including through delivery of a regulatory impact analysis	5, 10
Regenerating general aviation	
Initiative 30—Write to airport operators to make it clear that, when making decisions to approve future master plans or MDPs, the government will have regard to the appropriateness of the airport's community consultation processes and whether appropriate access to the airport site has been provided for General Aviation, consistent with the regulations in the <i>Airports Act</i> 1996	5, 12, 13
A balanced approach to airport planning and noise	
Initiative 33—Improve transparency about aircraft noise impacts. Airservices Australia will also publish a quarterly report on noncompliance with noise abatement procedures	16
Initiative 36—Improve land use planning outcomes near airports to seek to avoid further development that is inappropriate for the noise level and protect airport operations from potential safety risks, through:	
 working with National Airports Safeguarding Advisory Group to update NASF Guideline A by 2027 to describe best-practice approaches for including aircraft noise exposure notifications on property titles for new developments 	12, 16
supporting implementation of the recommendation from the 2021 review of the NASF to improve education on the NASF for local planning officials	12, 16

Aviation White Paper	Master Plan Section
 updating the Australian standard on building siting and construction in relation to aircraft noise intrusion. The Australian Government has applied to Standards Australia to review AS 2021:2015 and consider incorporating the guidance handbook on producing information on aircraft noise (SA HB 149:2016) into the standard 	12, 16
Initiative 37—Improve engagement with communities affected by changes to airspace and flight paths. The Australian Government has set expectations for Airservices Australia to apply best-practice consultation when designing airspace and flight path changes, consistent with the Community Engagement Standard for Flight Path and Airspace Change Proposals finalised in 2023	5. 16
Initiative 38—Update guidelines for Community Aviation Consultation Groups (CACGs) to set out ministerial expectations for greater community input into the CACG work programs, greater community involvement in CACG meetings and more widespread dissemination of CACG information to community members	5
Initiative 39—Require additional information in airport master plans and MDPs about how development of the airport will address climate change resilience, decarbonisation and disability access. The Australian Government will amend the <i>Airports Regulations 2024</i> to include this requirement. The Minister for Transport has also written to airport operators to advise that, when making decisions to approve future master plans or MDPs, the Minister will have regard to how the airport has addressed these additional requirements, as well as the appropriateness of the airport's community consultation processes, and whether appropriate access to the airport site has been provided for General Aviation. For master plans or MDPs that involve new or changed runways, the Minister will also have regard to the suitability of the airport's plans for noise mitigation, including the appropriateness of noise sharing arrangements.	5, 10

Table 4-3 Consideration of Aviation White Paper initiatives in Master Plan 2026 Source: Aviation White Paper, DTRDCSA

The purpose of the framework is to enhance the current and future safety, viability and growth of aviation operations at Australian airports.



4.3.3 National Airports Safeguarding Framework

The Australian Government recognises that the current and future viability of aviation operations can be impacted by inappropriate developments in areas beyond airport boundaries.

The National Airports Safeguarding Advisory Group (NASAG), comprising high-level Australian, state and territory transport and planning officials, prepared and released the National Airports Safeguarding Framework (NASF) in 2012. The NASF aims to safeguard airports and the communities in their vicinity, and to develop, with state and local governments, a national land use planning regime.

The purpose of the framework is to enhance the current and future safety, viability and growth of aviation operations at Australian airports, by supporting and enabling:

- the implementation of best practice land use assessment and decision making in the vicinity of airports
- assurance of community safety and amenity near airports
- better understanding and recognition of aviation safety requirements and aircraft noise impacts in land use and related planning decisions
- the provision of greater certainty and clarity for developers and landowners
- · improvements to regulatory certainty and efficiency, and
- the publication and dissemination of information on best practice in land use and related planning that supports the safe and efficient operation of airports.

The NASAG undertook a review of the NASF implementation in 2019. Two key implementation recommendations, relevant to Master Plan 2026, are for:

- the Australian Government to amend the Airports Regulations 2024 to require master plans and major development plans to set out how development of the airport will be consistent with the NASF, and
- all state and territory governments to implement the NASF principles and guidelines in their planning regimes by 2027.

Initiative 36 from the Aviation White Paper (see Section 4.3.2) is for the Australian Government to improve land use planning outcomes near airports to seek to avoid further development inappropriate for the noise level and to protect airport operations from potential safety risks, through:

- working with the NASAG to update NASF Guideline A by 2027 to describe best-practice approaches for including aircraft noise exposure notifications on property titles for new developments, and
- supporting implementation of the recommendation from the 2021 review of the NASF to improve education on the NASF for local planning officials.

As a critical future element of public infrastructure to Western Australia, Perth Airport must be safeguarded against inappropriate land development. Perth Airport seeks to implement the NASF where applicable throughout its planning, as outlined in Section 12. Perth Airport encourages the full implementation of the safeguarding measures into the Western Australian planning framework and continues to engage with the State Government on safeguarding measures.

4.3.4 Environment Protection and Biodiversity Conservation Act 1999

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) provides the Commonwealth framework for, among other things, protecting and managing nationally and internationally important flora, fauna, ecological communities and heritage places that are defined as 'matters of national environmental significance'. The EPBC Act also confers jurisdiction over actions that have the potential to make a significant impact on the environment where the actions affect, or are taken on, Commonwealth land or are carried out by a Commonwealth agency.

It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places, defined in the EPBC Act as matters of national environmental significance. The nine matters of national environmental significance to which the EPBC Act applies are:

- · world heritage sites
- · national heritage places
- wetlands of international importance (listed under the Ramsar Convention)
- listed threatened species and ecological communities
- migratory species protected under international agreements
- Commonwealth marine areas
- the Great Barrier Reef Marine Park
- nuclear actions (including uranium mines), and
- a water resource, in relation to coal seam gas development and large coal mining development.

The Policy aims to improve environmental outcomes through the consistent application of best practice offset principles, providing more certainty and transparency, and encouraging advanced planning of offsets.

The EPBC Act also confers jurisdiction over actions that have the potential to make a significant impact on the environment where the actions affect, or are taken on, Commonwealth land or are carried out by a Commonwealth agency, even if that significant impact is not one of the nine matters of national environmental significance. All matters protected under the EPBC Act are collectively referred to as 'protected matters'.

The EPBC Act has provisions which address any action likely to have a significant impact on a protected matter. A significant impact, as defined by the EPBC Act, is an impact which is important, notable, or of consequence, having regard to its context or intensity. Significant impact guidelines assist in the determination of whether an action is likely to be significant for a protected matter.

A requirement of the Airports Act and the EPBC Act is that Perth Airport must seek approval for a significant impact on any protected matter via the Airports Act through the major development plan process.

4.3.4.1 EPBC Act Environmental Offsets Policy

The EPBC Act Environmental Offsets Policy (2012) provides guidance on the role of offsets in environmental impact assessments and how the suitability of proposed offsets is considered. The Policy recognises that there are different ways to achieve good environmental outcomes and seeks to provide flexibility in delivering these. The Policy aims to improve environmental outcomes through the consistent application of best practice offset principles, providing more certainty and transparency, and encouraging advanced planning of offsets.

In recognition of the critical role played by Perth Airport in the economic development and employment framework for Perth and Western Australia, the Master Plan 2026 incorporates application of the Environmental Offsets Policy to enable suitable environmental offsets to be determined and applied, recognising the strategic use of the land within the airport estate to support the growing demand for airport services.



4.3.5 Aboriginal and Torres Strait Islander Heritage Protection Act 1984

Australia's state and territory governments are generally responsible for the recognition and protection of areas of significance to Aboriginal and Torres Strait Islander peoples. All states and territories have laws that protect various types of indigenous heritage.

The Aboriginal and Torres Strait Islander Heritage Protection Act 1984 enables the Australian Government to respond to applications to protect specific places or objects of particular significance to Aboriginal and Torres Strait Islander peoples that are under threat of injury or desecration due to the state or territory laws not providing effective protection.

There are no nationally protected heritage sites within the Perth Airport estate.

4.3.6 Native Title Act 1993

The Native Title Act 1993 recognises and protects native title rights and interests. Native Title refers to the communal, group or individual rights and interests of Aboriginal and Torres Strait Islander peoples in relation to land or waters.

In the case of Perth Airport, native title is extinguished by the issue of Crown leases.

4.3.7 Civil Aviation Act 1988

The *Civil Aviation Act 1988* establishes a regulatory framework for maintaining, enhancing and promoting the safety of civil aviation, including the design and operations of Perth Airport.

Under this Act, Australia's Civil Aviation Safety Authority (CASA) is responsible for developing and disseminating appropriate aviation safety standards.

Perth Airport, as the airport operator licenced by CASA, is responsible for the safety of the aerodrome in accordance with Part 139 of the *Civil Aviation Safety Regulations 1998*. These regulations are supported by a Part 139 (Aerodromes) Manual of Standards, which prescribe the technical standards for aerodromes used for air transport operations.

The planning and operation of aviation facilities and services at Perth Airport is also informed by the Manual of Standards Part 139H (requirements for the provision of aviation rescue and firefighting services), Part 172 (requirements and standards for air traffic service providers, including the facilities and equipment required), and Part 173 (requirements and standards for instrument flight procedure design).



4.3.8 Airspace Act 2007

The Airspace Act 2007 provides the regulations may make provision for and in relation to conferring functions and powers on CASA that are in connection with the administration and regulation of Australian-administered airspace.

Changes to airspace architecture require an airspace change approval under the *Airspace Act 2007* and *Airspace Regulations 2007*. The airspace change approval process considers the safety case and risk assessment, stakeholder consultation undertaken, efficiency, equitable access, economic and cost impact, national security, and environmental considerations such as aircraft noise.

Perth's new runway (described in Section 13.4.1.3) is expected to be operational by 2028 and will require an airspace change approval to be submitted to CASA's Office of Airspace Regulation for assessment and approval prior to the planned runway opening date.

4.3.9 Aviation Transport Security Act 2004

The security of Perth Airport is managed in accordance with the *Aviation Transport Security Act 2004* and *Aviation Transport Security Regulations 2005*.

As a security-controlled airport, Perth Airport is required to implement and manage a Transport Security Program (TSP) which is designed to meet aviation security obligations and safeguard against unlawful interference with aviation. The TSP also defines the airside and landside areas, security zones and event zones at an airport.

Perth Airport's airside security zone will be updated to incorporate the new runway, taxiway system and associated facilities once the runway has been constructed.

The future developments envisaged at Perth Airport complement the existing and future land uses in the areas surrounding the estate and are consistent with the respective surrounding local government land use zones.

4.4 State Policy And Regulatory Framework

Although Perth Airport is located on Commonwealth land, State legislation may apply under the provisions of the *Commonwealth Places (Application of Laws) Act 1970.* This is typically for activities where Commonwealth legislation does not exist, such as for bushfire and Aboriginal heritage. Where State and Commonwealth legislation conflict, Commonwealth legislation takes precedence.

The State legislation relevant to planning and development on the airport estate are:

- Aboriginal Heritage Act 1972
- Bush Fires Act 1954
- Dampier to Bunbury Pipeline Act 1997, and
- Heritage Act 2018.

While Western Australian planning laws do not apply to the Perth Airport site, the Airports Act and subsidiary regulations require that a master plan, where possible, describes proposals for land use planning and zoning in a format consistent with that used by the state or territory in which the airport is located.

This Master Plan 2026 has considered Western Australia planning requirements and, where appropriate, has used zones and land uses descriptions derived from the surrounding local government planning frameworks.

The Western Australian Planning Framework is administered by the Western Australian Planning Commission (WAPC) and includes a State Planning Strategy, State planning polices, regional strategies, position statements and guidelines.

The land use plan presented in Section 12 considers, and is consistent with, the Western Australian planning framework which identifies Perth Airport as a specialised activity centre, key employment node, critical transport hub, and the focal point for the growth of the tourism industry and efficiency of Western Australia's aviation network.

The future developments envisaged at Perth Airport complement the existing and future land uses in the areas surrounding the estate and are consistent with the respective surrounding local government land use zones.

Perth Airport also considers various State environmental legislation, policy and guidance for the assessment of environmental aspects on the estate and their management.

4.4.1 Aboriginal Heritage Act 1972

The Aboriginal Heritage Act 1972 (AH Act) makes provision for the preservation of places and objects customarily used by or traditional to the original inhabitants of Australia or their descendants.

In the absence of any prescriptive Commonwealth legislation, the AH Act bears relevance to Perth Airport, particularly where the Department of Planning, Lands and Heritage's Aboriginal Cultural Heritage Inquiry System indicates the presence of sites within the airport estate. The management of Aboriginal heritage sites at Perth Airport is detailed in Sections 8 and 11.

4.4.2 Bush Fires Act 1954

The *Bush Fires Act 1954* establishes the requirements for the preparedness, prevention and management of bush fires within the State.

Relevant to the Perth Airport estate are the provisions for establishing firebreaks, activity and equipment restrictions during fire bans, and burning on Commonwealth lands.

4.4.3 Dampier to Bunbury Pipeline Act 1997

The Dampier to Bunbury Natural Gas Pipeline (DBNGP) corridor is an area of land that houses the high-pressure gas pipelines which supply gas to heavy and light industry consumers, electricity generation and homes within Western Australia.

The DBNGP corridor is approximately 1,600 kilometres long, extending from the Burrup Peninsular to Bunbury. It traverses the Perth Airport estate along the length of the eastern boundary, adjacent to the freight rail and Abernethy Road.

The DBNGP corridor is managed under the *Dampier to Bunbury Pipeline Act 1997* (DBP Act). This Act is owned by the Minister for Energy and creates the role and function of the DBNGP Land Access Minister. The current DBNGP Land Access Minister is the Minister for Lands.

The DBNGP Land Access Minister, on behalf of the State, manages access to the DBNGP corridor for the purpose of constructing and operating gas pipeline facilities. The DBNGP Land Access Minister also administers any restrictions (including activities and works) on the DBNGP corridor to protect the integrity and safety of the gas pipelines. The Department of Planning, Lands and Heritage assists the Minister in administering the DBNGP corridor.

The location of the DBNGP corridor is considered as part of Perth Airport's development assessment and consent process (described in Section 4.2.1.3) for any environmental management or development works requiring access to the corridor.

4.4.4 Heritage Act 2018

The Heritage Act 2018 came into effect on 1 July 2019, replacing the Heritage of Western Australia Act 1990, and was established to:

- recognise the importance of, and promote understanding and appreciation of, Western Australia's cultural heritage, and
- to provide for the identification and documentation of places of cultural heritage significance and for the conservation, use, development and adaptation of such places

The new heritage legislation has streamlined the process for the registration of heritage places and provides the Heritage Council and the Minister for Heritage with increased preservation powers.

4.4.5 Metropolitan Region Scheme

The Metropolitan Region Scheme (MRS) is the statutory planning scheme covering the Perth metropolitan region and is administered by the Western Australian Planning Commission (WAPC). The MRS establishes regional land use zones and reservations, which provides a basis for local zones and reserves established in Local Planning Schemes.

Under the MRS, the Perth Airport is reserved for Public Purposes — Federal Government. This reserve is broad and identifies public infrastructure (in this case, an airport) and land with Commonwealth significance. The airport estate in the context of the MRS is shown in Figure 4-1.

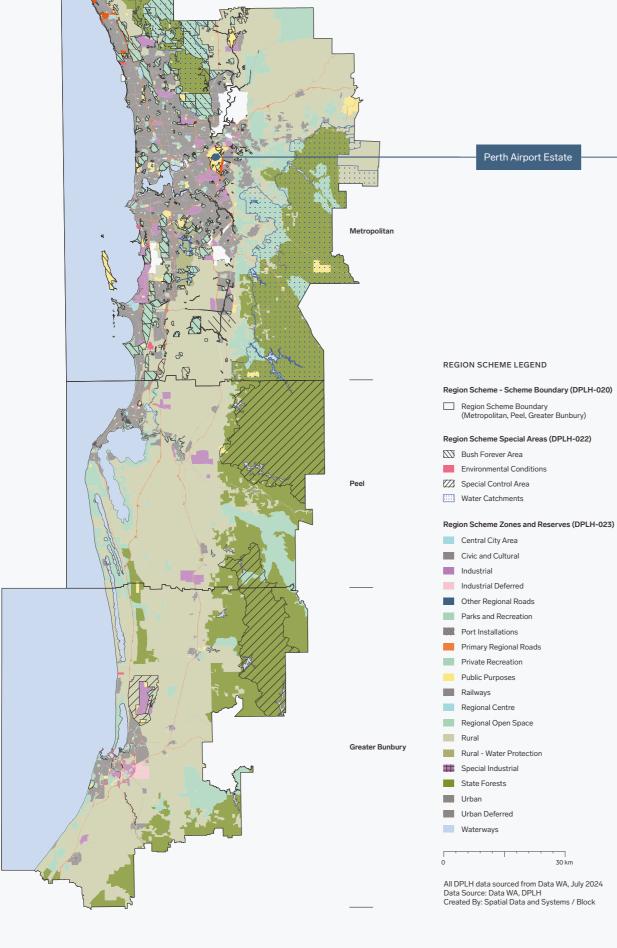


Figure 4-1 Perth Airport within the Metropolitan Region Scheme Source: Western Australian Planning Commission





This Master Plan 2026 has considered Western Australia planning requirements and, where appropriate, has used zones and land uses descriptions derived from the surrounding local government planning frameworks.

Key priorities of the State Aviation Strategy include:

- airlines, airport operators and government agencies to collaborate on attracting and growing the number of international, interstate and intrastate passengers to Perth and regional WA through expanded capacity on existing routes, strong trade relationships, tactical marketing and establishing new air routes, and
- the State Government to undertake a policy review to holistically address all matters in relation to land use planning and development in the vicinity of airports throughout Western Australia.

Perth Airport works closely with the State Government to attract new international airlines and routes to Perth. Since the recommencement of international services in 2022 following the international border shutdown during the COVID-19 pandemic, seven new international airlines and five new international routes have commenced services at Perth Airport.

Perth's new runway, expected to be operational in 2028, is critical infrastructure to facilitate continued growth in air services and efficiency of WA's aviation network.

4.4.7 State Planning Strategy 2050

The State Planning Strategy 2050, prepared by the WAPC and endorsed by the Western Australian State Cabinet, was launched in June 2014. It provides the strategic guidance for land use planning within Western Australia until 2050, as well as the vision and principles for coordinated and sustainable development.

The strategy supports the government's intention to undertake a collaborative approach to planning for the State's land availability, physical and social infrastructure, environment, economic development and security.

The State Planning Strategy recognises Perth Airport as a key element in the movement network of the State, and as the international gateway to Perth and Western Australia and the focal point for the growth of the tourism industry. It identifies that the redevelopment of Perth Airport and the Gateway WA project, which support the upgrade of terminals, traffic connections and facilities for the main entry and exit point to the state, will have a significant influence on how people are dispersed and moved throughout Western Australia.

Completed in 2016, the \$1 billion Gateway WA project was jointly funded by the Australian and State governments to support the consolidation of all commercial air services within the Airport Central precinct. As well as improving access to Perth Airport and creating a new primary access road to the Airport Central precinct, the project improved the safety and efficiency of one of the State's most important freight transport corridors.

4.4.8 WA Visitor Economy Strategy 2033

The WA Visitor Economy Strategy 2033 was launched in February 2024 and outlines a 10-year roadmap to guide the growth of WA's visitor economy. It outlines a vision for WA to be 'recognised as a world-class destination, immersing people in our unique cultures, communities and environment'.

The strategy sets an aspirational goal for visitor spend to grow to \$25 billion per annum by 2033, and identifies various enablers to achieve this target, including supporting the delivery of fit for purpose airport infrastructure and resources to enable increased international arrivals.

Master Plan 2026 describes the final phase of the consolidation of all passenger services into the Airport Central precinct, with expansions of existing terminal buildings, a new terminal to support the relocation of Qantas Group operations, and a new runway to support aviation growth.

4.4.9 Perth and Peel@3.5million

In March 2018, the State Government released the Perth and Peel@3.5 million suite of land use planning and infrastructure frameworks to accommodate 3.5 million people by 2050. The sub-regional planning frameworks provide guidance on future land to accommodate new homes and jobs, making the best use of existing and proposed infrastructure.

Perth Airport is identified in sub-regional planning frameworks as an Activity Centre (specialised centre), consistent with other State policy.

Perth Airport is also referenced as a key employment node important to the diversification of the economy, particularly within the Central sub-region where Perth Airport is the focus of employment, a major contributor to productivity and a facilitator of business clustering and agglomeration.

The plan outlines anticipated jobs growth at Perth Airport by 2050. This growth is in response to the development of aviation and non-aviation land uses that are planned for in each Perth Airport Master Plan. Perth Airport has the capacity to provide land for development of non-aviation land uses in a central location. The opportunity for employees to live close to their place of employment is a future benefit which will grow over time as more jobs become available and more residents move to nearby areas.

Through the development detailed in this Master Plan 2026, employment within the Perth metropolitan region that is generated by Perth Airport, is forecast to increase from 27,297 full-time employees in 2023 to 75,401 employees in 2046.

4.4.10 Perth and Peel@3.5million— The Transport Network

Perth and Peel@3.5million—The Transport Network, was prepared by the then Department of Transport with the intent of guiding the long-term planning for transport infrastructure for the Perth metropolitan region. The plan provides a framework to develop an efficient transport network to cater for Perth's population as it approaches 3.5 million and beyond.

The plan recognises that easy movement of people and freight across the sub-regions and beyond is a key to economic development and regional liveability and that it is critical to integrate urban and employment centres with efficient transport infrastructure and services.

The plan identifies the 8.5-kilometre Forrestfield-Airport Link rail infrastructure, including the Airport Central and Redcliffe stations, and notes that areas around train stations and other major public transport infrastructure have the potential to accommodate increased development.

4.4.11 State Planning Policy 2.8 — Bushland Policy for the Perth Metropolitan Region

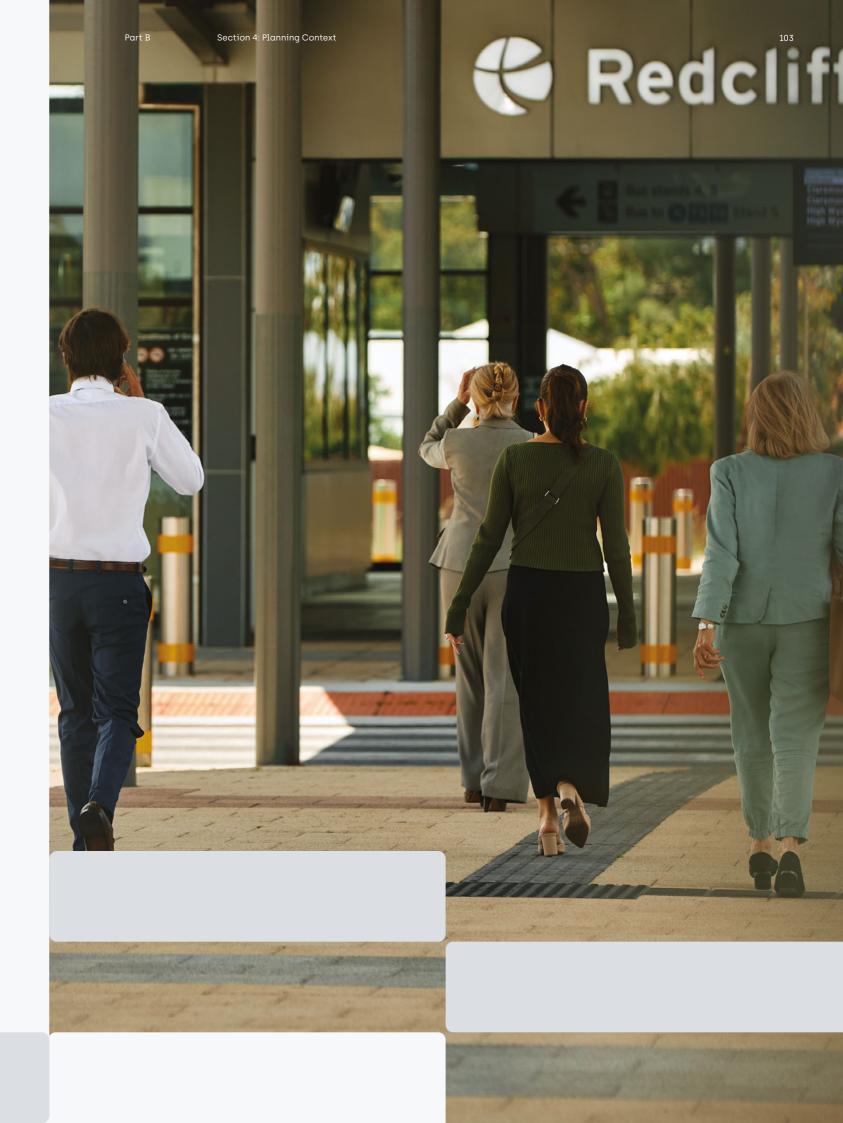
State Planning Policy 2.8 — Bushland Policy for the Perth Metropolitan Region (SPP 2.8) aims to provide a policy and implementation framework that ensures bushland protection, and management issues in the Perth Metropolitan Region are appropriately addressed and integrated with broader land use planning and decision making. The policy identifies measures applicable to proposals or decisions on State land that are likely to have an adverse impact on regionally significant bushland within a Bush Forever site, as identified in the policy and the Metropolitan Region Scheme (MRS).

Bush Forever sites located on State (or local) reserved or managed land, have specific measures detailed within the policy. As the airport estate is Commonwealth land managed under a hierarchy of Commonwealth legislation, State policies do not directly apply to the activities on the estate.

Perth Airport's approach to the retention of significant flora, fauna and vegetation is described in Section 11.

75,401

Employment generated by Perth Airport within the Perth metropolitan region forecast for 2046.



Part B Section 4: Planning Context 10



Ensuring a diversity of employment opportunities and the promotion of business clustering.



Providing for a choice of housing within and adjacent activity centres.



Designing activity centres to be more walkable and better integrated with public transport.

4.4.12 State Planning Policy 4.2 – Activity Centres

The State Planning Policy 4.2 Activity Centres (2023) (SPP 4.2) considers the planning and development of 'activity centres' throughout Western Australia. The main purpose of this policy is to ensure planning, development and decision making adequately consider the distribution, function, broad land use, access and urban form considerations for activity centres in Perth, Peel and Bunbury.

Other purposes of the policy include:

- ensuring a diversity of employment opportunities and the promotion of business clustering
- providing for a choice of housing within and adjacent activity centres, and
- designing activity centres to be more walkable and better integrated with public transport.

Perth Airport is identified in SPP 4.2 as a 'specialised activity centre' with an aviation and logistics specialisation.

Specialised centres focus on regionally significant economic and institutional activities, such as logistics-based businesses for airports. Planning for these centres should aim to protect the specialisation while improving the growth and clustering of business activity of State and regional significance, particularly in knowledge-based or logistics-based industries. These areas are to be developed as places with a concentration of linked businesses and institutions providing a major contribution to the economy, with excellent transport links and potential to accommodate significant future growth in jobs.

SPP 4.2 encourages development and employment growth to be focused within and around activity centres with train stations, capitalising on the use of existing and planned infrastructure. It also aims to maximise access to and within activity centres by walking, cycling and public transport, reducing private vehicle trips and parking.

Master Plan 2026 details the continued development of Perth Airport as a significant aviation and logistics hub that contributes to the growth of the Western Australian economy, consistent with the intent of the specialised activity centre designation under SPP 4.2. Land not required for long-term aviation purposes will be developed with non-aviation land uses in line with Master Plan objectives and applicable Commonwealth legislation.

4.4.13 State Planning Policy 5.1 – Land Use Planning in the Vicinity of Perth Airport

State Planning Policy 5.1 Land Use Planning in the Vicinity of Perth Airport applies to land in proximity to Perth Airport which is, or may be in the future, affected by aircraft noise.

The objectives of the policy are to:

- protect Perth Airport from unreasonable encroachment by incompatible (noise-sensitive) development, to provide for its ongoing development and operation, and
- minimise the impact of airport operations on existing and future communities.

The policy states: Perth Airport is fundamental to the continued development of the Perth metropolitan region and the State as a whole. Investment in airport infrastructure and the economic opportunities associated with the operation of the airport are now recognised as important and perhaps critical elements in the prosperity of a city such as Perth. Accordingly, the airport and its ongoing development need to be recognised in the planning of the region, and its operation protected, as far as practicable, from development that could potentially prejudice its performance. One of the main issues to be addressed in the planning of areas in the vicinity of the airport is aircraft noise, which is the focus of this policy.

The role of this policy is to provide guidance to local governments in the vicinity of Perth Airport and the WAPC when considering developments on land adjacent to, or affected by, the airport. In practice, the policy requires relevant local government authorities to give consideration to Perth Airport's Australian Noise Exposure Forecast (ANEF) contours in local planning decision making. It applies the ANEF contours in conjunction with Australian Standard 2021:2015 Acoustics—Aircraft noise intrusion—Building siting and construction (AS2021) to determine the acceptability of certain types of land use and developments.

The intent of this is to guide policy measures—for example zoning, residential density, subdivisions, development, notification on titles and advice—being appropriately applied to applications for development to avoid potential land use planning conflicts which may subsequently impact and restrict airport operations.

Under the Airports Act, Perth Airport is required to produce an ANEF for technical endorsement by Airservices Australia. The ANEF is incorporated in each airport master plan which is reviewed every five years. Consideration of aircraft noise exposure in line with the endorsed ANEF is beneficial. However, the effectiveness of the policy to protect the community is dependent on both the continuity of its application, and further work in collaboration with the WAPC to strengthen policy measures.

One of the priorities of the draft WA Aviation Strategy 2020 (see Section 4.4.6) is for the State Government to undertake a policy review to holistically address all matters in relation to land use planning and development in the vicinity of airports throughout Western Australia. Although there are actions in place relating to the planning and delivery of fit for purpose airport infrastructure, the State Government recognises the need for continual innovation and improvement. The Western Australian Planning Commission is considering issues relating to land use planning in the vicinity of airports in the state more broadly, including matters of noise and safety.

The Australian Government's Aviation White Paper (detailed in Section 4.3.2) identified several initiatives for improving land use planning outcomes near airports through avoiding further development that is inappropriate for the noise level or that poses potential safety risks to airport operations. The initiatives relevant to SPP 5.1 include:

 applying to Standards Australia to review Australian Standard 2021:2015 Acoustics—Aircraft Noise Intrusion—Building Siting and Construction (AS2021)

- updating the National Airports Safeguarding Framework (NASF) Guideline A (described in Section 4.3.3) to describe best-practice approaches for including aircraft noise exposure notifications on property titles for new developments, and
- improving education on the NASF for local planning officials.

4.4.14 State Planning Policy 5.4 Road and Rail Noise

State Planning Policy 5.4 Road and Rail Noise (2019) identifies the primary freight roads and rail routes within the Perth metropolitan area, with the objective to protect the community from unreasonable levels of transport noise as well as protect strategic and other significant freight transport corridors from incompatible urban encroachment.

The Policy recognises the hierarchy and jurisdiction of freight roads into and around Perth Airport. The major roads surrounding Perth Airport—Tonkin Highway, Great Eastern Highway and Abernethy Road—are identified as a 'strategic freight and/or major traffic route', and Airport Drive into the airport estate is identified as 'other significant freight/traffic route'.

Noting the strategic location Perth Airport has in relation to these freight routes, the implementation of SPP 5.4 requirements in planning decisions made off the estate carry importance for the future of the airport.

4.4.15 Swan Urban Growth Corridor Sub-Regional Structure Plan

The Swan Urban Growth Corridor Sub-Regional Structure Plan was prepared by the Department of Planning, Lands and Heritage in 2009 as a strategic document to achieve proper and orderly planning and development of land and infrastructure, consistently across the corridor. It considers factors such as economic development, road networks, transit stations, community facilities, district open space, urban densities, activity corridors and neighbourhood centres.

The plan is based on the outcomes sought by Directions 2031. It sets employment and housing targets for the Swan region, investigates opportunities for the delivery of the targets, and sets strategic priorities for the long-term development of the sub-region.

The current projections estimate a future population of 33,000 with approximately 12,500 residential lots being developed over the next 25 years. The sub-regional structure plan provides a set of principles to guide future development in the corridor in a coordinated manner, commensurate with the needs of the community. It acknowledges Perth Airport as a major employment centre that is likely to be a source of jobs for the future population.

The structure plan also identifies the application of SPP 5.1 for aircraft noise and the need to and protect Perth Airport's operation as much as practicable, from development which has the potential to prejudice its performance.

4.4.16 Diversify WA

In July 2019 the State Government released Diversify WA, an economic development framework for Western Australia. This document sets out a vision for a strong and diversified economy delivering quality jobs through increased investment across a broad range of industries. It also identifies priority sectors for strategic development that match WA's unique strengths with global trends to achieve growth across the economy.

Diversify WA provides an economic blueprint for collaboration between government, industry and the community. It acknowledges that, while the focus of Diversify WA is on government actions, it is the private sector that plays a pivotal role in WA's economic future.

As Western Australia's primary aviation gateway, Perth Airport plays a key role in supporting the economy by facilitating the growth of the State's tourism, resources, international education and export industries.

The planned development of Perth Airport over the next 20 years is expected create over 3,200 new full-time equivalent jobs and contribute \$2.2 billion to Gross State Product.

4.4.17 State Infrastructure Strategy (2022)

The State Infrastructure Strategy (Foundations for a Stronger Tomorrow) outlines the State's infrastructure needs and priorities over the next 20 years and makes recommendations about how to address these. The core themes of the Strategy include demand management, strategic infrastructure planning and processes, and optimising the existing asset base.

The Strategy recognises Perth Airport as a critical transport hub facilitating international, interstate and intrastate economic activity and trade, and states that longer-term planning should consider the planned expansion of Perth Airport. Furthermore, the Strategy notes that Perth Airport's investment in the new runway and the consolidation of passenger terminals will help ensure service of WA's aviation needs for well beyond the next 20 years.

The terminal and airfield developments planned for in this Master Plan 2026 ensure that Perth Airport will meet aircraft and passenger demand for many decades to come.

3,200

The planned development of Perth Airport over the next 20 years is expected create over 3,200 new full-time equivalent jobs.

4.5 Local Government Planning Framework

Local governments are responsible for planning of their local communities by ensuring appropriate planning controls exist for land use and development.

Local planning schemes and strategies are prepared by each individual local government area to:

- establish how land is to be used and developed
- classify and determine the acceptability of various land uses, and
- establish the provisions for the coordination of infrastructure and development within the local government area.

The local planning schemes of local governments must be consistent with the MRS and State planning policies.

The Perth Airport estate sits within three local government areas, divided between the City of Belmont, the City of Kalamunda and the City of Swan, as shown in Figure 4-2.

To provide compatible land uses and develop appropriate surface access arrangements, Perth Airport ensures that planning for the airport estate has due regard to the planning frameworks of adjoining local authorities. To achieve this outcome, Perth Airport works with the neighbouring local governments through key engagement forums such as the Perth Airport Planning Coordination Forum, Perth Airport Community Briefing Group, and the Perth Airport Consultative Environment and Sustainability Group.

Perth Airport also investigates, where practical, initiatives that include joint visioning and development concept projects for areas on the boundary of the airport estate which share common features, such as communities of interest, environment or transport networks.

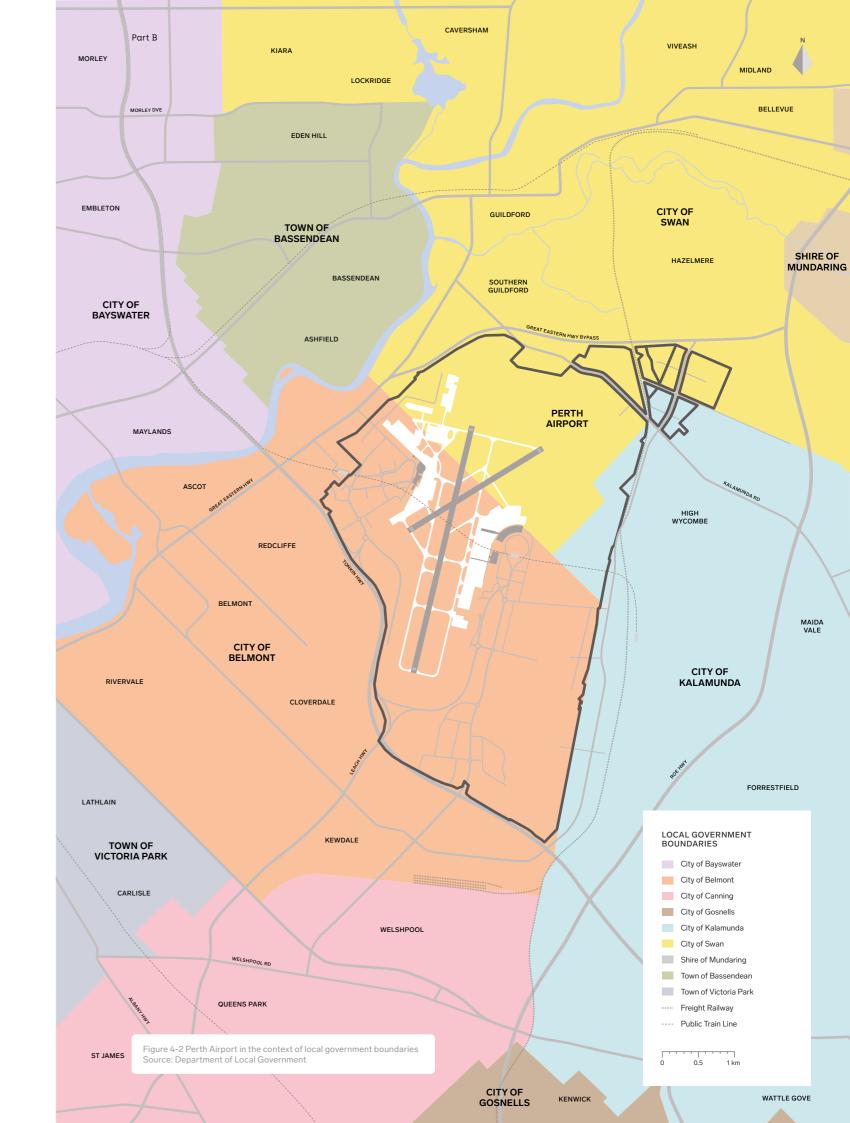
Perth Airport operations also impact local government planning within a much wider catchment of the Perth metropolitan area—largely due to the central location of the estate, only 12 kilometres from the Perth CBD, and the airport's strategic location within the metropolitan arterial road network.

4.5.1 City of Belmont Local Planning Scheme No. 15

The City of Belmont Local Planning Scheme No.15 (LPS 15) is the principal statutory planning tool for controlling land use and development within the 40 square kilometres of land that comprise the local government area.

Consistent with the MRS, the Perth Airport estate is reserved for Public Purposes – Federal Government under LPS 15.

The scheme provides for Industrial and Residential zones adjacent to the Perth Airport estate, including the major Kewdale industrial area and the residential suburbs of Cloverdale and Redcliffe. It incorporates provisions relating to land located within the ANEF to ensure referral of development proposals to Perth Airport in line with State Planning Policy 5.1 (see Section 4.4.13), and to ensure the



planning and design of new developments within the City considers, among other things, aircraft noise exposure and protected airspace.

Substantial redevelopment of residential land within the City of Belmont has been occurring since the early 1990s, as older housing stock has been replaced at increased densities. There are further residential infill opportunities in the area of Rivervale known as The Springs, and also within Development Area 6 which includes the area of Redcliffe and the Redcliffe Station, located adjacent to the airport boundary.

The City of Belmont's Activity Centre Planning Strategy designates Perth Airport as a 'specialised centre' with a broad vision as a highly accessible and vibrant business hub facilitating employment and meeting the commercial, social, and business needs of the community.

In December 2022, the State Government became the planning authority for the Redcliffe Station Precinct through the gazettal of Improvement Plan 45. The purpose of the improvement plan is to enable a coordinated approach to planning and development at Redcliffe Station Precinct to deliver high quality transit-oriented development close to the central business district and Perth Airport, and to contribute to the City of Belmont's housing targets. One of the objectives of the improvement plan is to manage the interface between future development within the Redcliffe Station Precinct and Perth Airport.

The Kewdale Industrial Area is strategically located around major freight rail and highway networks. State planning policy recognises the importance of the area as a transport and logistics hub. Under LPS 15, the City of Belmont has the capacity to approve a wide range of industrial activities within this zone, from heavy- to light industrial and commercial. Current land uses include the BP Fuel Storage facility, the Kewdale Freight Terminal (which accesses the heavy freight rail and other logistics, freight forwarding and manufacturing uses). It is expected that the importance of this industrial area will further develop over time given its strategic location.

4.5.2 City of Swan Local Planning Scheme No. 17

The City of Swan Local Planning Scheme No. 17 (LPS 17) is the principal statutory planning tool for controlling land use and development within a 1,042 square kilometre local government area to the north of the airport estate.

The majority of land within the City of Swan is a mix of Residential, Commercial, Industrial and Rural zoned land. LPS 17 provides for Industrial, Residential and Rural uses immediately adjacent to the airport estate in the localities of South Guildford and Hazelmere.

One of the objectives of the improvement plan is to manage the interface between future development within the Redcliffe Station Precinct and Perth Airport.

The City of Swan is serviced by the Midland City Centre, which is classified as a Strategic Metropolitan Centre under the provisions of SPP 4.2 Activity Centres for Perth and Peel. Planning within the City of Swan considers, among other things, the future infrastructure upgrades to link the Midland town centre to the airport. The intent of the centre is to cater for substantial future population growth in line with State strategies, including Directions 2031, and Perth and Peel @ 3.5million. The City of Swan has prepared the Midland Activity Centre Structure Plan to guide the development of the centre to support high density residential and mixed land uses. The Structure Plan considers height limitations for development in line with protected airspace and provides for assessment of possible noise attenuation measures where development is proposed within the ANEF 20 and above contours.

The primary residential growth area in the City of Swan is within the 1,100-hectare Urban Growth Corridor Local Area, which extends north from the Midland City Centre through to the northern boundary of the area of interest. The Urban Growth Corridor includes the suburbs of Brabham and Dayton, and parts of the suburbs of Caversham, West Swan, Whiteman and Bennett Springs. Strategic plans for Brabham include the development of a large neighbourhood centre, and the placement of residential development in this locality was undertaken in accordance with State policy.

LPS 17 incorporates provisions relating to land located within the ANEF to ensure referrals to Perth Airport occur inline with State policy, and to ensure the planning and design of new developments within the City considers, among other things, aircraft noise exposure and Perth Airport's airspace.

The residential suburb of South Guildford and historic Guildford Town Centre are located immediately to the north of the airport estate, separated by Kalamunda Road, the Great Eastern Highway Bypass and the Midland freight rail.

The Hazelmere Industrial area is located immediately north-east of the estate. Its location provides access to air and rail freight transport as well as ready access to major road transport routes including the Tonkin, Roe, Reid, Great Northern, and Great Eastern Highways. The area is also adjacent to the Airport North precinct, where the proposed future development aligns with LPS 17 due to its planned land use, and potential to promote innovation and facilitate new investment in the area.

The Hazelmere Enterprise Area Structure Plan (HEASP) has been prepared on behalf of the City of Swan and the Department of Planning, Lands and Heritage. It provides a structural framework to guide future planning and decision making that optimises the development of Hazelmere in a sustainable way. This includes appropriate responses to the sensitive environmental features, necessary servicing and infrastructure to support industrial development, and surrounding residential areas. The north-east corner of airport estate falls within the HEASP area and is complementary to the land uses identified in the Plan.

4.5.3 City of Kalamunda Local Planning Scheme No. 3

The City of Kalamunda Local Planning Scheme No. 3 (LPS 3) provides for Industrial and Residential areas adjacent to the airport estate. The majority of land within the City of Kalamunda is zoned for residential, rural-residential and rural development, and incorporates significant reserves for state forest and parks and recreation.

The City of Kalamunda is serviced by the Kalamunda City Centre and Forrestfield District Centre, both classified as District Centres under the provisions of SPP 4.2, comprising scope for some multiple dwellings and higher urban densities. Existing residential areas in High Wycombe, immediately to the east and north-east of the airport, have been developed over the past 35 years despite knowledge of the intention to proceed with the development of the new runway as outlined in Perth Airport master plans since the mid 1980s.

LPS 3 considers the placement of residential development outside of the ANEF 20 contour in accordance with the provisions of SPP 5.1. In areas within the ANEF 20 (and above) contours, LPS 3 requires development to incorporate noise attenuation measures to the satisfaction of the City and recommends that any new subdivisions be subject to memorials on title to acknowledge the potential for aircraft noise.

The Forrestfield-Airport Link project included the construction of the High Wycombe Station, located within the City of Kalamunda, which opened in October 2022. The City of Kalamunda prepared and adopted the Forrestfield North District Structure Plan to guide the development of a new activity centre, and a commercially focused Transit Oriented Development precinct based around the train station.

In June 2019 the Metropolitan Redevelopment Authority, now DevelopmentWA, announced the station precinct would be brought into a redevelopment area known as the METRONET East Redevelopment Area, which will capitalise on transport infrastructure and focus on maximising development opportunities to provide housing and jobs. The METRONET East Redevelopment Scheme was gazetted in May 2021 and planning control for the scheme area, which includes the station precinct, has been transferred to Development WA.

The WAPC's North-East Subregional Planning Framework (2018) has earmarked the areas of Wattle Grove and Maida Vale for future urban expansion. The framework states that the spatial plan addresses the need to avoid land use conflicts by taking into account buffer requirements as are required for airports.

4.5.4 METRONET East Redevelopment Scheme

In June 2019 the Metropolitan Redevelopment Authority, now DevelopmentWA, announced the High Wycombe station precinct would be brought into a redevelopment area known as the METRONET East Redevelopment Area, which will capitalise on transport infrastructure and focus on maximising development opportunities to provide housing and jobs. The METRONET East Redevelopment Scheme was gazetted in May 2021 and planning control for the scheme area, which includes the station precinct, has been transferred to Development WA.

4.5.5 Link WA

Link WA is an alliance comprising the City of Belmont, City of Canning, City of Kalamunda and City of Swan. Working together, these local governments are planning ahead with industry and other partners to find ways to better manage and encourage the growth expected in freight volumes and traffic movements.

Link WA creates a forum for stakeholders to access resources and gain a better understanding of Western Australia's growing road, rail and air freight needs and how these can be leveraged and managed for the benefit of industry, the community and government.

The Link WA precinct is Western Australia's key freight and logistics hub for local, regional, national and international freight movements. It links the major arterial roads of the Roe, Tonkin, Great Eastern, Great Northern, and Leach highways, and includes Perth Airport.

Perth Airport is a vital hub for air freight, and the development of the airport estate described in this Master Plan 2026 continues to focus on diversification of the airport estate to support the growth of the freight and logistics industry. Future land use and development on the Perth Airport estate will complement existing freight and logistics activities in surrounding local government areas.

Future land use and development on the Perth Airport estate will complement existing freight and logistics activities in surrounding local government areas.





5.1 Perth Airport Integrated Planning Framework

Perth Airport recognises that its infrastructure plans cannot be developed in isolation from those undertaken by other authorities with responsibility for land use planning in metropolitan Perth and which provide services that directly impact the airport's viability and effectiveness. This is because Perth Airport's operations affect surrounding communities and the natural environment, and the capacity of Perth Airport to meet the community's needs is affected by land use and infrastructure decisions made beyond the airport boundary.

Perth Airport devotes significant resources to planning and has developed an Integrated Planning Framework that ensures the interrelationships between the various inputs are properly defined, assessed and incorporated into future strategic planning and development. Figure 5-1 provides a general description of Perth Airport's Integrated Planning Framework.

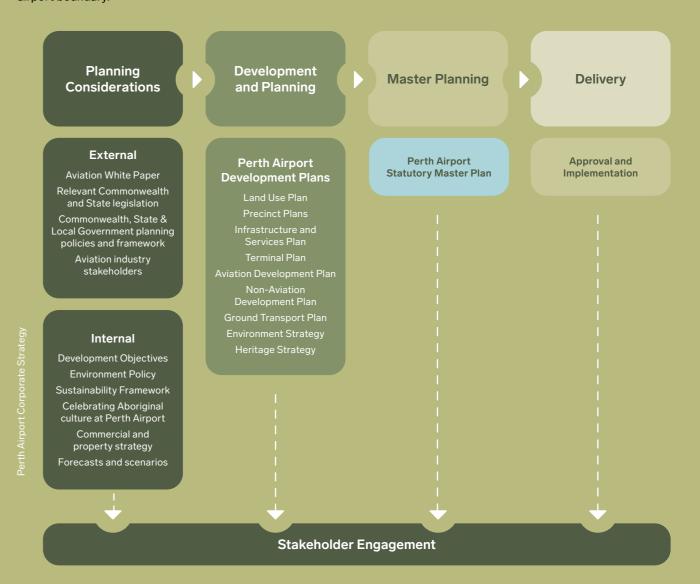


Figure 5-1 Perth Airport Integrated Planning Framewor Source: Perth Airport



deliver the airport of the future.

Perth Airport has also focused on ensuring that the integration of both aviation developments and the development of commercial precincts on the airport estate provide a safe and efficient airport environment.

5.1.2 Planning Approach

This Master Plan 2026 retains the fundamental concepts of all previously approved airport master plans, beginning with the first Perth Airport Master Plan 1985, published by the then Federal Department of Aviation, which identified a future centralised terminal precinct supported by a parallel runway system.

The consistency in planning that has been maintained can be seen in the progression of master plans from 1985 to 2026 as shown in Figure 5-2 to Figure 5-7.

In preparing this Master Plan 2026, Perth Airport has undertaken a range of technical studies, as well as a detailed review of previous strategic documentation and reassessed the location and spatial requirements for land use developments to cater for aviation needs over the 20-year planning period. The long-term planning requirements beyond the 20-year planning period have also been considered. The key consideration of the strategic review was to ensure that future development planning adequately accommodated aviation growth forecasts, safeguarding for ground transport requirements, integration with local government planning schemes, and management of environmental impacts.

Development within the non-aviation precincts will consider local government planning strategies and seek to complement development adjacent to the estate. State and local government planning outcomes which facilitate the economic development and enhancement of the key corridors connecting Perth Airport to the Perth CBD, and to other key metropolitan regional centres, are supported. While these developments occur outside of the airport estate, they formalise and support the role and function of Perth Airport as an integrated and essential economic element of the Perth metropolitan system.

Perth Airport has also focused on ensuring that the integration of both aviation developments and the development of commercial precincts on the airport estate provide a safe and efficient airport environment. The planning also considered pre-existing interests on the airport estate, including easements.

Detail is provided in this Master Plan regarding what is expected to occur in the initial five-year period for non-aviation development and ground transportation (refer sections 14 and 15 respectively). It is essential that land is safeguarded for the ultimate airfield configuration of the airport, even though some of the components of these developments are not planned to occur within the next 20-year period.



Long-term concepts are also included for aviation developments. This information is provided as an indicative concept, as the actual growth in traffic demand and commercial needs of Perth Airport's customers will influence the actual timing of these developments.

The Environment Strategy (Part C of this Master Plan 2026) outlines potential environmental impacts of development and operation at the airport and sets strategies and management in relation to these impacts. It details strategies Perth Airport will adopt in the upcoming five-year period to achieve continuous improvement in environmental management. Previous environment strategies were reviewed, areas requiring further analysis were identified, and the future of the airport estate was considered in the context of growth forecasts and environmental values and processes.

The delivery and implementation of this Master Plan 2026 forms a critical part of the Perth Airport operations and decision-making processes. Annual-based estimates of timing for works can be unreliable due to forecasting volatility and the unpredictable nature of external factors. Specifically, timelines for securing governmental approvals and negotiating commercial arrangements for new works can be uncertain and cause delays. While broad figures such as the annual passenger movements have a role in planning and defining triggers for development, it is acknowledged that more specific metrics should be adopted for each element of the aviation-related function. These triggers are identified in Section 5.2.

Perth Airport's Future Focus in Master Plan 2026

Future plan for airport consolidation	Section 2
Future economic and social impacts	Section 3
Framework and approach for all future developments	Section 5
Forecasts for passenger and freight growth	Section 6
Sustainability and social value priorities in future plans	Section 7
Importance of Aboriginal heritage in future planning and protection	Section 8
Five-year action plan for environmental management	Section 9
Five-year action plan for climate change and resource use	Section 10
Five-year action plan for land, air, and biodiversity	Section 11
Efficient and effective future use of land	Section 12
Five- and twenty-year aviation development plan	Section 13
Future non-aviation development on the estate	Section 14
Five- and twenty-year ground transport plan	Section 15
Safeguarding the airport's long-term future	Section 16
Future development plans for utilities infrastructure	Section 17



Figure 5-2 Perth Airport Master Plan 1985—future development plan Source: Perth Airport Master Plan 1985, Department of Aviation

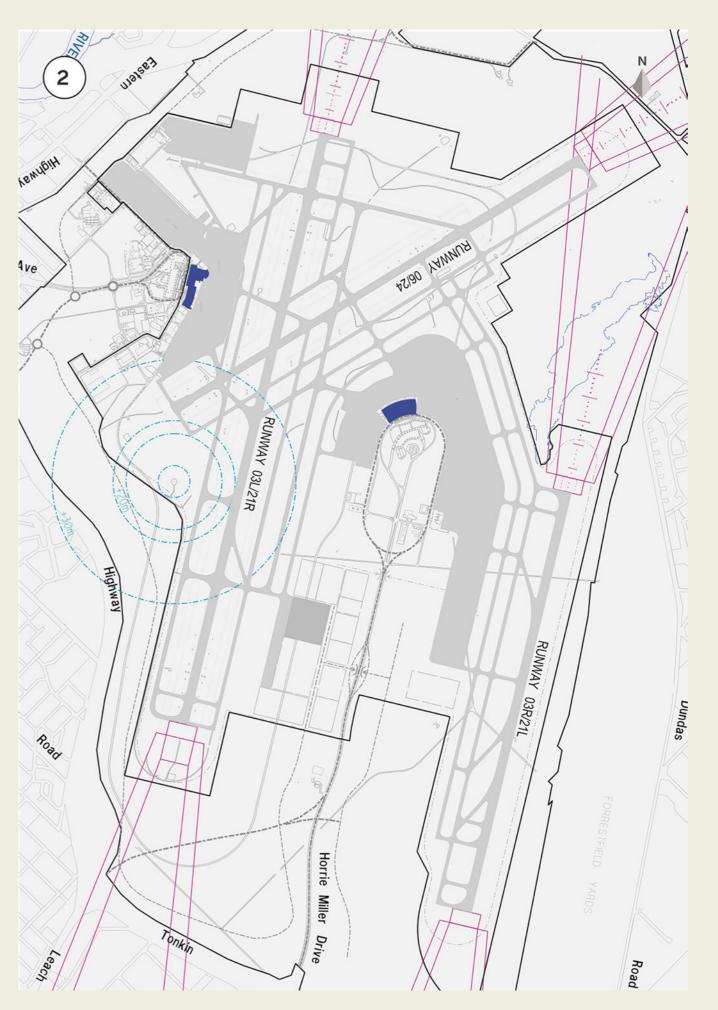


Figure 5-3 Perth Airport Airfield Layout Master Plan 1999 Source: Perth Airport Master Plan 1999

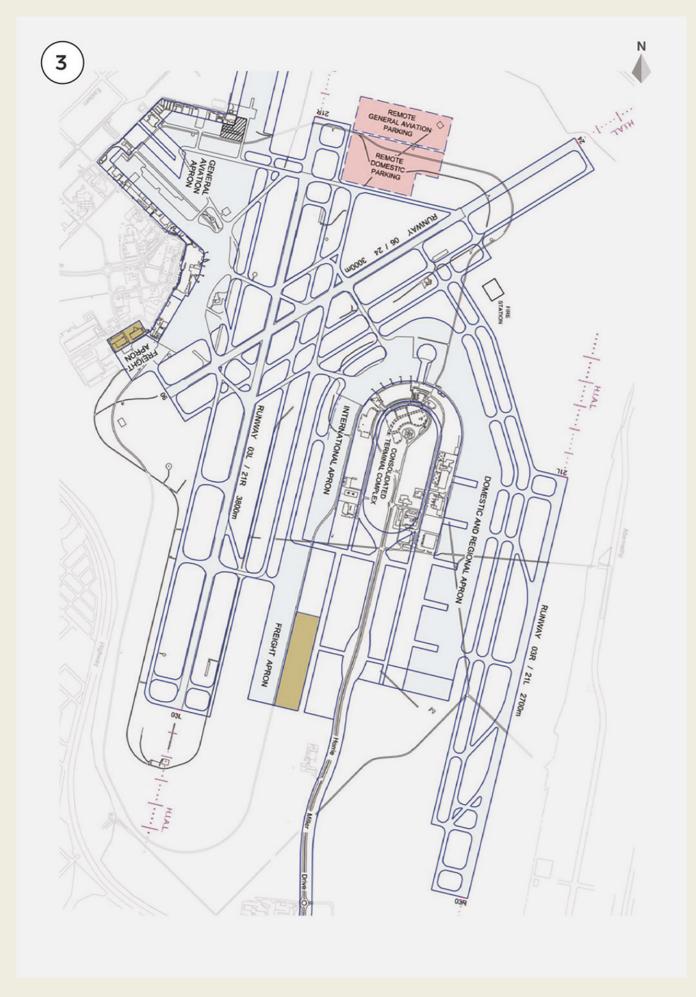


Figure 5-4 Perth Airport Airfield Layout Master Plan 2004 Source: Perth Airport Master Plan 2004

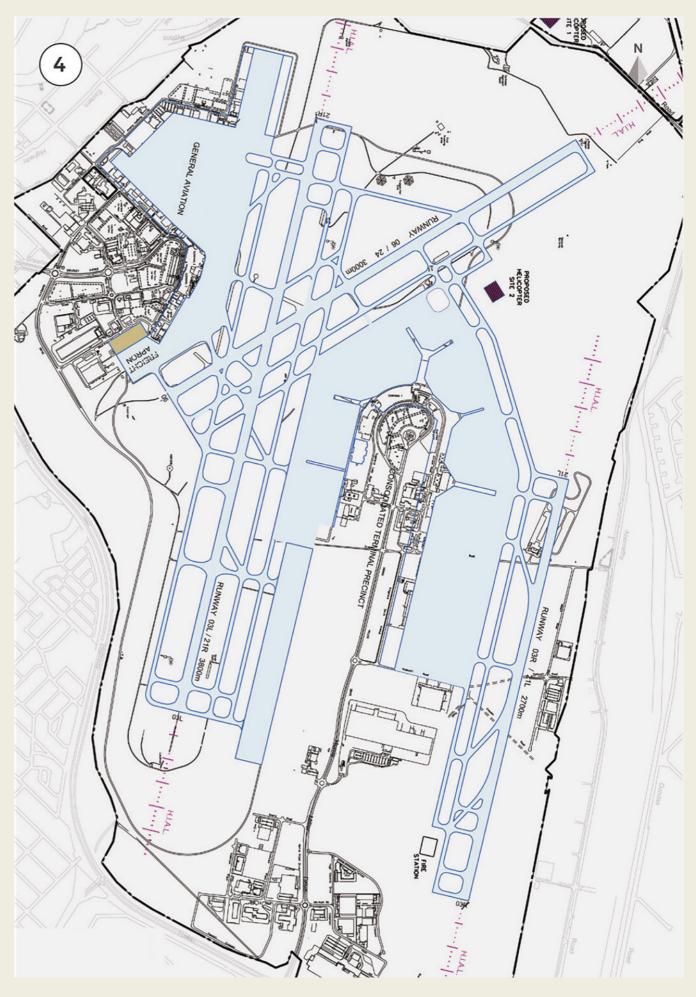


Figure 5-5 Perth Airport Airfield Layout Master Plan 2009 Source: Perth Airport Master Plan 2009



Figure 5-6 Perth Airport Airfield Layout Master Plan 2014 Minor Variation Source: Perth Airport Master Plan 2014 Minor Variation

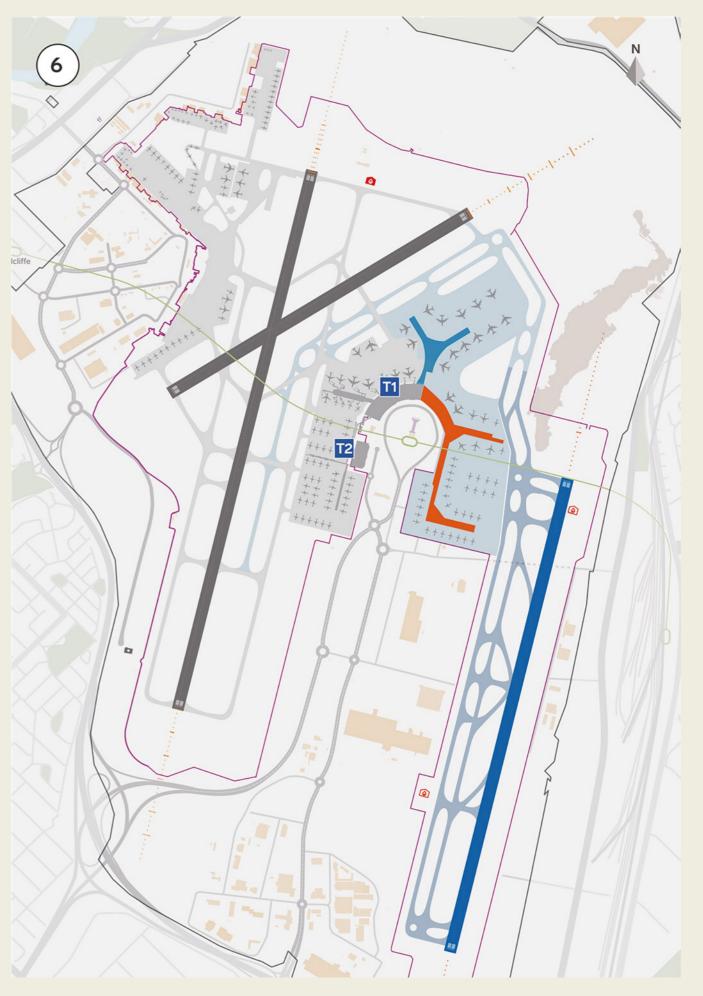


Figure 5-7 Proposed Airfield Layout 2040 Source: Perth Airport

Part B Section 5: Development Approach

5.2 Planning Criteria

Master Plan 2026 is underpinned by a number of key planning criteria relevant to land use planning, infrastructure development and airport operations.

The development triggers that guide the timing of Perth Airport's developments are summarised in Table 5-1.

Component	Development Triggers
Runways	Peak period aircraft movement demand for arrivals, departures or a mix of arrivals and departures (increase in runway capacity required) Forecast annual aircraft movements Improve holding and taxiing delays, reduce fuel burn and emissions Maintain and improve on-time performance Introduction of new aircraft types Climate change resilience and adaptation
Taxiways	Reduce taxiing delays, fuel burn and emissions Reduce runway occupancy times Introduction of new aircraft types New or expanded terminals Link in with new runway infrastructure Improved health, safety, security and environmental outcomes Climate change resilience and adaptation
Apron	Size and nature of the design busy hour New or expanded terminals Improved customer experience New and larger aircraft types Improved health, safety, security and environmental outcomes Overnight parking demand Climate change resilience and adaptation
Terminals	Passenger growth Size and nature of the design busy hour New and larger aircraft types Changes to the airside and landside environments Changing business partner requirements (airlines, ground handling agencies, control authorities, etc.) Legislative changes (for example, new security screening measures) Improved customer experience Improved health, safety, security and environmental outcomes Climate change resilience and adaptation Expanded commercial offerings Improved accessibly and inclusivity Process innovations and new technologies
Roads	Improved customer experience Improved health, safety, security and environmental outcomes Reduced delays and congestion Improved road network resilience Change in travel mode share Connect to new external road access points New or expanded terminals or car parks New commercial developments

Table 5-1 Overview of development triggers that guide the timing of Perth Airport developments Source: Perth Airport



5.2.1 Runways, Taxiways and Aprons

Perth Airport, as the airport operator, is responsible for the safety of the aerodrome in accordance with Part 139 of the *Civil Aviation Safety Regulations 1998*. These regulations are supported by Part 139 (Aerodromes) Manual of Standards (Part 139 MOS), which prescribes the technical standards for aerodromes used in air transport operations.

The specifications contained in Part 139 MOS are largely adopted from the International Civil Aviation Organization (ICAO) standards. The ICAO and Part 139 MOS adopt a code system, known as the 'aerodrome reference code', which comprises a code number and a code letter. The code number is based on the aircraft reference field length, while the code letter is based on the aircraft wingspan and the outer main gear wheel span. The aerodrome reference code provides a method of grouping aircraft with different characteristics which behave similarly when landing, taking off, taxiing and parking.

The planning of runways and taxiways is largely based on the aerodrome reference code that corresponds to the aircraft type which is the most demanding aircraft for the airport's infrastructure. For Perth Airport this is a Code 4F aircraft, which represents an Airbus A380. Planning for infrastructure such as aircraft apron and parking positions considers the most common aircraft types that will use these facilities and then balances the demand for, and cost of, the infrastructure to meet the needs of a range of aircraft types.



5.2.2 Terminals

Design standards and levels of service are fundamental components of terminal planning.

The International Air Transport Association (IATA), the industry body representing the airline industry, publishes the Airport Development Reference Manual (ADRM) as a guide for planning new or extending existing airport facilities. The ADRM is an important source of best industry practice with regard to the planning and design of airports. It is used by Perth Airport, in conjunction with other planning tools and techniques including simulation, customer surveys, industry benchmarking and extensive stakeholder consultation, to inform the design of the passenger terminal buildings. The size of a terminal building, including the retail and commercial offering and the number of aircraft gates, is based on the forecast number of passengers, aircraft movements and visitors during the design busy hour which is informed by the required level of service.

Airlines have a material influence on the level of service parameters upon which airport infrastructure is planned and designed, which are based on value judgements about the standard acceptable for their passengers. Airline partners generally require Perth Airport to adopt the IATA ADRM Optimum Level of Service standard in the targeted design year when designing terminal infrastructure.

The Optimum Level of Service is defined in the IATA ADRM as providing 'a good level of service: conditions of stable flow, acceptable delays and good levels of comfort'. The Optimum Level of Service is recommended as the minimum design objective by IATA as it denotes good service at reasonable cost and is the standard typically adopted by most airports.

The actual level of service experienced by a passenger in a terminal may differ from the design busy hour and IATA level of service modelled through the planning and design stages. It can be influenced by factors such as resource availability and scheduling allocation on the day of operation, construction works, and flight delays. Given the importance of customer experience to the aviation business, Perth Airport has a dedicated Customer Experience team to ensure a customer-centric focus is embedded across all business activities.

5.2.3 Ground Transport

Ground transport infrastructure planning is informed by simulation modelling and considers the daily passenger profiles, peak traffic on the external road networks and surveyed transport mode splits. These inputs are tested against the peak hourly volumes of the annual tenth-busiest day. The design and construction of on-airport estate roads meet appropriate Australian standards.

5.2.4 Sustainability and Environmental Management



Sustainability and environmental management at Perth Airport are guided by a vision to operate and grow in a manner that seeks to minimise environmental impacts and considers sustainable solutions for the development and operation of the airport estate.

Perth Airport aims to realise this vision through integrated planning, developing solutions, management techniques, engaging staff, contractors, tenants and the wider community in the operation and growth of the airport. Perth Airport incorporates sustainability and environmental principles into planning and development in several ways, including:

- the integration of sustainability and environment into planning processes to enable early identification of opportunities and constraints
- the consideration of renewable energy, waste management, vegetation retention, resource conservation and climate change resilience and adaptation opportunities during the planning, design and operational phases of development
- ongoing review and assessment of sustainability performance to drive continuous improvement, and
- adopting independent sustainability rating systems, where relevant, to guide and benchmark the design, construction and operation of buildings and infrastructure.



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5.3 Approach to Development

The transformation of Perth Airport over the next decade will ensure that airfield and terminal facilities (including the retail and commercial offering) are developed to meet the aviation needs of Western Australia well into the future. The planning for this Master Plan 2026 has focused on several key areas that are essential to Perth Airport's success, both now and into the future.

Master Plan 2026 Key Areas



Transforming the customer experience



Supporting general aviation



Sustainable design and development



Barrier free travel



Creating a sense of place



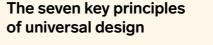
Embracing innovation and technology

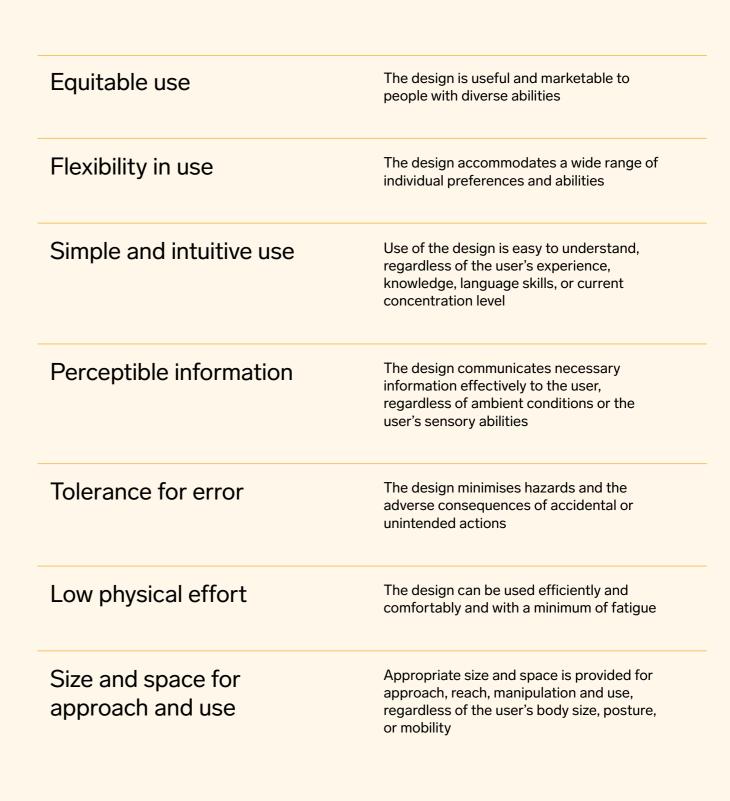


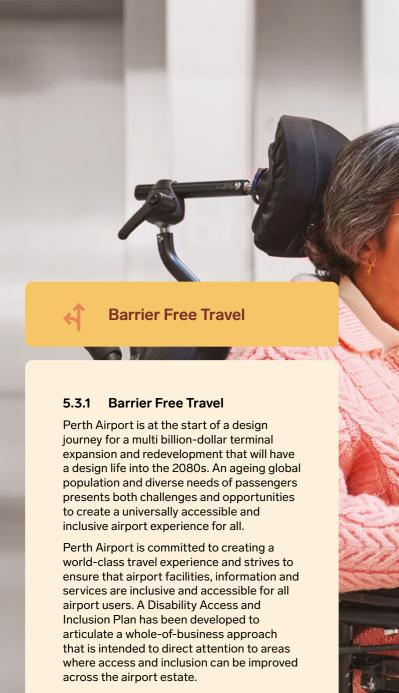
Commitment to reconciliation



Progressing sustainable aviation







A key focus of terminal design and infrastructure is to build in up-front measures to cater for passengers of all abilities and remove the barriers to travel.

Perth Airport recognises that equal access requires not just compliance with legislation but also the adoption of universal design principles and best practice approaches, to deliver the best possible outcomes for both those with a disability and for all passengers. The universal design principles offer an instructive framework within which to guide design that will work for as many people as possible.

@ 2025 Perth A

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Perth Airport established an Access and Inclusion Advisory Group in 2015, made up of stakeholders from the disability sector, representatives from disability services providers and people with lived experience.

This group meets regularly to consult on Perth Airport projects, discuss barriers to inclusion, and consider ways to improve the customer experience for people with disability. Perth Airport has delivered a number of recent initiatives in consultation with the Access and Inclusion Advisory Group, including:

- implementation of a Disability Access and Inclusion Plan in 2021
- development of Wayfinding and Signage Design and Technical Requirements guideline, specifying accessibility best practices to inform both the style and location of signage in terminals, forecourts and car parks
- development of a Sensory Room that provides a calming and supportive environment for passengers with sensory sensitivities or specific needs departing on international services from T1 International
- construction of Changing Places facilities at T1 and T4, which provide secure, suitable facilities for people who cannot use standard accessible toilets. Facilities include a shower, ceiling hoist, an adult sized change table and privacy screen
- construction of Service Animal Relief Areas at T1 and T4, providing dedicated toilet and watering facilities for assistance animals
- installation of 56 specialised incontinence bins in each ambulant and accessible toilet across all terminals, in partnership with the Continence Foundation Australia and Bins4Blokes
- creation of a Social Stories tool to support autistic travellers and their families at the airport, in partnership with The Autism Association of Western Australia
- the Hidden Disabilities Sunflower program, through which travellers wear a sunflower lanyard to subtly indicate that they (or someone they are travelling with) have a hidden disability and may need assistance.
 Perth Airport staff and security partners are trained to recognise the sunflower lanyard and how to support those wearing them, and
- upgrade of Perth Airport's website to Web Content Accessibility Guidelines 2.1AA standard to promote greater digital inclusivity.

In 2023, Perth Airport published Design and Technical Requirements for Universal Access and Inclusion to provide guidance on design requirements for publicly accessible infrastructure, such as the terminals, as well as new commercial developments across the airport estate. The requirements consider a range of elements which should be addressed at the earliest stages of design, including paths of travel, toilet and changing facilities, wayfinding, help points and assistance services, audio induction loop systems, sensory rooms and quiet areas.

A key future focus will be consultation on, and implementation of, new aviation standards that will be prepared by the Australian Government to clarify the obligations of airlines, airports and other aviation service providers to facilitate the passenger journey for people with disability.

Consultation on the draft standards is expected to take place in 2025. The Aviation White Paper, released in September 2024, sets out the Australian Government's long-term policy vision to deliver a safe, competitive, sustainable, productive and efficient Australian aviation sector out to 2050. A key objective is to ensure equitable access to air travel for people with disability. In response to this objective, the Australian Government will be amending airport legislation to require airport master plans and major development plans (described in Section 4.2.1) to set out how development of the airport will enable access for people with disability.





5.3.2 Transforming the Customer Experience

Continually improving customer experience is a core component of successful airport management. The upcoming delivery of major projects, such as the expansion of existing terminals and the construction of a new terminal, will enable Perth Airport to embed its customer experience vision into built form and drive a step change in the passenger's journey. Perth Airport's approach to customer experience is supported by seven pillars:

Brilliant basics	Essential facilities and services delivered at a high standard
Striving for service excellence	Consistently excellent customer service with continuous improvement
Customer listening and response	Customer-led solutions and identification of unmet needs that can elevate satisfaction and identify new products and services
Enabling effortless journeys	Operational excellence and efficiency of the terminals and surrounds through enhanced processes, defining areas of excellence and innovating with technology
Accessible and inclusive journeys	Become an industry leader in accessibility by improving access to, from and within all terminals for all customers
Establish emotional connections	Create ambience, sense of place, community engagement and meaningful connections to WA's rich cultural heritage
Best-in-class experience led infrastructure	Experience-led design that focuses on people, their journey, emotions and how they use airport infrastructure.



Overall customer satisfaction at Perth Airport has been consistently maintained or increased, driven by strategic investments aimed at enhancing operational efficiency, passenger comfort, and value for money.

> The Australian Competition and Consumer Commission's (ACCC) annual Airport Monitoring Reports—which are

Service Quality (ASQ) Monitoring Program, the world's customer satisfaction of services at an airport, is another the passenger experience through the Perth Airport managed terminals, such as parking, check-in, security, amenities, lounge, food and beverage and retail shops, and the arrivals process. During FY24, when more than 16.1 million passengers arrived and departed through Perth (above 4 out of 5) across all terminals in areas such as efficiency at check-in and security, customer service at check-in and security, and terminal hygiene and cleanliness.

highest priority areas for the improvement of the customer

Strategy that provides a roadmap for improving the manner as part of the substantial investment in new and upgraded terminals over the next decade.

experience for passengers, Perth Airport was awarded Best Airport Staff Service in Australia and Pacific at the 2024 Skytrax World Airport Awards.

based on a combination of passenger surveys, airline feedback and objective assessments of facilities and services— demonstrate that a consistently high standard of service is being delivered to passengers and airline partners. The ACCC has rated Perth Airport's overall quality of service and facilities as 'Good' in every Airport Monitoring Report

Data from the Airports Council International's Airports leading airport passenger service programme benchmarking source used to drive and prioritise improvements to facilities at Perth Airport. The ASQ focuses on key areas which define Airport, the ASQ survey results recorded scores of Excellent

This information allows Perth Airport to establish the experience and focus resources and initiatives appropriately.

Perth Airport has implemented a Customer Experience customer experience in a focused, actionable, and strategic

In recognition of the outstanding and world-class customer



T1 Domestic Kids Play Space





Image top: New accessible ramps at T1 International Image bottom: T1 Aspire Lounge

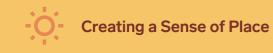
Recent projects include:

- The Kids Play Space in T1 Domestic, which is an accessible play area focused on physical activity and imaginative play, offering an alternative to digital entertainment
- \$36 million replacement of the stairs with new accessible ramps and lifts at three boarding gates in T1 International
- Reconfiguration of the departures level at the east end of T1 International, creating more retail choice, additional seating and dining options, as well as improved wayfinding
- Improved and increased seating in T2, refurbished amenities and improved retail offering.
- Installation of 36 common user self-service check-in kiosks in T1 International to reduce passenger queuing time
- Construction of the T1 Aspire lounge, providing premium dining, shower facilities and lounge areas available to all passengers

and facilities rating for Perth Airport in FY24.

Overall quality of service

3.66



5.3.3 Creating a Sense of Place

Travelling through Perth Airport is the first impression and first experience many visitors have of Perth and Western Australia. Developing and maintaining a unique and memorable sense of place is seen as critical to Perth Airport's success. A Sense of Place Framework has been developed to provide Perth Airport's planning, design, operations, clients, and suppliers with a practical framework for creating and maintaining an airport and precinct that possesses a genuinely unique sense of place.

Drawing on local and regional identity, culture, heritage, landscapes and experiences, the framework aims to inspire, create and maintain a sense of place that resonates with locals as distinctly of Perth and Western Australia, and introduces visitors to a destination quite unlike any they may have previously experienced.

The consolidated terminal precinct program provides opportunities for increasing sense of place that celebrates Perth Airport's business, cultural, and economic relevance to Perth, Western Australia, and the wider country, and that makes for:

- an airport unlike any other
- a world-class travel experience
- a multi-purpose destination
- a world of opportunities for business
- an increasingly prosperous city and state, and
- an ever-closer bond between Australia and the world.

Drawing on local and regional identity, culture, heritage, landscapes and experiences, the framework aims to inspire, create and maintain a sense of place that resonates with locals as distinctly of Perth and Western Australia.



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5.3.4 Commitment to Reconciliation

Perth Airport's commitment to reconciliation is documented in a Reconciliation Action Plan (RAP) firmly centred on building and strengthening meaningful, lasting connections with Aboriginal and Torres Strait Islander peoples. This vision is underpinned by a commitment to mutual respect, positive change, and an enduring partnership. Through the RAP, Perth Airport reaffirms its commitment to building these connections and addressing the challenges faced by Indigenous communities. Perth Airport's new RAP received conditional endorsement and came into effect on 1 July 2025, remaining in place for two years.

The heart of Perth Airport's RAP vision is to foster relationships with Aboriginal and Torres Strait Islander peoples that are not only genuine and respectful but also mutually beneficial. Perth Airport is committed to actively engaging with Aboriginal and Torres Strait Islander communities, seeking to understand the social, educational and economic challenges they face, and aiming to create opportunities that lead to positive, sustainable change for these communities.

This commitment is reflected through four key values:

Listen

Perth Airport is committed to listening actively, with empathy and respect

Conduct meaningful engagement

Perth Airport is committed to engaging authentically, fostering strong, trust-based connections

Work as one community

Perth Airport strives for collective action, working together to achieve common goals

Be curious and continuously learn

Perth Airport remains dedicated to lifelong learning and reflection to guide our reconciliation journey

Recent achievements through the RAP include:



2021 2022 2023

Perth Airport became the first major airport in Australia to acknowledge Traditional Custodians of destinations across the country, displaying both airport locations and the relevant Traditional Custodians' names on domestic boarding gates Perth Airport partnered with the Community Arts Network in a powerful First Nations truth-telling exhibition, Nglauk Waangkiny (Us Talking), which honoured the lives and legacies of 10 respected Aboriginal Elders. The multimedia exhibition was displayed in T4 and included large-scale photos, quotes and podcasts links, giving airport staff and travellers the opportunity to look, listen and learn about Perth's Aboriginal history and culture

Perth Airport entered into a partnership with the Indigenous Art Code as a supporter member to promote fair and ethical trade for Indigenous artists and transparency in the promotion and sale of artwork

Perth Airport installed large, illuminated welcome signs featuring Noongar language, reflecting the six seasons of the Noongar calendar, creating a unique visitor experience and honouring Noongar culture

Perth Airport commissioned a cross-cultural map and publication of the airport estate, highlighting the Noongar cultural narrative and ensuring development respects Indigenous heritage. Refer to Section 8 for further detail, and

Perth Airport maintains active memberships with organisations like the Western Australian Indigenous Tourism Operators Council (WAITOC), the Noongar Chamber of Commerce and Industry, and Supply Nation, supporting economic inclusion and capacity building for Aboriginal and Torres Strait Islander businesses.



Progressing
Sustainable Aviation

5.3.5 Progressing Sustainable Aviation

Globally, the aviation sector generates approximately 2.5 per cent of the world's carbon emissions. The Australian Government has adopted emissions reduction targets of 43 per cent below 2005 levels by 2030 and net zero emissions by 2050.

Aviation industry decarbonisation will require a combination of sustainable aviation fuels (SAF) and emerging propulsion systems (electric, hybrid-electric or hydrogen aircraft) in order to substantively reduce emissions. The Aviation White Paper (see Section 4.3.2) identifies that the aviation sector's net zero transition will require both airlines and airports to take action and will depend on renewable energy sources being available in sufficient quantities to support those steps. Airports will need the infrastructure and the renewable energy supply to recharge hydrogen or electric powered aircraft and ground vehicles or to deliver and account for the use of SAF.

Despite being the expected main lever for decarbonising aviation, the limited supply and higher production costs means the take up of SAF globally and within Australia is currently low; however, its usage is expected to dramatically increase in the next two decades. There is the potential for future SAF production within Western Australia, and the future supply of SAF to Perth Airport has been considered in this Master Plan 2026 (described in Section 13.6.1.2).

Perth Airport is actively monitoring the evolving landscape of electric aircraft, which will require specialised charging facilities on the airfield, and other supporting infrastructure. Perth Airport remains engaged in open dialogue with aircraft operators and is committed to collaborating with them to ensure the necessary capacity and infrastructure are in place to accommodate electric aircraft in the future.

While Perth Airport doesn't anticipate the introduction of hydrogen aircraft in the short to medium term, global advancements in this technology are noteworthy and industry estimates predict smaller hydrogen aircraft by the end of this decade and larger ones by the 2030s. Despite the uncertainties, Perth Airport is investigating infrastructure and operational needs for future hydrogen flights. Initial use will likely involve small gaseous hydrogen aircraft requiring limited infrastructure, but as technology scales up to larger liquid hydrogen-fuelled aircraft, significant infrastructure will be needed.

Master Plan 2026 incorporates key initiatives designed to integrate sustainable practices across all developments.



Sustainable Design and Development

5.3.6 Sustainable Design and Development

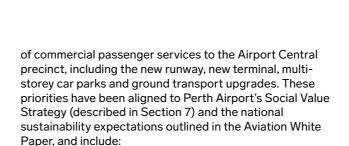
Perth Airport is committed to designing and constructing buildings and infrastructure that aim to deliver healthy, resilient and positive places for people and nature that take into account current and future demands on the built environment and seeking to address issues such as reducing emissions, enhancing climate resilience, resource efficiency, and health and wellbeing.

Master Plan 2026 incorporates key initiatives designed to integrate sustainable practices across all developments. This approach is intended to drive consistent sustainability outcomes, fostering a resilient and innovative estate that supports local and national goals to transition to a lowemission, climate-resilient future.

To advance these outcomes, Perth Airport has developed Sustainability Design and Technical Requirements which are embedded in the capital program and project management framework, including tender documents and procurement plans, in line with international best practices. The requirements drive decisions that aim to contribute to:

- improving the energy and resource efficiency of old and new airport buildings, as well as infrastructure across the estate
- procuring, delivering, and promoting the use of sustainable materials, products and technologies that save money and reduce costs on a 'whole of life' value basis, and
- developing, expanding, and managing Perth Airport's built environment for climate resilience and the transition towards reduce emissions with a goal of achieving Net Zero by 2032.

Sustainability priorities have been established for key developments being undertaken as part of the consolidation



- climate change and operational resilience—infrastructure will be designed and built, where practicable, to withstand direct and indirect climate-related risks, ensuring longterm operational continuity and adaptive capacity
- sustainable innovation—integration of forward-thinking technologies and processes that support environmental, social and economic sustainability across the design, construction and operation
- energy use and renewable energy investment—prioritising energy-efficient systems and renewable energy integration to reduce emissions, enhance operational efficiency and support Perth Airport's commitment to achieve Net Zero by 2032
- water efficiency and avoidance—implementing water conservation measures and exploring alternative water sources or construction methodologies that minimise potable water use
- responsible waste management—applying circular economy principles to aim to divert 80 per cent of construction and demolition waste from landfills and implement resource recovery strategies throughout the project lifecycle
- stakeholder engagement—collaborative engagement with partners, communities and stakeholders will shape sustainability objectives and targets on the developments
- workforce sustainability—foster inclusive workforce strategies, prioritising diversity, upskilling and employee well-being, and

 resource efficiency—selection of low carbon materials and targeting a 20 per cent reduction in embodied carbon through sustainable sourcing and lifecycle assessments, as well as exploration of circular economy approaches and design for disassembly for new developments.

Through the Social Value Strategy, Perth Airport has set minimum sustainability requirements and aims to achieve sustainability certifications for all new material infrastructure projects. There are several rating schemes targeting a variety of certifications, and Perth Airport considers the most appropriate sustainability certification applicable to each specific project.

The Infrastructure Sustainability Council's IS Rating scheme— Australia and New Zealand's only comprehensive rating system for evaluating economic, social and environmental performance of infrastructure across the planning, design, construction and operational phases of infrastructure assets—is being applied to the design and construction of key infrastructure projects. The new runway and the ground transport upgrade project at Airport Central have both been registered for IS rating. Perth Airport is also supporting industry development through an early trial of the IS Essentials Pilot rating tool.

The Green Star rating scheme is an internationally recognised Australian sustainability rating and certification system for building design and construction, operation, fit outs and communities. Ratings are assigned as 4-Star (Best Practice), 5-Star (Australian Excellence) or 6-Star (World Leader). Recent projects that have achieved 4-Star Green Star rating include the Dunreath Village shopping centre and Officeworks Customer Fulfilment Centre (opened in 2024). In addition to this, three warehouse developments, and a workshop and office building have also been targeting 4-Star Green Star rating. The new airport hotel is planned to target a 4-Star. The new terminal is planned to target 5-Star Green Star rating and IS Silver rating.

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Supporting General Aviation

602,000

The 2022 Boeing Pilot and Technician Outlook forecasts that the aviation industry will need to supply 602,000 commercial airline pilots

between 2022 and 2041.

5.3.7 Supporting General Aviation

Perth Airport recognises the importance of the general aviation sector to aviation workforce training and support of the resources, agricultural, emergency services and tourism sectors.

Aviation White Paper discusses the global pilot shortages that have emerged following the COVID-19 pandemic, and notes that shortages of qualified pilots in Australia have had a disproportionate impact on general aviation businesses and smaller and regional airlines. The 2022 Boeing Pilot and Technician Outlook forecasts that the aviation industry will need to supply 602,000 commercial airline pilots between 2022 and 2041, with 41 per cent of these required for countries in Asia and Oceania. In 2023, the Australian Government (though Jobs and Skills Australia) identified aeroplane pilots as a shortage nationally and in all states and territories except Queensland.

Commercial pilot training curriculum requires students to be able to fly in and around controlled airspace and have access to a variety of suitable navigation aids. In addition, pilots are required to have conducted one instrument approach (using a navigation aid) in the last 90 days so as to maintain their rating (qualification) to fly under instrument flight rules. Perth Airport is the only civil airport in the Perth and Peel region, and one of only six airports in WA, with an Instrument Landing System (ILS) navigation aid. RAAF Base Pearce has an ILS, however ILS approaches are only available to civil aircraft outside of RAAF air traffic control tower hours. The other airports with an ILS in WA are Broome, Karratha, Kalgoorlie and Port Hedland.

As a result, there are approximately 140 ILS approaches conducted each month at Perth Airport. The majority of these aircraft come from Jandakot Airport, with the remainder from Perth Airport, Bunbury Airport and RAAF Base Pearce, and occasional ILS approaches conducted by aircraft that have come from regional airports such as Albany, Busselton and Cunderdin. Due to the use of ILS approaches for training and licensing requirements, most of these movements are conducted in the smaller general aviation aircraft types commonly used for pilot training, such as the Piper PA-44 and Cessna 172. The majority of ILS approaches are conducted during daylight hours during the quieter movement periods at Perth Airport when there is airspace capacity. Airservices Air Traffic Control manages ILS approaches through its Airwork booking system.

Perth Airport has a dedicated General Aviation Area which has hangars and aircraft parking aprons for a variety of operations, including FIFO and charter, aircraft maintenance, search and rescue, and regional freight. The relocation of Qantas Group from T3/T4 to Airport Central at the time of consolidation will provide a strategic opportunity to realign the General Aviation Area and allow new and expanded facilities. This is discussed in Section 13.7.



Embracing Technology and Innovation

5.3.8 Embracing Technology and Innovation

Perth Airport is embracing new technologies and innovations that aim to enhance customer experience, improve operational efficiency and support sustainable outcomes. Initiatives already implemented include automated bag drop kiosks within T1 International, installation of advanced security screening equipment throughout all terminals, and the progressive implementation of an automated boarding solution in T1 International which utilises biometric technology to provide shorter queuing and processing times for passengers.

The design of the upcoming terminal upgrades and the new terminal creates opportunities for increased automation of passenger processes and baggage handling, such as autonomous baggage tugs and push-back of aircraft from their parking positions. Biometric solutions are likely to be implemented to streamline processes like check-in, security checks, immigration and boarding. Perth Airport are also investigating the use of artificial intelligence to further enhance these processes, as well as a virtual assistance and support via mobile applications.

To support Perth Airport's sustainability target of achieving net zero emissions by 2032, an Electric GSE Strategy has been developed to guide the implementation of infrastructure and spatial planning needed to support the

Within the 20-year planning period of Master Plan 2026, automated vehicles are expected to replace the bus services between long-term car parks and terminals.

transition to electric fleets for airline ground support equipment, terminal transfer buses and other vehicles used across the estate.

Within the 20-year planning period of Master Plan 2026, automated vehicles are expected to replace the bus services between long-term car parks and terminals, as well as those for passenger transfers to remote aircraft parking stands. There is also potential for automating logistics delivery vehicles to the terminals and other sites across the estate.

The future Perth Airport is likely to see advanced air mobility systems such as remotely piloted, autonomous or vertical take-off and landing aircraft, air taxis and drone operations for the delivery of time-critical goods. Perth Airport has commenced planning for the development of infrastructure to support the potential operation of these technologies in the future. A new VTOL site has been safeguarded as part of the future General Aviation rearrangement (detailed in Section 13.7) in Airport West, and Perth Airport will look to identify future opportunities in the Airport Central Precinct to provide direct connection to passenger arrivals and departures.



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5.4 Consultation and Community

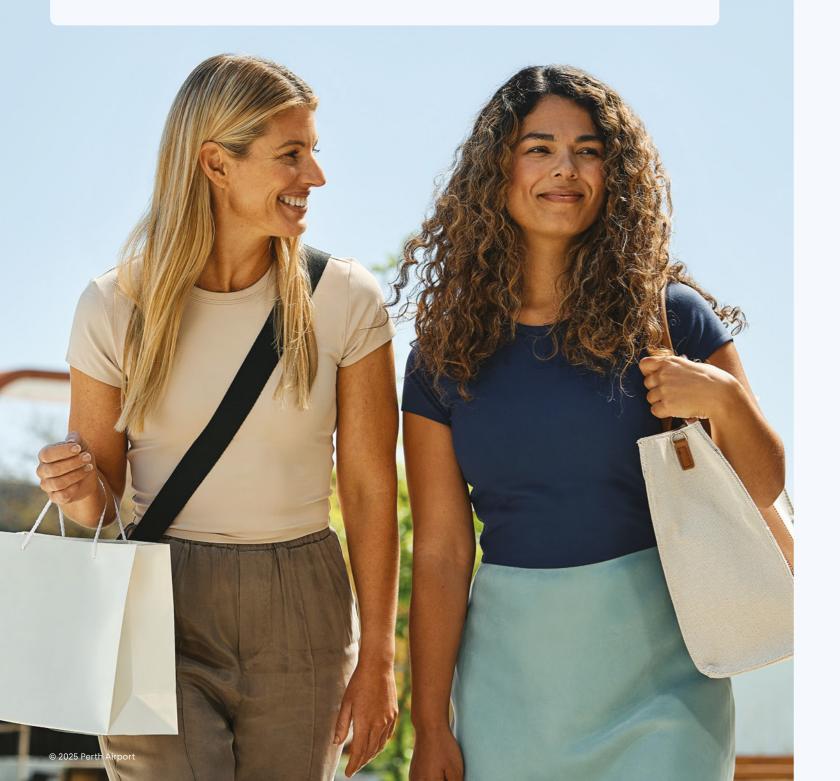
Safe, reliable, convenient and affordable air services are vital to the economic, cultural and social development of Western Australia. Perth Airport, as a 24 hours a day, seven days a week operation, plays a critical role in the provision of air services upon which all Western Australians depend, and is arguably one of the most important elements of public infrastructure in the State.

The location of Perth Airport within the Perth metropolitan area—just a 40-minute drive from most of the city's population—is a convenient one. However, it also presents challenges to ensure that the airport can continue to grow to meet community

needs, while at the same time, it doesn't inappropriately impact the living standards of those who live near the airport.

One of the objectives of the Airports Act is to ensure there is an appropriate level of vigilance, transparency and scrutiny of airport planning, so that reasonable public interest requirements are met as the airport's development progresses. Successful development of Perth Airport therefore depends on productive interactions with a wide range of stakeholders who are impacted by, and who may impact, the development of the airport.

Perth Airport is committed to maintaining strong links with stakeholders and the community.



5.4.1 Consultation Framework

Perth Airport has adopted the Australian Government's Airport Development Consultation Guidelines to provide guidance for consultation to be undertaken as part of the airport's operation and development. According to these guidelines, an effective consultation program ensures that a proposal has been fully explored, concerns identified, and alternatives considered; however, it does not necessarily mean that all interested parties will be satisfied with the outcome.

Perth Airport is committed to effective and transparent engagement and employs a range of ongoing consultation and education mechanisms to:

- inform stakeholders and the community about on-airport land use planning, developments and potential impacts
- seek input on alternative approaches and options
- maintain transparency, accountability and stakeholderfocused relationships
- provide feedback opportunities and one-on-one information sessions
- provide a conduit for information exchange between Perth Airport and key stakeholders, including the community
- · meet legal and regulatory responsibilities, and
- provide stakeholders with the opportunity to influence the future of Perth Airport.

Part of the ongoing consultation process with stakeholders and the community includes Perth Airport's facilitation of, and involvement in, various forums. These forums enable Perth Airport to engage with Federal, State and local government authorities, airlines and the community.

Perth Airport undertakes ongoing review and assessment of these groups to ensure their effectiveness and suitability to meet the engagement needs and requirements outlined in the Airport Development Consultation Guidelines. As such, the structure, composition and terms of reference for these groups may be varied from time to time to ensure the best model to achieve the required outcomes.

Perth Airport currently engages through a number of forums

5.4.1.1 Perth Airport Planning Coordination Forum

The Perth Airport Planning Coordination Forum (PCF) aims to foster high level strategic discussions between Perth Airport and Federal, State and local government representatives to promote better planning outcomes in relation to airport developments in the context of the broader urban setting. The PCF comprises State and local government representatives from the Department of Planning, Lands and Heritage, Department of Transport and Major Infrastructure, Main Roads WA, Public Transport Authority, City of Belmont, City of Swan, City of Kalamunda, and Chamber of Minerals and Energy, as well as the Federal Department of Infrastructure, Transport, Regional Development, Communications and the Arts, and Airservices Australia.

The input of the PCF remains central to the development of each master plan.

Perth Airport is committed to effective and transparent engagement and employs a range of ongoing consultation and education mechanisms.

5.4.1.2 Perth Airport Community Briefing Group

The Perth Airport Community Briefing Group (PACBG) provides a forum for the community and organisations to raise issues and express opinions regarding Perth Airport, particularly with regard to planning, development and operations. Its purpose is to:

- achieve broad community engagement on airport planning, development and operations, and their impact
- provide advice regarding communication, consultation and engagement to other stakeholders including Perth Airport
- assist Perth Airport to fulfil its obligations as a responsible corporate citizen within the local and broader community, while recognising its role as a major economic contributor for the local region, Perth and Western Australia, and
- enhance the long-term sustainability and growth of Perth Airport.

The Community Briefing Group was established in 2023 to replace the Perth Airport Community Forum. The Group meets biannually and includes representatives from Perth Airport, Airservices, local business groups, community members and First Nations peoples.

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5.4.1.3 Perth Airport Aircraft Noise Technical Working Group

The Perth Airport Aircraft Noise Technical Working Group, which comprises representatives from Perth Airport, Airservices, and airlines and local aircraft operators, contributes to the successful management of aircraft noise at Perth Airport. The group discusses aircraft noise and operational topics such as flight path and procedure changes, noise abatement procedures and aircraft noise complaints.

Following a hiatus during the COVID-19 pandemic, the working group will be reconvened to play an important role in providing input on the final airspace design and planning for the operation of the new runway expected to be operational in 2028.

5.4.1.4 Perth Airport Consultative Environmental and Sustainability Group

The Airport Consultative Environmental and Sustainability Group (ACES) comprises representatives from Federal, State and local governments as well as airport tenants, conservation groups, catchment groups and community members. The group discusses topics related to the environmental management of the airport estate and provides opportunities for tenants to learn and work together to minimise the environmental impacts of their operations and to facilitate improved environmental outcomes.

5.4.1.5 Aboriginal Partnership Agreement Group

The Perth Airport Aboriginal Partnership Agreement Group (PAG) was established in 2009 to facilitate active engagement between Perth Airport, the Traditional Custodians and other Aboriginal Elders. The PAG is a high-level steering group focussed on the cultural heritage management and ongoing development of the airport.

The PAG's purpose is to foster meaningful engagement, promote cultural understanding, and support opportunities for Aboriginal people in alignment with the airport's commitment to reconciliation and inclusivity. It collaborates on matters such as management of the airport land and heritage sites, development proposals, built form design, public art, and initiatives for Aboriginal cultural recognition.

5.4.1.6 Bird and Animal Hazard Management Advisory Committee

The Perth Airport Bird and Animal Hazard Management Advisory Committee has been established to provide a collaborative forum to reduce the bird and wildlife risk to aircraft safety.

The committee comprises representatives from Federal, State and local governments, Airservices air traffic control, airlines, City of Belmont, Eastern Metropolitan Regional Council, Department of Biodiversity, Conservation and Attractions, Jandakot Airport, airport tenants, DTRDCSA, Department of Agriculture, Fisheries and Forestry, Birdlife Australia, surrounding land use operators and ornithological consultants.

The key objectives of the committee are to review bird and wildlife count and strike data, advise on the development and implementation of strategies to reduce the incidence of bird and wildlife strike, review operating procedures and policies, and discuss recommendations from subject matter experts.

5.4.1.7 Perth Airport Access and Inclusion Advisory Group

The Access and Inclusion Advisory Group was established in 2015 and serves as a key platform dedicated to advocating for diversity, addressing inclusion barriers and enhancing the overall customer experience for individuals with disabilities, chronic health conditions, and other special circumstances, within airport terminals and across the estate. The group includes representatives from Visibility, Blind Citizens WA, Autism WA, Department of Communities, National Disability Services and community members with lived experience. Perth Airport actively solicits feedback from the Advisory Group to enable informed design, drive innovative solutions and identify improvement opportunities.

5.4.2 Community

Perth Airport places a high priority on engaging with representatives of local communities to ensure their needs and concerns are taken into account in the planning and operation of the airport. Throughout the year, Perth Airport undertakes a range of initiatives to achieve effective community engagement on airport matters. Key engagement activities include Airport Experience Open Days and updates across social media platforms as well as regular meetings of the Perth Airport Community Briefing Group, Airport Consultative Environmental and Sustainability Group, and the Aboriginal Partnership Agreement Group. Details about each of these groups is provided in Section 5.4.1.

Perth Airport also proudly contributes to a range of local schools, sporting organisations, not-for-profit charities and groups, as well as key industry groups, with the aim of supporting those in need and engaging with the local community. Perth Airport's relationship with the Western Australian community is an important part of company values and, over the past decade, more than \$9 million has been invested to positively impact the lives of many Western Australians. The range of community initiatives is detailed in Section 3.4.

Perth Airport places a high priority on engaging with representatives of local communities to ensure their needs and concerns are taken into account in the planning and operation of the airport.



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5.4.3 Master Plan 2026 Consultation

The development of an airport master plan requires extensive collaboration and engagement with Federal, State and Local Government departments, stakeholders and the community.

Figure 5-8 shows the five key stages to the development of an airport's master plan.

The consultation processes undertaken with the various stakeholder groups throughout the development and implementation of this Master Plan 2026 are shown in Table 5-2.



Figure 5-8 Master Plan Development Stages Source: Perth Airport

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FIVE YEAR MASTER PLAN PROCESS

Stakeholder	Master Plan development	Formal Consultation (Preliminary Draft)	Implementation	Outcome
Community	Perth Airport Community Briefing Group (CBG)	Public notice and comment period Community information sessions PACF	Ongoing process of engagement and review through various mechanisms including regular forums and direct briefings.	A process which provides ongoing and detailed opportunity for input and engagement across all sectors to influence the
First Nations peoples	Partnership Agreement Group (PAG) CBG Direct briefing and engagement	Public notice and comment period PAG CBG Direct briefing and engagement	All major developments require relevant approvals under Commonwealth and State legislation and, where required, formal engagement and public	development of the master plan within a transparent and collaborative framework. Key stakeholders and community are aware and informed of the
Environmental	Consultative Environmental and Sustainability Group (ACES) Stakeholder workshops	Public notice and comment period	 notification will be undertaken. 	timing and impacts of Perth Airport's operations and development.
Accessibility and inclusion advocates	Access and Inclusion Advisory Group	Public notice and comment period		
General industry	Planning Coordination Forum (PCF) Industry Briefings Direct briefings and engagement	Public notice and comment period		
Aviation sector	PACF Perth Airport Aircraft Noise Technical Working Group Direct briefings and engagement	Public notice and comment period		
Local Government	PCF CBG Stakeholder workshops Officer briefings	Public notice and comment period Elected Council briefing PCF		
State Government	PCF CBG ACES Stakeholder workshops Officer briefings	Public notice and comment period Direct briefings when requested PCF		
Australian Government	PCF CBG ACES Officer briefings	Public notice and comment period PCF		
Members of Parliament (Federal and State)	CBG	Public notice and comment period Direct briefing when requested		

Table 5-2 Master Plan 2026 engagement process Source: Perth Airport Perth Airport Master Plan 2026 Part B Section 5: Development Approach 151

5.4.4 Preparation of the Exposure Draft Master Plan 2026

Perth Airport undertook an extensive consultation process in the development of the initial draft of this Master Plan 2026.

Meetings were held with key stakeholders to discuss key elements of airport planning and to determine the priorities for the next 20 years. Perth Airport engaged specialist consultants to undertake detailed assessments and provide planning advice. Key findings were then discussed with Perth Airport's Board of Directors and relevant stakeholders.

5.4.5 Exposure Draft Master Plan 2026 Stakeholder Review

An important part of the development of a master plan is the release of an early version of the document for review and comment by key Australian, State and local government agencies, and aviation industry representatives.

The Exposure Draft Master Plan 2026 was provided to the stakeholders shown in Table 5-3, and briefings provided to key staff as required.

Briefings and updates on planning elements are also made to the Planning Coordination Forum, Airport Consultative Environmental Group, Community Briefing Group and the Partnership Agreement Group.

Perth Airport has due regard for feedback provided and, where possible, addresses the initial concerns and issues raised though the preparation of the Preliminary Draft Master Plan 2026.

Australian Government	State Government	Local Government	Industry
Airservices Australia	Department of Biodiversity,	City of Belmont	Board of Airline
Civil Aviation Safety Authority	Conservation and Attractions	City of Kalamunda	Representatives Australia
Department of Climate Change,	Department of Creative	City of Swan	Qantas Group
Energy, the Environment and	Industries, Tourism and Sport		Virgin Australia
Water	Department of Energy and Economic Diversification		National Jet Express
Department of Infrastructure,			Maroomba Airlines
Transport, Regional Development, Communications	Department of Planning, Lands and Heritage		Skippers Aviation
and the Arts	Department of Premier and		MinRes Air
	Cabinet		Maxem Aviation
	Department of Transport and		AvWest
	Major Infrastructure		Airflite
	Department of Water and		Remorex
	Environmental Regulation		Brooks Airways
	Environmental Protection		Penjet
	Authority		renjet
	Western Australia Planning Commission		
	Main Roads Western Australia		
	Public Transport Authority		
	Development WA		

Table 5-3 Exposure Draft Master Plan 2026 stakeholder review Source: Perth Airport

5.4.6 Release of Preliminary Draft Master Plan 2026 for Public Comment

In accordance with Section 79 of the Airports Act, the Preliminary Draft Master Plan 2026 is made available for public comment for a period of 60 business days.

Prior to the Preliminary Draft Master Plan 2026 being published for public comment, Section 80 of the Airports Act requires Perth Airport to advise, in writing, the following persons of Perth Airport's intention to submit a new master plan to the Federal Minister for Infrastructure:

- the Minister of the state in which the airport is situated with responsibility for town planning or use of land
- the authority of that state with responsibility for town planning or use of land, and
- each local government body with responsibility for an area surrounding the airport.

A newspaper advertisement is published in the West Australian newspaper advising that the Preliminary Draft Master Plan 2026 is available for members of the public to provide written comments, and advising how and where members of the public can obtain a copy of the document.

5.4.6.1 Obtaining a copy

A copy of the Preliminary Draft Master Plan 2026 is made available for download, free of charge, from <u>perthairport.</u> com.au/masterplan.

During the public comment period, printed copies of the Preliminary Draft Master Plan 2026 are also available for viewing or purchase at the Perth Airport Alpha building (Level 2, 2 George Wiencke Drive, Perth Airport) and at selected public libraries.

5.4.6.2 Engagement Materials and Activities

To ensure that the community has an opportunity to comment on the Preliminary Draft Master Plan 2026, public engagement includes a range of activities and the production of additional material.

West Australian advertisement

An announcement about the commencement of the public comment period is made in The West Australian newspaper.

Social media

Announcements about key milestones, such as the commencement of the public comment period and information about community briefings and public events, are regularly made through the Perth Airport Facebook and X accounts.

Perth Airport website

The Perth Airport website, perthairport.com.au/masterplan, provides online copies of documentation including the Preliminary Draft Master Plan 2026 and supplementary information, community information events, and opening times of the Perth Airport Experience Centre. This forum provides an opportunity for members of the public to meet with Perth Airport staff and discuss the matters of interest and concern to them.

Other communication

Other communication platforms, such as local government websites, are used to promote the public comment process wherever possible.

Aircraft noise information portal

Released in 2014, the interactive Aircraft Noise Information Portal enables users to obtain information related to a specific property's location for:

- current and anticipated future flight paths
- the Australian Noise Exposure Forecast contours, and
- the Number-Above noise contours.

The interactive noise portal has been updated to include the noise exposure modelling undertaken for this Master Plan 2026 (see Section 16.2) and can be accessed at perthairport.com.au/aircraftnoise.

The Perth Airport Aircraft Noise Management Summary and Reducing Aircraft Noise in Existing Homes booklets, which provide information on noise impacts relating to Perth Airport operations and associated flight paths, are also available for viewing and download from the noise portal site.

Airport Experience Centre

The Perth Airport Experience Centre, located on the ground floor of the Alpha building at 2 George Wiencke Drive, Perth Airport, is open at various times during the public comment period, including evenings and weekends. Visitors have the opportunity to speak to Perth Airport staff.

The Perth Airport Experience Centre opening times will be published on the Perth Airport website and through Perth Airport social media. Free car parking is available.

Community Information Activity

Information expos are held in various local shopping centres and community events.

Notices regarding the times and locations of the information expos are published at perthairport.com.au/masterplan, in the West Australian and/or relevant community newspapers, and through Perth Airport social media.

Perth Airport Master Plan 2026

Part B Section 5: Development Approach

5.4.6.3 Making a Submission

Written public comment submissions are to be sent to the below address or submitted online via perthairport.com.au/masterplan before 5.00 pm on Tuesday 23 December 2025.

Master Plan 2026 Perth Airport Pty Ltd PO Box 6 Cloverdale WA 6985

To assist Perth Airport in considering the feedback provided, submissions should:

- clearly state the matter(s) of interest
- reference the relevant section(s) of the Preliminary Draft Master Plan 2026
- use dot points or paragraph headings to assist with clarity
- provide the source of any factual information that has been referred to, and
- describe the measure(s) that would be appropriate to improve the proposal.

5.4.7 Preparation of the Draft Master Plan 2026

In accordance with the Airports Act, Perth Airport must have due regard for all comments received during the public comment period. Once all public comment submissions have been received, Perth Airport considers the feedback received and, where possible, incorporates the concerns and issues raised in the Draft Master Plan 2026.

During this time, Perth Airport engages with relevant State and local government agencies to review feedback and ensure the intent of their submissions is understood.

5.4.8 Submission of the Draft Master Plan 2026 to the Minister

As required under Section 79 the Airports Act, the submission of the Draft Master Plan 2026 to the Minister is accompanied by:

- a copy of written submissions received during the public comment period
- a written certificate signed on behalf of Perth Airport, containing:
- a list of names of the people or organisations that provided written comments to the Preliminary Draft Master Plan 2026
- a summary of the comments received
- evidence that Perth Airport has given due regard to those comments in preparing the Draft Master Plan 2026, and
- setting out such other information (if any) about those comments as is specified in the regulations.
- 5.4.9 Minister's Consideration of the Draft Master Plan 2026

The Airports Act requires the Federal Minister for Infrastructure to have regard to the following matters when deciding whether to approve or refuse a master plan:

 the extent to which the plan achieves the purposes of a final master plan

- the extent to which carrying out the plan would meet present and future requirements of civil aviation users of the airport, and other users of the airport, for services and facilities relating to the airport
- the effect that carrying out the plan would be likely to have on the use of land within the airport site and in areas surrounding the airport
- the consultations undertaken in preparing the plan, including the outcome of the consultations, and
- the views of the Civil Aviation Safety Authority and Airservices Australia, in so far as they relate to safety aspects and operational aspects of the plan.

In response to the Aviation White Paper (see Section 4.3.2), in August 2024 the Minister advised Perth Airport of their intent to also have regard for the following additional matters:

- the appropriateness of the airport's community consultation processes, including consultation with First Nations people (described in Section 8 and 11) and, where developments involve changes to flight paths, consistency with the Airservices Australia Community Engagement Standard (described in Section 16.2.2.8)
- how the airport will build and maintain resilience to climate impacts (described in Section 10.2)
- the suitability of the airport's sustainability and decarbonisation initiatives (described in Section 10)
- whether the airport's disability access arrangements comply with the *Disability Discrimination Act 1992* (Cth) and relevant disability standards (described in Section 5.3.1), and
- whether appropriate access to the airport's site has been provided for general aviation users (described in Section 13.7)

5.4.10 Publication of the Final Master Plan 2026

If the Draft Master Plan 2026 is approved by the Minister, in accordance with Section 86 of the Airports Act Perth Airport undertakes the following notifications within 50 business days of Ministerial approval:

- publishes a newspaper notice advising that the Perth Airport Master Plan 2026 has been approved
- makes copies of the plan available for inspection or purchase at Perth Airport, and
- makes a copy of the approved Master Plan 2026 available on the Perth Airport website, <u>perthairport.com.au/</u> <u>masterplan</u>.



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6.1 Introduction

Perth Airport is the fourth busiest airport in Australia by passenger volume, breaking the **17-million passenger** mark for the first time in FY25.

Over 90 per cent of aircraft movements are related to regular scheduled and charter passenger services. Other aircraft movements incorporate a range of freight and general aviation uses, including emergency services operations.

The planning and development of Perth Airport is underpinned by a number of development considerations which influence the infrastructure that is built and when it is delivered. One of the key considerations is the forecast of passenger and aircraft movements annually and in peak periods, air freight volumes, and the level of service expected by different airlines.

6.2 Recent Performance

The Perth aviation market comprises international, interstate and regional (intrastate) sectors, with each sector being influenced by different factors. When combined, interstate and regional are referred to as domestic passengers.

Perth Airport has experienced significant growth in passenger numbers and aircraft movements since the airport's privatisation in 1997, growing from nearly five million passengers in 1998 to 17.48 million in FY25.

Perth aviation markets have experienced periods of strong growth as well as periods of contraction.

Western Australia experienced a resource construction boom from 2007 until its peak in 2013, which contributed to significant aircraft movement and passenger growth at Perth Airport. During this period, Perth Airport was the fastest growing airport in Australia with an average annual passenger movement growth rate of 7.5 per cent, nearly twice that of the next fastest growing airport (Brisbane). At the peak, airlines and passengers experienced significant delays, which had flow-on impacts to the wider Western Australian economy.

The COVID-19 pandemic had an immediate impact on the global aviation sector. As a result of Australian and Western Australian border closures, international and interstate passenger numbers and air services at Perth Airport were dramatically impacted. International passenger numbers dropped 97.5 per cent between 2019 and 2021, while interstate passengers decreased by 70 per cent. Due to the majority of regional passengers being the fly-in fly-out (FIFO) resource workforce, regional passenger numbers increased by four per cent between 2019 and 2021. Western Australia's border closure was lifted in March 2022. Perth Airport's aviation recovery hit a major milestone in late 2023, with interstate passenger numbers surpassing pre-COVID levels in November 2023. In April 2024, two years on from the reopening of borders, Perth Airport's international passenger numbers returned to pre-COVID levels with the return of all international airlines as well as the introduction of several new airlines and routes.

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Regional aviation in Western Australia is heavily dependent on resource sector activity due to the reliance on a FIFO workforce model. Project sites are serviced by either regular scheduled passenger services or general aviation charters. Fluctuations occur as new mine sites complete construction activity and move into operational mode. The WA Department of Energy, Mines, Industrial Regulation and Safety reported that the mining and mineral exploration industries employed a record average of 122,600 full-time equivalent personnel during FY22, with the iron ore industry accounting for 49 per cent of employment and gold for 25 per cent. Annual regional passengers varied between 3.9 and 4.8 million between FY13 and FY20, before exceeding five million for the first time in FY22 and reaching a new peak of 6.24 million in FY25.

International passengers have typically represented around one third of total passengers through Perth Airport. In 2005, there were 2 million passengers, which increased to a new peak of 5.14 million in FY25.

Figure 6-1 shows the passenger movements at Perth Airport between 2005 to 2025.

6.3 Perth Airport Activity Forecasts

The passenger and movements forecasts for Master Plan 2026 were produced by Tourism Futures International (TFI), an independent research-oriented company specialising in aviation, travel and tourism forecasting.

Airline passenger forecasts are not based on a single homogenous market. In preparing passenger forecasts, segmentation is applied to Perth Airport's international and domestic markets to better understand and assess the significance of different drivers.

This approach allows for a clearer picture of the relative size and impact of each market segment, resulting in forecasts that are more responsive to events specific to a given market.

There are many factors that influence the growth in air travel, the most significant being:

- · Gross Domestic Product and Gross State Product
- disposable incomes of potential travellers and confidence that these levels will be maintained and grow
- price of air transport and travel
- · commodity market conditions
- currency exchange rates
- levels of consumer confidence
- availability of aircraft
- competitiveness and offering of a destination compared to alternative destinations
- frequency, reliability and quality of aircraft and airline services
- · competition for new airline services
- tourism promotion by governments, airlines and industry bodies
- · consumer trends and available time for travel
- demographic factors such as population growth and composition, and
- one-off factors and shocks that impact travel including terrorist attacks, significant environmental events such as volcanic ash clouds, the collapse of an airline, pandemics such as COVID-19, and large events such as major sporting events and concerts.

6.3.1 Use of Forecasts in Perth Airport Plan

Passenger forecasts are combined with aircraft load factors and airline fleet-mix assumptions to develop forecasts of passenger aircraft movements. General aviation aircraft movement forecasts are based on trend analysis of the various industry sectors that these operators service.

Aircraft movement forecasts, including aircraft type and operational time of day, are also a key input into aircraft noise modelling.

Annual forecasts provide a high-level overview of projected growth patterns. To inform the timing of specific developments, forecast peak period demand is compared to the capacity of each individual element of the airport's

infrastructure: roads, check-in, security screening, departure lounge size, aircraft parking positions and runway capacity. The capacity of airport infrastructure needs to provide the targeted levels of efficiency and customer service in peak demand periods. Therefore, a critical element of airport planning is the combination of activity forecasts with future airline schedule assumptions to forecast peak hour demand for each element of airport infrastructure.

Many of the factors that influence air travel are unpredictable and subject to diverging views, for example, interest rates, oil prices and population growth rates. Planning for Perth Airport is also highly sensitive to activities within the mining sector as this responds to macro-economic factors, which can disproportionally influence the accuracy of passenger and aircraft movement forecasts. In response, the forecast model for Perth Airport uses varied assumptions to produce high, central and low estimates of passenger and aircraft movement growth. The central forecast has been used to support the planning described in this Master Plan 2026.

6.3.2 Industry Outlook

The outlook for aviation activity in Australia and within Western Australia is positive, with domestic and international air travel expected to continue to grow in response to population growth, continued tourism demand, and the long-term program of mining investment within Western Australia.

Several economic and geopolitical factors continue to interact and influence travel outcomes in the short to medium term, including:

- inflation, globally and in Australia, has been moderating but remains high, with the combination of high inflation and interest rate rises impacting on discretionary incomes and spend, and in turn on consumer confidence. Inflation is expected to continue to ease gradually as cost pressures moderate
- oil prices reached a nine-year high in 2022 and are expected to fall slightly in 2025, with relatively little price change being forecast due to expectations that the global supply and demand of petroleum liquids will be relatively balanced
- geopolitical developments such as the ongoing war in Ukraine and the Middle East conflicts increases the volatility of commodity and oil prices and impact aviation fuel costs and consumer confidence
- constraints on airline capacity due to delays in the delivery of aircraft parts and new aircraft, thereby limiting capacity expansion and fleet renewal, and
- while the World Health Organisation declared in May 2023 that COVID-19 was over as a global health emergency, it indicates that the virus remains a threat and continues to track variants of interest.

While aviation growth prospects are positive into the medium/long term, there remain uncertainties that can stall growth. In addition, demographic trends are changing, with population growth slowing and an aging population indicated across many developed and developing countries.

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Perth Airport Aviation Forecasting Components

Market Segmentation

- Global economic factors
- Exchange rate performance
- Stock market performance
- Oil and commodity prices
- Regulatory factors
- Market growth
- Australian and state economic factors
- Demographic factors
- Airline capacities
- Travel costs
- Resource industry developments

Market Analysis

- Historical data and trends in passenger and aircraft movements at Perth Airport
- Perth Airport movement responses to previous economic downturns and other traffic 'shocks'
- Current airline schedules, general aviation and business environments
- Assumptions about future airline fleet and flight schedules and Perth Airport capacity
- Bureau of Infrastructure and Transport and Regional Economics official tourism forecasts for Australia and internationally
- Resource industry activity and FIFO demand trends

Forecasting Model Development

- Linking drivers of traffic which were identified for domestic and international travel
- Macro models linking economic indicators
- Micro models based on extensive statistical analysis and published studies which are generally based on markets, travel purpose or routes
- Final model outcomes based on an iterative process between the micro and macro modelling approaches

Review of Sensitivities

 Review key market drivers such as economic and population growth, currency exchange rates, travel costs, airline capacity changes and mining developments

Figure 6-2 Aviation forecast approach Source: Perth Airport

Within Western Australia, economic growth is forecast to accelerate and outperform the national economy in the short to medium term. This is largely due to the relative isolation of the state's economy from the rest of the country and a difference in industry composition. The resource sector will continue to be the dominant driver for growth, while commodity price corrections, along with rising global uncertainty, pose downside risks. The importance of the mining sector goes well beyond its direct contribution to growth; much of the non-residential building and engineering construction activity, and related employment and migration flows, are anchored to the investment and production cycle for mining.

6.3.3 Forecasting Approach

While there are many factors that can influence air service demand, only some of them can be reliably measured and their impacts included in forecasting models. The passenger and aircraft movement forecasts for Perth Airport have considered the components shown in Figure 6-2.

6.3.4 Passenger Forecasts

To ensure that Perth Airport can meet future demand when required, passenger forecasts are prepared for each new Master Plan and reviewed annually to support effective infrastructure planning and investment decision making.

Detailed analysis considers the factors that impact or trigger the need for infrastructure developments. These revalidation processes help to ensure (to the best of current available knowledge) that infrastructure capacity is delivered to meet demand, and that it is not delivered too early, noting that this would place unnecessary costs on the users of Perth Airport, including the travelling public. Perth Airport ensures that its infrastructure planning and design emphasise modularity and flexibility to support capacity expansion within shortened timeframes if required. Based on a central growth rate scenario, annual international passenger numbers at Perth Airport are forecast to grow from 4.34 million in FY24 to 11.38 million in FY46. In the same period, annual domestic passengers are forecast to grow from 11.76 million to 19.44 million.

Total annual passengers are forecast to grow from 16.11 million in FY4 to 28.78 million in FY46. These forecasts and the annual percentage growths are shown in Table 6-1. These forecasts include charter passengers such as flights operated exclusively for FIFO personnel.

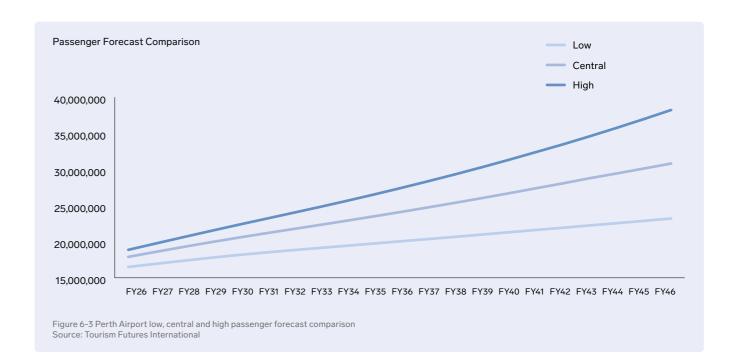
The proportion of international passengers is expected to increase from 30 per cent in FY19 (pre-COVID) to 37 per cent of all passengers by FY46, while the proportion of regional passengers is expected to reduce from 29.4 per cent in FY19 to 21.8 per cent by FY46. The proportion of interstate passengers is projected to remain relatively constant.

This Master Plan is underpinned by FY24 forecasts, ensuring a consistent approach across all planning components.

A comparison of the low, central and high growth rate scenario forecasts for annual passenger volumes is shown in Figure 6-3.

Financial Year 000's passengers	FY24 (actual)	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY36	FY41	FY46
International											
Passengers	4.347	4,868	5,487	5,791	6,090	6,393	6,684	6,948	8,203	9,654	11,381
Annual % change		12.0	12.7	5.5	5.2	5.0	4.5	3.9	3.4	3.3	3.3
Domestic											
Interstate	5,744	6,469	6,889	7,195	7,510	7,798	8,072	8,349	9,765	11,294	12,714
Regional	6,019	5,430	5,524	5,601	5,657	5,714	5,772	5,829	6,123	6,435	6,729
Domestic— total	11,763	11,899	12,414	12,796	13,167	13,512	13,844	14,178	15,888	17,729	19,443
Annual % change		1.2	4.3	3.1	2.9	2.6	2.5	2.4	2.3	2.2	1.9
International a	and Domestic										
Total passengers	16,110	16,767	17,900	18,857	19,257	19,906	20,528	21,126	24,091	27,383	30,824
Annual % change		4.1	6.8	3.8	3.6	3.4	3.1	2.9	2.7	2.6	2.4

 $Table \ 6-1 \ Perth \ Airport \ passenger forecasts (000s \ passengers) \ FY25 \ to \ FY46-central \ scenario \ Source: Tourism \ Futures \ International$



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6.3.5 Aircraft Movement Forecasts

Based on a central growth rate scenario, annual international aircraft movements at Perth Airport are forecast to grow from 21,680 in FY24 to 45,430 in FY46. In the same period, annual domestic aircraft movements (including general

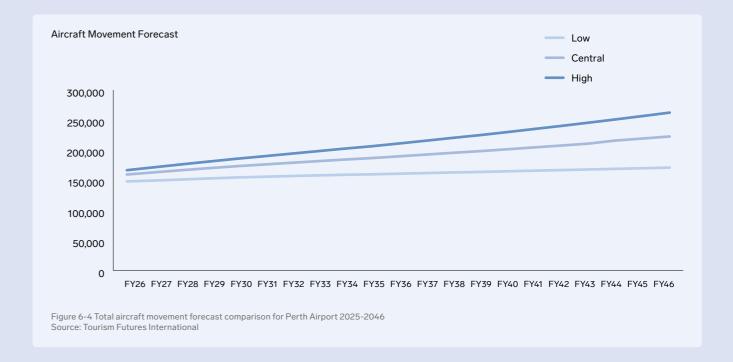
aviation and charter) are forecast to grow from 133,320 in FY24 to 175,420 in FY46. Total annual aircraft movements are forecast to grow from 156,760 in FY24 to 222,790 movements in FY46.

The annual movement forecasts are shown in Table 6-2.

Financial Year	FY24 (actual)	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY36	FY41	FY46
International											
Passenger aircraft	21.7	24.3	27.0	28.2	29.3	30.3	31.3	32.1	35.7	40.3	45.4
Annual % change		12.2%	11.3%	4.2%	3.8%	3.7%	3.2%	2.6%	2.1%	2.5%	2.4%
Domestic											
Interstate	37.5	42.6	45.2	46.7	48.5	50.1	51.6	52.9	59.8	66.8	74.5
Regional	66.6	56.7	58.3	59.1	59.6	60.1	60.7	61.3	64.1	67.1	70.2
Annual % change		-4.6%	4.2%	2.2%	2.2%	2.0%	1.9%	1.7%	1.6%	1.6%	1.6%
Freight											
Movements	1.7	1.5	1.3	1.4	1.4	1.4	1.4	1.5	1.6	1.8	1.9
Annual % change		-16.6%	-8.3%	2.1%	2.2%	2.1%	2.0%	2.1%	1.9%	1.7%	1.8%
General Aviation	on										
Movements	29.1	28.8	29.0	29.2	29.3	29.5	29.6	29.7	30.1	30.4	30.6
Annual change %		-1.3%	0.8%	0.5%	0.5%	0.5%	0.5%	0.4%	0.1%	0.1%	0.2%
Total Moveme	nts										
Movements	156.6	153.9	160.9	164.5	168.1	171.5	174.7	177.6	191.4	206.4	222.8
Annual % change		-1.8%	4.6%	2.3%	2.2%	2.0%	1.9%	1.6%	1.5%	1.6%	1.6%

Table 6-2 Aircraft movement forecasts for Perth Airport FY25 to FY46 (000s movements) Source: Tourism Futures International

The aircraft movement forecasts adopted for Master Plan 2026 are based on a central growth rate scenario. A comparison between the low, central and high scenario forecasts is shown in Figure 6-4.



6.3.6 Air Cargo Forecasts

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Air cargo provides the fastest method of transporting goods over long distances. Given Perth's distance from major trading partners and other Australian major ports, road, rail and sea are not viable options for goods which are time-critical or have a short shelf life.

Air cargo serves regional and remote communities by delivering vital supplies, such as medicines and fresh foods, and is used to deliver heavy machinery and specialised equipment to remote and regional mining sites.

Perth's air cargo market is primarily driven by Western Australia's resource and agri-food industries. Free trade agreements, the expanding airline route networks and the proximity of Perth to the Asian and Middle East markets have benefited the air cargo market.

Major air exports are gold and gold products (which require the enhanced level of security provided by air transport), and agricultural products such as live rock lobsters, fresh meat and fresh fruit which are highly perishable and need to move from harvest to consumption within 48 hours. Imports are typically gold and gold products, machinery and vehicle parts, and general household goods.

Changes to available capacity, trade relationships or market conditions can have profound impacts on air cargo volumes.

The majority of air cargo at Perth Airport is carried in the hold of regular passenger air services and is a factor in the financial viability of scheduled air services. The rate of growth of air cargo therefore has some correlation with the rate of passenger air services growth. The launch of air routes to new destinations provides additional export opportunities.

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6.3.6.1 International Air Freight

There are currently no regular scheduled international freighter services at Perth Airport except for a fortnightly service to Christmas Island and Cocos Island. Ad-hoc dedicated international freighter services have ranged between 88 and 156 per year since 2014.

Perth has experienced a steep decline of outbound cargo since 2020, partly driven by the reduction in aircraft capacity due to cancellation of international flights resulting from the COVID-19 pandemic, as well as the Chinese import ban on a range of Australian perishable exports during the pandemic.

Since early 2023, volumes have begun to recover but remain below peak levels. In FY25, Perth Airport generated 8 per cent of Australia's international inbound and 10 per cent of international outbound air cargo, representing the movement of approximately 102,000 tonnes of international air cargo.

Perth has the highest perishable export share of all Australian airports. Exports by air consist primarily of meat, seafood and fruits, which account for over 80 per cent of export weight. Current meat exports are split equally between pork (destined for Singapore) and lamb/mutton (primarily destined for Qatar, Jordan, the United Arab Emirates, Kuwait and the United States). Seafood exports consist almost entirely of crustacean (lobster) exports to Hong Kong, Vietnam and Taiwan. (Prior to the 2020 import ban on a series of Australian products by China, most lobster exports were destined for China but switched to Hong Kong thereafter.) Other perishable exports consist primarily of berries, avocados and other fruit, to Thailand, Malaysia, Singapore, Japan and Vietnam.

International imports by air consist mostly of machinery and transport equipment, confidential items, cut flowers and

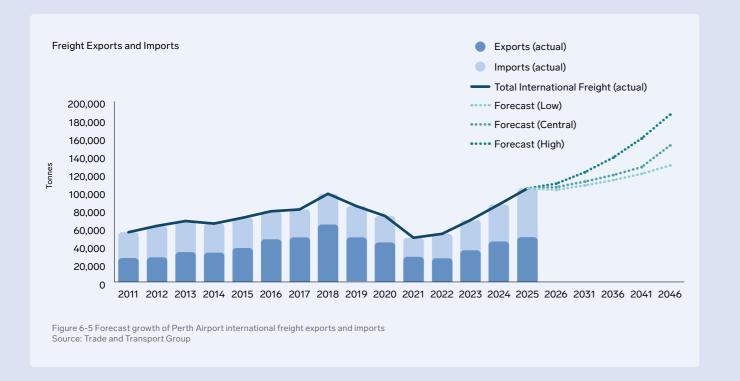
perishables, as well as a mix of other industrial and consumer products. Perth has a higher share of machinery and equipment as a percentage of total air imports, as compared to other Australian states.

The main air import partners for non-perishable cargo are the US, China, Germany, the UK and Finland. Malaysia, Kenya and Ecuador are the primary sources of cut flowers, while the US, New Zealand and Mexico are primary import destinations for certain or out-of-season fruit and vegetables.

Gold Corporation (operating as The Perth Mint) is located on the Perth Airport estate. In FY24, it processed 231.8 tonnes of gold, valued at approximately AUD \$24.94 billion, and 324.6 tonnes of silver, valued at approximately AUD \$401.35 million. A large proportion of these precious metals moved through Perth Airport. The co-location of Gold Corporation at the airport facilitates efficient and secure air freight, which is the preferred method for high-value shipments to the Perth Mint's global client base, making the airport a crucial gateway for the export of Western Australia's considerable precious metal production.

International air cargo is expected to continue to be largely transported on passenger services due to the smaller volumes of freight. International passenger flights returned to pre-COVID levels in 2024, and air cargo capacity is expected to increase with the growth of international services.

Forecasts identifying low, central and high growth scenarios for international air freight are shown in Figure 6-5. While analysis shows that there will continue to be surplus freight capacity on passenger services, some routes, such as Perth-Singapore, are likely to experience less spare freight capacity than other routes.



6.3.6.2 Domestic Air Freight

In FY25, 36,000 tonnes of domestic air freight were handled at Perth Airport, with inbound freight accounting for approximately 70 per cent of that volume.

Dedicated freighter services carry around two-thirds of the domestic freight moved through Perth Airport. The number of dedicated domestic air freight services is driven primarily by overnight express parcel delivery requirements. There are approximately 800 inbound dedicated domestic freighter flights annually at Perth Airport which depart the east coast at night for an early morning arrival into Perth. Qantas (on behalf of Australia Post) accounts for around three-quarters of all domestic flights, with Team Global Express accounting for most of the remainder. Three-quarters of flights come from Melbourne, and most of the balance from Sydney.

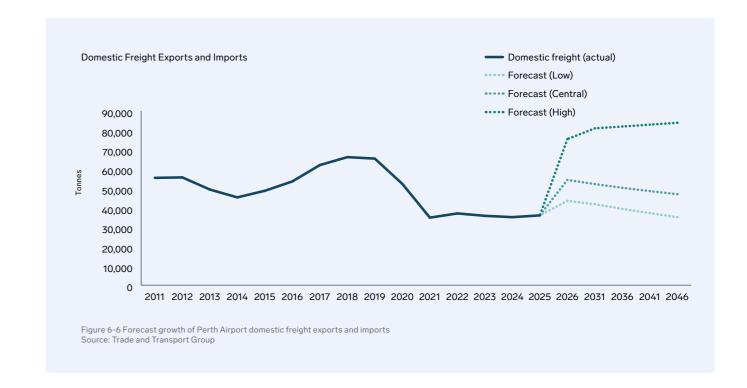
Approximately one-third of total domestic freight is carried on passenger flights.

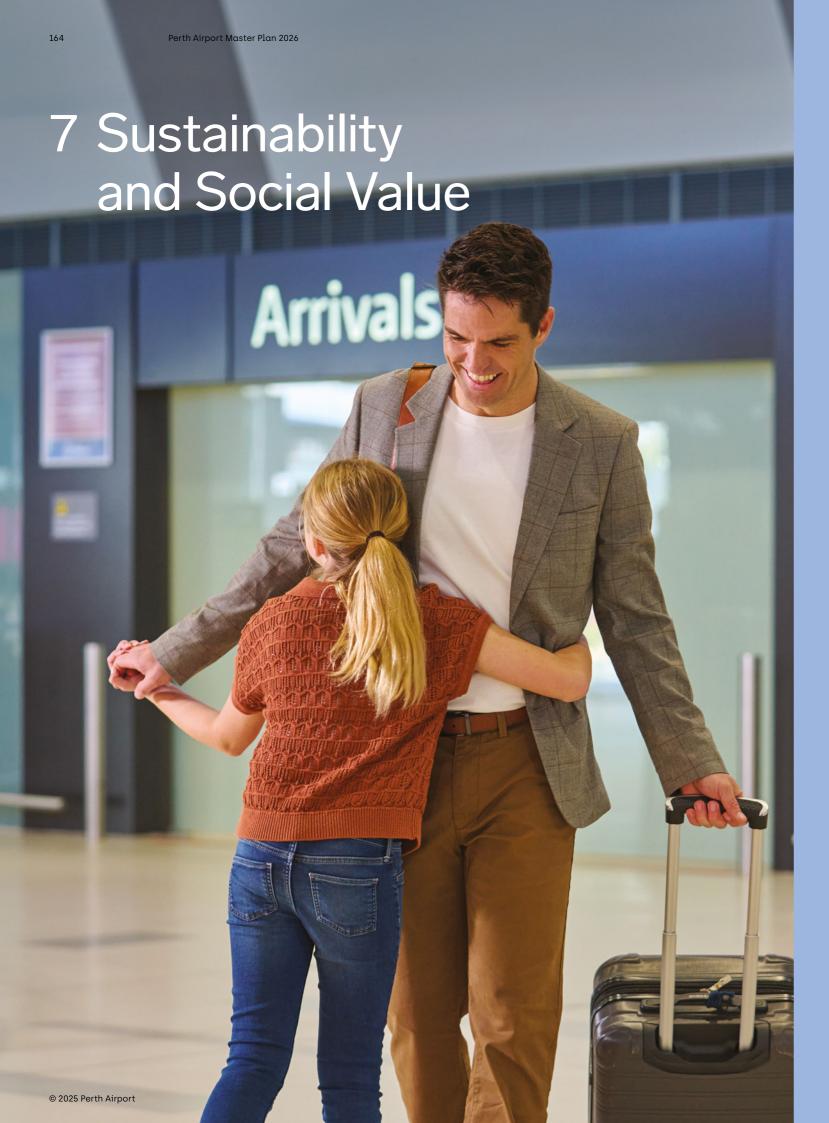
There is sufficient capacity for domestic air freight well into the future. Due to the belly freight capacity that will be available from the growth of domestic passenger services, it is unlikely that there will be a large increase in the frequency of dedicated domestic freighter services.

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The Bureau of Infrastructure and Transport Research Economics (BITRE) publishes long-term forecasts on Australian commercial air passenger and freight activity, including air freight volumes through Perth Airport. The forecasting considers inputs such as Gross Domestic Product, domestic air transport costs (assessed by aviation fuel costs), local airport catchment regional product, and event specific variables.

Research Report 157 (May 2024) forecasts domestic air freight volumes to decline at each of Australia's capital city airports between 2019 and 2050; however, it notes that domestic air freight forecasts have a high degree of uncertainty due to the high degree of variation in historical domestic freight activity. BITRE has forecast domestic air freight volume at Perth Airport in 2046 to range from 33,600 tonnes (low growth) to 84,600 tonnes (high growth), as shown in Figure 6-6.





7.1 Introduction

As one of Western Australia's key infrastructure assets, Perth Airport helps enable economic growth and connectivity while also contributing to broader social and environmental outcomes.

Perth Airport recognises that its long-term success is closely connected to the wellbeing of its employees, the communities surrounding the airport estate and the environment in which it operates.

7.2 Sustainability Framework

Sustainability at Perth Airport means integrating environmental, social and governance considerations to help meet current and future community needs. Perth Airport's long-term vision for sustainability is set out in its Sustainability Framework, which is aligned with ISO 26000 for social responsibility to guide the implementation of effective actions. Perth Airport commits to acting in accordance with the seven principles of social responsibility outlined in ISO 26000:

- accountability—Perth Airport will be accountable for its impacts on society, the economy and the environment
- transparency—Perth Airport will be transparent in its decisions and activities that impact on society and the environment
- ethical behaviour—Perth Airport's behaviour will be based on the values of honesty, equity and integrity
- respect for stakeholder interests—Perth Airport will respect, consider and respond to the interests of its stakeholders
- respect for the rule of law—Perth Airport accepts that respect for the rule of law is mandatory and will comply with legal requirements
- respect for international norms of behaviour— Perth Airport will respect international norms of behaviour, while adhering to the principle of respect for the rule of law, and
- respect for human rights—Perth Airport respects human rights, as set out in the UN Universal Declaration of Human Rights, and recognises both their importance and their universality.



100%

Perth Airport has a 100 per cent GRESB score in 2022, 2023 and 2024.

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7.2.1 Materiality assessment

Perth Airport has conducted a double materiality assessment, evaluating both financial materiality—how sustainability topics impact the airport's value—and impact materiality, focusing on how the airport's operations affect the broader economy, environment, and society.

While a broad range of issues continue to merit consideration and effective management by Perth Airport, it was determined through this materiality assessment process that the impacts, risks, and opportunities in relation to the topics specified in Table 7-1 below are the most material for Perth Airport and have therefore been reflected in the Sustainability Framework as focus areas.

Environment	Social	Governance
Energy & Carbon	Health, Safety and Security	Ethical Business
Contamination Management	Human Rights	IT Security, and Data Protection & Innovation
Biodiversity	Inclusive Access & Services	Corporate Governance & Compliance
Water Sensitivity	Customer Experience	Risk Management & Resilience
Waste Management	Indigenous & Community Engagement	Climate Change Mitigation & Resilience
	Sustainable Design & Development	Stakeholder Engagement
	Aircraft Noise	
	Organisational Culture	
	Diversity, Equity & Inclusion	
	Economic Impact	

Table 7-1 Perth Airport Materiality Assessment Source: Perth Airport

7.3 Social Value Strategy

To guide how its sustainability vision is delivered in practice, Perth Airport has developed a Social Value Strategy that provides an approach to understanding, enhancing and measuring its impacts. It is structured around three interconnected themes:

- People: Fostering a safe, inclusive, and adaptable workplace
- Local Communities: Building community trust
- Environment: Supporting community wellbeing and a healthier environment

The objectives and targets outlined in this section represent Perth Airport's current key focus areas under the Strategy that will be tracked. Informed by ongoing dialogue with Perth Airport's stakeholders, this approach will be refined over time as community expectations, regulatory requirements, and industry practices continue to evolve.

The objectives and targets have been considered in the planning for Perth Airport and are described throughout this Master Plan 2026.



Fostering a safe, inclusive, and adaptable workplace that drives performance and supports employee wellbeing, growth, and resilience.

Social Value Objective



Foster a Safe, High Performing, and Adaptable Culture.



Build a Diverse, Inclusive, Future-Ready Workforce.



Develop Purposeful and Capable Leaders.

Key Targets



Progressing and sustaining a 40:40:20 gender diversity ratio across all workforce levels at Perth Airport.



Increasing employment opportunities for people with a lived experience of disability and Aboriginal and Torres Strait Islander people.



Inclusive Employer Certification in partnership with Diversity Council Australia. Perth Airport Master Plan 2026 Part B Section 7: Sustainability and Social Value



Building community trust through transparent engagement, local economic participation, accessibility, respectful partnerships, and infrastructure and operations that support community wellbeing and resilience.

Social Value Objective



Engage Communities and Partner with Aboriginal and Torres Strait Islander people.



Support Local Economies through Responsible Procurement and Job Creation.



Deliver Inclusive, Sustainable and Resilient Infrastructure and Operations.

Key Targets



Progress against Reconciliation Action Plan (RAP) targets.



Sustainability certifications for relevant, new development projects. What is 'relevant' is determined on a case-by-case basis but generally applies to all new development projects with costs exceeding \$10 million.



Work with stakeholders to identify opportunities that mitigate aircraft noise impacts.



Supporting community wellbeing and a healthier environment by advancing decarbonisation, minimising biodiversity impacts, enhancing resource recovery, conserving water, and managing environmental and climate-related risks.

Social Value Objective



Advance Decarbonisation and Climate Resilience.

Support Biodiversity and Habitat Management.

Enhance Resource Recovery and Water Sensitivity.

Key Targets



Net Zero Perth Airport-only Scope 1 and Scope 2 GHG emissions by FY32. This includes Scope 1 & 2 emissions from the facilities under the operational control of PAPL as defined by the National Greenhouse and Energy Reporting Act 2007 (Cth). These emissions exclude emissions from the operation of facilities over which tenants have operational control, as defined by the National Greenhouse and Energy Reporting Act 2007 (Cth).



PAPL scheme water use (total) to remain below FY19 levels at FY30 despite expansion strategy (excl. Tenants). This target covers scheme water used by PAPL-controlled sites and operations, including terminals, the corporate office building, landscaping, and construction, and excludes tenants water usage across the Perth Airport estate.



Airport Carbon
Accreditation (ACA) Level
4 Accreditation by 2026.



≋

50% renewable energy across all of Perth Airport Estate by 2030. Includes the aggregate of all energy used within the Perth Airport estate and connected to the Perth Airport network, including Perth Airport, tenants and operators.



Reduce biodiversity impacts as far as practicable in the planning and design phase of all future developments; where practicable, explore options to adopt biodiversity offsetting arrangements which exceed minimum statutory requirements; and minimise impacts to Munday Swamp Wetland.



75% resource recovery rate of operational waste by FY30. 80% resource recovery of construction & demolition waste by FY30. This target covers activities within PAPL's direct operational control. This includes PAPL's operations as well as the operations of tenants where PAPL has the majority operational control over the building (i.e. within Terminals).



Part B Section 8: Connection to Country

8 Connection to Country

Perth Airport is on the traditional lands of the Whadjuk people, a dialect group of the Noongar Nation which encompassed the entire south-western region of Western Australia. The Whadjuk people have a deep and continuing connection to the land and hold significant cultural and spiritual ties to their ancestral Country.

8.1 Introduction

Connection to Country is central to the identity, culture, spirituality, and well-being of the Whadjuk people. It represents far more than just a physical connection to land — it encompasses a deep spiritual, cultural, and ancestral relationship with the land, waters, skies, and all living things.

The Environment Strategy (Part C of Master Plan 2026) provides details on the management of heritage sites on the estate. This section sets out Perth Airport's commitment to ongoing and future partnerships with the Whadjuk people to protect, celebrate, and deepen their enduring Connection to Country

8.2 Cultural Heritage Landscape

A cultural landscape is a geographic area that has been shaped by the interaction of people with their environment over time. It encompasses both natural and cultural elements, including journey routes, and other features that reflect human activity, beliefs and values. Tangible and intangible heritage values create a rich narrative reflecting the history, traditions, and ways of life of the people associated with the cultural landscape.

The cultural landscape of Perth Airport is located on the Swan Coastal Plain between the Darling Scarp and the Swan River and reflects the enduring relationship between Aboriginal people and their environment. It is particularly significant for its Aboriginal heritage, which includes mythological importance and symbolic meanings. It is also highly valued for its natural beauty, offering insights into the use and management of natural resources and sustainable land use practices. The estate showcases evidence of continuous occupation throughout various periods of climate change, as well as indications of technological development, while also revealing signs of human modification and intervention.

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8.3 Perth Airport Cultural Map

For Noongar people, cross cultural maps present a visual interpretation of a living land. Cultural landscapes offer an Indigenous worldview which presents an opportunity to consider the principles of 'caring for country' in a non-Indigenous environment.

A Cultural Map of Perth Airport has been developed to identify and acknowledge the airport's location on Whadjuk Noongar land, and that beneath the urban landscape the land has a story to tell. It provides two-way learning that drives Perth Airport going forward, particularly for future development.

The Perth Airport Cultural Map, Boodjar Waangki-ny, was developed through the storytelling of Whadjuk Noongar people together with findings of archaeological surveys undertaken on the estate, and other detailed research. The archaeology of sites and research findings tell the stories about the places where Noongar people camped, held their ceremonies and corroborees, and accessed food.

The Perth Airport Cultural Map is shown in Figure 10-1. It aims to impart an accurate version of the narrative by interpreting and presenting those cultural elements that are the most important depictions of Noongar Culture. The key themes for the Cultural Map include camp sites (represented by orange dots), homes or camps (represented by background circles), artefact scatters (represented by small yellow fires), Munday Swamp, turtle hunting, eating yorn (bobtails), Allawah Grove, bidi (tracks), family, culture, as well as the current built environment of the airport estate.

The map recognises that the Perth Airport estate is situated close to the Derbarl Yerrigan (the Swan River), which was carved through the land by the Waugyl (also written Waugal, Waagal and other variants), the sacred dreaming serpent. The Waugyl is still embodied in the river, and watches over the Custodians of the land while it snoozes in the curves and crevices, flowing under and over the land. The Waugyl, and thousands of years of caring for the land, ties the Whadjuk Noongar people to this country, and the network of places where they lived, hunted and nurtured Country on and around the Perth Airport estate is a vital part of that ongoing connection.

The Cultural Map is included within the Perth Airport spatial data system used to inform planning and operations across the estate.

8.4 Heritage Site Register

There are a number of Aboriginal heritage sites, artefact scatters and areas of cultural significance from ancient, historical and contemporary times within the boundaries of the Perth Airport estate that are listed on the Western Australian Government's Aboriginal Cultural Heritage Inquiry System. Further information on the management and protection of these sites can be found in Part C - Environment Strategy (Section 11 - Land, Air and Biodiversity).

8.5 Heritage Strategy

Perth Airport is working to the following five principles as part of a broader strategy:



Cultural landscapes offer an Indigenous worldview which presents an opportunity to consider the principles of 'caring for country' in a non-Indigenous environment.



Figure 8-1 Perth Airport Cross Cultural Map, Boodjar Waangki-ny Source: Karrda Pty Ltd



Perth Airport is committed to ongoing engagement with the Traditional Owners and Custodians in a manner that recognises the importance of the area to the Noongar community and acknowledges the strong link that exists with the land on which Perth Airport is located.

8.5.1 Partnership, Engagement, Consultation, Collaboration and Consent

Perth Airport is committed to ongoing engagement with the Traditional Owners and Custodians in a manner that recognises the importance of the area to the Noongar community and acknowledges the strong link that exists with the land on which Perth Airport is located.

The Perth Airport estate is situated within the South West Native Title Settlement (the Settlement). The Settlement is made up of six individual Indigenous Land Use Agreements (ILUAs) with the Whadjuk People ILUA Agreement Area, relevant to the Perth Airport estate.

The Whadjuk Aboriginal Corporation was established under the Whadjuk People ILUA and is the mandated Native Title Party with which Perth Airport must undertake consultation on Aboriginal cultural heritage matters. The Whadjuk Aboriginal Corporation's Cultural Advice Committee is made up of Elders who consider matters relevant to Culture, and make decisions to promote and protect our cultural interests. Perth Airport engages with the Whadjuk Aboriginal Corporation and its Cultural Advice Committee regularly, working together to provide economic and commercial opportunities for the community, and support the Whadjuk people in practicing and promoting their enduring Culture.

In 2009, Perth Airport entered into a partnership agreement with Traditional Owners and Custodians with a longstanding association with the airport estate. This agreement is referred to as the Partnership Agreement Group (the PAG).

The PAG now consists of representatives of seven Noongar families and is a high-level steering group that aims to create a shared vision for reconciliation, focused on preserving Aboriginal heritage and promoting the advancement of Aboriginal people within the airport estate.

Perth Airport proactively engages with the Whadjuk Aboriginal Corporation, the PAG and the wider Noongar community in relation to:

- · projects and developments on the estate
- cultural-awareness activities for heritage
- · ongoing compliance with heritage legislation
- facilitating economic opportunities, such as employment of Aboriginal people in cultural heritage awareness and land management activities
- · recognition of Country
- sponsorship of projects that benefit the Aboriginal community, and
- land management, and continued access to heritage places for cultural activities.

Perth Airport is committed to managing Aboriginal sites in a culturally sensitive manner and in accordance with relevant legislation. Heritage assessments and consultation with the PAG and other cultural knowledge holders ensures that potential impacts to Aboriginal heritage values from development and ongoing operation of the airport are considered, managed and mitigated where possible. The results obtained from consultations, heritage assessments and subsequent archaeological and ethnographic investigations continue to be used by Perth Airport to inform the short and long-term planning, operation and development of the estate.

At the request of the PAG, a security fence around Munday Swamp was constructed in 2021 to provide security for the heritage site and protection of fauna, with pedestrian gates incorporated into the design to allow unhindered access to the site by Traditional Owners and Custodians.

Five-year initiative: Engage with Aboriginal stakeholders to develop cultural heritage management plans and incorporate cultural elements into new developments and projects.

8.5.2 Protection and Management of Heritage

As the Traditional Owners and Custodians of the land, the Noongar people maintain a strong interest in the airport land and its management. Activities on the Perth Airport estate have the potential to impact Aboriginal heritage through ground disturbance that may either directly or indirectly impact on known and unknown sites, or through altering natural values by the removal or disturbance of wetlands and vegetation, that may impact the Aboriginal community's connection to the land.

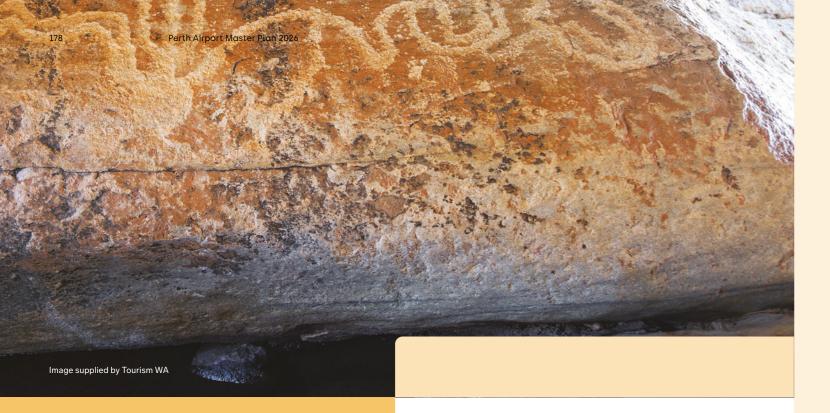
Aboriginal cultural heritage management and engagement at Perth Airport are guided by regulatory approval documents, internal policies, management plans and guidelines. These documents outline the management of cultural heritage in the preservation, management and promotion of cultural landscape, including heritage sites, artefacts, and traditions in a culturally appropriate manner. Some key documents include:

- Mapping Boodjar Waangki-ny Cultural Map—documents and visually maps the Perth Airport estate in a way that interprets and presents the cultural elements that are the most important depictions of Noongar Culture
- Reconciliation Action Plan—outlines actions for achieving Perth Airport's vision for reconciliation and providing tangible and substantive benefits for Aboriginal peoples
- Perth Airport Sustainability Framework and Social Value Strategy—captures strategies and action plans for Aboriginal heritage management and engagement which Perth Airport has in place, to make a meaningful social and environmental contribution to the people of Western Australia, and
- Perth Airport Master Plan 2026 (this document)—guides decision-making across the Perth Airport estate and includes a five-year action plan for cultural heritage management.

Tenant and contractor Environment Management Plans (described in Section 11.2.16) are required to detail the measures that will be implemented for protecting Aboriginal and non-indigenous heritage during specific development works and/or throughout the operation of the tenant facility. This includes plans for issuing a Stop Work Order should any suspected cultural material or skeletal remains be found during works.

In consultation and with advice from the PAG, specialist design consultants completed multiple re-designs of the infrastructure and taxiways required to support Perth's new runway to better protect Munday Swamp and other heritage sites, including the avoidance of impact to heritage site Place ID 3896 Munday Swamp: Poison Gully.

Five-year initiative: Consult and collaborate with Whadjuk Traditional Owners and Custodians to improve heritage and land management on the estate.



Perth Airport is committed to showcasing, celebrating and reflecting the deep historical, cultural and spiritual ties that First Nations Australians have to the lands and waters.



8.5.3 Artefact Conservation

The airport estate has been the subject of ongoing archaeological and ethnographic investigation since the 1980s. Artefacts have been recovered from the estate, mostly from the surface but also below ground. The artefacts recovered include a wide range of materials from which stone tools were made including blades, flakes, scrapers and grinding stones.

More recently, an Aboriginal Cultural Heritage Management Plan was developed in consultation with the PAG for the construction of the new runway. The plan identifies the heritage values of the project area and guides the actions of Perth Airport to mitigate impact to heritage values, including undertaking large-scale excavation and the collection and curation of artefacts identified in monitoring or in salvage excavation.

Excavation and salvage of a sample of the three known high-potential areas within the new runway project area, was conducted in 2021 and 2022, with more than 200 pieces of cultural material collected. The artefacts were found at the surface and continued down to a depth of around two metres. Optically Stimulated Luminescence dating of the soil from the digs indicates the artefacts accumulated over a period of 41,000 years, with these sites representing the oldest sites known in Perth. At the request of Traditional Owners and Custodians, all cultural material salvaged during the construction of the new runway is to be assessed by an archaeologist of standing in the Noongar community; the artefacts will be available for display within Perth Airport buildings and terminals.

In consultation with the PAG, an artefact display was installed in the Alpha office building (located in the Airport West precinct) to showcase some of the artefacts found during the initial excavation and salvage activities for the new runway.

rt B Section 8: Connection to Country

8.5.4 Cultural Awareness, Respect and Recognition

Perth Airport is committed to showcasing, celebrating and reflecting the deep historical, cultural and spiritual ties that First Nations Australians have to the lands and waters, with a range of initiatives already implemented to increase the visibility of the Noongar Whadjuk language and culture throughout the airport terminals and wider estate.

NAIDOC Week celebrations are held annually at Perth Airport, including Welcome to Country ceremonies, dancing, art exhibitions and cultural activities for staff. Cultural ceremonies are also included for other key events at the airport.

In consultation with Traditional Owners and Custodians, Welcome to Country messages in Noongar and English have been installed in all airport terminals. Aboriginal art is also displayed throughout the terminals and Perth Airport office buildings, and the airport regularly purchases pieces to add to the corporate collection.

Completed in October 2020, the pedestrian skybridge connecting the Airport Central train station to the T1 International forecourt was named Worl Bidi (Worl meaning sky, and bidi meaning path) by the PAG. The design incorporated a unique soundscape to reflect the significance of the Swan River and Whadjuk Country to local Noongar families. The soundscape offers a short audio journey through the Swan River region, moving through areas of the land and waters at different times of the day and night. It takes listeners from one end of the Swan River to the other over the course of a day, featuring differing weather conditions, and a Traditional Custodian sharing stories and viewpoints from a cultural perspective. At each end of the Worl Bidi is a striking mural, painted by Whadjuk Baladong artist Jade Dolman, that links to the soundscape. The travelators also feature artwork by Noongar artist Crispian Warrell. This work tells of travelling along the Swan River, and of the flora and fauna within Country.

As a show of respect for Aboriginal and Torres Strait Islander people across the almost 60 destinations Perth Airport serves around Australia, and to educate passengers and airport staff on the history and rich Indigenous Culture of the places they are visiting, in 2021 Perth Airport became the first major airport in Australia to recognise the Traditional Owners and Custodians of each flight destination. Flight information display screens and boarding gates throughout T1 Domestic, T3 and T4, rotate between the commonly used name of the destination and the name of the language group for the Traditional Owners and Custodians of that place.

Illuminated kaya (Noongar for hello) welcome signs have been installed on Dunreath Drive and Airport Drive. The six-metre-high signs light up to reflect the six seasons of the Noongar calendar and are adorned with Indigenous symbols that reflect the landscape and meaning of Wadjak Boodja.

The Alpha office building has incorporated direct recognition of the PAG through allocating PAG member family names to key meeting rooms.

Five-year initiative: Incorporate cultural awareness on the Perth Airport estate.

8.5.5 Building Capacity, Prosperity and Selfdetermination in Caring for Country

By fostering community-led initiatives that promote sustainable land management practices, Perth Airport aims to empower Aboriginal people to take active roles in preserving their cultural heritage and enhancing ecological health. This approach involves collaborative partnerships with Aboriginal organisations, government agencies, community groups, and educational institutions to provide training and resources for initiatives, supporting both environmental stewardship and economic development. Through these efforts to unite nature with culture, Perth Airport seeks to create pathways for Aboriginal people to care for their ancestral lands, leading to stronger, more resilient communities equipped to shape their own futures.

Aboriginal businesses have been engaged to undertake ongoing land management activities within heritage areas such as Munday Swamp and Redcliffe Wetland.

Five-year initiative: Continue to undertake land management activities to build and strengthen relationships and benefit Noongar communities.

8.5.6 Compliance And Legislative Approvals

Western Australia recognises Aboriginal cultural sites and objects of significance and makes specific provision for traditional use through the Aboriginal Heritage Act 1972 (WA) (AH Act). The AH Act protects and manages Aboriginal Heritage by requiring approval for activities that may impact or cause harm to an Aboriginal site.

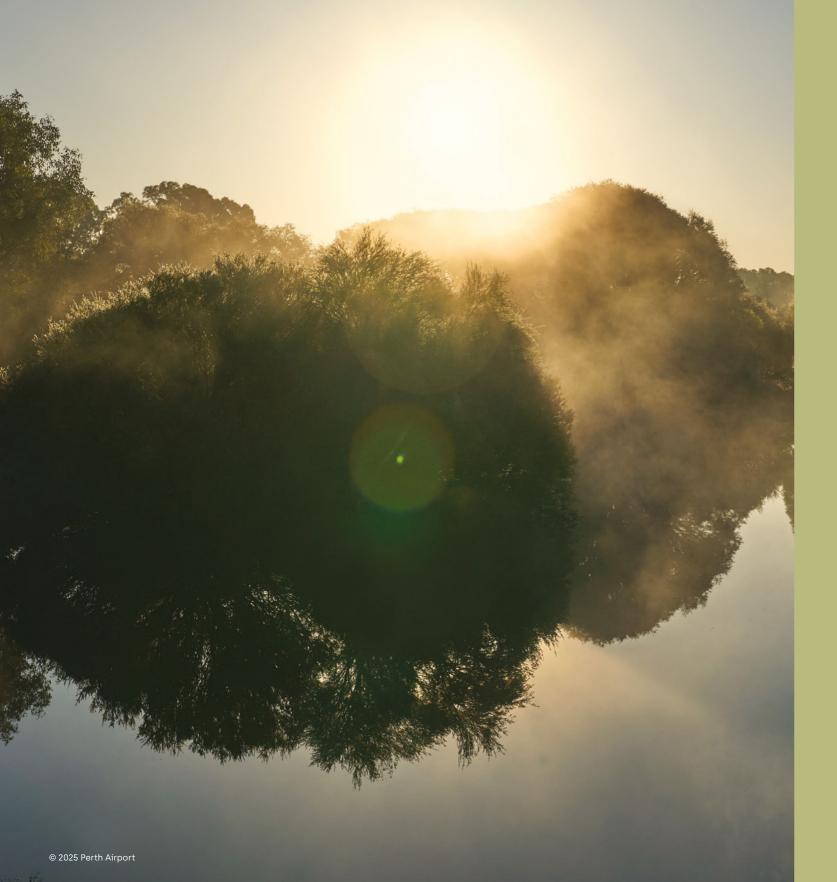
Perth Airport personnel, contractors and tenants involved in ground disturbance activities within registered Aboriginal sites are obliged to comply with the AH Act. Further information on the management and protection of these sites can be found in Part C - Environment Strategy (Section 11 - Land, Air and Biodiversity)



Environment Strategy

- 9 Environmental Management
- 10 Climate Change and Resource Use
- 11 Land, Air and Biodiversity

9 Environmental Management



9.1 Introduction

The Environment Strategy provides the strategic direction for Perth Airport's environmental management and performance. It details the areas of environmental and sustainability focus, and outlines actions, improvements and initiatives in a five-year action plan. In accordance with the Airports Act requirements, it includes assessment of, and strategies for, the management of environmental matters over the next five years.

Perth Airport's Environment Strategy comprises:

- Section 9—Environment Management (this section)
- Section 10—Climate Change and Resource Use, and
- Section 11—Land, Air and Biodiversity.

Perth Airport recognises the importance of protecting and enhancing the quality of the environment and has put in place responsible environmental management strategies to minimise and mitigate the impact of airport operations and development activities.

The Environment Strategy is Perth Airport's key document that provides the strategic direction for the Perth Airport in terms of environmental management and performance.

In accordance with the requirements of the Airports Act, the strategy:

- specifies the key objective/s for environmental management
- identifies the areas considered to be environmentally significant
- outlines the framework for effective environmental management, including assessment and management of potential environmental issues, and
- provides the program of actions to be implemented over the next five years.



The Environment Strategy is Perth Airport's key document that provides the strategic direction for the Perth Airport in terms of environmental management and performance.

9.1.1 Site Overview

The Perth Airport estate covers an area of 2,105 hectares and is situated on the Swan Coastal Plain at the base of the Darling Escarpment. The land is owned by the Commonwealth of Australia and has been operated and managed by Perth Airport Pty Ltd under a 50-year (plus 49-year extension option) lease arrangement since 1997.

The airport estate forms part of the traditional network of communication routes, meeting places and camping sites of the Whadjuk Noongar people. There are registered Aboriginal heritage sites present on the estate, including Munday Swamp.

Early European occupation of the land within the vicinity of the Perth Airport estate dates to the mid-late 1800s. The land was being used primarily as a golf course and market garden when it was acquired by the Federal Government in 1938 and developed as an airport. Perth Airport Master Plan 2026 Part C Section 9: Environmental Management

9.1.2 Legislative Context

Environmental management of the Perth Airport estate is controlled through a Commonwealth legislative framework that includes the:

- Airports Act 1996
- Airports Regulations 2024
- Airports (Environment Protection) Regulations 1997 (AEP Regulations)
- Australian Heritage Council Act 2003
- Aboriginal and Torres Strait Islander Heritage Protection Act 1984
- Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
- Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy
- Environmental Protection and Biodiversity Conservation Regulations 2000, and
- Native Title Act 1993.

The Australian Government's Department of Infrastructure, Regional Development, Communications, Sport and the Arts (DITRDCSA) is responsible for administering the Airports Act and associated regulations. DITRDCSA appoints an Airport Building Controller and an Airport Environment Officer to oversee the implementation of the Airports Act and associated regulations at Perth Airport.

Because Perth Airport is located on Commonwealth land, State legislation will generally only apply for activities where Commonwealth legislation does not exist. In the case of matters absent from existing Commonwealth legislation, the following Western Australian legislation applies:

- Aboriginal Heritage Act 1972
- Bush Fires Act 1954
- Dampier to Bunbury Pipeline Act 1997
- Dangerous Goods Act 2004
- Dangerous Goods Safety Regulations 2007, and
- Heritage Act 2018.

To provide compatible land uses and manage potential off-site impacts, Perth Airport has due regard for land and biodiversity requirements within the local and state planning framework schemes.

Perth Airport also considers various State environmental legislation, policy and guidance for the assessment of environmental aspects on the estate and their management.

9.1.3 Stakeholder Consultation

The preparation of this Environment Strategy and ongoing effective environmental and heritage management of the airport estate, is dependent on productive interactions with a wide range of stakeholders.

Environmental topics are discussed by the Perth Airport Consultative Environment and Sustainability (ACES) group which includes representatives from Federal, State and local governments as well as conservation groups, catchment groups and community members. The ACES meetings provide opportunities to facilitate improved environmental outcomes and learnings across the estate. The group meets quarterly.

Perth Airport is also establishing a new quarterly forum with its tenants to focus on operational matters. This forum is designed to provide tenants with a more effective platform for discussions around environmental management and sustainability, allowing the ACES meetings to concentrate more on community-focused matters. Cultural heritage management across the estate is guided by:

- the Perth Airport Aboriginal Partnership Agreement Group (described in Section 8.5), which was established in 2009 to facilitate active engagement between Perth Airport, Traditional Custodians and other Aboriginal Elders, and
- the native title holders of the Perth metropolitan regions, the Whadjuk Aboriginal Corporation.

Perth Airport also undertakes ongoing consultation with Federal and State conservation bodies regarding methodology and outcomes of regular biodiversity surveys and assessments, environmental offsets, and progress and reporting on Environment Strategy initiatives.

9.2 Environmental Management Approach

Perth Airport adopts a risk-based approach to environmental management and implements this through the Environmental Management System (EMS), which is aligned to the requirements of the international standard for environmental management, ISO 14001:2015, and strategic policy and planning documents.

Key components of the EMS include the following elements:

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- Environment Policy—outlines Perth Airport's intentions, commitments and principles in relation to environmental management
- Sustainability Policy—outlines Perth Airport's commitment to sustainable operations and business decisions and the implementation of sustainable development principles
- Sustainability Framework—describes the overarching strategic direction for operating in a sustainable manner to deliver positive outcomes for today and the future and make meaningful social, economic and environmental contributions to the people of Western Australia
- Heritage Strategy—outlines Perth Airport's intentions and principles for Aboriginal heritage management, and
- continuous improvement, including monitoring, reporting and reviews.

The EMS's intended outcomes are to:

- manage the environmental values of the airport estate
- achieve compliance with all applicable legal and other requirements
- understand and manage risks to the environment
- manage Aboriginal culture and heritage within the estate
- facilitate integration of environmental management into Perth Airport's business management systems, and
- facilitate the communication and awareness of environmental information and processes through a documented framework.

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9.2.1 Responsibilities

Environmental and heritage management are the responsibility of Perth Airport, airline partners, business partners, tenants, contractors and consultants. The key organisations with roles and responsibilities relating to environmental and heritage management of the Perth Airport estate are shown in Table 9-1.

Environmental Roles and Responsibilities	
Perth Airport Board of Directors	Oversee the environmental management of Perth Airport Ensure compliance with environmental regulatory requirements Set environmental and sustainability targets
Perth Airport executive staff	Ensure compliance with environmental regulatory requirements Ensure the necessary resources and processes are in place for implementation of required environmental management measures Ensure development aligns with the approved Master Plan and Environment Strategy
Perth Airport environment and heritage staff	Implement the Environment Management System Ensure compliance with environmental regulatory requirements Ensure the integration of environmental requirements into airport development and operation Identify and implement strategies to manage environmental issues Review and approve tenant and contractor Environmental Management Plans Report and investigate environmental hazards, incidents and stakeholder feedback Provide environmental advice and training to staff, contractors and other airport users Undertake tenant environmental inspections and audits Convene and administer the Perth Airport Consultative Environment and Sustainability Group Convene and administer the Perth Airport Partnership Agreement Group
Perth Airport staff	Comply with Perth Airport environmental management policies, plans and procedures Report environmental incidents Attend environmental training relevant to their role and responsibilities
Airport tenants, operators and contractors	Comply with applicable environmental legislation and Perth Airport plans, procedures and guidelines Report environmental incidents and hazards to Perth Airport Develop and implement construction and/or operational Environmental Management Plans when required Where required, provide an Annual Environment Report to Perth Airport
Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts (DTRDCSA)	Administer the Airports Act, Airports Regulations 2024 and Airports (Environment Protection Regulations 1997 Appoint an Airport Environment Officer
Airport Environment Officer	Ensure management of the airport environment is in accordance with the Airports Act and associated regulations Conduct site inspections, monitoring and reporting Review development and building applications to ensure that environmental matters are appropriately managed
Federal Minister for Infrastructure	Decide whether to approve or refuse the Perth Airport master plan, including consideration of the environment strategy
Federal Minister for the Environment	Provide feedback on environmental aspects of Major Development Plans in accordance with the Airports Act Make decisions on airport projects referred under the EPBC Act

Table 9-1 Environmental management roles and responsibilities

9.2.2 Tenant and Airport Operators

Perth Airport's tenants and companies conducting activities on the estate must comply with relevant legislation, lease agreements, and Perth Airport's Environment Strategy.

Under the AEP Regulations, all tenants and operators at the airport have a general duty to avoid polluting and to take all reasonable and practicable measures to prevent polluting or minimise where prevention is not possible. This must take into account the sensitivity of the receiving environment, the nature of the harm the pollution could cause, and the technical knowledge available to prevent or minimise pollution.

The AEP Regulations require tenants to establish and maintain appropriate monitoring systems to assess the environmental consequences of their activities, and report monitoring results to Perth Airport.

Tenants considered to pose a risk to the environment are required to conduct their activities in accordance with an approved Environment Management Plan (EMP). An EMP provides an assessment of the potential environmental impacts and the mitigation measures of a tenant's operations, monitoring, reporting and corrective actions to be put in place to manage the identified risks. The EMP is required to comply with environmental legislation and standards and be approved by the General Manager Approvals, Environment and Heritage (or equivalent) for Perth Airport prior to the tenant commencing operations.

All tenants and operators at Perth Airport have a general duty to avoid polluting and must take all reasonable and practicable measures to prevent or minimise environmental harm.

All EMPs must address the requirements of Federal and State Government guidelines, where applicable, as well as the documents published on the Perth Airport website, which are available to all tenants and contractors. These are further detailed in Section 9.2.4. Depending on the scope of tenant activities and the potential environmental risks identified, tenant monitoring activities will be required for surface-water and groundwater, soil, dust, air quality, and noise and vibration, with results regularly reported back to Perth Airport.

All tenants with an EMP in place are required to submit an annual environment report to Perth Airport that provides information on matters such as resource (energy, water, groundwater abstraction and fuel) consumption, waste generation, emissions, and results of any environmental monitoring.

Site environmental management is also addressed in sub-leases between Perth Airport and its tenants. Perth Airport classifies its tenants based on their environmental risk. The level of risk determines the frequency the tenant is audited by Perth Airport. This level of risk is regularly reviewed based on the tenant performance and their operations.



9.2.3 Contractors Contractors conducting activities at Perth Airport are expected to comply with this Environment Strategy, the Airports Act and the AEP Regulations. Contractors carrying out construction projects that have been assessed to have an impact on the

environment are required to develop and implement a construction EMP. For projects or works that carry an increased environmental risk, Perth Airport may also require the development of specific sub-plans. An EMP and any sub-plans must be reviewed and approved by Perth Airport prior to works commencing. This review will include compliance with Perth Airport's PFAS Management Framework.

9.2.4 Tenant and Contractor Guidelines

Perth Airport has developed a range of documents to provide guidance for tenants and contractors about specific environmental requirements for their activities on the estate. These documents are published on the Perth Airport extranet site, and include:

- Design and Technical Requirements: suite of guidance documents that detail the various matters to be identified and assessed in the design of new developments
- Environment Requirements Manual: outlines key environmental management requirements for planning, design, construction and operation phases
- guidelines for developing EMPs and Annual **Environment Reports**
- procedures for activities such as vegetation clearing, stockpiling and fill management, and
- permit application forms for activities such as fill use, clearing and pruning, and dewatering.

Perth Airport also provides an online Interactive Spatial Hub to provide contractors, tenants and consultants with access to ArcGIS infrastructure maps for the airport estate, including water and drainage infrastructure, flora, wetlands, and Aboriginal heritage.

9.2.5 Sources of Environmental Impact

The Perth Airport estate is a unique and dynamic setting operating 24 hours a day, seven days a week, with a wide range of aviation and nonaviation activities which have the potential to impact on the environment.

Potential sources of impact are shown in Table 9-2.

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Part C Section 9: Environmental Management

Activities with Potential Environmental Impact

Aviation Aircraft operations Aircraft painting Aircraft refuelling Aircraft waste Engine ground running and idling Firefighting operations and training General aviation maintenance, such as spray painting and paint stripping, workshop activities and cleaning using organic solvents Inflight catering Maintenance of aircraft, vehicles, mechanical plant and electrical equipment Runway, taxiway and apron maintenance Washing of aircraft, vehicles and equipment Wildlife hazard control Construction Construction of buildings, roads, runways, taxiways, aprons, car parks, etc. Demolition works Fuel storage and supply Importation and placing of fill material Land clearing, earthworks and dewatering Landscaping Services infrastructure installation Vehicle wash facilities Vehicle and equipment use Waste generation and disposal Weed and pest control Bush, building and equipment fires Operations

Equipment use and maintenance

Fuel storage and supply

Road maintenance

Manufacturing, distribution and industrial activities conducted by tenants

Services (electricity, water, gas, wastewater) maintenance

Sewerage leaks and spills

Vehicle use, parking, maintenance, refuelling and washing

Historical Activities

Aircraft maintenance

Aircraft hangar fire suppression systems

Firefighting operations and training activities

Fuel storage and supply

Hangar foam fire suppression systems

Herbicide and pesticide use

Historical land uses

Importation of fill

Landfill

Table 9-2 Sources of environmental impact at Perth Airport Source: Perth Airport

9.2.6 Application of the EMS

The EMS incorporates five key management processes as follows:

9.2.6.1 Strategic Planning

Perth Airport's overall commitments and approach to environment are defined in the Environment Policy. The EMS contains strategic-level objectives for environmental management of the estate.

9.2.6.2 Operational Planning

Operational planning includes environmental aspect and risk identification and assessment, incident management and emergency preparedness and response.

9.2.6.3 Implementation

Implementation of the EMS is achieved through defined environmental responsibilities, training and awareness, and communication.

9.2.6.4 Monitoring, Auditing and Reporting

A wide range of monitoring, auditing and reporting processes are in place to satisfy Commonwealth and State regulatory requirements, and to measure the extent to which Perth Airport's environment objectives are being met. Processes include:

- auditing—every EMP for either construction or tenant operational phases, is assessed to ensure Perth Airport's environmental and sustainability objectives and requirements are maintained for all works on the airport estate
- environmental monitoring—monitoring undertaken for flora and fauna, surface and ground water, contaminated sites and ground-based noise
- Annual Environment Report—Perth Airport submits an annual report to DITRDCSA
- tenant management activities—tenants with an EMP are required to submit an Annual Environment Report to Perth Airport within 30 days of the end of the financial year
- reporting—Perth Airport reports as required to the National Pollution Inventory, National Greenhouse and Energy Reporting Scheme, Water Corporation's Water Business Program, and the Australian Bureau of Statistics Environment Indicators Survey
- environmental and heritage incident reporting and investigation
- collection and collation of environmental incident and hazardous material spill data and reporting to the Airport Environment Officer, and
- management of the Environmental Site Register.

Table 9-3 provides a summary of the environmental monitoring activities undertaken by Perth Airport.

9.2.6.5 Review

Operations and activities are reviewed annually through the business improvement plan process, with the annual performance of the EMS assessed and improvement opportunities identified.

All monitoring and survey details are submitted to the Airport Environment Officer through the Annual Environment Report.

Environmental Management Aspect	Monitoring Type	Frequency
Environmental management	Internal EMS Conformance Audit	Annually
	External EMS Conformance Audit	Every 3 years
Sustainability in planning and design	Qualitative review of the implementation of environmental and sustainability principles in new developments	Ongoing
	Water use	Annually
Energy and carbon	Gas use	Annually
	Fuel use	Annually
	Electricity use	Annually
	Fuel usage (ground vehicles)	Annually
Hazardous materials and dangerous goods	Audit of dangerous goods storage	Every 3 years
	Underground storage tank integrity testing	As required
	Inspections of hazardous materials storage areas	Regular and ongoing as part of tenant audits
Cultural heritage	Aboriginal heritage monitors	As required, generally project based
Tenants	Review of tenant risk ratings	Annually, based on audits
	Review of tenant operational EMP	As required
	Audit of tenants for compliance against EMP commitments and site monitoring where required (groundwater, air emissions etc.)	Every 1-3 years, based on tenant risk ratings
	Environmental baseline assessment prior to lease commencement	As required
	Environmental assessment prior to lease expiry	As required
Projects	Review of contractor EMP, and associated sub-plans where required	Prior to the commencement of major construction activities
	Assessment of site conditions prior to commencing major projects	As required
	Audit of construction projects for compliance against EMP commitments	During major construction activities and/or on the basis of assessed risk
	Inspection of compliance with environmental permit conditions (such as clearing, stockpiling and soil/ fill movements)	Periodic
Estate management	Weed management	Annually
	Feral animal control	Annually
	Dieback monitoring and treatment	Annually

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Environmental Management Aspect	Monitoring Type	Frequency
Bushfire management	Fire break maintenance and paddock slashing	Annually
	Prescribed burns to reduce fuel load	As required
Soil and water management	Soil quality testing	Prior to moving excavated soil
	Stormwater quality	Quarterly
	Groundwater quality	Quarterly
Biodiversity and conservation	Airside wildlife hazard monitoring	Daily
	Flora and vegetation survey	Every 5 years
	Threatened flora survey	Every 5 years
	Flora and fauna monitoring	Prior to major construction activities
Air quality and ground-based noise	Air quality	Continuous
	Ground-based noise	Continuous
Waste management	Bin room inspections	Regular and ongoing
	Triple interceptor trap inspections	Every 2 years or following spills
	Trade/greasy waste discharge monitoring	Reported annually by tenants
	Bin inspections	Ad-hoc, as part of EMP audits

Table 9-3 Perth Airport Monitoring

Source: Perth Airport

9.2.7 Continuous Improvement

Perth Airport's EMS adopts a continuous improvement process to ensure plans and practices are current, in line with regulatory requirements, and adequate to manage identified risks.

Perth Airport conducts regular audits, monitoring, incident investigations, risk reviews and management reviews of the EMS. Through these processes, opportunities for improvement are identified and acted upon via system changes, updates and revisions. This process ensures regular and systematic continuous improvement of environmental management and sustainability at Perth Airport.

9.2.8 Training

To promote effective environmental and heritage management, Perth Airport's environmental employees are required to have appropriate industry recognised qualifications, training and experience.

All Perth Airport employees are made aware of their roles and responsibilities, including conformance with policies and procedures. Training and communication processes and systems have been established, including environmental awareness training that is completed by all employees.

An induction process is undertaken by other personnel working on the airport estate—such as maintenance and construction contractors, and airline, security and retail staff working in the terminals—that includes an overview of environmental management obligations when working on the estate.

Environmental Focus Areas

The Environment Strategy details the management of environmental aspects that can be impacted by the development and operation of Perth Airport. The key focus areas are presented as follows:

Section 10

Climate Change and Resource Use

Focus Area

Climate change mitigation and adaptation

Water resource

Waste

Section 11

Land, Air and Biodiversity

Focus Area

Soils, groundwater and contamination

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Biodiversity

Local air quality

Ground-based noise

Aboriginal cultural heritage sites

Built heritage

Action plans have been developed for each focus area to identify key initiatives to be undertaken over the next five years. The anticipated timeframes for achieving the actions are indicated as ongoing, short-term (one to two years) or long-term (three to five years).

General environmental management initiatives to be undertaken by Perth Airport between 2026 and 2030 are shown in Table 9-4 below:

Initiatives	Completion Timeframe
Annual review of the Environmental Design and Technical Requirements (DATR) guideline	Ongoing
Review and continuous improvement of the Environmental Management System	Ongoing
Improve environmental data management to aid in decision making	Short-term
Increase collaboration with airport tenants to improve their environmental management	Short-term

Table 9-4 Environmental Management five-year action program Source: Perth Airport

10 Climate Change and Resource Use



Climate-related risks and opportunities are considered as part of Perth Airport's strategic planning, including its short-term asset management plans and medium-term infrastructure projects.

10.1 Introduction

As operators of critical infrastructure, Perth Airport recognises that climate change has the potential to affect its business through physical and transitional risks, impacting the high levels of availability, reliability, and resilience Perth Airport aims to deliver.

Climate-related risks and opportunities are considered as part of Perth Airport's strategic planning, including its short-term asset management plans and medium-term infrastructure projects.

10.2 Climate Change Mitigation and Adaptation

10.2.1 Objectives



Avoid and reduce carbon emissions to achieve net zero emissions by 2032.

Understand and continually assess the short-, medium- and long-term climate change risks and opportunities.

Adapt to the direct and indirect impacts of climate change, and enhance and maintain resilience to these climate impacts.

10.2.2 Overview

Climate change is a global challenge. There is a wide body of evidence to suggest that Australia's climate has already changed significantly, particularly over the last 50 years. Climate change is projected to increase the severity and frequency of extreme weather events, increase hot weather and heat waves, extend periods of drought conditions, and increase sea levels, which will impact aviation and transport in its ability to provide critical services. In addition, policy, market and legal shifts are causing disruption to the products, services and systems fundamentally relied on by infrastructure assets, brought about by a global transition to low carbon.

In 2016, the Australian Government committed to the Paris Agreement, a legally binding international treaty on climate change. Australia has committed to reducing its emissions to 43 per cent below 2005 levels by 2030 and net zero emissions by 2050.

10.2.3 Carbon Emission Reductions

Greenhouse gas emissions are categorised as Scope 1, 2, and 3 emissions by the Greenhouse Gas Protocol.

Scope 1 emissions are direct emissions made by sources a company owns or controls, such as fuel for Perth Airport's vehicle fleet and the terminal transfer buses, and natural gas for the Cogeneration Plant, which is used for lighting and heating and cooling of buildings, including airport terminals.

Scope 2 emissions are indirect emissions that result from a company's energy purchases from utility providers. Perth Airport purchases electricity from the South-west Interconnected System grid to power terminals, car parks, runway and taxiway lighting, and Perth Airport owned buildings and infrastructure.

Scope 3 emissions are all other indirect emissions that result from a company's activities, such as aircraft emissions during take-off, in-flight, landing and engine ground runs; the use of aircraft auxiliary power units and ground support equipment, emissions from tenant electricity consumption and fuel use, and the use of fuel by passengers and visitors to the airport estate. It is not possible for Perth Airport to reduce direct aircraft emissions because fuel and combustion are required for flight and are beyond Perth Airport's direct control. As a result, Perth Airport concentrates reduction and efficiency efforts on its own energy emissions and indirect emissions associated with airport operations.

-0-

2032

Perth Airport has committed to Net Zero emission by 2032 (PAPL-only Scope 1 and Scope 2 emissions).

50%

By 2030, Perth Airport aims to source 50% of its energy from renewable sources across the estate. Perth Airport has committed to Net Zero emission by 2032 (PAPL-only Scope 1 and Scope 2 emissions).

In FY25, approximately 10 per cent of Perth Airport's total energy supply was provided by the co-generation facility, and the remaining 90 per cent by the WA state grid. Perth Airport is implementing measures to decommission the co-generation facility and increase the proportion of renewable energy and low emission energy sources in its energy mix, to reduce the environmental impacts of energy use and emissions which contribute to climate change. Through investigation of opportunities for renewable energy supply on the estate, Perth Airport will continue to focus on clean energy supply and energy efficiency increases in the development of the estate.

Perth Airport has an Energy Strategy that outlines the potential pathway to develop commercial, economic energy systems that support sustainable growth with outcomes that meet social, environmental expectations, delivering customer satisfaction. Each activity contained within the Energy Strategy is developed through investment appraisal and strategic assessment to ensure alignment with evolving strategies and the statewide energy transformation pathway.

Development of the first 5MW (Megawatt) solar farm, located on a portion of land to the east of the General Aviation Area, commenced in 2025 with generation anticipated in 2026. The solar farm will produce an annual energy yield of 10GWhr (Gigawatt-hour) and is planned to be complemented by other energy systems, including:

- electrification of vehicle and equipment fleets
- additional solar farms and the expansion of roof top solar systems
- battery energy storage systems supporting the solar farm and rooftop solar systems, and
- · pyrolysis generation from wood waste.

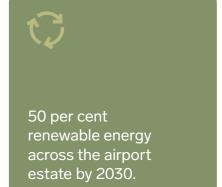
To support future energy transition, Perth Airport has set a target of 50 per cent renewable energy across the airport estate by 2030. This will significantly contribute towards reducing Scope 2 emissions from Perth Airport owned buildings and infrastructure, as well as reducing emissions from tenant electricity usage.

Fossil fuel combustion is the largest contributor to air pollution in the world. In 2024, road transport accounted for 16 per cent of Australia's total greenhouse gas emissions; furthermore, transport emissions have the highest rate of growth of any sector. Trends and travel patterns in Perth indicate that vehicle travel is a preferred method of transport. As Perth Airport continues development of the estate, there is an opportunity to integrate other modes of transport, including the new Forrestfield-Airport rail link and other forms of public transport, walkable catchments and the possible future introduction of an automated people mover. The planning for alternative transport is discussed in Section 15.

10.2.4 Targets







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10.2.5 Climate Change Adaptation

Perth Airport recognises the impacts of climate change and its ability to have long-term direct effects on airport infrastructure, aviation network performance and natural habitats on the airport estate, as well as the wider community beyond the airport boundary.

Perth Airport partnered with climate change experts to conduct scenario analysis to understand the physical and transition risks, and to identify emerging opportunities, that may arise from a changing climate. The climate scenario adopted for the physical risk assessment used the Representative Concentration Pathway 8.5 developed by the Intergovernmental Panel on Climate Change. This scenario represents a continued trend towards high rates of carbon emissions, with failure to reduce global emissions meaningfully and adequately by the end of the century.

The primary climate hazards identified for the Perth region include increasing average temperatures, more extreme heat days, severe rainfall resulting in flooding, extreme storms, wind, drought, and bushfires. The increasing frequency and intensity of these events, as well as their occurrence 'out of season', could place additional strain on airport operations, particularly where systems are not optimised to manage such conditions.

The key climate change physical risks that Perth Airport is responding to in the planning and operation of the estate are:

- health and safety—extreme weather events and rising temperatures posing health and safety risks for staff and passengers, including biosecurity concerns, heatstroke, and elevated tarmac temperatures
- operational disruptions—extreme weather, flooding, power outages, changes to aircraft performance, and storm debris leading to operational delays or disruptions and resulting in passenger delays and reputational damage
- flooding risks—extreme rainfall and flooding are highlighted as specific risks due to past incidents at the airport, including flooded walkways, power outages, and safety concerns

- asset damage—climate hazards such as heat, intense rainfall, windblown debris and inundation that damage or degrade assets leading to increased repair costs, runway maintenance, and asset replacement, and
- indirect impacts—including power loss, weather events in another location or changes in aircraft performance leading to disruption, delays and revenue loss.

10.2.6 Current Management

Perth Airport's management of climate change mitigation and adaptation is addressed through plans, strategies and initiatives outlined below.

10.2.7 Climate Adaptation Planning

Perth Airport aims to embed climate considerations into strategic planning, focusing on building climate resilience through asset management and infrastructure projects. Climate risk assessments and the associated controls inform Perth Airport's project management framework.

Operational contingency plans are also in place to ensure business continuity and passenger safety during climaterelated disruptions.

10.2.8 Airport Carbon Accreditation Program

Airport Carbon Accreditation (ACA) is the only industrially endorsed, global carbon management certification program for airports. It independently assesses and recognises the efforts of airports to manage and reduce their carbon emissions through six levels of certification. Perth Airport achieved ACA Level 3 (Optimisation) in 2024 and has set a target to achieve ACA Level 4 (Transformation) certification by 2026. Level 4 requires Perth Airport to achieve absolute emissions reductions while also actively driving stakeholder engagement towards delivering emissions reductions.

10.2.9 Carbon Management Plan

In 2018, Perth Airport developed a Carbon Management Plan as part of the ACA certification process. It outlines Perth Airport's goals and performance objectives for renewable energy uptake, emissions reductions targets, and implementation plan for achieving these goals. The plan is reviewed annually as part of the ACA accreditation process and is subject to third-party approval by the certifying body.

10.2.10 Monitoring and Reporting

Energy management in Perth Airport operated terminals is undertaken through a Building Management System (BMS). The BMS controls lighting, ventilation, heating and cooling, with ability to sense and respond to changes in temperature. This system enables Perth Airport to continually identify and implement energy efficiency measures. The BMS is subject to consistent review and upgrades.

Perth Airport has committed to making transparent disclosures in accordance with Australia's climate-related financial disclosure regime, addressing both transition risks associated with the shift to a low-carbon economy and physical risks that could impact airport assets or operations, like prolonged periods of precipitation causing shutdowns. Data about Perth Airport's energy and gas consumption, greenhouse gas emissions, fuel use and waste are reported to various national and international sustainability surveys and reporting schemes (see Section 7.3).

10.2.11 Project Design and Assessment

Perth Airport's design standards and building and development approvals process aim to ensure that the climate adaptation is considered in the design of all new developments.

Project design is required to demonstrate alignment with the carbon management hierarchy of avoid, reduce, replace and offset and to prioritise energy efficient solutions with LED lighting a minimum requirement for car park, street and airfield lighting.

Designs also consider low-carbon transport options by prioritising public transport links, electric vehicle infrastructure, walkability, and active transport.

Perth Airport requires environmental accreditation for certain types of new developments and has set minimum targets of:

- 4-Star (Best Practice) Green Star target for the design of new buildings and major refurbishments
- Infrastructure Sustainability (IS) Silver target for engineering-oriented infrastructure projects
- 5-Star National Australian Built Environment Rating System (NABERS) energy rating for commercial office building projects, and
- International WELL Building Institute standard considered on a case-by-case basis for new and significant building projects, including offices, hotels and terminal expansion projects.

Development proposals are required to demonstrate understanding of, and adaptation to, the risks and physical impacts of climate change. Design requirements seek to reduce the heat island effect through a combination of suitable strategies (such as tree retention and landscaping, cool pavements, light roofing colour, and paint systems with high solar reflectance) while also incorporating permeable and porous surfaces to allow for stormwater infiltration, and providing shade through vegetation or structures, pedestrian pathways, and areas where people might gather outside.



Artist's impression of future commercial development at Perth Airport

All new developments must align with the carbon management hierarchy: avoid, reduce, replace, offset.



10.2.14 Five-year Action Plan

Initiatives to be undertaken between 2026 and 2030 as part of Perth Airport's five-year action program for climate change mitigation and adaptation are shown in Table 10-1 below:

Initiatives	Completion Timeframe
Implement the Climate Change Adaptation Plan for the airport estate	Ongoing
Undertake thermal heat mapping of the estate to inform strategies and opportunities for projects to reduce heat island effect	Ongoing
Complete a climate change risk assessment for major projects and developments over a specified capital expenditure threshold	Ongoing
Achieve and maintain accreditation Level 4 (Transformation) under the Airport Carbon Accreditation initiative	Short-term
Refresh the Perth Airport Master Drainage Strategy to reflect latest Australian Rainfall and Runoff (ARR) guidelines, including updated rainfall intensities and temporal patterns	Short-term
Develop, build and operate a 5MW solar farm	Short-term
Develop strategy to purchase green energy	Short-term
Develop an electrification strategy for landside and airside fleet vehicles	Short-term
Implement a smart metering upgrade to better account for energy use and emissions across the estate	Short-term
Develop a battery strategy for the estate to support the implementation of renewable energy sources	Short-term
Investigate the photovoltaics (solar) potential for existing rooftops and future development	Short-term
Replacement of gas-fired cogeneration plant with emission reducing technology	Long - term
Investigate opportunities to accelerate sustainable aviation fuel usage with stakeholders, in line with global trends and standards	Long-term

Table 10-1 Climate change mitigation and adaptation five-year action program Source: Perth Airport

10.3 Water Resource Management10.3.1 Objectives



Increase water efficiency of non-aviation operations and ground-based aviation operations across the estate.

Manage operational and development activities such that groundwater levels are maintained.

10.3.2 Overview

Perth and the greater south of Western Australia experience a dry Mediterranean climate with extended periods of low rainfall. The effects of climate change on water supply and annual rainfall reductions are being felt across all Western Australia, with Perth having experienced extended dry periods since 1975. Resulting water shortages have caused Western Australian water suppliers to launch initiatives and campaigns to reduce water use across the State.

The Perth Airport estate is one of the largest private water users in the metropolitan area. Between 2020 and 2024, scheme water-use across the estate averaged approximately 640,000 kilolitres per year for the terminals and tenant buildings. Additionally, approximately 335,000 kilolitres of groundwater have been used annually for irrigation and non-potable purposes.

The continued development at the airport is expected to lead to higher demand for scheme water, resulting from more users on the airport estate: passengers, construction staff, airport staff, contract staff and tenants.

In line with the Western Australian Government's recommended water targets for industrial users, Perth Airport's Social Value Strategy has a target of no net increase in potable water use from 2019 levels through to 2030 for Perth Airport controlled facilities and operations, including the terminals, landscaping and construction. Perth Airport's management of water is discussed in Section 9.4.

Development at the airport has the potential to impact groundwater levels through use and abstraction of groundwater and dewatering activities. Changes to groundwater levels have the potential to impact on flora and fauna within the estate through inundation and/or reduced access to water.

Monitoring indicates that superficial groundwater levels on the estate have not declined over the last 10 years, despite a continued decline in rainfall during this period. Superficial groundwater levels appear to be maintained by inter-aquifer relationships, whereby deeper aquifers are partially recharging the superficial aquifer. On-site investigations into contamination on the estate has indicated the presence of per-and polyfluoroalkyl substances (PFAS) on airport in soil, surface water and groundwater. PFAS contamination on the Perth Airport estate is largely attributable to the historical use of aqueous film-forming foams from aviation firefighting activities by Airservices Australia and its predecessor, the Civil Aviation Authority. Refer to Section 11.2.6 for more information.

10.3.3 Target



Total scheme water use to remain below 2019 levels for Perth Airport controlled facilities and operations in 2030.

10.3.4 Current Management

Water consumption across the airport estate is managed through the plans, strategies and initiatives outlined below. Although located on Commonwealth land and subject to Commonwealth legislation, Perth Airport adheres to the principles of State-mandated limits on sprinkler use, and limits watering in winter, and only on allocated days where applicable.

10.3.5 Monitoring

Scheme water-use is monitored by smart water meters on-airport, tenant buildings and facilities. The data from smart meters is automatically transmitted to a central database for analysis and reporting.

Water flow meters are required to be installed for construction projects to monitor and record water use.

Groundwater abstraction and use is monitored across the estate. The network of production bores is managed to ensure that groundwater abstraction is not concentrated in any area, avoiding heavy drawdown and spreading the abstraction load across the estate.

10.3.6 Water Efficiency Management Plan

The Western Australian Government requires businesses using more than 20,000 kilolitres of scheme water per annum to participate in the Water Corporation's Waterwise Business Program, which includes the production of a Water Efficiency Management Plan (WEMP). Perth Airport's WEMP improves water efficiency by:

- assessing current water use on site
- · identifying inefficiencies and potential water savings, and
- identifying opportunities where other sources of water could potentially be used to substitute current scheme water use.

Perth Airport has adopted a reporting framework based on the water management and reporting model used by local government authorities. As part of annual WEMP reporting to the Water Corporation, Perth Airport identifies the largest water consuming tenants on the airport estate. This facilitates collaboration between tenants and the Water Corporation to help reduce water consumption as part of the Waterwise program and contributes to broader efforts to decrease water consumption across the airport.

10.3.7 Project Design and Assessment

Project proposals are assessed through Perth Airport's building activity and development application process to ensure appropriate consideration and sustainable management of water resources.

Perth Airport requires water efficiency to be incorporated into the design of all new infrastructure and developments. This includes measures such as water-sensitive urban design features for all landside facilities to enhance local water quality, identifying opportunities for water re-use and reducing potable water consumption, selecting flora species that require minimal or no irrigation after establishment, and using water-efficient fittings and fixtures with specified efficiency ratings.

10.3.8 Environment Management Plans

Tenants and contractors are required to detail water use and water efficiency measures within construction and tenant EMPs.

10.3.9 Recent Achievements

Recent achievements in water management include:

- A Water Management Plan was developed to outline management strategies for surface water and groundwater across the estate.
- Perth Airport engaged with the 10 largest water users on the estate to develop and implement tenant-specific water efficiency plans.
- A Groundwater Extraction Management Plan (including surface water where appropriate) was implemented in 2022 to guide the monitoring and management of groundwater extraction.
- Design and Technical Requirements guidance documents were published in 2023 to outline Perth Airport's requirements for environmental and sustainability matters that need to be identified and assessed in the design of new infrastructure and developments, including efficient water use.
- A water audit was conducted for all of the terminal buildings and the Alpha office building to identify water saving opportunities. Projects implemented include the upgrade of tapware in Terminal 1 and the Alpha office building.
- Perth Airport worked closely with its cleaning contractor to trial a new water saving cleaning system throughout Terminal 1. The system recycled and filtered water, as well as applied artificial intelligence to map out the terminal space and provide a more efficient cleaning process, resulting in a reduction from around 300 litres of water to 100 litres of water to clean the ground floor.

10.3.10 Five-year Action Plan

Initiatives to be undertaken between 2026 and 2030 as part of Perth Airport's five-year action program for water management are shown in Table 10-2 below:

Initiatives	Completion Timeframe
Investigate opportunities for alternative sources of water, such as recycled water use	Short-term
Implement smart metering upgrade for monitoring, control, and real-time management of water consumption to support the water efficiency target	Long-term
Investigate use of a water saving cleaning system throughout all terminals	Long-term

Table 10-2 Water Management five-year action program Source: Perth Airport



10.4 Waste Management

10.4.1 Objectives



Reduce waste, increase reuse and recycling through Perth Airport's operations and manage the remainder in the most sustainable way.

Decrease waste generation and increase efficiency in waste stream processing across the estate.

10.4.2 Overview

Around 40,000 people move through the airport every day, generating around three tonnes of non-hazardous, operational waste across the estate. Approximately 80 per cent of this waste is currently sent to landfill.

Development and related activities have the potential to increase the amount of waste generated across the estate. The anticipated increase is related to waste products generated by increasing passenger numbers, aircraft movements and construction activities across the estate.

Perth Airport is responsible for waste generated from Perth Airport owned and operated buildings and from estate management. Waste management extends across the built environment, operations and the supply chain, and is driven by the nationally and internationally accepted hierarchy of waste management: prevent and reduce (waste reduction), reuse, recycle, recover, treat, with disposal as the least preferred option.

In line with State Government aspirations, Perth Airport's Social Value Strategy has set a target to recover 75 per cent of waste from landfill by 2030 and divert it to more sustainable waste streams. To achieve this target, Perth Airport has developed a Waste Strategy and is implementing several key initiatives to align with our sustainability targets in the short-, mid- to long-term. This includes installing upgraded bins in passenger areas of the terminals and expanding the number of Containers for Change bins throughout Terminals 1 and 2. Perth Airport is also targeting 80 per cent resource recovery of construction and demolition waste by 2030.

Disposal of waste is a material cost in the operation of the airport, particularly with the current and future increases in the State's waste to landfill levy. Adopting waste reduction and circular initiatives presents a cost-reduction opportunity for Perth Airport. Additionally, waste generation and disposal have indirect links to climate change, such as increased methane and landfill by-products, and increased emissions from manufacturing.

10.4.3 Targets



75 per cent resource recovery rate of operational waste by 2030.



80 per cent resource recovery of construction and demolition waste by 2030.

10.4.4 Current Management

Perth Airport's management of waste is achieved through a range of plans, strategies and initiatives.

10.4.5 Recycling

Recycling is undertaken in airport terminals as well as in Perth Airport office buildings. Materials recycled include cardboard, paper, glass, aluminium and plastic drink containers (co-mingled waste).

Perth Airport introduced Containers for Change collection bins in each of the terminals in 2021, collecting suitable recyclable drink containers for a 10-cent refund through the State Government's Containers for Change scheme. Perth Airport makes donations to its charity partners from the monies earned through this scheme (see Section 3.4).

Organics collection bins and paper towel composting bins have also been introduced in several office buildings and retail tenancies to divert previously deemed landfill waste to an organics stream.

In addition to recycling of general waste, Perth Airport reuses road and other construction related materials for pavements and other airfield and estate purposes.

10.4.6 Project Design and Assessment

Through the Perth Airport building activity and development application process, project proposals are assessed to ensure appropriate consideration and management of waste.

All projects are to identify and address risks associated with waste generation and storage so that mitigations can be identified at the design stage to eliminate or otherwise minimise the risk of harm to human health and the environment.

Operational waste management must be considered in the early phases of design and reviewed in subsequent phases. Perth Airport requires the design of all new infrastructure to apply the design principles of the waste and resource management hierarchy: reduce waste generation at the source, re-use of materials, recycle and recover, with the last resort being landfill.

Where it has been identified through the project's risk and opportunities assessment that waste will be a key aspect of the operation that requires ongoing management, Perth Airport requires the preparation of a Waste Management Plan to document the proposed waste management system, ensuring all critical elements are reflected in the architectural layout and engineering design, as well as the logistical operational functionality requirements.

10.4.7 Environment Management Plans

Tenants and contractors are required to address waste management in construction and tenant EMPs. This includes their measures for external storage of waste, recycling and diversion from landfill, and waste handling. Waste must be appropriately segregated by waste stream and reused and recycled where possible.

Tenants who have an increased environmental risk associated with their waste management are required to prepare a separate Waste Management Plan.

10.4.8 Recent Achievements

Recent achievements in waste management include:

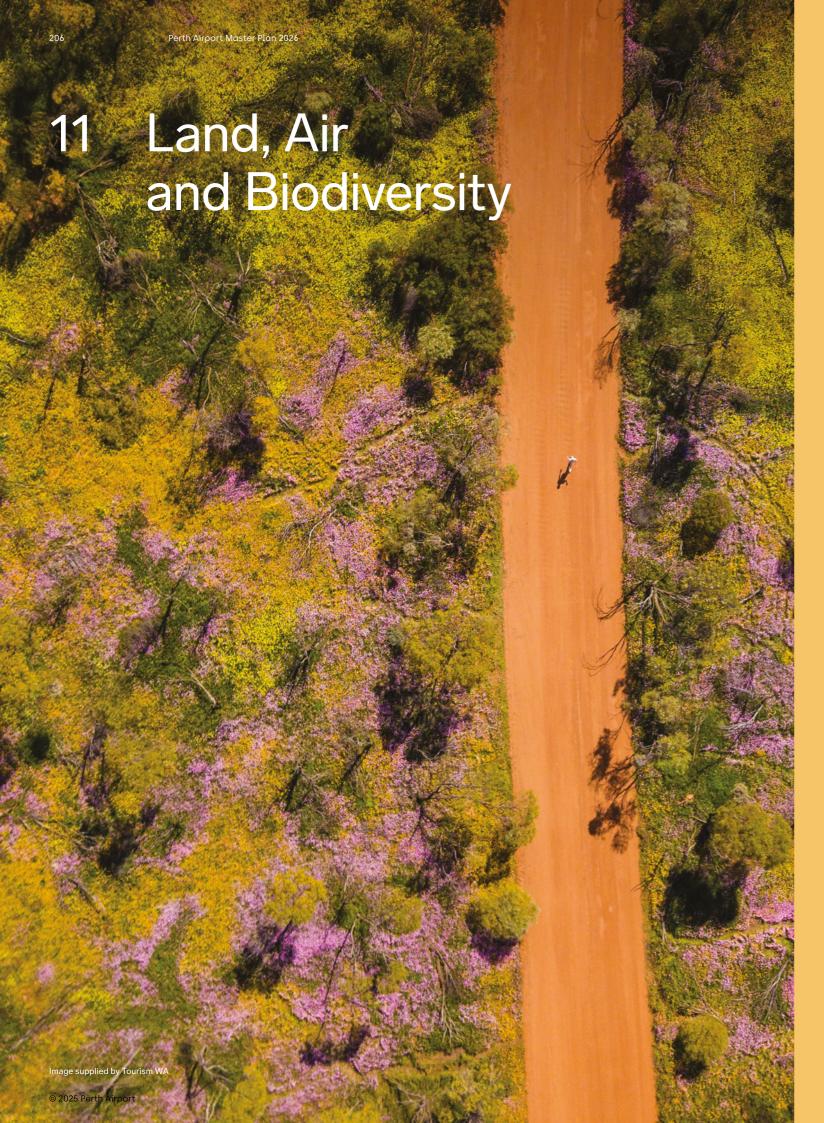
- Since the introduction of Containers for Change collection bins in the terminals in 2021, Perth Airport has diverted more than 450,000 recyclable drink containers from landfill and raised \$45,000 for local charity partners.
- An Environmental Design and Technical Requirements guidance document was published in 2023 to outline Perth Airport's requirements for environmental matters that need to be identified and assessed in the design of new infrastructure and developments, such as waste generation and storage.
- Development and implementation of a Waste Strategy and Action Plan in 2024, which included waste education initiatives with estate tenants and stakeholders, upgrades of terminal service yards, and expansion of the collection services for the organics and Containers for Change recycling programs.

10.4.9 Five-year Action Plan

Initiatives to be undertaken between 2026 and 2030 as part of Perth Airport's five-year action program for waste management are shown in Table 10-3 below:

Initiatives	Completion Timeframe
Collaborate with airlines to review all waste reduction opportunities, including aircraft waste	Ongoing
Investigate opportunities to eliminate waste generation and transition towards a circular economy	Short-term
Implement and improve the use of organic waste streams in terminal buildings	Short-term
Update relevant Perth Airport policies and plans to align with current (and any future) State Government targets for waste reduction and recycling goals	Short-term
Develop a monitoring program for waste management for Perth Airport managed facilities	Short-term

Table 10-3 Waste Management five-year action program Source: Perth Airport



Introduction

Perth Airport strives to reduce environmental impacts across its operations. By focusing on regulatory compliance, managing contamination and minimising biodiversity impacts, Perth Airport contributes to protecting public health.

While the natural environment of the estate has been significantly altered by historical land uses and its development as an airport, the remaining native vegetation contains a high level of biological diversity, with vegetation condition varying from completely degraded to pristine, with a large proportion in very good condition.

11.2 Soils, Groundwater and **Contamination Management**

11.2.1 Objectives



Prevent contamination of soil and groundwater within the Perth Airport estate.

Manage and investigate known or potentially contaminated sites in accordance with relevant legislation.

Manage operational and development activities such that groundwater levels are maintained and groundwater quality on the estate is protected.

Manage operational and development activities such that soil contamination is not mobilised and does not impact other areas of the estate.

Maintain, protect and improve water quality and associated environmental values of surface water features across the estate.

11.2.2 Overview

Perth Airport sits within two of the 30 major stormwater catchments of the Swan and Canning rivers system. The Northern Main Drain (NMD) and the Southern Main Drain (SMD) (described in Section 17) are two open channel drains which traverse the estate, draining two of those 30 catchments. The drains generally flow east to west, discharging into the Swan River, and have been constructed as extensions and modifications to naturally occurring water bodies.

Surface water features are interspersed across the estate in the form of wetlands (seasonal, permanent and constructed) and the drainage network. The surface water features on the estate relate directly to, or interface with, the shallow groundwater. The main drains and the wider arterial drain network intersect the groundwater table at various locations, partially draining the site and limiting maximum groundwater levels. This provides surface flow in the main drains for most

Any surface contamination event has the potential to permeate into the overlying sand and potentially impact groundwater. Subsequently, management of contamination requires consideration of several aspects, including soil type and quality, surface water, groundwater, and sources of contamination.

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11.2.3 Soils

Perth Airport is situated at the base of the Darling Escarpment, on the Swan Coastal Plain. The surface geology comprises quaternary-age sand and sandy soils derived from the Bassendean Dune system, underlain by Guildford formation clays. These natural surface geology types are variously overlaid by fill soils, predominantly in developed portions of the estate.

Most of the soils on the estate are free from contamination. Contamination has been identified as being a result of aviation, fuel storage, historical landfill and industrial activities. A number of these sites require active management to ensure impacts are minimised.

As is commonly encountered in the Swan Coastal Plain, potential acid sulphate soils are known to be present on the airport estate. Acid sulphate soils are naturally occurring soils, sediments and peats that contain iron sulphides. In an anaerobic state, these materials remain benign and do not pose a significant risk to human health or the environment. However, disturbing acid sulphate soils and exposing them to oxygen has the potential to cause the release of acidity and the dissolution of metals into groundwater. The risk of contamination is considered minimal until activities are proposed that will disturb acid sulphate soil materials, such as excavations and removal of groundwater (dewatering).

11.2.4 Surface Water

The estate contains seasonal, permanent and constructed wetlands, as well as a drainage network that intersects the groundwater table. The NMD and SMD channel stormwater through the airport, reflecting upstream catchment influences, including historical industrial, agricultural, and residential runoff.

Typically, water entering the estate contains elevated levels of nutrients and metals as a consequence of historic and current upstream land uses, including the Forrestfield Rail marshalling yards, former and current agricultural and horticultural uses, and commercial, industrial and residential developments. Much of the upstream catchment remains un-sewered, and the historic and ongoing use of septic tanks and other onsite wastewater treatment is a major contributor to the level of nutrients recorded.

In addition, developments outside the estate and within the upstream catchments have increased the rate of runoff, increasing the volume of water flowing through the estate. Historically, undeveloped land on the estate has been used as storage to compensate for these increased flows.

Water flows from built infrastructure (such as roads, car parks, tarmac areas and roofing) within the airport estate are directed into the drainage system. This consists primarily of open drains and is formalised in developed areas through piping and associated water quality management mechanisms.

Water monitoring consistently indicates that airport activities do not generally degrade regional surface water quality. In many cases, water leaving the estate is of better quality than incoming flows. This may be attributed to the availability of undeveloped land that has acted to detain water, and interaction with the shallow groundwater aquifer, allowing natural processes to improve water quality.

Perth Airport is currently updating its Master Drainage Strategy, originally delivered in 2022, to reflect recent changes to the Australian Rainfall and Runoff guidelines and to address environmental impacts associated with surface runoff across the estate.

11.2.5 Groundwater

Perth Airport is located on relatively flat, low-lying land within the Swan River floodplain. The Swan River is located less than one kilometre from the estate boundary at its nearest point. The proximity to the Swan River is influential in the regional groundwater characteristics, resulting in shallow groundwater depths ranging between one metre and seven metres below ground level across the estate. Overall, groundwater flows west-northwest (toward the Swan River) within the permeable sands of the Bassendean Dunes (non-confined aquifer) and as a semi-confined aquifer in the Guildford Formation, and a deeper confined aquifer of the Ascot Formation.

Groundwater supports ecological functions, including ephemeral and permeant wetlands, irrigation and construction. The depth of the underlying groundwater is seasonally influenced and can fluctuate by up to approximately two metres, depending on the soil type.

The upstream catchment conditions have a direct impact on the quality of groundwater encountered at the estate. Historically, the presence of the SMD and NMD, and the topographical and geological features of the estate, have acted to moderate the local catchment, retaining water on site during times of high rainfall and flood. This results in a positive impact on water quality as it flows from east to west through the estate, before discharging into the Swan River.

The long-term groundwater monitoring results show concentrations of nutrients and heavy metals which regularly exceed the acceptance criteria detailed in the *Airports* (*Environment Protection*) *Regulations 1997* (AEP Regulations). Nutrient concentrations tend to represent historic upstream land uses such as agriculture, industrial and residential, while metal concentrations are indicative of the conditions on the Swan Coastal Plain.

There are isolated instances of groundwater contamination primarily associated with areas of soil contamination. Modelling and monitoring indicate most contamination plumes are restricted to areas directly under or adjacent to the original source and, with appropriate management, represent limited risk to the environment.

11.2.6 Per- and polyfluoroalkyl substances (PFAS)

PFAS (Per- and polyfluoroalkyl substances) are a group of man-made chemicals that have been manufactured since the 1940s. PFAS are known for their chemical stability and durability and have been widely used in industrial and commercial applications, including consumer products such as non-stick cookware, cosmetics, food packaging and textiles, as well as in aqueous film-forming foams used to extinguish fires. Its historical use in firefighting foams has resulted in detection of PFAS contamination at a number of sites across the estate. The persistence of these substances is now understood to pose environmental and health risks.

PFAS contamination on the Perth Airport estate is largely attributable to the historical use of aqueous film-forming foams for aviation firefighting activities by Airservices Australia and its predecessor, the Civil Aviation Authority.

The presence of PFAS on the Perth Airport estate has been recognised since 2008, when Airservices Australia commenced initial reviews across its national operations.

This investigation revealed contamination from PFAS-containing foams used in training and emergency responses. Since then, various investigations and management actions have been undertaken to understand and address PFAS contamination on the Perth Airport estate.

11.2.7 Hazardous Materials

Perth Airport estate operations require the storage, handling and use of various hazardous materials and chemicals.

The most significant volume of hazardous material used on the estate is aviation fuel. There are currently two main fuel distribution depots on the estate—the Joint Operations Supply Facility located in the Airport West precinct, and the Jet Fuel Infrastructure in the Airport Central precinct.

Other activities involving the use of hazardous materials include maintenance facilities operated by airport tenants, material used for firefighting, construction and related activities, and the storage and use of fuels and oils (other than aviation fuel), solvents, paints, pesticides and herbicides.

Spills of hazardous materials have the potential to impact adversely on the environment if not captured and managed appropriately. They can impact the receiving environment via soil, surface and groundwater, vegetation and flora, fauna and human health.

Historical asbestos has also been identified on the estate.

11.2.8 Current Management

Perth Airport's management of soil and groundwater contamination is addressed through a range of plans, strategies and initiatives outlined below.

11.2.9 Monitoring and Reporting

Monitoring is undertaken and reported in accordance with the AEP Regulations.

Perth Airport has employed a comprehensive water monitoring program since 1998, which provides data on surface and groundwater levels and water quality. Water quality monitoring results are compared to the relevant acceptance criteria outlined in the AEP Regulations, the National Environment Protection (Assessment of Contaminated Sites) Measure 1999, and the PFAS National Environmental Management Plan 2022 (NEMP 2.0) to monitor water quality.

Environmental site evaluations are conducted at the expiry of tenant lease arrangements to identify any potential contamination and inform appropriate site remediation.

Perth Airport collaborates with the Australian Government's Airport Environment Officer and tenants in the investigation, management and remediation of known contaminated sites. Detailed information on specific contaminated sites, management responses and progress, are provided in Perth Airport's Annual Environment Report submitted to the Department of Infrastructure, Transport, Regional Development, Communities, Sport and the Arts (DTRDCSA).

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11.2.10 Environmental Site Register

Perth Airport maintains an Environmental Site Register, detailing all known areas of contamination on the estate, and an Asbestos Register detailing all known sites of asbestos.

11.2.11 Catchment Management

Perth Airport has developed a Master Drainage Strategy which identifies the surface water management requirements up to and including the full development scenario of the estate. It informs Perth Airport's decision-making regarding flood management and water conveyance on the estate.

Modelling undertaken to inform the Master Drainage Strategy includes sensitivity analysis to simulate the potential climate change impact of increased and decreased rainfall on the airport's stormwater drainage network.

Perth Airport continues to engage with State and local government authorities on catchment management matters. When atypical water quality results are detected on the estate boundary, relevant catchment authorities are notified and, where appropriate, action plans are developed.

11.2.12 Spill Response

A range of procedures are in place to ensure an effective response to any spills of hazardous materials.

Responsibility for prevention of spills on the estate during fuel transportation (pipes) and refuelling of aircraft lies with the refuelling companies and the airlines.

Management of spills on tenant premises is the responsibility of the tenant. Perth Airport provides spill response advice and assistance to tenants and ensures appropriate remedial action is undertaken.

The Perth Airport Aerodrome Emergency Plan, which is developed in consultation with emergency service organisations, details the procedures for responding to substantial pollution events on the estate.

11.2.13 PFAS Management Strategy

Perth Airport recognises that a holistic and multidisciplinary approach is required to achieve the PFAS management objectives and has developed a PFAS Management Strategy (shown in Figure 11-1) to guide and inform Perth Airport's approach to PFAS with a focus on governance, evaluation and monitoring, risk management, remediation, stakeholder communication and engagement, and innovation and research.

In 2017, Airservices Australia conducted a preliminary site investigation in relation to its leased areas and areas of potential foam use. This was largely a desktop study, with targeted soil and water sampling, which helped to determine the potential presence of PFAS contamination and identify areas for further investigation.

In 2019, a detailed site investigation was undertaken by Perth Airport to further assess the physical extent and magnitude of PFAS contamination in the areas of the estate identified by Airservices' preliminary investigation as being areas of PFAS impacts.

Following the detailed site investigation, Perth Airport completed a human health and ecological risk assessment to identify high risk activities for human exposure risk and ecological exposure risk. Risk based controls have been developed to outline acceptable levels of contamination for re-use activities relating to soil and water on the estate.

Perth Airport has established a program of site trials, support for research, and investigation works to improve the understanding of PFAS across the estate and to identify potential treatment and management solutions. Trials have been conducted on the use of granular activated carbon cells placed within the NMD, and an active pump-and-treat system to remove sediment and reduce PFAS levels. The results from these trials continue to inform further trials and PFAS management measures implemented on the estate, including actions to remove PFAS from surface water, so that the surface water meets recreational standards prior to release from the airport estate.

A PFAS Management Plan for the airport estate was finalised in 2024, following extensive peer review and stakeholder engagement, and endorsed by a suitable independent assessor. The plan adopts a risk-based approach to enable the reuse of soil and water generated from redevelopment projects in a safe and sustainable manner. In addition, Perth Airport has developed a PFAS Soil Management Framework and PFAS Water Management Framework.

Airservices is separately undertaking investigations as part of its National PFAS Management Program to determine the nature and extent of PFAS at its leased sites at Perth Airport. The results of these studies are available online through https://engage.airservicesaustralia.com/pfas-perth.

11.2.14 Project Design and Assessment

Perth Airport's building and development approvals process requires projects to identify and address environmental risks from contamination.

At the planning phase of significant projects, Perth Airport will undertake a project-specific baseline site environmental assessment to identify the initial condition of the site, determine the suitability of the site for development and intended use of the development, and inform whether any further site investigations are required.

Design proposals must address risks associated with the environmental aspects of soils, groundwater and contamination such that mitigations can be identified at the design stage to eliminate, or otherwise minimise, the risk of harm to human health and the environment.

Project design is required to minimise changes to the landform and groundwater that may increase the potential infiltration rate of rainfall, runoff, stormwater, and surface water in areas where PFAS contamination has been identified

Works that are likely to disturb soil are routinely risk-assessed for potential PFAS contamination in accordance with the Australian Government's PFAS National Environmental Management Plan. Site appropriate actions for PFAS management are considered on a project-by-project basis. Large construction projects or project-specific activities may require the development of a project PFAS management plan and a conceptual site model to determine appropriate management controls.

Hazardous material storage tanks must be above ground where possible, with secondary containment and overfill protection systems incorporated into the design. If underground storage tanks are required, downstream groundwater monitoring needs to be installed.

Stormwater is required to be drained away from areas in which wastes are stored, to prevent offsite contamination.

The control of fill material being relocated and imported onto the estate is managed through guidelines and approvals. Re-use of excavated soil within the estate is only permitted if the material has been appropriately sampled and approved for re-use, otherwise, it is to be taken offsite to an approved facility in accordance with State Government guidelines.

Where the risk of acid sulfate soil disturbance is likely, an acid sulfate soil investigation will be conducted prior to works commencing and, where applicable, an Acid Sulfate Soil Management Plan developed and implemented.

Tenants and contractors require approval from Perth Airport for any water extraction activities. For larger projects, Perth Airport may require the preparation of a Hydrological Management Plan.

PFAS Contamination Management Strategy

Perth Airport is committed to the appropriate assessment, management and remediation of PFAS on the Airport estate

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Innovation and Research

Remain appraised of technology and developments and support research that may improve PFAS management across the Perth Airport Estate



Stakeholder Communication and Engagement

Ensure appropriate communication of the presence and management of PFAS to regulators, stakeholders and the community



Evaluate and Monitor

Understand the magnitude and extent of PFAS occurrence in the soil surfacewater and groundwater across the Perth Airport Estate



Governance

Ensure appropriate management oversight is provided, and operational controls are developed and implemented



Risk Management

Evaluate and minimise risks to human health and the environment from PFAS



Site Management and Remediation

Ensure that responsible parties manage and remediate PFAS contaminated areas to remove or minimise ongoing risks, constraints and liabilities

Figure 11-1 Perth Airport PFAS Management Strategy Source: Perth Airport

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11.2.15 Environmental Management Plans

Tenants and contractors are required to address environmental management in construction and tenant EMPs, including risk assessment and measures for:

- management of surface water and groundwater, stormwater, and erosion and sedimentation control
- contamination management, including PFAS
- · soils, stockpiles and dust
- storage and handling of hazardous materials and spill and contamination contingency actions, and
- handling, managing and disposing of asbestos contaminated soil and materials in accordance with regulations and best practice guidance.

11.2.16 Recent Achievements

Recent achievements for soil, groundwater contamination management are listed below.

- A detailed site PFAS investigation was undertaken in 2019 to identify the nature and extent of PFAS in the areas of the estate identified by Airservices' preliminary investigation as being areas of PFAS impacts.
- A limited pilot soil washing trial (laboratory scale bench trial) for PFAS was completed in 2020 and a further washing trial was undertaken in 2023, with results indicating that in situ treatment was not a suitable option to progress in its current form.
- An Environmental Requirements Manual was developed in 2022 for tenants and contractors, and outlines environmental requirements for acid sulfate soils, dieback, and hazardous spill response. The manual was updated in 2024 to expand the management and mitigation measures for PFAS.
- An improved risk-based ground and surface water monitoring program was implemented in 2023, which included refining the number and location of water monitoring points and analytes tested.
- The development of an Environmental Design and Technical Requirements document in 2023 which outlines Perth Airport's requirements for environmental matters that are to be identified and assessed in the design of new developments, including soil, groundwater, surface water and contamination.
- Following the successful completion of a research and trial period, Perth Airport converted the Northern Main Drain PFAS treatment solution to a permanent facility.
 Ongoing operation of the treatment facility has resulted in the treatment of water leaving the estate at this location, with PFAS levels below the required criteria.
- An estate-wide PFAS Management Plan was finalised in 2024 to enable the re-use of soil and water generated from redevelopment projects in a safe and sustainable manner.
- Dieback treatment to affected and susceptible areas was undertaken in 2022 and additional dieback mapping and demarcation occurred in 2024.

11.2.17 Five-year Action Plan

Initiatives to be undertaken between 2026 and 2030 as part of Perth Airport's five-year action program for soils and groundwater contamination management are identified in Table 11-1:

Initiatives	Completion Timeframe
Continue to review and update of Perth Airport's PFAS Management Plan	Ongoing
Update Perth Airport's Geographical Information System (GIS) database to include locations of hazardous materials	Short term
Investigate additional PFAS treatment technologies	Long-term
Investigate opportunities for water sensitive urban design within new built infrastructure	Long-term

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Table 11-1 Soils and groundwater contamination management five-year action program Source: Perth Airport

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11.3 Biodiversity Management

11.3.1 Objective



Maintain and protect listed environmental values onsite or, where agreed with regulatory authorities, provide offsite offsets for listed environmental values as appropriate.

11.3.2 Overview

The Perth Airport estate is situated on the Swan Coastal Plain at the base of the Darling Scarp, within the Drummond Botanical Subdistrict. The natural environment of the Perth Airport estate has been greatly disturbed by historical clearing of vegetation and the development of the airport site. The remaining native vegetation contains a high level of biological diversity in variable condition.

Flora surveys have been undertaken across the airport estate since 1983. Vegetation associations present on the estate include the Southern River Complex, Guildford Complex and Bassendean Complex. The Southern River Complex is the dominant vegetation complex represented on the estate, comprising open woodlands of marri-jarrah Banksia species in elevated areas, and fringing woodlands of flooded Gum and Swamp Paperbark.

Surveys have revealed the presence of over 375 vascular plant species, spanning 213 genera and 62 families. Two species, Conospermum undulatum and Macarthuria keigheryi, are recognised under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) as vulnerable and endangered, respectively. These species are also classified as threatened flora under the *Biodiversity Conservation Act 2016* (WA) (BC Act).

Nine plant species are listed as Priority flora by the WA Department of Biodiversity, Conservation and Attractions (DBCA). The Priority flora list is maintained by the DBCA to identify species that may be at risk or are not well understood, but do not yet meet the criteria for listing as Threatened Flora.

There is currently one threatened ecological community listed by the Australian Government that is present on the estate:

 Banksia dominated woodlands of the Swan Coastal Plain IBRA region, which is listed as endangered under the EPBC Act and Priority 3 under the BC Act. There is currently one threatened ecological community listed by the State Government that is present on the estate:

 Corymbia calophylla-eucalyptus marginata woodlands on sandy clay soils of the southern Swan Coastal Plain, which is listed as vulnerable under the BC Act.

The estate is home to a diverse range of vertebrate and invertebrate fauna. Fauna surveys have identified 139 vertebrate species, including three fish, eight frogs, 23 reptiles, 95 birds, and ten mammals (five of which are introduced species). Surveys of the estate's invertebrate fauna have recorded 92 species, representing 59 different taxonomic families.

The fauna species identified as Commonwealth or State listed environmental value that occur on the airport estate are:

- Carnaby's Black Cockatoo (Zanda latirostris), listed as endangered under the EPBC and WA BC Acts and Forest Red-tailed Black Cockatoo (Calyptorhynchus banksii naso), listed as vulnerable under the EPBC and WA BC Acts, are regular visitors with foraging habitat across the estate, while the Baudin's Black Cockatoo (Zanda baudiinii), listed as endangered under the EPBC and WA BC Acts, are irregular visitors
- Quenda (*Isoodon fusciventer*), is listed as Priority 4 in Western Australia and is abundant across the estate
- Water Rat (Rakali—Hydromys chrysogaster), is listed as Priority 4 in Western Australia and is an occasional visitor to the estate, as individuals disperse along drains from nearby wetlands, and
- Woolybush Bee (Hylaeus globuliferus) is listed as Priority 3 in Western Australia, with suitable habitat for the species present on the estate.

Potential habitat for the Western Swamp Tortoise (*Pseudemydura umbrina*) was previously identified on the airport estate within the State's species recovery plan. Numerous studies indicate that the Western Swamp Tortoise is locally extinct and not present on the estate.

Wetlands present on the estate vary from ephemeral to perennial, natural to artificial, and groundwater-fed to surface-water fed.

Munday Swamp, the largest of all the wetlands present on the estate (approximately 20 hectares), is listed on the Commonwealth Directory of Important Wetlands in Australia. This wetland provides a permanent water source and, as such, supports an array of invertebrate and vertebrate fauna. It is also an important Aboriginal heritage site (discussed in Section 11.6). Through the Sustainability Framework and Social Value Strategy (see Section 7), Perth Airport has committed to minimise impacts to the Munday Swamp wetland. This will include:

- Restricting works within Munday Swamp
- Maintaining the secure fencing constructed between Munday Swamp and Abernethy Road, and
- Install water quality nutrient stripping basins to improve water quality.

Northern wetlands to the west of Munday Swamp are classified as sumplands. These sumplands are seasonally inundated and are also listed on the Directory of Important Wetlands in Australia. Other wetlands of note on the estate include Runway Swamp and the Kwenda Marlark Wetland (man-made) to the south.

Perth Airport regularly liaises with Federal and State conservation agencies to confirm the values and methodologies for technical assessments. Further consultation will occur as Perth Airport continues to undertake biodiversity surveys and assessments.

Development of the airport estate can directly or indirectly impact listed environmental values. Direct impacts may include the clearing or removal of environmental values, while indirect impacts may include habitat fragmentation, pollution events, alteration of hydrological regimes, and increased edge effects through weed incursion and dieback infestation. Threatening processes such as weed incursion, dieback infestation, bush fire, feral animal predation, illegal access, and fly tipping (unauthorised dumping of waste) present an ongoing potential impact to natural areas and environmental values on the estate.

11.3.3 Environmentally Significant Areas

In accordance with the Airports Act, Perth Airport has identified areas on the estate that may be considered environmentally significant. These areas are shown in Figure 11-2 and comprise the known threatened ecological community listed by the Australian Government (described in Section 11.3.2) and Munday Swamp.

Changes have been made to the environmentally significant areas since publication of Master Plan 2020. Three major projects have been approved by the Federal Minister for Infrastructure under the Airports Act, with approvals provided by the Federal Minister for the Environment for impacts on matters protected by the EPBC Act. These projects are:

- New Runway Project—development of a 293-hectare site for the new 3,000 metre runway and associated infrastructure. Vegetation clearing commenced in 2025, and the runway is expected to be operational in 2028
- Airport Central (Airfield Upgrade)—development of a 213.5-hectare site for new taxiways, aircraft apron and navigation aid equipment, which is expected to commence in 2026, and
- Airport West (South)—clearing and site preparation for a 65.5-hectare development area, expected to commence in 2025.

As part of the detailed design phases for the New Runway Project and Airport West (South) projects, Perth Airport has been able to reduce the size of the impacted environmentally significant areas through careful redesign and updated survey data, including a 35 per cent reduction to the total impact areas for Banksia Woodlands, and further minimising the impact to Munday Swamp.

Comprehensive offset strategies have been approved by the Federal Minister for the Environment to help compensate for the loss of biodiversity values on the estate.

Perth Airport recognises that airport expansion and other developments on the estate will result in further disturbance of environmental and cultural values, including environmentally significant areas. Potential impacts to these values will require consideration under the EPBC Act, AH Act and assessment under the Airports Act if the impact is deemed significant. The Australian Government will consider the baseline investigations conducted, impact assessment and management programs, prior to granting approvals in accordance with the Airports Act, AH Act and EPBC Act.

Perth Airport will continue to undertake studies and consider the environmental values of each precinct, taking into account:

- aviation-related protection zones and restrictions
- · environmental values
- Aboriginal Heritage
- drainage and flooding impact
- potential contamination
- environmental offset (either onsite or offsite) costs, and
- potential development costs.

This analysis will determine the suitability and capacity of land to be developed for either aviation or non-aviation uses. An assessment will be made to determine the viability of developing the land and, where development is proposed, the environmental impact will be assessed.

For all future developments on the estate, Perth Airport will apply the biodiversity offset mitigation hierarchy, which prioritises avoiding impacts to biodiversity wherever possible, minimising and rehabilitating unavoidable impacts, and only using offsets as a last resort to achieve no net loss of biodiversity. This aligns with the key Social Value target of reducing biodiversity impacts as far as practicable in the planning and design phase of all future developments.



11.3.4 Current Management

Under the AEP Regulations, Perth Airport, its tenants, and operators at the airport have a general duty to preserve and to take all reasonable and practicable measures to ensure there are no adverse consequences of activities on local biota, ecosystems, habitats, aesthetic, cultural, historical, social, indigenous or scientific values.

Perth Airport has a wide range of strategies to manage the listed environmental values on the estate and potential environmental disturbances.

11.3.4.1 Sustainability Targets

Through the Sustainability Framework and Social Value Strategy (see Section 7), Perth Airport has committed to reduce biodiversity impacts as far as practicable in the planning and design phase of all future developments; where practicable, explore options to adopt biodiversity offsetting arrangements which exceed minimum statutory requirements; and minimise impacts to Munday Swamp Wetland. Endemic species to the Perth Airport estate will be planted where practical. Perth Airport's Sustainability Framework and Social Value Strategy also commits to:



Reduce biodiversity impacts as far as practicable in the planning and design phase of all future developments.



Where practicable, explore options to adopt biodiversity offsetting arrangements which exceed minimum statutory requirements.



Minimise impacts to Munday Swamp Wetland.

11.3.4.2 Biodiversity Offsets

Where impacts to listed environmental values on the airport estate cannot be avoided, any significant loss of natural habitat will be offset through either land purchase or the restoration of degraded land, so that the total area of natural habitat increases. Where biodiversity offsets are required, these are implemented for protected matters located on the airport estate such as for Banksia Woodlands, wetlands and Black Cockatoo foraging habitat. All offsets are in accordance with the Federal Government's Environmental Offset Policy. Perth Airport actively engages with both Federal and State government agencies to secure suitable offset sites.

Three offset strategies have recently been approved by the Federal Government for impacts to Banksia woodlands, wetlands, Black Cockatoo foraging habitat, and threatened flora species.

Perth Airport has purchased seven properties for biodiversity offsets. Five of the properties will be transferred to the State of Western Australia to be managed by the DBCA. The other two properties will be retained by Perth Airport in the medium term until offset revegetation has been undertaken.

Approved offset strategies for major projects are published on the Perth Airport website, https://www.perthairport.com.au/Home/corporate/planning-and-projects/major-development-plans

11.3.4.3 Land and Biodiversity Management

A Land and Biodiversity Management Plan was developed to guide the environmental management requirements necessary to meet Perth Airport's goals and commitments. This includes initiatives that promote the restoration and management of natural ecosystems, such as bushfire management, weed control, dieback treatment and feral animal control.

Uncontrolled bushfires pose a risk to the natural environment. Perth Airport has a Bushfire Mitigation Plan to reduce the risk and impact of bushfires and address the biodiversity maintenance goals of bushfire management within the estate. Perth Airport undertakes works to maintain fire control breaks, as well as vegetation slashing, mechanical thinning activities and occasional mitigation burns to reduce fuel loads.

Perth Airport carries out weed control which includes physical removal and chemical spraying activities to maintain the environmental values of the estate, protect biodiversity, retain visual amenity and prevent or minimise the establishment of known weed species.

Phytophthora cinnamomi (dieback) spreads easily and causes the death of susceptible plants, and in turn, loss of habitat for animals. Perth Airport undertakes testing and mapping of dieback across the airport estate to inform dieback management and priority areas for the treatment program. Activities within and around these areas require additional management to prevent the spread of dieback. Perth Airport may require that a Weed and Hygiene Management Plan be developed for specific works.



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Perth Airport maintains a targeted feral animal pest control program to reduce and control the numbers of feral cats, foxes and rabbits on the estate through repeated trapping and baiting campaigns to reduce the populations of introduced pest species and non-native predators. Biosecurity surveillance and treatment activities are also implemented for the invasive *Lepisiota frauenfeldi* (browsing ant) and *Aedes aegypti* (mosquito).

The Civil Aviation Safety Regulations 1998 (Cth) require Perth Airport to maintain an active wildlife hazard management program to reduce the risk of wildlife strikes on aircraft. Perth Airport has a Wildlife Hazard Management Plan to guide the monitoring, assessing, mitigating and reporting of wildlife hazards. Perth Airport undertakes deterrence measures such as installing barrier netting on the major open drains, controlling grass species and flowering plants known to attract birds, and installing bird spikes on lights and signage to discourage roosting. Active wildlife management measures include dispersal, removal of nests and eggs, elimination of roosting sites, trapping and relocation, and lethal control at times of severe wildlife activity.

11.3.4.4 Project Design and Approvals

Perth Airport's building and development approvals process aims to ensure that biodiversity is considered in the design of all new developments.

Project proposals are required to identify and address any risks associated with land use and ecology, vegetation, fauna, wetlands, weeds and seeds. The design must reduce adverse impacts on biodiversity through avoiding or minimising the removal and/or disturbance of native vegetation and terrestrial and aquatic habitat, wherever possible. There is a requirement for outdoor lighting which prevents or reduces the nuisance effects of lighting to the environment.

Perth Airport also considers the risk of wildlife attraction for all activities on-airport and has specific requirements related to wildlife hazard management, such as controlling the types of vegetation used for landscaping and strict policy on the use and location of waste bins.

Approval from Perth Airport is required for the removal or clearing of vegetation on the estate. The approvals process allows Perth Airport to assess whether the proposed pruning or clearing is within an environmentally significant area, or if it could impact on native vegetation.

11.3.4.5 Environment Management Plans

Tenants and contractors are required to address interactions with flora, fauna and wetlands in construction and tenant EMPs. This includes assessment and management/ mitigation measures for vegetation and habitat protection, wildlife egress and interactions, and dieback management.

11.3.5 Recent Achievements

Recent achievements in biodiversity management include:

- Multiple re-designs of the infrastructure and taxiways required to support the new runway project were undertaken to achieve a significant reduction in the original impact area. This was done to ensure maximum native vegetation can be retained on site and impacts to Munday Swamp, important Aboriginal heritage and ecological site, are minimised.
- An Environmental Requirements Manual was developed in 2022 for tenants and contractors, and outlines environmental requirements for flora, fauna and wetlands.
- An Environmental Design and Technical Requirements guidance document was developed in 2023 to outline Perth Airport's requirements for environmental matters that need to be identified and assessed in the design of new developments, including vegetation clearing and ecological rehabilitation.
- The Australian Government has approved biodiversity offset strategies for the new runway, Airport Central (Airfield Upgrade), and Airport West (South) projects, as well as a Propagation, Research and Monitoring Plan for Wavy-leaved Smokebush and Keighery's Macarthuria.

11.3.6 Five-year Action Plan

Initiatives to be undertaken between 2026 and 2030 as part of Perth Airport's five-year action program for biodiversity management are shown in Table 11-2 below:

Initiatives	Completion Timeframe
Undertake vegetation and flora mapping of the estate, with scope to include identifying areas for possible conservation and onsite restoration sites	Ongoing
Develop an overarching environmental offset strategy	Short term
Review bushfire management and mitigation plans to ensure relevant biodiversity objectives are captured	Long term

Table 11-2 Biodiversity management five-year action program Source: Perth Airport

11.4 Local Air Quality Management

11.4.1 Objective



Manage non-aviation air emissions across the Perth Airport estate consistent with relevant legislative requirements.

11.4.2 Overview

Air quality encompasses dust, particulates, odour and gaseous emissions. Perth Airport is required to manage air emissions generated by ground-based activities within the airport estate in accordance with the AEP Regulations, which stipulate ambient air quality objectives for the seven common pollutants found in the air within airport estates. Aircraft emissions are governed by the Air Navigation (Aircraft Engine Emissions) Regulations (Cth) and are the responsibility of the aircraft operators.

The National Environment Protection (Ambient Air Quality) Measure, developed by the National Environment Protection Council, sets national standards for assessing ambient air quality and is directly relevant to air quality at Perth Airport. Additionally, Western Australian regulations and best practice guidelines are also used as a tool to monitor and manage air emissions.

Perth Airport recognises that the ground-based activities undertaken on the airport estate, including those of tenants, have the potential to impact air quality. Construction equipment can affect the local air quality through direct emissions from machinery; there is also the potential for an increase in dust emissions from vegetation clearing and soil disturbance. Similarly, increases in vehicle movements on the estate will result in a rise in combustion emissions within the vicinity of the estate. Aircraft painting activities and firefighting training exercises have the potential to affect local air quality through release of fumes and smoke, while odour-causing vapours can be released through storage, handling and spillages of aviation fuel.

As part of the National Pollutant Inventory, Perth Airport is required to report emissions caused by operational activities.

11.4.3 Current Management

Local air quality management is achieved through a range of plans, strategies and initiatives.

11.4.3.1 Monitoring

An Air Quality Monitoring Plan was developed for Perth Airport to understand and monitor potential influences of non-aviation operations on ambient air quality in the vicinity of the airport estate.

To support the Monitoring Plan, a fixed air quality monitoring station was installed in the Airport West precinct and five volatile organic compound canisters positioned across the estate in 2024. The monitoring results are reviewed to inform management of non-aviation air emissions and ensure compliance with legislative requirements and best practice quidelines.

Prior to the installation of air quality monitors within the airport estate, Perth Airport obtained data from the closest local monitoring station, which is located in Caversham, approximately five kilometres to the north of the airport, and is operated by the WA Department of Water and Environmental Regulation.

Perth Airport's activities are currently below the reporting threshold for the National Greenhouse and Energy Reporting System.

The airport estate contains industry types that have the potential to impact air quality. These tenants are required to monitor air quality, with some having continuous monitoring in place to detect any potential exceedances that may need to be investigated and rectified.

11.4.3.2 Project Design and Assessment

Through the Perth Airport building activity and development application process, project proposals are assessed for their potential impact on ambient air quality and to ensure that any significant new emission source complies with the AEP Regulations and Western Australian air quality guidelines.

Proposals must address risks associated with the environmental aspects of air quality, such that mitigations can be identified at the design stage to eliminate or otherwise minimise the risk of harm to human health and the environment.

Perth Airport may require the preparation of an air quality impact assessment where a project's risk assessment identifies potential impacts from new air emissions or odour sources.

Restrictions on exhaust plumes are in place to protect aircraft operations (discussed in Section 16.7.2.1).

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11.4.3.3 Environment Management Plans

Tenants and contractors are required to address the management of air quality in construction and tenant EMPs.

Construction EMPs outline measures to minimise the potential for dust, particulates, odour and emissions from construction activities. Perth Airport may also require the preparation of an Air Quality and/or Dust Management Plan where it is identified that odours or dust have the potential to impact local and surrounding air quality.

The management of tenant emissions is addressed through an EMP.

For those tenants required to undertake their own air quality monitoring, the EMP will outline the relevant assessment criteria and reporting obligations to Perth Airport. If exceedances of the AEP Regulations occur from tenant activities, Perth Airport will work with the tenant and DITRDCSA to ensure appropriate corrective actions are implemented.

11.4.4 Recent Achievements

- An Air Quality Monitoring Plan was developed as part of an initiative to understand and monitor potential influences of non-aviation operations on ambient air quality in the vicinity of the airport estate.
- A fixed air quality monitoring station and five volatile organic compound canisters were installed across the estate in January 2024 to allow monitoring and management of non-aviation air emissions and continued compliance with legal requirements and best practice guidelines.
- An Environmental Requirements Manual was developed in 2022 to outline environmental requirements for tenants and contractors, including the management of dust generation, particulates, odours and emissions.
- An Environmental Design and Technical Requirements guidance document was published in 2023 to outline Perth Airport's requirements for environmental matters that need to be identified and assessed in the design of new developments, including new emissions or odour sources.

11.4.5 Five-year Action Plan

Initiatives to be undertaken between 2026 and 2030 as part of Perth Airport's five-year action program for local air quality management are shown in Table 11-3 below:

Initiatives	Completion Timeframe
Update the Air Quality Monitoring Plan to ensure relevance and compliance with regulatory requirements	Short term

Table 11-3 Air quality management five-year action program Source: Perth Airport

11.5 Ground-Based Noise Management

11.5.1 Objective



Manage and minimise noise levels associated with ground-based airport operations and development.

11.5.2 Overview

Perth Airport is located in a highly developed urban setting and the airport estate is surrounded by residential, industrial and commercial properties, all of which are potential receptors to ground-based noise generated by airport activities. The major sources of ground-based noise at the airport include:

- parked aircraft with operating engines
- aircraft engine ground running (engine testing)
- operation of aircraft auxiliary power units
- · movement of passengers and goods on/off aircraft
- operation of vehicles and equipment
- construction and demolition activities, and
- tenant plant and operational activities.

Ground-based operational noise at airports is regulated by the AEP Regulations. Under the AEP Regulations, all tenants and operators at the airport have a general duty to take all reasonable and practicable measures to prevent the generation of offensive noise, or minimise noise where prevention is not possible. The regulations include specific limits for certain activities at certain times of the day, as well as a set of indicators to determine if noise is excessive. The regulations also provide guidance for consideration of sensitive and commercial receptors, and other more general principles to avoid offensive noise which would intrude on individual, community or commercial amenity.

Perth Airport requires compliance with the *Environmental Protection (Noise) Regulations 1997* (WA) for development projects that have the potential to impact sensitive receptors.

The AEP Regulations do not apply to noise generated by an aircraft in flight, or when landing, taking off or taxiing at an airport. Noise emissions associated with these activities are

regulated through the Air Navigation Act 1920 (Cth) and Air Navigation (Aircraft Noise) Regulations 1984 (Cth). Perth Airport recognises that aircraft noise is an important issue for the community and works closely with a range of stakeholders to manage aircraft noise. Aircraft noise management is detailed in Section 16.2.2.

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11.5.3 Current Management

The management of ground-based noise is achieved through a range of plans, strategies and initiatives as described below.

11.5.3.1 Monitoring

In 2022, Perth Airport installed five noise monitors to capture representative baseline conditions for current sources of ground-based noise. Ongoing data is collected to inform the airport's noise profile and assess potential impacts of future construction projects.

11.5.3.2 Engine Ground Run Management Plan

Engine ground runs are conducted as part of essential safety testing following maintenance on aircraft. In 2024, approximately 800 engine ground runs were conducted at the airport.

To manage engine ground running activities and reduce potential noise impacts, Perth Airport has an Engine Ground Run Management Plan that places restrictions on the time of day, location and maximum power settings for these activities. Aircraft operators must seek approval from Perth Airport if a proposed engine run cannot be conducted in accordance with the defined constraints. Perth Airport regularly monitors compliance against the Engine Ground Run Management Plan.

11.5.3.3 Project Design and Assessment

Projects are assessed for their potential to generate noise and vibrations though Perth Airport's building activity and development application process.

Design proposals are required to address risks associated with noise and vibration, such that mitigations can be identified at the design stage to eliminate, or otherwise minimise, the risk of harm to human health and the environment. This includes:

- ensuring facilities with significant sources of noise and vibration are located to maximise the distance to sensitive areas and oriented so that noise and vibration are dissipated away from such areas
- noise control measures that comply with the requirements of AS/NZS 1269.2:2005, and
- consideration of the direction of the prevailing wind and the topography to limit sound transmission.

Where considered necessary, noise modelling is undertaken to assess potential impacts.

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11.5.3.4 Environment Management Plans

Tenants and contractors are required to address the management of ground-based noise in construction and tenant EMPs.

Construction EMPs will address management and mitigation of noise pollution caused by construction activities and are a key control for noise exposure during development activities at the airport. Where construction or operational noise sources have the potential to impact on nearby sensitive receivers, Perth Airport may also require the construction contractor to develop a Noise Management Plan.

Tenants conducting operational activities which pose a risk of emitting offensive noise are required to incorporate noise minimisation strategies in their EMP.

11.5.4 Recent Achievements

Recent achievements in ground-based noise management include:

- Five noise monitors installed across the airport estate in 2022 to capture baseline ground-based noise conditions for assessing current sources of ground-based noise and future planning construction
- An Environmental Requirements Manual developed in 2022 to outline environmental requirements for tenants and contractors, including ground-based noise.
- An Environmental Design and Technical Requirements guidance document published in 2023 to outline Perth Airport's requirements for environmental matters that need to be identified and assessed in the design of new developments and infrastructure, including ground-based noise and vibrations.

11.5.5 Five-year Action Plan

Initiatives to be undertaken between 2026 and 2030 as part of Perth Airport's five-year action program for ground-based noise management are shown in Table 11-4:

Initiatives	Completion Timeframe
Review layouts of proposed developments and noise reduction strategies for developments closer to the runway	Ongoing

Table 11-4 Ground-based noise management five-year action program Source: Perth Airport



1.6 Aboriginal Heritage Management

11.6.1 Objective



Manage listed aboriginal sites in a culturally sensitive manner and in accordance with relevant legislation.

Aboriginal Culture is recognised as the world's oldest continued culture and merits recognition, protection, preservation and management.

11.6.2 Overview

Perth Airport is on the traditional lands of the Whadjuk people, a dialect group of the Noongar nation which encompassed the entire south-western region of Western Australia. The Whadjuk people have a deep and continuing connection to the land and hold significant cultural and spiritual ties to their ancestral Country.

The airport estate incorporates a cultural landscape that contains sites utilised as meeting places, campgrounds, hunting areas and lore grounds dating back 41,000 years, with Munday Swamp one of the most recognised. The land was created during the Nyitting (dreaming or creation time) by the Waakarl (Rainbow Serpent) and remains important to Whadjuk people and the wider Noongar community to this day. Contemporary sites also exist on the estate that were used historically as base camps for resistance against colonisation, a government-run Aboriginal Reserve, and bush camps. Aboriginal Culture is recognised as the world's oldest continued culture, and merits recognition, protection, preservation and management.

Where the airport estate once formed part of the traditional travelling networks of the Whadjuk people, today it forms part of a modern travelling network. As a busy domestic and international airport and the first experience many visitors will have with Perth, Western Australia or even Australia, Perth Airport has an important role in promoting the unique cultural heritage of the Noongar nation to local and global visitors.

11.6.3 Heritage Site Register

There are a number of Aboriginal heritage sites, artefact scatters and areas of cultural significance from ancient, historical and contemporary times within the boundaries of the Perth Airport estate that are listed on the State Government's Aboriginal Cultural Heritage Inquiry System.

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These places provide tangible evidence of the historical use of the airport estate by the Whadjuk people, and intangible links through ongoing connections and storytelling.

The State Government registered Aboriginal sites located within the airport estate are shown in Figure 11-3. Following heritage surveys of the airport estate, information may be submitted to the WA Department of Planning, Lands and Heritage to update site boundaries and locations and details of heritage sites to allow for better site management.

Aboriginal heritage places of the highest importance on the airport estate are Munday Swamp and Allawah Grove.

Munday Swamp is a 20-hectare ethnographic site and wetland located within the eastern portion of the Perth Airport estate that provides continued access for Traditional Owners and Custodians. Munday Swamp served as a resourceful location for hunting turtles, goannas and kangaroos, as well as for gathering reeds, timber and paperbark for creating paintings. It is reported that various cultural practices, including corroborees, funeral rites and memorials, and religious rituals, occurred at Munday Swamp. Traditional Owners and Custodians continue to have access to Munday Swamp for traditional practices.

Allawah Grove is a vacant site located in north-west corner of the estate and has both indigenous and non-indigenous heritage significance. It was first gazetted in 1910 as an Aboriginal Reserve, then appropriated for accommodation for service personnel during World War II, and later for non-Aboriginal families during the post-war housing shortage; more recently, the site was used for transitional housing for Noongar families until 1968. Some remains of old buildings are still present.



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11.6.4 Compliance And Legislative Approvals

Western Australia recognises Aboriginal cultural sites and objects of significance and makes specific provision for traditional use through the Aboriginal Heritage Act 1972 (WA) (AH Act). The AH Act protects and manages Aboriginal Heritage by requiring approval for activities that may impact or cause harm to an Aboriginal site.

Perth Airport personnel, contractors and tenants involved in ground disturbance activities within registered Aboriginal sites are obliged to comply with the AH Act.

Under the AH Act, the Minister for Aboriginal Affairs, or the Registrar for Aboriginal Sites, may provide consent to the proposed activity with conditions which may include a condition that Aboriginal Heritage Monitors are employed to observe the ground disturbance activities to prevent possible harm to Aboriginal heritage.

The Perth Airport Aboriginal Monitoring Procedure applies to any party involved in land use or related activities on the airport estate, including situations where monitoring is a condition of a consent given under the AH Act, the activity may impact on Aboriginal heritage, or where monitoring may be considered as part of a broader risk assessment in areas outside of an Aboriginal site boundary.

Perth Airport engages with the PAG and other Traditional Owners and Custodians prior to applying for any approvals required under the AH Act. Following consultation with the Traditional Owners and Custodians and relevant organisations, in 2017 Perth Airport submitted an application under section 18 of the AH Act to seek approval to develop, maintain and operate the new runway. The application was subsequently approved by the State Government in May 2018 and revised in 2024.

Perth Airport prepares a Cultural Heritage Management Plan for any activity that requires AH Act section 18 approval. Most recently, in 2024, a Cultural Heritage Management Plan was developed for the construction of the new Runway project to mitigate and manage impact to heritage values during construction.

11.6.5 Five-year Action Plan

Perth Airport's five-year action program for Aboriginal heritage management between 2026 and 2030, is shown in Table 11-5. Further information on these initiatives can be found in Section 8.

Initiatives	Completion Timeframe
Incorporate cultural awareness on the Perth Airport estate.	Short-term
Continue to undertake land nanagement activities to build and strengthen relationships and benefit Noongar communities	Ongoing
Consult and collaborate with Whadjuk Traditional Owners and Custodians to improve heritage and land management on the estate	Ongoing
Engage with Aboriginal stakeholders to develop cultural heritage management plans and incorporate cultural elements into new developments and projects	Ongoing

Table 11-5 Aboriginal heritage five-year action plan Source: Perth Airport

1.7 Built Heritage Management

11.7.1 Objective



Part C

Identify and promote the post-European and aviation history of the Perth Airport estate.

11.7.2 Overview

As a landmark site within the Perth landscape, the Perth Airport estate has a long and rich history of activity.

Perth Airport sits on the traditional lands of the Whadjuk people of the Noongar Nation, which once formed part of their traditional travelling networks. Perth Airport's recognition and management of Aboriginal cultural heritage is detailed in Section 8.

The Perth Airport estate has also played an important role in the post-European history of the region and the development of aviation in Western Australia. Prior to the site's official use as an airport in the latter half of the 20th century, the landscape was utilised for agricultural pursuits, a golf course, and a RAAF base during World War II.

There are no sites of heritage significance within Perth Airport that are listed on the National Heritage List or on the Commonwealth Heritage List.

11.7.3 Built Heritage

Heritage assessments have identified two non-Indigenous historic areas within Perth Airport; however, the full extent of these sites and values has not been determined.

Allawah Grove (formerly Guildford Army Camp, Camp 22, and Reserve 12720) has a complex history. It has been variously utilised as a camp reserve for Aboriginal people, a World War II army camp, State housing commission flats, and later as an Aboriginal housing settlement. Additionally, a plane crash occurred at Camp 22 in 1949. Allawah Grove has both Aboriginal and historic heritage values and archaeological potential, and is registered as a Heritage Place on the State's inHerit register.

The land located off Dunreath Drive has varied archaeological potential associated with the remains of rural or semirural houses built in the early decades of the 20th

century, along with the remains of associated outbuildings and facilities such as sheds, wells, septic tanks, earth closets (composting toilets), and farm-related infrastructure. The rural residences and farmlets, market gardens and poultry farms that preceded the airport, mark a particular time in the development of the region from rural farmland held as large estates, to smaller farmlets and modest rural holdings.

11.7.4 Aviation Heritage

The layout of Perth Airport's airfield and other built landscape elements are a legacy of nearly 90 years of airport development, the existing cross runway 06/24 having been constructed in 1944 and the existing main runway 03/21 in 1949.

The history of Perth Airport, from the initial land acquisition in 1938, its use as a RAAF base during World War II and its development today, is detailed in Section 2.4.

Perth Airport's Public Viewing Area is located on Dunreath Drive, within the Airport West precinct. The viewing platform, which opened in 2011, was designed to incorporate elements of aviation history and to preserve and showcase the surrounding natural environment. The shelter reflects the shape of the body section of a Boeing 747, with one section of paving 120 feet long (36.5 metres)—the same distance as the first flight undertaken by the Wright brothers. Signage is provided about the history of aviation and the airport. The viewing platform is wheelchair accessible and is a popular place for plane spotting.

11.7.5 Current Management

Perth Airport has implemented a Land and Biodiversity Management Plan to outline the environmental management requirements necessary to meet Perth Airport's goals and commitments, including built heritage considerations.

Planning for the next phase of works to achieve consolidation of all passenger services within the Airport Central precinct identified a potential relocation of the outdoor viewing platform (described in Section 13.10). Any future relocation or upgrade will consider opportunities for increasing awareness of the role of the airport's aviation history.

11.7.6 Recent Achievements

 A Land and Biodiversity Management Plan was developed in 2024 to guide the appropriate management of Perth Airport's environmental and heritage values.





The Future Plan for Perth Airport

- 12 Land Use Plan
- 13 Aviation Development Plan
- 14 Non-Aviation Development Plan
- 15 Ground Transport Plan
- 16 Airport Safeguarding
- 17 Utilities Development Plan



12.1 Introduction

The Perth Airport Land Use Plan balances the safeguarding of long-term airfield, terminal and aviation support land and operations with the development of the Perth Airport estate. This will incorporate the efficient use and development of non-aviation land for long-term growth, which will also ensure an appropriate level of flexibility to respond to operational requirements, market developments and business expectations.

Perth Airport is taking a strategic approach to meet growing air travel demand by streamlining terminals, improving ground transportation, and exploring non-aeronautical land uses to enhance efficiency and passenger experience. To support Western Australia's population and economic growth, additional infrastructure and air transport services are needed.

The consolidation of all commercial passenger services into the Airport Central precinct over the next five years presents opportunities to plan for future aeronautical needs and optimise land not required for aviation purposes.

Perth Airport's Land Use Plan also considers aviation safeguarding principles, including the protection of airspace, management of building-induced windshear, and considerations for communication, navigation and surveillance facilities, as well as aircraft noise.

Perth Airport is designated as a Specialised Activity Centre in State planning documents. Specialised Activity Centres focus on regionally significant economic and institutional activities, such as logistics-based businesses for airports or knowledge-based for health and tertiary education precincts. Planning for these centres should aim to protect the specialisation, while improving the growth and clustering of business activity of State and regional significance, particularly in knowledge-based or logistics-based industries. These areas are to be developed as places with a concentration of linked businesses and institutions providing a major contribution to the economy, with excellent transport links and potential to accommodate significant future growth in jobs and in some instances housing.



The consolidation of all commercial passenger services into the Airport Central precinct over the next five years presents opportunities to plan for future aeronautical needs and optimise land not required for aviation purposes.

Master Plan 2026 has adopted terminology consistent with the Western Australian planning system, and accordingly has use zones, land uses, and planning provisions broadly derived from the State Government's *Planning and Development (Local Planning Schemes) Regulations 2015.*

The objectives of the Perth Airport Land Use Plan are to:

- maximise aviation capacity
- ensure long-term aviation growth requirements are met
- support the consolidation of all commercial air services to a central terminal precinct
- safeguard for flexible and adaptive growth, responding to the changing needs and wants of industry, business, consumers and visitors
- bring land not required for long-term aviation services into productive use by facilitating land use and development
- avoid, minimise and mitigate environmental impacts, and protect environmentally significant areas where possible
- strengthen Perth Airport's position as a key Activity
 Centre by supporting economic development and creating employment in Western Australia
- protect the airport's 24-hour, seven day a week operation for the benefit of Western Australia
- support land uses and zoning consistent with surrounding areas and uses complementary to aviation such as retail, transport, business/commercial and tourism, and
- encourage sustainable outcomes that create safe, attractive and connected places offering high amenity for visitors and the local workforce.

The Perth Airport estate comprises 2,105 hectares of land that includes:

- the airfield and terminals
- · aviation-related and aviation support facilities
- roads and infrastructure services
- a range of industrial, business and commercial activities, and
- · remnant vegetation and wetlands.

12.2 Precincts

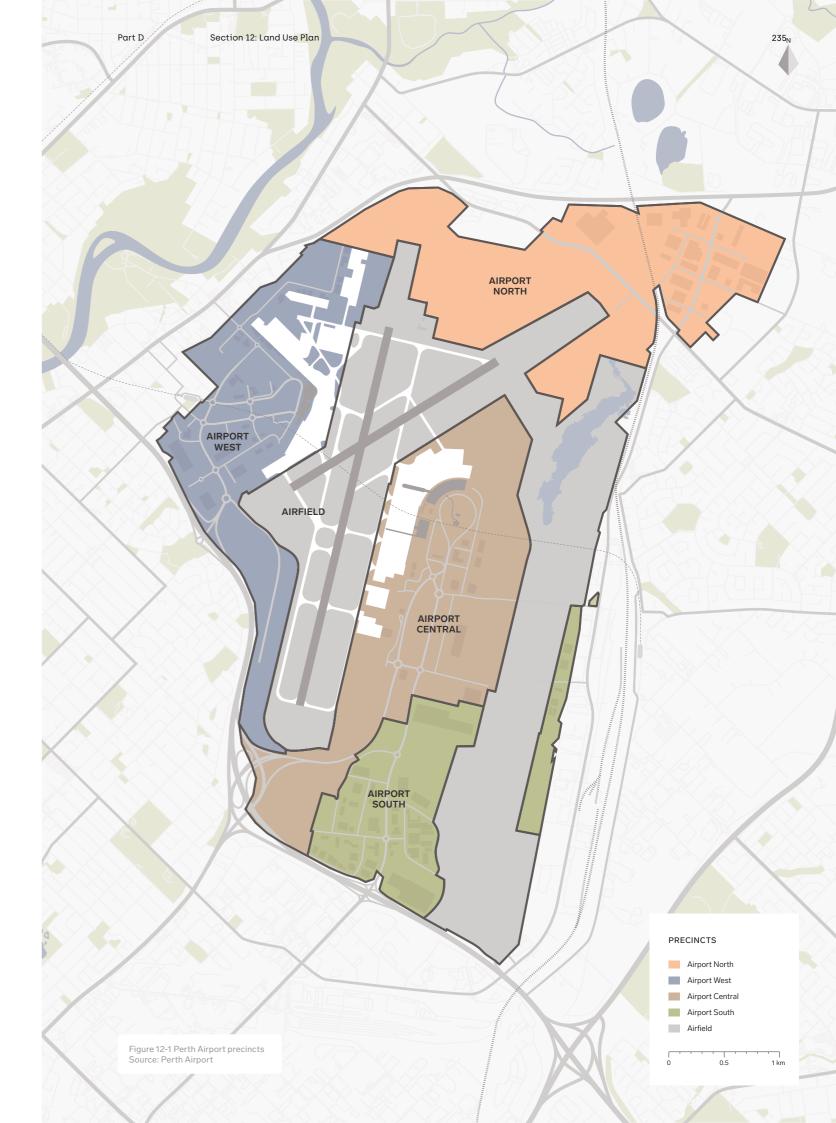
The Perth Airport estate has been divided into five precincts for planning, development and identification. Each precinct has differing objectives and characteristics based on:

- · communities of interest
- contiguous land uses
- · access points and available transport, and
- · interfaces with neighbouring land uses and communities.

The use of precincts within the context of the airport estate can be compared to the concept of a suburb (or locality) within a local government area. At this high level, precincts define the locational characteristic of a respective area, but not the land uses or zones. The use of land within each precinct is guided by zones, similar to the way in which a suburb may contain a range of land use zones. A precinct may contain one, or a number of different land use zones. Within a precinct there can also be a specified development area that reflects a specific development intent for that area, in the same way that a neighbourhood centre is planned by local government authorities.

The Perth Airport precincts are shown in Figure 12-1.

Perth Airport is a Specialised Activity Centre, designed to support economic growth, link businesses and institutions, and accommodate significant future jobs while safeguarding aviation operations and environmental values.



12.3 Airfield Precinct



A safe, secure and efficient precinct with operations 24 hours a day, seven days a week.

The Airfield Precinct covers approximately 776 hectares and comprises all infrastructure required for the current and future movement of aircraft, including runways and taxiways, aircraft aprons, and the current and future facilities for navigation aids and aviation rescue and firefighting services.

There is sufficient land in the Airfield Precinct to accommodate all required aircraft movement infrastructure for the long-term configuration of Perth Airport. This includes the upcoming construction of the new runway 03R/21L and potential future extensions of the main runway 03/21 (to become 03L/21R) and the cross runway 06/24.

This precinct will continue to be used and developed to support the required aviation activities and facilities integral to the day-to-day operations of Perth Airport.

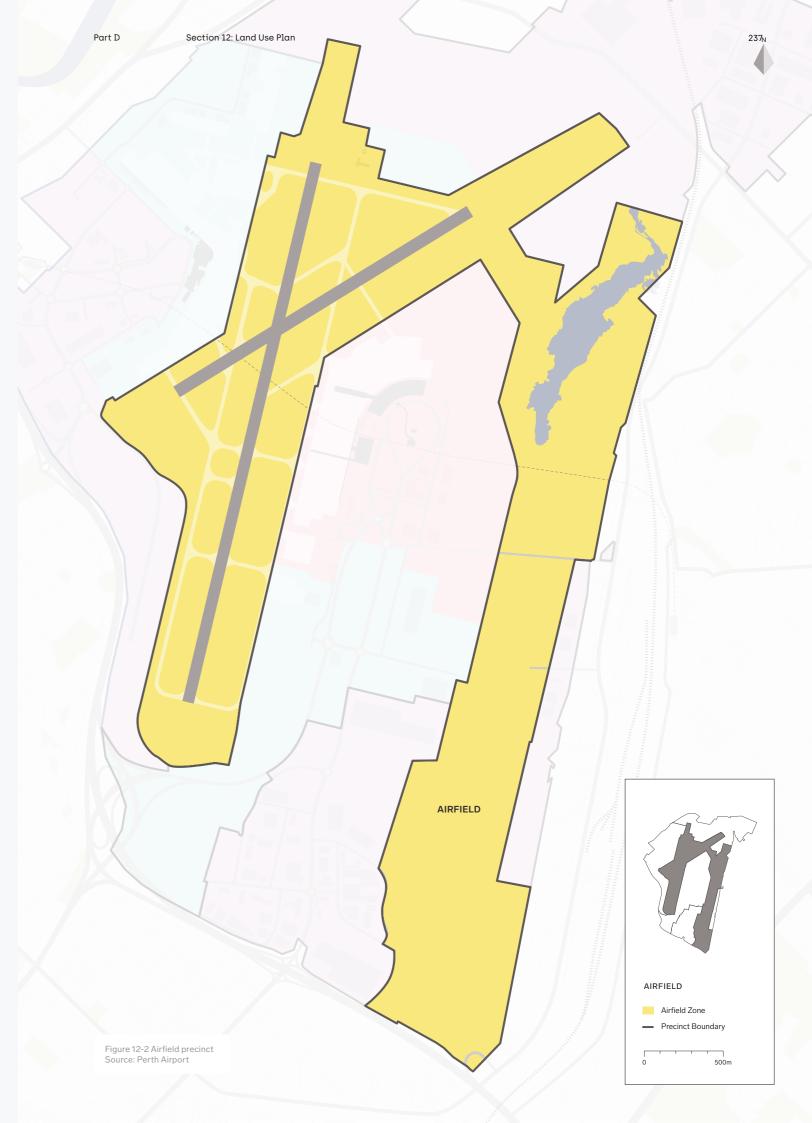
The undeveloped areas of the precinct comprise a mixture of vegetation types and conditions. Approximately 25 per cent of the Airfield Precinct is vegetated, totalling approximately 182 hectares, with the vegetation condition ranging from degraded to excellent. Vegetation type in the northern portion of the precinct differs significantly from that in the south, mainly due to variable soil conditions.

Munday Swamp, an important feature within the precinct, is listed on the State Government's Register of Aboriginal Heritage Sites for its archaeological, ethnographic, and spiritual significance to the Traditional Custodians of the land. As part of its Social Value Strategy, Perth Airport is committed to minimising impacts on this vital wetland. Covering approximately 20 hectares, with around one hectare of open water, Munday Swamp supports diverse vegetation, as well as a rich array of invertebrate and vertebrate fauna. It is also recognized on the Commonwealth Directory of Important Wetlands.

The Airfield precinct is shown in Figure 12-2.



All new developments must align with the carbon management hierarchy: avoid, reduce, replace, offset.



12.4 Airport Central Precinct



The heart of Perth Airport operations, supporting seamless and convenient passenger experiences through maximised aviation capacity, terminal forecourt activation and direct and centralised access to car parking.

The Airport Central precinct, located at the core of the airport estate, plays a key role in meeting projected aviation demand. It provides essential car parking to improve passenger convenience and experience, while also offering strategic commercial land to support aviation activity and amenities for airport workers.

The Airport Central precinct currently comprises:

- T1 International, T1 Domestic Pier and T2
- Airport Central Station
- · aircraft parking aprons
- the Air Traffic Control tower
- · aviation support facilities such as aircraft refuelling, maintenance, catering and freight handling
- ground transport interfaces and road accessways, car parking (staff, short-term and long-term), and car rental, taxi, bus, ride share and small charter vehicle access
- supporting services and utilities, including waste and central energy plant facilities, and
- commercial developments, including retail and office.

The 417-hectare precinct provides sufficient land to accommodate the consolidation of all commercial air services into new facilities around the site of the existing terminals and Airport Central Station, to achieve the envisaged ultimate configuration of Perth Airport.

Contained within the precinct is approximately 72 hectares of remnant bushland, of which 27 hectares is the Commonwealth-listed Banksia Woodland of the Swan Coastal Plain threatened ecological community.

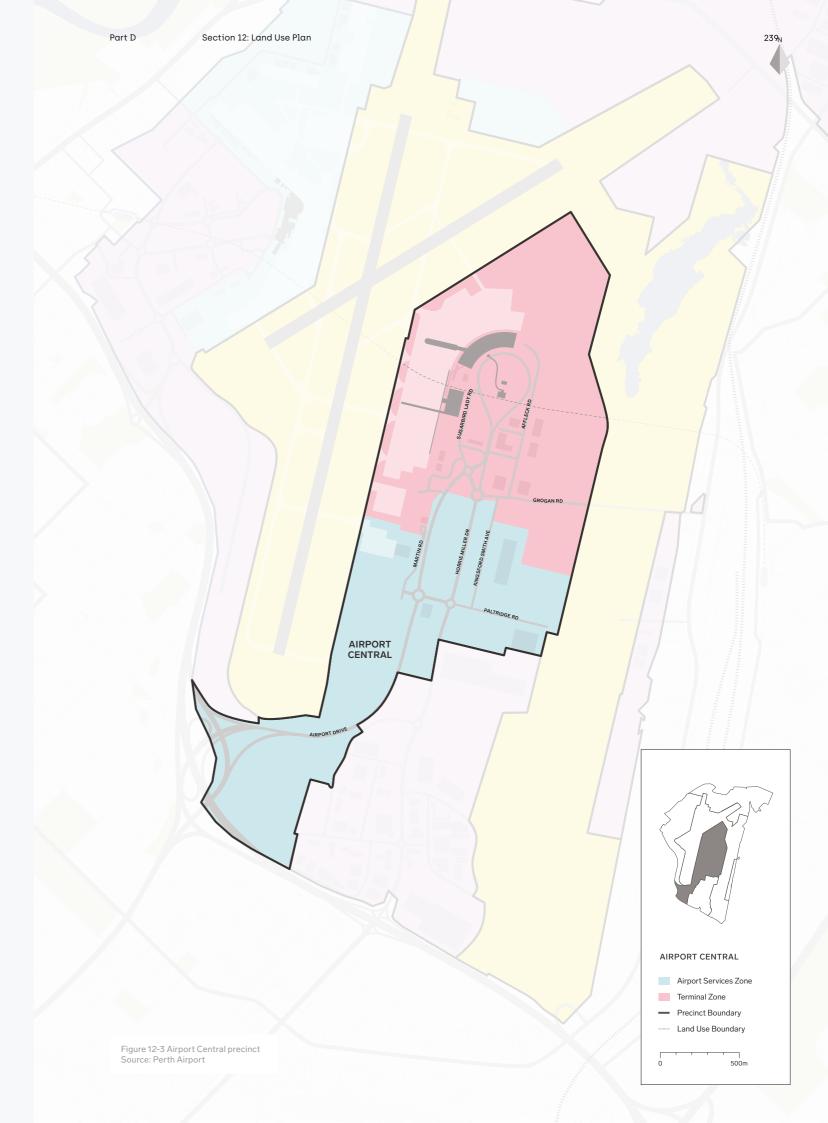
Future use and development within the Airport Central precinct will ensure aviation needs can be prioritised while balancing support facility requirements, complementary non-aviation opportunities and the provision of car parking.

Perth Airport has undertaken land use planning that addresses the significant growth and activity in the Airport Central precinct following consolidation, safeguarding land for critical aviation support uses such as jet fuel infrastructure, cargo terminal operations, aircraft maintenance and freight forwarding. The proportion of land allocated to aviation support uses within Airport Central can be staged, responding to lease arrangements, development commitments and forecast demand.

Planning for the precinct includes the following future facilities:

- new and expanded terminals
- · new aprons for aircraft parking
- multi-storey car parks, incorporating passenger drop-off and pick-up areas
- hotel accommodation
- · ground transport systems
- freight facilities
- aircraft maintenance facilities
- · additional commercial development including offices and
- office accommodation for airline partners, airport administration, international air freight operations
- fuel storage facilities, and
- amenities for airport employees, such as childcare and food and beverage offerings.

The Airport Central precinct is shown in Figure 12-3.



12.5 Airport West Precinct



An activated and diverse hub that creates the possibility for all work, tourism and leisure needs to be met in one location, seamlessly integrating with ongoing general aviation activities.

The Airport West precinct, comprising 344 hectares, will transition in use during the period of this Master Plan 2026. With the shift of passenger operations and aviation support facilities from T3 and T4 to the Airport Central precinct, the Airport West precinct will change from a passenger service focus to a vibrant commercial hub, featuring office, education, retail, and leisure developments. Within the Airport West precinct, there is approximately 40 hectares of remnant bushland covering approximately 12 per cent of the total precinct area.

The Redcliffe Train Station, opened in October 2022 as part of the Forrestfield-Airport Link project, directly abuts the eastern boundary of the Airport West precinct. The station supports land use opportunities within the precinct that provide goods, services and amenity for travellers, the future increased nearby residential population, the wider growing population of Perth, and the growing employee base on the airport estate. Perth Airport will look to develop commercial land uses to complement the transit-oriented development carried out as part of the State Government's METRONET program.

These land uses will integrate with ongoing general aviation activities, which will continue to be accommodated within the Airport West precinct. The planned reconfiguration of the General Aviation Area (detailed further in Section 13.7) will improve airside access, supporting growth in general aviation, future cargo and aviation support facilities, and anticipated helicopter and vertical take-off and landing (VTOL) operations.

The large aircraft types currently operating from the General Aviation Area and the volume of passengers in peak periods are not consistent with the intended use of the General Aviation Area when it was established. It is also not consistent with the long-term planning for Perth Airport, which is based on all high-volume passenger services operating from suitable infrastructure in a centralised precinct. As such, there is no requirement for significant terminal or passenger processing facilities in the

General Aviation Area beyond that necessary to support small-scale regional and charter movements with a seating capacity of less than 40 passengers. Several operators have recently or are planned to relocate their operations into existing and future common use terminals within Airport Central. Perth Airport is committed to working with other operators to transition their operations into the consolidated Airport Central precinct.

As a result, the General Aviation Area is planned to transition back to its original intended use during the 20-year planning period of this Master Plan 2026, which is to cater for traditional general aviation operations including emergency services, small-scale charter and freight, aerial work, flight instruction, ground aviation services (such as maintenance and navigation), and recreational flying.

Following the consolidation of Qantas operations to the Airport Central precinct, the T3 and T4 buildings will be decommissioned. Given the proximity to the airfield, the future use of the T3 and T4 sites will be for aviation purposes and align with the long-term development plans of Airport West and the General Aviation Area reconfiguration. The land use zoning in this part of the precinct, Airport Services zone, reflects this future intention. Perth Airport will work with existing aviation support tenants in Airport West, for example cargo terminal operators and freight forwarders, to support any future relocation plans to Airport Central and Airport South precincts.

The Airport West precinct is shown in Figure 12-4.



12.6 Airport South Precinct



A highly connected and accessible industrial and logistics precinct accommodating complimentary aeronautical land uses which benefit from strategic proximity to terminals and support Airport Central operations.

The Airport South precinct is a highly functional precinct offering diversity, amenity and quality transport links and infrastructure. It covers approximately 203 hectares and will continue to be developed to provide a range of aviation and non-aviation uses, with a focus on logistics, freight and distribution facilities and light industrial.

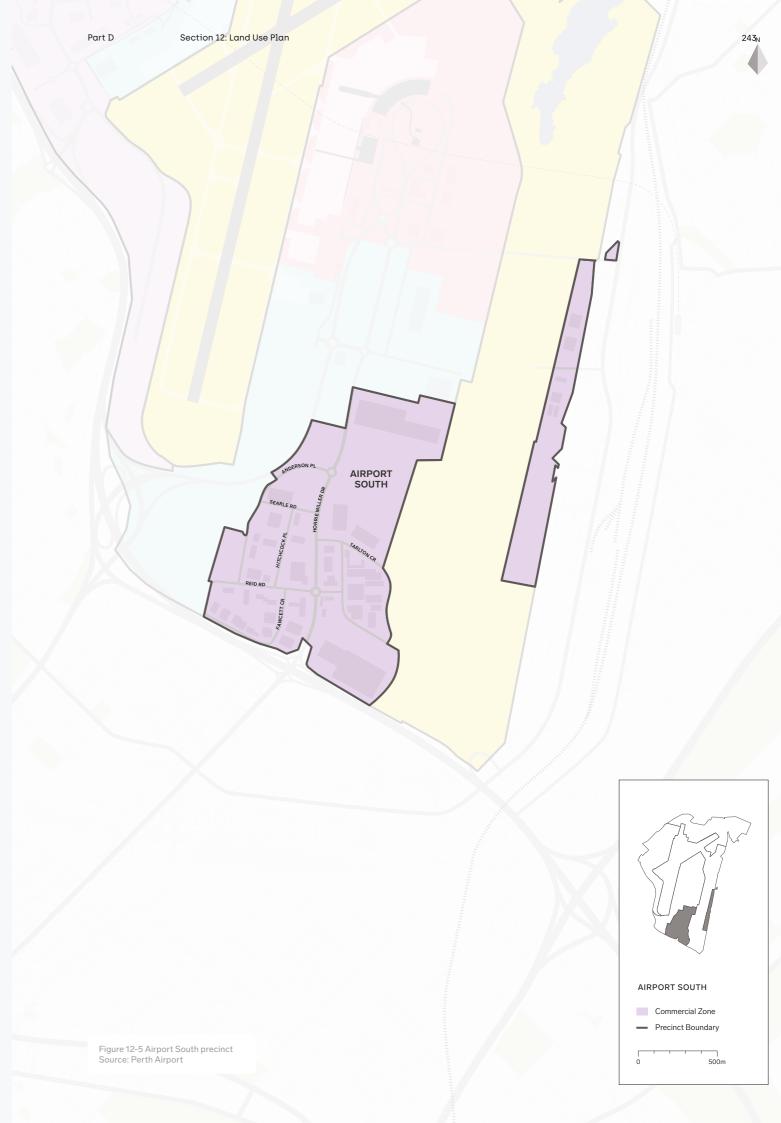
Airport South is strategically located; with direct access from Tonkin Highway and Kewdale Road onto Horrie Miller Drive, it serves as the airport's southern gateway and provides a seamless transition to Airport Central.

It will continue to be developed for large-format industrial use, while opportunities for aviation support facilities within the precinct will also be explored. The long-term vision is for a highly accessible industrial and logistics precinct anchored by a precinct-centre, providing high-quality public realm with spaces for workers to meet. It also provides strategically positioned land to safeguard aviation support operations which benefit from proximity to terminals and aprons, and future opportunities for airside access.

Contained within the Airport South precinct is approximately 25 hectares of remnant bushland covering approximately 13 per cent of the total precinct area.

The Airport South precinct is shown in Figure 12-5.





12.7 Airport North Precinct



An attractive and highly functional precinct, offering a mix of industrial and logistics uses.

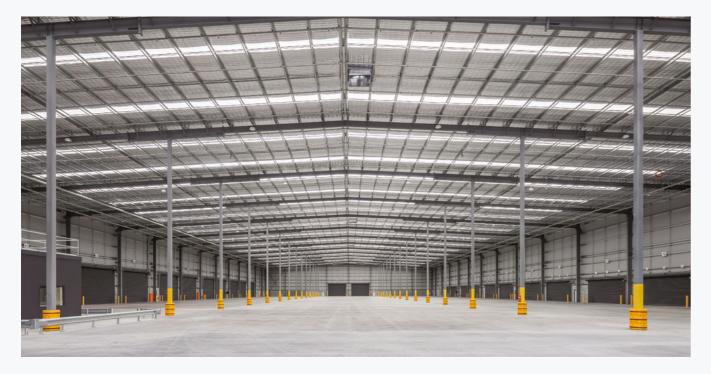
The Airport North Precinct covers approximately 365 hectares and is envisaged to provide an integrated mix of commercial, industrial, aviation support and logistics land uses

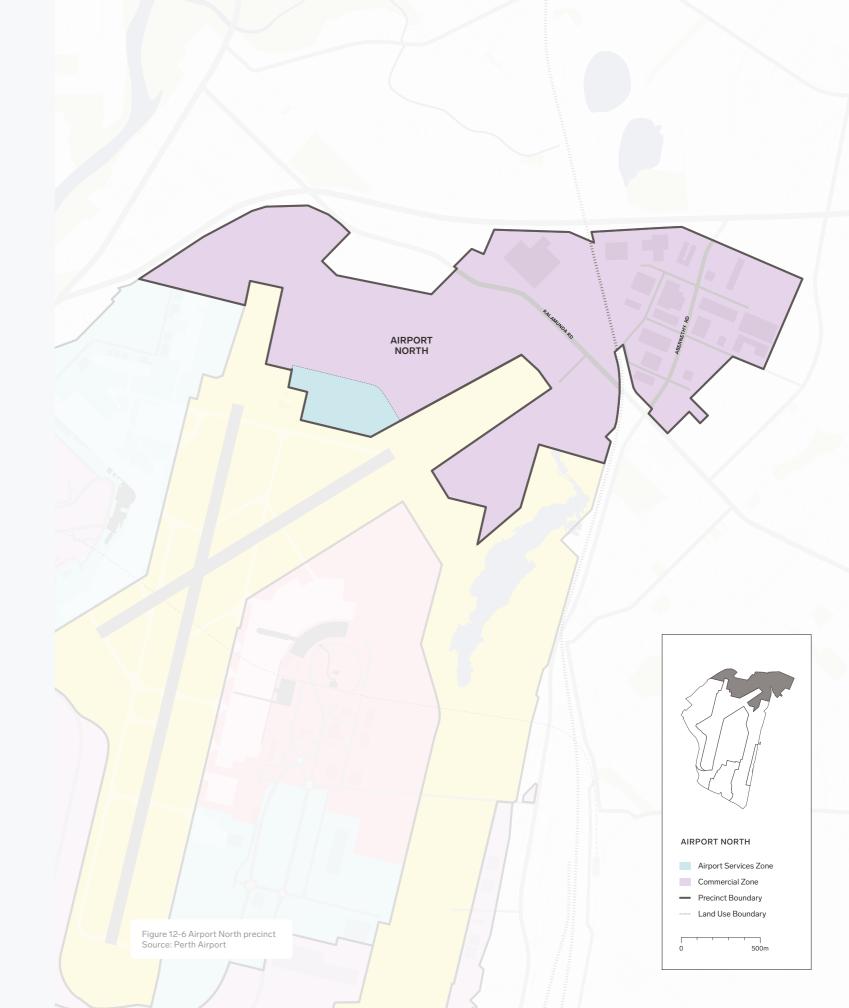
When developed, this precinct will take advantage of the large flat sites that are available and maximise land use efficiency within the metropolitan region, by delivering much needed and well-connected industrial land in a central location to support Perth's continued growth into the future. Airport North has direct and convenient access to the broader freight network off Kalamunda Road and Great Eastern Highway and has the potential for rail freight access in the future.

The precinct also presents an opportunity for aviation related development, for example aircraft and ground services equipment maintenance, with direct airside frontage to be made available through future development for some sites.

Located within the precinct is approximately 139 hectares of remnant bushland, of which 60 hectares is the Commonwealth-listed Banksia Woodlands of the Swan Coastal Plain threatened ecological community.

The Airport North precinct is shown in Figure 12-6.





12.8 Land Use Zones

The five precincts described in this Land Use Plan contain the following land use zones:

- Airfield Zone
- Terminal Zone
- Airport Services Zone, and
- Commercial Zone.

Consistent with Section 71(2)(c) of the Airports Act and Regulation 15(2) of the Airports Regulations 2024, the land uses for each of the zones identified have generally been based on those land uses included in the State's Planning and Development (Local Planning Schemes) Regulations 2015, with some additional uses specific to Perth Airport such as 'aviation activity' and 'aviation support facilities'. These land use zones are shown in Figure 12-7. Perth Airport will apply these land uses and interpret all definitions as required for the operation and development of Perth Airport. Land use tables have been developed which identify discretional uses and, as such, for operational and development purposes Perth Airport may consider the listed land uses at its discretion. Definitions of each discretionary land use can be found in Section 18.

Perth Airport is committed to working closely with the State Government and the adjoining local governments around the estate to minimise conflict and inappropriate developments.

12.8.1 Airfield Zone

The Airfield Zone has the objectives and discretional land uses shown in Table 12-1.

Airfield Zone Objectives

To provide for safe, secure and efficient airfield operations 24 hours a day, seven days a week, including aircraft take-off, landing and taxiing

To accommodate provision of facilities that support safe and efficient airfield operations, such as aviation fire and rescue services and aircraft navigational aids

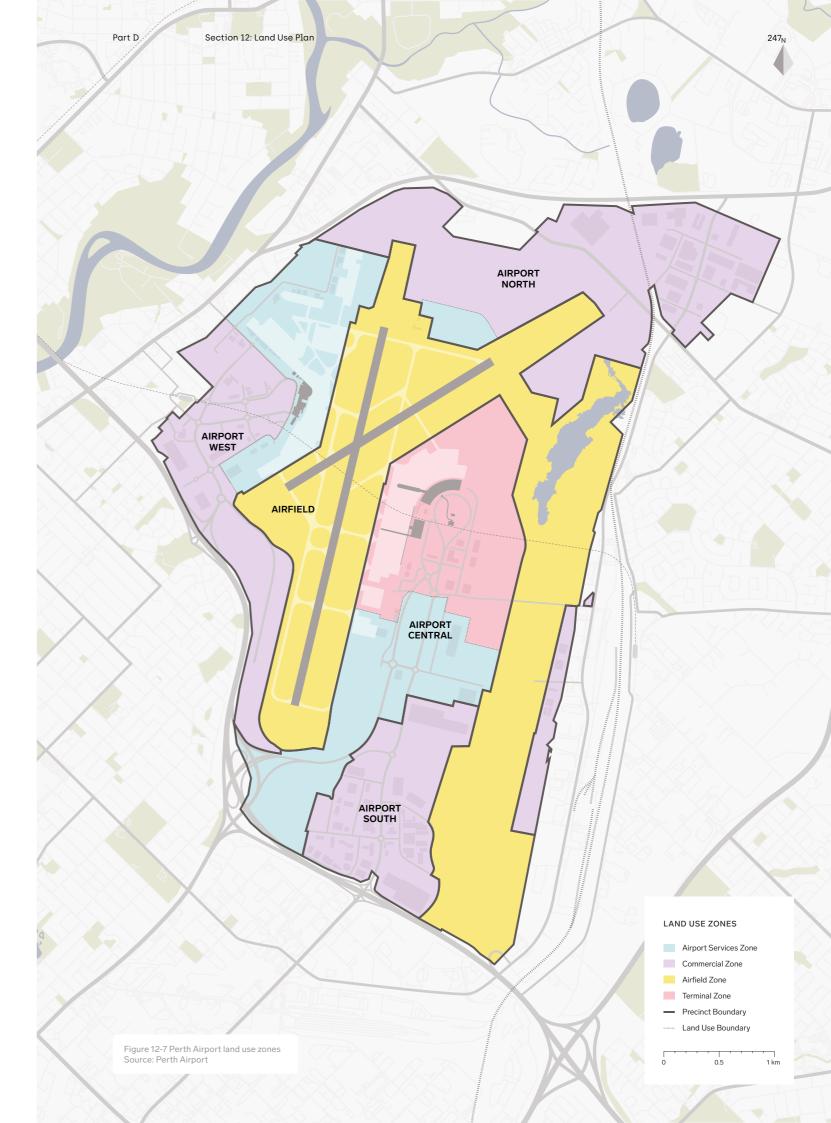
To enable future expansion of the airport's operations, including additional runways, taxiways and associated aviation facilities

To support the consolidation of all commercial air services in a central terminal precinct

Discretional Uses

Animal establishment Aviation activity Aviation support facilities Car park Environmental Services Helipad Heliport Industry—light* Motor vehicle, boat or caravan sales/hire*
Navigational aids
Recreation—public
Telecommunications infrastructure
Utilities and infrastructure
Warehouse/storage*
Workforce Accommodation

Table 12-1 Airfield Zone objectives and uses Source: Perth Airport Note: *Interim uses as discussed in Section 12.8.5



Perth Airport Master Plan 2026 Part D Section 12: Land Use Plan

12.8.2 Terminal Zone

The Terminal Zone has the objectives and discretional land uses shown in Table 12-2.

Terminal Zone Objectives

To provide for the operation, use and development of land for passenger and baggage processing, and aircraft aprons, terminal and ground transport interfaces, enabling the airport facilities to operate safely, securely, efficiently and cost-effectively

To provide quality facilities for airline partners and passengers, including efficient terminal facilities with adequately located and sized commercial areas

To provide terminal facilities with ample commercial and retail uses

To provide for flexible expansion of passenger terminal facilities and aircraft aprons to meet forecast demand

To provide for appropriate freight and logistics land uses utilising the airside-landside interface

Discretional Uses

Art gallery
Aviation activity
Aviation support facilities
Brewery
Car park
Childcare premises
Civic Use
Consulting rooms
Convenience store
Corrective institution
Education establishment
Environmental Services
Exhibition centre
Fast food outlet/lunch bar
Hotel

Medical centre

Motor vehicle repair

Navigational aids
Office
Passenger terminal
Reception centre
Restaurant/cafe
Service station
Shop
Small bar
Telecommunications infrastructure
Tourist and visitor accommodation
Training facility
Utilities and infrastructure
Warehouse/storage*
Waste storage facility

Workforce Accommodation

Table 12-2 Terminal Zone objectives and uses Source: Perth Airport Note: *Interim uses as discussed in Section 12.8.5 12.8.3 Airport Services Zone

The Airport Services Zone has the objectives and discretional land uses shown in Table 12-3.

Airport Services Zone Objectives

To provide a range of aviation support activities, services and facilities for use by airline partners, passengers, government agencies, freight businesses and transport providers

To provide integrated car parking, hotel accommodation, commercial and retail uses that support the airport

To provide an attractive and functional gateway to the airport

To provide freight and logistics land use opportunities in appropriate locations

To provide ground transport facilities and services for efficient access to the airport and terminals

Discretional Uses

Animal establishment
Aviation activity
Aviation support facilities
Car park
Childcare premises
Civic Use
Consulting rooms
Convenience store
Corrective institution
Education establishment
Environmental Services
Fast food outlet/lunch bar
Fuel depot
Medical centre

General aviation and support facilities Hotel Industry Industry— light Medical centre Motor vehicle repair

Motor vehicle, boat or caravan sales/hire

249

Motor vehicle wash Navigational aids Office

Passenger terminal Service station

Shop Small bar

Telecommunications infrastructure
Tourist and visitor accommodation

Trade Supplies
Training facility
Transport depot
Utilities and infrastructure
Warehouse/storage
Waste storage facility
Workforce Accommodation

Table 12-3 Airport Services Zone objectives and uses Source: Perth Airport

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12.8.4 Commercial Zone

Commercial Zone has the objectives and discretional land uses shown in Table 12-4.

Commercial Zone Objectives

Facilitate land use and development in line with the characteristics of a Specialised Activity Centre and encourage a mix of uses and intense development around the Redcliffe Train Station

Deliver a diversity of appropriate land uses to make best use of land, facilities and services and to provide a suitable interface between the airport boundary and the surrounding areas

Create through good urban design, an attractive, walkable, safe and balanced built form and natural environment

To provide a focus for industry, business and employment generating development opportunities

To promote sustainable design and development outcomes

Discretional Uses

Abattoir^
Agriculture—intensive^
Animal establishment^
Art gallery
Aviation support facilities
Brewery
Bulky goods showroom
Car park
Childcare premises
Cinema/theatre
Civic Use
Club premises
Community purpose
Consulting rooms
Convenience store

Exhibition centre
Fast food outlet/lunch bar
Fuel depot^
Funeral parlour
Garden centre
Hospital
Hotel
Industry
Industry—light^
Liquor store (small)

Corrective institution^

Education establishment

Environmental Services

Logistics centre Market Medical centre Motor vehicle repair' Motor vehicle wash

Motor vehicle, boat or caravan sales/hire Office

Reception centre
Recreation—public
Recreation—private
Resource recovery centre^
Restaurant/cafe
Service station
Shop

Shop
Shopping centre
Small bar
Tavern

Telecommunications infrastructure Tourist and visitor accommodation

Trade display
Trade Supplies
Training facility
Transport depot^
Utilities and infrastructure
Veterinary centre
Warehouse/storage^
Waste storage facility^
Workforce Accommodation

Table 12-4 Commercial Zone objectives and uses

Source: Perth Airport

Liquor store (large)

 ${\tt Note: ^{\land} land\ uses\ to\ be\ minimised\ within\ the\ immediate\ pedestrian\ environment\ surrounding\ Redcliffe\ Train\ Station}}$

Within the Commercial Zone, permitted uses for the adjoining Airport Services Zone, Terminal Zone and Airfield Zone which are not identified in the above list of Commercial Zone uses, may be considered if required for airport operations.

12.8.5 Interim Use and Development of Airfield, Terminal and Airport Services Zones

It is unlikely that the ultimate development of Perth Airport will occur within the statutory 20-year planning period of Master Plan 2026. In the interim, land in the Airfield, Terminal and Airport Services Zones across all precincts, while maintaining an overarching aviation purpose, may be used and developed for non-aviation purposes that are consistent with uses permitted in adjacent precincts.

Commercial arrangements for the use of this land will ensure such uses will not impact on, or limit future expansion of aeronautical operations, and the intended interim uses will be consistent with the objectives of this master plan.

In instances where interim commercial uses are planned on land that may be required for aviation services in the longterm, appropriate break clauses are incorporated in leases and only relatively low capital intensity uses are undertaken.

12.9 Surrounding Land Uses

Perth Airport's land use aligns strategically with adjacent local government areas, allowing for seamless integration and economic synergy.

To the north, Perth Airport's border with the City of Swan features key transport routes such as Kalamunda Road and the Great Eastern Highway Bypass, along with light industrial zones and significant sites like Guildford Cemetery and the South Guildford residential area.

To the west, the airport estate's border with the City of Belmont encompasses Redcliffe's residential areas and the Redcliffe Train Station, enhancing local accessibility. To the south, connections to the Tonkin Highway and the Kewdale light industrial area emphasise the estate's role in logistics and freight.

To the east of the estate, Abernethy Road and the freight rail line integrate with the City of Kalamunda's Forrestfield area, a critical hub for industrial and distribution networks.

This alignment promotes a mix of industrial, residential, and transport-focused land uses, reinforcing Perth Airport's role as a central hub for economic and infrastructure growth across the region.

12.9.1 Consistency with State and Local Planning Framework

The Airports Regulations 2024 requires an airport master plan to describe proposals for land use and related planning, zoning or development in an amount of detail equivalent to that required by, and using terminology (including definitions) consistent with that applying in, land use planning, zoning and development legislation in force in the state or territory in which the airport is located.

In this regard, where possible, the land use zones in the Perth Airport Land Use Plan have been developed using terminology consistent with that of the Western Australian *Planning and Development (Local Planning Schemes)*Regulations 2015 and the three adjoining local planning schemes of the City of Belmont, City of Swan and City of Kalamunda.

The Perth Airport Land Use Plan complements the planning frameworks of City of Belmont, City of Swan and City of Kalamunda by providing additional economic and

employment opportunities for growing residential populations within the adjoining local government areas.

12.10 Sensitive Developments

Section 71A of the Airports Act requires a master plan to identify any proposed 'sensitive development'. A sensitive development is defined as development or redevelopment that increases the capacity of the following:

- · residential dwelling
- · community care facility
- pre-school
- primary, secondary, tertiary or other education institution, or
- hospital.

A sensitive development does not include the following:

- an aviation education facility
- accommodation for students studying at an aviation education facility at the airport
- a facility with the primary purpose of providing emergency medical treatment and which does not have in-patient facilities, or
- a facility with the primary purpose of providing in-house training to staff of an organisation conducting operations at the airport.

Sensitive developments are not permitted at Commonwealth leased airports, except in exceptional circumstances, and require an airport to apply to the Federal Minister for Infrastructure for approval to prepare a draft major development plan (MDP) for the proposed development. The Minister may approve the preparation of the MDP only when satisfied that there are exceptional circumstances that supports its preparation.

There are two future land uses identified in Master Plan 2020 that have been retained for this Master Plan 2026 which are sensitive developments: Education and Hospital. No specific site has been identified for either land use; however, the wider Airport West precinct is seen as a suitable location. Both Hospital and Education are high trip generating uses that require both private and public transport access, as well as large land parcels with adequate infrastructure in close proximity to populated areas. Perth Airport is already well serviced by major arterial roads for car and public bus access, and by rail through the Forrestfield-Airport Link project. The nearby growing resident population within the City of Belmont will benefit from access to employment opportunities and services, within a walkable catchment.

Additionally, there are suitable locations within Airport West which are either completely outside of the current aircraft noise contours or are located within the lowest contour. Under State planning policy, the development of these sensitive land uses within the lowest contour is 'conditionally acceptable', meaning it can be permitted subject to compliance with certain design criteria.

Education and Hospital land uses are aligned with both State and local government strategic documents which plan for the future of the eastern suburbs of metropolitan Perth.

12.11 Pre-Existing Interests

There are a number of pre-existing interests that provide for access and use of land within the airport estate by external parties. These are in the form of licences, leases and easements over the airport estate which existed when the operation and management of Perth Airport was transferred from the Commonwealth to Westralia Airports Corporation on 2 July 1997.

The pre-existing interests are shown in Table 12-5. They include government authorities which provide services for purposes related to international airport activities, and providers of utilities that supply the airport estate or pass through it.

Future developments on the airport estate will recognise the existence of these interests and Perth Airport will liaise with the owners and operators of these services to ensure their relevant needs are addressed as development occurs. Perth Airport will also protect the rights of those parties as provided for in the leases and licences and will abide by the relevant regulations and legislation in relation to the easements.

12.12 Changes From Master Plan 2020

The Perth Airport Land Use Plan contained within Master Plan 2026 remains consistent with the land use plan in the Master Plan 2020, with minor changes as follows:

- The boundary between the Airport Central and Airport South precincts has been realigned to follow the airport cadastral boundary, replacing the previous alignment which cut through individual sites and created interpretation challenges. This change simplifies the precinct layout and provides a clearer distinction of land use between the two areas.
- The 'Mixed Use' zone in Airport West has been removed, with the 'Airport Services' zone extended to include sites up to the airside boundary. In Master Plan 2020, the 'Mixed Use' zoning included conditions related to potential future terminal expansion in the precinct; however, these conditions are no longer applicable to Perth Airport.
- The 'Terminal' and 'Airport Services' zones within the Airport Central precinct have been realigned to more accurately reflect the intended land use. This adjustment ensures better alignment with the future terminal development footprint and relocates proposed aviation support development sites—previously within the 'Terminal' zone—into the more appropriate 'Airport Services' zone.
- The extent of the 'Airport Services' zone along the airside boundary in the Airport North precinct has been reduced due to operational challenges associated with this land use in that location. As a result, the area has been reverted to the 'Commercial Use' zone to better support its intended function.

A comparison of the Master Plan 2020 and Master Plan 2026 land use plans, is shown in Figure 12-8.

Name	Purpose	Precinct
Airservices Australia	Operations centre, navigation equipment, offices and store	Airport West
Airservices Australia	Air Traffic Control tower	Airport Central
Australia Post	Post processing facility	Airport West
BP Australia Ltd	Fuel hydrant supply lines	Airfield
Dampier Bunbury Natural Gas Pipeline	High pressure gas pipeline	Airfield, Airport North and Airport South
Parmelia Gas Pipeline	High pressure gas pipeline	Airport North
Qantas Airways Ltd	Domestic flight operations	Airport West
Telstra Corporation Ltd	Communication facilities	Airport West
Water Corporation	Water pipe	Airport West and Airport South

Table 12-5 Pre-existing interests on the Perth Airport estate Source: Perth Airport



13 AviationDevelopment Plan



13.1 Introduction

The successful operation of Perth Airport relies on the ongoing development of airfield and terminal infrastructure to ensure that forecast passenger and aircraft demand can be met.

The aviation development plan includes runways, taxiways, aircraft parking areas, navigation infrastructure and terminal facilities, and takes into consideration:

- maximising airport and airspace capacity in the ultimate airfield configuration
- ensuring aircraft movements between runways and terminals deliver the most efficient taxiing, lowest fuel burn and therefore the lowest environmental impact
- the accommodation of all aircraft types up to the largest passenger aircraft (currently the Airbus A380)
- airline partner and aviation and border control authority requirements to meet their respective business and operational needs
- customer experience
- the environmental and Aboriginal heritage values across the Perth Airport estate, and
- roads, car parking and public transport.

There were 160,882 aircraft movements at Perth Airport in FY25, exceeding the previous peak of 156,757 movements recorded in FY24. Growth forecasts predict that aircraft movements will increase by more than 40 per cent to 222,800 movements by FY46.

Perth Airport has a long-held vision of consolidating all commercial passenger services into a central precinct that is supported by a parallel runway system. The first phase of consolidation was achieved through a \$1 billion investment that included new and upgraded terminal and airfield facilities. Over the next decade the final stage of consolidation will be achieved through a multi-billion-dollar capital investment program that includes a new runway, new terminal, and upgrades to existing terminals. This transformation will ensure that Perth Airport has the airfield and terminal facilities to meet the future air travel needs of Western Australia well into the future.

Perth Airport's ongoing development ensures airfield and terminal infrastructure meets forecast passenger and aircraft demand.

13.2 Existing Airfield

The existing airfield layout, shown in Figure 13-1, consists of two intersecting runways, associated taxiways and apron areas. The main runway 03/21 is positioned in a north-south alignment and is 3,444 metres long and 45 metres wide. The runway is a flexible pavement, grooved runway and is contained within a 300-metre-wide runway strip.

The cross runway 06/24 is positioned in a northeast-southeast alignment and is 2,163 metres long and 45 metres wide, contained within a 300-metre-wide runway strip.

The runway system is supported by a network of taxiways which provide access from the runways to the various passenger terminals.

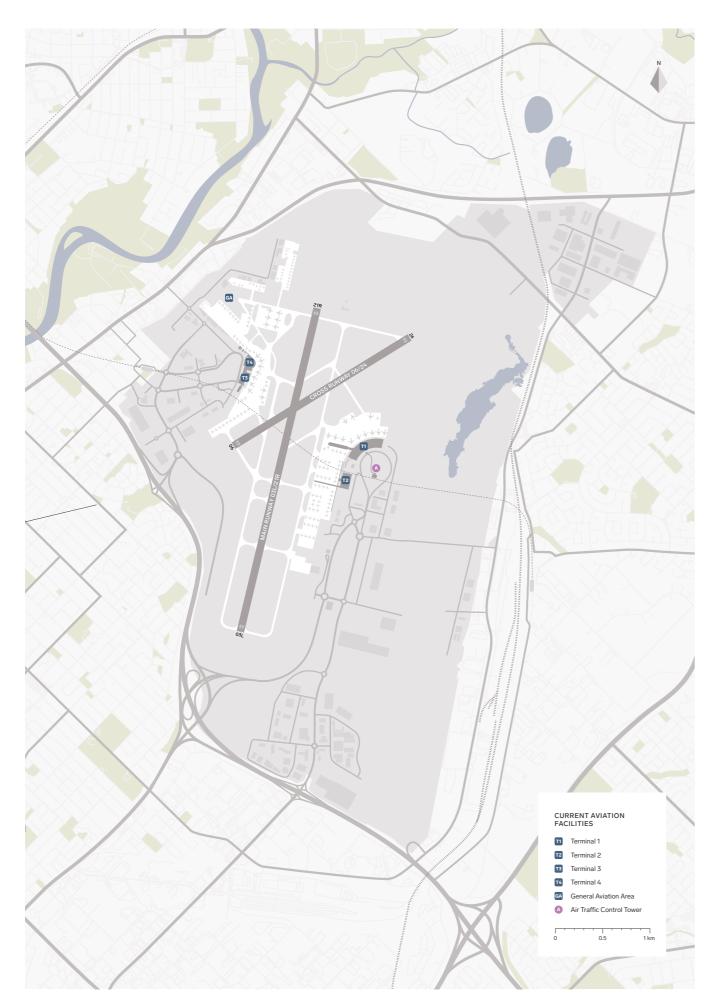


Figure 13-1 Current aviation facilities

Source: Perth Airport

Figure 13-2 Existing runway modes Source: Perth Airport

13.3 Runway Use

Both ends of a runway can be used for arrivals and departures. The direction being used is referred to as the operating or duty runway. An operating mode is the use of a certain runway, or a combination of runways, and the mode selected is based on a number of factors and selection criteria.

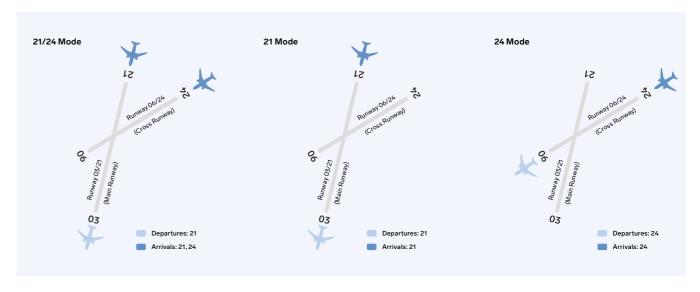
For operations at Perth Airport, aircraft arrivals from the north and departures to the south are referred to as the South Flow, while arrivals from the south and departures to

the north are referred to as the North Flow. Single runway operations can occur for all runway directions (03, 06, 21, or 24).

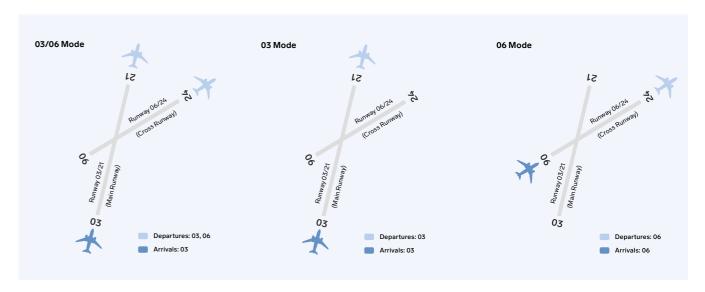
The current runway modes are shown in Figure 13-2. The modes that achieve maximum movement capacity are when both runways are used:

- 03/06 mode—arrivals on runway 03 and departures on runways 03 and 06, and
- 21/24 mode—arrivals on runway 21 and 24 and departures on runway 21.

South Flow



North Flow



The selection of a runway direction for aircraft arrivals or departures is based on many considerations, including weather, local airspace, and traffic demand, and to allow runway maintenance to occur.

Noise abatement procedures (NAPs) are designed to reduce the impact of aircraft noise on the community. They include procedures for runway use and flight paths to reduce flights over residential areas. NAPs are implemented by Air Traffic Control, but their use is not mandatory and is subject to weather conditions and aircraft requirements.

The NAPs have formed the basis for Perth's runway usage since the 1980s. The current NAPs allocate departures to, and arrivals from, the south-southwest using the cross runway 06/24 as the least preferred and are minimised, as there are densely populated suburbs located southwest of Perth Airport with the runway end located 960 metres from residential areas in Redcliffe and Cloverdale. Therefore, the cross runway 06/24 is predominantly used for departures to the north and northeast on runway 06, and for arrivals from the north and northeast on runway 24. The cross runway 06/24 is used for departures to, or arrivals from, the south and southwest, overflying the more densely populated areas of Belmont, Rivervale and Redcliffe in strong crosswind conditions or when runway maintenance works are being completed on the main runway 03/21. Runway use and NAPs are discussed further in Section 16.

13.3.1 Airfield Capacity Enhancement

Since 2012, Perth Airport has been working with Airservices Australia to support an Airport Capacity Enhancement (ACE) program focused on making the best use of the existing infrastructure to maximise operational efficiency, through improvements to the processes and practices of air traffic controllers, airport operators and airline partners.

The ACE program has helped to address capacity issues and meet industry challenges by managing the efficiency and impact of air traffic at Perth Airport. ACE focuses on three main themes:

- harmonisation—the steps taken to increase efficiency needed to be in harmony with current Australian standards and practices, while providing sufficient room for the development of local procedures
- collaboration—every movement matters and every second counts. Over many aircraft movements, the seconds add up to create additional capacity that in turn can reduce delays. The benefits are shared by all and can be achieved collaboratively, and
- performance management—performance must be monitored and measured to tactically manage improvement in Air Traffic Control and pilot performance. By measuring performance, new methods can be assessed and refined.

The ACE study identified several opportunities to enhance the existing airfield and airspace capacity and performance. Based on the three themes, 28 initiatives were considered, of which 22 have been completed or closed and six remain underway or ongoing. Perth Airport was responsible for assessing and delivering seven of the recommendations, including the introduction of a slot coordination system and taxiway layout improvements.

13.3.2 Need for Additional Runway Infrastructure

Perth Airport's existing runways continue to reach capacity during peak periods, resulting in delays to flights and disruption to travellers.

While the ACE initiative has delivered airfield and airspace efficiencies and contributed to a significant reduction in delays and congestion at peak times, it has not resolved the fundamental issue of runway demand exceeding capacity at certain times in the day. Domestic airline on-time performance data, published by the Bureau of Infrastructure and Transport Research Economics, identifies that flight delays at Perth Airport have increased from 14.5 per cent of movements in 2017 to 28.5 per cent in 2024. Delays have been occurring more frequently for arrival flights, which have increased from 16.3 per cent of flights delayed in 2017 to 31.3 per cent delayed in 2024. Delays for departure flights have increased from 12.7 per cent delayed in 2017 to 25.8 per cent delayed in 2024.

Airports play a critical role in ensuring infrastructure has sufficient capacity and does not constrain the ability of airlines to achieve on-time performance. Perth Airport's airfield currently supports a maximum of 38–40 scheduled aircraft movements per hour, depending on the proportion of arriving and departing aircraft, which is considerably less than current runway capacity for the major airports on Australia's east coast. Runway capacity is also heavily influenced by the weather due to increased aircraft separation requirements in low visibility conditions. Depending on the weather conditions, the current runway capacity for departing aircraft is between 30 and 40 aircraft movements per hour, and the arrivals capacity is between 20 and 26 aircraft movements per hour.

Due to the nature of the resource sector's fly-in fly-out (FIFO) workforce deployment and the need to time many international flights to connect to other services at international hub airports. Perth Airport experiences significant peak periods at particular times during the day and night. There is a departures peak in the early morning, which can see up to 40 aircraft departing each hour for a three-hour period, and a second peak in the early- to mid-afternoon. There are also two main peak periods for arriving aircraft, starting mid-morning and in the early evening, which can see up to 26 aircraft arriving each hour (the maximum arrival capacity of the runway system) for a two- to three-hour period. These arrivals peaks are spread over a wider period than the departures peaks, as current airfield and airspace capacity permits fewer arrivals per hour than departures (there is greater spacing required between arriving aircraft due to the aircraft being at a slower speed and typically requiring a longer time on the runway than a departing aircraft). Airline slot demand exceeds available capacity during the busy morning weekday departure peak and the subsequent arrival peak of returning aircraft.

The hourly runway demand for a typical day in 2025 is shown in Figure 13-3.

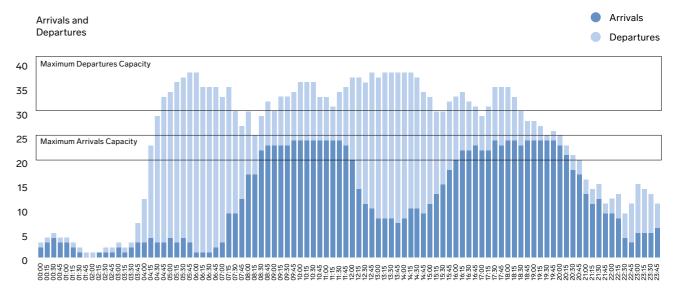


Figure 13-3 2025 typical day arrivals and departures runway demand

Airports play a critical role in ensuring infrastructure has sufficient capacity and does not constrain the ability of airlines to achieve on-time performance



The nature of the demand at Perth Airport means that Tuesdays, Wednesdays and Thursdays are currently the busiest days of the week, increasing from an average of 460 movements per busy day in 2019 to more than 550 movements per busy day in 2024. Due to the current capacity constraints during the mid-week, Mondays and Fridays have seen considerable growth in movement numbers, increasing from 380 per busy day in 2019 to 450 per day in 2024. Weekend movements have remained consistent at around 220 movements per busy day.

If no additional airfield capacity is provided, modelling indicates that flight delays will reach critical levels by 2035. Departure ground delays would approach 30 minutes on average during the peak periods, as well as additional taxiing time due to the number of aircraft being queued for departure. The runways would be operating at capacity for 12 hours a day, with few viable slots for new services.

To prevent unacceptable delays in aircraft operations, provide for the increasing demand and to support economic growth in Western Australia, a major expansion of airfield capacity is needed. This will be achieved through the construction of a new runway, located parallel to the existing main runway 03/21, which is expected to be operational by 2028.

13.4 Airport Development Plan

Airfield and terminal developments are required to support the forecast levels of passenger and aircraft movement growth at Perth Airport.

The airfield development plan shows the planning for runways, taxiways, aprons, aircraft parking positions and aviation support services to meet forecast demand and safeguard the long-term capacity of the airport. The proposed airfield layout in 2031 is shown in Figure 13-4 and the proposed airfield layout in 2046 is shown in Figure 13-5.

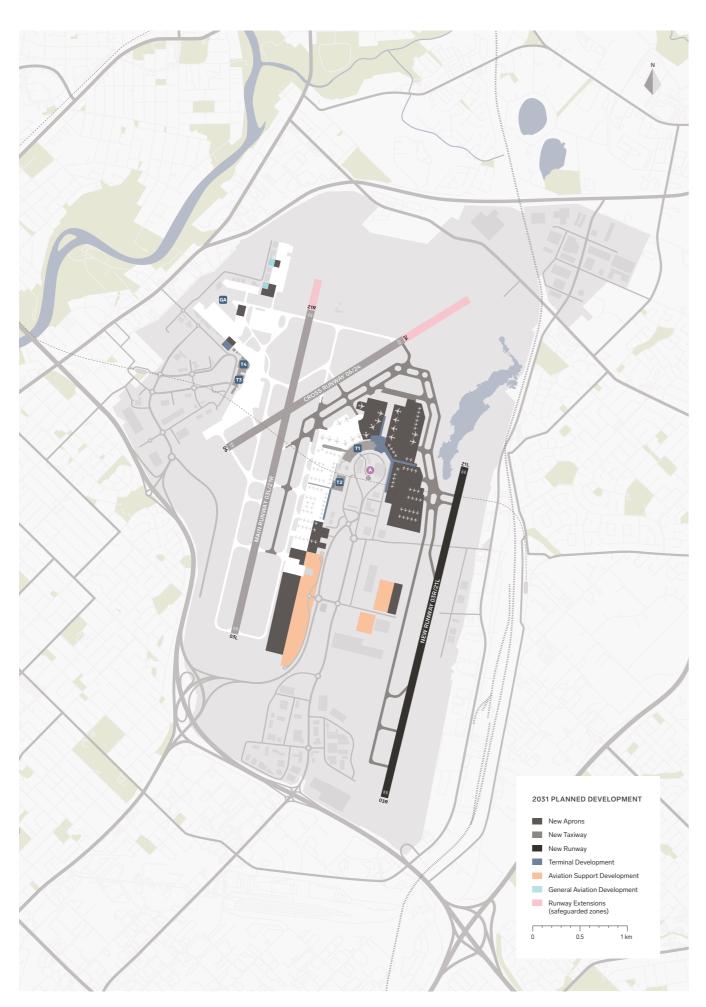


Figure 13-4 Airfield development plan 2031 Source: Perth Airport

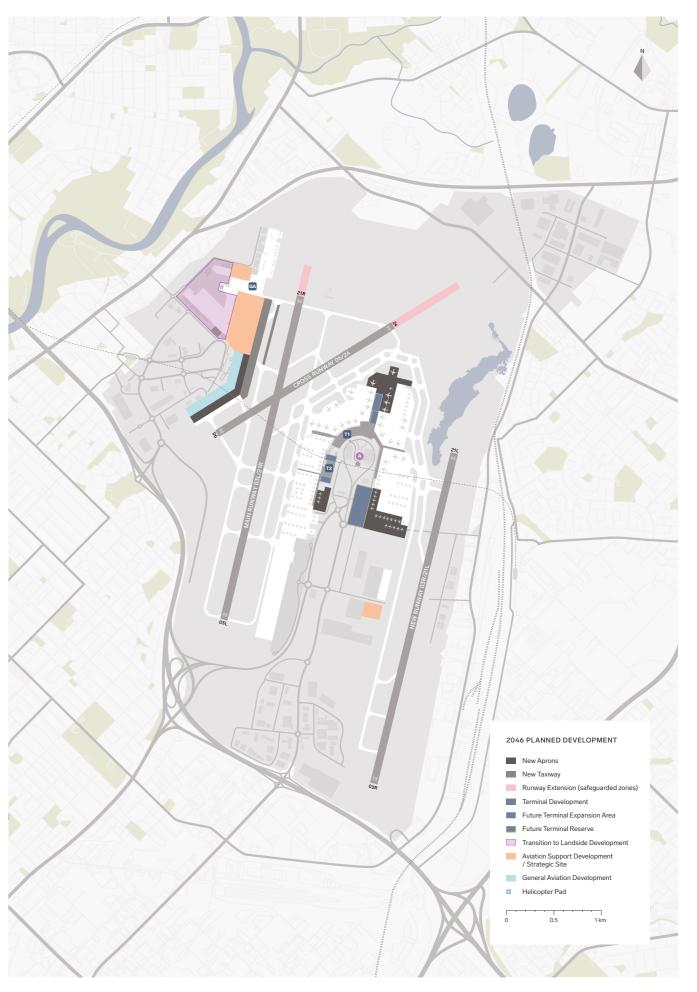


Figure 13-5 Airfield development plan 2046 Source: Perth Airport

13.4.1 Runways

The runway configuration and characteristics, such as runway length and width, are determined by several factors including:

- maximising usability in most wind conditions
- providing adequate runway length to cater for existing and future aircraft operating at maximum take-off weight in hot conditions, and
- International Civil Aviation Organization (ICAO) and Australian design standards and conventions.

Consistent with the previous six master plans, Master Plan 2026 continues to safeguard for future airfield infrastructure. These are:

- a new 3,000 metre runway 03R/21L (expected to be operational by 2028)
- extending the cross runway 06/24 to the north-east to a total length of 3,000 metres, and
- extending the main runway 03/21 to the north to a total length of 3,800 metres.

Technical analysis has shown that the proposed long-term airfield layout could cater for a maximum theoretical capacity of more than 433,000 annual aircraft movements. This capacity is based on a flattening of the departure and arrival peak periods currently experienced at Perth Airport and spreading the traffic over the day. As discussed in Section 6, Perth Airport is forecast to grow from the current 160,882 annual aircraft movements in FY25 to more than 222,000 movements by FY46. Therefore, these runway developments are expected to safeguard for aviation needs well beyond the 20-year planning period of this Master Plan 2026.



13.4.1.1 Main Runway

The main runway 03/21 (to be renamed 03L/21R once the new runway is operational) was built in 1949 and has been lengthened, widened and strengthened over the years.

A future extension of the main runway from the existing 3,444 metres to 3,800 metres continues to be planned for. The benefit from increasing the length of the main runway is to accommodate large aircraft at maximum take-off weight on ultra-long-haul flights in hot conditions. The planned extension is based on the expectation that future large aircraft types will have this extended flight range.

The extension will not provide any increase in arrival and departure airfield capacity but simply cater for larger aircraft. The timing of the extension to the main runway will therefore depend on future demand for ultra-long-haul flights.

13.4.1.2 Cross Runway

The cross runway, referred to as runway 06/24, is 2,163 metres long with a northeast-southwest orientation. It was initially constructed in 1944.

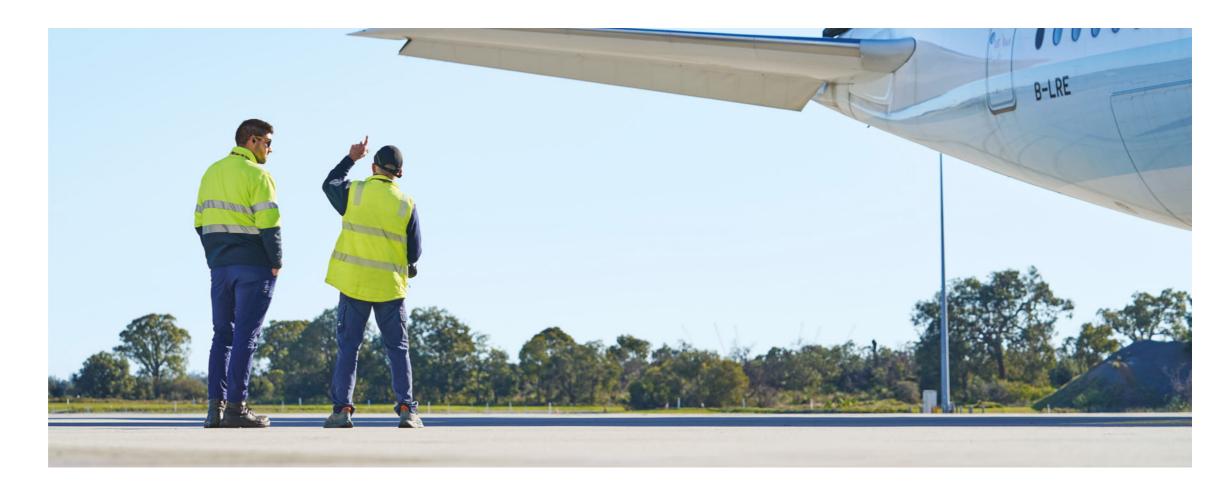
Consistent with previous master plans, Master Plan 2026 retains provision for a possible future extension of the cross runway to 3,000 metres.

With suitable noise abatement procedures, an extended cross runway could accommodate all aircraft types, including large Code F aircraft such as the Airbus A380, and would allow a small increase to capacity for arrivals in the southerly flow of traffic on runway 24 through the use of Land and Hold Short Operations, which would allow some aircraft to land on the cross runway and hold short of the intersection with the main runway while another aircraft lands or takes off from the main runway. However, it provides no improvement in the northerly flow, and scheduling for higher capacity therefore carries a risk of increased aircraft delays depending on which flow is used on the day. The extension of the cross runway would only deliver short-term capacity enhancements.

In 1999, a deed of agreement between the City of Bayswater and Perth Airport was developed in relation to any future extension to the cross runway 06/24. The deed reaffirms a commitment that the proposal to extend the cross runway 06/24 to the northeast will include the adoption of strict and explicit use procedures, such as take-offs to, and landing from, the southwest, which will only occur:

- in emergencies
- in extreme weather conditions, or
- through the loss of the use of main runway.

The current noise abatement procedures in place for aircraft greater than 20,000 kilograms (maximum take-off weight) arriving on runway 06 and departing from runway 24 would be maintained in the event of the extension of the cross runway.



Consistent with the previous two approved master plans, this Master Plan 2026 maintains cross runway 06/24 under review as part of broader considerations for future operational needs. The Concept of Operations for the parallel runway system showed that the continued use of the cross runway 06/24 once the new runway is operational would reduce the efficiency and overall runway capacity at Perth Airport, potentially negating capacity benefits of the new runway. Several factors will influence all future cross runway plans and extensive consultation with a range of stakeholders including aircraft operators, Airservices and the Civil Aviation Safety Authority, the community, and local, State and Federal governments.

13.4.1.3 New Runway

Construction of the new runway 03R/21L commenced in early 2025 and is expected to be completed in 2028. The new runway will be 3,000 metres long and located parallel—with a two-kilometre spacing—to the existing main runway 03/21.

The need for a second parallel runway at Perth Airport was first identified in 1973. The location of the runway was determined in the late 1970s by the then Federal Department of Aviation, and additional land was acquired for its future development. The layout for the consolidation of terminals into a central precinct and the location of the new runway, was first released for public comment as part of the Master Plan 1985 planning process.

The key benefits of the new runway are:

- operational benefits from expanding the airfield capacity to operate efficiently and avoid congestion and flight delays
- cost savings (such as fuel and staffing costs) for airlines through delay avoidance
- maintaining flexibility for airlines to operate in the most efficient manner aligned to their business, including optimal use of aircraft types and preferred flight schedules, and
- economic and social benefits as a result of providing capacity for the growth of aviation services.

The location of the new runway remains unchanged from the original planning, with the runway length reduced from the initial planned 3,800 metres to 3,000 metres in recognition of the cultural heritage importance of Munday Swamp.

In 2020, the Federal Government approved the Major Development Plan (MDP) for the new runway and associated infrastructure. The MDP process involved years of engagement with airline partners, stakeholders and all levels of government on a range of issues, including aviation operations, airspace management and flight corridors, aircraft noise, Aboriginal heritage and environmental impacts, as well as one of the largest ever community consultation efforts for a major project in Western Australia.

13.4.2 Taxiways

A system of taxiways is provided to connect runways with the various terminals via aircraft aprons, and the existing airfield. The taxiway network is planned to avoid congestion on the ground while aiming to minimise taxiing distances and thereby reducing fuel burn. The taxiway system includes rapid exit taxiways, parallel taxiways and various link taxiways to provide flexibility for traffic management of aircraft while on the ground.

Further expansion of the existing taxiway system at Perth Airport is being completed as part of the works for the new runway and the Airport Central airfield upgrade projects. The MDP for the Airport Central project was approved by the Federal Minister for Infrastructure in February 2025 and includes a new taxiway system that provides connectivity between the new runway, new aircraft parking aprons and the existing airfield. These works are planned to commence in 2026.

Additional taxiway works may also occur within the 20-year planning period of this Master Plan and may be subject to Ministerial approval under the Airports Act (either as part of other projects or approval in its own right). Likely taxiway expansions are summarised below.

13.4.2.1 Parallel Taxiways

Parallel taxiways maximise the efficiency and operation of the airfield by allowing arriving aircraft to manoeuvre directly to parking positions without being impeded by other aircraft pushing back from the apron or taxiing for departure. This reduces delays and minimises aircraft taxiing requirements.

Parallel taxiways will be constructed to support the new and expanded terminals within Airport Central as well as the new runway 03R/21L. The parallel taxiways will be adjacent to each of the terminal parking aprons and at each end of the new runway.

13.4.2.2 Runway Entry and Exit Points

To improve runway efficiency, multiple runway entry points and rapid exit taxiways (RETs) are planned for both the main runway 03L/21R and the new runway 03R/21L. RETs (or high-speed taxiways by definition) are designed to expedite aircraft turning off the runway after landing, which reduces the amount of time an aircraft occupies the runway. By reducing the runway occupancy times, runway capacity can increase in certain modes of operation.

Two RETs will initially be developed as part of the construction of the new runway, with the location for a further two RETs safeguarded for future development. Future RETs may also be developed for the main runway. Forecasts and simulation modelling will determine when construction of future RETs will be required.

13.5 Terminals

Airport terminals are complex structures which contain the multitude of functions required to process passengers efficiently and deliver a good level of customer experience.

Terminal capacity is typically expressed as the total number of passengers the facility can handle in a given year; however, this does not recognise the daily passenger flow peaks and troughs. Infrastructure provision is therefore typically based on responding to the periods when the terminal is busiest.

Perth Airport generally uses the 95 per cent design busy hour to establish the size of its passenger terminals and passenger facilities. Using this methodology, five per cent of passengers could experience the terminal operating above its theoretical design capacity in the selected design year. This approach seeks to deliver an adequate level of service for most of the time, while avoiding the costly overprovision of facilities that designing for the absolute peak would entail. Level of Service guidelines are then applied to each operational process (such as check-in or security) to determine the recommended space and queuing time requirements.

Other planning parameters that influence overall terminal size include the size and number of commercial facilities, the number of required contact gates, facilities required by business partners and aviation and border control authorities, along with site specific constraints.

As detailed in Table 13-1, there are currently five terminals located within two precincts at Perth Airport:

- T1 International, T1 Domestic and T2 located in the Airport Central precinct, and
- T3 and T4 located in the Airport West precinct.

The General Aviation Area (GA Area), also located in the Airport West precinct, has several passenger processing facilities owned and operated by private companies and used for both general aviation operations and FIFO charter flights to regional areas in Western Australia.

Terminal	Airlines	Pax pa (FY25)	Aerobridge contact gates	Non-aerobridge contact bays	Stand-off bays
T1 International	All international services except Qantas	4.77 million	6 (including two swing gates)	1	4
T1 Domestic	Virgin Australia (interstate and some regional services)	3.21 million	8-10 (excluding swing gates)	Nil	Nil
T2	Alliance Airlines (regional services), Virgin Australia (most regional services), Regional Express Airlines (regional services), Nexus Airlines (regional services) (Note: Jetstar relocated to T2 as of September 2024)	2.41 million	Nil	20	16
T3	Qantas (international, interstate and regional services)	2.55 million (domestic) 363,003 (international)	5	4	16
T4	Qantas (interstate and regional)	3.29 million	4	4	7

Table 13-1 Perth Airport terminals summary Source: Perth Airport

Perth Airport remains focused on delivering a fully consolidated terminal precinct, in line with the consolidation strategy outlined in the previous master plans.

Consolidation of all commercial passenger services into the Airport Central precinct will address capacity constraints, provide passengers with an improved experience, and provide airlines which operate in both domestic and international markets with significant operational savings through co-location of operations.

Construction of the T2 and T1 Domestic terminals delivered the first stages of the consolidation strategy, with Virgin Australia Regional Airlines (formally Skywest) and Alliance Airlines moving their operations to the Airport Central precinct. Other carriers operating FIFO and regular scheduled passenger services to mine sites and regional airports have subsequently commenced operations from T2, followed by Jetstar relocating its domestic interstate services from T3 to T2 in September 2024.



The final stage of consolidation of all commercial passenger services into Airport Central will be achieved following the construction of the new terminal, providing sufficient terminal capacity for the relocation of Qantas Group operations from Airport West as well as delivering sufficient capacity for forecast domestic and international passenger growth in the precinct. The new terminal is anticipated to be completed and operational around 2031. It will require Ministerial approval through the Major Development Plan process prior to construction of the terminal commencing. Perth Airport has prepared a long-term development plan to

Perth Airport has prepared a long-term development plan to cater for growth beyond the consolidation of all commercial air services into Airport Central. Post consolidation, it will be necessary to expand terminal facilities over time in order to meet demand and maintain acceptable service levels for airline partners and passengers.

The need for terminal upgrade and expansion projects is reviewed regularly and informed by passenger forecasting studies, ongoing monitoring and capacity analysis of the terminal facilities, and feedback and survey results from airline partners, passengers and other Perth Airport stakeholders.

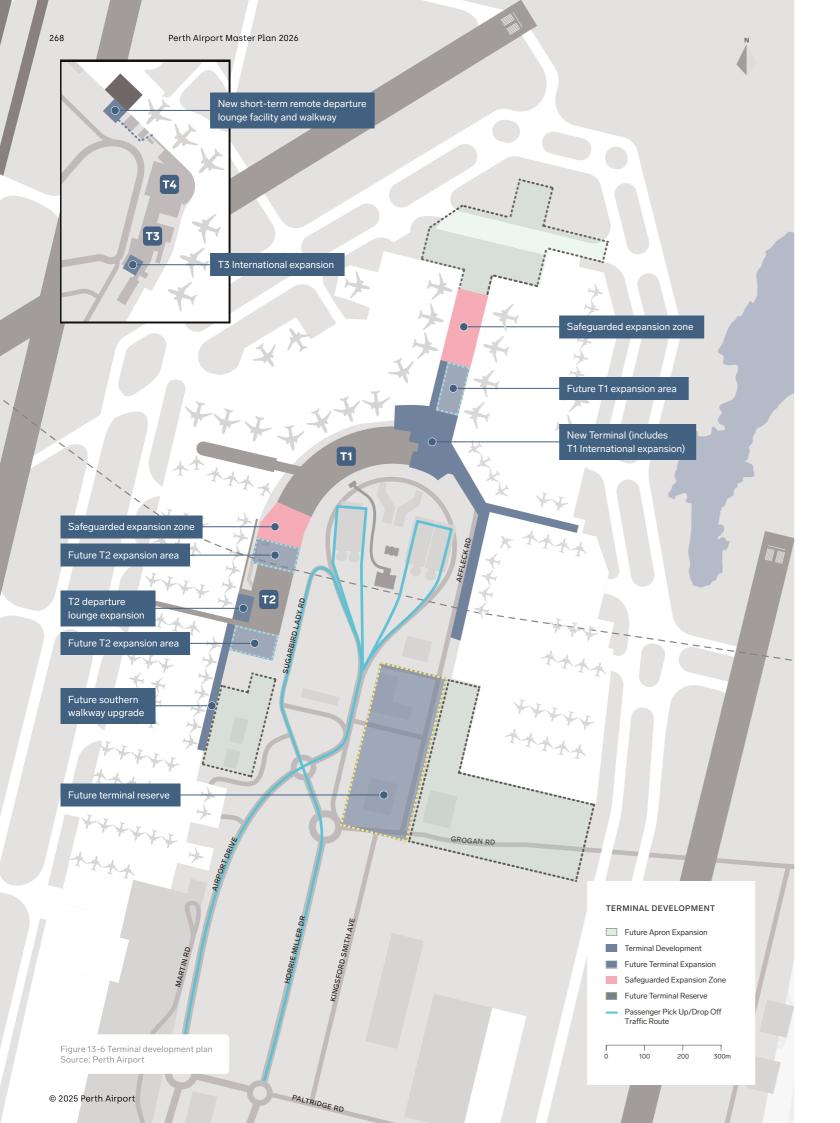
The new terminal will be designed to target 5-Star Green Star Building certification.

The principles upon which the long-term expansion planning for terminal facilities will be undertaken include:

- responding to the forecast traffic growth
- ensuring sufficient aircraft parking apron area for the long-term demand
- balancing the runways and aprons, as much as possible, to reduce taxiing distances, reduce fuel usage (and therefore emissions), and increase runway capacity
- maintaining safe, efficient and free flowing ground movement of aircraft on taxiway and apron areas
- clustering terminals around an inner precinct as far as practicable to ensure efficiency and connectivity, fully integrated with the Airport Central rail station
- maintaining terminal piers that are perpendicular to taxiways for maximum efficiency of apron operations
- ensuring that facilities are barrier free to the greatest extent possible so they can be used by passengers with a disability
- adopting terminal layouts that optimise potential commercial performance, and maximise flexibility of common-use infrastructure between airlines and international and domestic operations
- safeguarding for integration between terminals and processes such as seamless passenger and baggage transfers
- safeguarding for future innovation and technology within the terminal layout, considering future trends in passenger behaviour, technology use and travel expectations
- integrating roads, passenger drop-off/pick-up and car park facilities with the terminals, and
- adopting terminal layouts that facilitate future stages of expansion.

The terminal development plan is shown in Figure 13-6.







13.5.1 Terminal 1 International

T1 International was opened in 1986 and has seen significant upgrades and expansions over the years.

T1 International provides passenger processing facilities for all international services, with the exception of the Qantas services currently operating from T3. The terminal is common use, with facilities shared between 23 international airline partners across the 24 hours, seven days a week schedule.

T1 International has eight aerobridge serviced gates, four of which have swing capabilities (to allow use for either domestic or international operations) and are Airbus A380 capable, and a range of retail and food and beverage options both landside and airside.

Recent upgrades undertaken in T1 International include:

- the installation of 36 common use self-service kiosks and 16 bag drop facilities to improve the efficiency of the check-in process
- replacement of three aerobridges with dual head apron drive aerobridges, and installation of ramps and lifts at each of these gates, eliminating the need for passenger boarding via stairs from the second-floor departure lounge
- relocation of the Singapore Airlines SilverKris Lounge
- construction of the Aspire passenger lounge that features panoramic views of the airfield and Perth city skyline. The Aspire Lounge was awarded the Best Airport Lounge in Oceania at the World Travel Awards in September 2022, and Airport Excellence Commercial Award at the National Airport Industry Awards in 2022
- development of a Sensory Room that provides a calming and supportive environment for passengers with sensory sensitivities or specific needs departing on international services from T1 International
- construction of Changing Places facilities, which provide secure, suitable facilities for people who cannot use standard accessible toilets. Facilities include a shower, ceiling hoist, an adult sized change table and privacy screen
- construction of Service Animal Relief Areas, providing dedicated toilet and watering facilities for assistance animals, and
- upgrades to the level 2 departure lounge to provide expanded food and beverage and retail offerings.

International traffic at Perth Airport has continued to grow over recent years and is forecast to continue increasing. Capacity and service quality analysis indicates that a number of key terminal functions are already, or will soon be reaching capacity in coming years, including:

- international aircraft parking stands are near or at capacity during peak periods
- the departure hall check-in infrastructure is at capacity during peak periods
- the passenger security screening area has sufficient capacity until the late 2020s to early 2030s, with no additional area available for expansion in its current location
- the international departure lounge provides a lower level of service due to its narrow linear configuration and being split across two levels
- the outbound baggage system is at capacity during peak periods, and
- considerable congestion in the landside arrivals hall is currently experienced in the peak periods, requiring an expansion to provide additional space.

To ensure international capacity at Perth Airport is maintained and to deliver an improved experience that meets international traveller expectations, an expansion and modernisation of the terminal facilities is required.

The construction of the new terminal (described in Section 13.5.5) includes an expansion of T1 International and is anticipated to be completed and operational around 2031.

Perth Airport is undertaking extensive planning on future options and engagement with international airline partners and the Australian Government border agencies to inform the design of the new facilities. The expansion will increase the capacity of international operations at Perth Airport, enhance the international passenger departures and arrivals experience and facilitate more efficient airline operations. Key design aspects are:

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- seamless connection to existing T1 International infrastructure
- construction of additional contact aircraft parking positions for wide-bodied aircraft
- additional baggage make-up capacity
- new airline lounges providing sufficient area to meet airline requirements and with the potential for direct boarding
- repositioning and/or expansion of border agency (biosecurity, immigration and customs control) facilities
- improved accessibility for persons with a disability, and
- aircraft taxi lanes and aprons to allow access to the new aircraft parking positions.

The planning considers the need to accommodate both international and domestic growth in the Airport Central precinct with efficient airside and landside interfaces. It is envisaged that gates that sit on the interfaces between international and domestic operations will have swing capability to be used for either operation.

Image above: Artist's impression of the new terminal interior

13.5.2 Terminal 1 Domestic

T1 Domestic is located adjacent to T2 and is integrated with the T1 International building and associated ground transport. Virgin Australia commenced domestic operations from this purpose-built facility in November 2015, relocating operations from T3 in the Airport West precinct and marking another important stage towards consolidation.

T1 Domestic provides self-service check-in facilities for passengers including kiosks and automated bag drops, passenger screening, a central retail and dining area, baggage reclaim services, a Virgin Australia lounge, and 12 aerobridge serviced gates, including up to four swing gates that can be used for either domestic or international operations.



In late 2024, two additional boarding gates were installed together with an expansion of the T2 departure lounge to accommodate the growth in the number of peak period passengers. The upgrade also provided an enhanced and expanded retail offering and a refresh of the departure lounge amenities.

13.5.3 Terminal 2

T2 opened in March 2013 principally to meet the needs of regional services. The construction of T2, and subsequent relocation of some of the flight operators from T3, was the first stage of consolidation of commercial air services to the centralised terminal precinct.

T2 is currently used by Aerlink, Alliance Airlines, Jetstar, Nexus, Rex Airlines, and Virgin Australia Regional Airlines, which operate services to regional ports and mine sites.

The single-level terminal was designed to be quick and easy to expand given the rapidly changing resource industry demand. It provides a check-in area, passenger screening point, and departure lounge with speciality retail and food and beverage outlets, and airline lounges. A central boarding zone leads out to covered passenger walkways servicing 20 contact gate parking positions. T2 is connected to T1 Domestic via an air-conditioned link, providing a seamless connection for passengers between regional and Virgin interstate services.

In late 2024, two additional boarding gates were installed together with an expansion of terminal departure lounge to accommodate the growth in the number of peak period passengers. The upgrade also provided an enhanced and expanded retail offering and a refresh of the departure lounge amenities.

Further upgrades are planned for T2 in 2026 to facilitate the forecast growth in passenger numbers and the planned relocation of some FIFO services from the GA Area. Planned upgrades include:

- installation of common-use self service check-in infrastructure
- further expansion of the departure lounge beyond the current terminal layout
- an additional passenger security screening lane
- relocation of the goods screening point to the oversize baggage area
- expansion of the baggage hall
- ability to handle Barrow Island flights which require additional guarantine procedures
- additional airline offices and facilities for ground handling agents and
- an expansion of the existing passenger walkway to the south of the terminal.

There is sufficient space for additional expansions of facilities in T2 to accommodate future growth.



13.5.4 Terminal 3 and Terminal 4

There are currently two multi-user passenger terminals within the Airport West precinct. T3 and T4 are linked and are currently used for Qantas services.

The two terminal buildings were constructed by Ansett and Qantas in the 1980s for their respective operations. Both terminals are now operated and managed by Perth Airport, with T3 purchased by Perth Airport following the collapse of Ansett in 2001, and T4 transferred to Perth Airport in 2019 following the expiry of a 30-year lease for T4 with the Qantas Group.

In March 2018, Qantas commenced direct Perth-London flights from T3 using Boeing 787 Dreamliner aircraft. To facilitate these services and seamless passenger transfers from Qantas domestic flights, the existing T3 building was upgraded to accommodate limited international operations until the relocation of Qantas operations to the consolidated Airport Central precinct. Qantas currently operates Perth-Singapore, Perth-Paris and seasonal Perth-Rome services out of T3.

To facilitate ongoing operations and future growth opportunities of Qantas operations ahead of relocation to the new terminal in the Airport Central precinct, Perth Airport will be undertaking upgrades at T3 and T4 between 2025 and 2027. These works include:

- new passenger lifts in T3
- construction of a new short-term remote lounge facility connected to T4 by a walkway
- new enclosed walkway for international arrivals
- 750 square metre expansion to T3 to improve border agency examination areas for international services,
- upgrades to the baggage system, and
- optimising the retail offering.

Following consolidation of Qantas Group operations to the Airport Central precinct, the T3 and T4 buildings will be decommissioned and associated landside infrastructure repurposed for alternative commercial uses.

13.5.5 New Terminal

The final stage of consolidation of all commercial air services to the Airport Central precinct requires the construction of a new terminal that consists of:

- a new domestic terminal
- an expansion of the current T1 International facilities (described in Section 13.5.1), and
- · associated aircraft aprons.

The new domestic terminal will be located to the east of, and connect to, the T1 International expansion.

Perth Airport is working with the Qantas Group to define the operational requirements for the design phases. The new domestic terminal is anticipated to be constructed and operational around 2031 and includes:

- a terminal layout which optimises operational efficiencies and customer experience, and is flexible by design to enable future adjustment of functional needs and cater for the evolution of technology and systems
- a diverse range of passenger and airline lounges and retail offerinas
- sufficient aircraft stands and apron capacity to cater for current and future operations and facilitate balanced runway usage
- suitable access and connectivity to T1 International, T1 Domestic and T2 with integrated efficient operations wherever possible to benefit both passengers and airline partners, and
- integrated ground transport infrastructure.

There will be area safeguarded for future terminal expansion to the north of the new terminal, likely required beyond the planning period of this master plan.

Consistent with Perth Airport's Social Value Strategy (described in Section 7), the new terminal will be designed to target 5-Star Green Star Building certification.

13.5.6 Common Departure Lounge

A Common Departure Lounge (CDL) concept allows both domestic and international departing passengers to comingle in a single, shared departure lounge rather than in two separate, fully segregated areas.

This approach, already implemented at a number of international airports, delivers a number of operational and customer experience benefits. They can include a reduced building footprint through a more efficient layout, a greater choice of retail outlets and the optimisation of departure gates.

While current legislation does not permit CDL operations in Australian airports, Perth Airport is planning the New Terminal development to be 'CDL ready', ensuring that, should the position change in the future, it can be accommodated.

13.5.7 Future Terminal Reserve

An area to the south of the new terminal is being safeguarded for a future terminal that is anticipated to be required beyond the 20-year planning horizon of this Master Plan 2026. While the specific operational requirements for the terminal are yet to be determined, it is likely to be of a similar nature to T2, primarily catering to domestic and regional traffic.

13.5.8 Aircraft Parking

There are currently 133 aircraft parking (contact and remote) positions located proximate to the passenger terminals, in addition to more than 66 parking positions located within leased apron areas which are controlled by various tenants.

Recent upgrades of aircraft parking facilities include:

- expansion of T2 stand-off parking apron to provide two additional Code C parking positions, and
- construction of 42,000 square metres of aircraft apron to the south of T2, providing six new aircraft parking stands, with a further 57,800 square metre expansion to provide an additional 11 aircraft parking stands planned for 2025.

Upgrades to the T3/T4 apron are planned to support the continued growth of Qantas operations prior to Qantas services being relocated to the Airport Central precinct at the time of consolidation. This includes the construction of a 9,000 square metre apron supporting three additional parking bays and a further 5,000 square metre apron supporting two additional remote parking bays; both expansions accommodate Code C aircraft. In addition, two aircraft parking bays within the adjacent freight apron, to the south of T3, are planned to be upgraded to accommodate larger freight aircraft.

Further extensive apron works will be undertaken to support the consolidation of passenger services into the Airport Central precinct. The construction of the new terminal will include direct contact parking bays as well as a remote parking apron suitable for a range of aircraft types.

Future stand demand is forecast by developing 'design day schedules', from which busy hour demand, hourly movement demand and aircraft stand demand can be derived. The design day is a representative busy day projected forward from current aircraft traffic, considering the profile of traffic over the baseline for the various travel segments (international, domestic and regional). Unlike annual forecasts, this approach takes into account the peak period nature of traffic at Perth Airport.

The stand demand is based on a reference code, which refers to the grouping of aircraft types based on characteristics such as aircraft wingspan and outer main gear wheel span.

The groupings of regular passenger aircraft types operating at Perth Airport are the Dash-8 Q400, Fokker 100, Embraer E190, Airbus A320 and Boeing 737 (Code C), Airbus A330, Airbus A350, Boeing B777 and Boeing B787 (Code E), and the Airbus A380 (Code F).

The larger stands are typically configured to also accommodate smaller aircraft types.

The forecast stand demand for the Airport Central consolidation is summarised in Table 13-2.

Works to expand the apron capacity in Airport Central are planned to commence in 2026. These works are detailed in the MDP for the Airport Central (Airfield Upgrade) which was approved by the Federal Minister for Infrastructure in February 2025. The project will deliver sufficient apron capacity to service the existing terminal facilities as well as the new terminal and future terminal expansions.





	ACTIVE STANDS		NON-ACTIVE STANDS		TOTAL STANDS		
Financial Year	Code F	Code E	Code C	Code E	Code C	Total	Code C Equivalent
Terminal 1 International							
FY23 (Actual)	2	3	1	_	-	6	11
FY31	2	6	1	1	-	10	19
FY46	-	12	_	2	-	16	32
Terminal 1 Domestic							
FY23 (Actual)	-	_	8	_	-	8	8
FY31	-	_	8	_	2	10	10
FY46	-	1	7	_	4	12	13
Terminal 2							
FY23 (Actual)	-	_	20	_	20	40	40
FY31	-	_	20	_	32	52	52
FY46	-	-	22	_	39	61	61
New Terminal							
FY31	-	5	15	2	23	26	50
FY46	-	7	18	2	31	35	65

Table 13-2 Airport Central stand demand

Note 1: Active stands are those used for actual passenger processing, being either contact stands (i.e. those served by an aerobridge or walk-up) or, passengers can be bussed to and from other locations

Note 2: Non-active stands are those where aircraft not carrying out an immediate turnaround are towed and parked. Aircraft parking demand is impacted by Perth Airport's intensive aircraft movements at certain times of the day, due to FIFO operations.

13.6 Aviation Support

Aviation support facilities are crucial for the seamless and efficient operation of the airport. Perth Airport caters for the needs of more than 30 airline partners which rely on the services of aviation support operators to provide in-flight catering, ground handling, aircraft maintenance, fuel and air freight facilities.

The current facilities are located across the Airport Central and Airport West precincts, and include:

- three catering companies
- · six ground handling operators
- 13 maintenance providers
- three air cargo terminal operators, and
- an aviation fuel terminal and hydrant network.

Over the next 20 years, continuing demand for aviation support facilities is anticipated, including:

- facilities for line or base maintenance of aircraft by airline engineering or maintenance repair overhaul service providers
- facilities for cargo terminal operators or integrators for air freight transfer, consolidation and interim storage
- aircraft parking associated with aviation support activities or for layover parking associated with adjacent terminal activities
- · in-flight catering facilities, and
- facilities for the maintenance and storage of ground support equipment.

Following the relocation of Qantas operations from T3/T4, the Airport Central precinct will become the heart of Perth Airport's passenger operations. This is expected to result in aviation support organisations wanting to relocate or develop purpose-built facilities to be closer to airline operations in the Airport Central precinct.

To meet this demand, Perth Airport has planned for a dedicated aviation support area to the south of T2 and bounded by Airport Drive and Taxiway Charlie. It encompasses approximately 44 hectares of land, with 24 hectares located airside and 20 hectares located landside. This area is specifically designed and reserved for operations requiring airside access and/or apron areas for aeronautical operations, such as aircraft hangars, ground support equipment providers, flight catering and airfreight logistics. The first built-form development was the 4-Star Green Star rated Virgin Australia Regional Airlines maintenance hangar, which was completed in 2024 and comprises a 5,000 square metre office and hangar building alongside a 10,000 square metre apron.

Perth Airport has also designated an area within the eastern part of the Airport Central precinct for aviation support purposes. Accessible via Paltridge Road, this area complements adjacent land uses, including future jet fuel infrastructure and freight forwarder sites. Its location also offers convenient access to the new runway and new terminal, enhancing its suitability for aviation-related activities.

The GA Area in Airport West caters for a variety of aviation support services, including airline catering and aircraft maintenance. Aviation support operators will continue to be located in the GA Area, and the planned future development of the area (described in Section 13.7) will also provide opportunities for expanded and new aviation support services.

The Airport North precinct provides additional suitable locations for the development of aviation support facilities, particularly along the southern boundary which has direct airside access.

Located adjacent to Airport Central, the Airport South precinct also presents opportunities for aviation support development to cater for demand in excess of land availability within Airport Central.

Figure 13-7 shows the aviation support services within the Perth Airport estate.



Perth Airport supports more than 30 airline partners through 13 maintenance providers, six ground handling operators, and three catering companies.



Figure 13-7 Aviation Support Services Source: Perth Airport

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13.6.1 Aviation Fuel

Jet A-1 fuel is supplied to the airport from off-airport storage facilities via an underground pipeline. The on-airport tank farm is located in the Airport Central precinct. It has three storage tanks with a maximum capacity of 6.6 million litres, which currently provide capacity for up to two days of reserve fuel storage.

Approximately 6 kilometres of underground pipeline connect the on-airport tank farm site to 125 aircraft refuelling hydrants located on terminal aprons.

In August 2023, Perth Airport acquired the jet fuel infrastructure (JFI) facility. Perth Airport's ownership provides for open and transparent access to aviation fuel for airline customers. Perth Airport has appointed a third-party operator to operate and maintain the JFI facility.

A fuel depot in the Airport West precinct has Jet A-1 tanker loading point to supply bowser trucks for fuelling aircraft which do not have access to hydrant points.

Avgas is supplied from tankers for fuelling of piston engine aircraft.

13.6.1.1 Future Fuel Development

The current aviation fuel supply chain at Perth Airport is constrained by the throughput capacity of the off-airport pipeline and on-airport storage capacity, which is less than 50 per cent of that recommended by the International Air Transport Association. This does not provide appropriate levels of supply security or redundancy to manage a supply disruption, and multiple modes for fuel delivery and increased on-airport storage are needed to mitigate the risk of a single point of failure and supply disruption.

Perth Airport's acquisition of the JFI facility acquisition in 2023, together with capital investment into additional jet fuel infrastructure, will enable an improved open access regime to increase competition among existing and new fuel suppliers, and improve jet fuel security of supply into Perth.

In the short-term, Perth Airport is implementing measures to improve open access and storage capacity, with tanker loading available at the tank farm, as well as planning for the development of a new facility to enable existing and new suppliers to establish additional supply chains to the airport by road.

By 2046, it is estimated that fuel demand will reach between 4.7 million and 6.7 million litres per day. This was determined by analysing the routes served by various aircraft types, the average flight hours, and fuel burn rates (including improved efficiency).

Based on this forecast demand, and the requirement for three days of fuel storage at any given time, a minimum 24-million litre tank capacity would be required for on-airport storage.

Previous Perth Airport Master Plans have identified that the current aviation fuel storage will need to be relocated in the future, as the existing JFI site will eventually be acquired for apron expansion to the south of T2.

Planning studies have been undertaken to identify suitable locations for the future JFI site. The potential sites proposed in Master Plan 2014 (within Airport South) and Master Plan

2020 (within Airport North) have since been assessed as unsuitable due to factors such as space availability and airspace height restrictions.

A new site on Paltridge Road, within the Airport Central precinct, is now safeguarded for the future JFI facility. This site has adequate space and height to accommodate storage tanks and fuel receipt facility. Additionally, its connection to the existing road network is well suited for fuel tanker access. The adjacent site, currently used for aviation support operations, is suitable for additional fuel storage tanks and is being safeguarded for the long-term expansion of the future fuel facility.

To accommodate the projected fuel demand, Perth Airport will assess opportunities to provide two fuel pipeline connections to the new JFI site which is planned to be in operation by 2032.

13.6.1.2 Sustainable Aviation Fuel

Perth Airport's ownership of the JFI supports the strategic goal of preparing for the introduction of future fuels in aviation, such as sustainable aviation fuel (SAF). SAF is a 'drop-in' fuel that is blended with conventional Jet-A1 fuel and delivered to aircraft via the existing fuel supply channels.

Due to SAFs producing fewer carbon emissions than traditional fossil jet fuel, it will be essential for domestic and international airlines to have access to SAF in order to meet the Australian Government's commitment to achieving net zero emissions by 2050.

There is currently no SAF production in Australia; however, the Australian Government is working on a range of initiatives to encourage a domestic SAF production industry. The planning for the new JFI site considers the requirements for the introduction of SAF when it becomes available.

13.6.2 In-flight Catering

There are currently three in-flight catering facilities serving Perth Airport: one in Airport West and two in Airport Central. These facilities include buildings, vehicle manoeuvring spaces for catering and supply trucks, catering vehicle loading and unloading bays, and catering truck parking/staging areas.

Catering growth responds directly to passenger volumes, and the current facilities on-airport are sufficient to meet demand

Consistent with operations at other airports, catering operators are able to operate from locations on- and off-airport. However, Perth Airport will continue to support on-airport catering operations to help maintain efficient aviation support services.



13.6.3 Aircraft Maintenance Facilities

Perth Airport has aircraft maintenance facilities located in the GA Area and the Airport Central precinct. The existing hangars are limited to narrowbody sized aircraft.

A new \$35 million maintenance hangar built by Perth Airport for Virgin Australia and their regional subsidiary Virgin Australia Regional Airlines, was opened in September 2024 and is located near T2 in Airport Central.

The relocation of Qantas operations from Airport West to Airport Central is planned to include new aircraft maintenance facilities located within the precinct.

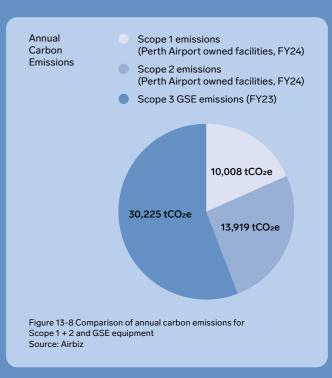
13.6.4 Ground Support Equipment

Ground support equipment (GSE) refers to the variety of vehicles and equipment that are used for passenger and cargo loading and unloading, maintenance, and other activities while an aircraft is on the apron. This includes passenger boarding stairs, tugs, baggage carts, container dollies and loaders, ground power units, aircraft refuelling trucks, aircraft waste disposal vehicles and catering vehicles.

GSE storage areas are typically located close to aircraft parking aprons and are maintained by airlines or their ground handling companies. New GSE storage areas will be needed for the new aircraft parking bays that will be constructed for the new terminal and planned terminal expansions.

GSE maintenance facilities are required to service and repair vehicles and equipment. There is currently a single dedicated GSE maintenance facility operating within the Airport Central precinct. There is opportunity for additional GSE maintenance facilities to be developed in Airport West once Qantas relocates from T3/T4 to the new terminal.

Perth Airport is working with airline partners and ground handling service providers to support the introduction and progressive uptake of battery electric powered GSE. As shown in Figure 13-8, the annual carbon emissions from GSE equipment during aircraft turnarounds exceeds the



combined Scope 1 and Scope 2 emissions for all Perth Airport owned facilities (for example, the terminal buildings). The electrification of ground handling activities and GSE equipment will therefore make a significant contribution to the reduction of aviation carbon emissions, and Perth Airport is actively planning to facilitate the use of electric GSE

An initial assessment has been conducted into new ground handling technologies, and their potential application and associated requirements, for future use at the airport. Potential suitable locations and essential infrastructure have been identified, including the installation of charger point services.

13.7 General Aviation and Helicopters

General aviation is a broad term applied to almost all aircraft operations other than major international and domestic passenger and freight services. The Aviation White Paper defines general aviation as including:

- emergency services—aviation which enables the provision of essential and potentially lifesaving services to the Australian public, requiring priority access to airspace and airport infrastructure, for example, aero-medical flights, emergency services, law enforcement and search and rescue
- charter and freight—businesses or individuals that provide small scale transport services for freight or charter transport services for passengers
- aerial work—businesses and individuals that provide services such as mustering, spraying, banner towing and surveying
- flight instruction—businesses that provide commercial and non-commercial flight instruction
- ground aviation services— businesses or individuals that operate on land on or off airports, which provide aviation services such as maintenance and navigation, and
- recreational flying—businesses that provide recreational flight services to the public, and individuals who fly for pleasure, including sport and recreation associations.

Perth Airport recognises the importance of the general aviation sector to aviation workforce training and supporting regional and remote areas of Australia, where it facilitates the delivery of critical education, health and emergency response services.

Perth Airport has a dedicated GA Area located within the Airport West precinct, in close proximity to the airfield.

The GA Area includes leased hangars and aprons from which fly-in fly-out (FIFO) and private charter services operate, as well as aircraft maintenance, fixed base operators (handling of private aircraft and charters), maritime aerial surveillance and search and rescue, regional freight, and other aviation support services companies. Perth Airport maintains a common-use aircraft parking apron.

From 2008, the level of activity in the GA Area increased significantly, due mainly to the demand for charter services by the resource sector's FIFO workforce deployment model. Perth Airport responded to this growth by completing the construction of T2 and providing upgrades to airside infrastructure and terminal facilities at T3. These investments afforded facilities suitable for charter and regular passenger services.

There is no current requirement for further significant terminal or passenger processing facilities in the GA Area beyond that necessary to support small scale regional and charter movements (seating capacity of fewer than 40 passengers). Perth Airport continues to work with general aviation operators looking to transition new operations that are not suitable for the GA Area into existing and future common use terminals.

The relocation of Qantas services into the Airport Central precinct will result in the decommissioning of T3/T4, providing a strategic opportunity to realign the GA Area and provide additional land for hangars, maintenance and freight.

The potential reconfiguration requires a staged relocation of some general aviation tenants to new sites, the development of a dedicated maintenance area, expansion of taxiway Alpha and construction of a new taxiway to the west of taxiway Alpha. It aims to provide twice the amount of area for general aviation compared to the existing arrangement, which is nearing full capacity.

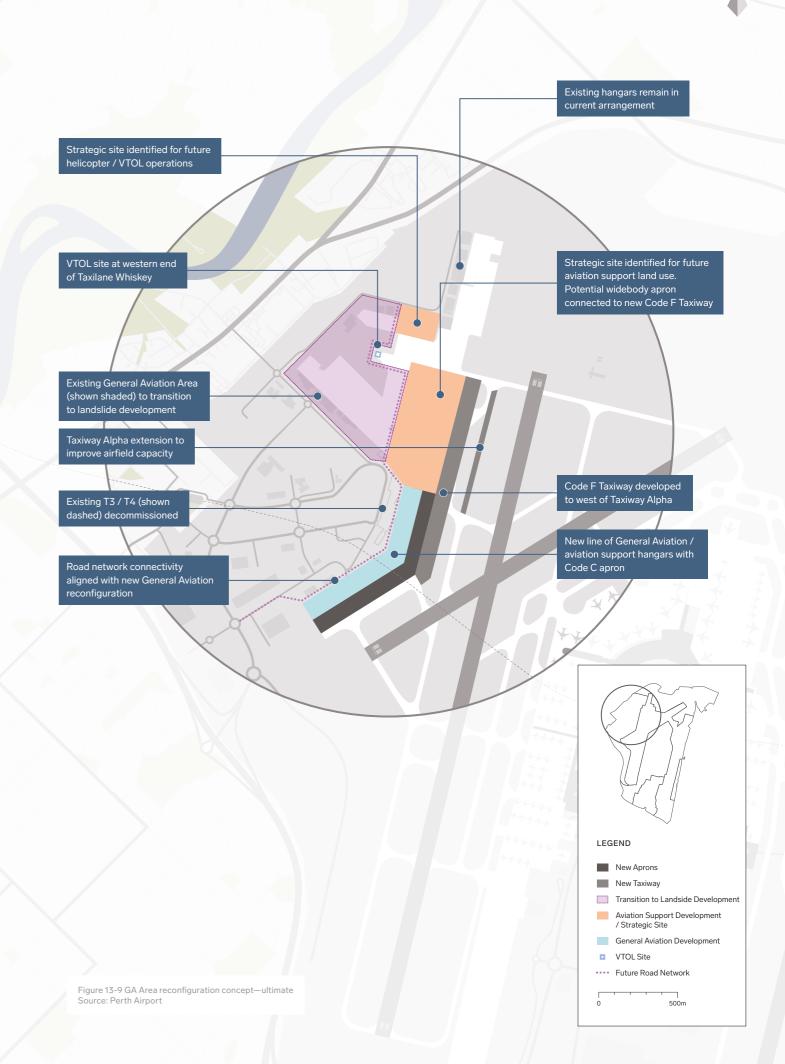
A potential ultimate layout for an expanded GA Area is shown in Figure 13-9. This layout accommodates the 20-year forecast requirements for general aviation operators, and also safeguards strategic sites for future aviation support facilities, including vertical take-off and landing operations.

13.7.1 Helicopters

There are currently no dedicated helicopter landing facilities at Perth Airport. Current ad-hoc helicopter movements are managed by Air Traffic Control as and when required.

Due to wake turbulence requirements, where helicopters must be held and separated from large fixed-wing aircraft, there are only limited areas on the estate where helicopters could operate independent of mainstream airfield operations. The GA Area is considered the most suitable location for helicopter operations.

Should Perth Airport be approached by an operator, the need for helicopter facilities on the airfield will be investigated in consultation with Airservices Australia, and would consider current airfield design standards, airspace management and potential aircraft noise.



13.8 Air Freight

Perth Airport is working with industry and the State Government to grow air freight capacity, including the identification of infrastructure that will enhance the efficient movement of air freight as volumes grow.

Cargo terminal operators currently operate in the Airport Central and Airport West precincts. They require efficient landside and airside access to support the movement of goods from trucks to passenger aircraft or dedicated freighter aircraft.

The relocation of Qantas Group operations into the Airport Central precinct and the planned future expansion of the T2 apron will require the relocation of a number of the existing cargo operators on the estate, providing an opportunity to increase the efficiency of the air freight logistics chain.

Perth Airport is also considering additional airside and landside cargo facilities such as cold storage, in line with State Government's Revitalising Agricultural Region Freight Strategy—Responding to Change (2020), as well as scanning and freight holding facilities to service the future growth in air freight capacity and movements.

To facilitate improved air freight operations, new facilities will be centred on future airside access gates. Possible future locations are within the Airport West, Airport North, and Airport Central precincts.

13.9 Air Navigation Facilities and Services

The safe operation of aircraft requires a range of air navigation facilities and services.

Airservices Australia, which is owned by the Australian Government, is responsible for navigational services, air traffic control, and aviation rescue and firefighting services at Perth Airport.

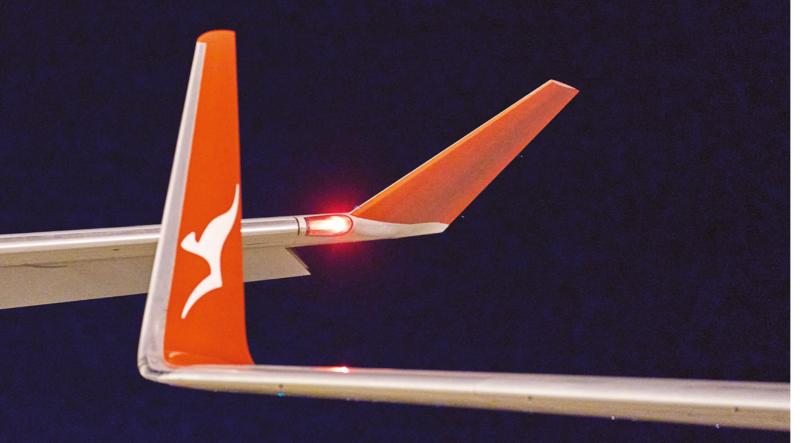
13.9.1 Air Traffic Management

Airservices Australia undertakes air traffic management at Perth Airport through two control units, the Air Traffic Control (ATC) tower and the Terminal Control Unit (TCU). The ATC tower is responsible for the control of aircraft on the ground and on approach to the airport. The TCU is responsible for aircraft operating in airspace around Perth up to 36 nautical miles from Perth Airport.

The ATC tower was constructed in 1986 and is located within the Airport Central precinct, between the main runway 03/21 and the site of the new runway 03R/21L. The tower has an eye level of 65 metres above ground level, providing air traffic controllers with a good view of all parts of the existing airfield movement area and the new runway. The operational requirement to maintain the line of sight for the ATC tower to the ends of the runways imposes limits on the height of developments in the building areas to the south of the tower.

The TCU is located within the Airport West precinct.





13.9.2 Aviation Rescue and Fire Fighting

Airservices currently operates a single Aviation Rescue and Fire Fighting (ARFF) station, located adjacent to the runway 21 threshold. This facility was opened in 2010 and provides response for aviation incidents at Perth Airport, as well as first aid, motor vehicle accidents and fire alarm events on the airport estate.

Based on CASA and ICAO regulations, ARFF has varying levels of service which dictate the required amount of water and foam needed to be carried, the response times, water discharge rates and the number of personnel. The Perth Airport ARFF station provides a Category 9 level of service 24 hours per day. A Category 10 level of service is needed for Code F (Airbus A380) services and the ARFF station upgrades to Category 10 at the times that the A380 operates.

The construction of the new runway 03R/21L will require relocation, upgrades, and installation of new Airservices infrastructure, including a potential additional ARFF station.

Airservices also operates a hot fire training ground, within the Airport North precinct, that is likely to be relocated in the future. The training ground is used for preparedness training which requires all ARFF personnel to respond to a mock aircraft disaster at least once every 90 days. The new location will be determined in consultation with Airservices.

The relocation of Qantas Group operations into Airport Central will increase efficiency.

13.9.3 Communication, Navigation and Surveillance Infrastructure

Communication, navigation and surveillance (CNS) facilities are critical for the safe and efficient operation of aircraft. They enable communications between pilots and air traffic controllers, navigation by pilots, and monitoring of aircraft movements and air routes by air traffic control.

Perth Airport has a variety of CNS infrastructure in place, including:

- instrument landing system (ILS)
- VHF omnidirectional range/distance measuring equipment
- advanced surface movement guidance and control system (A-SMGCS)
- anemometers (which measure wind speed)
- terminal approach radar
- meteorological radar, and
- high frequency, very high frequency and microwave data links.

It is expected that the high frequency data link and the terminal approach radar may be relocated during the period of this Master Plan. Perth Airport has assessed potential alternative locations within the estate where the facilities could be relocated if required, taking into consideration factors such as land availability, infrastructure requirements, accessibility, proximity to existing airport operations and equipment, environmental considerations and regulatory requirements. Coverage analysis was also undertaken to ensure that the proposed locations maintain or enhance the coverage required for safe and efficient operations.

The sites being safeguarded for the potential relocation of these facilities are shown in Figure 13-10.

The proposed site for the terminal approach radar is located on the south side of Airport Drive. The site currently houses a mains power line and communication network, which will be available to support the terminal approach radar. Additional security measures will need to be implemented to protect the radar site.

The proposed site for the high frequency data link is located within a vacant area in the north-east corner of the estate.

The construction of the new runway requires the installation of new CNS infrastructure. This includes:

- an ILS
- meteorology anemometers
- · runway visual range sensors, and
- · additional infrastructure associated with the A-SMGCS.

The safeguarding considerations for the communications, navigation and surveillance equipment are discussed in Section 16.8.

13.10 Outdoor Viewing Platform

Perth Airport opened the outdoor viewing platform in 2010, offering views of the main runway 03/21 through a purpose-built facility which has capacity for 100 people and was designed to incorporate elements of aircraft history. The wheelchair-accessible facility is located in the Airport West precinct, with access provided via Dunreath Drive. In suitable weather conditions, around 450 vehicles per day will visit the viewing platform.

Perth Airport will explore further opportunities for aircraft viewing areas as part of the detailed planning for the new runway and new terminal projects.



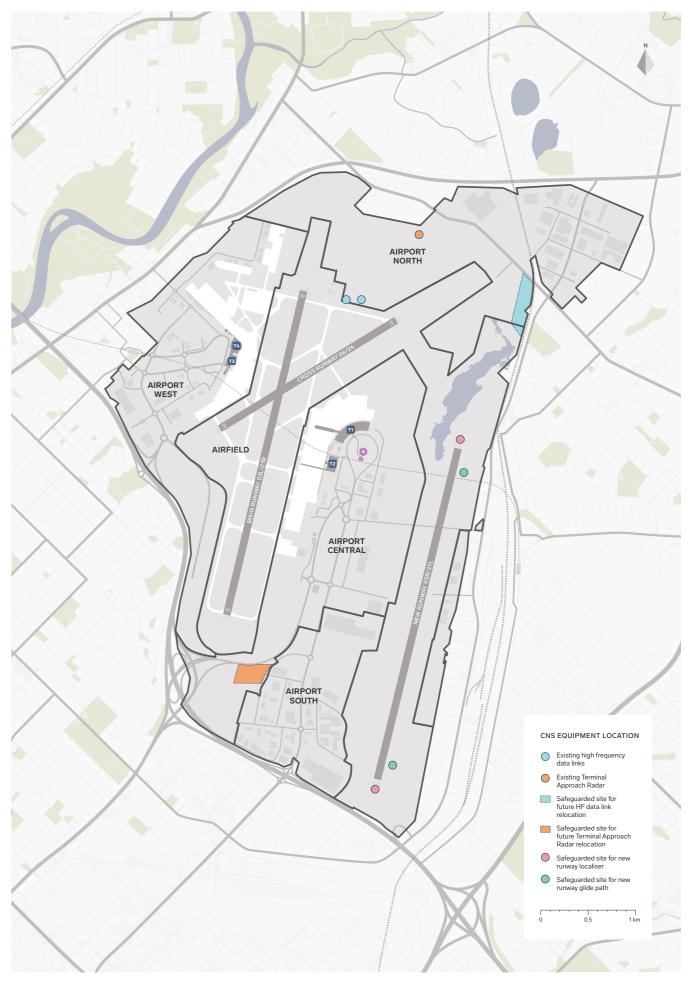


Figure 13-10 Proposed safeguarded sites for future relocated CNS equipment
Note: The location of localisers and glide paths on the new runway are indicative only. Final locations will be determined by Airservices
Australia and Perth Airport.
Source: Perth Airport

14.1 Introduction

Perth Airport is one of the largest property landlords in Western Australia and plays a significant role in developing land which facilitates the growth of Perth and Western Australia's economy.

Perth Airport seeks to optimise the development opportunities for airport land not required for aviation purposes, by creating a unique and compelling destination for community, industry and commerce.

Perth Airport has experienced ongoing demand for logistics opportunities, in particular warehouses, due to its high-profile location and unrivalled connectivity. The current property portfolio has more than 200 tenants, many of which are highly regarded, blue chip commercial operators.

The vision for non-aviation development is to create a 'city at the airport', integrating Perth Airport's infrastructure with a variety of commercial, industrial, and cultural facilities. Through this approach, the airport estate is being established as a premier centre of activity within Perth, leveraging the global and national connectivity of the airport alongside its location in the metropolitan region.

To achieve this vision, Perth Airport requires a flexible, cohesive and innovative development plan. This non-aviation development plan takes into consideration:

- compatibility with aviation activities and aviation support facilities
- Perth Airport's designated status as a Specialised Activity Centre in State planning documents
- complementary and integrated development with surrounding land uses in consultation with government authorities
- demand from industries that see a benefit to their operations being located on the Perth Airport estate
- proximity and connectivity to the Central Business District (CBD) and regional road network
- Perth Airport's location in relation to freight hubs and transport infrastructure
- proximity to the Airport Central Station and Redcliffe Station
- security of electricity, water and communications networks
- existing large developable land parcels on the airport
- environmental and heritage values.



The vision for non-aviation development is to create a 'city at the airport'.

14.2 Non-Aviation Development Plan

The non-aviation development plans presented in Master Plan 2026 reflect the current planning and vision for the Airport North, Airport West, Airport Central and Airport South precincts.

The development plans have been designed to be flexible so as to respond to changes in market and customer expectations. The timing and scope of any development will be influenced by a range of factors including market demand, business viability, and Airports Act development approval requirements.

Perth Airport Master Plan 2026

Part D Section 14: Non-Aviation Development Plan

14.2.1 Airport North Precinct

The Airport North precinct, shown in Figure 14-1, is 365 hectares in area and is envisaged to be a world-class industrial and commercial precinct, leveraging connectivity to Western Australia and beyond. The precinct also presents an opportunity for aviation-related development, with direct apron frontage available for some sites.

The portion of this precinct located north of Kalamunda Road is fully developed with a range of industrial, warehouse, showroom, storage and logistics land uses.

Non-aviation development since 2020 is shown in Table 14-1.

An interpretive walking trail celebrating Whadjuk heritage and culture is planned to link two key cultural sites—Allawah Grove and Munday Swamp—creating a central feature for the precinct's development and providing an enriching experience for precinct visitors and employees.

Within the next five years, it is expected that the undeveloped portion of Airport North will begin to undergo development, which is likely to include industrial, logistics and aviation support land uses, following the construction of access roads and other supporting utility infrastructure. Given the area of land available, large lots can be created to support industrial land uses, and a range of research, innovation and technology land uses which require large flat sites can also be accommodated.

Access to the precinct will be provided as part of the Northern Access Project which is being jointly funded by the Federal and State governments and is planned for delivery by the State Government within the next five years. This project will make heavy vehicle movements safer and more efficient, at the same time providing the access required to deliver the future potential of the Airport North precinct. The future internal road network of Airport North is designed to accommodate the land uses within the precinct, ensuring further improved accessibility.

There is an opportunity to develop the area with other complementary, high amenity and convenient land uses for the future local workforce and resident population in Forrestfield North, within the City of Kalamunda.

The Midland Freight Rail Line bisects Airport North, creating the potential for a rail spur extension into the precinct. Combined with opportunities to establish airside access for air freight, this could enable the development of an intermodal facility, opening the door to new and more diverse land uses not currently present on the estate. There are constraints—such as limited developable height due to the cross runway, as well as environmental considerations—which restrict this opportunity, and Perth Airport will continue exploring options to enhance the viability of such development.

Development in Airport North will recognise and respect cultural heritage and the natural environment in the precinct. An interpretive walking trail celebrating Whadjuk heritage and culture is planned to link two key cultural sites—Allawah Grove and Munday Swamp—creating a central feature for the precinct's development and providing an enriching experience for precinct visitors and employees.

Development /Tenant	Nature of Use	Land area (approx. hectares)	
CEA	Industrial warehouse and office	3.4	

Table 14-1 Non-aviation development within Airport North 2020-2025 Source: Perth Airport





14.2.2 Airport West

The Airport West Precinct is shown in Figure 14-2 and comprises 344 hectares. It currently consists of predominantly aviation developments, with T3, T4 and the General Aviation Area all within the precinct. Other existing land uses include commercial office buildings, freight and logistics centres, and more recently the Dunreath Village and Highway Services developments.

Non-aviation development since 2020 is shown in Table 14-2.

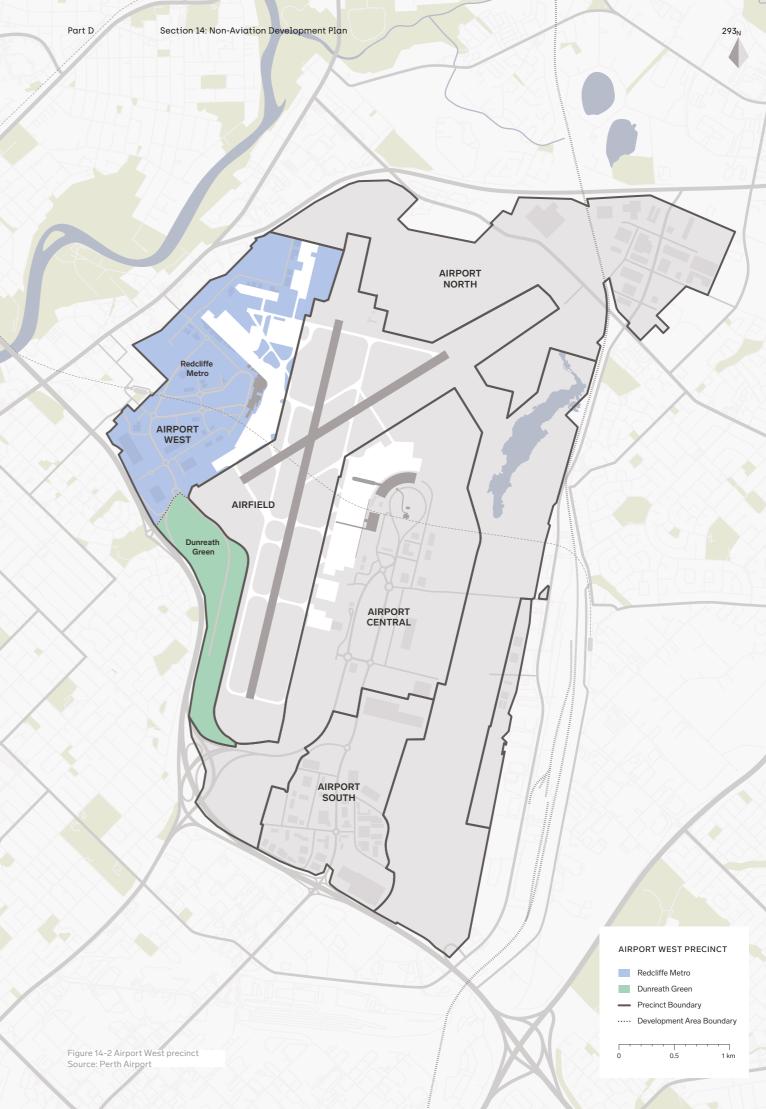
As shown in Figure 14-2, the Airport West precinct has two distinct non-aviation development areas—Redcliffe Metro and Dunreath Green.

Development/Tenant	Nature of Use	Land area (approx. hectares)
Costco Wholesale	Large format retail warehouse and petrol station	6.3
Dunreath Village (Stage 1)	Retail centre	2.2
Dunreath Village (Stage 2)	Liquor store	0.2
Highway Services	Fast food and car wash	1.8

Table 14-2 Non-aviation development within Airport West 2020-2025 Source: Perth Airport

Artist's impression of future commercial development at Perth Airport





Perth Airport Master Plan 2026

14.2.2.1 Redcliffe Metro Development Area

Redcliffe Metro is a distinct commercial centre of Airport West that covers an area of 274 hectares.

It maximises the benefit of the Federal and State government investments in the METRONET rail project. The area is anchored by a commercial core adjacent to Redcliffe Station, with a wide range of business and land uses that provide all the conveniences of a local shopping centre for passengers, airport workers and the local community. Since 2018, the Direct Factory Outlet, Costco Wholesale, Dunreath Village (featuring Woolworths, Priceline, Sushi Hub, Dan Murphy's and other speciality retail shops), McDonalds, KFC and an IMO car wash have opened, creating more than 1,300 ongoing retail jobs.

The area will continue to provide a range of aviation support facilities and associated ground transport infrastructure for T3/T4 until Qantas relocates to a new terminal within the Airport Central precinct. After the relocation, the existing services and established road network with abundant car parking will become progressively available for use (and re-use) by complementary land uses.

The staged realignment of the General Aviation Area (discussed in Section 13.7) will allow for expanded general aviation and cargo uses, and may include private passenger transport by way of, for example, vertical take-off and landing aircraft in the future.

The demand for new office developments is anticipated to increase over time, assisted by the uptake in the use of the Forrestfield-Airport Link rail services to Redcliffe Station and the increased surrounding residential population. This population will be ideally located for easy access to employment opportunities within the estate.

Through a staged approach over the 20-year planning period of this Master Plan 2026, the area will transition into a highly integrated and walkable mixed-use hub that could include the following:

- expanded general aviation and cargo facilities
- restructured traffic network which separates heavy-duty vehicles from other precinct traffic
- · a connected active transport network throughout
- increased public open space
- high-amenity office campus
- adaptive re-use of existing warehouses
- · entertainment and leisure facilities
- prioritisation of culture and the arts
- · education and training centres, and
- improved amenities such as childcare facilities and food and beverage offerings.



Development of Dunreath Green will focus on creating an experience-driven destination, featuring large-format retail and leisure land uses, as well as industrial, logistics and automotive uses.

The area includes an existing living stream (vegetated open drainage channel) which will be preserved as part of development; new green spaces will also be added to enhance the quality of the environment for visitors and employees.

Development within Dunreath Green is set to begin in 2025.

Development of
Dunreath Green will
focus on creating an
experience-driven
destination, featuring
large-format retail and
leisure land uses, as well
as industrial, logistics
and automotive uses.



14.2.3 Airport South

The Airport South precinct comprises approximately 203 hectares of land and is supported by quality transport links and infrastructure.

As shown in Figure 14-3, the Airport South precinct comprises the non-aviation development area in the south of the estate, and a portion of land along the eastern boundary of the airport estate. It is serviced by Tonkin Highway, Horrie Miller Drive and Airport Drive, which provide high commercial exposure for development sites. Abernethy Road provides access to the portion of land along the eastern boundary.

The precinct is made up of primarily industrial developments such as distribution centres, storage warehouses and workshops. There are also some commercial facilities within the precinct, including offices and food and beverage offerings.

Non-aviation development within Airport South since 2020 is shown in Table 14-3.

The precinct benefits from high-quality transport links and infrastructure, serving as Perth Airport's southern gateway and providing a seamless transition to Airport Central. It will continue to be developed for large-format commercial and industrial use, while opportunities for aviation support facilities within the precinct will also be explored. The long-term vision for Airport South is of a highly accessible industrial and logistics precinct anchored by an identifiable precinct-centre, supported by high-quality public realm with spaces for workers to meet.

There are several industrial developments planned within the next five years. The first development is the 16.3-hectare parcel of land located to the north-east of the precinct, along Tarlton Crescent, planned to be prepared for development. The site can cater for multiple developments, suitable for land uses such as industrial, logistics and aviation support. The proposal for land clearing and construction of roads and services of this land parcel is detailed in a Major Development Plan that underwent public comment in early 2025 and will be submitted to the Federal Minister for Infrastructure for decision.

The Airport South precinct has an interface with the Airfield precinct. With the upcoming Airport Central precinct developments, including the new runway and new and expanded terminals, there will be an increase in the aviation workforce on the estate. Consequently, land uses which provide amenity for the growing workforce may be pursued in this area.

Given the height constraints within the eastern boundary, there is limited future development on the five-year horizon for that portion of the Airport South precinct. The only development Perth Airport is currently working on is the relocation of an existing shipping container storage tenant—which will be displaced by the new runway development—to a new site within this area.

Development/Tenant	Nature of Use	Land area (approx. hectares)
Air Radiators	Industrial workshop and office	1.2
Border Express	Logistics warehouse and office	4.2
Cummins	Industrial warehouse and office	1.4
Epiroc	Industrial workshop and office	1.7
Geordis	Industrial warehouse and office	0.9
Officeworks	Warehouse and office 3.3	
Pacific Energy	Industrial warehouse and office 1.5	
Westrac	Industrial warehouse and office	1.3
Westrac	Industrial warehouse and office 0.9	
Dnata	Industrial warehouse and office 2	
Capital Group	Industrial warehouse and office	1.1

Table 14-3 Non-aviation development within Airport South 2020-2025 Source: Perth Airport



redeveloped buildings will have attractive front facades that strengthen the interplay between the public and private realm.



A gateway precinct

Create a southern entrance to the Perth Airport estate around the Horrie Miller Drive and Tonkin Highway intersection. Landscaping and wayfinding will support improvements to the precinct amenity.



A coherent and legible character

Public realm and landscaping improvements focused in the eastern area of the precinct will support people moving safely and comfortably through the precinct.



Support industry and economy

Airport South will continue to provide valuable large-format industrial and logistics floorspace to existing long term tenants, supporting economic activity within the airport estate. Further development of



14.2.4 Airport Central

Unlocked by the upcoming multi-billion-dollar consolidation of commercial passenger services into the precinct, Airport Central will be the gateway to Western Australia. The precinct is shown in Figure 14-4 and is approximately 417 hectares, comprising mainly Terminal and Airport Services Zones.

T1 International, T1 Domestic pier and T2 are located within the precinct, as well as the Airport Central Station, public and staff car parks, and the Air Traffic Control tower. A range of non-aviation developments also exists within the Airport Central precinct, including retail, office accommodation and car rental facilities.

Airport Drive is the main terminal access road, linking with Tonkin Highway. Horrie Miller Drive runs through Airport Central, linking from Airport South, and is used by heavy vehicles accessing the precinct to service various freight and other related land uses.

Non-aviation development with Airport Central since 2020 is shown in Table 14-4.

Development/ Tenant	Nature of Use	Land area (approx. hectares)
United Petroleum	Fuel station	0.8

Table 14-4 Non-aviation development within Airport Central 2020-2025 Source: Perth Airport

Non-aviation development within the next five years includes the construction of the airport's first hotel (see Section 2.9.1.5), located adjacent to the Air Traffic Control tower, and two multi-storey car parks.

The construction of a new terminal and expansion of existing terminal facilities will also take place within the next five years, with Qantas operations to relocate from T3/T4 to Airport Central around 2031. This will provide opportunity for other aviation-related development, with direct apron frontage available for some sites, as well as complementary commercial projects aimed at improving visitor convenience and supporting the increased workforce within the precinct.

Land is being safeguarded for a future second hotel to the east of the first hotel site, along with an area designated for commercial development between the two hotels. This commercial space may include retail, office and leisure facilities, catering to passengers and other airport visitors.



Create a sense of arrival and departure

Airport Central is the stepping-off point for people visiting or returning to Western Australia. Public realm and landscaping within the forecourt will introduce the rich variety of Western Australia, with the physical environment creating a sense of arrival and welcome.



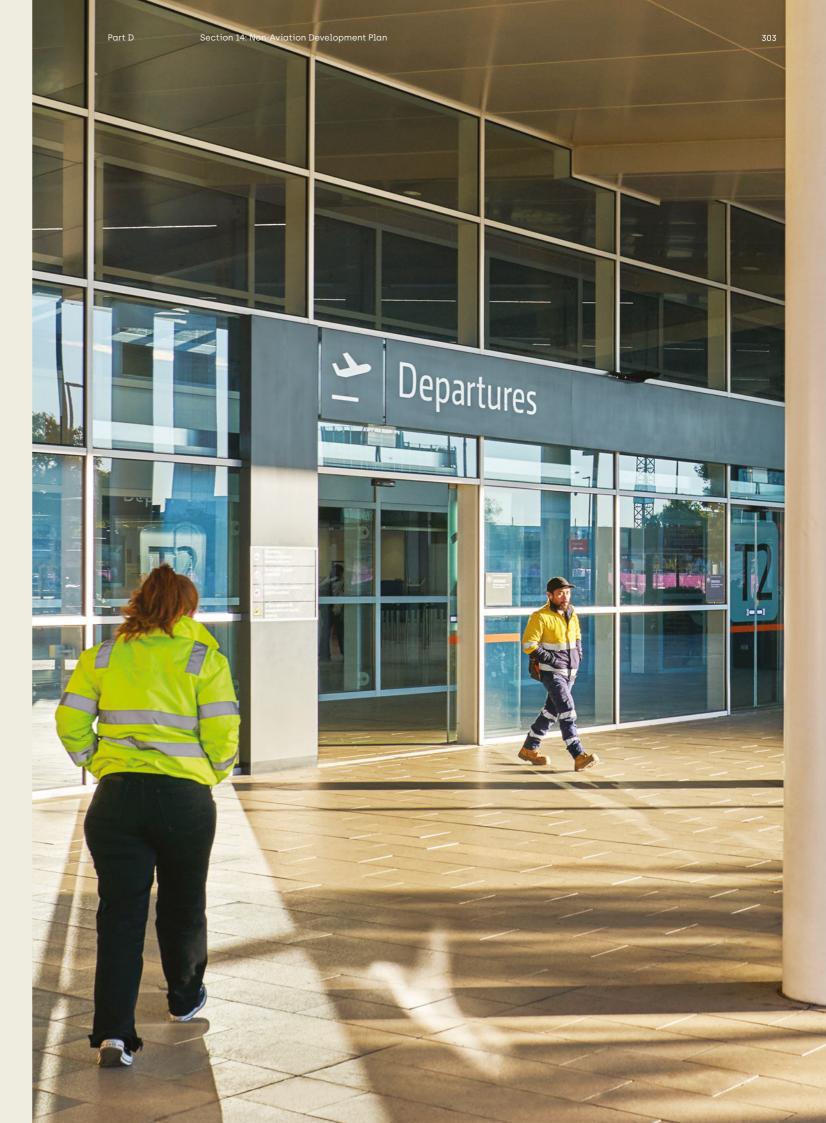
Support aviation function

With significant access to airside land, the Airport Central precinct will play a critical role in the aviation functions of the airport. Precinct design will support a range of aviation support services.



The forecourt as a destination

The terminal forecourt will be a destination centred around the terminals, hotels and other commercial activity, as well as the Airport Central Station



Part D Section 15: Ground Transport Plan

14.3 Impacts of Non-aviation Development

Future non-aviation development at Perth Airport will complement, preserve and protect the primary function of current and future aviation requirements. Interim developments may be considered in areas set aside for aviation with suitable break clauses incorporated into the leases. These interim developments will be relatively low capital intensity uses, such as vehicle storage and warehouses.

Non-aviation development at Perth Airport fulfils an important role supporting economic growth, noting the importance the airport is given within State and local government planning frameworks. As detailed in Section 3, non-aviation tenants on the estate directly employed 6,896 full-time equivalent employees in FY24 and generated 13,541 jobs across the Perth metropolitan area, contributing over \$2.9 billion to Gross Regional Product. By FY46, non-aviation tenants on the estate are expected to generate 54,318 jobs within the Perth metropolitan area and contribute \$10.9 billion to Gross Regional Product.

Perth Airport has undertaken a net benefit test, consistent with the State Planning Policy 4.2 Implementation Guidelines, to measure a significant impact for a proposed activity centre. The analysis assessed cumulative impacts and determined proposed developments planned within Redcliffe Metro and Dunreath Green over the next five years will have a minimal, and acceptable level of impact on the turnover of surrounding centres. As well as supporting short- and long-term employment, the proposed developments also provide improved access to goods and services for residents of the surrounding area.

Non-aviation tenants on the estate directly employed 6,896 full-time equivalent employees in FY24.

14.4 Consistency with State and Local Government Planning

As discussed in Section 12, Perth Airport is identified as a Specialised Activity Centre under the State Government's planning framework, which supports the growth of economic activity at Perth Airport as an employment generation hub.

The non-aviation development of Perth Airport is consistent with the Specialised Activity Centre designation. The estate creates a consolidated business and commercial hub that caters to companies seeking access to passenger and freight air services. These companies can take advantage of the location of the airport estate in close proximity to other transport modes, including the Kewdale rail freight facility, the Forrestfield-Airport Rail Link, major highway and regional road networks and, via those roads, the Port of Fremantle.

Each precinct has defined zones which outline the discretionary land uses. These zones have considered the applicable State and local government planning frameworks and have sought to complement and support these to the fullest extent possible.

This Master Plan 2026 has been developed to be consistent with planning undertaken in the cities of Belmont, Swan and Kalamunda. The development of the estate as an activity centre providing economic and employment opportunities is complementary to the planning being undertaken by these local government authorities to grow the resident population by way of infill development. Planning for non-aviation development at Perth Airport includes, among other land uses, opportunities for nearby residents to access goods, services and amenity.

14.5 Design Guidelines for Non-aviation Development

Perth Airport has implemented a suite of Design and Technical Requirements (DATR) guidelines to inform the design of new developments on the estate.

The DATR guidelines provide built form and site development standards to encourage the development of contemporary buildings of a high design quality adding to the corporate image of the tenant and the overall vision of Perth Airport as a premier commercial and industrial location. In line with the objectives of precinct planning, the designs of new developments are required to incorporate sustainable design requirements and sustainability best practice, promote environmental and Aboriginal heritage values, and create safe, attractive and connected places offering high amenity for visitors and the local workforce.



15.1 Introduction

Ground transport planning is critical to the efficient operation of Perth Airport and its future growth.

The journey to and from Perth Airport often creates the first and last impression for people visiting Western Australia. The development and implementation of the ground transport plan is based on a core principle of seeking to provide multiple options and streamline the efficiency and customer experience for people coming to and going from the airport. This is achieved through integrated planning and adopting a collaborative approach with State and local governments to ensure that the road, rail, shared path and public transport networks are developed and operated to provide a suitable level of service.

The ground transport plan is focused on the developments which will occur in the next five-year period as well as considering the future requirements over the 20-year planning horizon of Master Plan 2026.

15.2 Planning Approach

Planning is an ongoing and essential requirement to meet the current and future demand for ground transport services at Perth Airport. The key factors informing the ground transport plan and access to Perth Airport are:

- the modes of transport used and how they will change
- meeting the demands of forecast passenger growth
- the consolidation of all commercial air services into the Airport Central precinct
- changes in land use
- the anticipated level of commercial development and associated employment on the airport estate
- the growth in traffic on the roads surrounding Perth Airport generated by activities unrelated to Perth Airport
- · continuing to reduce the convergence of passenger and freight vehicle traffic
- integration of the airport's ground transport network into the wider local and state-wide networks, and
- · providing a safe, secure and sustainable ground transport network.

15.2.1 Stakeholder Engagement

The ground transport initiatives described in this ground transport plan reflect the regular and ongoing collaboration between Perth Airport and key stakeholders that include:

- the Department of Transport and Major Infrastructure, which sets policy and strategic direction for transport and major infrastructure throughout Western Australia
- the Department of Planning, Lands and Heritage, which develops planning policies related to land use and the transport network in Western Australia
- the Public Transport Authority (PTA), which manages and operates public transport within Perth and the regions
- METRONET, which is made up of key government agencies including the Department of Transport and Major Infrastructure, PTA, the Department of Planning, Lands and Heritage, the Department of Communities, LandCorp, and the Metropolitan Redevelopment
- Main Roads Western Australia (Main Roads), which is responsible for planning, construction and management of the major State roads to the airport
- Local governments, which are responsible for the planning, construction and management of local and regional roads adjacent to and connecting to Perth Airport, and
- the Federal Minister for Infrastructure, who is responsible for the approval of the ground transport plan as part of this Master Plan 2026, as well as the approval of any subsequent major development plan required prior to the construction of ground transport network projects.

Perth Airport works with the planning authorities to ensure that the changing demands of airport operations are reflected in strategic multi-modal transport modelling and planning. Perth Airport also ensures that developments within the airport estate consider the surrounding State and local infrastructure capacity. This engagement will continue to ensure both the internal and external ground transport networks sufficiently cater to meet demand.

15.2.2 State Planning

The Western Australian Government is both the regulator and operator of public transport services, including bus and rail for the Perth metropolitan area, including that servicing Perth Airport. It is also the regulator for taxi, rideshare and other commercial vehicle operations which service Perth Airport, in addition to its role setting the policy framework to determine mode share targets for the Perth metropolitan transport network.

Perth Airport is committed to working with State and local governments in achieving targets for sustainable transport options and mode share. Perth Airport will undertake this collaboration through coordination of projects located at the airport estate boundary, and beyond, where appropriate.

State and local governments are responsible for the road network that surrounds and provides access to Perth Airport. Figure 15-1 shows the location of Perth Airport in the context of metropolitan transport.

The ground transport plan considers and incorporates the key State Government land use and transport strategies which directly impact Perth Airport.

15.2.2.1 Perth and Peel @ 3.5million — The Transport Network

Perth and Peel @ 3.5 million—The Transport Network (2018) was prepared by the then Department of Transport with the intent of guiding the long-term planning of transport infrastructure for the Perth metropolitan region. The Transport Network provides a framework to develop an efficient transport network catering for Perth's population as it approaches 3.5 million people and beyond, including the Forrestfield-Airport rail link and Airport Central rail station which opened in October 2022.

This Master Plan 2026 is consistent with the intent of the Transport Network framework through the provision of capacity to support the ongoing growth of Perth's population and subsequent required transport infrastructure.

15.2.2.2 State Planning Policy 5.4 Road and Rail Noise

The State Planning Policy 5.4 Road and Rail Noise (2019) (SPP 5.4) identifies primary freight roads and rail routes within the Perth metropolitan area, with the objective of ensuring that the community is protected from unreasonable levels of transport noise while also ensuring the future operations of strategic and important freight and traffic routes.

Based on the transport corridor classifications in SPP 5.4, Tonkin Highway, Great Eastern Highway, Roe Highway and Leach Highway are strategic freight and major traffic routes within the State's network. Perth Airport is committed to working with State and local governments in achieving targets for sustainable transport options and mode share.

15.2.2.3 WA Active Travel Strategy

The State Government (through the Department of Transport and Major Infrastructure) is currently drafting an Active Travel Strategy to outline a coordinated, consistent approach to increase active travel in Western Australia.

The strategy will be an overarching strategic document that articulates a shared and accepted vision for the future of active travel and provides clear direction on the action required to implement the vision. While walking and bike riding are the most common modes, the strategy will also consider wheelchair and scooter use, skating, running, and use of other assisted devices such as an e-bike.

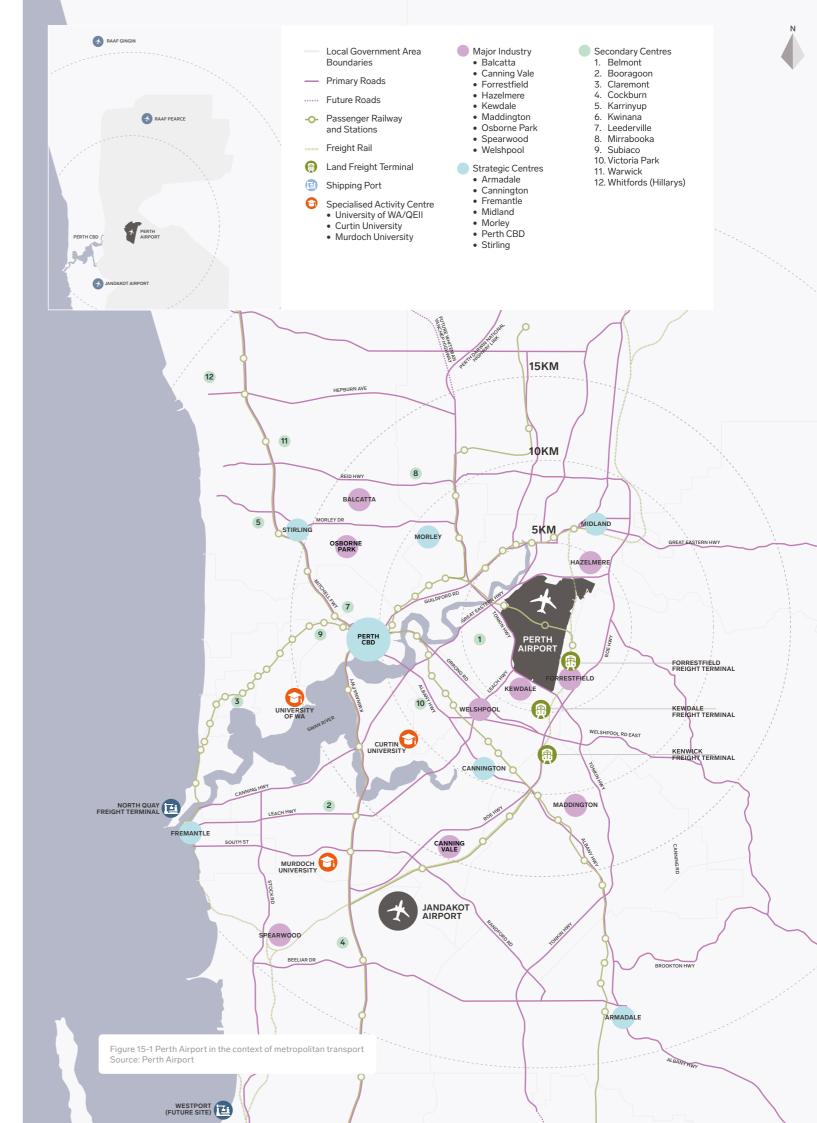
Whilst the strategy is still to be endorsed, the long-term cycle network (LTCN) for Perth and Peel is an available State planning document that identifies an aspirational blueprint for a cycling infrastructure network in Western Australia.

15.2.2.4 Westport

Westport is the State Government's planning program to move container trade activity from Fremantle to Kwinana. This includes planning new port facilities, a connected road and rail freight system, and logistics operations. The planning acknowledges that Western Australia's trade gateways to the world are its seaports and airports, making them critical pieces of economic infrastructure.

Westport is currently developing a business case that the State Government will use to decide on how, and if, to progress the project.

Westport's Landside Logistics Opportunities Study shortlisted landside supply chain network options. These options utilise existing freight rail lines as well as potential new spur lines (which branch off existing rail lines), with potential future rail to the Airport North precinct identified for each of the options being considered.



15.3 Current Road Network

Perth Airport is well served by the metropolitan road network, connecting the airport with the Perth CBD and the major metropolitan areas.

In addition to Perth Airport funded projects within the estate, both the State and Federal governments have contributed significantly to fund infrastructure supporting the current growth and transformation of Perth Airport.

15.3.1 Access to Perth Airport

The current road access for Perth Airport is shown in Figure 15-2.

15.3.1.1 Airport Central Precinct

The proximity of Perth Airport to the CBD enables good off-peak access via the arterial road network. During morning and evening peak periods, the road network surrounding Perth Airport carries significant volumes of (non-airport) commuter traffic. The peak periods for passengers using the Perth Airport passenger terminals currently differs from the traditional metropolitan commuter peak periods, reducing the impact of the airport traffic on the surrounding road network capacity at peak times.

As shown in Figure 15-2, the main access to the passenger terminals within the Airport Central precinct is through the grade separated Tonkin Highway, Leach Highway and Airport Drive interchanges, delivered as part of Gateway WA.

The \$1 billion Gateway WA project was jointly funded by the Federal and State governments and included upgrades of Tonkin Highway, Leach Highway, Roe Highway, and interchange connections to Airport Drive. In addition to significantly improving access to Perth Airport, Gateway WA also improved the safety and efficiency of one of the State's most important freight transport corridors.

Airport Drive is the designated primary access to Airport Central and all road signs direct traffic for T1 and T2 onto this route. It has been designed, and land safeguarded, to allow future widening to respond to increases in vehicular volumes. The secondary access point into the Airport Central precinct is via the Tonkin Highway, Horrie Miller Drive and Kewdale Road interchange. Traffic for T1 and T2 is not directed through this location as it is intended primarily for commercial and freight vehicle access.

Traffic between the Perth CBD and the airport is directed onto the Great Eastern and Tonkin Highways, while traffic from the east on the primary road network is directed to use the Roe, Reid and Tonkin Highways.

Grogan Road is predominantly used by non-airport related traffic as a through route to access the primary road network south and west of the Perth Airport estate (Tonkin Highway, Great Eastern Highway, Great Eastern Highway Bypass and Roe Highway) and by local tenants within the Airport Central and Airport South precincts.

15.3.1.2 Airport West Precinct

Dunreath Drive currently provides access to T3 and T4 via Tonkin Highway.

The \$330 million Tonkin Gap Project, jointly funded by the Federal and State governments, was undertaken between 2021 and 2023. The project delivered widening of Tonkin Highway and a new shared path between Dunreath Drive and Collier Road (to the north), and new interchanges and bridges.

Dunreath Drive will continue to be the main access to the Airport West precinct after the relocation of Qantas operations to the Airport Central precinct, with Second Street (Stanton Road) and Fauntleroy Avenue continuing to provide secondary access.

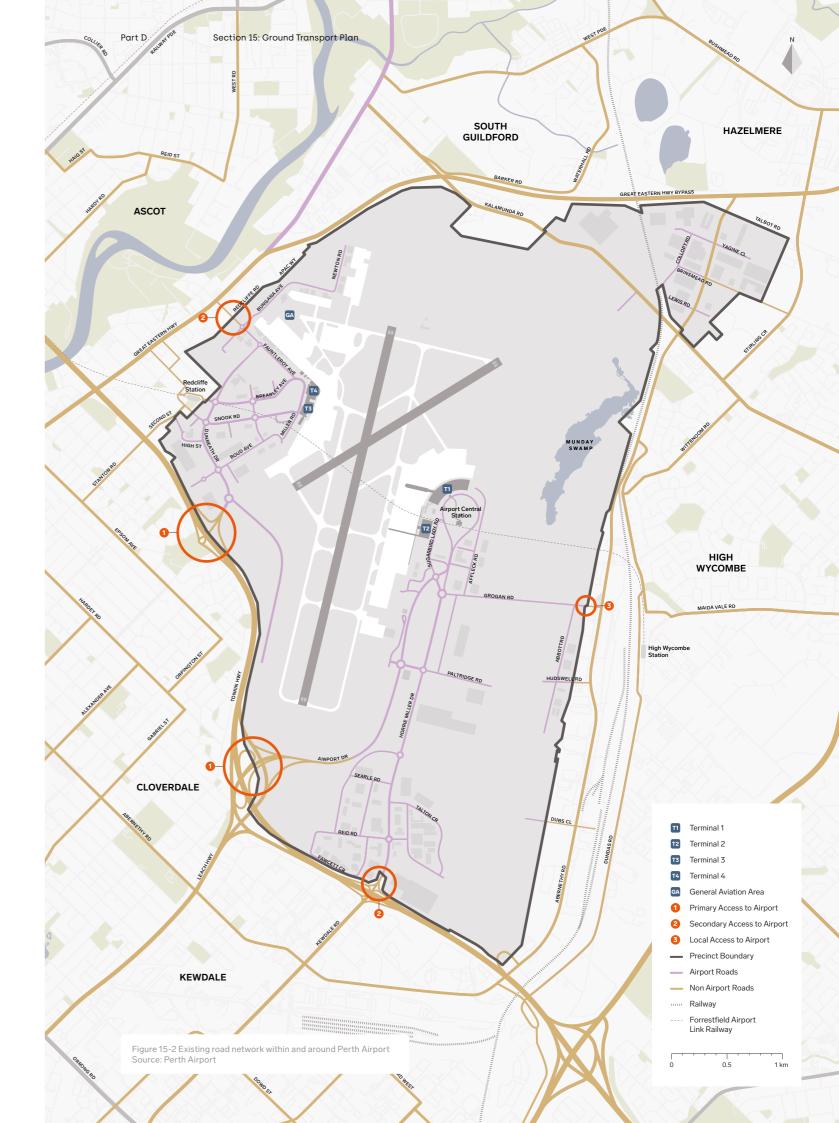
Access to the General Aviation Area (GA Area) is provided via Fauntleroy Avenue, from Great Eastern Highway.

15.3.1.3 Restricted Vehicle Access

The primary road network within and surrounding the estate also forms part of the metropolitan freight network for Restricted Access Vehicles (RAV). There is RAV 4 (27.5 metre B-Double, comprising a towing vehicle and two semitrailers), RAV 6 (36.5 metre double road train 87.5 tonnes) routes on the estate and RAV 7 (36.5 metre double road train 107.5 tonnes) on Tonkin Highway and Abernethy Road providing heavy vehicle access to the estate. There is a turning restriction at the intersection of Abernethy Road and Grogan Road for all RAV vehicles, with right turns not permitted either from Abernethy Road into Grogan Road or from Grogan Road into Abernethy Road.

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The \$330 million Tonkin Gap Project, jointly funded by the Federal and State governments, was undertaken between 2021 and 2023.



15.3.2 Road Network Hierarchy

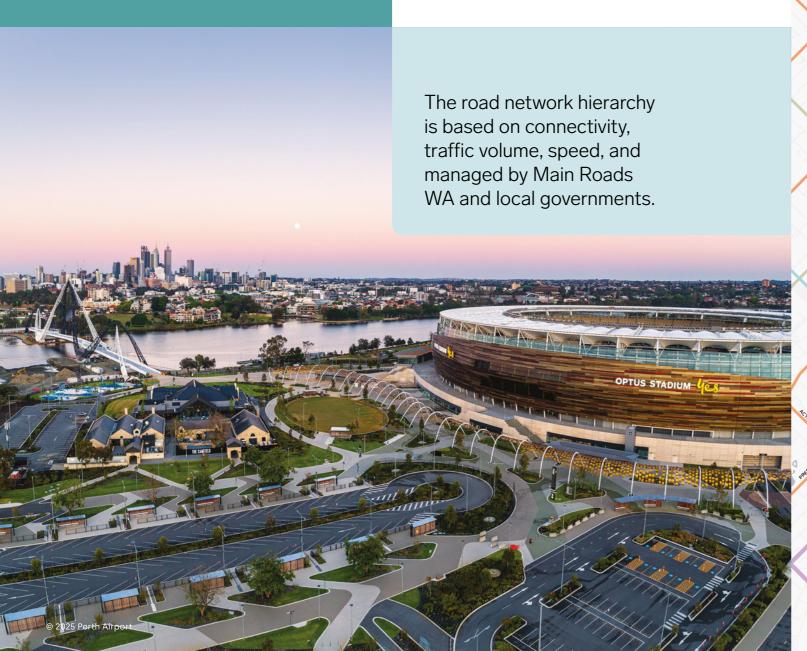
The road network in Western Australia is categorised by a functional hierarchy that represents the role that a road is intended to perform. The hierarchy is determined by a range of criteria, including location, degree of connectivity, predominant road use, indicative traffic volume, and recommended operating speed.

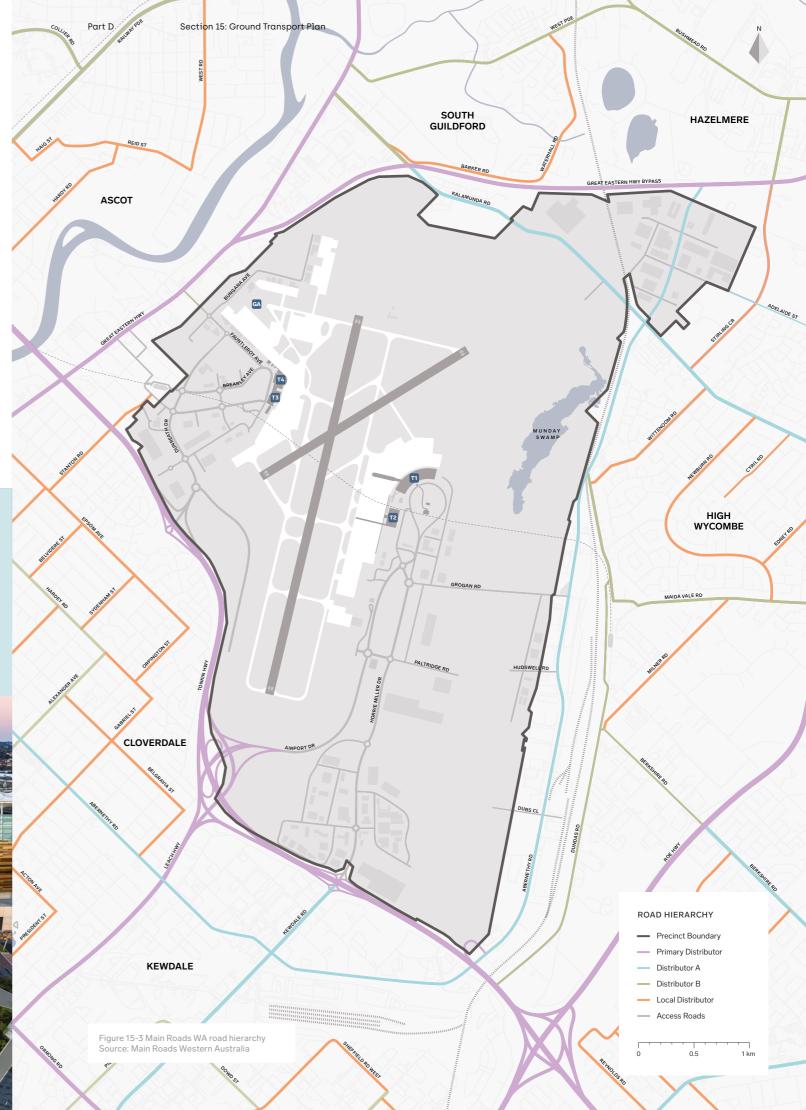
The Primary Distributor roads surrounding the airport are managed by Main Roads WA. Lower-order roads (Distributor A, Distributor B, Local Distributor and Access Roads) feeding into the primary road network are managed by the three local government authorities (Belmont, Swan and Kalamunda) that adjoin the estate. The road hierarchy relevant to Perth Airport includes:

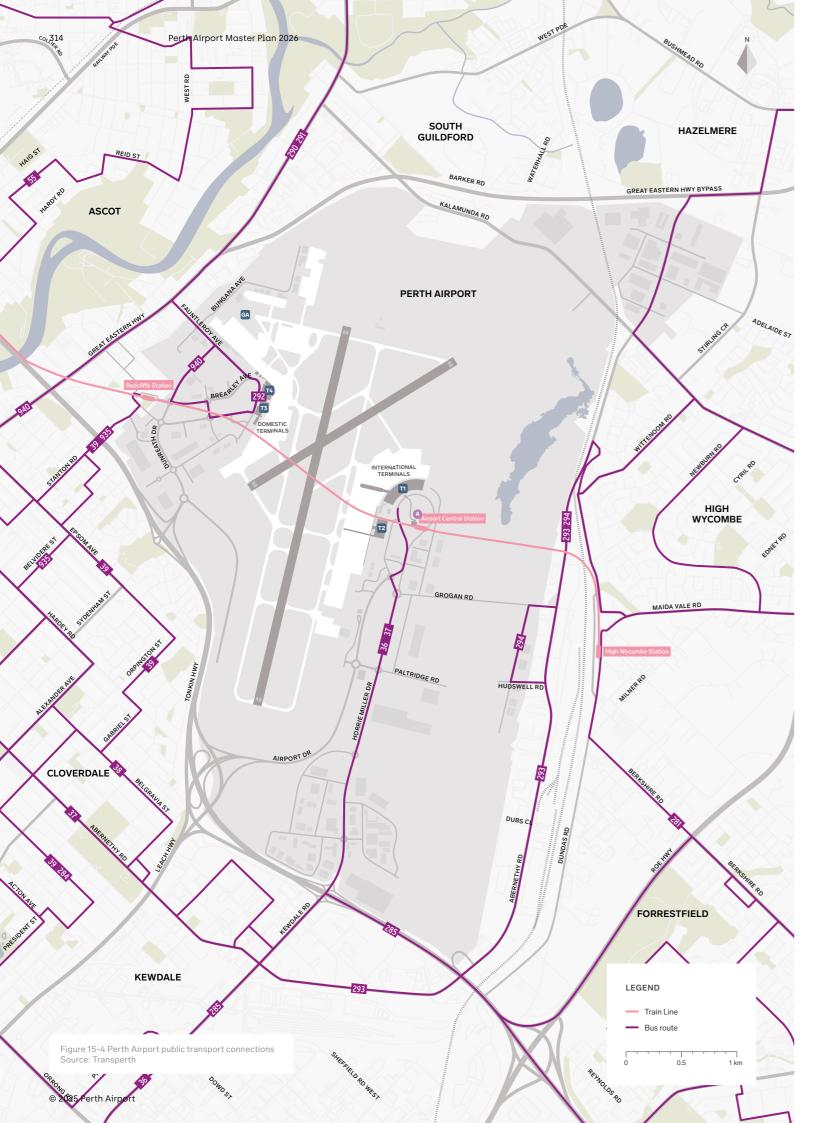
 Primary Distributor—Tonkin Highway, Leach Highway, Great Eastern Highway, Great Eastern Highway Bypass and Roe Highway, which provide for major traffic

- movement and carry large volumes of generally fastmoving traffic
- Distributor A—urban area roads in built up areas that carry traffic between industrial, commercial and residential areas and generally connect to Primary Distributor roads
- Distributor B—similar to Distributor A roads, but with reduced capacity due to flow restrictions (often older roads with a traffic demand in excess of that originally intended)
- Local Distributor—roads that link Distributor A and B roads to Access Roads, and
- Access Roads—provide access to properties with amenity, safety and aesthetic aspects having priority over the vehicle movement function.

Figure 15-3 shows the current road hierarchy network surrounding the airport estate.







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15.4 Public Transport

Public transport to Perth Airport is provided by bus services and, since 2022, by rail services.

The current transport connections provided by rail and bus are shown in Figure 15-4.

15.4.1 Rail

The Forrestfield-Airport Link (FAL) was the first stage of the State Government's METRONET project, a \$3.6 billion passenger rail project comprising approximately 72 kilometres of new passenger rail and up to 18 new stations. The FAL is an 8.5-kilometre underground extension of the Perth rail network from Bayswater to Forrestfield, of which 3.8 kilometres is located within the Perth Airport estate. The project included the Airport Central Station, located within the Airport Central precinct, and two train stations outside the estate—Redcliffe Station and Forrestfield Station.

The FAL project was completed in 2022 and forms an integral component of Perth's long-term public transport network to meet existing and future public transport demand.

The connection of Perth Airport to the remainder of the metropolitan rail network offers passengers and employees who work on the estate an alternative means of accessing the airport. Currently, trains run every 10 minutes during peak times, providing passengers with an 18-minute journey time between Airport Central Station and the CBD, at the same payment rates as the rest of the Metropolitan rail network.

Perth Airport continues to work with the Public Transport Authority and the nearby local government authorities to ensure the stations are well connected to other modes of transport.

15.4.1.1 Airport Central Station

Airport Central Station was opened in October 2022 to support the consolidation of commercial passenger services within the Airport Central precinct. It is located in the core of the precinct and provides connectivity to the existing T1 and T2 forecourts as well as the future new terminal. Access to the terminals from the station is via the pedestrian Skybridge, a 280-metre elevated walkway connecting the Airport Central Station to the terminal forecourts. Integrating the rail station into the terminal and forecourt areas provides an effective ground transport system and a high-quality passenger and visitor experience.

The rail link provides an alternative to road-based access to the airport, and Perth Airport works with the Public Transport Authority to improve services to the airport and seamlessly link the Airport Central Station with the surrounding facilities and nearby employment.

The design of the new airport hotel and multi-storey car parks have been integrated with the Airport Central Station and Skybridge infrastructure.



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15.4.1.2 Redcliffe Station

Redcliffe Station is located on State-controlled land, adjacent to the airport estate. The station includes a public transport interchange that provides links to local bus services and focuses on general metropolitan commuter passenger demand. The associated bus interchange significantly improves the catchment for public transport to the station. The station is located approximately 900 metres from T3 and T4 and is connected to these by a footpath.

Following the relocation of Qantas operations to the Airport Central precinct, Redcliffe Station will primarily serve the needs of local residents, Airport West retail and business park users, and the GA Area.

Perth Airport continues to work with the Public Transport Authority, METRONET and Main Roads WA to ensure and improve connection between Redcliffe Station and nearby attractions and employment.

15.4.2 Bus Services

Airport Central Station is currently serviced by the following bus routes:

- Route 37—Oats Street Station via Belmont Forum shopping centre and Kewdale Road, and
- Route 36—Cannington Station via Queens Park, Kewdale Road and Horrie Miller Drive.
- Redcliffe Station is currently serviced by the following bus routes:
- Route 935 (high frequency)—Kings Park via CBD and Belmont Forum
- Route 940 (high frequency)—CBD via Great Eastern Highway
- Route 39—CBD via the suburbs of Cloverdale, Belmont, Carlisle and Lathlain
- Routes 290 and 291—Midland Station via the suburbs of Guildford and South Guildford
- Route 293—High Wycombe Station via Belmont Forum and Abernethy Road, and
- Route 292—Fauntleroy Avenue and T3/T4 (Circular Route).

Perth Airport will continue to work with the PTA to confirm new and amended Transperth bus routes that will service the airport estate, including temporary services responding to large scale construction works over the next five years in the Airport Central precinct.

Perth Airport will also work with the PTA to ensure any required supporting infrastructure, such as connecting footpaths and wayfinding, can be accommodated where suitable.



15.5 On-Airport Traffic

Perth Airport is responsible for all roads within the airport estate. This includes roads that are publicly accessible as well as restricted access roads located within the airside areas of the estate.

The Ground Transport Plan caters for all activities on the estate including:

- passengers
- employees
- · commercial development
- freight
- · aviation support facilities, and
- fuel supply services.

Almost 70 per cent of current traffic on the estate is directly related to aviation activities, and the predominant mode of access to and from Perth Airport is road-based transport, both public and (primarily) private.

Although the opening of the FAL in 2022 and subsequent expansion of bus services have improved travel choice to and from the airport, road-based private transport (car, taxi and rideshare) is expected to remain the predominant mode for the next five years and throughout the planning period of this Master Plan 2026.

A comparison of the mode of travel by visitors arriving and departing the airport estate in 2015 and 2024 is shown in Figure 15-5.

The most significant change in mode share in the past 10 years has been the increase in the proportion of rideshare use, which has grown from 4.5 per cent in 2015 to 17.8 per cent in 2024. This coincides with a drop in taxi movements, which has decreased from 18 per cent in 2015 to 6.6 per cent in 2024. Private car use, which captures car park users (long term and short term) and public pick-up and drop-off, increased from 63 per cent to 69.2 per cent. Public transport has increased from 2.6 per cent to 3.7 per cent, likely following the opening of the FAL as bus use has dropped during the same period.

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State and local governments are planning for and identifying opportunities to balance the transport mode share, which is currently dominated by car-based private vehicles in the Perth metropolitan area, towards more sustainable alternatives through initiatives, including:

- investing in new infrastructure and services in road, rail and public transport
- encouraging travel demand management for employees and contractors around key activity centres
- the provision of additional public transport options for both aviation passengers and employees and contractors at Perth Airport, and
- provision of new infrastructure such as paths, shelters and end-of-trip facilities for cyclists and pedestrians.

Perth Airport will collaborate with the Public Transport Authority to support efforts to grow train patronage, helping to maximise the benefits of the State Government's recent investment in rail infrastructure.

It will also continue working with key stakeholders to ensure a diverse and well-connected transport network is available.



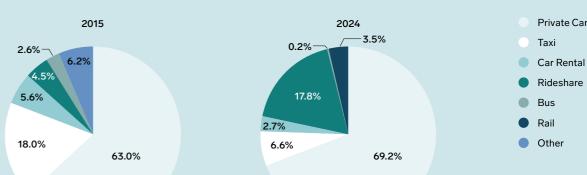


Figure 15-5 Comparison of passenger travel modes in 2015 and 2024 Source: Perth Airport



15.5.1 Logistics Strategy

Perth Airport has developed an estate-wide logistics strategy that captures the current and future requirements of all logistics movements.

The consolidation of terminals within the Airport Central precinct provides an opportunity to establish efficient logistical operations for people, vehicles, goods and equipment at the airport. The logistics strategy provides a framework for Perth Airport to apply during the design of future infrastructure such as the new terminal, multi-storey car parks, airport hotel and road network upgrades. It outlines key logistics principles and a concept of operations for key logistics considerations, such as a new central logistics facility to be incorporated into the new terminal, the location and role of future Gate 14 (the key point of airside access on the eastern side of the Airport Central precinct), and aviation support vehicle movements within the estate to minimise conflict points to passenger traffic.

15.5.2 Emerging Technologies

Planning for the short- and long-term also considers new travel modes and emerging technologies that are disrupting the more traditional ground transport options, as well as providing opportunities to improve ground transport and access to the airport.

The introduction of rideshare services has already seen changes in mode share, as more passengers choose to be dropped off on the forecourt via rideshare services instead of private vehicle pick-up and drop-off. Demand for car parking in the long-term car parking saw unprecedented growth through the COVID-19 pandemic which remains as a significant proportion of private car use. It is anticipated, however, that the rate of change will increase towards rideshare and car parking modes. The relocation of Qantas operations to the Airport Central precinct will impact on mode share, with rail use expected to increase given the proximity of Airport Central Station to all terminals.

15.5.2.1 Intelligent Transport Systems

In the short-term, additional intelligent transport systems will optimise the existing ground transport network. Harnessing the power of technology dramatically changes how Perth Airport operates and optimises transport networks. Rapid changes in how data can be collected and analysed in real time will enable network operators to make informed operational decisions to improve network efficiency, safety and customer experience. Implementation of intelligent system technology assists in managing transport networks under normal conditions, during periods of heavy congestion and when managing incidents.

There are opportunities for Perth Airport to implement intelligent systems to further optimise the use of the road network and parking infrastructure. The project opportunities of particular interest are:

- foundation infrastructure—vehicle detector stations on each lane of the main access roads and key locations, which provide real-time information of traffic volumes and issues on the network. The fibre optic backbone would link back to Perth Airport operations centre, with associated control systems to monitor and display the information. Additional CCTV coverage would also be considered to allow visual validation of congestion or other issues on the network
- digital signage—allows airport operational staff to dynamically control messaging to road users to manage the traffic in a way that optimises traffic flow for a range of different conditions at the airport, and
- smart parking sensors and/or use of existing CCTV—can be used for pick-up and drop-off or in car parks, with end-to-end navigation to guide drivers to an available bay and smart matching between car size and bays. This concept can be extended to the use of GPS (ground positioning systems) to guide automated vehicles towards vacant spaces in car parks and on forecourts.

Standards and guidelines for intelligent transport systems have been developed by Main Roads for the external road network. The systems at Perth Airport will be aligned with these standards to ensure a seamless journey for those travelling to and from the airport.

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Autonomous vehicles may be widely adopted within the 20-year planning horizon, reducing car park demand but increasing terminal drop-off requirements.

15.5.2.2 Autonomous Vehicles

Autonomous vehicles may emerge as a viable option within the next five years and may be widely adopted within the 20-year planning horizon of this Master Plan 2026. Fleet, or privately-owned autonomous vehicles, will be able to drive themselves to and from the airport, reducing demand for airport car parks but increasing the need for drop-off and pick-up facilities located close to the terminals.

Similarly, as private ownership of autonomous vehicles increases, the proportion of customers choosing to use pick-up and drop-off facilities and have their vehicle drive itself to and from their residence or nearby remote parking facility would increase. This remote parking may include Perth Airport car parks.

Although the development of multi-storey car parks represents an opportunity to increase the capacity of pick-up and drop-off facilities, Perth Airport will continue to monitor ground transport mode share and will consider demand management to ensure all ground transport modes are operating as efficiently as possible.

The automation of logistics delivery vehicles is also anticipated. Autonomous vehicles may rely on or have their operation enhanced by their ability to communicate with other vehicles, intelligent transport systems, infrastructure and mobile devices. Further, autonomous vehicles may be facilitated by high-resolution digital mapping of the areas they operate in. Perth Airport will consider the technology required to facilitate this communication or other requirements of vehicle automation.

Autonomous vehicles are also likely to be used in place of the bus services currently used for long term car park and terminal transfers landside, and for remote stand passenger transfer airside. Additionally, many of the airside vehicles servicing aircraft, such as cargo dollies and aircraft tugs, could be automated.

The timing and scope of the developments and initiatives outlined in this ground transport plan are therefore flexible, and will be determined by close monitoring of ground transport trends and technologies as they emerge.

Autonomous transport technologies such as the use of air taxis, and of drones for parcel delivery, are discussed in Section 5.3.8.

15.5.3 Traffic Forecasting

Ground transport forecasting is based on a range of data inputs and assumptions. This can include existing traffic counts, car park data, State Government forecasts for traffic volumes on the external road network, passenger forecasts, future aviation and commercial development, and concept plans for future ground transport access arrangements. Forecasting also considers the potential impact of changes in modes of travel, as well as emerging future technologies.

Similarly, traffic modelling will be undertaken to simulate traffic performance within specific areas and assess the network capacity, resilience and ability to meet future transport demands.



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15.6 Airport West Precinct

The Tonkin Highway—Dunreath Drive interchange is the primary access to the Airport West precinct, with secondary access from Fauntleroy Avenue via Great Eastern Highway. Local access is provided via Central Avenue and Second Street within the City of Belmont.

Currently, the road network is designed to facilitate and prioritise access to T3, T4 and the GA Area. The ground transport plan will evolve as land use changes in this precinct

Changes were made to the road network in 2023 to support the construction of the Dunreath Village shopping centre. These works included:

- a new High Street connection to the Second Street intersection with Boulder Avenue, and
- a new southbound right turn from Dunreath Drive to High Street.

The forecast traffic demand for the key road links in Airport West precinct is shown in Table 15-1.

Year	Dunreath Drive (vehicles per day)	Brearley Avenue (vehicles per day)	Fauntleroy Avenue (vehicles per day)
2024	47,000	17,000	17,000
2031	59,000	23,000	24,000
2046	47,000	5,000	16,000

Table 15-1 Forecast traffic for Airport West Source: Perth Airport T3 and T4 will continue to operate within the Airport West precinct until around 2031, when Qantas operations relocate to the Airport Central precinct. Passenger growth, and new developments within the precinct, will place pressure on the road network. Planned works to support the Airport West precinct road network operation over the next five years include:

- widening of the current Tonkin Highway and Dunreath Drive interchange with a potential southbound access into Dunreath Green to support increasing traffic demand
- potential widening and signalisation of the Dunreath Drive and Old Dunreath Drive intersection (first intersection after the Tonkin Highway and Dunreath Drive interchange)
- improving the Dunreath Drive and Brearley Avenue intersection through potentially converting to a signalised roundabout
- new two-lane ring road around new prospective development in Dunreath Green development area, linking back to Dunreath Drive
- potential introduction of a roundabout at the Boud Avenue and Ross Drive intersection to improve traffic efficiency, and
- potential conversion of the existing single lane roundabout at the Fauntleroy Road and Bungana Avenue intersection into a dual lane roundabout to improve traffic efficiency.

The concept for the ground transport network over the next five years within the Airport West precinct is shown in Figure 15-6.

Following the consolidation of all commercial air services to the Airport Central precinct, the closure of T3 and T4 will greatly decrease demand on the road network and car parking facilities within the precinct. The modes of transport will change as priorities for ground transport shift from ensuring passenger access to T3 and T4, to becoming a transit-oriented development that meets the needs of the GA Area and the future commercial developments. To meet future demand, the road network will be assessed to identify opportunities for repurposing roads and improving amenity in the precinct. Potential road network changes over the 20-year planning period include:

- constructing a new ring road that wraps around the Airport West precinct via Fauntleroy Avenue, Miller Road and Boud Avenue. This would also require upgrades to the Great Eastern Highway and Fauntleroy Avenue intersection
- converting Dunreath Drive to a shared zone surrounding Redcliffe Station as the existing office park continues to expand. This will enhance the journey for rail users and office users to be able to walk safely to numerous existing and new tenancies within the surrounding area, and
- potentially replacing the roundabouts on Dunreath Drive with traffic signals, to reflect the changing needs of those accessing the precinct and to improve connectivity to the GA Area, nearby businesses, residences and public transport.

The primary access to the Airport Central precinct for terminal-related traffic is via Airport Drive, with freight and commercial traffic using Horrie Miller Drive.

Airport Drive is the primary traffic route to T1 and T2, and ultimately to all terminals following the relocation of Qantas operations to the Airport Central precinct in the future.

Airport Drive is currently constructed as a dual carriageway with two lanes in each direction and has been designed to be widened as traffic volumes increase in the future. Major intersections on Airport Drive are currently roundabout controlled, as this facilitates turning movements to support current operations and prioritises traffic to the terminals.

With the relocation of Qantas operations into this precinct, and the forecast growth in passenger numbers, vehicle traffic volumes will experience a step change in demand by 2031. Terminal-related traffic in Airport Central is projected to increase from 24,000 vehicles per day in 2024 to 65,000 vehicles per day in 2031 and 93,000 vehicles per day in 2046. Most of the increase will be passenger-related traffic concentrated on Airport Drive. The forecast numbers of vehicles per annum, in relation to forecast total passengers, are shown in Table 15-2.

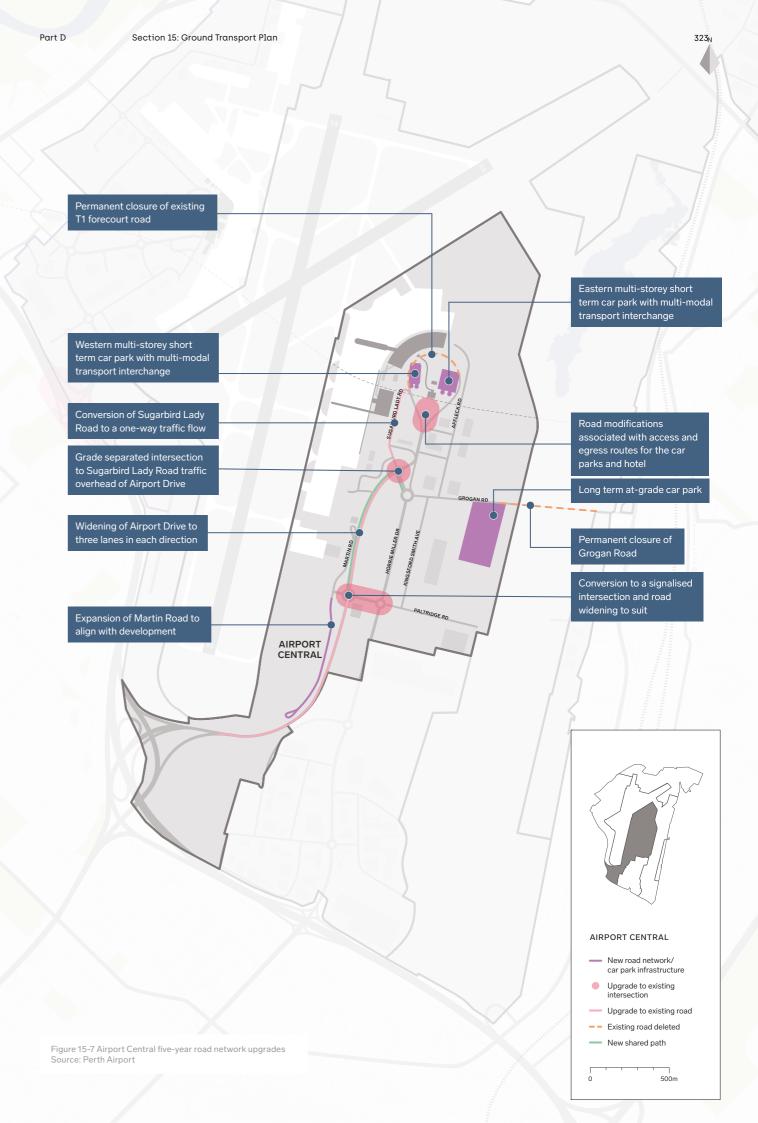
To increase the efficiency of the current network and expand capacity to support future demand, Perth Airport is undertaking substantial road traffic upgrades over the next five years. These works are detailed in the Major Development Plan for the Airport Central (Ground Transport Upgrade), approved by the Hon. Barnaby Joyce MP, Minister for Infrastructure, Transport and Regional Development on 2 September 2021, and include:

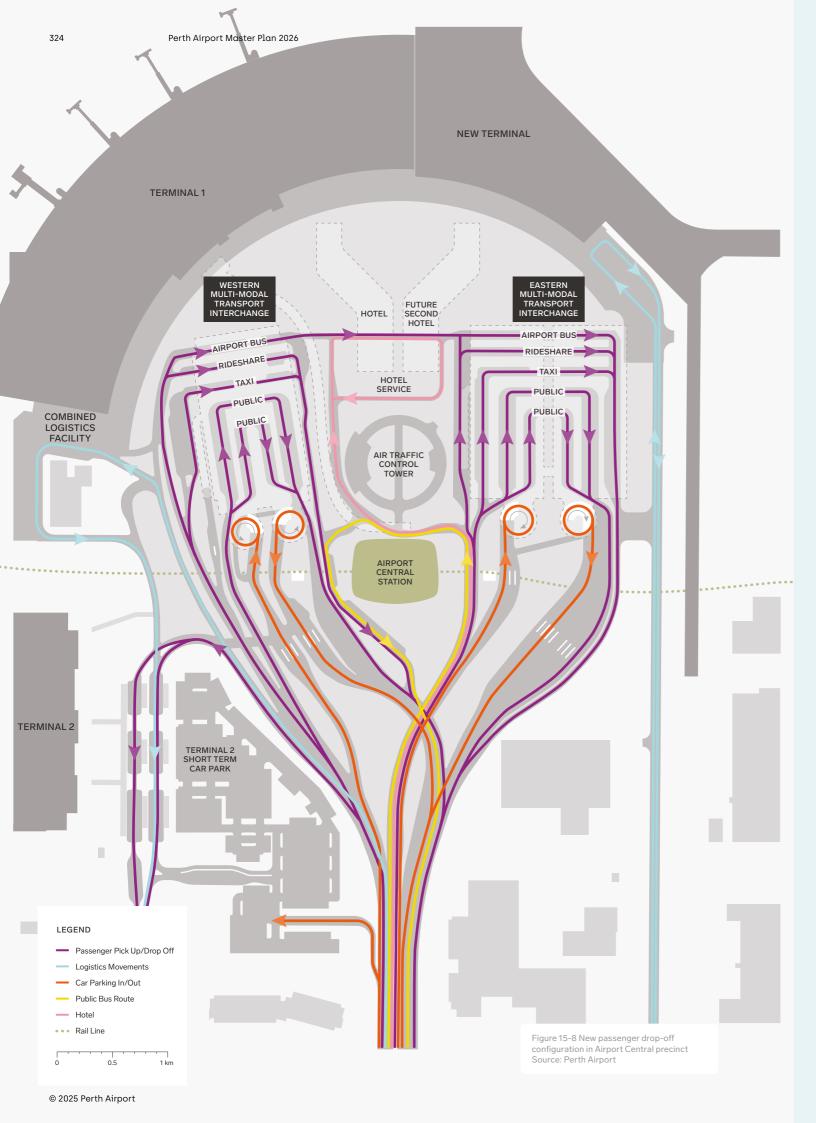
- converting Sugarbird Lady Road to a one-way (southbound) traffic flow that provides two lanes for vehicles exiting the T2 forecourt (completed in early 2025)
- widening sections of Airport Drive from two lanes in each direction to three lanes in each direction
- upgrading the roundabout which intersects Airport Drive, Sugarbird Lady Road and Horrie Miller Drive, to a grade separated solution that will take Sugarbird Lady Road traffic overhead of Airport Drive to allow free-flowing traffic along Airport Drive
- upgrading the roundabout that intersects Airport Drive and Paltridge Road to a signalised solution
- relocating the passenger, taxi, rideshare and long-term car park bus drop off and pickup facilities to a new multi-modal transport interchange that will be located within the area of the existing T1 short term car park, as shown in Figure 15-8 (the interchange also incorporates a multi-storey car park which is described in Section 15.10.2)
- closure of existing T1 forecourt road and the creation of a pedestrian plaza (access will be maintained for emergency services vehicles)
- construction of a second multi-modal interchange and multi-storey car park, located in the east of the Airport Central precinct
- road modifications associated with access and egress routes for the new multi-storey car parks and hotel, and
- expansion of Martin Road.

The five-year ground transport plan for Airport Central is shown in Figure 15-7.

Year	Million passengers per annum	Airport Drive (vehicles per day)	Horrie Miller Drive (vehicles per day)	Terminal-related traffic (vehicles per day)
2024	8.44	34,000	19,000	24,000
2031	20.35	75,000	32,000	65,000
2046	30.61	108,000	45,000	93,000

Table 15-2 Forecast traffic for Airport Drive and Horrie Millier Drive Source: Perth Airport





Part D Section 15: Ground Transport Plan 3

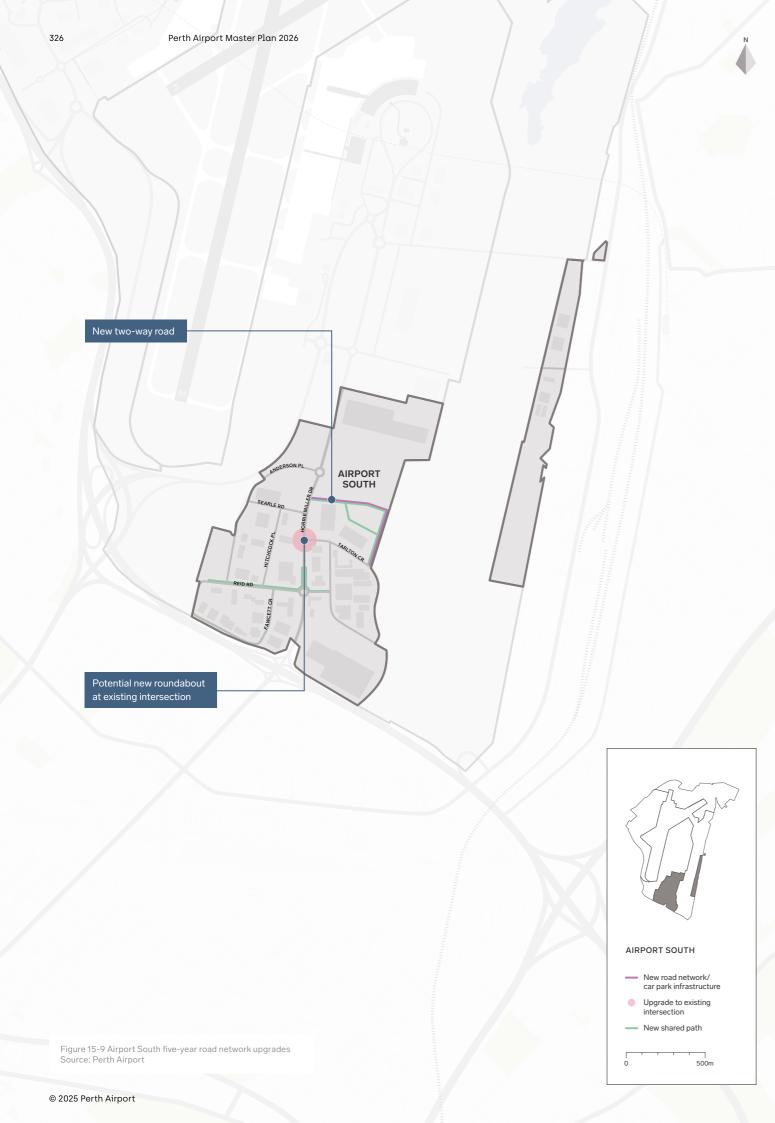
Potential road network changes over the 20-year planning period include:

- further widening to Airport Drive by one additional lane in each direction between Sugarbird Lady Road and Paltridge Road
- potential grade separated upgrade of the Airport Drive and Paltridge Road intersection
- widening of Paltridge Road and Kingsford Smith Avenue to allow for increased traffic flow with anticipated passenger and freight growth
- new two-way road connecting Paltridge Road and Grogan Road, and
- road network connectivity to the future terminal reserve.

The timing of these developments will be informed by the close monitoring of traffic levels on main access routes to the airport as well as by passenger growth.

Future demand could also be managed through drop-off and pick-up facilities at satellite locations, most likely in the southern portion of Airport Central or Airport South. To ensure reasonable levels of service for those passengers choosing to be picked up and dropped off at future satellite locations, Perth Airport will investigate the use of Automated Mass Transit systems such as automated buses, trackless trams and automated people movers to connect this location with the terminals and long-term car parks. Such a system could eventually replace the buses transporting passengers and visitors between the various car parks and terminals. It could also serve to connect Airport Central Station to the many businesses in other parts of the estate, particularly those in the southern portion of Airport Central and Airport South.

Perth Airport is committed to collaborating with Main Roads to monitor increases in demand on the Gateway WA network, including the airport interchanges. Terminal-related traffic in Airport Central is projected to increase from 24,000 vehicles per day in 2024 to 93,000 vehicles per day in 2046.



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15.8 Airport South Precinct

The Airport South precinct is primarily accessed via Horrie Miller Drive from the intersection with Tonkin Highway and Kewdale Road, with secondary access via Grogan Road which connects off Abernethy Road.

Horrie Miller Drive is a dual carriageway with two lanes in each direction and roundabouts at intersections. It will remain the primary access for the Airport South precinct, handling commercial vehicles travelling to and from the Airport Central precinct, and providing access to key facilities such as cargo terminals, freight forwarders, catering facilities, maintenance repair operators and aviation fuel sites. It also functions as the route for the terminal buses to and from the long-term car park.

In the eastern portion of Airport South, Hudswell Road and Dubs Close will continue to provide freight vehicle access from Abernethy Road.

The construction of the new runway includes the re-closure of Grogan Road, which was previously closed to through-traffic between 1987 and 2005. Grogan Road will be closed between Abbott Road and the Airport Central precinct, and access to the terminals and businesses within Airport Central will be via the Roe and Tonkin Highways. Many of the businesses currently accessed by this portion of Grogan Road will be relocated as part of the construction of the new runway and other works supporting the consolidation of passenger operations within Airport Central. The planning for the re-closure of Grogan Road is detailed in the Major Development Plan for the New Runway Project, approved by the Federal Minister for Infrastructure in November 2020.

The five-year ground transport plan for Airport South is shown in Figure 15-9.

Access along Tonkin Highway south of the airport estate will be improved through the \$366 million Tonkin Highway Corridor Project being jointly funded by the Australian and State governments. This project is part of a suite of improvements to transform Tonkin Highway to a high standard north-south transport link and will benefit access between Airport South and the industrial areas of Welshpool, Forrestfield and Kewdale, as well as residential areas to the south of the airport. Due for completion in 2028, the project includes widening of Tonkin Highway from south of Roe Highway to Kelvin Road, and grade separations at the Tonkin Highway intersections with Welshpool Road, Hale Road and Kelvin Road.

Perth Airport Master Plan 2026 New heavy vehicle access Main Roads WA project road network to align with upgrade to existing intersection future development Main Roads WA project upgrade to existing intersection AIRPORT NORTH New road network/ car park infrastructure Upgrade to existing New shared path Figure 15-10 Airport North five-year road network upgrades Source: Perth Airport © 2025 Perth Airport

15.9 Airport North Precinct

Access to the Airport North precinct is provided by Kalamunda and Abernethy roads, both of which form part of the metropolitan regional road freight network.

This access will be improved by the \$170 million Perth Airport Precinct—Northern Access Project being jointly funded by the Australian and State governments and planned for delivery by the State Government within the next five years. This project will make heavy vehicle movements safer and more efficient, at the same time providing the access required to deliver the future potential of the Airport North precinct. These works are shown in Figure 15-11 and include two connections to the Airport North precinct.

Development of the road network within the Airport North precinct will occur in line with the development of land uses. An efficient and appropriately sized network is critical to ensuring that the desired character and function of the precinct is achieved. Heavy vehicle access is required for the planned industrial and logistics land uses. The five-year ground transport plan for Airport North is shown in Figure 15-10.

The Midland Freight Rail line currently runs along the eastern boundary of the estate and provides the opportunity for a future private rail access spur for the direct deliver of freight by rail into the eastern portion of Airport North. This will continue to be explored by Perth Airport and is captured in the 20-year ground transport plan Figure 15-16.

Development of the road network will occur in line with the development of land uses.

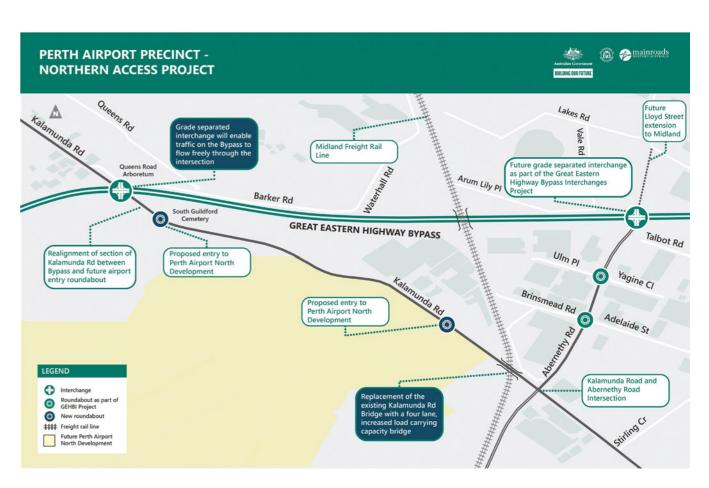
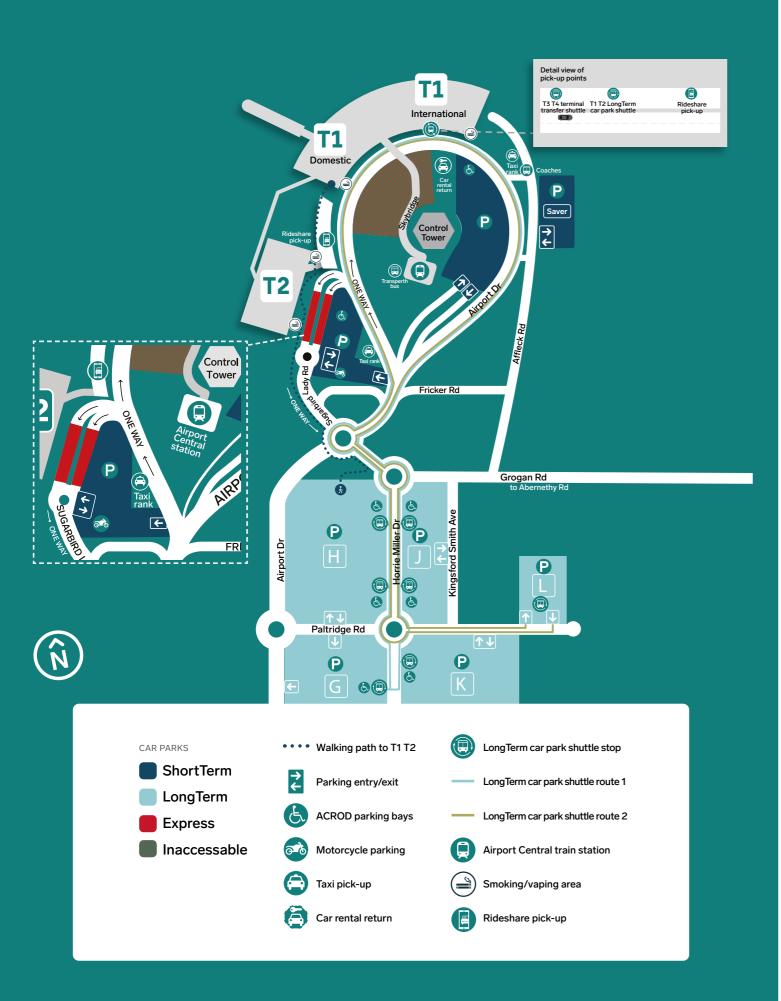


Figure 15-11 Perth Airport Precinct — Northern Access Project Source: Main Roads Western Australia

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15.10 Car Parking

Perth Airport has more than 28,000 car parking bays for passengers, visitors and staff across the estate. Current car parking options are shown in Figure 15-12 and includes:

- Perth Airport valet parking at T3 and T4
- premium parking in covered, extra-wide bays only a one-minute walk from the T3 and T4 check-in areas
- short-term parking, located immediately outside each terminal
- short-term saver parking, located close to T3 and T4 terminals
- long-term parking, with free regular bus services to each terminal
- long-term undercover parking, available at T3 and T4
- undercover and general parking bays at the GA Area, and
- airport staff car parking in both Airport West and Airport Central precincts.

Short-term car parks typically have a smaller number of bays compared to long-term car parks, as the turnover of vehicles is more frequent in short-term.

Perth Airport ensures that all developments within its estate include sufficient ACROD parking facilities and requires ACROD bays to be given priority in the parking bay hierarchy. ACROD bays are designed to meet Australian Standards and comply with the *Disability Discrimination Act 1992*, ensuring accessibility and inclusivity for all users. The Perth Airport shuttle buses also cater for passengers of all abilities.

With the increasing use of rideshare, automated vehicles on the horizon, and public transport connections through the Forrestfield-Airport Link and Transperth bus services, the future demand for car parking is difficult to forecast.



Perth Airport has more than 28,000 car parking bays for passengers, visitors and staff across the estate.

Car parking to support commercial and other non-aviation land uses within the Perth Airport estate is intended to be provided within each individual development site.

Car rental facilities are currently located proximate to the terminals; these are planned for relocation to the multistorey car parks. In the longer term, traffic levels and demand for car parking may trigger relocation of car rental pick-up and drop-off facilities to a site closer to the highway interchanges, at which point they may also be serviced by an Automated Mass Transit system.

The current primary taxi and rideshare holdings areas for T1 and T2 are located at the southern end of Long Term Car Park G, with taxis having access to additional secondary staging areas closer to the terminals. To accommodate the expansion of terminal operations in the Airport Central precinct, the existing holding area within Long Term Car Park G will be expanded to meet passenger demand. The existing staging areas for taxis will be transitioned into the new multi-modal transport interchanges (discussed in Section 15.10.2).



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15.10.1 Airport West Precinct

Since 2020, Perth Airport has invested in a range of projects to continue to support Qantas Group operations in T3/T4, including:



20 additional pick-up and drop-off bays

Implementing an express pick-up and drop-off system for the T3/T4 forecourt, incorporating the addition of 20 additional pick-up and drop-off bays, redesign of ACROD bays, and improving pedestrian flow by upgrading the crossing and installing traffic lights



216 undercover bays

Expansion of the T3/T4 car parks to add 216 undercover bays within the T4 Premium Car Park, and creation of a new 533-bay Short Term Saver Car Park



175 staff parking bays

Expansion of Staff A Car Park by an additional 175 car parking bays



576-bay Long Term Car Undercover

Expansion of Staff A Car Park by an additional 175 car parking bays



330-bay Long Term Car Park

Construction of the 330-bay Long Term Car Park E.

The Airport West precinct currently provides 7,640 public car park bays, with 6,310 bays within long-term car parks and 1,330 bays within the short-term car parks.

The T3 and T4 taxi holding and staging areas are located adjacent to Fauntleroy Avenue. The rideshare holding area is located off Dunreath Drive, co-located with Long Term Car Park A. The rideshare holding area is planned to be co-located with the existing taxi holding area within the next five years.

Following the relocation of Qantas operations to the Airport Central precinct and the subsequent closure of T3 and T4, the associated T3/T4 car parking will be discontinued and the land made available for alternative land uses.

15.10.2 Airport Central Precinct

Perth Airport has continued to invest in parking infrastructure within Airport Central. Projects undertaken since 2020 include:



1,000 bays to Airport Central

Expansion to existing Long Term K Car Park in Airport Central to add 1,000 bays



216 undercover bays

Conversion of 1,000 car bays within the Long Term H Car Park into dedicated airport staff parking facilities



2,300 bays in Long Term Car Park L

Construction of a new 2,300 bay Long Term Car Park L



310 bay Short Term Saver

Construction of a new 310 bay Short Term Saver car park

The Airport Central precinct currently provides 13,300 public car park bays, with 12,000 bays in the long-term car parks and 1,300 bays in the short-term car parks. There are a further 1,200 car parking bays for airport staff.

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The construction of the new terminal, and relocation of Qantas operations to the Airport Central precinct around 2031, will place significant demand on the requirement for additional car parking spaces in the precinct. Demand for parking is forecast to reach 27,200 bays by 2046, requiring an additional 16,700 bays within the Airport Central precinct. Parking projections are inclusive of staff parking requirements and have been calculated through applying parking penetration (based on historical trends) to passenger forecasts.

Figure 15-13 shows the Airport Central long-term car parking demand projections to 2046.

The availability of land for additional parking within Airport Central is heavily constrained. To support the key land use objective of safeguarding for flexible and adaptive growth, Perth Airport is meeting car park demand in Airport Central through construction of two multi-storey car parks adjacent to the terminals. The ground level of the facilities will function as a multi-modal transport interchange for passenger drop-off and pick-up by all vehicle types, including private vehicles, buses, rideshare and taxis. The two multi-storey car parks are set to deliver an anticipated net increase of over 2,900 short term bays close to the terminals.

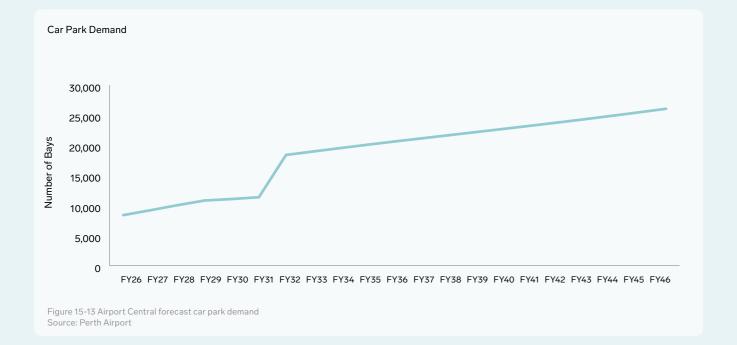
Perth Airport Master Plan 2026 Part D Section 15: Ground Transport Plan

Perth Airport are planning EV charging at suitable parking locations across the estate. Spatial planning aims to minimise walking distances and provide a seamless journey between the parking areas and terminals.

The two multi-storey car parks are detailed in the Major Development Plan for the Airport Central (Ground Transport Upgrade) approved by the Hon. Barnaby Joyce MP, Minister for Infrastructure, Transport and Regional Development on 2 September 2021. The multi-storey car parks will be delivered in stages, with the first facility due for completion in 2026. The second multi-storey car park is planned to be operational for the opening of the new terminal. An intelligent traffic system will be implemented to ensure overflow capacity can be managed between the two facilities, so as to maintain operational flexibility and journey time reliability.

The Ground Transport Upgrade project also includes an expansion of the T2 short-term car park by approximately 120 bays. Perth Airport plans to deliver additional long-term, at-grade car parks within the Airport Central precinct. These parking solutions will meet current demand while preserving flexibility for future land use in the area. Beyond 2031, if car parking demand continues to rise as projected, additional multi-storey car parks and automated people movers may be considered.

Perth Airport are also planning EV charging at suitable parking locations across the estate.





15.11 Active Transport

Cycling and walking facilities are currently predominantly used by employees working within the estate, however there is a desire to grow both the number and type of user. As such, shared paths will continue to be provided throughout the estate to provide users with travel choices. To further encourage active travel use, further initiatives such as including end-of-trip facilities in commercial developments, will also be considered.

The Airport South precinct is accessed by a shared path that connects to the Principal Shared Path (PSP) which runs along Tonkin Highway and terminates at Reid Road.

T1 and T2 are serviced by a shared path that runs along Airport Drive before connecting to the PSP along Tonkin Highway, which connects to the wider, regional PSP and active travel network.

Airport West is served by shared routes providing access to T3, T4, the GA Area, and retail and commercial areas. A pathway between Redcliffe Station and T3/T4 was constructed in 2022.

To support the sustainability and environmental objectives outlined in Section 7, improved and efficient active transport connections to and within the estate are essential. As noted in Section 15.5, private car use remains the dominant mode of travel to and from Perth Airport. Enhancing active transport infrastructure both within and around the estate will offer greater travel choices for passengers and staff particularly for those using public transport, e-mobility options, walking or cycling. Perth Airport has also developed Public Realm Design and Technical Requirements, which provide a blueprint to integrated and intuitive pedestrian amenity and connectivity within areas of development on the estate. Perth Airport has undertaken active transport studies for the Airport Central and Airport West precincts (including the GA Area) with a focus on providing short term upgrades to ensure customer safety, as well as a longer-term emphasis on the linkages to and from the surrounding land uses and future development areas, for a wholly integrated plan of maximum benefit to the community. This integrated approach focuses on sustainable movement ideas to provide

active transport outcomes that ensure the needs of all ages and abilities are fully considered, and users have legitimate travel choices.

Identified upgrades to shared paths within the Airport West precinct to enhance safety and connectivity for pedestrians and cyclists over the next five years include new shared paths along Brearley Avenue, Snook Road, Boud Avenue and Dunreath Drive, as well as upgrades to existing footpaths to accommodate shared use throughout the precinct. These upgrades will include mid-block crossing points to enhance accessibility and visitor experience, and integrate with existing and future bus services. For the Dunreath Green development area in the southern part of Airport West, Perth Airport will ensure developments in this area actively incorporate active transport connections and other supporting infrastructure.

Additionally, road network upgrades in the Airport Central precinct will involve reconfiguring shared paths, including constructing a new underpass to connect the long-term car parks with the existing shared path leading to the terminals. In the Airport South precinct, minor shared path improvements are also planned for the near future.

There are currently no dedicated shared paths providing access to Airport North. Future shared path access to Airport North may be affected by factors such as the low-density development around the area—Kalamunda Road forming part of the RAV network and carrying a high proportion of heavy vehicles—and a lack of current and planned shared paths in the wider surrounding network. For future development in Airport North, Perth Airport will plan for the provision of active transport infrastructure where appropriate.

Figure 15-14 shows the pedestrian and cycle networks on the Perth Airport estate.



Figure 15-14 Pedestrian and cycle access Source: Perth Airport

© 2025 Perth Airport

15.12 Wayfinding

Wayfinding is important to ensure the effective and efficient movement of vehicles, pedestrians and cyclists within the estate as part of a passenger's journey.

Within the estate, Perth Airport has installed advanced car park vacancy signs on key roads, showing where parking is available, thereby allowing users to select the most appropriate car park. The car park transfer bus service also has active signs at bus stops to advise passengers of the arrival time for the next bus.

Ground transport wayfinding will continue to be provided across the estate.

Perth Airport will continue to work with Main Roads to provide intelligent signage on key road access routes to inform traffic leaving the airport of any incidents off—airport, to allow drivers to modify their journey if required. Perth Airport will work with the Public Transport Authority to explore opportunities to provide similar information for public transport services.

15.13 Five-Year Ground Transport Implementation Plan

The projects associated with the ground transport implementation plan over the next five years is shown in Figure 15-15.

15.14 20-Year Ground Transport Implementation Plan

The projects associated with the ground transport implementation plan over the next 20 years is shown in Figure 15-16.



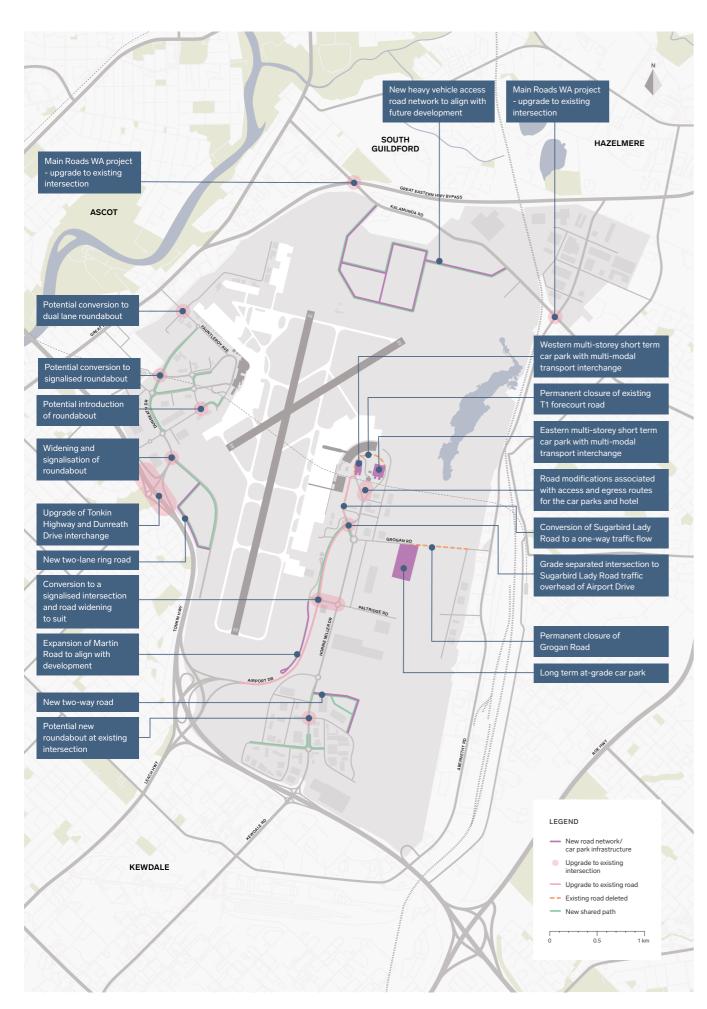


Figure 15-15 Perth Airport five-year ground transport plan Source: Perth Airport

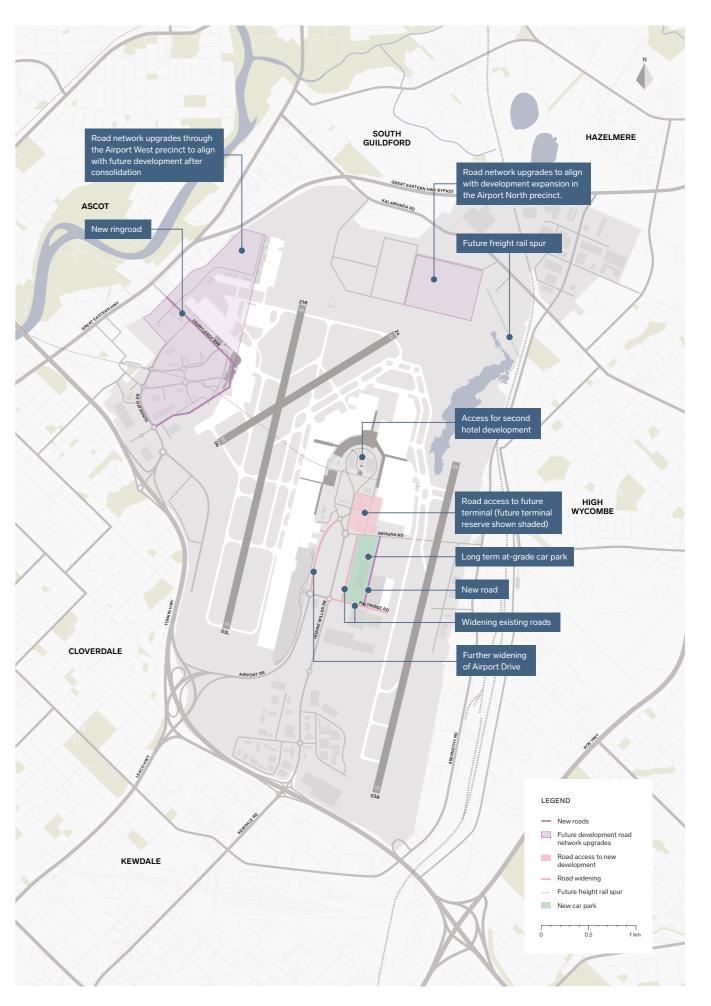
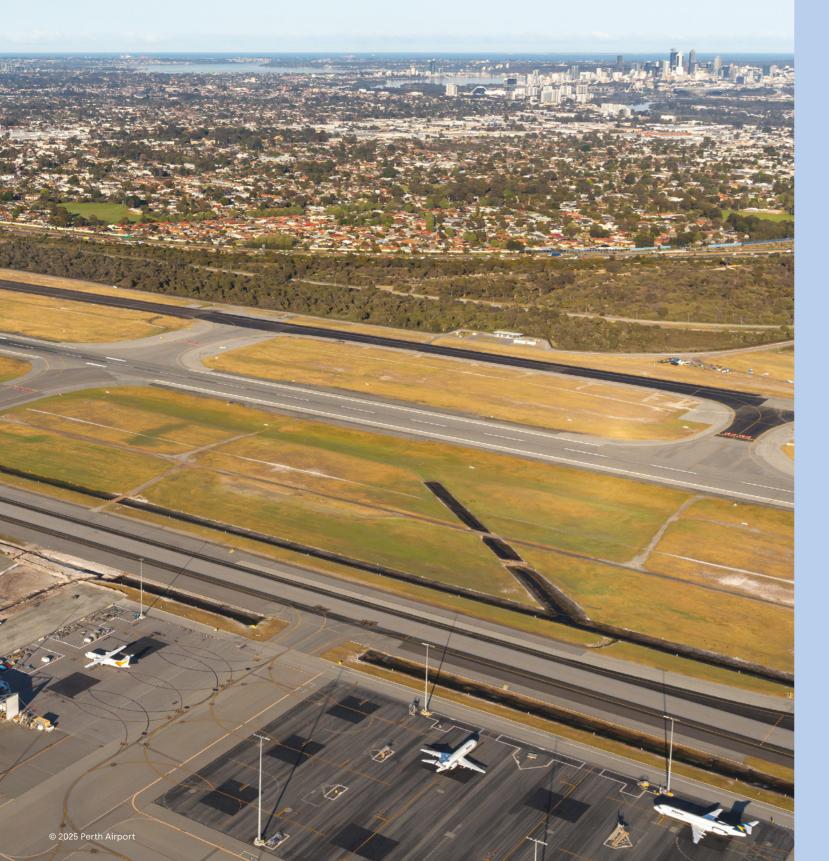


Figure 15-16 Perth Airport 20-year ground transport concept plan Source: Perth Airport



16.1 Introduction

The safety of air services arriving and departing Perth Airport daily and the capacity of Perth Airport to expand to meet aviation demand can be compromised by inappropriate land use and activities in the vicinity of the airport.

The Australian Government recognises that the current and future viability of aviation operations at Australian airports can be impacted by inappropriate developments in areas beyond the airport boundary. The National Airports Safeguarding Advisory Group (NASAG), comprising highlevel Federal, State and Territory transport and planning officials, has developed the National Airports Safeguarding Framework (NASF). The NASF is a national land use planning regime that aims to safeguard airports and the communities in their vicinity. The purpose of the framework is to enhance the current and future safety, viability and growth of aviation operations at Australian airports, by supporting and enabling:

- the implementation of best practice in relation to land use assessment and decision making in the vicinity of airports
- assurance of community safety and amenity near airports
- better understanding and recognition of aviation safety requirements and aircraft noise impacts in land use and related planning decisions
- the provision of greater certainty and clarity for developers and landowners
- improvements to regulatory certainty and efficiency, and
- the publication and dissemination of information on best practice in land use and related planning that supports the safe and efficient operation of airports.

The NASF currently comprises nine guidance documents:

Guideline A

Measures for Managing Impacts of Aircraft Noise

Guideline B

Managing the Risk of Building Generated Windshear and Turbulence at Airports

Guideline C

Managing the Risk of Wildlife Strikes in the Vicinity of Airports

• Guideline D

Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation

Guideline E

Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports

Guideline F

Managing the Risk of Intrusions into the Protected Airspace of Airports

Guideline G

Protecting Aviation Facilities – Communications, Navigation and Surveillance

Guideline H

Protecting Strategically Important Helicopter Landing Sites, and

Guideline I

Managing the Risk in Public Safety Areas at the ends of Runways.

16.1.1 NASF and the WA Planning Framework

The Western Australian Government is responsible for establishing the State's planning policy and determining how the NASF guidelines are applied within the State framework.

Currently, the State Government has adopted one NASF guideline into planning requirements. Since 2020, it is required that NASF Guideline D (Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation) be considered for wind turbine proposals (see Section 16.5).

A review of the implementation of NASF guidelines was undertaken by the NASAG in 2019. A key recommendation from the implementation review is for all state and territory governments to implement the NASF principles and guidelines in their planning regimes by 2027.

Perth Airport encourages the implementation of the safeguarding measures into the State planning framework and continues to engage with the Western Australian government on safeguarding initiatives.

Landgate, the State Government's land information authority, has included Perth Airport aircraft noise modelling in its Property Interest Reports since 2015.

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16.2 Aircraft Noise

16.2.1 Introduction

Noise from aircraft approaching and departing Perth Airport and from their operations on the airfield is an unavoidable consequence of the provision of critical and safe air services.

From time to time, aircraft from Perth Airport—as well as Jandakot Airport and RAAF Base Pearce - will fly over most of the Perth metropolitan region.

The noise generated by aircraft has two main sources: air passing over the aircraft airframe, and the aircraft engines. The air passing over the airframe (fuselage and wings) causes friction and turbulence, which results in sound waves. More noise is generated when the aircraft's landing gear and wing flaps are used, as these create more wind resistance. Some studies indicate that 30 to 50 per cent of the noise at take-off and landing can be caused by wind friction. Engine noise is created by the sound of the moving engine parts and that of air being expelled at high speed (or in the case of propeller-driven aircraft and helicopters, the sound from the rotating blades cutting through air).

The aircraft noise heard at ground level is influenced by a range of factors, including:

- aircraft type and size —fuselage design, type of engines and the specific aircraft performance all impact on the noise being generated
- the way the aircraft is being flown by the pilot
- the aircraft weight and rate at which it climbs—longer flights generally require more fuel on departure, resulting in higher thrust settings and a slower climb due to the weight, and
- meteorological conditions—temperature, wind speed and direction, humidity, rain and cloud-cover all impact on the reverberation of sound waves.

Aircraft have been getting progressively quieter due to advances in aerodynamic design and engine technology. Australia has one of the most modern aircraft fleets in the world.

16.2.2 Aircraft Noise Management

The management of aircraft noise is shared across a range of international, national and local organisations. The various roles and responsibilities in relation to aircraft noise management at Perth Airport is shown in Table 16-1.

Perth Airport acknowledges that there are communities which are exposed to aircraft noise; however, this exposure is balanced against the broader community and economic benefit that arises from operating 24 hours per day, seven days a week.

In recognition of aircraft noise impacts, Perth Airport is committed to working with Airservices Australia, government authorities and the aviation industry to actively manage aircraft noise exposure and its effect on the community, while balancing the need for critical and safe air services. This has the benefits of:

- providing guidance for achieving appropriate land use outcomes in the vicinity of the airport
- enabling the community to make informed decisions about aircraft noise exposure
- managing, mitigating and, where possible, working towards improved noise outcomes, and
- protecting Perth Airport's 24-hour seven days a week operation.

Australia has one of the most modern aircraft fleets in the world.

Organisation	Roles And Responsibilities For Aircraft Noise Management
International Civil Aviation Organization (ICAO)	Develops policies, standards and recommended practices for the global aviation industry Establishes noise certification standards for new aircraft Provides guidance on aircraft noise management
Civil Aviation Safety Authority (CASA)	Independent statutory authority with responsibility for regulation of civil aviation operations in Australia Sets standards and safety outcomes for pilots, aircraft, airports and airspace in Australia Responsible for airspace regulation through the Office of Airspace Regulation
Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts (DITRDCSA)	Advises the Australian Government on the policy and regulatory framework for Australian airports and the aviation industry Provides policy advice to the Minister on the management of aircraft noise Provides regulatory oversight of the Air Navigation (Aircraft Noise) Regulations 1984

Organisation	Roles And Responsibilities For Aircraft Noise Management	
Airservices Australia	Australia's air navigation service provider responsible for providing safe, secure, efficient, and environmentally sustainable services to the aviation industry	
	Manages and maintains aircraft navigation, surveillance, and noise monitoring infrastructure	
	Designs and implements flight paths, including at Perth Airport	
	Consults with the community and aviation industry on proposed flight path and airspace changes	
	Manages noise complaints and enquiries through the Noise Complaints and Information Service	
	Provides information to the community on aircraft movements, runway and flight path usage and aircraft noise	
	Conducts noise monitoring in communities surrounding Perth Airport	
	Reviews and endorses the Perth Airport Australian Noise Exposure Forecast (ANEF) for technical accuracy	
	Implements noise abatement procedures	
	Considers environmental impacts (including noise) of air traffic management	
Department of Climate Change, Energy, the Environment and Water	Assesses proposed changes to aircraft operations that trigger 'significance' under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	
Federal Minister for the Environment	Provides advice on proposed changes to aircraft operations assessed under the EPBC Act	
	Provides advice to the Federal Minister for Infrastructure on airport Major Development Plans for new/changed runway infrastructure	
ederal Minister for Infrastructure	Considers aircraft noise and community consultation processes when deciding whether to approve or refuse Perth Airport Master Plans and Major Development Plans for new or changed runways	
Airlines and aircraft operators	Operates and maintains aircraft that meet the ICAO noise certification requirements	
	Conducts flight operations in accordance with published operational and noise abatement procedures	
Aircraft Noise Ombudsman (ANO)	Oversees the handling of aircraft noise issues by Airservices and the Department of Defence	
	Conducts independent reviews of noise complainants and complaint handling	
	Makes recommendations for improvements and changes	
National Airports Safeguarding Advisory Group (NASAG)	Develops the National Airports Safeguarding Framework (NASF) guidelines to provide guidance to state and local governments on planning and development around airports, including measures for managing the impacts of aircraft noise	
Nestern Australian Government	Develops land use planning policy and frameworks	
	Determines implementation of the NASF guidelines into State planning policy	
Local governments	Implements the State's land use planning frameworks	
•	Plans and manages land use in areas surrounding the airport	
Perth Airport	Manages operations at the airport	
•	Develops and maintains infrastructure to support aircraft operations	
	Publishes a master plan with a new ANEF every five years	
	Develops a management plan for managing aircraft noise intrusion in areas forecast to be subject to exposure above significant ANEF levels	
	Applies an Engine Ground Run Management Plan	
	Engages on aircraft noise through the Perth Airport Community Briefing Group, Planning Coordination Forum, Perth Airport Aircraft Noise Technical Working Group, and broader community	
Perth Airport Community Briefing Group CBG)	Considers community issues and opinions regarding the planning, development and operation of Perth Airport	
Perth Airport Planning Coordination Forum (PCF)	Supports effective engagement between Perth Airport and Federal, State and local government agencies on strategic planning issues, including land use and aircraft noise	
Perth Airport Aircraft Noise Technical Working Group (PAANTWG)	Enables the aviation industry to initiate and evaluate operational changes while ensuring that the noise impact of those changes is considered and opportunities to improve noise outcomes are explored	

Table 16-1 Organisations responsible for aircraft noise management Source: Perth Airport

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16.2.2.1 ICAO Balanced Approach to Aircraft Noise

The International Civil Aviation Organization (ICAO) is a specialised agency of the United Nations established in 1944 to serve as the global forum for international civil aviation. Australia is a member state of ICAO and was one of the first states to ratify the Convention on International Civil Aviation which came into force on 4 April 1947. The Convention established certain principles and arrangements for international civil aviation to be able to develop in a safe and orderly manner. The legal instrument that gives effect to this in Australia is the Air Navigation Act 1920 (Cth).

ICAO develops policies and standards, undertakes compliance audits, and performs studies and analyses to support and enable a global air transport network.

One of ICAO's objectives is to minimise the adverse environmental effects of civil aviation activities. ICAO's Balanced Approach to Aircraft Noise Management (ICAO Doc 9829) is the only globally recognised policy for managing aircraft noise. It consists of identifying the noise problem and analysing various measures available to reduce noise at a specific airport through the exploration of four principal elements, namely:

This work includes investigations into emerging noise reduction technologies, noise impacts from new aircraft concepts, environmental aspects of airport land use planning, and good practices on airport community engagement.



Pillar 1

Reduction of noise at source



Pillar 2

Land use planning and management



Pillar 3

Noise abatement operational procedures



Pillar 4

Operating restrictions

In 2019, the ICAO Assembly resolved to acknowledge community engagement as a cross-cutting element to support the four pillars of the Balanced Approach, with the goal of identifying practical solutions which includes community feedback, whenever possible. The goal of ICAO's Balanced Approach is to address noise problems on an individual airport basis and to identify the noise-related measures that achieve maximum environmental benefit most cost-effectively, using objective and measurable criteria. Continuous work is being conducted by ICAO to ensure the currency of the technical basis underpinning the ICAO Standards, guidance and policies associated with reducing aircraft noise. This work includes investigations into emerging noise reduction technologies, noise impacts from new aircraft concepts, environmental aspects of airport land use planning, and good practices on airport community engagement. Perth Airport has adopted ICAO's Balanced Approach to Aircraft Noise Management and monitors ICAO initiatives and advice on aircraft noise matters.

16.2.2.2 Perth Airport Aircraft Noise Management Strategy

Perth Airport's commitment to managing aircraft noise is guided by the Aircraft Noise Management Framework as shown in Figure 16-1.

This framework takes into account aircraft taking off, departing, approaching, landing and manoeuvring on the airfield, including engine testing within the airport site.

Effective mitigation of aircraft noise often requires several small, incremental improvements to result in a noticeable reduction in aircraft noise. Perth Airport works with Airservices, aircraft operators, industry stakeholders and the community to identify opportunities for improvement and achieve better outcomes where possible.

Noise improvement proposals can arise from a variety of sources, including Airservices reviews and analysis, the Aircraft Noise Ombudsman, aviation industry and community feedback. The *Air Services Act 1995* (Cth) requires the safety of air navigation to be the most important consideration, and each initiative is therefore assessed first and foremost for its impact on safety. If there are no safety implications, further assessment will consider noise and community, efficiency, environmental and operational principles. These considerations are detailed in Airservices' Flight Path Design Principles, available at https://engage.airservicesaustralia.com.

Where an initiative is deemed to provide an improvement, a trial of the proposal may be conducted to verify the initial findings. This involves advertising and widespread consultation with all stakeholders, including the community. The results of the trial, including community feedback, are assessed and a decision made on whether to permanently implement the procedure or discard it. If implemented, a post implementation review is usually conducted to verify the success of the change. Post implementation reviews are published by Airservices on its website, airservicesaustralia.com.

Between 2010 and 2015, Airservices considered more than 30 proposed noise improvement opportunities for the greater Perth area. As a result, eight changes related to Perth Airport operations were able to be implemented.

Perth Airport continually seeks to improve understanding of aircraft noise and its impacts to ensure effective noise management. In 2018, Perth Airport commissioned a review of relevant literature relating to the health impacts of aircraft noise, including research, reviews and guidelines. The assessment considered 168 published articles, including large research projects undertaken in areas close to some of the major international airports, such as Heathrow and Munich. While nearly every study suggested that further research into potential health impacts was needed, the review has encouraged Perth Airport to focus on noise management strategies which can assist in reducing the health consequences of aircraft noise exposure. These include appropriate land planning around airports, careful route planning, noise abatement procedures, provision of clear and comprehensible information about the likely exposure to aircraft noise, as well as information to assist those affected by the noise to undertake amelioration measures that can reduce noise penetration into homes.

Perth Airport continues to invest in understanding aircraft noise, impacts, and ways to engage and communicate. Perth Airport also participates in a number of national forums and working groups focused on aircraft noise. By participating in forums such as the Perth Aircraft Noise Technical Working Group and the Australian Airports Association's Planning Working Group, Perth Airport can discuss and consider aircraft noise-management initiatives both in Australia and at airports around the world.

Perth Airport seeks to understand what best practice is and learn lessons from other airports and industries on how to manage the impacts of aircraft noise and community engagement.

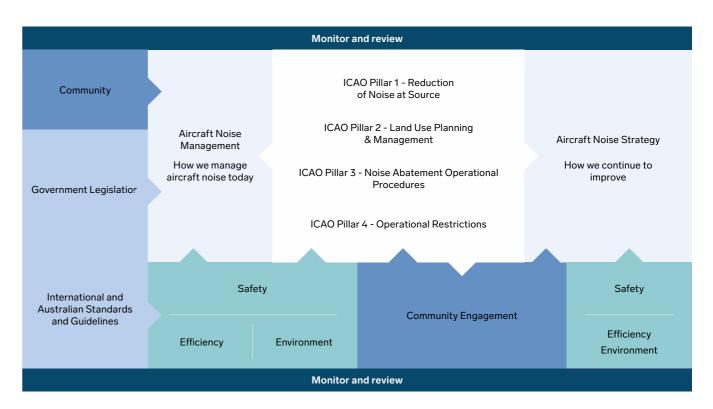


Figure 16-1 Perth Airport Aircraft Noise Management Framework Source: Perth Airport

Part D

ICAO Pillar 1—Reduction at Source



The first pillar of ICAO's Balanced Approach to Aircraft Noise Management is the reduction of noise at source.

Aircraft noise has been controlled since the 1970s by the setting of noise limits for aircraft in the form of standards and recommended practices contained in Annex 16 to the Convention on International Civil Aviation. Over the years, ICAO has set progressively tighter certification standards, referred to as 'chapters', which set noise level compliance criteria for different types of civil aircraft during take-off and landing. The primary purpose of noise certification is to ensure that the latest available noise reduction technology is incorporated into aircraft design.

The Australian Government has established the Air Navigation (Aircraft Noise) Regulations 2018 (Cth) which require aircraft operating in Australian airspace to comply with the noise standards and recommended practices set out in ICAO Annex 16 Volume I. Under the Regulations, only aircraft that comply with the ICAO Chapter 3, Chapter 4 and Chapter 14 standards are permitted to operate in Australia. Chapter 2 aircraft were banned from operating in Australia in 2002. Chapter 2 aircraft retrofitted with a 'hush-kit' to meet Chapter 3 standards were banned from operating at major Australian airports in 2010. Aircraft that are verified as complying with the ICAO standards are issued with a noise certificate by Airservices. (State aircraft and propeller driven aircraft designed and used exclusively for aerobatics, firefighting, or agricultural operations, are not subject to the Regulations and are not required to hold a noise certificate.)

The ICAO Chapter 14 standards were established in 2014 and are expected to remain the mainstay ICAO standard for aircraft noise for the coming years. All new passenger aircraft designs certified since 2017, including the Boeing 737 MAX, Boeing 787 Dreamliner, Airbus A320neo, Airbus A350 and Airbus A330neo, meet the stringent Chapter 14 noise standards

ICAO Chapter 14 compliant aircraft operate at Perth Airport and their use will continue to grow, with the two largest airlines, Qantas Group and Virgin Australia, both making significant investment in new aircraft. Qantas Group has commenced a multi-billion-dollar investment in the next generation of aircraft, with 182 new aircraft expected to be delivered over the next decade.

This includes orders for 158 Airbus A220-300 and A320 family aircraft to replace the existing Boeing 717s and Boeing 737s, 12 Airbus A350ULR (ultra long range) aircraft to predominantly service non-stop flights to Europe and the east coast of North America, and 12 Airbus A350LR (long range) and 12 Boeing 787 Dreamliners which will progressively replace the current Airbus A330 fleet. Virgin Australia is adding 31 new Boeing 737MAX aircraft to its fleet over the next few years, which will bring its fleet of latest generation aircraft to 39.

Figure 16-2 shows the actual and projected proportion of movements at Perth Airport operated by ICAO Chapter 14 compliant aircraft.

Table 16-2 summarises the ICAO Pillar 1 actions in place at Perth Airport.

Aircraft noise has been controlled since the 1970s under ICAO international standards.

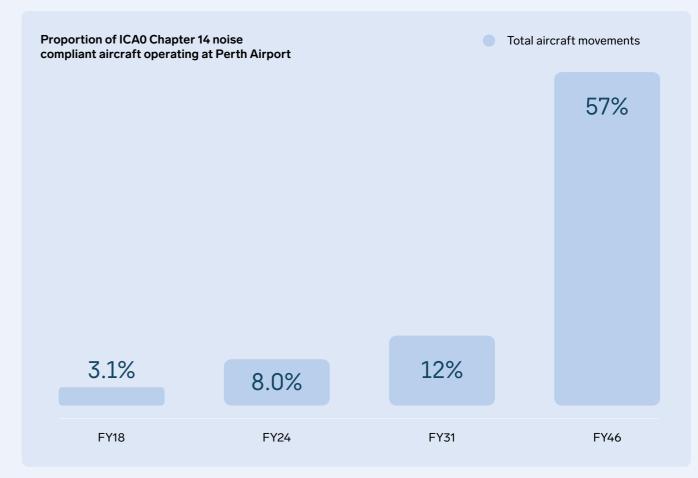


Figure 16-2 Current and forecast proportion of ICAO Chapter 14 noise standard compliant aircraft at Perth Airport Source: Perth Airport

ICAO Pillar 1 (Reduction Of Noise At Source) Actions at Perth Airport International Civil **Aviation Organization** Airlines and aircraft (ICAO) Australian Government Airservices Australia Perth Airport operators Develops aircraft noise Establishes the Air Issues Noise Determines which Develops airfield and Navigation (Aircraft Certificates for aircraft terminal infrastructure certification standards aircraft types to for civil aircraft Noise) Regulations 2018 complying with the ICAO purchase suitable for new which require aircraft generation aircraft standards operating in Australian types airspace to comply with the ICAO noise standards and recommended practices

Table 16-2 ICAO Pillar 1 (Reduction of Noise at Source) actions at Perth Airport Source: Perth Airport

Part D Section 16: Airport Safeguarding

ICAO Pillar 2—Land Use Planning and Management



Land use planning and management is the second pillar of ICAO's Balanced Approach to Aircraft Noise Management.

Perth Airport works with Federal, State and local governments to coordinate land use planning and management both within the airport estate and the areas surrounding the airport. Land use planning and development proposals are discussed through the Perth Airport Planning Coordination Forum (see Section 5.4.1.1), and specific land use and development proposals are referred to Perth Airport for comment and advice by government authorities.

The NASF Guideline A Measures for Managing Impacts of Aircraft Noise provides guidance to Federal, State and local government decision makers to manage the impacts of noise around airports, including assessing the suitability of developments. The guideline applies the Australian Noise Exposure Forecast (described in Section 16.2.3.4) and Number-Above (described in Section 16.2.3.5) noise modelling metrics to recommended criteria for rezoning and development assessments.

An initiative of the Australian Government's Aviation White Paper (detailed in Section 4.3.2) is to improve land use planning outcomes near airports, to seek to avoid further development that is inappropriate for the noise level, and to protect airport operations from potential safety risks, through:

- updating the NASF Guideline A by 2027 to describe best-practice approaches for including aircraft noise exposure notifications on property titles for new developments. This will provide a basis for state and territory governments to adopt aircraft noise exposure notifications into relevant planning schemes so that future purchasers of newly developed properties affected by aircraft noise can make fully informed decisions
- supporting implementation of the recommendation from the 2021 NASF Implementation Review to improve education on the NASF for local planning officials, and
- applying to Standards Australia to review Australian Standard 2021:2015 Acoustics—Aircraft Noise Intrusion—Building Siting and Construction, and consider incorporating the Standards Australia Handbook 149:2016 Acoustics—Guidance on Producing Information on Aircraft Noise guidance into the standard.

The Australian Noise Exposure Forecast (ANEF) has been used for land use planning purposes in Australia since 1982. It is a central component of the Australian Standard 2021:2015 Acoustics—Aircraft Noise Intrusion—Building Siting and Construction (AS2021). In conjunction with the ANEF contours, AS2021 provides guidance to development control authorities (for example, state and local governments) on the acceptability of certain types of land use or development in areas near airports, based on the ANEF level. It also provides detail regarding construction methods and materials to minimise noise intrusion to development within ANEF contours. AS2021 considers residential development to be 'acceptable' in areas with ANEF lower than 20, 'conditionally acceptable' in areas with ANEF between 20 and 25, and 'unacceptable' in areas with ANEF greater than 25. In conditionally acceptable areas, AS2021 recommends that new buildings incorporate acoustic treatment to achieve specified internal noise levels. The building type acceptability for ANEF zones is shown in

The application of AS2021 encourages incompatible land uses—such as residential development—to be directed away from areas that are, or will be, exposed to significant aircraft noise, while land uses that are less sensitive to aircraft noise—such as industrial developments—are encouraged in areas surrounding an airport.

Perth Airport developed its first ANEF 40 years ago as part of the Master Plan 1985.

Building Type	Acceptable	Conditionally Acceptable	Unacceptable
House, home unit, flat, caravan park	Less than 20 ANEF	20 to 25 ANEF	Greater than 25 ANEF
Hotel, motel, hostel	Less than 25 ANEF	25 to 30 ANEF	Greater than 30 ANEF
School, university	Less than 20 ANEF	20 to 25 ANEF	Greater than 25 ANEF
Hospital, nursing home	Less than 20 ANEF	20 to 25 ANEF	Greater than 25 ANEF
Public building	Less than 20 ANEF	20 to 30 ANEF	Greater than 30 ANEF
Commercial building	Less than 25 ANEF	25 to 35 ANEF	Greater than 35 ANEF
Light industrial	Less than 30 ANEF	30 to 40 ANEF	Greater than 40 ANEF
Other industrial	Acceptable in all ANEF zones		

Table 16-3 Building type acceptability table based on Australian Noise Exposure Forecast contours Source: Australian Standard 2021:2015 Table 21

Local government guidance regarding development in the vicinity of Perth Airport is provided by the State Planning Policy 5.1 Land Use Planning in the Vicinity of Perth Airport (SPP 5.1), described in Section 4.4.13. It applies Perth Airport's ANEF and AS2021 Table 2.1 Building Site Acceptability Based on ANEF Zones to guide land use zoning and the acceptability of various development types within each of the Perth Airport ANEF contours. The policy measures include:

- consideration of noise insulation for certain developments
- notification of aircraft noise on land titles for building types determined to be 'conditionally acceptable' in the AS2021 building type acceptability table, and
- advice about potential for noise nuisance to be provided to prospective purchasers of noise-sensitive premises.

SPP 5.1 requires the Western Australian Planning Commission and local government authorities to refer certain land use and development proposals to Perth Airport for comment and advice.

Perth Airport developed its first ANEF 40 years ago as part of the Master Plan 1985. Since that initial noise forecast, which included the new parallel runway, the overall footprint of the ANEF contours have remained relatively the same. However, there has been considerable residential development and infill within the Perth Airport ANEF contours since the 1980s.

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Perth's new runway, expected in 2028, has been designed with best-practice aircraft noise management in mind.

Standards Australia also published a handbook, SA HB 149:2016 (HB149), Acoustics—Guidance on producing information on aircraft noise and how to meaningfully present information on the impact and nature of aircraft noise to the public, and to assist in land use planning and building assessments. HB149 recognises that ANEF charts are not intended for use as an informational tool for the presentation of aircraft noise to the general public, and recommends the presentation of aircraft noise information through alternative metrics such as N-contour maps. Perth Airport has produced N-contour maps for all airport master plans since 2009.

Since 2015, the Perth Airport ANEF and N65 N-contour maps have been included in the Property Interest Report available through Landgate.

Perth Airport continues to advocate for the Western Australian Government to follow the Queensland and Victorian governments in adopting the NASF guidelines, including the N-contours, into the State planning framework.

Perth Airport is responsible for managing the use and development of land within the airport estate. Perth Airport applies best practice aircraft-noise management practices where relevant in the development of new airport infrastructure. The design of airport infrastructure, including runways, taxiways and engine run up facilities can impact on the aircraft noise exposure around an airport. The design of Perth's new runway, expected to be operational in 2028, and the associated infrastructure has considered best practice aircraft noise management practices. Table 16-4 summarises the ICAO Pillar 2 actions in place at Perth Airport.

ICAO Pillar 2 (Land Use Planning and Management) ACTIONS at Perth Airport

Australian Government	State Government	Local Government	Perth Airport
Sets the legislative requirement for airports to prepare an	Prepares State Planning 5.1 Land Use Planning in the	Considers SPP 5.1 when assessing land use and	Prepares an updated ANEF for each new master plan
updated ANEF for each new	Vicinity of Perth Airport (SPP	development proposals	Produces N-contour noise maps
master plan Established the National Airports Safeguarding Advisory Group to develop the National	5.1), which applies the Perth Airport ANEF to provide guidance on the acceptability of certain types of land use or development in areas near	Participates in the Perth Airport Planning Coordination Forum which discuss aircraft noise and land use planning	Convenes the Planning Coordination Forum to discuss on- and off-airport land use and development proposals
Airports Safeguarding Framework, including Guideline A Measures for Managing the	Perth Airport, including requirements for noise		Manages the use of land within the airport estate
Impacts of Aircraft Noise	attention measures and notification on title		Designs and develops new
Developed the Aviation White Paper which outlines recommendations for land use planning in the vicinity of airports	Makes the Perth Airport ANEF and N-contour noise map information available through Landgate Property Interest Reports		airport infrastructure, including runways and taxiways
Participates in the Perth Airport Planning Coordination Forum	Participates in the Perth Airport Planning Coordination Forum		

Table 16-4 ICAO Pillar 2 (Land Use Planning and Management) actions at Perth Airport Source: Perth Airport

ICAO Pillar 3—Noise Abatement Operational Procedures



The third pillar of ICAO's Balanced Approach to Aircraft Noise Management is noise abatement operational procedures.

ICAO assists on the development and standardisation of low noise operational procedures that are safe and cost-effective. The possibilities include noise preferential runways and routes, and noise abatement procedures for take-off and landing. The appropriateness of any of these measures depends on the physical lay-out of the airport and its surroundings, but in all cases must give priority to safety considerations.

Every major airport in Australia has noise abatement procedures (NAPs) which are designed to reduce the impact of aircraft noise on the community. The NAPs are developed and reviewed by Airservices, in consultation with airlines and other aircraft operators, airports, community aviation consultation groups, and other stakeholders. NAPs are implemented by Air Traffic Control and aircraft operators.

The use of NAPs is subject to ensuring that the safety and efficiency of the airport are not compromised. Air traffic controllers or pilots may not be able to use them in certain situations due to weather conditions, traffic complexity, or the specific operating requirements of individual aircraft.

The NAPs for Perth Airport were first established in 1998 and define which runways and flight paths are preferred for use to achieve noise abatement. They were substantially updated in 2014 following a review of their effectiveness by Airservices. The NAPs are available online through the Departure and Approach Procedures published as part of Airservices' Aeronautical Information Package (airservicesaustralia.com/aip/).

Currently, runway 06 is the least preferred runway for landings and runway 24 is the least preferred runway for departures, with the other runway directions all equally preferred. This does not mean that they are equally used, but rather that there is no preference in the use of the runways, as the environmental conditions of the day (such as weather and operational requirements) will determine the preferred runway

Noise abatement operational procedures also include the use of flight departure and approach routings such as noise preferential routes, standard instrument arrival and departure procedures for each runway, dispersed flight tracks, and automated arrival and departure procedures based on modern technology and on-board flight management systems. The current NAPs for Perth Airport include preferential flight paths for certain arrival routes and types of operations, with pilots required to use standard instrument departure and arrival procedures where available. In 2015, Airservices introduced a smart tracking flight path for suitably equipped aircraft arriving from the north and east and landing onto runway 03 (southern end of the main runway).

The NAPs for Perth Airport will be reviewed and updated as part of the final airspace design for Perth's new runway and new parallel runway operations (see Section 13.4.1.3).

In response to Initiative 33 from the recently released Aviation White Paper (see Section 4.3.2), Airservices is expected to begin publishing a quarterly report on noncompliance with an airport's published NAPs. Perth Airport Master Plan 2026 Part D Section 16: Airport Safeguarding

New aircraft technologies and capabilities present opportunities for noise abatement. New aircraft technologies and capabilities present opportunities for noise abatement. Required Navigation Procedures—Authorisation Required (RNP-AR) procedures provide more flexibility in route design and more accurate navigation. An arrival procedure using this technology was implemented at Perth Airport for main runway 03 in September 2015 for use by suitably equipped aircraft and qualified crew.

Airline and aircraft operators will also have their own specific procedures that can include measures for noise abatement such as reduced power/drag techniques (which delay wing flap extension and landing gear deployment as much as possible) and continuous descent approaches (which reduce overall thrust, and therefore noise on the ground) by keeping the aircraft higher for longer during the initial descent.

The Perth Airport Aircraft Noise Technical Working Group, which comprises representatives from Perth Airport, Airservices and airlines and local aircraft operators, discusses a range of aircraft noise and operational topics, including NAPs and other noise abatement measures.

The ground-based operational procedures in place at Perth Airport include aircraft engine ground running management and measures to reduce auxiliary power unit use (discussed further in Section 16.2.2.3). Table 16-5 outlines the ICAO Pillar 3 (Noise Abatement Operational Procedures) actions at Perth Airport.

ICAO Pillar 3 (Noise Abatement Operational Procedures) ACTIONS at Perth Airport

Airservices	Perth Airport	Aircraft operators
Design and implement flight paths at Perth Airport	Establish and manage engine ground- running procedures	Apply the Perth Airport NAPs for flight planning and operations wherever possible
Develop, publish and review the NAPs for Perth Airport	Supply fixed power for ground power units on terminal aprons	Equip aircraft and pilots to be able to use Required Navigation Performance –
Develop and implement Air Traffic Control procedures at Perth Airport	Work with Airservices, aircraft operators and other stakeholders through the Perth	Authorisation Required (RNP-AR) procedures
Publish a quarterly report on noncompliance with an airport's NAPs (not yet implemented)	Aircraft Noise Technical Working Group Work with Airservices, aircraft operators and other stakeholders to develop the NAPs	Establish operational procedures for the use of reduced power/drag techniques and continuous descent profile approaches
	for Perth's new runway	Reduced use of auxiliary power units through fixed power and other ground support equipment alternatives

Table 16-5 ICAO Pillar 3 (Noise Abatement Operational Procedures) actions at Perth Airport Source: Perth Airport

ICAO Pillar 4—Operating Restrictions



The fourth pillar of ICAO's Balanced Approach to Aircraft Noise Management deals with operating restrictions.

Operating restrictions are a noise-related action that limits or reduces an aircraft's access to an airport. Examples of operating restrictions are a movement cap, a curfew to restrict aircraft movements between certain hours, or a restriction on the nature of flights during certain hours.

The Balanced Approach identifies that operating restrictions should only be considered as a last resort, following assessment of the benefits gained from the first three pillars. Given the outcomes achieved through the wide range of actions and initiatives currently in place to manage aircraft noise at Perth Airport, operating restrictions are not used at Perth Airport.

Maintaining operational flexibility at Perth Airport is critical to supporting Western Australia's economy. Perth's isolation means that it relies on air travel for passengers and cargo more than any other Australian city does.

Perth Airport is part of a national and global aviation network; consequently, flight times and schedules are not directly controlled locally. The viability of many of Perth's international air services depends on linking with connecting networks through hub airports, such as Dubai and Singapore. Any restrictions on the operations of Perth Airport would lead to a significant loss of air services. International aircraft seats are the lifeblood of the State's international tourism business and the many jobs directly and indirectly generated by that industry. The reduced level of international air services that would arise from restrictions on Perth Airport would have profound negative impacts on tourism and all those who depend on that industry.

The 24/7 operations at Perth Airport are also critical to maintaining and supporting an effective freight and logistics industry. A multitude of industries from minerals such as gold and diamonds, primary produce such as seafood and meat and a variety of specialist imports, rely on the extensive dedicated freight and passenger plane 'belly freight' to support industry. Any operational restriction would adversely and materially impact the industries which rely on overnight and well-connected international routes.

A study undertaken in 2015 showed that Western Australia would suffer a \$46.1 billion economic hit and the loss of 27,000 jobs up to 2040 if a night curfew was introduced.



Maintaining operational flexibility at Perth Airport is critical to supporting Western Australia's economy.

Perth Airport Master Plan 2026 Part D Section 16: Airport Safeguarding

ICAO Cross-Cutting Element— Community Engagement

The ICAO acknowledges community engagement as a cross-cutting element which supports the four pillars of the Balanced Approach.

Perth Airport is committed to ensuring the community is fully informed and that their concerns and priorities are considered in guiding aircraft noise management outcomes.

The Perth Airport Community Briefing Group provides a forum for the community and organisations to raise issues and express opinions regarding Perth Airport, particularly with regard to planning, development and operations. The group includes representatives from Perth Airport, Airservices, local governments, local business groups, community members and First Nations peoples.

Runway closures for upgrades and regular maintenance can result in temporary changes to the flight paths being used. These works are advised to the community through the Perth Airport website (https://www.perthairport.com.au/Home/corporate/planning-and-projects/runway-works) and social media channels.

The Perth Airport master plans and major development plans (MDPs) are an important part of engaging with the community on current and predicted aircraft noise exposure. Perth Airport prepares a new master plan every five years, while an MDP is prepared for specific types of development, including new or extended runways and taxiways. The Airports Act requires the airport master plan to include an Australian Noise Exposure Forecast (described in Section 16.2.3.4), the flight paths at the airport, and the plans for managing aircraft noise intrusion in areas forecast to be subject to significant noise exposure (see Section 16.2.3.4). An MDP must detail the effect that the proposed development would have on flight paths, aircraft noise exposure, and the plans for managing aircraft noise intrusion in areas forecast to be subject to significant noise exposure. Master plans and MDPs are required to undergo extensive consultation throughout the preparation of the documents, including a 60-business day formal public consultation process (see Section 5.4.3).

Perth's New Runway

The construction of Perth's new runway (see Section 13.4.1.3), expected to be operational in 2028, will require the design of new flight paths. Designing flight paths for new infrastructure is a complex process that requires extensive consultation—often over many years—between Airservices, the airport, aircraft operators, government, aviation regulators and the local community.

General airport planning consultation activities on the new runway began in the 1970s as part of the joint Australian and State Government enquiry into future aviation needs for the Perth region, which determined the need for a future parallel runway. All Perth Airport Master Plans since 1985 have included the planning and aircraft noise modelling for the new runway.

In 2018, Perth Airport prepared an MDP for the new runway. The MDP presented indicative flight corridors which were developed by specialist airspace consultants in consultation with Airservices to guide the assessment of impacts and the final airspace and flight path design. The MDP, approved by the Federal Minister for Infrastructure in November 2020, was subject to one of the most extensive public consultation programs ever undertaken for new infrastructure in WA. A copy of the approved MDP is available at https://www.perthairport.com.au/Home/corporate/planning-and-projects/major-development-plans.



Perth's new runway is considered a Level 1 change proposal under the Airservices Standard, as it involves a suite of new flight paths and changes in airspace operation.

The formal airspace detailed design for the new runway will take approximately three years and is being completed by Airservices, as Australia's air navigation service provider. Once the final airspace design is completed, Perth Airport will revise the aircraft noise modelling and flight path communications materials, including the online Aircraft Noise and Information Portal. A Stakeholder Engagement Plan will be developed to ensure the community is informed of the updated flight path and aircraft noise information.

In response to the Aviation White Paper (described in Section 4.3.2), the Federal Minister for Infrastructure has advised airports that, when considering whether to approve or refuse a new Master Plan that includes development which involves changes to flight paths, the Minister will have regard to the Master Plan's consistency with Airservices' Community Engagement Standard. The Community Engagement Standard for Flight Path and Airspace Change Proposals was published by Airservices in September 2023 to provide a clearly defined process for public engagement on flight path and airspace changes of various scope, scale and complexity.

Perth's new runway is considered a Level 1 change proposal under the Airservices Standard, as it involves a suite of new flight paths and changes in airspace operation. While the new Standard states that proposals in development at the time of publication are not expected to apply the Standard retrospectively, Perth Airport has considered the elements of the Airservices Standard for the new runway. The alignment of Airservices' requirements to Perth's new runway is shown in Table 16-6.



Artists impression of Perth's new runway

Part D Section 16: Airport Safeguarding

Airservices Community Engagement Standard

Perth's New Runway

Step 1 — Engagement Planning

Engagement with stakeholders that are representative of the wider community to support understanding of affected stakeholders and local area



Extensive stakeholder and community engagement undertaken for all Perth Airport Master Plans (1985, 1999, 2004, 2009, 2014 and 2020) which have included indicative flight paths and noise modelling for the new runway

Consultation with State and local government authorities on the ANEF and future aircraft noise, including for the new runway, since 1985 as part of the ANEF endorsement process for each new Master Plan

Consideration of future aircraft noise forecasts for the new runway in land use zoning and development proposals since 1997 under State Planning Policy 5.1 Land Use Planning in the Vicinity of Perth Airport

Telephone survey of 300 residents within a 10-kilometre radius of Perth Airport undertaken by Patterson Research Group in 1998 to identify perceptions of aircraft noise

Development of a web-based interactive Aircraft Noise Information Portal (perthairport.com.au/aircraftnoise) in 2014 to provide information on current and predicted flight paths and aircraft noise in relation to specific properties or areas, with upgrades undertaken in 2019 and 2025 to enhance functionality and incorporate updated information

Engagement with stakeholders and the community through regular Perth Airport Community Briefing Group (previously Perth Airport Community Forum), Planning Coordination Forum and (now discontinued) Perth Airports Municipalities Group meetings

Focus groups held with community members in 2017 to improve how information on flight paths and aircraft noise is presented

Publish engagement plan



Stakeholder Engagement Plan for the New Runway Project MDP developed with Airservices input

Public comment consultation activities and available resources detailed in each Perth Airport Master Plan and the New Runway Project MDP

Baseline awareness survey



More than 2,600 people within a 30-kilometre radius of Perth Airport participated in a 2018 survey undertaken by Patterson Research Group to identify community attitudes towards infrastructure development, including aircraft noise and Perth's new runway. Four out of five of the people surveyed either 'support' or 'strongly support' the new runway, with four per cent opposed to the project



Airservices Community	y Engagement Standard		Perth's New Runway
Step 2 — Develop and Assess Options	Seek feedback on options development methodology and assessment criteria Engage stakeholders in the iterative development of design options	\odot	UK NATS engaged to support Perth Airport and Airservices in developing a Concept of Operations (CONOPS) for the new runway Development of a draft Airspace Management Plan through extensive consultation with stakeholders to determine the expected airspace architecture and management framework for the future airfield configuration, including modelling and analysis to review potential flight paths. Workshops involving Perth Airport, Airservices and the Department of Defence investigated various options to facilitate the air routes
	Publish preferred and shortlisted design options 12-week public engagement	\odot	60-business day (12 week) public comment period undertaken for Perth Airport Master Plans in 1999, 2004, 2009, 2014, 2020 and 2026, whic displayed aircraft noise modelling and indicative current and future flight paths, in accordance with the Airports Act Review and comment on the exposure draft version of the New Runway
			Project MDP by Federal, State and local governments and key stakeholders 60-business day (12 week) public comment period undertaken in 2018 for the New Runway Project MDP in accordance with the Airports Act, including briefings on the noise modelling and preliminary airspace design to community groups, state and local governments, and other stakeholders
	Community awareness survey (general survey to gauge percentage of population with awareness of the	\odot	Extensive interaction with the community during the 60-business day public consultation period for the New Runway Project MDP (while not a survey, these interactions provide a gauge of public awareness of the proposal and engagement) including: • introduction letter mailed to 308,595 residences in the Perth metro area
	proposal and engagement in the process)		 44,649 unique visitors to newrunway.com.au and 8,275 downloads of documents
			 8,958 visitors to the online Aircraft Noise Information Portal interactions with 7,300 people at new runway information stands held across 19 shopping centres
			 targeted social media posts reaching 448,786 people with 5,403 interactions 2,030 public comment submissions received, of which 2,000 were from
			 the community 815 attendees at Community Information Expos and the Perth Airport
			 Experience Centre 212 phone calls to new runway project information phone line 129 articles about the new runway across print, radio and online media
Step 3 — Engage	Publish proposed design and environmental assessment	G	The final flight paths for the parallel runway system will be designed by Airservices during the detailed design phase before the new runway opens. This phase also includes the development of air traffic management procedures and noise abatement procedures.
	12-week public engagement		Perth Airport will revise aircraft noise modelling and flight path communications materials, including the online Aircraft Noise and Information Portal.
			Extensive engagement will be undertaken with industry, regulators, stakeholders and the community
	Community awareness survey	6	Survey will be conducted to gauge the level of community awareness of the change proposal
Step 4 — Update and Submit	Publish engagement report	(1)	A community engagement report will be published to show how the design has considered consultation feedback
	Re-engagement with affected stakeholders if the final design creates new impacts not identified previously	G	Re-engage with affected stakeholders if the final design identifies any substantive changes from the information provided during Step 3
Step 5 — Implement and Review	Inform all affected stakeholders of implementation timing	6	Stakeholders and community will be kept informed about the new runway project through the regular engagement forums (PCF and CBG as a minimum), Perth Airport website, media, and social media sources
	Engage stakeholders in the Post Implementation Review	6	Post Implementation Reviews are conducted by Airservices a minimum of 12 months after implementation of the change to assess if the anticipated impacts and benefits of the original proposal are as expected

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Table 16-6 Consistency of new runway planning with Airservices Community Engagement Standard Source: Perth Airport

Perth Airport Master Plan 2026 Part D Section 16: Airport Safeguarding

Aircraft Noise Information

A key focus of Perth Airport's engagement is to communicate aircraft noise information in a manner that is uncomplicated and easy to understand.

Perth Airport provides a range of material to inform and engage the community about aircraft noise and flight paths. This includes the ANEF contours, N-above contours (described in Section 16.2.3.5), published material on aircraft noise, and an online Aircraft Noise Informational Portal.

Launched in 2014, the web-based interactive Aircraft Noise Information Portal was developed by Perth Airport to provide information on flight paths, the ANEF and N-above contours and how they apply to a property a person resides in or may be looking to purchase. The portal, shown in Figure 16-3, provides information on current and future operations at Perth Airport and is available at perthairport.com.au/aircraftnoise. The Portal was upgraded in 2019 and 2025 to enhance functionality and incorporate updated noise information.

Since 2015, the Perth Airport ANEF and N-Above (N65) contours have been made available through Landgate Property Interest Reports which provide details of the interests that may impact the use and enjoyment of a specific property within Western Australia.

Section 5.4 details Perth Airport's ongoing consultation and education mechanisms. They include a Planning Coordination Forum to foster planning discussions with Australian, State and local government representatives, and the Perth Airport Community Briefing Group, which provides a forum for the community and stakeholders to discuss the planning, development and operation of Perth Airport.

In 2016, an Australian initiative was led by Perth Airport and resulted in the publication of a booklet titled Reducing Aircraft Noise in Existing Homes. The booklet provides information about practical modifications that can reduce noise levels and is available from perthairport.com.au/aircraftnoise.

Perth Airport has also engaged with community members through focus groups that are asked to provide feedback about how information on flight paths and aircraft noise is perceived. This has aided Perth Airport to provide clear, concise and meaningful information which assists the community in making informed decisions.

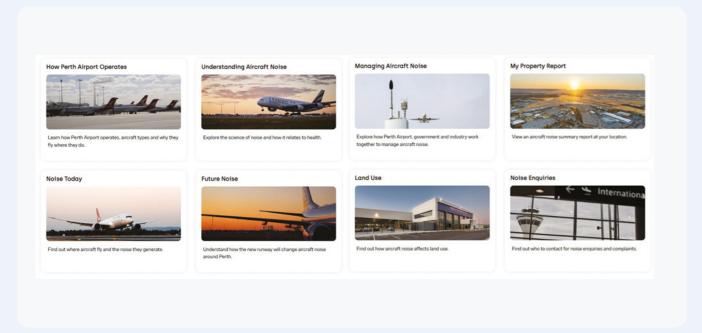


Figure 16-3 Perth Airport Noise Information Portal Source: Perth Airport

Airservices Australia

Airservices, as Australia's air navigation service provider, also engages with the community on aircraft noise and provides information about aircraft operations at Perth Airport, including:

- The Airservices Noise Complaints and Information Service is the main interface on civil aircraft noise and related issues for the community. Airservices uses complaints and enquiries to help identify operations of concern and possible opportunities for improvement,
- WebTrak (www.airservicesaustralia.com/webtrak) which provides information about individual flights and allows users to submit aircraft noise enquiries and complaints,
- Noise monitoring, which is undertaken by Airservices to provide accurate information about aircraft noise to stakeholders and the community, as well as for the assessment of proposed procedure changes. Airservices collects noise and operational data from six noise monitors located around Perth Airport. Noise monitoring results are available to view through WebTrak (www. airservicesaustralia.com/webtrak), and
- Aircraft in Your Neighbourhood (https://aircraftnoise.airservicesaustralia.com/), which provides information about flight paths and runway use for Perth Airport specific to a person's selected location.

Table 16-7 outlines the ICAO cross-cutting element (Community Engagement) actions at Perth Airport.

ICAO cross-cutting element (Community Engagement) actions at Perth Airport

Australian Government Airservices Australia Establishes consultation requirements for Responds to aircraft r

airport Master Plans and Major Development Plans through the *Airports Act* 1996

Publishes the Airport Development Consultation Guidelines and the Community Aviation Consultation Group Guidelines to guide consultation processes at the leased federal airports

Responds to aircraft noise enquiries and complaints through its Noise Complaints

complaints through its Noise Complaints and Information Service

Provides information about individual flights

and noise monitor readings through the

WebTrak online portal

Provides information about flight path and runway use at Perth Airport through the Aircraft in Your Neighbourhood online portal

Undertakes community consultation on flight path and airspace change proposals in accordance with its Community Engagement Framework

Participates in the Perth Airport Community Briefing Group

Perth Airport

Convenes the Perth Airport Community Briefing Group to discuss the development and operation of the airport

Provides detailed information about aircraft noise and flight paths through the online Perth Airport Noise Information Portal

Undertakes public consultation on airport Master Plans and Major Development Plans

Publishes the Reducing Noise in Existing Homes Brochure to provide information about practical modifications that can reduce noise levels

Keeps the community informed of runway works through the Perth Airport website (https://www.perthairport.com.au/Home/corporate/planning-and-projects/runway-works) and social media channels

Table 16-7 ICAO cross-cutting element (Community Engagement) actions at Perth Airport Source: Perth Airport

16.2.2.3 Ground-based Noise

Perth Airport has limited control of noise generated by aircraft on the ground.

An essential safety measure following maintenance of aircraft is to perform engine testing, known as 'ground running'. Perth Airport does not have major airline maintenance facilities and consequently has less ground running than other major airports. There is, however, a continuing requirement for aircraft operators to carry out engine ground running at Perth Airport.

Perth Airport acknowledges that engine ground running can contribute to the overall noise created at an airport. To manage engine ground running activities and reduce potential noise impacts, Perth Airport has an Engine Ground Run Management Plan that places restrictions on the time of day, location and maximum power settings for these activities. Aircraft operators must seek approval from Perth Airport if a proposed engine run cannot be conducted in accordance with the defined constraints. Perth Airport regularly reviews its Engine Ground Running Management Plan to assess opportunities for improved noise management.

There are other ground-based aircraft noise sources on the airfield, such as the use of auxiliary power units which supply electrical and pneumatic power to aircraft systems when the main engines are not operating. One measure adopted by Perth Airport to reduce ground noise sources has been the installation of fixed electrical ground power units at aircraft parking positions to minimise the use of auxiliary power units and mobile ground power units.

Perth Airport is also working with airline partners and their ground handling agents to support the introduction of electric ground services equipment which can help reduce ground-based noise.

The management of other sources of ground-based noise is discussed in Section 11.5.

16.2.3 Aircraft Noise Modelling

Aircraft noise modelling is undertaken to understand and evaluate the actual and predicted aircraft noise exposure. Modelling results are used to inform the design of airfield infrastructure and flight paths, as well as provide useful information to the community about current operations and potential future changes.

A range of metrics is available to describe the level of aircraft noise in an area, each being useful for a different purpose. Consistent with the NASF Guideline A, the metrics presented in this Master Plan 2026 are the ANEF and N-Above contours.

The ANEF system comprises the following three noise exposure indicators that, although they use the same noise metric for calculation, are based on different inputs and vary in purpose:

 Australian Noise Exposure Forecast (ANEF)—show the anticipated noise contours for the most likely or preferred development and forecasts for an airport. Only one ANEF can be in place at the one time and is the basis for Australian Standard 2021:2015 Acoustics—Aircraft Noise Intrusion—Building Siting and Construction Perth Airport is also working with airline partners and their ground handling agents to support the introduction of electric ground services equipment which can help reduce ground-based noise.

- Australian Noise Exposure Concept (ANEC)—a planning tool used to test changes to noise exposure resulting from proposed changes to airport operations. Several ANECs may be produced based on a range of scenarios, and
- 3. Australian Noise Exposure Index (ANEI)—noise contours based on actual aircraft movement data and show actual noise exposure for a previous period, typically a year. The ANEI is mostly developed to compare with the ANEF and ANECs to highlight differences in anticipated noise exposure.

The Airports Act requires a master plan to provide an ANEF for the areas surrounding the airport. An ANEF must be formally endorsed for technical accuracy by Airservices. In addition, the master plan must specify the airport's plans, developed through a consultative process with airline partners and local government authorities in the vicinity of the airport, for managing aircraft noise intrusion in areas forecast to be subject to exposure above significant ANEF levels. Significant ANEF levels are defined as the 30 ANEF contour and above.

The N-above system of describing aircraft noise was developed by the Australian Government through industry and community consultation. N-above modelling illustrates the average number of aircraft noise events per day that exceed a specified noise level. The NASF Guideline A recommends the use of N-above modelling to provide more comprehensive and understandable information about aircraft noise to communities.



16.2.3.1 Modelling Software

The noise modelling for this Master Plan 2026 has been prepared using the Aviation Environmental Design Tool (AEDT) software, developed by the US Federal Aviation Administration. AEDT is the most modern noise simulation software package used for aircraft noise modelling. AEDT version 3e has been used in accordance with Airservices' requirements for technical endorsement.

The AEDT contains a database of current civil passenger and military aircraft along with their performance and typical noise characteristics.

Input data for the AEDT noise modelling includes the following variables:

- types of aircraft (aircraft fleet mix)
- movement volume
- configuration of the runways and allocation to respective operations
- arrival and departure tracks flown, along with ascent and descent profiles and flight track dispersal to consider the spread on the track by aircraft operations
- aircraft destinations or origins (stage lengths) to take into consideration track allocation
- day/night split of operations
- terrain data, and
- normalised wind velocity and temperature information.

16.2.3.2 Noise Modelling Inputs

Movement Scenarios

The Manner of Endorsement for Australian Noise Exposure Forecasts, published by the Australian Government, outlines

- a standard ANEF— forecast noise exposure levels up to a maximum of 20 years
- a long-range ANEF which specifies a year—forecast noise exposure levels up to or beyond 20 years, or
- an ultimate practical capacity ANEF—forecast noise exposure level likely if an airport was operating at its ultimate practical capacity.

Consistent with Perth Airport's 1999, 2004, 2009, 2014 and 2020 master plans, Master Plan 2026 has also adopted an ultimate practical capacity ANEF.

The composite ANEF for this Master Plan 2026 comprises four ANEC scenarios:

- ANEC 0 actual FY24 aircraft operations on the existing main runway 03/21 and cross runway 06/24
- ANEC 1—existing main runway 03/21 and cross runway 06/24 with their planned future extensions
- ANEC 2—future parallel runway operations for the existing main runway 03/21 and the new runway, operating at their theoretical ultimate capacity, and
- ANEC 3 future three-runway operations for the existing main runway 03/21 and cross runway 06/24 with their planned future extensions, as well as the new runway, operating at their theoretical ultimate capacity.

The composite ANEF is created by taking the outer contour lines of all ANECs.

Associated aircraft movement tables for each ANEC can be found in Section 18.

Perth Airport Master Plan 2026 Part D Section 16: Airport Safeguarding

Runway Use

The runway direction in use is primarily determined by seasonal wind patterns because aircraft take off and land into the wind for safety and performance. Therefore, as the wind direction changes, the runway in operation may also have to be changed, depending on the strength of the wind.

Wind patterns at Perth Airport can be characterised by a distinct daily pattern. In the mornings, winds are predominantly easterly or northeasterly, while the afternoons are characterised by predominantly westerly or south-westerly winds.

The main runway (03/21) is used in runway 03 direction (departing to the north and arriving from the south) for a north-easterly wind, and runway 21 direction (departing to the south and arriving from the north) for a south-westerly wind. The prevailing sea breeze from the south-west limits availability of runway 03 in the afternoon and evening. Conversely, the prevailing land-to-sea breeze limits availability of runway 21 during the night and morning. This is most pronounced during the warmer months of October through March.

The new runway will be located parallel to the existing main runway and will therefore have the same runway direction usage as that of the main runway.

Winds from the east or west will have crosswind components, and the cross runway is typically used during periods when crosswinds exceed 20 knots. Refer to Figure 16-4 for aircraft operating flows at Perth Airport.

The noise abatement procedures (described in Section 16.2.2.2) also influence runway use.

For noise modelling purposes, future runway use was determined by considering 10 years of Bureau of Meteorology meteorological data for Perth Airport and applying the rules set out in the Manual of Standards Part 172 – Air Traffic Services (Cth).

Flight Paths

Flights paths can be considered 'highways in the sky'. They define three-dimensional routes that aircraft use to arrive at or depart from an airport. Flight paths are often shown as a single line on a map; however, in practice, a flight path can vary up to several kilometres or more. This occurs for a range of reasons, including:

- weather conditions
- aircraft performance
- separation distances and air traffic management requirements, and
- type of aircraft operation (instrument flight rules or visual flight rules).

For visual presentation of flight paths, the path shown is based on a nominal spread around a central corridor that represents where the majority of aircraft are expected to be. A flight path diagram illustrates flight paths in two ways:

- as a chart that visually shows:
 - if the flight path is used for arriving or departing aircraft, shown by different colours
 - the approximate height of the aircraft, shown as a colour gradient
 - the potential width of the flight corridor
- in a data table that shows:
 - the average and typical number of times that an aircraft is likely to use the flight path during day (6am-7pm), evening (7pm-11pm), night (11pm-6am) and 24-hour periods
 - the percentage of days where no flights are predicted (based on the modelling) for day, evening night and 24-hour periods.

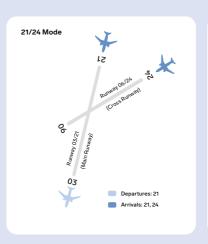
Flight paths for Perth Airport are designed around military airspace to the north, west and south, and Jandakot Airport airspace to the south. The close proximity of RAAF Base Pearce to the north means that air traffic controllers at Perth Airport have to coordinate their actions with RAAF controllers, including those for changes of runway direction.

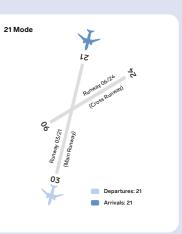
Jet arrivals into Perth are generally aligned with the runway at least 10 kilometres from the airport. From this point they will fly towards the runway in a straight line. Departure flight paths allow aircraft to maintain the runway heading for a short time until they are stabilised in flight, and then to turn towards the route that will take them to their destination.

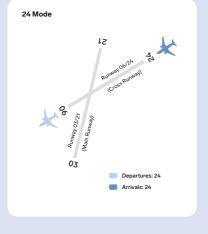
There have been no changes to flight paths at Perth Airport since Airservices introduced a smart tracking flight path for suitably equipped aircraft arriving from the north and east and landing onto runway 03 (southern end of the main runway) in September 2015.

Indicative flight path diagrams for each operating flow are shown in Figure 16-5 to Figure 16-8.

South Flow

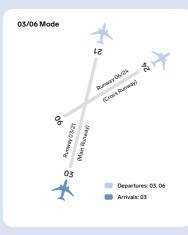


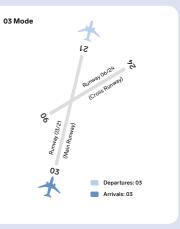


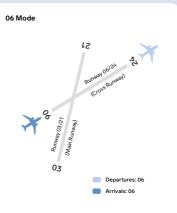




North Flow







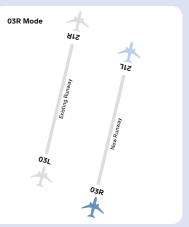
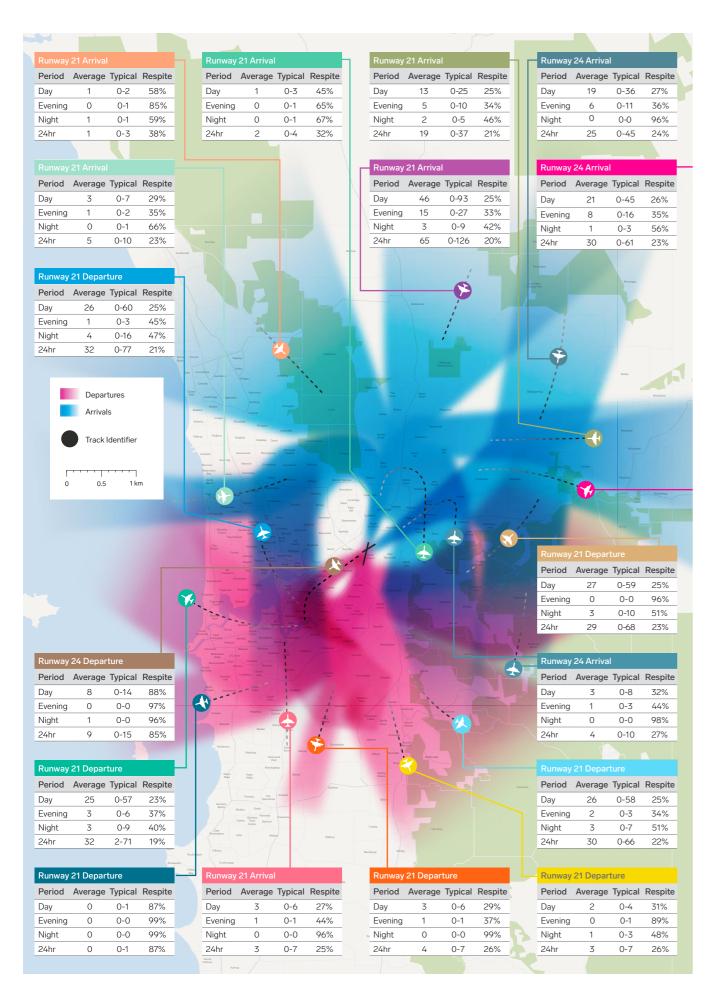


Figure 16-4 Perth Airport aircraft operating flows Source: Perth Airport



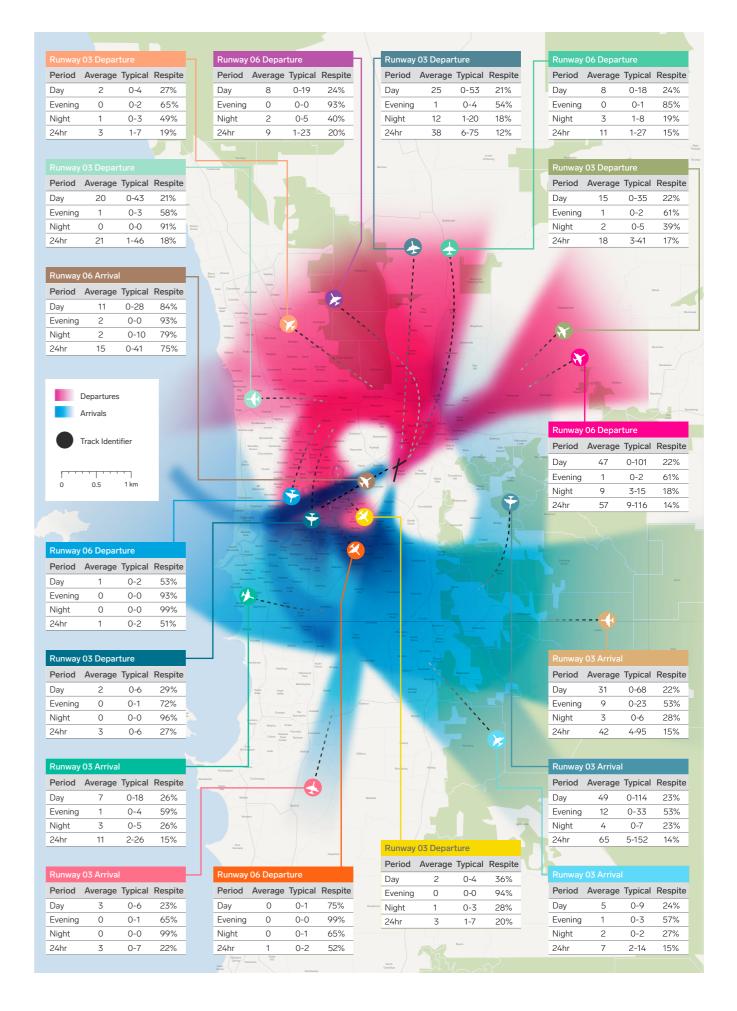
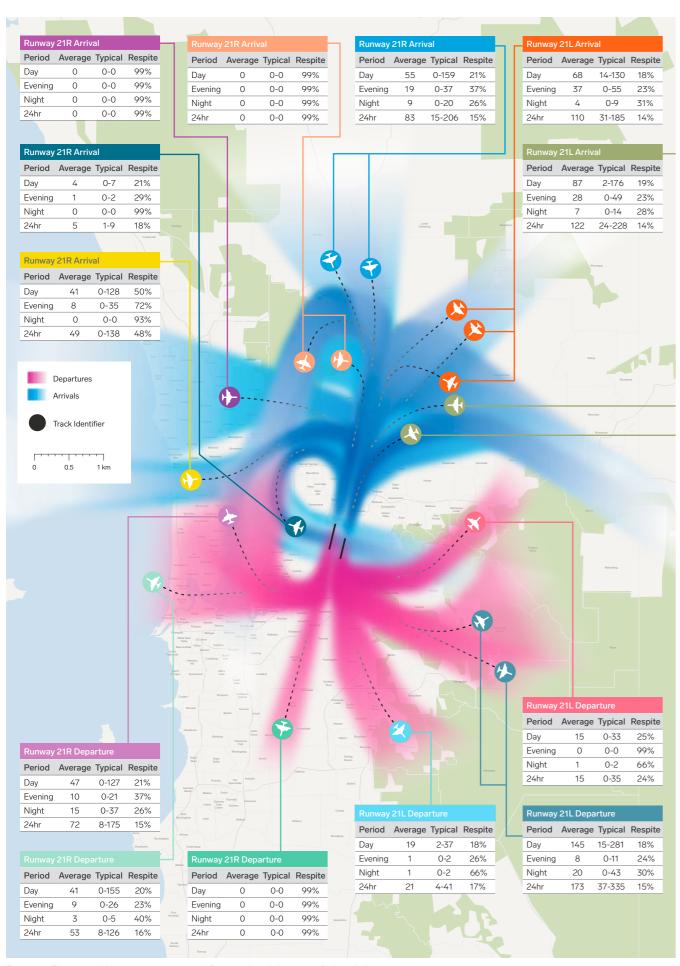


Figure 16-5 Existing runways south flow arrivals and departures flight path diagram Source: Perth Airport

Figure 16-6 Existing runways north flow arrivals and departures flight path diagram Source: Perth Airport

Perth Airport Master Plan 2026 Part D Section 16: Airport Safeguarding



 $Figure\,16-7\,Future\,parallel\,runway\,operations\,south\,flow\,arrivals\,and\,departures\,flight\,path\,diagram$

Source: Perth Airport

This movement data is based on Perth Airport's projected movements at ultimate capacity.

Based on the forecasts used in this Master Plan, Perth Airport will theoretically reach capacity around 2080.

The displayed flight path corridors represent the preliminary airspace design for the new runway operations.

The final airspace design will be completed prior to the opening of the new runway

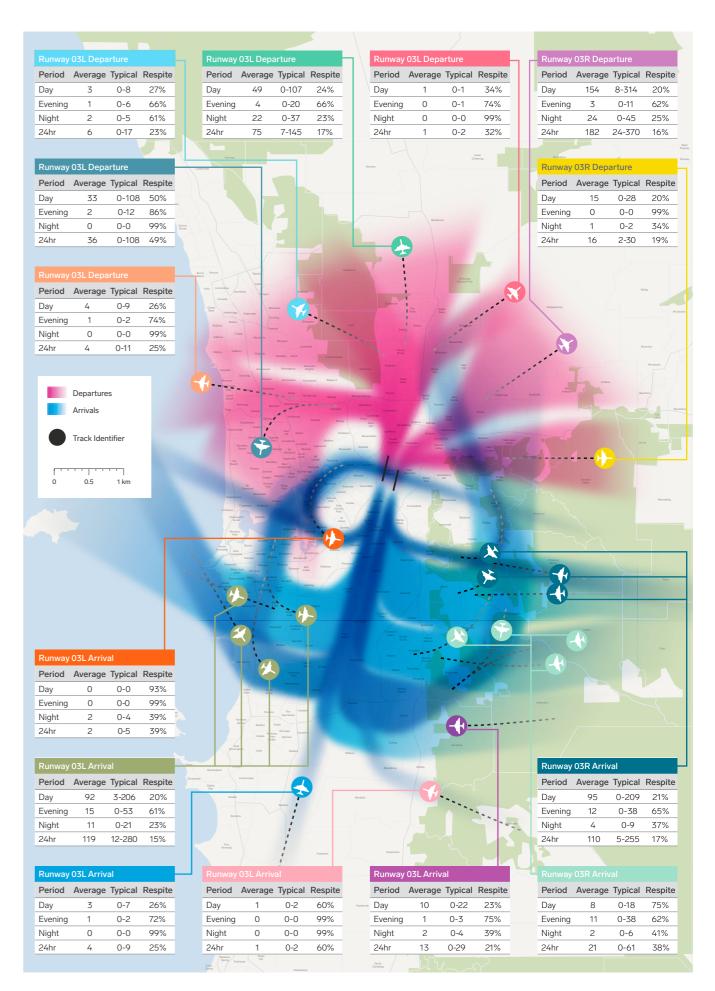


Figure 16-8 Future parallel runway operations north flow arrivals and departures flight path diagram

The ANEI is shown in Figure 16-9 and displays the average daily aircraft noise exposure based on aircraft movements for the year 2023.

16.2.3.4 Australian Noise Exposure Forecast (ANEF)

The Master Plan 2026 Ultimate Capacity ANEF, endorsed by Airservices for technical accuracy on 22nd September 2025, is shown in Figure 16-10.

Overall, the Master Plan 2026 ANEF is fairly consistent with the Master Plan 2020 ANEF. The outer ANEF contour (ANEF 20) has reduced on all runway ends except Runway 06 which has extended slightly. These changes are attributable to:

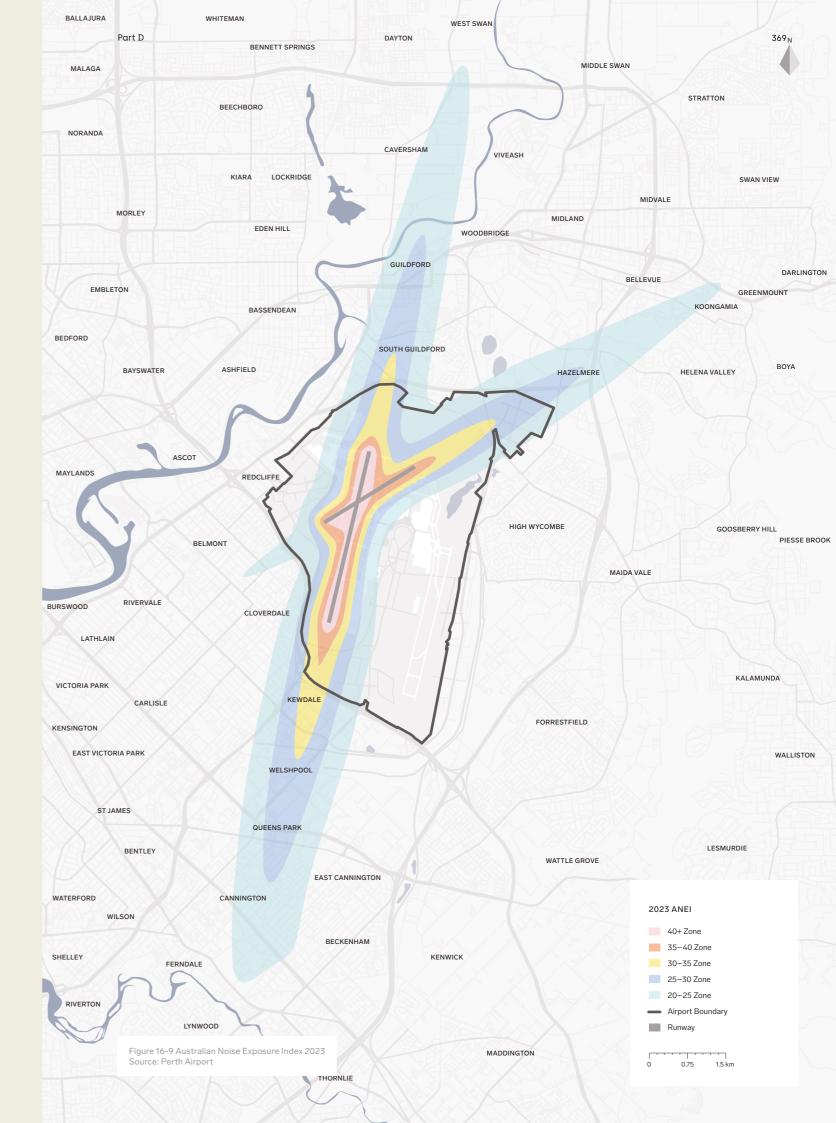
- Updated movement volume forecasts
- Updated runway and track allocation assumptions, and
- Updated aircraft mix that incorporates recent airline fleet changes and future planning for quieter new-generation aircraft types.

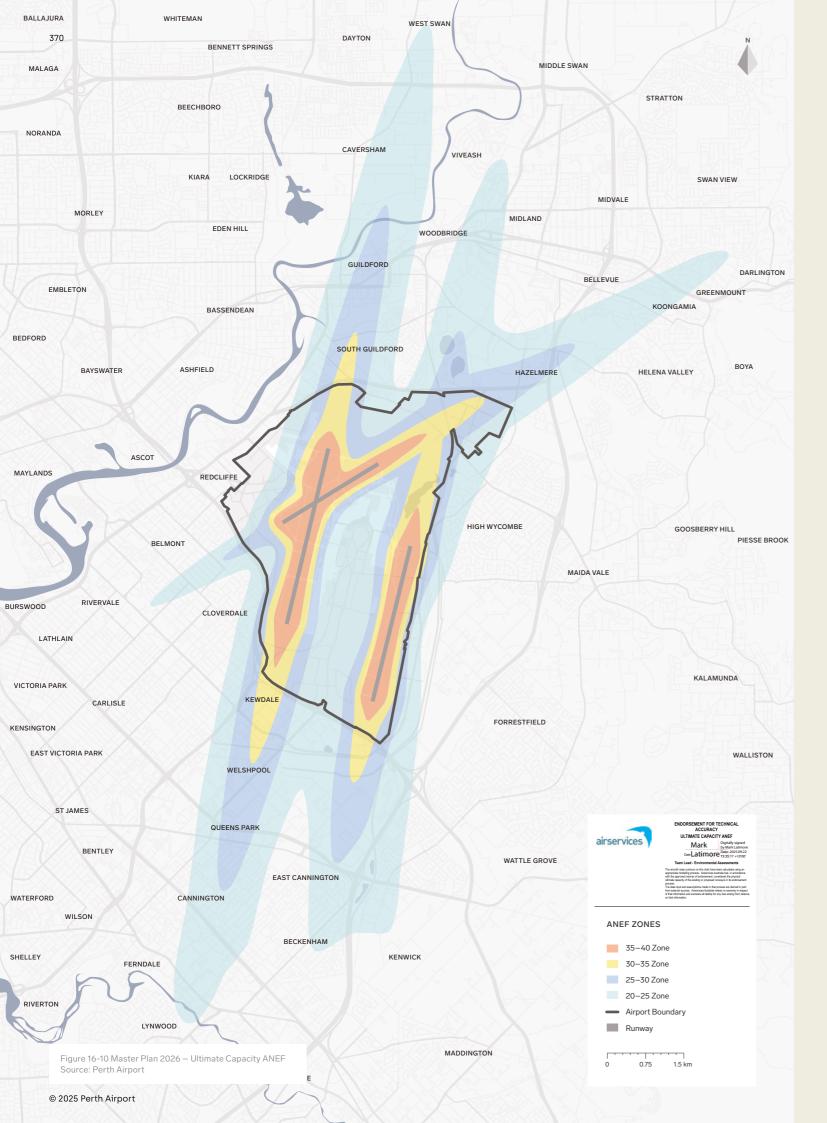
Houses within the 30 ANEF Contour

The Airports Act requires a master plan to provide plans, developed in consultation with airlines and local government bodies within the vicinity of the airport, for managing aircraft noise intrusion in areas forecast to be above the significant ANEF (ANEF 30) levels.

There are 31 dwellings in South Guildford that sit within the ANEF 30 contour.

The net difference between the ANEF charts published in Master Plan 2020 and this Master Plan 2026 is a decrease of seven dwellings with exposure above the significant ANEF levels (ANEF 30 contour). Perth Airport works closely with Airservices, aircraft operators, and Federal, State and local governments to manage aircraft noise, with a focus on houses located within the 30 ANEF contour. The range of measures in place to manage aircraft noise at Perth Airport are discussed in Section 16.2.2.2.





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16.2.3.5 Number-Above Contours

AS2021 recognises that the ANEF does not capture all high noise affected areas around an airport and is not necessarily an indicator of the full spread of noise impacts. The frequency of over-flight and the sound level of a single aircraft are typically the two factors that determine how a person will perceive noise, and these are not clearly translated by the ANEF system.

To improve how aircraft noise is communicated to the public, the Australian Government developed Number-above (or N-above noise) contours. This system of describing aircraft noise was developed through industry and community consultation and is described in the discussion paper Expanding Ways to Describe and Assess Aircraft Noise (Department of Infrastructure and Regional Development, 2020). The use of N-above contours for communicating and assessing aircraft noise exposure is also outlined in the Standards Australia Handbook SB HB 149:2016 (Acoustics—Guidance on producing information on aircraft noise) and NASF Guideline A.

N-above contours illustrate the average number of aircraft noise events (single aircraft movements) per day that exceed a specified sound level.

The volume (loudness) of a sound depends on its soundpressure level, which is expressed in decibels (dB). For measurement purposes, A-weighted decibels (dBA) are generally used because they take into account varying sensitivity of the human ear to different frequencies of sound

The most commonly used N-above noise descriptors are N70, N60 and N65 contours.

The N70 contours represent the average daily noise events above 70 dBA. A noise level of 70 dBA outside a building will generally result in an internal noise level of approximately 60 dBA, if windows are open to a normal extent. This is considered the sound level at which conversation and other indoor activities can generally be disturbed.

N60 is typically used for the assessment of aircraft noise at night. The N60 contours represent the number of average daily noise events exceeding 60 dBA external to a building, which would typically result in a maximum noise level of 50 dBA within a building having windows open to a normal extent. This is considered close to the point at which noise could cause awakening, or sleep disturbance.

Perth Airport recognises that residents of the region enjoy an outdoor lifestyle, supported by a mild climate and an abundance of warm weather and sunshine during the summer months, which is often reflected in building construction. As a result, Perth Airport has historically adopted an outdoor sound level of 65 dBA for noise modelling, which correlates to an indoor noise level of approximately 55 dBA and is the sound level at which conversation may be disturbed. This is a conservative approach compared to other Australian airports, to account for the anticipated prevalence of outdoor living.

N-above contours are presented for five or more events per period. This threshold is adopted because it represents a level above which aircraft noise would be considered a regular feature of the noise environment. N-above values of five or more are considered appropriate for describing aircraft noise in areas that currently experience aircraft noise, as well as areas which would be newly affected. Furthermore, they provide sufficient resolution to describe the change in aircraft noise for both existing and newly exposed areas.

The N-above noise contours represent an average day and not a typical day. Traffic at Perth Airport varies significantly from weekdays to weekends and depending on the runway being used at any particular time, and residents may experience more events or fewer events than the N-above contours suggest.

The Perth Airport N65 and N60 contour plans, based on 2023 aircraft movements and the ultimate capacity forecast, are provided in Figure 16-11 to Figure 16-14.

As outlined in Section 16.2.2.2, Perth Airport has developed a web-based portal to allow community members and representatives to more easily understand current and anticipated aircraft noise exposure. The portal allows users to identify the noise contours applicable to a specific property address or area. The portal is available through Perth Airport's website at perthairport.com.au/aircraftnoise.

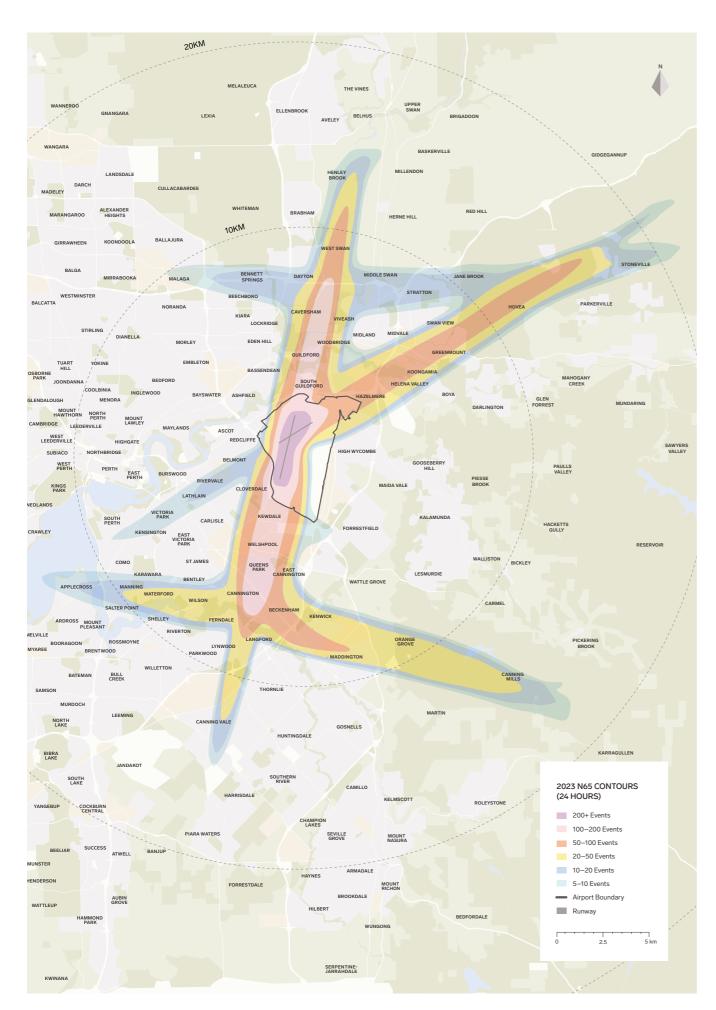


Figure 16-11 Perth Airport N65 contours (24 hours) — 2023 Source: Perth Airport

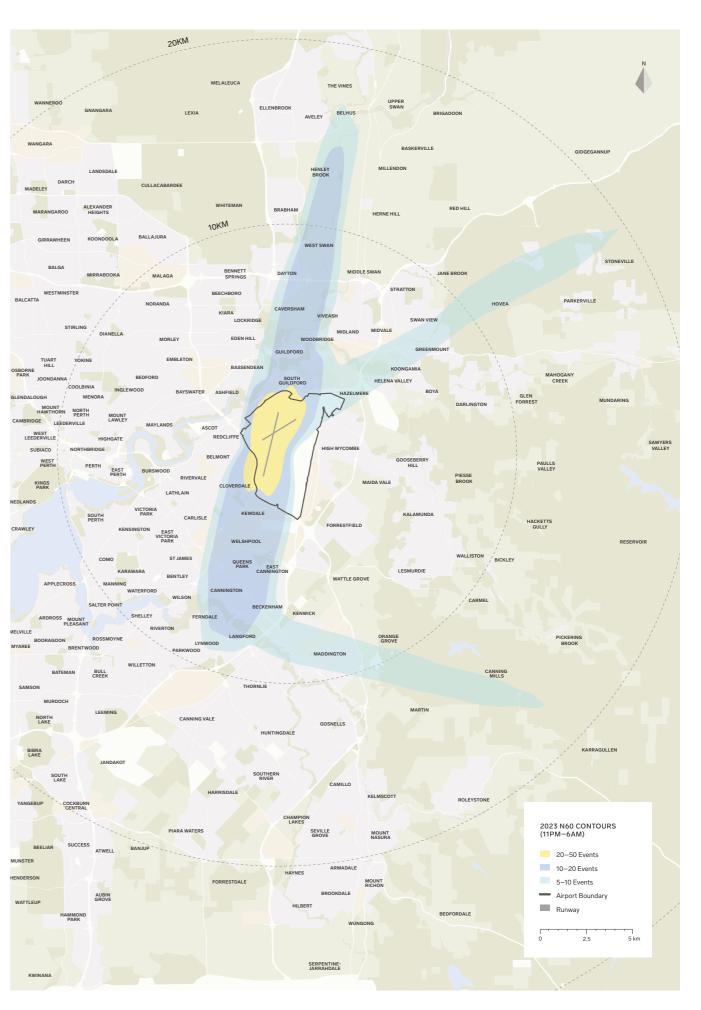


Figure 16-12 Perth Airport N60 contours (11pm-6am) — 2023 Source: Perth Airport

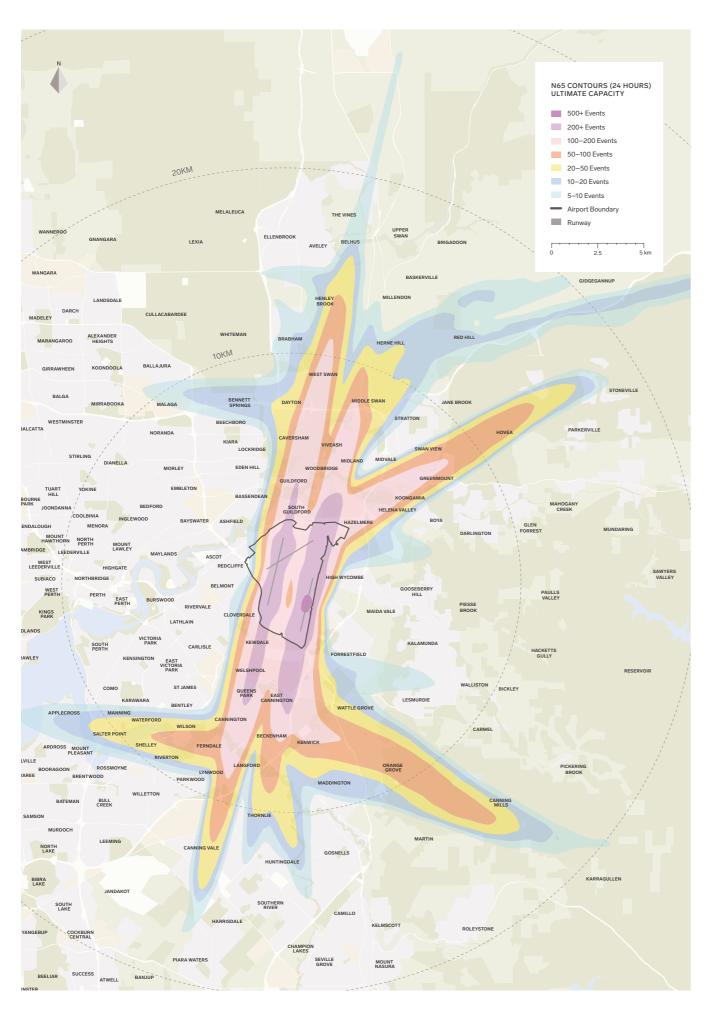


Figure 16-13 Perth Airport N65 contours (24 hours) — Ultimate Capacity Source: Perth Airport

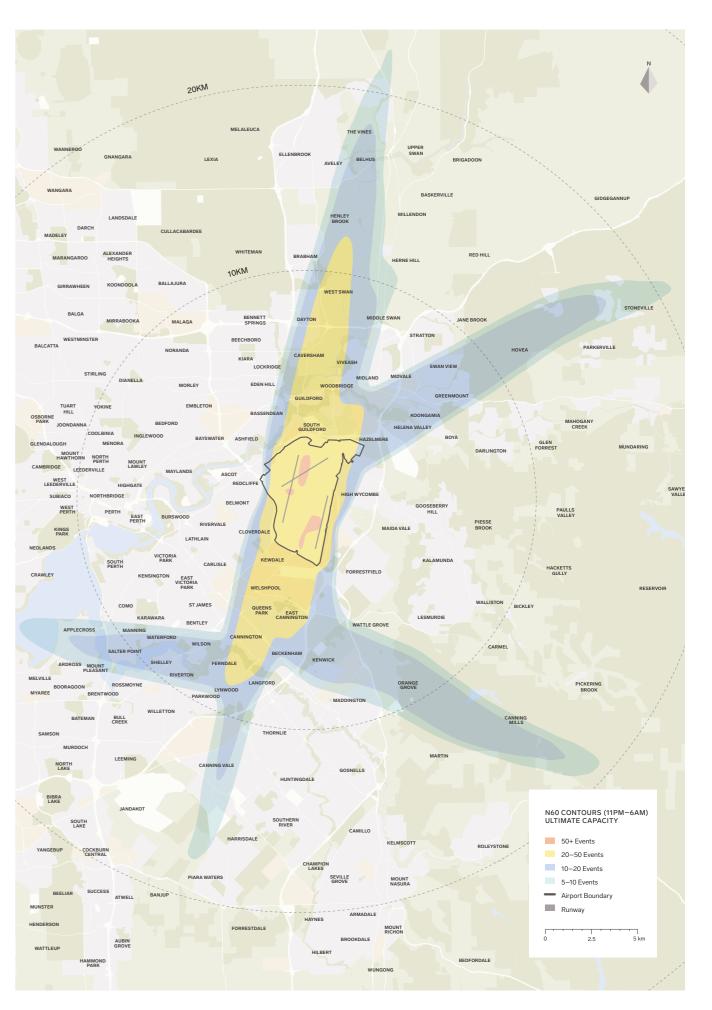


Figure 16-14 Perth Airport N60 contours (11pm-6am) — Ultimate Capacity Source: Perth Airport

16.3 Building Generated Windshear and Turbulence

The risk of windshear (a change of wind speed and/or direction over a relative short distance) created from a large building or terrain located in the vicinity of a runway, is a critical consideration for safe airport operations.

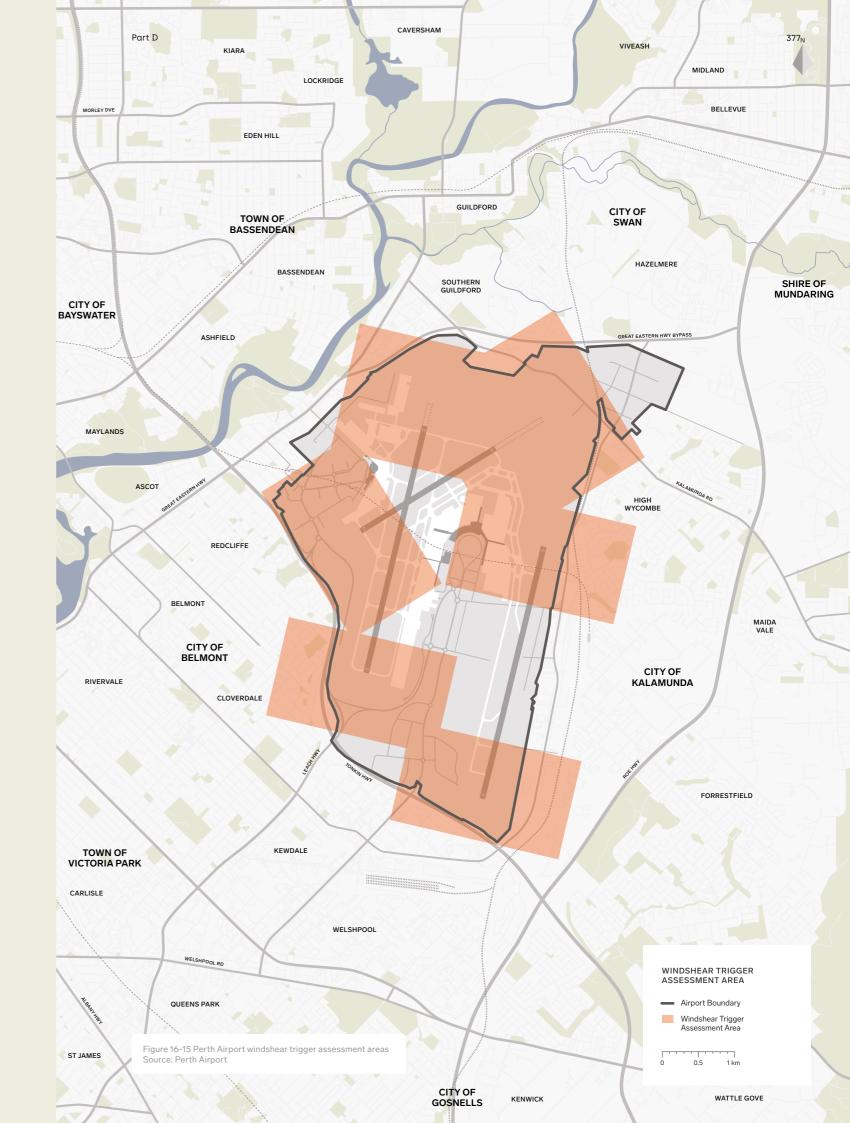
Windshear poses the greatest risk on approach, landing and take-off when an aircraft's speed is low and the pilot's ability to respond is more limited.

Building-generated windshear becomes critical to safety when a significant obstacle, such as a building, is upwind of the approach path to an operational runway. In such circumstances, wind flow may be diverted around and over the building, causing the wind speed and direction to vary along the approach path.

The NASF Guideline B Managing the Risk of Building Generated Windshear and Turbulence at Airports provides a framework for a staged assessment of building generated windshear and turbulence. First, Guideline B defines an area based on distances from the extended runway centreline and runway ends within which buildings and other obstacles are considered to pose a safety risk in terms of windshear and turbulence. This area is referred to as the 'trigger assessment area'. The second stage of assessment is to test the 1:35 rule against single buildings or obstacles within the trigger assessment area. The 1:35 rule proposes that buildings with a perpendicular distance to a runway centreline that is less than 35 times the height of the building should be further assessed, and that aerodynamic modelling may be required. The rule is noted as being very conservative and any building that passes the 1:35 rule test is considered not to create unsafe wind effects.

The windshear trigger assessment areas for Perth Airport are shown in Figure 16-15. These areas consider the existing runway layout as well as the new runway and the potential future extensions of the main and cross runways.

Perth Airport's development approval process considers NASF Guideline B. When determining the siting of potential buildings within the trigger assessment areas, the prevailing wind conditions are considered to gain an understanding of how often the building(s) will be upwind of the approach path to the runway. Developments off-estate located in the windshear trigger assessment areas are to follow the above assessment, which Perth Airport can assist with if required. If a development is proposed to exceed the 1:35 elevation it will trigger windshear assessments, including wind tunnel testing, as per the Guideline. Proponents will require a specialist consultant to undertake that testing and share the results with Perth Airport.



16.4 Bird and Animal Hazard

Wildlife around aerodromes can present serious hazards to aircraft operations. The most obvious of these is the presence of birds, but other animals can also present a hazard.

Under the *Civil Aviation Safety Regulations 1988* Part 139, Perth Airport is required to control the risk of wildlife striking operating aircraft. Perth Airport has a comprehensive Wildlife Hazard Management Plan that incorporates monitoring, assessment, reporting, and control methods for bird and animal hazards. Perth Airport is committed to undertake regular reviews of the Wildlife Hazard Management Plan's operational policies and procedures updated, including risk management processes and reporting frameworks.

Perth Airport also manages vegetation and open waterways across the airport estate to minimise the attraction of species that may pose a risk to aircraft safety.

Bird and wildlife strikes are an aviation safety incident and are required to be reported to the Australian Transport Safety Bureau. Bird and wildlife strike data is published at atsb.gov.au/national-aviation-wildlife-strike-dashboard. The main species involved in strikes with aircraft at Perth Airport since 2019 have been the Nankeen Kestrel, Welcome Swallow, black cockatoo, galah, rabbits and bandicoots.

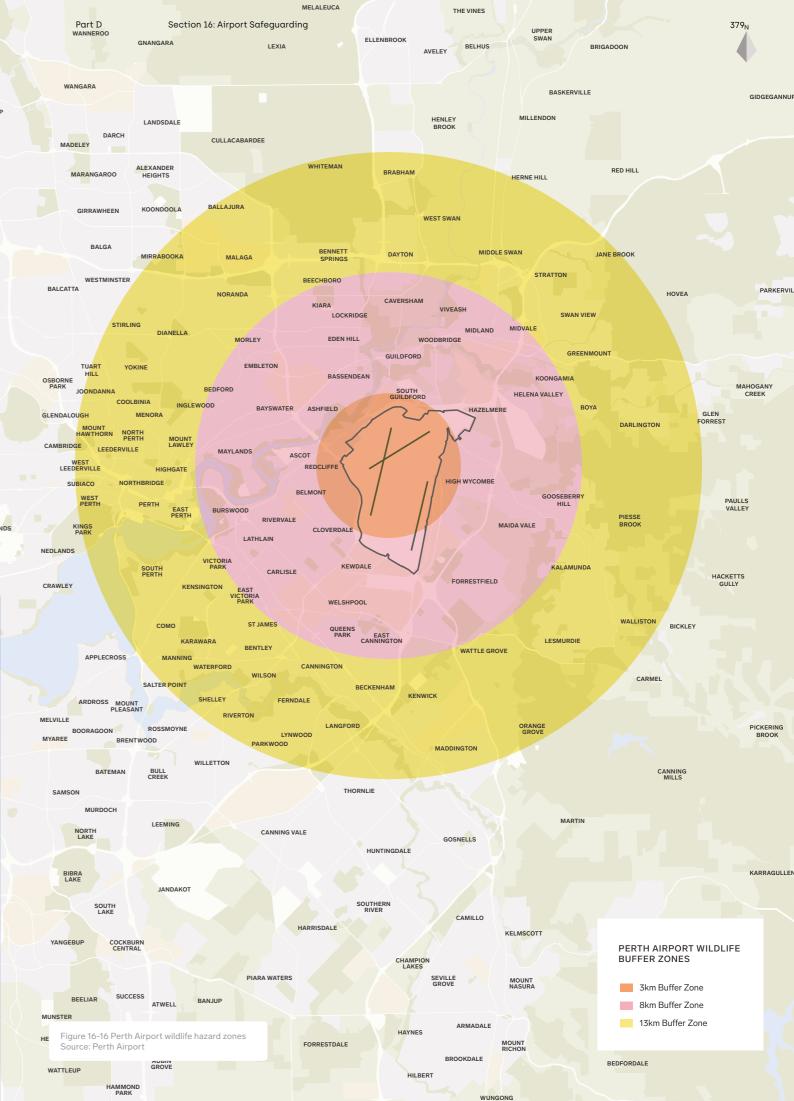
NASF Guideline C Managing the Risk of Wildlife Strikes in the Vicinity of Airports provides advice to State and local governments about wildlife-attracting land uses in the vicinity of an airport. It applies three wildlife buffer zones and describes the level of risk of specific types of land uses within each buffer zone and the triggers for adopting active measures to mitigate the risk.

Guideline C applies three wildlife buffer zones—three-kilometre, eight-kilometre and 13-kilometre radius from the airport—and describes the level of wildlife attraction risk associated with specific types of land uses, as well as triggers for adopting active measures to mitigate the risk. These buffer zones are shown in Figure 16-16. The land uses with moderate or high wildlife attraction risk are shown in Table 16-10.

Perth Airport works with State and local planning authorities to monitor conflicting land uses or changing waste disposal strategies, such as landfills, that may cause wildlife and birds to pass or roost in the vicinity of the airport.

The Perth Airport Bird and Animal Hazard Management Advisory Committee (described in Section 5.4.1.7) comprises representatives from Perth Airport, Federal, State and local governments, airlines, airport tenants and ornithological consultants who meet to discuss on- and off-airport wildlife hazard management issues.





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	Wildlife	Actions For E	xisting Develop	ments		Actions For Proposed Developments/ Changes To Existing Developments			
Land Use	Attraction Risk	3km radius	8km radius	13km radius	3km radius	8km radius	13km radius		
Cattle/dairy farm	Moderate	Mitigate	Monitor	Monitor	Mitigate	Mitigate	Monitor		
Fish processing/ packing plant	High	Mitigate	Mitigate	Monitor	Incompatible	Mitigate	Monitor		
Food/organic waste facility	High	Mitigate	Mitigate	Monitor	Incompatible	Mitigate	Monitor		
Food processing plant	High	Mitigate	Mitigate	Monitor	Incompatible	Mitigate	Monitor		
Fruit tree farm	High	Mitigate	Mitigate	Monitor	Incompatible	Mitigate	Monitor		
Golf course	Moderate	Mitigate	Monitor	Monitor	Mitigate	Mitigate	Monitor		
Park/ playground	Moderate	Mitigate	Monitor	Monitor	Mitigate	Mitigate	Monitor		
Piggery	High	Mitigate	Mitigate	Monitor	Incompatible	Mitigate	Monitor		
Picnic/ camping ground	Moderate	Mitigate	Monitor	Monitor	Mitigate	Mitigate	Monitor		
Poultry farm	Moderate	Mitigate	Monitor	Monitor	Mitigate	Mitigate	Monitor		
Racetrack/ horse riding school	Moderate	Mitigate	Monitor	Monitor	Mitigate	Mitigate	Monitor		
Showground	High	Mitigate	Mitigate	Monitor	Incompatible	Mitigate	Monitor		
Turf farm	High	Mitigate	Mitigate	Monitor	Incompatible	Mitigate	Monitor		
Wildlife sanctuary/ conservation area— dryland	Moderate	Mitigate	Monitor	Monitor	Mitigate	Mitigate	Monitor		
Wildlife sanctuary/ conservation area— wetland	High	Mitigate	Mitigate	Monitor	Incompatible	Mitigate	Monitor		

Table 16-8 Land uses with moderate/high wildlife attraction risk Source: National Airports Safeguarding Framework Guideline C Attachment 1

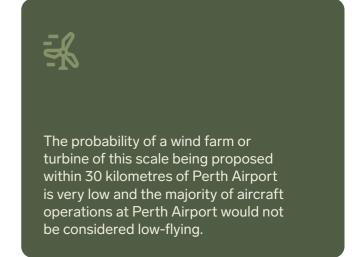
16.5 Wind Turbine Farms as Obstacles

Wind turbine farms can be hazardous to aviation as they are tall structures with the potential to come into conflict with low-flying aircraft. There is also the possibility for wind turbines to cause turbulence which is noticeable up to 16 rotor diameters downwind of the turbine.

The NASF Guideline D—Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation provides guidance to proponents of wind farms and planning authorities to help identify any potential aviation safety risks posed by wind turbine and wind monitoring installations. It recommends that proposed wind turbines greater than 150 metres above the ground and within 30 kilometres of an aerodrome should be referred to the Civil Aviation Safety Authority (CASA) and Airservices (or the Department of Defence for a military aerodrome).

The probability of a wind farm or turbine of this scale being proposed within 30 kilometres of Perth Airport is very low and the majority of aircraft operations at Perth Airport would not be considered low-flying.

The WA Government's Position Statement: Renewable Energy Facilities (March 2020) requires proponents of wind turbine proposals to refer to NASF Guideline D to determine any potential aviation safety risks and possible mitigation measures.





16.6 Lighting Distraction To Pilots

The specific patterns of aeronautical ground lights during inclement weather and outside daylight hours are designed to enable pilots to align their aircraft with the runway in use and land the aircraft at the appropriate part of the runway. Glare from ground lights or large reflective surfaces in the vicinity of the runways have the potential to obscure vision or cause confusion and distraction for pilots and air traffic controllers.

Guidance for managing the risk of distractions to pilots from lighting near airports is provided in the NASF Guideline E—Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports.

Part 139 of the *Civil Aviation Safety Regulations 1988* and the Manual of Standards Part 139, specify ground lighting intensities (measured at three degrees above the horizontal) within four light zones which surround a runway. These zones reflect the degree of interference ground lights can cause as a pilot approaches to land, with the closest zone the most operaus

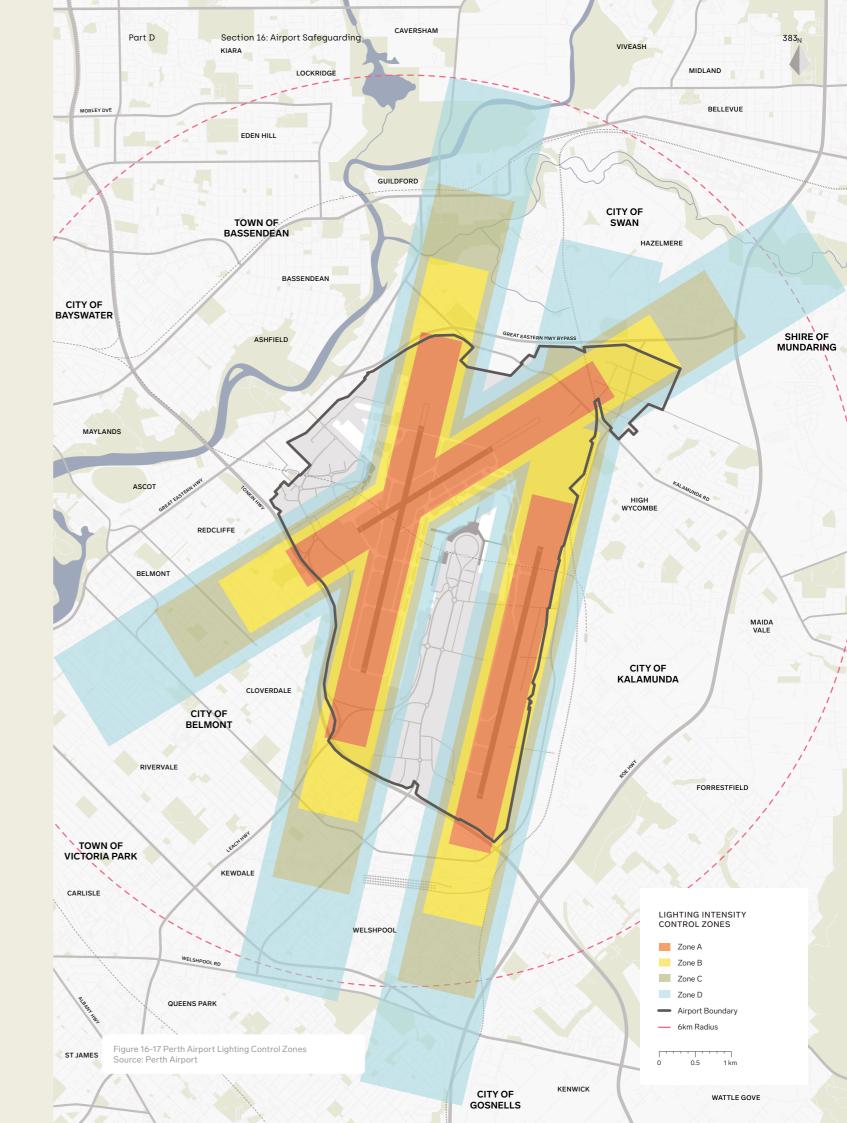
The lighting zones for Perth Airport are shown in Figure 16-17.

CASA has the authority, through Regulation 94 of the *Civil Aviation Regulations 1988*, to require interfering lights to be extinguished or modified. Lights within six kilometres of an airport are most likely to be subjected to the provisions of Regulation 94.

The fact that a certain type of light fitting already exists in an area is not necessarily an indication that more lights of the same type can be added to the same area. Coloured lights are likely to cause conflict, irrespective of their intensity, as coloured lights are used to identify different aeronautical facilities at the airport.

Even though a proposed installation is designed to comply with the zone intensities, proposals requiring significant lighting (such as freeways, stadium flood lighting and construction projects) should be referred to CASA as there may be overriding factors which require more restrictive controls.

The regulations pertaining to lighting intensity also address sources of glare that may distract pilots. This has become increasingly important as the popularity of solar panels continues to grow. Perth Airport will continue to work with CASA in the assessment of relevant solar panel applications.



16.7 Protected Airspace

Protection of airspace required for Perth Airport's current and future needs is essential to provide a safe, predictable environment for the arrivals and departures of aircraft using Perth Airport in all weather conditions.

NASF Guideline F Managing the Risk of Intrusions into the Protected Operational Airspace of Airports provides Guidance to planners and decision makers about working within and around and airport's airspace and how the airspace can be better integrated into local planning processes.

The Airports Act and the Airports (Protection of Airspace) Regulations 1996 (APA Regulations) establish a framework for the protection of airspace at federally leased airports.

The Australian Government is currently reviewing a number of legislative instruments due to sunset (automatic repeal after a fixed period) on or before 1 April 2025, including the APA Regulations. As a result of the review, it is expected that new airspace protection criteria will be established for implementation during the period of this Master Plan 2026.

16.7.1 Prescribed Airspace

Prescribed airspace comprises the airspace above the lower of two sets of defined invisible surfaces above the ground, referred to as the Obstacle Limitation Surfaces (OLS) and Procedures for Air Navigation Services—Aircraft Operations (PANS-OPS) surfaces. The design of these surfaces is determined by criteria established by the International Civil Aviation Organization (ICAO).

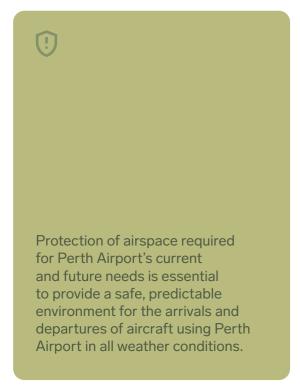
The OLS relates to visual operations or the visual stages of an instrument flight procedure. While this airspace should ideally be kept free of obstacles, the purpose of the OLS is not to restrict or prohibit all obstacles but to ensure that existing or potential obstacles are examined for their impact on aircraft operations and that their presence is properly considered.

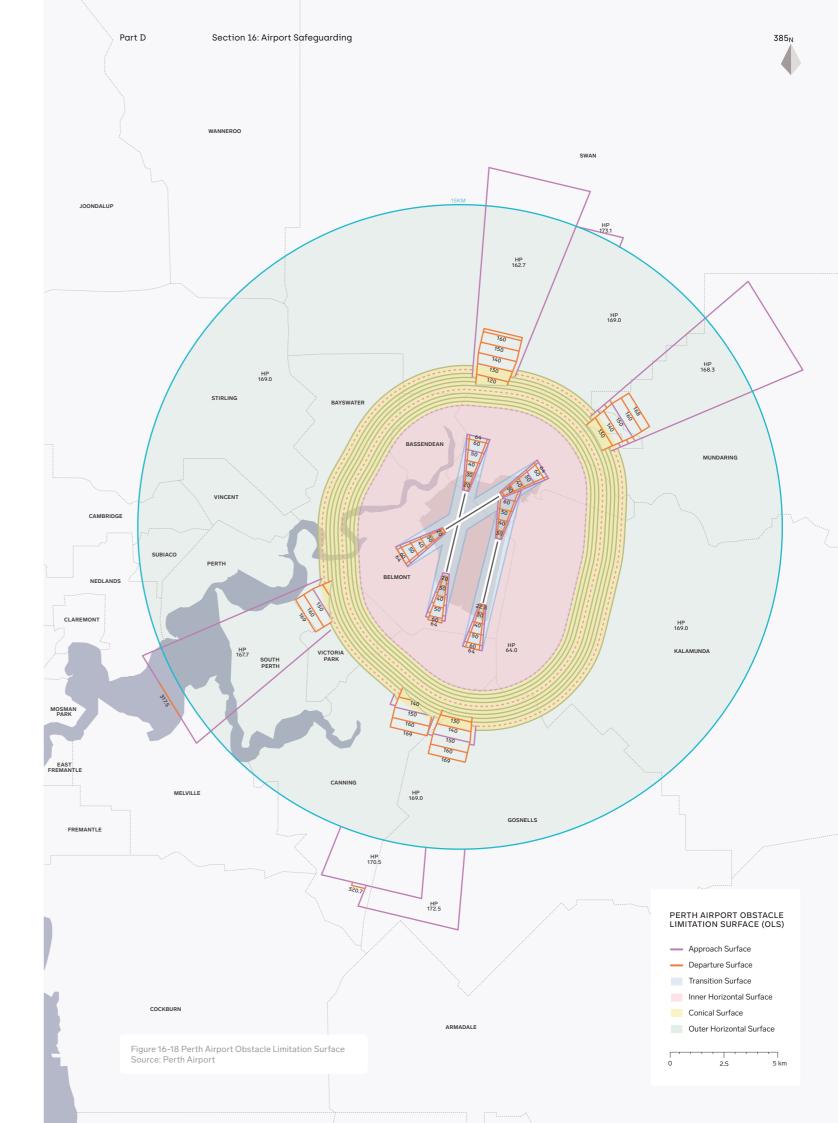
PANS-OPS surfaces define the airspace related to instrument flight procedures, whereby pilots rely solely on navigation equipment. Minimum safe altitudes are established for each segment of an instrument flight procedure.

Changes to airfield infrastructure or flight path procedures may require amendment of the OLS or PANS-OPS surfaces. In 2001, Perth Airport declared airspace that included the new runway at 2,700 metres long. Due to changed design standards for runway approach lighting, the new runway length was extended from 2,700 to 3,000 metres and the changed length was reflected in the Master Plan 2014 Minor Variation, Major Development Plan for the New Runway Project and Master Plan 2020. The airspace declaration for the future runway infrastructure, including a 3,000-metre new runway (outlined in Section 13.4.1.3), was completed in December 2023 following engagement with Jandakot Airport, RAAF Base Pearce, the Department of Planning, Lands and Heritage, 21 local government authorities and DevelopmentWA.

The long-term OLS for Perth Airport is shown in Figure 16-18 and the long-term critical PANS-OPS surface for Perth Airport is shown in Figure 16-19. Both plans are intended to safeguard the current and future airfield configuration and the associated airspace against any proposed long-term or permanent development which could impact on its operation.

The updated airspace protection charts are published on the Perth Airport website, https://www.perthairport.com.au/ Home/corporate/planning-and-projects/airspace-protection.





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PERTH AIRPORT PROCEDURES FOR AIR NAVIGATION SERVICES -AIRCRAFT OPERATIONS Figure 16-19 Perth Airport Procedures for Air Navigation Services—Aircraft Operations

16.7.2 Controlled Activities

The Airports Act defines certain activities that could result in an intrusion into an airport's protected airspace to be 'controlled activities' and requires that controlled activities cannot be carried out without approval under the

The following activities are considered controlled activities if they intrude into prescribed airspace:

- construction or erection of any permanent or temporary structure, such as a building, communications tower or construction crane
- · an activity attached to or on the ground, such as transient objects including trucks, machinery and equipment
- an activity that results in artificial or reflected light that exceeds acceptable light intensities or is capable of blinding or confusing pilots
- an activity that results in air turbulence
- an activity that results in the emission of smoke, dust, or other particulate matter, and
- an activity that results in the emission of steam or gas.

DITRDCSA, which administers the Airports Act and APA Regulations, has published guidance on processing applications under the APA Regulations for operators of federal airports. Details of proposed controlled activities are required to be provided to Perth Airport to be assessed against the OLS and PANS-OPS. Any controlled activity found to infringe the prescribed airspace is referred to Airservices and CASA for assessment and then submitted to DITRDCSA for approval or refusal.

Perth Airport can approve infringements of the OLS that are short-term (less than three months), such as cranes, following the assessments by Airservices and CASA. Infringements of the PANS-OPS surfaces will only be approved by DITRDCSA if the activity is short-term (less than three months) and does not pose an unacceptable effect on the safety or existing or future aircraft operations. Long-term infringements of the PANS-OPS surfaces are not permitted. Conditions may be imposed on a controlled activity approval which will be monitored by Perth Airport, with any breach reported and rectification required.

For proposals within the airport estate, controlled activities are identified and addressed through Perth Airport's development approval and consent processes. For proposals outside of the airport estate, government agencies and proponents are required to refer applications for developments or structures that may constitute a controlled activity to Perth Airport for assessment.

Perth Airport has prepared Height Control plans that indicate the height at which a building or structure triggers the need for a referral to Perth Airport for assessment. There are areas identified immediately adjacent to the airport, and particularly in the final approach and take-off areas, where the airport requires all development and structures to be referred for assessment.

Perth Airport has developed an online system for the assessment and management of crane applications and permanent structures. The Protected Airspace Assessment Tool (PAAT) automatically issues a permit if no airspace infringement is detected. Perth Airport receives notification of any assessments that would result in an airspace infringement, and relevant applications are then issued to Airservices, CASA and DITRDCSA as required.

Access to PAAT, copies of the various Height Control plans, and airspace protection charts are available online at https://www.perthairport.com.au/Home/corporate/ planning-and-projects/airspace-protection.

16.7.2.1 Exhaust Plumes

Exhaust plumes of significant vertical velocity (plume rise) can emanate from ground activities, such as vents and stacks, and can interfere with aircraft operations in various stages of flight.

Under the Civil Aviation Safety Regulations 1988 Part 139, CASA may determine that an exhaust plume having a velocity in excess of 4.3 metres per second is, or will be, a hazard to aircraft operations because of the velocity or location of the efflux.

Any plumes with velocity exceeding 4.3 metres per second should be referred to CASA via CASA Form 1247 by the proponent, ideally copying in Perth Airport. Via this form, the proponent must provide relevant characteristics of the plume, such as velocity, temperature, composition of the effluence and any particulate matter.

Perth Airport works with local planning authorities to ensure they are informed of the risk from exhaust plumes and encourages information about off-airport developments that include exhaust plume(s) to be submitted to Perth Airport for assessment.

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16.8 Communication, Navigation and Surveillance Facilities

There are several communications, navigation and surveillance (CNS) systems on or near Perth Airport which are critical to the safe and efficient operation of aircraft. These facilities enable communications between pilots and Air Traffic Control, instrument navigation by pilots, and monitoring of aircraft movements by Air Traffic Control.

While many of these facilities are located on-airport, some can be located considerable distances from an airport. Inappropriate development in the vicinity of these facilities can compromise their effectiveness.

The CNS systems in operation at Perth Airport are generally installed and maintained by Airservices and the Bureau of Meteorology. These include:

- Instrument Landing System (ILS) (localiser and glideslope)
- VHF Omnidirectional Range (VOR) and Distance Measuring Equipment (DME)
- high frequency and very high frequency data links
- · terminal area radar
- surface movement radar, and
- · anemometers.

NASF Guideline G Protecting Aviation Facilities— Communication, Navigation and Surveillance (CNS), provides guidance to land use planners when considering development proposals that have the potential to cause interference to these facilities. Interference can be caused by obstructions such as structures or trees located between transmitting and receiving devices, electromagnetic emissions and plume rises. Guideline G also identifies when assessment of a development proposal is required by Airservices, CASA, and/or the Department of Defence.

Development and construction proposals on the airport estate, or that are off airport and are referred to Perth Airport by surrounding local governments, are assessed in consultation with Airservices to ensure the performance of CNS facilities remains acceptable and that current and future anticipated systems are suitably protected in accordance with the *Civil Aviation Safety Regulations 1988*. This includes the protection of land for equipment installations and required services, such as fibre optic communication systems, and any potential airspace required for its operation. CASA has authority under Section 21 of the *Civil Aviation Act 1988* to request the removal or modification of any equipment or structure that is or may be causing interference to CNS facilities.

Perth Airport continues to work with Airservices to assess and introduce new technologies that may improve safety, performance, economics and efficiency of Perth's air traffic and airspace. As part of works associated with the new runway project (see Section 13.4.1.3), a glide path and Advanced Surface Movement Guidance and Control System link (between the Air Traffic Control System and airfield) will be relocated in 2025.

Perth Airport's CNS protection surfaces for the current and future configuration are shown in Figure 16-20 and published online at https://www.perthairport.com.au/Home/corporate/planning-and-projects/airspace-protection.

16.9 Strategically Important Helicopter Landing Sites

A strategically important helicopter landing site is an off-airport helicopter landing site that has been declared by a state or territory to be of critical need to the provision of helicopter services, such as for a hospital or an elevated landing site located within a populated area.

The safety, viability and efficient operation of helicopters at a landing site can be compromised by development, including permanent buildings and temporary structures such as cranes, gaseous plumes, telecommunication towers, overhead wires and power lines, and landscape features such as trees. Potential hazards are obstacles encroaching into flight paths, lighting that distracts or causes interference with night operations, noise mitigation requirements, risk of remotely piloted aircraft systems (drone) operation and strike, risk of bird and wildlife strike, and building induced windshear or air turbulence.

NASF Guideline H—Protecting Strategically Important Helicopter Landing Sites, provides guidance to State and local government decision makers, as well as the owners or operators of identified strategically important helicopter landing sites, to ensure that the use of these sites is not compromised by proposed developments.

There are multiple helipads within Perth airspace, including the Royal Perth Hospital, Fiona Stanley Hospital, Perth Children's Hospital and Fremantle Heliport. There are regular helicopter movements between Perth Airport and the Fremantle Helipad, particularly during the summer months, and occasional movements between Perth Airport and hospital helipads.

The Royal Perth Hospital helipad was upgraded in 2022 and the hospital is seeking introduction of its flight paths into the City of Perth planning framework to protect the continued operation of critical aeromedical services.



There are multiple helipads within Perth airspace, including at Royal Perth Hospital, Fiona Stanley Hospital, Perth Children's Hospital, and Fremantle Heliport.



16.10 Public Safety Areas

Public Safety Areas (PSA) are areas of land at the ends of the runways, identified by quantifiable risk contours, within which development is restricted in order to control the number of people on the ground at risk of death or injury in the event of an aircraft accident on take-off or landing. PSA risk contours are developed based on runway use statistics correlated against international crash data. These provide an objective basis for precautionary planning decisions in those areas of highest risk.

Perth Airport has adopted the United Kingdom approach to public safety as detailed in NASF Guideline I— Managing the Risk in Public Safety Areas at The Ends of Runways.

Under the UK model, the PSA is generally broken into two areas representing 1-in-10,000 and 1-in-100,000 probabilities of being killed or injured per year from an aircraft accident. Although the boundary of a PSA generally corresponds with the 1-in-100,000 contours, the predicted level of risk within this area may be higher.

The model considers the maximum tolerable level of individual third-party risk of being killed as a result of an aircraft accident, as 1-in-10,000 per year. Any occupied residential properties, or commercial and industrial properties occupied as normal all-day workplaces, within the 1-in-10,000, are not recommended.

In the remaining PSA between the 1-in-10,000 and 1-in-100,000 individual risk contours, developments which involve a low density of people working or congregating are considered acceptable. For example, this may include car parking, open storage or certain types of warehouse development. According to the NASF Guideline I, new residential buildings should not be permitted within this area of the PSA; however, existing developments may remain. The compatibility for new developments is shown in Table 16-11. Perth Airport has developed PSA contours that reflect the ultimate development and demand of the airport at approximately 362,000 movements per year, of which the 1-in-10,000 and 1-in-100,000 areas are shown in Figure 16-21.

PSA	Compatible uses	Incompatible uses/activities
INNER AREA—1 in 10,000	Long stay and employee car parking (where the minimum stay is expected to be in excess of six hours) Built development for the purpose of housing plant or	Accommodation activities: includes dwelling houses, multiple dwellings, resort complexes, tourist park, hostels, retirement villages or other residential care buildings
	machinery and would require no people on site on a regular basis, such as electricity switching stations or installations associated with the supply or treatment	Community activities: educational establishment, community centres, hospitals, theatres, childcare and playgrounds, detentio facilities, place of worship
	of water Golf courses, but not club houses (provided	Recreation activities: includes parks, outdoor recreation and sport, major sport and entertainment facilities
	appropriate mitigation measures are in place to reduce wildlife attraction risk—see NASF Guideline C)	Entertainment and centre activities: shopping centres, service stations, showrooms, markets, hotels, theatres, tourist attraction garden centres
		Industrial and commercial uses involving large numbers of workers or customers: intensive uses such as high-impact, medium- and low-impact industry, warehousing, services industry.
		Manufacture or bulk storage of flammable, explosive or noxious materials
		Public passenger transport infrastructure: includes bus, train an light rail stations
OUTER AREA—1 in 100,000	Long stay and employee car parking (where the minimum stay is expected to be in excess of six hours) Shorter stay car parking (with a safety case –	Accommodation activities: includes dwelling houses, multiple dwellings, resort complexes, tourist park, hostels, retirement villages or other residential care buildings
	depends on intensity of use) Built development for the purpose of housing plant or	Community activities: educational establishment, community centres, hospitals, theatres, childcare and playgrounds, detention facilities, place of worship
	machinery and would require no people on site on a regular basis, such as electricity switching stations or installations associated with the supply or treatment	Recreation activities: includes parks, outdoor recreation and sport, major sport and entertainment facilities
	of water Golf courses, but not club houses (provided appropriate mitigation measures are in place to	Entertainment and centre activities: shopping centres, service stations, showrooms, markets, hotels, theatres, tourist attraction garden centres
	reduce wildlife attraction risk) Open storage and types of warehouses with a very	Industrial and commercial uses involving large numbers of workers or customers: intensive uses such as high impact,
	small number of people on site. The planning authority could consider imposing conditions to prevent future intensification of the use of the site and limit the	medium and low impact industry, warehousing, services industry Manufacture or bulk storage of flammable, explosive or noxious materials
	number of people to be present on the site Developments which require few or no people on site on a regular basis such as buildings housing plant or	Public passenger transport infrastructure: includes bus, train ar light rail stations
	machinery	

CAVERSHAM Section 16: Airport Safeguarding 391_N VIVEASH KIARA MIDLAND LOCKRIDGE BELLEVUE MORLEY DVE EDEN HILL :TON CITY OF GUILDFORD TOWN OF SWAN BASSENDEAN SHIRE OF HAZELMERE MUNDARING BASSENDEAN CITY OF BAYSWATER **ASHFIELD** PERTH MAYLANDS ASCOT REDCLIFFE BELMONT CITY OF BELMONT CITY OF RIVERVALE KALAMUNDA CLOVERDALE FORRESTFIELD KEWDALE TOWN OF VICTORIA PARK CARLISLE WELSHPOOL PUBLIC SAFETY AREAS AT ULTIMATE CAPACITY Airport Boundary QUEENS PARK ____ 1-10.000 ____ 1–100,000 Figure 16-21 Perth Airport public safety areas ource: Perth Airport CITY OF KENWICK WATTLE GOVE GOSNELLS

17 Utilities Development Plan

17.1 Introduction



The safe, effective and efficient operation of Perth Airport and the activities within the estate depend upon having reliable access to services, including power, water, wastewater, drainage and telecommunications.

Perth Airport has developed strategies to ensure these services are available to meet current requirements as well as being adaptable to the growing needs of the airport as demand increases.

Perth Airport operates its own internal power, water, wastewater and communication networks, integrating with the State's systems at the estate boundary. Perth Airport also controls stormwater drainage running through the estate. Gas and commercial telecommunications are provided throughout the estate by external suppliers. The power supply is sourced from the Western Power grid, supported by emergency power backup units to ensure that the airport can continue to operate during external power supply interruptions.

Perth Airport works closely with the utility providers to ensure these essential services can support the operation and growth of the airport.

Section 7 presents Perth Airport's Sustainability
Framework and Social Value Strategy which outlines
sustainability targets for a range of aspects, including
power and water use. Section 9 discusses the
environmental management of water, power and
stormwater, including a five-year action plan. The
sustainability and environmental management strategies
include measures for Perth Airport to become more
sustainable in the use of all major services. This will also
have the benefit of limiting the impact that airport
developments have on demand for service infrastructure
outside the airport estate.

Ongoing commercial development, together with construction of new and expanded terminals within the Airport Central precinct, provides opportunities to include water and energy saving initiatives and incorporate renewable power generation, while innovative design features can be used to reduce service demand.

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39%

43%

Perth Airport makes up 43% of the Northern Main Drain catchment and 39% of the Southern Main Drain catchment.

17.2 Stormwater Drainage

Perth Airport sits within two of the 30 major stormwater catchments of the Swan and Canning rivers system. The Northern Main Drain (NMD) and the Southern Main Drain (SMD) are two open-channel main drains that traverse the airport estate, each draining one of the 30 major stormwater catchments. The NMD catchment (2,367 hectares) and the SMD catchment (2,633 hectares) extend from the top of the Darling Scarp down to the Swan River. The airport estate sits as close as 450 metres to the Swan River and makes up 43 per cent of the total NMD catchment and 39 per cent of the total SMD catchment. There are two smaller, primarily piped catchments—the Fauntleroy Avenue and North East catchments—also within the estate.

Upstream of the estate, the NMD catchment consists primarily of residential areas, while the SMD catchment is primarily residential but with an industrial area just outside the estate to the east. Downstream of the estate, the areas for both catchments are a mix of residential, commercial and light industrial.

Due to its low-lying, flat terrain and high water tables, the airport estate is prone to flooding. Stormwater management is required to minimise storm and flood risks that include personal harm, environmental harm, physical damage to infrastructure, and interruption or cancellation of aviation and non-aviation operations. Development controls are applied to account for 100-year flood levels.

The Water Corporation is responsible for managing Perth's main arterial stormwater drainage network, and local governments manage the local networks within their jurisdiction.

Prior to Perth Airport taking over management of the airport in July 1997, the Water Corporation administered the drainage infrastructure within the estate. Perth Airport is now responsible for the provision and management of stormwater infrastructure, comprising of piped and open channels, within the estate.

The stormwater infrastructure was designed to handle the peak stormwater inflows and storage requirements from upstream sources for 1997 levels. Subject to the suitable management of stormwater inflows into the estate to the legacy 1997 levels, Perth Airport controls outflow from the estate into external infrastructure to the peak flow rates as they were in 1997.

Infrastructure and capacity will be provided to meet the inflows and peak stormwater storage requirements from upstream sources for the legacy 1997 levels, as well as provide relevant peak stormwater storage for all development and infill within the estate since 1997.

Perth Airport has undertaken detailed stormwater modelling of the current network. With the legacy 1997 levels providing the baseline for monitoring peak outflows from the estate, an ultimate concept network has been prepared for the future development of the estate.

Water quality guidelines require controlled nutrient levels for stormwater discharge into the Swan River.

17.2.1 Existing Stormwater Network

17.2.1.1 Northern Main Drain

The NMD is an open unlined channel for most of its length through the airport estate. It drains three open channels that cross the eastern boundary: Poison Gully, which has its source near the top of the Darling Scarp, and two Water Corporation scheme drains. The two Water Corporation scheme drains which enter the estate, discharge directly into Munday Swamp. During times of high flow, the NMD on the estate reaches capacity and overflows into the southern end of Munday Swamp. When Munday Swamp reaches capacity, it overflows at its northern end and drains into the nearby NMD

Within the estate, the NMD drains the majority of the Airport Central precinct, the majority of the existing cross runway, just under half of the existing main runway, a small portion of the Airport West Precinct, and the Airport North precinct south of Kalamunda Road.

Perth Airport administers the NMD within the estate, the Water Corporation administers its two scheme drains, and the City of Kalamunda manages Poison Gully upstream of the estate. The City of Swan manages the NMD downstream off the estate (where it is known as Limestone Creek).

17.2.1.2 Southern Main Drain

The SMD is an open unlined channel for most of its length through the estate. It drains Crumpet Creek which has its source near the top of the Darling Scarp.

The SMD also drains the Airport South Precinct, just over half of the existing main runway, the majority of the Airport West precinct, some areas of Tonkin Highway and small areas of the neighbouring suburbs of Redcliffe and Cloverdale. It traverses the airside area and runs under the south end of the existing main runway.

A portion of the SMD that runs along the western boundary of the estate has been constructed as a living stream, which is an open channel that mimics the characteristics of natural streams, with suitable in-stream vegetation to improve water quality.

Perth Airport manages the SMD within the estate, the Water Corporation manages it downstream of the estate, and the City of Kalamunda manages the drain upstream (where it is known as Crumpet Creek).

17.2.1.3 Fauntleroy Avenue Catchment

The Fauntleroy Avenue Catchment is a small catchment within the estate. It is an underground piped network for the majority of its length. The network starts in the vicinity of T3 and T4 and drains directly to the Swan River in a pipeline managed by Perth Airport.

This catchment drains T3, T4, part of the terminal aprons, the nearby car parks and part of the General Aviation Area, all of which are in the Airport West precinct.

7.2.1.4 North East Catchment

The North East Catchment has its upper reach located mostly within the estate. It is an underground piped network within the estate. The catchment drains the part of the Airport North precinct north of Kalamunda Road. This is an industrial area, with some flows entering the estate from an adjacent industrial area and a nearby residential area.

The downstream estate boundary is the Great Eastern Highway Bypass. From the airport discharge point, the stormwater drains north into the Helena River which in turn drains into the Swan River.

Perth Airport manages the catchment within the estate, the City of Kalamunda manages the small section upstream, and the City of Swan manages a small section upstream and also the downstream section outside of the airport estate.

17.2.1.5 Gate 4 Catchment

The Gate 4 catchment is a small, piped network that drains to a retention basin where water is infiltrated into the ground or evaporates.

17.2.2 Drainage System Considerations

The development of the drainage system within the airport estate takes into consideration:

- external system capacity (upstream and downstream)
- · internal system capacity
- modifications required for future land uses
- design criteria to manage a one-in-100-year storm event for the existing runways (main runway and cross runway), the new runway, taxiways and the terminal buildings
- design criteria to manage a one-in-50-year storm event for major access roads, aprons and short-term car parking suitable service levels for other infrastructure and land development, based on stormwater industry standards
- managing environmental impact from airport and commercial development operations, and
- maintaining or improving stormwater runoff quality entering receiving environments by managing (retaining, detaining and treating, if required) stormwater runoff from constructed impervious surfaces generated by the first 15mm of rainfall at-source as much as practical.

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17.2.2.1 External System Capacity

Prior to the privatisation of the airport in 1997, the Water Corporation administered the NMD and SMD. As part of this management, land within the airport estate was used for the detention of stormwater due to stormwater infrastructure limitations downstream of the airport. Perth Airport now administers this legacy of detaining stormwater volumes generated upstream, based on 1997 levels.

Construction of the new runway, together with the planned development of the airport estate, will result in alternative uses for some of the land historically used for stormwater detention purposes. It is therefore essential that upstream authorities continue to increase detention volumes to provide suitable storage for all stormwater volume increases generated by off-airport developments since 1997.

Alternatively, approval would need to be obtained to increase outfall capacity to match inflow from upstream catchments as a minimum and ideally allow for a reasonable proportion of run-off generated on the airport site to be disposed of in the main drains. Perth Airport will continue to work with the Water Corporation and the surrounding local governments to achieve the required outcomes through increased upstream compensation, and/or downstream outfall capacity, to reduce the amount of compensation required on the airport estate.

17.2.2.2 Internal System Capacity

Extensive stormwater modelling was undertaken to develop a Master Drainage Strategy. This strategy is used to inform land use planning decisions and detailed stormwater designs, to help ensure the network is integrated and keeps peak flow discharge off the estate to the 1997 values, subject to inflows remaining the same.

The NMD and SMD have several limitations which contribute to the potential for localised flooding in peak flow events, including:

- · limited open channel capacity based on size
- flat gradients of the drains (the NMD is as flat as 1 in 3,300 and the SMD is as flat as 1 in 2,500)
- various culverts along the drain have insufficient capacity for the larger flows
- the 1,200-millimetre diameter pipe under the main runway and Horrie Miller Drive has insufficient capacity for the larger SMD flows
- the drains downstream of the airport have several restrictive culverts and bends, and
- maintenance of the drains downstream of the estate is not under Perth Airport control.

17.2.3 Drainage Network Development Plan

Perth Airport's Master Drainage Strategy was updated in 2022 to address future stormwater needs for the estate, ensuring that stormwater management continues to support both safety and environmental outcomes. The potential infrastructure projects include:

- various flood mitigation options within the airport estate
- the need for detention basins, and
- · realignment of sections of the NMD and SMD.

The run-off created by Perth Airport's ongoing development needs to be managed. The option of upgrading infrastructure downstream of the airport estate relies on the cooperation and timeliness of other parties. Initial system upgrades are likely to be undertaken on the airport estate, and discussions with State and local government authorities will continue to achieve the best overall outcome.

The Master Drainage Strategy is currently being updated in 2025 to reflect the latest Australian Rainfall and Runoff (ARR) guidelines, including updated rainfall intensities and temporal patterns.

Perth Airport has developed Design and Technical Requirements (DATR) to provide guidance about environmental and sustainability considerations to designers and consultants working on Perth Airport development projects. All new and upgraded stormwater infrastructure will be informed by the DATR, ensuring that the resulting infrastructure will:

- manage the run-off of stormwater through the estate to protect people, property and the environment
- minimise any adverse impact on the quality of run-off water that is entering the receiving water system
- minimise any adverse impact that the quantity of run-off has on the surrounding earth, vegetation, and infrastructure
- provide adequate stormwater capacity for the catchments and consider future developments within the catchments
- where available, incorporate the stormwater network into the capture and re-use system
- minimise, and where possible, avoid impact to the habitat of significant biodiversity values on the estate
- result in an extended or upgraded stormwater network with the most optimal lifecycle cost, and
- provide water-sensitive design integrated with the objectives of the Master Drainage Strategy.

Perth Airport will continue to review climate modelling inputs to assess how the latest projections can be integrated into future planning.

On-site investigations into contamination on the estate has indicated the presence of per-and polyfluoroalkyl substances (PFAS) on airport in soil, surface water and groundwater. Refer to Section 11.2.6 for more information.

As part of future developments that require alterations to surface water drains, including but not limited to the NMD and SMD, Perth Airport will, among other assessment criteria, consider the potential to improve water quality (particularly in relation to PFAS and nutrients) through design and construction methods such as culverting, diversions, or retention basins.

The drainage network development plan and stormwater catchments within the estate are shown in Figure 17-1.

17.2.3.1 Northern Main Drain

Modifications to the alignment and the configuration of the NMD are planned to facilitate Perth Airport's ongoing development. The current NMD alignment passes through land required for:

- the new runway
- extensions of terminals and a new terminal in the Airport Central precinct
- · proposed future extension of the cross runway, and
- · development of the Airport North precinct.

To support the construction of the Perth Airport's new runway (described in Section 13.4.1.3), the NMD drainage system will be realigned to ensure safe runway operations and sufficient drainage capacity during storm (up to one exceedance per year) and flood events. This realignment includes critical design features such as a pollutioncapturing basin and an infiltration basin, and measures to control the velocity and quality of existing water flow into Munday Swamp. Perth Airport's drainage design aims to reduce potential impacts on wetlands by preserving the current hydrological balance and minimising contamination risks from stormwater. The redirection of the high NMD flows through Munday Swamp is engineered to keep peak water levels and inundation times close to the current conditions, remaining within tolerance levels of the wetland flora and fauna.

Aboriginal traditional custodians have indicated that Poison Gully historically drained into Munday Swamp. The drainage works planned as part of the new runway project will realign and restore the original natural water flows, with a restored connection of Munday Swamp upstream to Poison Gully Creek (through the eastern hills area) and downstream to Limestone Creek (which connects to the Swan River).

Additional stormwater storage is planned for the development of the Airport North precinct.

17.2.3.2 Southern Main Drain

Modifications to the alignment and the configuration of the SMD will be required to allow Perth Airport's ongoing development. The current SMD alignment passes through land required for:

- the new runway, and
- development of the Airport South and Airport West precincts.

The planned development of these areas will incorporate a realignment of the SMD. Provision for additional storage is planned for the Airport Central, Airport South and Airport West precincts. The continued detention of the legacy 1997 storage volumes will be incorporated into the SMD network.

17.2.3.3 Fauntleroy Avenue Catchment

As consolidation of commercial air services continues, with the relocation of Qantas operations to the Airport Central precinct, land uses in the Airport West precinct will change and complementary upgrades to the drainage system will be progressively undertaken.

17.2.3.4 North East Catchment

The stormwater network within the North East Catchment consists of a pit and pipe system with three detention storage basins. The development of the network in this area was completed in 2015.

17.2.3.5 Wetlands

There are several wetland areas within the airport estate, including Munday Swamp.

For most of the time, wetland areas only obtain surface water from their own localised catchments or rising ground water following winter rains. However, in times of high flow, wetland areas may receive varying amounts of overflow water from the NMD or SMD.

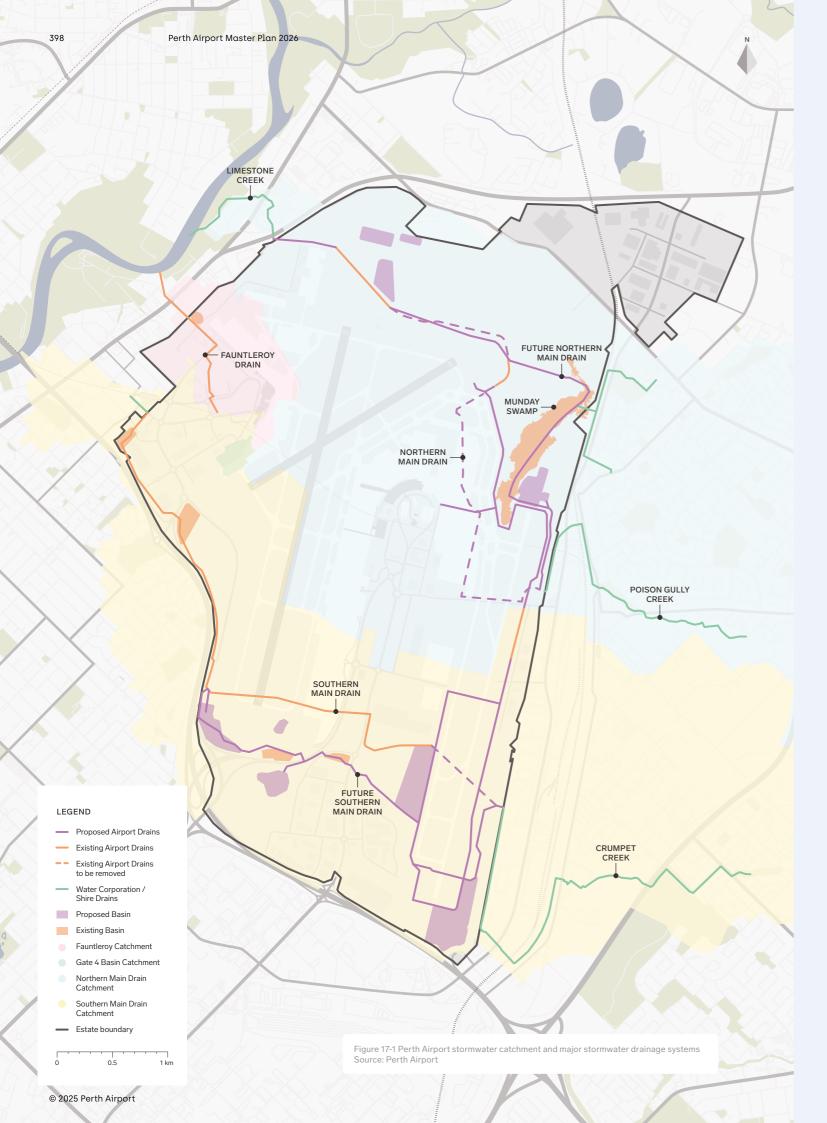
The airport drainage design endeavours to minimise adverse impacts on the wetlands on the airport estate resulting from changes to the hydrological regime, and potential contamination from stormwater. The redirection of the high flows of the NMD through Munday Swamp, as part of the construction of the new runway, has been designed to keep peak water levels and inundation times close to the existing scenario and within tolerance levels of the wetland flora and fauna.

17.2.3.6 Pollution Control

Pollution control is an integral part of any drainage system. All developments at Perth Airport must satisfy the requirements of the *Airports (Environment Protection) Regulations 1997* (AEP Regulations).

The greatest potential source of pollution related to airport operations has been identified as oil and fuel spills during aircraft servicing and refuelling. Hydrocarbons from these areas are intercepted prior to reaching the main drains or the Fauntleroy Avenue catchment outlet. Hydrocarbon interceptors are specified on all new apron construction projects that provide bays for aircraft refuelling operations. All apron constructions include these measures. Regular monitoring and maintenance are undertaken to ensure operational efficiency is continued.

Pollution control is also required to be implemented directly by tenants. This may be in the form of ensuring appropriate spill kits are available, hydrocarbon interceptors, or the installation of water-quality protection infrastructure and procedures. These requirements are administered through tenant Environmental Management Plans and tenant audits (described in Section 9).



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17.2.3.7 Water Quality and Management

The AEP Regulations require Perth Airport to manage water quality. Management measures will continue to be implemented so as to mitigate any impact on water run-off and quality resulting from development on the airport estate.

Water quality at Perth Airport is monitored on a quarterly basis. Perth Airport has a large groundwater monitoring bore network and surface water monitoring locations, which are consistently sampled during each monitoring event.

Estate tenants also undertake water quality monitoring, and this is reported to Perth Airport as part of each tenant's Annual Environment Report.

Further information on Perth Airport's water quality monitoring program is provided in Section 11.2.9.

Perth Airport requires individual leased sites on the estate to retain and infiltrate the first 15 millimetres of rainfall from each storm, in line with the State guidelines for stormwater management in urban areas. This helps to provide at-source pollution control and ecological protection for receiving waterways and avoid overland overflow into the Perth Airport drainage network.

17.2.3.8 Hydrogeology

Perth Airport is located over the Cloverdale groundwater flow system. The groundwater beneath the estate is an unconfined water table within the Bassendean Sand (the surface geological unit) and within the mostly unconfined Guildford Formation geological unit below that sand.

The general direction of the groundwater flows is northwest, towards the Swan River. The groundwater level sits at a shallow depth (surface to four metres below ground level) across the estate. Soil conditions vary, and seasonal changes are generally experienced, with various areas of the airport estate becoming inundated or waterlogged in the winter months

Site specific assessment of groundwater conditions will be required when proposed developments are likely to be impacted by groundwater.



17.3 Water Supply

The Water Corporation supplies potable water to the majority of the Perth Airport estate through three main connections which feed into the internal water ring main system. The ring mains provide redundancy in the water network to support upgrades, maintenance and unplanned events.

The internal main infrastructure is owned and managed by Perth Airport. The estate has a significant water pipe network, ranging from small domestic feeds to larger supply mains, and serves both potable and fire water needs.

The main supply points are located at Fauntleroy Avenue, Boud Avenue and Horrie Miller Drive.

17.3.1 Water Supply Development Strategy

Perth Airport works with the Water Corporation to ensure potable water supply for the airport estate. To meet the increased demand from aviation and commercial development, additional ring mains are planned to be installed within the estate to enhance supply continuity and water pressure. New supply points are also planned to be installed along Beyer Place (eastern boundary of the estate) as well as Waterhall Road, to service future development in the Airport North precinct. Where possible, Perth Airport will aim to avoid and minimise the impact to existing biodiversity on the estate when delivering water supply network upgrades or realignment.

The estate is a large user of water within its buildings, tenant usage and landscaping, and sustainable water management is a key priority for Perth Airport (described in Section 9).

Figure 17-2 shows current and future water potable water mains on the estate.



Where possible, Perth Airport will aim to avoid and minimise the impact to existing biodiversity on the estate when delivering sewage system upgrades or realignment.

17.4 Sewerage System

Perth Airport manages the sewer infrastructure within the estate. The existing wastewater collection system includes a sewer reticulation network that serves both tenants and aviation facilities. Wastewater is collected via gravity pipes and discharged at various locations to a network of 15 minor pumping stations and four major pumping stations via sewer pressure mains.

There are three discharge connection points from the estate into the Water Corporation network at the following locations:

- Airport South precinct (PS1)—discharges into a sewer on Kewdale Road near Collie Street in Welshpool
- Airport Central precinct (PS2—discharges into the Dubs Close pumping station at the southeast boundary of the estate, and
- Airport West precinct (PS12)—discharges into a sewer at the intersection of Moreing Street and Smiths Avenue in Redcliffe

Wastewater from the land north of Kalamunda Road, in the Airport North precinct, is conveyed to the Water Corporation network via a combination of gravity and pumping mains.

Sewer transfer systems, which accept waste taken from aircraft, are located in the Airport Central and Airport West precincts.

Figure 17-3 shows the locations of the major pumping stations, their associated wastewater catchment areas, and the discharge points into the Water Corporation network.

17.4.1 Sewerage System Development Strategy

Perth Airport engages with the Water Corporation on capacities and quality of sewage being discharged from the estate.

To meet projected demand driven by passenger numbers, proposed developments, and asset end-of-life replacements, the sewerage system is planned to be expanded by:

- upgrading all four major pumping stations to accommodate increased pump duty rates and ensure safe maintenance access
- realigning existing sewer lines to accommodate new major developments, and
- installing a new major pumping station in the Airport North precinct to service future development, which will connect to a new rising main that ultimately discharges into the Dubs Close pumping station.

Where possible, Perth Airport will aim to avoid and minimise the impact to existing biodiversity on the estate when delivering sewage system upgrades or realignment.



17.5 Power Supply

Perth Airport operates a 22KV embedded distribution network system that supplies power across most of the estate. The network has two supply connection points from the South West Interconnected System:

- Dunreath 22KV substation on the western boundary which supplies power to the Airport West precinct. This substation is supplied from Belmont 132KV substation outside the curtilage of the Perth Airport estate, and
- Munday 132KV substation on the airport eastern boundary, which supplies power into the Airport Central precinct. The precinct is supported by a natural gas fired co-generation power plant with waste heat recovery providing electrical power generation, space heat and cooling services to T2 and T1 Domestic.

The area of the Airport North precinct that is north of Kalamunda Road, is supplied directly from Western Power's distribution network and is not operated or managed by Perth Airport.

Emergency backup power to support Perth Airport operations in the event of a loss of supply from Western Power, is provided by a combination of the co-generation power plant (for terminals within the Airport Central precinct) and backup diesel generators.

17.5.1 Power Supply Development Strategy

The energy landscape continues to evolve on the transformational journey to reduce emissions. Perth Airport's approach to managing energy and delivering the best energy solutions to its customers is also evolving, requiring a holistic approach to energy procurement, renewable asset deployment, energy modelling, network modelling, energy data analysis, optimised infrastructure design, and capital and operational investment.

To support projected passenger growth and proposed land developments, Perth Airport plans to increase the capacity of the Munday and Dunreath substations to 60MW within the next five years. This includes adding 5MW from an on-site thermal plant and another 5MW from an on-site solar farm. Perth Airport has significant potential for future photovoltaic (solar) energy systems and continues to collaborate with Western Power to plan for the integration of solar generated power.

Perth Airport is also exploring options to power the future development of the Airport North precinct.

Figure 17-4 shows the proposed high-voltage upgrades across the Perth Airport estate, which include infrastructure works to support the new runway, new terminal and existing terminal expansions, new airport hotel, and the multi-storey car park developments. Electrical infrastructure is also planned for development to support electric ground equipment charging on aircraft aprons, landside electric vehicle charging facilities, and future electric aircraft requirements.

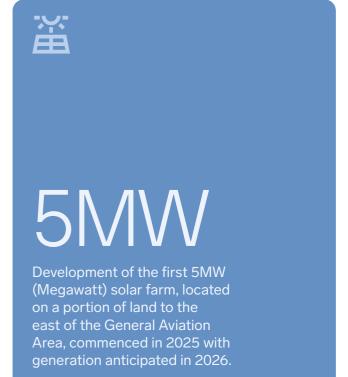
Where possible, Perth Airport will aim to avoid and minimise the impact to existing biodiversity on the estate when delivering power supply upgrades or realignment.

17.5.2 Renewable Energy

Perth Airport's use of renewable energy is a key element of the Perth Airport's Sustainability Framework to achieve sustainability goals.

Development of the first 5MW (Megawatt) solar farm, located on a portion of land to the east of the General Aviation Area, commenced in 2025 with generation anticipated in 2026. The solar farm will produce an annual energy yield of 10GWhr (Gigawatt-hour) and is planned to be complemented by other energy systems, including:

- electrification of vehicle and equipment fleets
- additional solar farms and the expansion of roof top solar systems
- battery energy storage systems supporting the solar farm and rooftop solar systems, and
- pyrolysis generation from wood waste.





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17.6 Irrigation

The majority of irrigation within the estate is sourced from groundwater. There are currently 21 groundwater bores located across the airport estate. Perth Airport recognises that groundwater supplies in the area are limited and therefore seeks to rationalise their use.

Future irrigation demands will be determined through assessment of groundwater monitoring data, resource analysis and usage requirements.

17.7 Gas Supply

Gas supply to the airport estate is currently provided by Synergy through a piped network mostly owned and maintained by ATCO Gas Australia. The existing system includes gas reticulation mains along Horrie Miller Drive, Brearley Avenue and Fauntleroy Avenue.

A high-pressure gas main runs along the western side of Horrie Miller Drive and services the Airport South precinct, Airport Central precinct and surrounding developments. This line is reticulated from a gas main running adjacent to Tonkin Highway at the southern end of the estate. A further gas pressure main supplies airport tenants located north of Kalamunda Road.

The gas mains under Perth Airport's direct control are the distribution mains that service T1 and T2 from the cogeneration power plant.

There are two high-pressure gas transmission lines that run through dedicated easements on the estate:

- Parmelia Pipeline, which passes through a portion of the Airport North precinct to the north of Kalamunda Road, and
- Dampier to Bunbury Natural Gas Pipeline, which runs from north of Kalamunda Road in the Airport North precinct and then along entire length of the eastern airport boundary.

17.7.1 Gas Supply Development Strategy

Perth Airport's commitment to decarbonisation (discussed in Section 7) is expected to result in a reduction to future gas use and network coverage. Consequently, no new gas services installations are forecast across the estate.

Perth Airport's co-generation power plant, which is gas powered, supplies the primary heating, ventilation and air conditioning (HVAC) system for T1 Domestic, T1 International and T2, as well as emergency backup power. A key component of the decarbonisation works will be the decommissioning of the co-generation power plant by 2027.

Perth Airport will undertake a staged approach to decommissioning the existing network.

A key component of the decarbonisation works will be the decommissioning of the co-generation power plant.

17.8 Communications

Reliable communications systems are necessary to ensure safe and efficient aircraft navigation and airport operations. Communications infrastructure within the airside boundary are primarily the responsibility of Perth Airport, although a substantial network of airside communication cables for control of navigational aids and associated communications, is owned by Airservices Australia.

Perth Airport has an extensive network of communications systems consisting of air-to-ground and point-to-point radio communications utilising:

- high frequency transmitter and receiver stations
- · microwave links, and
- land-line communications via underground cables and optic fibre.

Commercial telecommunications are provided throughout the airport estate by various third-party service providers, such as Telstra, Optus and NBN Co Ltd, whose distribution utilises the Perth Airport duct networks or their own dedicated containment.

17.8.1 Communications Development Strategy

Communications systems will be upgraded as required to maintain or increase capacity and effectiveness in line with Perth Airport's communications strategy. The strategy considers development of communications across the airport through the establishment of additional cable/fibre containment, equipment rooms and integration with fibre distribution centres. Perth Airport is also investigating the benefits of wireless communications networks for connectivity to a wider range of facilities, including airport operations, facility monitoring and for some commercial applications.

Existing communications services along Grogan Road need to be relocated for the construction of the new runway.

New communications rooms will be required to service the new terminal, with one of the rooms to be used as a hub for the fibre ring.

Following the relocation of Qantas operations to the Airport Central precinct, the existing communications hub at T3 and T4 will be repurposed and relocated to serve as a hub for the expanding Airport West commercial development.

A new communications hub will also need to be established within the Airport North precinct to service the planned developments.

The safeguarding of aviation communication, navigation and surveillance systems is discussed in Section 16.8.

Perth Airport Master Plan 2026



Appendix A: Acronyms

The following abbreviations are used in Master Plan 2026, in either text, figures or tables:

Abbreviation			
ABC	Airport Building Controller	FIFO	Fly-in fly-out
ACA	Airports Carbon Accreditation	FY	Financial Year
ACCC	Australian Competition and Consumer Commission	IATA	International Air Transport Association
ACES	Airport Consultative Environmental and Sustainability	ICAO	International Civil Aviation Organization
AEO	Airport Environment Officer	LPS	Local Planning Scheme
AEP Regulations	Airport (Environment Protection) Regulations 1997 (Cth)	MDP	Major Development Plan
AH Act	Aboriginal Heritage Act 1972 (WA)	MRS	Metropolitan Region Schemes
Airports Act	Airports Act 1996 (Cth)	NASF	National Airport Safeguarding Framework
Airservices	Airservices Australia	PAANTWG	Perth Airport Aircraft Noise Technical Working Group
ANEF	Australian Noise Exposure Forecast	PACBG	Perth Airport Community Briefing Group
ARFF	Aviation Rescue Fire Fighting Services	PAAT	Protected Airspace Assessment Tool
ATC	Air Traffic Control	PAG	Aboriginal Partnership Agreement Group
CASA	Civil Aviation Safety Authority	PCF	Planning Coordination Forum
CBD	Central Business District	PFAS	Per- and poly-Fluoroalkyl Substances
dBA	Decibels	РТА	Public Transport Authority
DBCA	Department of Biodiversity, Conservation and Attractions (WA)	RAAF	Royal Australian Air Force
DCCEEW	Department of Climate Change, Energy, the Environment and Water (Cth)	T1	Terminal 1
DFO	Direct Factory Outlet	T2	Terminal 2
DITRDCSA	Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts (Cth)	T3	Terminal 3
EMP	Environment Management Plan	T4	Terminal 4
EMS	Environmental Management System	WAPC	Western Australian Planning Commission
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Cth)		

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Appendix B: Glossary of Terms

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The following abbreviations are used in Master Plan 2026, in either text, figures or tables:

Term	Definition
03/21	Existing main runway designation (03L/21R once the new runway is operational)
03R/21L	New runway designation
06/24	Existing cross runway designation
Aerodrome/Airport	A defined area on land or water (including any buildings, installations, and equipment) intended to be used either whole or in part for the arrival, departure and surface movement of aircraft
Air Traffic Control	Air traffic control services provided by Airservices Australia to manage the safe and orderly flow of aircraft into, out of and between airports
Aircraft movement	Either a take-off or a landing by an aircraft
Aircraft sequencing	The process of air traffic control arranging spacing between aircraft to allow an orderly landing sequence with enough spacing to allow a landing aircraft to vacate the runway prior to the next one being cleared to land
Airport Lease	The lease agreement between Perth Airport Pty Ltd (formerly Westralia Airports Corporation) and the Commonwealt of Australia
Airport Central	The terminal area between the existing main and new runways, which currently houses Terminal 1 and Terminal 2
Airside	The movement area of an airport, adjacent terrain and buildings or portions thereof, access to which is controlled
Airspace	The portion of the earth's atmosphere over which a nation exercises jurisdiction over aircraft in flight
Airspace Management Plan	High-level document that provides the parameters for which detailed flight path planning can be undertaken prior to the construction of the New Runway. Section 160 of the Environment Protection and Biodiversity Conservation Act 1999 notes that before the NRP MDP can be approved, the Commonwealth Minister for Infrastructure and Transport must consider the advice of the Minister for the Environment and Energy in relation to the adoption of implementation of a plan for aviation airspace management involving aircraft operations that have, or will have, or are likely to have a significant impact on the environment.
Approach	The course to be followed by an aircraft in approaching for a landing or in joining a traffic pattern
Apron	A defined area on a land aerodrome intended to accommodate aircraft for the purpose of loading and unloading passengers, mail or cargo, or for fuelling, parking or maintenance
Contact bay	An aircraft parking position located at the terminal building, with direct terminal access via a gate
Corridor	A representation around an air route that indicates a range of flight paths that may be flown by aircraft
Duty runway	The runway or runways that have been nominated to be used by air traffic control at a given time
Dewatering	Removal or draining groundwater or surface water from a riverbed, construction site, caisson, or mine shaft, by pumping or evaporation
Estate	The grounds and tenancies associated with the Perth Airport land holdings
Flight path	The track an aircraft may fly. Flight paths include Air Routes, Departure and Arrival procedures, Approach procedures and flight tracks
Fly-in fly-out (FIFO)	Describes the pattern of work whereby employees are flown to and from their place of work
Landside	That portion of an aerodrome not designated as airside and to which the general public normally has free access

Term	Definition
Movement	Either a take-off or a landing by an aircraft
Non-contact bay	An aircraft parking position located away from the terminal building, without direct terminal access via a gate
Pavement	A prepared or semi prepared surface of a given depth for the purpose of providing added bearing capacity to an existing ground surface
Runway	A defined rectangular area on a land aerodrome, prepared for the take-off and landing or of aircraft along its length
Runway number	The number allocated to a runway end, being that whole number nearest to one -tenth of the magnetic bearing of the runway centreline (measured clockwise from magnetic north), when viewed from the aircraft approach. Single digit numbers so obtained are preceded by zero and where the final numeral of the bearing is five degrees, the number allocated is the next largest number
Runway mode	An operating mode is the use of a certain runway, or a combination of runways and the mode selected is based on a number of factors and documented selection criteria
Stand-off bay	An aircraft parking position located away from the terminal building, without direct terminal access via a gate, where aircraft temporarily wait before moving to a contact bay
Swing gate	A flexible aircraft gate that can be configured to serve both domestic and international flights, allowing for operational capacity adjustments in response to fluctuating demand
Taxiway	A defined path on an aerodrome established for the taxiing of aircraft and intended to provide a link between one part of the aerodrome and another, including:
	aircraft stand taxi lane: a portion of an apron designated as a taxiway and intended to provide access to aircraft stands only,
	 apron taxiway: a portion of a taxiway system located on an apron and intended to provide a through taxi route across the apron, and
	 rapid exit taxiway: a taxiway connected to a runway at an acute angle and designed to allow landing aircraft to turn off at higher speeds than are achieved on other exit taxiways, thereby minimising runway occupancy times.
Wetland	Land that is permanently, seasonally or intermittently waterlogged or inundated with water, but excludes watercourses.

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Appendix C: Land Use Definitions

The following land use terms are defined for clarity within Master Plan 2026:

Term	Definition
Animal establishment	Premises used for the breeding, boarding, training or caring of animals for commercial purposes but does not include animal husbandry — intensive or veterinary centre
Art gallery	Premises that are open to the public and where artworks are displayed for viewing or sale
Aviation activity*	Premises used for any activity for the arrival, departure, movement or operation of aircraft and includes aircraft aprons, helipads, heliports, runways, taxiways, areas set aside for the parking and or storage of aircraft either short or long term and the like
Aviation support facilities*	Premises used for aircraft maintenance facilities, catering facilities, engine-run areas, ground support equipment, transport depots and associated ground base activities necessarily for the orderly and efficient operations of aviation activity
Brewery	Premises the subject of a producer's licence authorising the production of beer, cider or spirits granted under the Liquor Control Act 1988
Bulky goods showroom	Premises used to sell by retail any goods and accessories that are principalling used for domestic purposes
Car park	Premises used primarily for parking vehicles whether open to the public or not but does not include any part of a public road used for parking or for a taxi rank, or any premises in which cars are displayed for sale
Child care premises	Premises where an education and care service as defined in the Education and Care Services National Law (Western Australia) section 5(1), other than a family day care service, is provided, or a child care service as defined in the Child Care Services Act 2007 section 4 is provided
Cinema/theatre	Premises where the public may view a motion picture or theatrical production
Civic use	Premises used by a government department, an instrumentality of the State or the local government for administrative, recreational or other purposes
Club premises	Premises used by a legally constituted club or association or other body of persons united by a common interest
Commercial vehicle parking	Premises used for parking of one or 2 commercial vehicles but does not include any part of a public road used for parking or for a taxi rank, or parking of commercial vehicles incidental to the predominant use of the land
Community purpose	Premises designed or adapted primarily for the provision of educational, social or recreational facilities or services by organisations involved in activities for community benefit
Consulting rooms	Premises used by no more than 2 health practitioners at the same time for the investigation or treatment of human injuries or ailments and for general outpatient care
Convenience store	Premises used for the retail sale of convenience goods commonly sold in supermarkets, delicatessens or newsagents, operated during hours which include but may extend beyond normal trading hours, and the floor area of which does not exceed 300 square metres net lettable area
Corrective institution	Premises used to hold and reform persons committed to it by a court, such as a prison or other type of detention facility
Educational establishment	Premises used for the purposes of providing education including premises used for a school, higher education institution, business college, academy or other educational institution, but does not include those uses falling within the definition of Training Facility
Environmental services	Premises intended to be used for a range of purposes including natural area retention and management, biodiversity offsets and other onsite environmental land uses as appropriate

Term	Definition
Exhibition centre	Premises used for the display, or display and sale, of materials of an artistic, cultural or historical nature including a museum
Fast food outlet/ lunch bar	Premises, including premises with a facility for drive through service, used for the preparation, sale and serving of food to customers in a form ready to be eaten without further preparation and primarily off the premises
Fuel depot	Premises used for the storage and sale in bulk of solid or liquid or gaseous fuel but does not include premises used as a service station or for the sale of fuel by retail into a vehicle for use by the vehicle
Funeral parlour	Premises used to prepare and store bodies for burial or cremation, and conduct funeral services
Garden centre	Premises used for the propagation, rearing and sale of plants, and the storage and sale of products associated with horticulture and gardens
General aviation and support facilities*	Premises used for any aviation and aviation related use of the land. General aviation commonly refers to that part of the aviation industry that engages in activity other than scheduled commercial airline activity. This may include charter operations, aeromedical operations, agricultural aviation businesses, aviation-based fire-fighting services, training and aerial work such as aerial photography and surveying. It also includes private, business, recreational and sport aviation activity and supporting businesses such as maintenance providers
Helipad*	Premises, not open to the public, used for taking off and landing of helicopters
Heliport*	Premises, not open to the public, used for taking off and landing of helicopters whether or not it includes a terminal building, or facilities for parking, storage or repair of helicopters
Hospital	Premises used as a hospital as defined in the Health Services Act 2016 section 8(4)
Hotel	Premises the subject of a hotel licence other than a small bar or tavern licence granted under the <i>Liquor Control Act</i> 1988 including any betting agency on the premises
Industry	Premises used for the manufacture, dismantling, processing, assembly, treating, testing, servicing, maintenance or repairing of goods, products, articles, materials or substances and includes facilities on the premises for the purpose of the storage of goods, the work of administration or accounting, the selling of goods by wholesale or retail, the provision of amenities for employees, or incidental purposes
Industry — light	Premises used for an industry where impacts on the amenity of the area in which the premises is located can be mitigated, avoided or managed
Liquor store — large	Premises the subject of a liquor store licence granted under the <i>Liquor Control Act 1988</i> with a net lettable area of more than 300 m2
Liquor store — small	Premises the subject of a liquor store licence granted under the <i>Liquor Control Act 1988</i> with a net lettable area of not more than 300 m2
Market	Premises used for the display and sale of goods from stalls by independent vendors
Medical centre	Premises other than a hospital used by 3 or more health practitioners at the same time for the investigation or treatment of human injuries or ailments and for general outpatient care
Motor vehicle, boat or caravan sales	Premises used to sell or hire motor vehicles, boats or caravans
Motor vehicle repair	Premises used for or in connection with electrical and mechanical repairs, or overhauls, to vehicles other than panel beating, spray painting or chassis reshaping of vehicles, or repairs to tyres other than recapping or re-treading of tyres
Motor vehicle wash	Premises primarily used to wash motor vehicles

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Term	Definition
Navigational aids*	Means any aircraft surveillance equipment, control tower, radars, visual and no-visual navigation aids and the like
Office	Premises used for administration, clerical, technical, professional or similar business activities
Passenger terminal*	Premises used as an airline passenger terminal or heliport with associated retail and passenger amenities
Place of worship	Premises used for religious activities such as a chapel, church, mosque, synagogue or temple
Reception centre	Premises used for hosted functions on formal or ceremonial occasions
Recreation — private	Premises that are used for indoor or outdoor leisure, recreation or sport, and not usually open to the public without charge
Resource recovery centre	Premises other than a waste disposal facility used for the recovery of resources from waste
Restaurant/cafe	Premises primarily used for the preparation, sale and serving of food and drinks for consumption on the premises by customers for whom seating is provided, including premises that are licenced under the <i>Liquor Control Act</i> 1988
Service station	Premises other than premises used for a transport depot, panel beating, spray painting, major repairs or wrecking, that are used for the retail sale of petroleum products, motor vehicle accessories and goods of an incidental or convenience nature, or the carrying out of greasing, tyre repairs and minor mechanical repairs to motor vehicles
Shop	Premises other than a bulky goods showroom, a liquor store — large or a liquor store — small used to sell goods by retail, to hire goods, or to provide services of a personal nature, including hairdressing or beauty therapy services
Shopping Centre	Means a group of shops, service offices and general offices and related activities, developed as an integrated unit together with the required on-site parking facilities;
Small bar	Premises the subject of a small bar licence granted under the <i>Liquor Control Act</i> 1988
Tavern	Premises the subject of a tavern licence granted under the <i>Liquor Control Act 1988</i>
Telecommunications infrastructure	Premises used to accommodate the infrastructure used by or in connection with a telecommunications network including any line, equipment, apparatus, tower, antenna, tunnel, duct, hole, pit or other structure related to the network
Tourist and visitor accommodation	Premises used to provide accommodation for guests, on a commercial basis, with no individual guest accommodated for a period or periods exceeding a total of 3 months in any 12-month period
Trade display	Premises used for the display of trade goods and equipment for the purpose of advertisement
Trade supplies	Premises used to sell by wholesale or retail, or to hire, assemble or manufacture any materials, tools, equipment, machinery or other goods used for purposes including goods which may be assembled or manufactured off the premises
Training Facility	Means premises, buildings or set of rooms, supplied with necessary resources and equipment, used to teach and train groups and individuals the skills and knowledge for a job or activity, such as computer skills, manual skills, machinery, vehicles, safety or other work skill training
Transport depot	Premises used primarily for the parking or garaging of 3 or more commercial vehicles including any ancillary maintenance or refuelling of those vehicles, and any ancillary storage of goods brought to the premises by those vehicles, and the transfer of goods or persons from one vehicle to another

Term	Definition
Utilities and Infrastructure	Means a road, traffic lights, automotive charging station, gas and fuel lines, pits and tanks, fire management facilities, stormwater drains, facilities for the reticulation of services and disposal of sewage and waste water, telecommunications facilities, electrical substations and electricity transmission facilities, including sustainable generation systems; and the like
Veterinary centre	Premises used to diagnose animal diseases or disorders, to surgically or medically treat animals, or for the prevention of animal diseases or disorders
Warehouse/storage	Premises including indoor or outdoor facilities used for the storage of goods, equipment, plant or materials, or the display or sale by wholesale of goods
Waste storage facility	Premises used to collect, consolidate, temporarily store or sort waste before transfer to a waste disposal facility or a resource recovery facility on a commercial scale
Workforce accommodation	Premises, which may include modular or relocatable buildings, used primarily for the accommodation of workers engaged in construction, resource or other industries on a temporary basis, and for any associated catering, sporting and recreation facilities for the occupants and authorised visitors

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Section 18: Appendices

^{*}Aviation-related land use as defined by Perth Airport

Part D

ANEC 0 Forecast movements by runway, aircraft and operation

RWY Aircraft ARR day ARR night ARR total DeP day DEP night DeP total Circuits AI 03 A20N 0.0000 0.3507 0.3507 0.2904 0.1178 0.4682 0.0000 0.7589 03 A21N 1.0849 0.4411 1.5260 0.7973 0.2767 1.0740 0.0000 2.6000 03 A319 0.3479 0.0495 0.4438 0.2650 0.0712 0.3397 0.0000 30.4603 03 A321 0.4767 0.3856 0.8603 0.2630 0.0575 0.3205 0.000 11808 03 A352 1.9342 1.1945 3.1288 0.9589 0.6384 1.5973 0.0000 1.2606 03 A353 0.4761 0.0210 0.6849 0.4329 0.1918 0.6247 0.000 1.2760 03 A353 0.4166 0.0027 0.1644 0.1260 0.0027 0.1282 0.0193 0.0548 0.0										
03 A21N 1.0849 0.4411 1.5260 0.7973 0.2767 1.0740 0.0000 2.6000 03 A319 0.3479 0.0959 0.4438 0.2685 0.0712 0.3397 0.0000 2.6000 03 A320 10.8740 4.7205 15.5945 9.4548 5.4110 14.8658 0.0000 30.4603 03 A321 0.4767 0.3836 0.8603 0.2630 0.0575 0.3205 0.0000 4.7260 03 A332 1.9342 1.1945 3.1288 0.9589 0.6384 1.5973 0.0000 4.7260 03 A333 0.4740 0.2110 0.6849 0.4329 0.1918 0.6247 0.0000 1.3096 03 A333 0.1616 0.0027 0.1644 0.1260 0.0027 0.1288 0.0000 0.2932 03 A345 0.0466 0.0000 0.0466 0.0055 0.0493 0.0548 0.0000 0.7953	RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
03 A319 0.3479 0.0959 0.4438 0.2685 0.0712 0.3397 0.0000 0.7836 03 A320 10.8740 4.7205 15.5945 9.4548 5.4110 14.8658 0.0000 30.4603 03 A321 0.4767 0.3836 0.8603 0.2650 0.0575 0.3205 0.0000 1.1808 03 A332 1.9342 1.1945 3.1288 0.9589 0.6384 1.5973 0.0000 4.7260 03 A333 0.4740 0.2110 0.6849 0.4329 0.1918 0.6247 0.0000 1.3096 03 A333 0.4616 0.0027 0.1644 0.1260 0.0027 0.1288 0.0000 0.2932 03 A343 0.0466 0.0000 0.0466 0.0055 0.0493 0.0548 0.0000 0.7973 03 A358 0.4192 0.0137 0.4329 0.3452 0.0192 0.3644 0.0000 0.0793	03	A20N	0.0000	0.3507	0.3507	0.2904	0.1178	0.4082	0.0000	0.7589
03 A320 10.8740 4.7205 15.5945 9.4548 5.4110 14.8658 0.0000 30.4603 03 A321 0.4767 0.3836 0.8603 0.2630 0.0575 0.3205 0.0000 1.1808 03 A332 1.9342 1.1945 3.1288 0.9589 0.6384 1.5973 0.0000 4.7260 03 A333 0.4740 0.2110 0.6849 0.4329 0.1918 0.6247 0.0000 1.5096 03 A333 0.1616 0.0027 0.1644 0.1260 0.0027 0.1288 0.0000 0.2932 03 A343 0.0466 0.0000 0.0466 0.0055 0.0493 0.0548 0.0000 0.7973 03 A3559 0.4192 0.0137 0.4329 0.3452 0.0192 0.3644 0.0000 0.7975 03 A356 0.0000 0.0384 0.0027 0.7068 0.7096 0.0000 1.2740 03 <t< td=""><td>03</td><td>A21N</td><td>1.0849</td><td>0.4411</td><td>1.5260</td><td>0.7973</td><td>0.2767</td><td>1.0740</td><td>0.0000</td><td>2.6000</td></t<>	03	A21N	1.0849	0.4411	1.5260	0.7973	0.2767	1.0740	0.0000	2.6000
03 A321 0.4767 0.3836 0.8603 0.2630 0.0575 0.3205 0.0000 1.1808 03 A332 1.9342 1.1945 3.1288 0.9589 0.6384 1.5973 0.0000 4.7260 03 A333 0.4740 0.2110 0.6849 0.4329 0.1918 0.6247 0.0000 1.3096 03 A333 0.1616 0.0027 0.1644 0.1260 0.0027 0.1288 0.0000 0.2932 03 A343 0.0466 0.0000 0.0466 0.0055 0.0493 0.0548 0.0000 0.1014 03 A359 0.4192 0.0137 0.4329 0.3452 0.0192 0.3644 0.0000 0.7973 03 A358 0.5233 0.0411 0.5644 0.0027 0.7068 0.7096 0.0000 1.2740 03 A775 0.9288 0.0466 0.9753 0.2137 0.0055 0.2192 0.0000 1.1945 <td< td=""><td>03</td><td>A319</td><td>0.3479</td><td>0.0959</td><td>0.4438</td><td>0.2685</td><td>0.0712</td><td>0.3397</td><td>0.0000</td><td>0.7836</td></td<>	03	A319	0.3479	0.0959	0.4438	0.2685	0.0712	0.3397	0.0000	0.7836
03 A332 1,9342 1,1945 3,1288 0,9589 0,6384 1,5973 0,0000 4,7260 03 A333 0,4740 0,2110 0,6849 0,4329 0,1918 0,6247 0,0000 1,3096 03 A333 0,1616 0,0027 0,1644 0,1260 0,0027 0,1288 0,0000 0,2932 03 A343 0,0466 0,0000 0,0466 0,0055 0,0493 0,0548 0,0000 0,1014 03 A359 0,4192 0,0137 0,4329 0,3452 0,0192 0,3644 0,0000 0,7973 03 A35K 0,0000 0,0384 0,0384 0,0027 0,0384 0,0411 0,0000 0,0795 03 A375 0,9288 0,0466 0,9753 0,2137 0,0055 0,2192 0,0000 1,1945 03 B350 0,6630 0,2904 0,9534 0,5425 0,1726 0,7151 0,0000 1,6685 <td< td=""><td>03</td><td>A320</td><td>10.8740</td><td>4.7205</td><td>15.5945</td><td>9.4548</td><td>5.4110</td><td>14.8658</td><td>0.0000</td><td>30.4603</td></td<>	03	A320	10.8740	4.7205	15.5945	9.4548	5.4110	14.8658	0.0000	30.4603
03 A3333 0.4740 0.2110 0.6849 0.4329 0.1918 0.6247 0.0000 1.3096 03 A339 0.1616 0.0027 0.1644 0.1260 0.0027 0.1288 0.0000 0.2932 03 A343 0.0466 0.0000 0.0466 0.0055 0.0493 0.0548 0.0000 0.7014 03 A359 0.4192 0.0137 0.4329 0.3452 0.0192 0.3644 0.0000 0.7973 03 A35K 0.0000 0.0384 0.0027 0.0384 0.0411 0.0000 0.0795 03 A388 0.5233 0.0411 0.5644 0.0027 0.7068 0.7096 0.0000 1.1240 03 A175 0.9288 0.0466 0.9753 0.2137 0.0055 0.2192 0.0000 1.1945 03 B190 1.2877 0.1068 1.3945 0.3945 0.0301 0.4247 0.0000 1.6885 03 B3	03	A321	0.4767	0.3836	0.8603	0.2630	0.0575	0.3205	0.0000	1.1808
03 A339 0.1616 0.0027 0.1644 0.1260 0.0027 0.1288 0.0000 0.2932 03 A343 0.0466 0.0000 0.0466 0.0055 0.0493 0.0548 0.0000 0.1014 03 A359 0.4192 0.0137 0.4329 0.3452 0.0192 0.3644 0.0000 0.7973 03 A35K 0.0000 0.0384 0.0027 0.0384 0.0411 0.0000 0.0795 03 A388 0.5233 0.0411 0.5644 0.0027 0.7068 0.7096 0.0000 1.2740 03 A175 0.9288 0.0466 0.9753 0.2137 0.0055 0.2192 0.0000 1.1945 03 B190 1.2877 0.1068 1.3945 0.3945 0.0301 0.4247 0.0000 1.8192 03 B350 0.6630 0.2904 0.9534 0.5425 0.1726 0.7151 0.0000 1.6685 03 B38	03	A332	1.9342	1.1945	3.1288	0.9589	0.6384	1.5973	0.0000	4.7260
03 A343 0.0466 0.0000 0.0466 0.0055 0.0493 0.0548 0.0000 0.1014 03 A359 0.4192 0.0137 0.4329 0.3452 0.0192 0.3644 0.0000 0.7973 03 A35K 0.0000 0.0384 0.0384 0.0027 0.7068 0.7096 0.0000 1.2740 03 A388 0.5233 0.0411 0.5644 0.0027 0.7068 0.7096 0.0000 1.2740 03 A175 0.9288 0.0466 0.9753 0.2137 0.0055 0.2192 0.0000 1.1945 03 B190 1.2877 0.1068 1.3945 0.3945 0.0301 0.4247 0.0000 1.6685 03 B350 0.6630 0.2904 0.9534 0.5425 0.1726 0.7151 0.0000 1.7753 03 B38M 0.7370 0.2027 0.9397 0.6932 0.1425 0.8356 0.0000 1.7753 <td< td=""><td>03</td><td>A333</td><td>0.4740</td><td>0.2110</td><td>0.6849</td><td>0.4329</td><td>0.1918</td><td>0.6247</td><td>0.0000</td><td>1.3096</td></td<>	03	A333	0.4740	0.2110	0.6849	0.4329	0.1918	0.6247	0.0000	1.3096
03 A359 0.4192 0.0137 0.4329 0.3452 0.0192 0.3644 0.0000 0.7973 03 A35K 0.0000 0.0384 0.0384 0.0027 0.0384 0.0411 0.0000 0.0795 03 A388 0.5233 0.0411 0.5644 0.0027 0.7068 0.7096 0.0000 1.2740 03 AT75 0.9288 0.0466 0.9753 0.2137 0.0055 0.2192 0.0000 1.1945 03 B190 1.2877 0.1068 1.3945 0.3945 0.0301 0.4247 0.0000 1.8192 03 B350 0.6630 0.2904 0.9534 0.5425 0.1726 0.7151 0.0000 1.6685 03 B38M 0.7370 0.2027 0.9397 0.6932 0.1425 0.8356 0.0000 1.7753 03 B712 0.0082 0.0000 0.0622 0.0164 0.0000 0.0164 0.0000 0.0603 <td< td=""><td>03</td><td>A339</td><td>0.1616</td><td>0.0027</td><td>0.1644</td><td>0.1260</td><td>0.0027</td><td>0.1288</td><td>0.0000</td><td>0.2932</td></td<>	03	A339	0.1616	0.0027	0.1644	0.1260	0.0027	0.1288	0.0000	0.2932
03 A35K 0.0000 0.0384 0.0384 0.0027 0.0384 0.0411 0.0000 0.0795 03 A388 0.5233 0.0411 0.5644 0.0027 0.7068 0.7096 0.0000 1.2740 03 AT75 0.9288 0.0466 0.9753 0.2137 0.0055 0.2192 0.0000 1.1945 03 B190 1.2877 0.1068 1.3945 0.3945 0.0301 0.4247 0.0000 1.8192 03 B350 0.6630 0.2904 0.9534 0.5425 0.1726 0.7151 0.0000 1.6685 03 B38M 0.7370 0.2027 0.9397 0.6932 0.1425 0.8356 0.0000 1.7753 03 B461 0.2575 0.1123 0.3699 0.2466 0.0603 0.3068 0.0000 0.0247 03 B733 0.0027 0.0411 0.0438 0.0110 0.0055 0.0164 0.0000 0.0603 <td< td=""><td>03</td><td>A343</td><td>0.0466</td><td>0.0000</td><td>0.0466</td><td>0.0055</td><td>0.0493</td><td>0.0548</td><td>0.0000</td><td>0.1014</td></td<>	03	A343	0.0466	0.0000	0.0466	0.0055	0.0493	0.0548	0.0000	0.1014
03 A388 0.5233 0.0411 0.5644 0.0027 0.7068 0.7096 0.0000 1.2740 03 AT75 0.9288 0.0466 0.9753 0.2137 0.0055 0.2192 0.0000 1.1945 03 B190 1.2877 0.1068 1.3945 0.3945 0.0301 0.4247 0.0000 1.8192 03 B350 0.6630 0.2904 0.9534 0.5425 0.1726 0.7151 0.0000 1.6685 03 B38M 0.7370 0.2027 0.9397 0.6932 0.1425 0.8356 0.0000 1.7753 03 B461 0.2575 0.1123 0.3699 0.2466 0.0603 0.3068 0.0000 0.6767 03 B712 0.0082 0.0000 0.0082 0.0164 0.0000 0.0164 0.0000 0.0603 03 B733 0.0027 0.0411 0.0438 0.0110 0.0055 0.0164 0.0000 0.0603 <td< td=""><td>03</td><td>A359</td><td>0.4192</td><td>0.0137</td><td>0.4329</td><td>0.3452</td><td>0.0192</td><td>0.3644</td><td>0.0000</td><td>0.7973</td></td<>	03	A359	0.4192	0.0137	0.4329	0.3452	0.0192	0.3644	0.0000	0.7973
03 AT75 0.9288 0.0466 0.9753 0.2137 0.0055 0.2192 0.0000 1.1945 03 B190 1.2877 0.1068 1.3945 0.3945 0.0301 0.4247 0.0000 1.8192 03 B350 0.6630 0.2904 0.9534 0.5425 0.1726 0.7151 0.0000 1.6685 03 B38M 0.7370 0.2027 0.9397 0.6932 0.1425 0.8356 0.0000 1.7753 03 B461 0.2575 0.1123 0.3699 0.2466 0.0603 0.3068 0.0000 0.6767 03 B712 0.0082 0.0000 0.0082 0.0164 0.0000 0.0164 0.0000 0.0164 0.0000 0.0603 03 B733 0.0027 0.0411 0.0438 0.0110 0.0055 0.0164 0.0000 0.0603 03 B734 0.1123 0.4301 0.5425 0.0685 0.0603 0.1288 0.0000	03	A35K	0.0000	0.0384	0.0384	0.0027	0.0384	0.0411	0.0000	0.0795
03 B190 1.2877 0.1068 1.3945 0.3945 0.0301 0.4247 0.0000 1.8192 03 B350 0.6630 0.2904 0.9534 0.5425 0.1726 0.7151 0.0000 1.6685 03 B38M 0.7370 0.2027 0.9397 0.6932 0.1425 0.8356 0.0000 1.7753 03 B461 0.2575 0.1123 0.3699 0.2466 0.0603 0.3068 0.0000 0.6767 03 B712 0.0082 0.0000 0.0082 0.0164 0.0000 0.0164 0.0000 0.0247 03 B733 0.0027 0.0411 0.0438 0.0110 0.0055 0.0164 0.0000 0.0603 03 B734 0.1123 0.4301 0.5425 0.0685 0.0603 0.1288 0.0000 0.6712 03 B737 1.3096 0.5452 1.8548 1.1726 0.3014 1.4740 0.0000 29.5699 <t< td=""><td>03</td><td>A388</td><td>0.5233</td><td>0.0411</td><td>0.5644</td><td>0.0027</td><td>0.7068</td><td>0.7096</td><td>0.0000</td><td>1.2740</td></t<>	03	A388	0.5233	0.0411	0.5644	0.0027	0.7068	0.7096	0.0000	1.2740
03 B350 0.6630 0.2904 0.9534 0.5425 0.1726 0.7151 0.0000 1.6685 03 B38M 0.7370 0.2027 0.9397 0.6932 0.1425 0.8356 0.0000 1.7753 03 B461 0.2575 0.1123 0.3699 0.2466 0.0603 0.3068 0.0000 0.6767 03 B712 0.0082 0.0000 0.0082 0.0164 0.0000 0.0164 0.0000 0.0247 03 B733 0.0027 0.0411 0.0438 0.0110 0.0055 0.0164 0.0000 0.6603 03 B734 0.1123 0.4301 0.5425 0.0685 0.0603 0.1288 0.0000 0.6712 03 B737 1.3096 0.5452 1.8548 1.1726 0.3014 1.4740 0.0000 29.5699 03 B738 11.7616 4.9315 16.6932 9.4082 3.4685 12.8767 0.0000 29.5699	03	AT75	0.9288	0.0466	0.9753	0.2137	0.0055	0.2192	0.0000	1.1945
03 B38M 0.7370 0.2027 0.9397 0.6932 0.1425 0.8356 0.0000 1.7753 03 B461 0.2575 0.1123 0.3699 0.2466 0.0603 0.3068 0.0000 0.6767 03 B712 0.0082 0.0000 0.0082 0.0164 0.0000 0.0164 0.0000 0.0247 03 B733 0.0027 0.0411 0.0438 0.0110 0.0055 0.0164 0.0000 0.0603 03 B734 0.1123 0.4301 0.5425 0.0685 0.0603 0.1288 0.0000 0.6712 03 B737 1.3096 0.5452 1.8548 1.1726 0.3014 1.4740 0.0000 3.3288 03 B738 11.7616 4.9315 16.6932 9.4082 3.4685 12.8767 0.0000 29.5699 03 B739 0.0164 0.0630 0.0795 0.0548 0.0411 0.0959 0.0000 0.1753	03	B190	1.2877	0.1068	1.3945	0.3945	0.0301	0.4247	0.0000	1.8192
03 B461 0.2575 0.1123 0.3699 0.2466 0.0603 0.3068 0.0000 0.6767 03 B712 0.0082 0.0000 0.0164 0.0000 0.0164 0.0000 0.0247 03 B733 0.0027 0.0411 0.0438 0.0110 0.0055 0.0164 0.0000 0.0603 03 B734 0.1123 0.4301 0.5425 0.0685 0.0603 0.1288 0.0000 0.6712 03 B737 1.3096 0.5452 1.8548 1.1726 0.3014 1.4740 0.0000 3.3288 03 B738 11.7616 4.9315 16.6932 9.4082 3.4685 12.8767 0.0000 29.5699 03 B739 0.0164 0.0630 0.0795 0.0548 0.0411 0.0959 0.0000 0.1753	03	B350	0.6630	0.2904	0.9534	0.5425	0.1726	0.7151	0.0000	1.6685
03 B712 0.0082 0.0000 0.0164 0.0000 0.0164 0.0000 0.0247 03 B733 0.0027 0.0411 0.0438 0.0110 0.0055 0.0164 0.0000 0.0603 03 B734 0.1123 0.4301 0.5425 0.0685 0.0603 0.1288 0.0000 0.6712 03 B737 1.3096 0.5452 1.8548 1.1726 0.3014 1.4740 0.0000 3.3288 03 B738 11.7616 4.9315 16.6932 9.4082 3.4685 12.8767 0.0000 29.5699 03 B739 0.0164 0.0630 0.0795 0.0548 0.0411 0.0959 0.0000 0.1753	03	B38M	0.7370	0.2027	0.9397	0.6932	0.1425	0.8356	0.0000	1.7753
03 B733 0.0027 0.0411 0.0438 0.0110 0.0055 0.0164 0.0000 0.0603 03 B734 0.1123 0.4301 0.5425 0.0685 0.0603 0.1288 0.0000 0.6712 03 B737 1.3096 0.5452 1.8548 1.1726 0.3014 1.4740 0.0000 3.3288 03 B738 11.7616 4.9315 16.6932 9.4082 3.4685 12.8767 0.0000 29.5699 03 B739 0.0164 0.0630 0.0795 0.0548 0.0411 0.0959 0.0000 0.1753	03	B461	0.2575	0.1123	0.3699	0.2466	0.0603	0.3068	0.0000	0.6767
03 B734 0.1123 0.4301 0.5425 0.0685 0.0603 0.1288 0.0000 0.6712 03 B737 1.3096 0.5452 1.8548 1.1726 0.3014 1.4740 0.0000 3.3288 03 B738 11.7616 4.9315 16.6932 9.4082 3.4685 12.8767 0.0000 29.5699 03 B739 0.0164 0.0630 0.0795 0.0548 0.0411 0.0959 0.0000 0.1753	03	B712	0.0082	0.0000	0.0082	0.0164	0.0000	0.0164	0.0000	0.0247
03 B737 1.3096 0.5452 1.8548 1.1726 0.3014 1.4740 0.0000 3.3288 03 B738 11.7616 4.9315 16.6932 9.4082 3.4685 12.8767 0.0000 29.5699 03 B739 0.0164 0.0630 0.0795 0.0548 0.0411 0.0959 0.0000 0.1753	03	B733	0.0027	0.0411	0.0438	0.0110	0.0055	0.0164	0.0000	0.0603
03 B738 11.7616 4.9315 16.6932 9.4082 3.4685 12.8767 0.0000 29.5699 03 B739 0.0164 0.0630 0.0795 0.0548 0.0411 0.0959 0.0000 0.1753	03	B734	0.1123	0.4301	0.5425	0.0685	0.0603	0.1288	0.0000	0.6712
03 B739 0.0164 0.0630 0.0795 0.0548 0.0411 0.0959 0.0000 0.1753	03	B737	1.3096	0.5452	1.8548	1.1726	0.3014	1.4740	0.0000	3.3288
	03	B738	11.7616	4.9315	16.6932	9.4082	3.4685	12.8767	0.0000	29.5699
03 B744 0.0055 0.0055 0.0110 0.0000 0.0082 0.0082 0.0000 0.0192	03	B739	0.0164	0.0630	0.0795	0.0548	0.0411	0.0959	0.0000	0.1753
	03	B744	0.0055	0.0055	0.0110	0.0000	0.0082	0.0082	0.0000	0.0192
03 B748 0.0055 0.0000 0.0027 0.0000 0.0027 0.0000 0.0082	03	B748	0.0055	0.0000	0.0055	0.0027	0.0000	0.0027	0.0000	0.0082
03 B763 0.0027 0.0027 0.0055 0.0027 0.0027 0.0055 0.0000 0.0110	03	B763	0.0027	0.0027	0.0055	0.0027	0.0027	0.0055	0.0000	0.0110

RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
03	B772	0.0027	0.0027	0.0055	0.0027	0.0000	0.0027	0.0000	0.0082
03	B77W	0.0082	0.2000	0.2082	0.0082	0.2411	0.2493	0.0000	0.4575
03	B788	0.2658	0.0932	0.3589	0.2356	0.1342	0.3699	0.0000	0.7288
03	B789	1.0411	0.3096	1.3507	0.3616	0.6548	1.0164	0.0000	2.3671
03	B78X	0.2301	0.9178	1.1479	0.3425	0.9096	1.2521	0.0000	2.4000
03	BD-700- 1A11	0.0548	0.0137	0.0685	0.0548	0.0082	0.0630	0.0000	0.1315
03	BE30	1.1260	0.0740	1.2000	0.5452	0.0301	0.5753	0.0000	1.7753
03	BEC58P	0.0438	0.0000	0.0438	0.0301	0.0000	0.0301	0.0000	0.0740
03	C130	0.0000	0.0000	0.0000	0.0055	0.0000	0.0055	0.0000	0.0055
03	C206	0.3589	0.0986	0.4575	0.1178	0.1836	0.3014	0.0000	0.7589
03	C441	0.8027	0.0932	0.8959	0.3589	0.0466	0.4055	0.0000	1.3014
03	C560	0.1096	0.0329	0.1425	0.1123	0.0466	0.1589	0.0000	0.3014
03	CIT3	0.0027	0.0000	0.0027	0.0027	0.0000	0.0027	0.0000	0.0055
03	CL60	0.0959	0.0356	0.1315	0.1123	0.0082	0.1205	0.0000	0.2521
03	CNA172	0.0055	0.0082	0.0137	0.0055	0.0082	0.0137	0.0000	0.0274
03	CNA208	0.0000	0.0027	0.0027	0.0027	0.0000	0.0027	0.0000	0.0055
03	CNA510	0.0000	0.0027	0.0027	0.0082	0.0000	0.0082	0.0000	0.0110
03	CNA55B	0.1288	0.0274	0.1562	0.0822	0.0110	0.0932	0.0000	0.2493
03	CNA750	0.0000	0.0055	0.0055	0.0055	0.0000	0.0055	0.0000	0.0110
03	DH8A	0.9726	0.0466	1.0192	0.3562	0.0137	0.3699	0.0000	1.3890
03	DH8C	2.2630	0.1342	2.3973	0.6904	0.0712	0.7616	0.0000	3.1589
03	DH8D	3.1644	0.0548	3.2192	1.4164	0.0630	1.4795	0.0000	4.6986
03	E170	0.2301	0.0959	0.3260	0.1397	0.0438	0.1836	0.0000	0.5096
03	E190	1.9452	0.3370	2.2822	0.6274	0.1096	0.7370	0.0000	3.0192
03	F100	12.2493	2.9808	15.2301	7.8192	3.5918	11.4110	0.0000	26.6411
03	F70	0.7370	0.1781	0.9151	0.3671	0.0110	0.3781	0.0000	1.2932

Part D

416

RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
03	FAL900EX	0.0493	0.0192	0.0685	0.0521	0.0027	0.0548	0.0000	0.1233
03	GIV	0.0137	0.0055	0.0192	0.0192	0.0027	0.0219	0.0000	0.0411
03	GL7T	0.1014	0.0384	0.1397	0.0740	0.0274	0.1014	0.0000	0.2411
03	GV	0.0192	0.0055	0.0247	0.0219	0.0000	0.0219	0.0000	0.0466
03	H25B	0.1014	0.0219	0.1233	0.0740	0.0219	0.0959	0.0000	0.2192
03	IA1125	0.0055	0.0000	0.0055	0.0000	0.0000	0.0000	0.0000	0.0055
03	LJ35	0.0630	0.0082	0.0712	0.0685	0.0000	0.0685	0.0000	0.1397
03	MU3001	0.0164	0.0000	0.0164	0.0164	0.0000	0.0164	0.0000	0.0329
03	PA31	0.2192	0.0137	0.2329	0.1041	0.0000	0.1041	0.0000	0.3370
03	SF34	2.7918	0.3370	3.1288	2.0740	0.2575	2.3315	0.0000	5.4603
03	SW4	0.7699	0.0384	0.8082	0.4164	0.0055	0.4219	0.0000	1.2301
03 Total		63.4301	20.5041	83.9342	42.5068	18.3836	60.8904	0.0000	144.8247
06	A20N	0.0000	0.0548	0.0548	0.0356	0.0027	0.0384	0.0000	0.0932
06	A21N	0.1370	0.0575	0.1945	0.4548	0.1479	0.6027	0.0000	0.7973
06	A319	0.0219	0.0027	0.0247	0.1479	0.0192	0.1671	0.0000	0.1918
06	A320	1.1918	0.5233	1.7151	3.7562	1.9753	5.7315	0.0000	7.4466
06	A321	0.0603	0.0658	0.1260	0.3041	0.2767	0.5808	0.0000	0.7068
06	A332	0.2082	0.2000	0.4082	1.0767	0.8192	1.8959	0.0000	2.3041
06	A333	0.0822	0.0164	0.0986	0.1068	0.0575	0.1644	0.0000	0.2630
06	A339	0.0164	0.0000	0.0164	0.0000	0.0000	0.0000	0.0000	0.0164
06	A343	0.0027	0.0000	0.0027	0.0000	0.0000	0.0000	0.0000	0.0027
06	A359	0.0192	0.0000	0.0192	0.0082	0.0000	0.0082	0.0000	0.0274
06	A35K	0.0027	0.0000	0.0027	0.0000	0.0000	0.0000	0.0000	0.0027
06	AT75	0.0877	0.0000	0.0877	0.8438	0.2027	1.0466	0.0000	1.1342
06	B190	0.0849	0.0082	0.0932	0.9945	0.5041	1.4986	0.0000	1.5918
06	B350	0.0548	0.0055	0.0603	0.4411	0.0877	0.5288	0.0000	0.5890

RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
06	B38M	0.0849	0.0384	0.1233	0.1068	0.0164	0.1233	0.0000	0.2466
06	B461	0.0219	0.0082	0.0301	0.1726	0.0438	0.2164	0.0000	0.2466
06	B712	0.0000	0.0000	0.0000	0.0082	0.0000	0.0082	0.0000	0.0082
06	B733	0.0027	0.0055	0.0082	0.0137	0.0110	0.0247	0.0000	0.0329
06	B734	0.0219	0.0932	0.1151	0.1041	0.1151	0.2192	0.0000	0.3342
06	B737	0.1260	0.0274	0.1534	0.7671	0.1973	0.9644	0.0000	1.1178
06	B738	1.3370	0.5616	1.8986	6.0329	2.8849	8.9178	0.0000	10.8164
06	B739	0.0027	0.0027	0.0055	0.0000	0.0000	0.0000	0.0000	0.0055
06	B772	0.0000	0.0000	0.0000	0.0000	0.0027	0.0027	0.0000	0.0027
06	B77W	0.0000	0.0027	0.0027	0.0000	0.0164	0.0164	0.0000	0.0192
06	B788	0.0082	0.0027	0.0110	0.0000	0.0000	0.0000	0.0000	0.0110
06	B789	0.0986	0.0055	0.1041	0.3068	0.0164	0.3233	0.0000	0.4274
06	B78X	0.0137	0.0795	0.0932	0.0110	0.0356	0.0466	0.0000	0.1397
06	BD-700- 1A11	0.0082	0.0000	0.0082	0.0384	0.0082	0.0466	0.0000	0.0548
06	BE30	0.1589	0.0055	0.1644	1.0411	0.2247	1.2658	0.0000	1.4301
06	BEC58P	0.0164	0.0000	0.0164	0.0329	0.0000	0.0329	0.0000	0.0493
06	C130	0.0000	0.0000	0.0000	0.0027	0.0027	0.0055	0.0000	0.0055
06	C206	0.0521	0.0027	0.0548	0.2274	0.1425	0.3699	0.0000	0.4247
06	C441	0.0904	0.0137	0.1041	0.4493	0.3425	0.7918	0.0000	0.8959
06	C560	0.0164	0.0055	0.0219	0.0603	0.0164	0.0767	0.0000	0.0986
06	CL60	0.0164	0.0000	0.0164	0.0384	0.0055	0.0438	0.0000	0.0603
06	CNA172	0.0055	0.0000	0.0055	0.0027	0.0000	0.0027	0.0000	0.0082
06	CNA208	0.0000	0.0000	0.0000	0.0082	0.0000	0.0082	0.0000	0.0082
06	CNA510	0.0027	0.0000	0.0027	0.0027	0.0000	0.0027	0.0000	0.0055
06	CNA55B	0.0055	0.0000	0.0055	0.0603	0.0274	0.0877	0.0000	0.0932
06	CNA750	0.0000	0.0000	0.0000	0.0027	0.0027	0.0055	0.0000	0.0055

DWW	Almanasti	ADD des	ADD while	ADDistal	DED des	DED winks	DEDAMA	Cimenita	A11
RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
06	DH8A	0.0795	0.0000	0.0795	0.7616	0.2411	1.0027	0.0000	1.0822
06	DH8C	0.1973	0.0082	0.2055	1.7260	0.8301	2.5562	0.0000	2.7616
06	DH8D	0.4192	0.0027	0.4219	1.7507	1.0658	2.8164	0.0000	3.2384
06	E170	0.0110	0.0110	0.0219	0.2055	0.0959	0.3014	0.0000	0.3233
06	E190	0.1890	0.0110	0.2000	1.4521	0.8548	2.3068	0.0000	2.5068
06	EMB190	0.0027	0.0000	0.0027	0.0000	0.0027	0.0027	0.0000	0.0055
06	F100	1.3041	0.0603	1.3644	4.1397	4.0767	8.2164	0.0000	9.5808
06	F70	0.1260	0.0027	0.1288	0.5836	0.2767	0.8603	0.0000	0.9890
06	FAL900EX	0.0000	0.0000	0.0000	0.0329	0.0137	0.0466	0.0000	0.0466
06	GIV	0.0027	0.0000	0.0027	0.0274	0.0000	0.0274	0.0000	0.0301
06	GL7T	0.0219	0.0082	0.0301	0.0438	0.0137	0.0575	0.0000	0.0877
06	GV	0.0000	0.0027	0.0027	0.0110	0.0027	0.0137	0.0000	0.0164
06	H25B	0.0055	0.0027	0.0082	0.0493	0.0164	0.0658	0.0000	0.0740
06	IA1125	0.0000	0.0000	0.0000	0.0027	0.0000	0.0027	0.0000	0.0027
06	LJ35	0.0055	0.0000	0.0055	0.0274	0.0055	0.0329	0.0000	0.0384
06	MU3001	0.0000	0.0027	0.0027	0.0027	0.0027	0.0055	0.0000	0.0082
06	PA31	0.0795	0.0055	0.0849	0.2384	0.0658	0.3041	0.0000	0.3890
06	SF34	0.4466	0.0027	0.4493	1.2192	0.0411	1.2603	0.0000	1.7096
06	SW4	0.0603	0.0000	0.0603	0.6000	0.0247	0.6247	0.0000	0.6849
06 Total		7.0110	1.9096	8.9205	30.5342	15.8356	46.3699	0.0000	55.2904
21	A20N	0.0000	0.3315	0.3315	0.1808	0.1123	0.2932	0.0000	0.6247
21	A21N	0.6000	0.4192	1.0192	1.5726	0.3726	1.9452	0.0000	2.9644
21	A319	0.1479	0.0959	0.2438	0.2877	0.0438	0.3315	0.0000	0.5753
21	A320	8.9041	6.6685	15.5726	13.3342	6.2521	19.5863	0.0000	35.1589
21	A321	0.2219	0.1342	0.3562	0.6575	0.3068	0.9644	0.0000	1.3205
21	A332	0.9863	1.3753	2.3616	2.0192	1.6137	3.6329	0.0000	5.9945

RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
21	A333	0.4685	0.2411	0.7096	0.5644	0.2027	0.7671	0.0000	1.4767
21	A339	0.0986	0.0055	0.1041	0.1562	0.0000	0.1562	0.0000	0.2603
21	A343	0.0274	0.0000	0.0274	0.0000	0.0192	0.0192	0.0000	0.0466
21	A359	0.2849	0.0301	0.3151	0.3726	0.0274	0.4000	0.0000	0.7151
21	A35K	0.0000	0.0685	0.0685	0.0000	0.0685	0.0685	0.0000	0.1370
21	A388	1.3233	0.0822	1.4055	0.0027	1.2548	1.2575	0.0000	2.6630
21	AT75	0.3699	0.0247	0.3945	0.6877	0.1589	0.8466	0.0000	1.2411
21	ATR72- 212A	0.0000	0.0027	0.0027	0.0137	0.0000	0.0137	0.0000	0.0164
21	B190	0.6356	0.0548	0.6904	1.0247	0.3562	1.3808	0.0000	2.0712
21	B350	0.6137	0.3973	1.0110	0.9014	0.1616	1.0630	0.0000	2.0740
21	B38M	0.7342	0.2932	1.0274	1.2658	0.2685	1.5342	0.0000	2.5616
21	B461	0.2986	0.1671	0.4658	0.4055	0.0795	0.4849	0.0000	0.9507
21	B712	0.0164	0.0000	0.0164	0.0027	0.0000	0.0027	0.0000	0.0192
21	B733	0.0137	0.0274	0.0411	0.0411	0.0411	0.0822	0.0000	0.1233
21	B734	0.1041	0.1781	0.2822	0.2329	0.4658	0.6986	0.0000	0.9808
21	B737	1.2164	0.8384	2.0548	1.8192	0.3808	2.2000	0.0000	4.2548
21	B738	6.4986	4.9890	11.4877	15.5151	5.1863	20.7014	0.0000	32.1890
21	B739	0.0110	0.0795	0.0904	0.0301	0.0493	0.0795	0.0000	0.1699
21	B744	0.0082	0.0027	0.0110	0.0055	0.0082	0.0137	0.0000	0.0247
21	B748	0.0027	0.0027	0.0055	0.0082	0.0000	0.0082	0.0000	0.0137
21	B763	0.0027	0.0000	0.0027	0.0027	0.0000	0.0027	0.0000	0.0055
21	B772	0.0000	0.0055	0.0055	0.0000	0.0055	0.0055	0.0000	0.0110
21	B77W	0.0219	0.3370	0.3589	0.0000	0.3014	0.3014	0.0000	0.6603
21	B788	0.3370	0.1534	0.4904	0.3041	0.1808	0.4849	0.0000	0.9753
21	B789	1.3370	0.8493	2.1863	0.9945	1.6082	2.6027	0.0000	4.7890
21	B78X	0.4849	0.9726	1.4575	0.6795	0.7425	1.4219	0.0000	2.8795

Part D

421

21 BB-700- 1A11 21 BE30 0.8274 0.1014 0.9288 1.3151 0.1452 1.4603 0.0000 0.150 21 BE50 0.8274 0.1014 0.9288 1.3151 0.1452 1.4603 0.0000 0.2389 21 BEC58P 0.0411 0.0027 0.0438 0.0521 0.0000 0.0521 0.0000 0.095 21 C130 0.0110 0.0000 0.0110 0.0055 0.0027 0.0082 0.0000 0.019 21 C206 0.2301 0.0521 0.2822 0.3342 0.2438 0.5781 0.0000 0.860 21 C441 0.4740 0.1288 0.6027 0.7233 0.2356 0.9589 0.0000 1.561 21 C560 0.1370 0.0767 0.2137 0.1342 0.0685 0.2027 0.0000 0.416 21 C13 0.0000 0.0000 0.0000 0.0027 0.0000 0.0027 21 CL60 0.2110 0.0384 0.2493 0.2356 0.0329 0.2685 0.0000 0.517 21 CNA172 0.0000 0.0000 0.0000 0.0027 0.0000 0.0027 21 CNA208 0.0027 0.0082 0.0110 0.0027 0.0000 0.0027 21 CNA20B 0.0027 0.0082 0.0110 0.0027 0.0000 0.0025 21 CNA558 0.0712 0.0082 0.0795 0.1178 0.0082 0.1260 0.0000 0.013 21 CNA750 0.0055 0.00027 0.0082 0.0055 0.0000 0.0055 0.0000 0.013 21 DHBA 0.4438 0.0411 0.4849 1.0110 0.1671 1.1781 0.0000 1.653 21 DHBA 0.4458 0.0411 0.4849 1.0110 0.1671 1.1781 0.0000 1.653 21 DHBA 0.4458 0.0411 0.4849 1.0110 0.1671 1.1781 0.0000 5.482 21 E170 0.1452 0.1342 0.2795 0.1773 0.0685 0.2658 0.0000 0.545 21 E170 0.1452 0.1342 0.2795 0.1773 0.0685 0.2658 0.0000 0.545 21 E170 0.1452 0.1342 0.2795 0.1973 0.0685 0.2658 0.0000 0.545 21 E170 0.7781 0.1452 0.9233 1.6082 0.6685 2.2767 0.0000 3.0794 21 F100 9.0164 4.3726 13.3890 12.5452 4.8603 17.4055 0.0000 3.0794 21 F100 9.0164 4.3726 13.3890 12.5452 4.8603 17.4055 0.0000 0.093										
1A11 21 BE30 0.8274 0.1014 0.9288 1.3151 0.1452 1.4603 0.0000 2.389 21 BEC58P 0.0411 0.0027 0.0438 0.0521 0.0000 0.0521 0.0000 0.079 21 C130 0.0110 0.0000 0.0110 0.0055 0.0027 0.0082 0.0000 0.019 21 C206 0.2301 0.0521 0.2822 0.3342 0.2438 0.5781 0.0000 0.860 21 C441 0.4740 0.1288 0.6027 0.7233 0.2356 0.9589 0.0000 1.561 21 C560 0.1370 0.0767 0.2137 0.1342 0.0685 0.2027 0.0000 0.416 21 CIT3 0.0000 0.0000 0.0000 0.0027 0.0000 0.0027 0.0000 0.022 21 CL60 0.2110 0.0384 0.2493 0.2356 0.0329 0.2685 0.0000 0.517 21 CNA172 0.0000 0.0000 0.0000 0.0027 0.0000 0.0027 0.0000 0.022 21 CNA208 0.0027 0.0082 0.0110 0.0027 0.0110 0.0137 0.0000 0.022 21 CNA510 0.0055 0.0000 0.0055 0.0055 0.0000 0.0055 0.0000 0.011 21 CNA55B 0.0712 0.0082 0.0795 0.1178 0.0082 0.1260 0.0000 0.013 21 DH8A 0.4438 0.0411 0.4849 1.0110 0.1671 1.1781 0.0000 1.663 21 DH8C 1.0082 0.1178 1.1260 2.0247 0.5589 2.5836 0.0000 3.709 21 DH8D 1.9699 0.0384 2.0082 2.7562 0.7178 3.4740 0.0000 3.402 21 E170 0.1452 0.1342 0.2795 0.1973 0.0685 0.2658 0.0000 0.545 21 E190 0.7781 0.1452 0.9233 1.6082 0.6685 2.2767 0.0000 3.200 21 F100 9.0164 4.3726 13.3890 12.5452 4.8603 17.4055 0.0000 3.794 21 F100 0.06329 0.2767 0.9096 0.8356 0.1534 0.9990 0.0000 1.898 21 FAL900EX 0.0219 0.0192 0.0411 0.0411 0.0411 0.0101 0.0521 0.0000 0.035	RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
21 BEC58P 0.0411 0.0027 0.0438 0.0521 0.0000 0.0521 0.0000 0.095 21 C130 0.0110 0.0000 0.0110 0.0055 0.0027 0.0082 0.0000 0.019 21 C206 0.2301 0.0521 0.2822 0.3342 0.2438 0.5781 0.0000 0.860 21 C441 0.4740 0.1288 0.6027 0.7233 0.2356 0.9589 0.0000 1.561 21 C560 0.1370 0.0767 0.2137 0.1342 0.0685 0.2027 0.0000 0.416 21 C173 0.0000 0.0000 0.0002 0.0027 0.0000 0.0027 0.0000 0.002 21 CL60 0.2110 0.0384 0.2493 0.2356 0.0329 0.2685 0.0000 0.051 21 CNA208 0.0027 0.0082 0.0110 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 <	21		0.0466	0.0192	0.0658	0.0685	0.0164	0.0849	0.0000	0.1507
21 C130 0.0110 0.0000 0.0110 0.0055 0.0027 0.0082 0.0000 0.019 21 C206 0.2301 0.0521 0.2822 0.3342 0.2438 0.5781 0.0000 0.860 21 C441 0.4740 0.1288 0.6027 0.7233 0.2356 0.9589 0.0000 0.416 21 C560 0.1370 0.0767 0.2137 0.1342 0.0685 0.2027 0.0000 0.416 21 C173 0.0000 0.0000 0.0002 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0010 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000	21	BE30	0.8274	0.1014	0.9288	1.3151	0.1452	1.4603	0.0000	2.3890
21 C206 0.2301 0.0521 0.2822 0.3342 0.2438 0.5781 0.0000 0.860 21 C441 0.4740 0.1288 0.6027 0.7233 0.2356 0.9589 0.0000 1.561 21 C560 0.1370 0.0767 0.2137 0.1342 0.0685 0.2027 0.0000 0.416 21 C173 0.0000 0.0000 0.0000 0.0002 0.0000 0.0027 0.0000 0.0007 0.0000 0.0027 0.0000 0.0027 0.0000 0.017 0.0000 0.017 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.013 0.0000 0.013 0.0000 0.013 0.0000 0.015 0.0000 0.015 0.0000 0.015 0.0000 0.013 <td>21</td> <td>BEC58P</td> <td>0.0411</td> <td>0.0027</td> <td>0.0438</td> <td>0.0521</td> <td>0.0000</td> <td>0.0521</td> <td>0.0000</td> <td>0.0959</td>	21	BEC58P	0.0411	0.0027	0.0438	0.0521	0.0000	0.0521	0.0000	0.0959
21 C441 0.4740 0.1288 0.6027 0.7233 0.2356 0.9589 0.0000 1.561 21 C560 0.1370 0.0767 0.2137 0.1342 0.0685 0.2027 0.0000 0.002 21 CIT3 0.0000 0.0000 0.0007 0.0000 0.0027 0.0000 0.0027 21 CL60 0.2110 0.0384 0.2493 0.2356 0.0329 0.2685 0.0000 0.0127 21 CNA172 0.0000 0.0000 0.00027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 21 CNA208 0.0027 0.0082 0.0110 0.0027 0.0110 0.0137 0.0000 0.024 21 CNA510 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000 0.0133 0.0	21	C130	0.0110	0.0000	0.0110	0.0055	0.0027	0.0082	0.0000	0.0192
21 C560 0.1370 0.0767 0.2137 0.1342 0.0685 0.2027 0.0000 0.416 21 CIT3 0.0000 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 21 CL60 0.2110 0.0384 0.2493 0.2356 0.0329 0.2685 0.0000 0.517 21 CNA172 0.0000 0.0000 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 21 CNA208 0.0027 0.0082 0.0110 0.0027 0.0110 0.0137 0.0000 0.024 21 CNA510 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000 0.026 21 CNA750 0.0055 0.0027 0.0082 0.055 0.0000 0.055 0.0000 0.013 21 DH8C 1.0082 0.1178 1.1260	21	C206	0.2301	0.0521	0.2822	0.3342	0.2438	0.5781	0.0000	0.8603
21 CIT3 0.0000 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 21 CL60 0.2110 0.0384 0.2493 0.2356 0.0329 0.2685 0.0000 0.002 21 CNA172 0.0000 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 21 CNA208 0.0027 0.0082 0.0110 0.0027 0.0110 0.0137 0.0000 0.024 21 CNA510 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000 0.0112 21 CNA55B 0.0712 0.0082 0.0795 0.1178 0.0082 0.1260 0.0000 0.013 21 CNA750 0.0055 0.0027 0.0082 0.0055 0.0000 0.0055 0.0000 0.013 21 DH8A 0.4438 0.0411 0.4849 1.0110 0.1671 1.1781 0.0000 3.709 21 <t< td=""><td>21</td><td>C441</td><td>0.4740</td><td>0.1288</td><td>0.6027</td><td>0.7233</td><td>0.2356</td><td>0.9589</td><td>0.0000</td><td>1.5616</td></t<>	21	C441	0.4740	0.1288	0.6027	0.7233	0.2356	0.9589	0.0000	1.5616
21 CL60 0.2110 0.0384 0.2493 0.2356 0.0329 0.2685 0.0000 0.517 21 CNA172 0.0000 0.0000 0.0027 0.0000 0.0027 0.0000 0.0027 21 CNA208 0.0027 0.0082 0.0110 0.0027 0.0110 0.0137 0.0000 0.024 21 CNA510 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000 0.011 21 CNA55B 0.0712 0.0082 0.0795 0.1178 0.0082 0.1260 0.0000 0.205 21 CNA750 0.0055 0.0027 0.0082 0.0055 0.0000 0.0055 0.0000 0.013 21 DH8A 0.4438 0.0411 0.4849 1.0110 0.1671 1.1781 0.0000 3.709 21 DH8D 1.9699 0.0384 2.0082 2.7562 0.7178 3.4740 0.0000 5.482	21	C560	0.1370	0.0767	0.2137	0.1342	0.0685	0.2027	0.0000	0.4164
21 CNA172 0.0000 0.0000 0.0027 0.0000 0.0027 0.0000 0.0022 21 CNA208 0.0027 0.0082 0.0110 0.0027 0.0110 0.0137 0.0000 0.024 21 CNA510 0.0055 0.0000 0.0032 0.0000 0.0055 0.0000 0.0032 0.0000 0.0055 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000	21	CIT3	0.0000	0.0000	0.0000	0.0027	0.0000	0.0027	0.0000	0.0027
21 CNA208 0.0027 0.0082 0.0110 0.0027 0.0110 0.0137 0.0000 0.024 21 CNA510 0.0055 0.0000 0.0055 0.0055 0.0000 0.0055 0.0000 0.011 21 CNA55B 0.0712 0.0082 0.0795 0.1178 0.0082 0.1260 0.0000 0.205 21 CNA750 0.0055 0.0027 0.0082 0.0055 0.0000 0.0055 0.0000 0.013 21 DH8A 0.4438 0.0411 0.4849 1.0110 0.1671 1.1781 0.0000 1.663 21 DH8C 1.0082 0.1178 1.1260 2.0247 0.5589 2.5836 0.0000 3.709 21 DH8D 1.9699 0.0384 2.0082 2.7562 0.7178 3.4740 0.0000 5.482 21 E170 0.1452 0.1342 0.2795 0.1973 0.0685 0.2658 0.0000 0.545 21 E190 0.7781 0.1452 0.9233 1.6082 0.6685 2.2767 0.0000 3.200 21 F100 9.0164 4.3726 13.3890 12.5452 4.8603 17.4055 0.0000 30.794 21 F70 0.6329 0.2767 0.9096 0.8356 0.1534 0.9890 0.0000 1.898 21 FAL900EX 0.0219 0.0192 0.0411 0.0411 0.0110 0.0521 0.0000 0.093	21	CL60	0.2110	0.0384	0.2493	0.2356	0.0329	0.2685	0.0000	0.5178
21 CNA510 0.0055 0.0000 0.0055 0.0000 0.0055 0.0000 0.011 21 CNA55B 0.0712 0.0082 0.0795 0.1178 0.0082 0.1260 0.0000 0.205 21 CNA750 0.0055 0.0027 0.0082 0.0055 0.0000 0.0055 0.0000 0.013 21 DH8A 0.4438 0.0411 0.4849 1.0110 0.1671 1.1781 0.0000 1.663 21 DH8C 1.0082 0.1178 1.1260 2.0247 0.5589 2.5836 0.0000 3.709 21 DH8D 1.9699 0.0384 2.0082 2.7562 0.7178 3.4740 0.0000 5.482 21 E170 0.1452 0.1342 0.2795 0.1973 0.0685 0.2658 0.0000 3.200 21 E190 0.7781 0.1452 0.9233 1.6082 0.6685 2.2767 0.0000 30.794 21 F100	21	CNA172	0.0000	0.0000	0.0000	0.0027	0.0000	0.0027	0.0000	0.0027
21 CNA55B 0.0712 0.0082 0.0795 0.1178 0.0082 0.1260 0.0000 0.205 21 CNA750 0.0055 0.0027 0.0082 0.0055 0.0000 0.0055 0.0000 0.013 21 DH8A 0.4438 0.0411 0.4849 1.0110 0.1671 1.1781 0.0000 1.663 21 DH8C 1.0082 0.1178 1.1260 2.0247 0.5589 2.5836 0.0000 3.709 21 DH8D 1.9699 0.0384 2.0082 2.7562 0.7178 3.4740 0.0000 5.482 21 E170 0.1452 0.1342 0.2795 0.1973 0.0685 0.2658 0.0000 3.200 21 E190 0.7781 0.1452 0.9233 1.6082 0.6685 2.2767 0.0000 30.794 21 F100 9.0164 4.3726 13.3890 12.5452 4.8603 17.4055 0.0000 3.000 <td< td=""><td>21</td><td>CNA208</td><td>0.0027</td><td>0.0082</td><td>0.0110</td><td>0.0027</td><td>0.0110</td><td>0.0137</td><td>0.0000</td><td>0.0247</td></td<>	21	CNA208	0.0027	0.0082	0.0110	0.0027	0.0110	0.0137	0.0000	0.0247
21 CNA750 0.0055 0.0027 0.0082 0.0055 0.0000 0.0055 0.0000 0.013 21 DH8A 0.4438 0.0411 0.4849 1.0110 0.1671 1.1781 0.0000 1.663 21 DH8C 1.0082 0.1178 1.1260 2.0247 0.5589 2.5836 0.0000 3.709 21 DH8D 1.9699 0.0384 2.0082 2.7562 0.7178 3.4740 0.0000 5.482 21 E170 0.1452 0.1342 0.2795 0.1973 0.0685 0.2658 0.0000 0.545 21 E190 0.7781 0.1452 0.9233 1.6082 0.6685 2.2767 0.0000 3.200 21 F100 9.0164 4.3726 13.3890 12.5452 4.8603 17.4055 0.0000 30.794 21 F70 0.6329 0.2767 0.9096 0.8356 0.1534 0.9890 0.0000 1.898 21	21	CNA510	0.0055	0.0000	0.0055	0.0055	0.0000	0.0055	0.0000	0.0110
21 DH8A 0.4438 0.0411 0.4849 1.0110 0.1671 1.1781 0.0000 1.663 21 DH8C 1.0082 0.1178 1.1260 2.0247 0.5589 2.5836 0.0000 3.709 21 DH8D 1.9699 0.0384 2.0082 2.7562 0.7178 3.4740 0.0000 5.482 21 E170 0.1452 0.1342 0.2795 0.1973 0.0685 0.2658 0.0000 0.545 21 E190 0.7781 0.1452 0.9233 1.6082 0.6685 2.2767 0.0000 3.200 21 F100 9.0164 4.3726 13.3890 12.5452 4.8603 17.4055 0.0000 30.794 21 F70 0.6329 0.2767 0.9096 0.8356 0.1534 0.9890 0.0000 1.898 21 FAL900EX 0.0219 0.0192 0.0411 0.0411 0.0110 0.0521 0.0000 0.063	21	CNA55B	0.0712	0.0082	0.0795	0.1178	0.0082	0.1260	0.0000	0.2055
21 DH8C 1.0082 0.1178 1.1260 2.0247 0.5589 2.5836 0.0000 3.709 21 DH8D 1.9699 0.0384 2.0082 2.7562 0.7178 3.4740 0.0000 5.482 21 E170 0.1452 0.1342 0.2795 0.1973 0.0685 0.2658 0.0000 0.545 21 E190 0.7781 0.1452 0.9233 1.6082 0.6685 2.2767 0.0000 3.200 21 F100 9.0164 4.3726 13.3890 12.5452 4.8603 17.4055 0.0000 30.794 21 F70 0.6329 0.2767 0.9096 0.8356 0.1534 0.9890 0.0000 1.898 21 FAL900EX 0.0219 0.0192 0.0411 0.0411 0.0110 0.0521 0.0000 0.063 21 GIV 0.0192 0.0137 0.0329 0.0301 0.0000 0.0301 0.0000 0.063	21	CNA750	0.0055	0.0027	0.0082	0.0055	0.0000	0.0055	0.0000	0.0137
21 DH8D 1.9699 0.0384 2.0082 2.7562 0.7178 3.4740 0.0000 5.482 21 E170 0.1452 0.1342 0.2795 0.1973 0.0685 0.2658 0.0000 0.545 21 E190 0.7781 0.1452 0.9233 1.6082 0.6685 2.2767 0.0000 3.200 21 F100 9.0164 4.3726 13.3890 12.5452 4.8603 17.4055 0.0000 30.794 21 F70 0.6329 0.2767 0.9096 0.8356 0.1534 0.9890 0.0000 1.898 21 FAL900EX 0.0219 0.0192 0.0411 0.0411 0.0110 0.0521 0.0000 0.093 21 GIV 0.0192 0.0137 0.0329 0.0301 0.0000 0.0301 0.0000 0.063	21	DH8A	0.4438	0.0411	0.4849	1.0110	0.1671	1.1781	0.0000	1.6630
21 E170 0.1452 0.1342 0.2795 0.1973 0.0685 0.2658 0.0000 0.545 21 E190 0.7781 0.1452 0.9233 1.6082 0.6685 2.2767 0.0000 3.200 21 F100 9.0164 4.3726 13.3890 12.5452 4.8603 17.4055 0.0000 30.794 21 F70 0.6329 0.2767 0.9096 0.8356 0.1534 0.9890 0.0000 1.898 21 FAL900EX 0.0219 0.0192 0.0411 0.0411 0.0110 0.0521 0.0000 0.093 21 GIV 0.0192 0.0137 0.0329 0.0301 0.0000 0.0301 0.0000 0.063	21	DH8C	1.0082	0.1178	1.1260	2.0247	0.5589	2.5836	0.0000	3.7096
21 E190 0.7781 0.1452 0.9233 1.6082 0.6685 2.2767 0.0000 3.200 21 F100 9.0164 4.3726 13.3890 12.5452 4.8603 17.4055 0.0000 30.794 21 F70 0.6329 0.2767 0.9096 0.8356 0.1534 0.9890 0.0000 1.898 21 FAL900EX 0.0219 0.0192 0.0411 0.0411 0.0110 0.0521 0.0000 0.093 21 GIV 0.0192 0.0137 0.0329 0.0301 0.0000 0.0301 0.0000 0.063	21	DH8D	1.9699	0.0384	2.0082	2.7562	0.7178	3.4740	0.0000	5.4822
21 F100 9.0164 4.3726 13.3890 12.5452 4.8603 17.4055 0.0000 30.794 21 F70 0.6329 0.2767 0.9096 0.8356 0.1534 0.9890 0.0000 1.898 21 FAL900EX 0.0219 0.0192 0.0411 0.0411 0.0110 0.0521 0.0000 0.093 21 GIV 0.0192 0.0137 0.0329 0.0301 0.0000 0.0301 0.0000 0.063	21	E170	0.1452	0.1342	0.2795	0.1973	0.0685	0.2658	0.0000	0.5452
21 F70 0.6329 0.2767 0.9096 0.8356 0.1534 0.9890 0.0000 1.898 21 FAL900EX 0.0219 0.0192 0.0411 0.0411 0.0110 0.0521 0.0000 0.093 21 GIV 0.0192 0.0137 0.0329 0.0301 0.0000 0.0301 0.0000 0.063	21	E190	0.7781	0.1452	0.9233	1.6082	0.6685	2.2767	0.0000	3.2000
21 FAL900EX 0.0219 0.0192 0.0411 0.0411 0.0110 0.0521 0.0000 0.093 21 GIV 0.0192 0.0137 0.0329 0.0301 0.0000 0.0301 0.0000 0.063	21	F100	9.0164	4.3726	13.3890	12.5452	4.8603	17.4055	0.0000	30.7945
21 GIV 0.0192 0.0137 0.0329 0.0301 0.0000 0.0301 0.0000 0.063	21	F70	0.6329	0.2767	0.9096	0.8356	0.1534	0.9890	0.0000	1.8986
	21	FAL900EX	0.0219	0.0192	0.0411	0.0411	0.0110	0.0521	0.0000	0.0932
21 GL7T 0.0603 0.0329 0.0932 0.1123 0.0493 0.1616 0.0000 0.254	21	GIV	0.0192	0.0137	0.0329	0.0301	0.0000	0.0301	0.0000	0.0630
	21	GL7T	0.0603	0.0329	0.0932	0.1123	0.0493	0.1616	0.0000	0.2548
21 GV 0.0301 0.0027 0.0329 0.0164 0.0110 0.0274 0.0000 0.060	21	GV	0.0301	0.0027	0.0329	0.0164	0.0110	0.0274	0.0000	0.0603
21 H25B 0.0849 0.0137 0.0986 0.0959 0.0192 0.1151 0.0000 0.213	21	H25B	0.0849	0.0137	0.0986	0.0959	0.0192	0.1151	0.0000	0.2137

RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
21	IA1125	0.0027	0.0000	0.0027	0.0055	0.0000	0.0055	0.0000	0.0082
21	LJ35	0.0712	0.0164	0.0877	0.1014	0.0055	0.1068	0.0000	0.1945
21	MU3001	0.0055	0.0055	0.0110	0.0164	0.0000	0.0164	0.0000	0.0274
21	PA31	0.1918	0.0110	0.2027	0.2082	0.0438	0.2521	0.0000	0.4548
21	SF34	1.3260	0.4247	1.7507	3.0849	0.6548	3.7397	0.0000	5.4904
21	SW4	0.3315	0.0164	0.3479	0.8027	0.0329	0.8356	0.0000	1.1836
21 Total		43.9726	24.9479	68.9205	71.5808	29.0548	100.6356	0.0000	169.5562
24	A20N	0.0000	0.0027	0.0027	0.0027	0.0000	0.0027	0.0000	0.0055
24	A21N	0.8438	0.0849	0.9288	0.0301	0.0000	0.0301	0.0000	0.9589
24	A319	0.0959	0.0411	0.1370	0.0082	0.0000	0.0082	0.0000	0.1452
24	A320	4.9644	2.7644	7.7288	0.4685	0.0000	0.4685	0.0000	8.1973
24	A321	0.4137	0.1260	0.5397	0.0137	0.0000	0.0137	0.0000	0.5534
24	A332	0.9753	0.3836	1.3589	0.1123	0.0000	0.1123	0.0000	1.4712
24	A333	0.0822	0.0192	0.1014	0.0356	0.0000	0.0356	0.0000	0.1370
24	A359	0.0082	0.0000	0.0082	0.0000	0.0000	0.0000	0.0000	0.0082
24	AT75	0.6027	0.0712	0.6740	0.0055	0.0000	0.0055	0.0000	0.6795
24	ATR72- 212A	0.0110	0.0000	0.0110	0.0000	0.0000	0.0000	0.0000	0.0110
24	B190	1.1178	0.0904	1.2082	0.0521	0.0000	0.0521	0.0000	1.2603
24	B350	0.1479	0.1507	0.2986	0.0301	0.0000	0.0301	0.0000	0.3288
24	B38M	0.3918	0.0247	0.4164	0.0137	0.0000	0.0137	0.0000	0.4301
24	B461	0.0822	0.0712	0.1534	0.0137	0.0000	0.0137	0.0000	0.1671
24	B712	0.0027	0.0000	0.0027	0.0000	0.0000	0.0000	0.0000	0.0027
24	B733	0.0164	0.0164	0.0329	0.0027	0.0000	0.0027	0.0000	0.0356
24	B734	0.0110	0.1068	0.1178	0.0137	0.0000	0.0137	0.0000	0.1315
24	B737	0.3233	0.3178	0.6411	0.0767	0.0000	0.0767	0.0000	0.7178
24	B738	7.4740	5.4795	12.9534	0.5151	0.0027	0.5178	0.0000	13.4712

RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
24	B788	0.0000	0.0000	0.0000	0.0027	0.0000	0.0027	0.0000	0.0027
24	B789	0.3068	0.0411	0.3479	0.0329	0.0000	0.0329	0.0000	0.3808
24	B78X	0.0219	0.0000	0.0219	0.0027	0.0000	0.0027	0.0000	0.0247
24	BD-700- 1A11	0.0466	0.0110	0.0575	0.0082	0.0000	0.0082	0.0000	0.0658
24	BE30	0.9589	0.0932	1.0521	0.0466	0.0000	0.0466	0.0000	1.0986
24	BEC58P	0.0110	0.0000	0.0110	0.0000	0.0000	0.0000	0.0000	0.0110
24	C130	0.0055	0.0000	0.0055	0.0000	0.0000	0.0000	0.0000	0.0055
24	C206	0.2630	0.1836	0.4466	0.0000	0.0000	0.0000	0.0000	0.4466
24	C441	0.4904	0.0685	0.5589	0.0110	0.0000	0.0110	0.0000	0.5699
24	C560	0.0603	0.0027	0.0630	0.0027	0.0000	0.0027	0.0000	0.0658
24	CL60	0.0384	0.0082	0.0466	0.0082	0.0000	0.0082	0.0000	0.0548
24	CNA172	0.0027	0.0000	0.0027	0.0000	0.0000	0.0000	0.0000	0.0027
24	CNA208	0.0110	0.0000	0.0110	0.0000	0.0000	0.0000	0.0000	0.0110
24	CNA510	0.0027	0.0000	0.0027	0.0000	0.0000	0.0000	0.0000	0.0027
24	CNA55B	0.0658	0.0164	0.0822	0.0164	0.0000	0.0164	0.0000	0.0986
24	CNA750	0.0027	0.0000	0.0027	0.0000	0.0000	0.0000	0.0000	0.0027
24	DH8A	1.0274	0.0301	1.0575	0.0603	0.0000	0.0603	0.0000	1.1178
24	DH8C	2.1671	0.1342	2.3014	0.0932	0.0000	0.0932	0.0000	2.3945
24	DH8D	2.2082	0.0548	2.2630	0.1425	0.0000	0.1425	0.0000	2.4055
24	E170	0.1096	0.0164	0.1260	0.0027	0.0000	0.0027	0.0000	0.1288
24	E190	1.5699	0.3699	1.9397	0.0164	0.0000	0.0164	0.0000	1.9562
24	F100	5.9562	1.6493	7.6055	0.5397	0.0000	0.5397	0.0000	8.1452
24	F70	0.3233	0.0082	0.3315	0.0521	0.0000	0.0521	0.0000	0.3836
24	FAL900EX	0.0384	0.0055	0.0438	0.0000	0.0000	0.0000	0.0000	0.0438
24	GIV	0.0219	0.0027	0.0247	0.0000	0.0000	0.0000	0.0000	0.0247
24	GL7T	0.0438	0.0247	0.0685	0.0027	0.0000	0.0027	0.0000	0.0712

RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
24	GV	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0137
24	H25B	0.0493	0.0110	0.0603	0.0082	0.0000	0.0082	0.0000	0.0685
24	LJ35	0.0411	0.0055	0.0466	0.0027	0.0000	0.0027	0.0000	0.0493
24	MU3001	0.0082	0.0000	0.0082	0.0000	0.0000	0.0000	0.0000	0.0082
24	PA31	0.1397	0.0027	0.1425	0.0055	0.0000	0.0055	0.0000	0.1479
24	SF34	2.0301	0.1808	2.2110	0.1452	0.0055	0.1507	0.0000	2.3616
24	SW4	0.6767	0.0274	0.7041	0.0384	0.0000	0.0384	0.0000	0.7425
24 Total		36.2767	12.6986	48.9753	2.6356	0.0082	2.6438	0.0000	51.6192
Total		150.6904	60.0603	210.7507	147.2575	63.2822	210.5397	0.0000	421.2904

RWY Aircraft 03L A20N 03L A21N 03L A320 03L A321 03L A332 03L A333 03L A339 03L A343 03L A388 03L A775 03L B190 03L B38M 03L B738	1.9337 2.1638 10.7061 0.0000 2.9721 0.7252 0.2227 0.3154 0.4575	0.3885 1.1455 3.1537 1.4523 1.8165 0.0000 0.2796	2.3222 3.3093 13.8599 1.4523 4.7886 0.7252	0.9100 0.7526 5.4699 0.0965	0.3950 1.2964 4.5452 0.4144 1.4659	1.3050 2.0490 10.0150 0.5109	0.0000 0.0000 0.0000	3.6272 5.3583 23.8749
03L A21N 03L A320 03L A321 03L A332 03L A333 03L A339 03L A343 03L A388 03L A775 03L B190 03L B38M	2.1638 10.7061 0.0000 2.9721 0.7252 0.2227 0.3154	1.1455 3.1537 1.4523 1.8165 0.0000	3.3093 13.8599 1.4523 4.7886	0.7526 5.4699 0.0965	1.2964 4.5452 0.4144	2.0490 10.0150 0.5109	0.0000	5.3583
03L A320 03L A321 03L A332 03L A333 03L A343 03L A343 03L A388 03L A775 03L B190 03L B38M	10.7061 0.0000 2.9721 0.7252 0.2227 0.3154	3.1537 1.4523 1.8165 0.0000	13.8599 1.4523 4.7886	5.4699 0.0965	4.5452 0.4144	10.0150 0.5109	0.0000	23.8749
03L A321 03L A332 03L A333 03L A339 03L A343 03L A388 03L A775 03L B190 03L B38M	0.0000 2.9721 0.7252 0.2227 0.3154	1.4523 1.8165 0.0000	1.4523 4.7886	0.0965	0.4144	0.5109		
03L A332 03L A333 03L A339 03L A343 03L A388 03L AT75 03L B190 03L B38M	2.9721 0.7252 0.2227 0.3154	1.8165 0.0000	4.7886				0.0000	1.9632
03L A333 03L A339 03L A343 03L A388 03L A775 03L B190 03L B38M	0.7252 0.2227 0.3154	0.0000		1.4229	1.4659	0.0000		
03L A339 03L A343 03L A388 03L AT75 03L B190 03L B38M	0.2227		0.7252			2.8888	0.0000	7.6774
03L A343 03L A388 03L AT75 03L B190 03L B38M	0.3154	0.2796		0.6432	0.0000	0.6432	0.0000	1.3684
03L A388 03L AT75 03L B190 03L B38M			0.5023	0.6869	0.0000	0.6869	0.0000	1.1892
03L AT75 03L B190 03L B38M	0.4575	0.0000	0.3154	0.0000	0.3433	0.3433	0.0000	0.6587
03L B190 03L B38M		0.3885	0.8460	0.5710	0.7943	1.3653	0.0000	2.2113
03L B38M	1.2705	0.0000	1.2705	0.3317	0.0000	0.3317	0.0000	1.6022
	0.8911	0.0000	0.8911	0.3563	0.3202	0.6766	0.0000	1.5677
03L B738	2.1606	1.1300	3.2906	1.3121	0.3240	1.6361	0.0000	4.9267
	14.3904	7.7823	22.1727	6.9966	4.2334	11.2300	0.0000	33.4027
03L B77W	0.2771	0.0000	0.2771	0.2480	0.0000	0.2480	0.0000	0.5251
03L B789	3.5234	2.9449	6.4683	3.5987	1.4523	5.0510	0.0000	11.5193
03L B78X	0.7321	0.8462	1.5783	0.6172	0.8345	1.4517	0.0000	3.0300
03L BE30	0.6681	0.0000	0.6681	0.7970	0.0000	0.7970	0.0000	1.4651
03L C441	0.7821	0.0000	0.7821	0.6910	0.0000	0.6910	0.0000	1.4730
03L DH8A	1.7320	0.0000	1.7320	0.8466	0.3204	1.1670	0.0000	2.8990
03L DH8C	1.7651	0.2379	2.0030	0.9866	0.5143	1.5008	0.0000	3.5038
03L DH8D	3.4991	0.2796	3.7787	1.7209	1.2466	2.9675	0.0000	6.7462
03L E170	0.2420	0.0000	0.2420	0.1224	0.0000	0.1224	0.0000	0.3644
03L E190	3.6097	1.0856	4.6954	1.5923	1.3266	2.9189	0.0000	7.6143
03L F100	12.1980	2.8525	15.0505	6.2435	5.0501	11.2937	0.0000	26.3442
03L F70	0.8056	0.5358	1.3414	0.7903	0.0486	0.8389	0.0000	2.1803
03L GL7T		0.0000	0.3384	0.1435	0.1926	0.3361		

RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
03L	H25B	0.3746	0.0000	0.3746	0.1473	0.0000	0.1473	0.0000	0.5220
03L	PA31	0.4902	0.0000	0.4902	0.4054	0.0000	0.4054	0.0000	0.8956
03L	SF34	2.3632	0.2745	2.6376	1.5388	0.2013	1.7401	0.0000	4.3777
03L	SW4	0.4978	0.2135	0.7113	0.2826	0.0356	0.3181	0.0000	1.0294
03L Tota	I	72.1077	26.8075	98.9152	40.3218	25.3549	65.6767	0.0000	164.5918
06	A20N	0.2432	0.0848	0.3280	1.1733	0.1145	1.2878	0.0000	1.6158
06	A21N	0.2980	0.2094	0.5075	1.3400	0.5943	1.9343	0.0000	2.4417
06	A320	1.1442	0.3573	1.5015	4.6174	4.0615	8.6789	0.0000	10.1804
06	A321	0.0000	0.2386	0.2386	0.1595	0.4343	0.5938	0.0000	0.8324
06	A332	0.3859	0.2960	0.6818	1.3004	1.4471	2.7476	0.0000	3.4294
06	A333	0.1013	0.0000	0.1013	0.1637	0.0000	0.1637	0.0000	0.2650
06	A339	0.0268	0.0213	0.0481	0.1185	0.0000	0.1185	0.0000	0.1666
06	A343	0.0414	0.0000	0.0414	0.0000	0.0793	0.0793	0.0000	0.1208
06	A388	0.0385	0.0848	0.1233	0.0000	0.0000	0.0000	0.0000	0.1233
06	AT75	0.1402	0.0000	0.1402	1.4425	0.0000	1.4425	0.0000	1.5827
06	B190	0.1175	0.0000	0.1175	0.1149	0.1530	0.2679	0.0000	0.3854
06	B38M	0.2888	0.1563	0.4452	2.1047	0.0986	2.2033	0.0000	2.6485
06	B738	1.7085	0.9849	2.6934	11.9958	5.0281	17.0238	0.0000	19.7172
06	B77W	0.0389	0.0000	0.0389	0.0000	0.0000	0.0000	0.0000	0.0389
06	B789	0.4355	0.4459	0.8814	1.9649	0.4676	2.4325	0.0000	3.3139
06	B78X	0.1007	0.1540	0.2547	0.1235	0.2428	0.3663	0.0000	0.6210
06	BE30	0.0804	0.0000	0.0804	0.6635	0.0000	0.6635	0.0000	0.7439
06	C441	0.1033	0.0000	0.1033	0.2692	0.0000	0.2692	0.0000	0.3725
06	DH8A	0.1753	0.0000	0.1753	0.8449	0.1528	0.9977	0.0000	1.1730
06	DH8C	0.2101	0.0138	0.2239	0.5496	0.7267	1.2763	0.0000	1.5002
06	DH8D	0.3878	0.0213	0.4092	0.8261	1.0346	1.8607	0.0000	2.2699

RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
06	E170	0.0335	0.0000	0.0335	0.1530	0.0000	0.1530	0.0000	0.1865
06	E190	0.4212	0.0683	0.4895	1.6819	1.4264	3.1083	0.0000	3.5978
06	F100	1.3962	0.1887	1.5849	3.7598	4.8879	8.6477	0.0000	10.2326
06	F70	0.1086	0.0362	0.1448	0.2782	0.5291	0.8073	0.0000	0.9521
06	GL7T	0.0449	0.0000	0.0449	0.0436	0.0331	0.0768	0.0000	0.1217
06	H25B	0.0458	0.0000	0.0458	0.2731	0.0000	0.2731	0.0000	0.3190
06	PA31	0.0672	0.0000	0.0672	0.1520	0.0000	0.1520	0.0000	0.2191
06	SF34	0.2949	0.0159	0.3108	1.1520	0.0528	1.2048	0.0000	1.5156
06	SW4	0.0605	0.0124	0.0729	0.1125	0.6865	0.7990	0.0000	0.8719
06 Total		8.5392	3.3900	11.9292	37.3784	22.2510	59.6294	0.0000	71.5586
21R	A20N	0.7868	0.2811	1.0679	1.5938	0.2438	1.8377	0.0000	2.9055
21R	A21N	1.2063	1.0306	2.2369	2.0898	0.9697	3.0595	0.0000	5.2964
21R	A320	9.8306	3.2381	13.0687	11.1681	3.4403	14.6083	0.0000	27.6771
21R	A321	0.0000	0.3843	0.3843	0.4952	0.6568	1.1520	0.0000	1.5363
21R	A332	1.5746	1.4121	2.9868	2.7368	2.0056	4.74 <u>2</u> 4	0.0000	7.7292
21R	A333	0.6396	0.0000	0.6396	0.6811	0.0000	0.6811	0.0000	1.3207
21R	A339	0.4762	0.4437	0.9199	0.6896	0.0000	0.6896	0.0000	1.6095
21R	A343	0.3550	0.0000	0.3550	0.0000	0.3305	0.3305	0.0000	0.6855
21R	A388	0.9988	0.2811	1.2799	0.1936	0.7349	0.9285	0.0000	2.2083
21R	AT75	0.5415	0.0000	0.5415	1.1767	0.0000	1.1767	0.0000	1.7181
21R	B190	0.6195	0.0000	0.6195	0.7434	0.1538	0.8972	0.0000	1.5167
21R	B38M	0.7319	0.7206	1.4525	1.7512	0.3305	2.0817	0.0000	3.5342
21R	B738	9.2013	5.3358	14.5371	19.0254	4.1923	23.2177	0.0000	37.7548
21R	B77W	0.4012	0.0000	0.4012	0.5166	0.0000	0.5166	0.0000	0.9178
21R	B789	3.1631	2.8594	6.0225	5.1223	1.9593	7.0816	0.0000	13.1040
21R	B78X	0.6254	0.5061	1.1315	0.7416	0.4284	1.1700	0.0000	2.3015

RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
21R	BE30	1.1023	0.0000	1.1023	0.7904	0.0000	0.7904	0.0000	1.8927
21R	C441	0.7237	0.0000	0.7237	0.8662	0.0000	0.8662	0.0000	1.5899
21R	DH8A	1.0962	0.0000	1.0962	1.3775	0.1538	1.5314	0.0000	2.6276
21R	DH8C	1.3943	0.1341	1.5284	1.6364	0.3902	2.0266	0.0000	3.5550
21R	DH8D	2.5690	0.1427	2.7117	2.5784	0.7294	3.3078	0.0000	6.0195
21R	E170	0.3566	0.0000	0.3566	0.4508	0.0000	0.4508	0.0000	0.8075
21R	E190	2.0448	1.1931	3.2380	3.8017	0.8860	4.6876	0.0000	7.9256
21R	F100	7.5652	3.3384	10.9036	11.0121	3.1436	14.1557	0.0000	25.0593
21R	F70	0.3223	0.6122	0.9345	1.1430	0.1756	1.3186	0.0000	2.2531
21R	GL7T	0.2427	0.0000	0.2427	0.3681	0.3386	0.7067	0.0000	0.9494
21R	H25B	0.2451	0.0000	0.2451	0.3045	0.0000	0.3045	0.0000	0.5496
21R	PA31	0.1808	0.0000	0.1808	0.1903	0.0000	0.1903	0.0000	0.3711
21R	SF34	1.6900	0.3756	2.0656	2.1535	0.4511	2.6046	0.0000	4.6702
21R	SW4	0.4966	0.1306	0.6272	0.5015	0.2195	0.7210	0.0000	1.3482
21R Tota	al	51.1813	22.4198	73.6010	75.8995	21.9337	97.8333	0.0000	171.4343
24	A20N	0.8592	0.0103	0.8694	0.1457	0.0113	0.1570	0.0000	1.0264
24	A21N	1.1742	0.0356	1.2098	0.1758	0.0449	0.2207	0.0000	1.4305
24	A320	4.3145	1.6612	5.9757	0.9174	0.1863	1.1036	0.0000	7.0794
24	A321	0.0000	0.2185	0.2185	0.0134	0.0237	0.0370	0.0000	0.2556
24	A332	1.6544	0.5924	2.2468	0.2487	0.0766	0.3253	0.0000	2.5720
24	A333	0.0630	0.0000	0.0630	0.0412	0.0000	0.0412	0.0000	0.1042
24	A339	0.0389	0.0199	0.0588	0.0341	0.0000	0.0341	0.0000	0.0929
24	A343	0.0527	0.0000	0.0527	0.0000	0.0115	0.0115	0.0000	0.0643
24	A388	0.0343	0.0103	0.0446	0.0000	0.0000	0.0000	0.0000	0.0446
24	AT75	1.1062	0.0000	1.1062	0.1074	0.0000	0.1074	0.0000	1.2135
24	B190	0.2833	0.0000	0.2833	0.0597	0.0101	0.0698	0.0000	0.3531

RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
24	B38M	0.6415	0.2867	0.9282	0.1840	0.0115	0.1955	0.0000	1.1237
24	B738	8.5849	5.1498	13.7347	1.4561	0.2103	1.6664	0.0000	15.4011
24	B77W	0.0473	0.0000	0.0473	0.0000	0.0000	0.0000	0.0000	0.0473
24	B789	1.0781	0.4589	1.5370	0.2999	0.0443	0.3441	0.0000	1.8812
24	B78X	0.0710	0.0228	0.0938	0.0469	0.0234	0.0703	0.0000	0.1641
24	BE30	0.4430	0.0000	0.4430	0.0429	0.0000	0.0429	0.0000	0.4858
24	C441	0.3024	0.0000	0.3024	0.0850	0.0000	0.0850	0.0000	0.3875
24	DH8A	0.8194	0.0000	0.8194	0.1167	0.0101	0.1268	0.0000	0.9462
24	DH8C	0.8903	0.3242	1.2145	0.1406	0.0254	0.1660	0.0000	1.3805
24	DH8D	1.1899	0.3209	1.5107	0.2267	0.0477	0.2744	0.0000	1.7851
24	E170	0.1325	0.0000	0.1325	0.0383	0.0000	0.0383	0.0000	0.1708
24	E190	1.8430	0.8205	2.6635	0.3150	0.0564	0.3715	0.0000	3.0350
24	F100	5.7796	1.8518	7.6314	0.8684	0.2050	1.0734	0.0000	8.7048
24	F70	0.2926	0.3449	0.6375	0.0823	0.0113	0.0936	0.0000	0.7311
24	GL7T	0.5208	0.0000	0.5208	0.0182	0.0091	0.0273	0.0000	0.5482
24	H25B	0.0990	0.0000	0.0990	0.0396	0.0000	0.0396	0.0000	0.1386
24	PA31	0.0264	0.0000	0.0264	0.0170	0.0000	0.0170	0.0000	0.0433
24	SF34	0.5671	0.1532	0.7203	0.1733	0.0116	0.1848	0.0000	0.9051
24	SW4	0.2194	0.2806	0.5001	0.0591	0.0141	0.0733	0.0000	0.5733
24 Total		33.1291	12.5625	45.6915	5.9530	1.0446	6.9976	0.0000	52.6892
Total		164.9573	65.1797	230.1370	159.5528	70.5842	230.1370	0.0000	460.2740

$\label{lem:anequation} \textbf{ANEC 2 Forecast movements by runway, aircraft and operation}$

Section 18: Appendices

RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
03L	A20N	4.6455	2.0885	6.7340	13.2087	11.3864	24.5950	0.0000	31.3290
03L	A21N	0.6815	4.5537	5.2353	2.0469	1.2610	3.3079	0.0000	8.5431
03L	A223	0.0000	0.0000	0.0000	5.2482	3.3406	8.5888	0.0000	8.5888
03L	A339	2.9454	4.3679	7.3134	4.9049	2.9559	7.8609	0.0000	15.1743
03L	A359	1.0355	0.0000	1.0355	0.4015	0.6359	1.0374	0.0000	2.0729
03L	A35K	0.3975	0.2378	0.6353	0.0000	0.7826	0.7826	0.0000	1.4179
03L	AT75	7.9926	0.4195	8.4121	2.7345	0.3845	3.1191	0.0000	11.5312
03L	B190	1.4557	0.0000	1.4557	0.7731	0.0000	0.7731	0.0000	2.2288
03L	B38M	10.7881	2.0031	12.7912	5.0343	3.1121	8.1464	0.0000	20.9376
03L	B738	0.0000	1.0467	1.0467	0.0000	0.0000	0.0000	0.0000	1.0467
03L	B77W	1.9593	0.7105	2.6698	1.8515	1.0538	2.9053	0.0000	5.5751
03L	B788	1.5618	0.0000	1.5618	1.0263	0.2006	1.2269	0.0000	2.7887
03L	B789	7.4773	6.0548	13.5321	9.7198	3.3714	13.0912	0.0000	26.6233
03L	B78X	2.5206	1.5818	4.1024	2.3082	1.5231	3.8314	0.0000	7.9338
03L	BE30	1.2782	0.0000	1.2782	0.5775	0.0000	0.5775	0.0000	1.8557
03L	C441	1.1870	0.0000	1.1870	0.2059	0.0000	0.2059	0.0000	1.3929
03L	DH8D	12.9235	1.2411	14.1646	1.0137	0.0000	1.0137	0.0000	15.1783
03L	E190	20.2122	3.8688	24.0810	4.7358	6.6693	11.4051	0.0000	35.4860
03L	GL7T	0.0000	0.2120	0.2120	0.0000	0.2120	0.2120	0.0000	0.4240
03L	PA31	0.3425	0.0000	0.3425	0.4101	0.0000	0.4101	0.0000	0.7527
03L Tota	al	79.4043	28.3862	107.7905	56.2010	36.8893	93.0903	0.0000	200.8808
03R	A20N	29.9139	7.3762	37.2901	18.1657	10.8124	28.9781	0.0000	66.2682
03R	A21N	10.0324	4.5298	14.5622	11.9139	6.9620	18.8758	0.0000	33.4381
03R	A223	8.8365	1.2895	10.1261	1.8912	1.5431	3.4343	0.0000	13.5604
03R	AT75	0.0000	0.0000	0.0000	5.8681	0.0000	5.8681	0.0000	5.8681
03R	B190	0.0000	0.0000	0.0000	0.6931	0.4361	1.1292	0.0000	1.1292

2.8541 27.6857 6.7791 34.4648 0.0000 57.3189 0.0000 0.3832 0.0000 0.3832 0.0000 0.3832 2.4061 11.3762 2.1515 13.5278 0.0000 25.9339 0.0000 1.1029 0.0000 1.1029 0.0000 1.1029 0.0000 0.7338 0.5233 1.2572 0.0000 1.2572 0.0000 9.3121 7.1883 16.5003 0.0000 28.5577 0.0000 0.3558 0.0000 0.3558 0.0000 251.6738 1.9401 101.9590 47.7746 149.7337 0.0000 251.6738 1.9401 101.9590 47.7746 149.7337 0.0000 26.4549 2.0340 12.2353 6.6219 18.8573 0.0000 40.8912 4.4324 4.2484 0.7593 5.0077 0.0000 19.4401 3.7549 0.0000 0.0000 0.0000 0.0000 1.7339 5.0534 6.6728										
0.0000 0.3832 0.0000 0.3832 0.0000 0.3832 2.4061 11.3762 2.1515 13.5278 0.0000 25.9339 0.0000 1.1029 0.0000 1.1029 0.0000 1.1029 0.0000 0.7338 0.5233 1.2572 0.0000 1.2572 0.0000 9.3121 7.1883 16.5003 0.0000 16.5003 4.7016 12.4774 11.3788 23.8562 0.0000 28.5577 0.0000 0.3558 0.0000 0.3558 0.0000 0.3558 1.9401 101.9590 47.7746 149.7337 0.0000 251.6738 4.0368 23.2767 9.1414 32.4181 0.0000 86.4549 2.0340 12.2353 6.6219 18.8573 0.0000 40.8912 4.4324 4.2484 0.7593 5.0077 0.0000 19.4401 3.7549 0.0000 0.0000 0.0000 0.0000 1.1149 0.0001 1.5305	RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
2.4061 11.3762 2.1515 13.5278 0.0000 25.9339 0.0000 1.1029 0.0000 1.1029 0.0000 1.1029 0.0000 0.7338 0.5233 1.2572 0.0000 1.2572 0.0000 9.3121 7.1883 16.5003 0.0000 16.5003 4.7016 12.4774 11.3788 23.8562 0.0000 28.5577 0.0000 0.3558 0.0000 0.3558 0.0000 0.3558 1.9401 101.9590 47.7746 149.7337 0.0000 251.6738 4.0368 23.2767 9.1414 32.4181 0.0000 86.4549 2.0340 12.2353 6.6219 18.8573 0.0000 40.8912 4.4324 4.2484 0.7593 5.0077 0.0000 3.7549 1.1149 0.0000 0.0000 0.0000 0.0000 1.1149 5.0534 6.6728 1.0864 7.7592 0.0000 1.7339 5.3075 30.1336	03R	B38M	16.2468	6.6073	22.8541	27.6857	6.7791	34.4648	0.0000	57.3189
0.0000 1.1029 0.0000 1.1029 0.0000 1.1029 0.0000 0.7338 0.5233 1.2572 0.0000 1.2572 0.0000 9.3121 7.1883 16.5003 0.0000 16.5003 4.7016 12.4774 11.3788 23.8562 0.0000 28.5577 0.0000 0.3558 0.0000 0.3558 0.0000 0.3558 1.9401 101.9590 47.7746 149.7337 0.0000 251.6738 4.0368 23.2767 9.1414 32.4181 0.0000 86.4549 2.0340 12.2353 6.6219 18.8573 0.0000 40.8912 4.4324 4.2484 0.7593 5.0077 0.0000 19.4401 3.7549 0.0000 0.0000 0.0000 0.0000 1.1149 5.0534 6.6728 1.0864 7.7592 0.0000 1.7339 5.3075 30.1336 6.1541 36.2877 0.0000 71.5952 0.4882 1.1517	03R	B738	0.0000	0.0000	0.0000	0.3832	0.0000	0.3832	0.0000	0.3832
0.0000 0.7338 0.5233 1.2572 0.0000 1.2572 0.0000 9.3121 7.1883 16.5003 0.0000 16.5003 4.7016 12.4774 11.3788 23.8562 0.0000 28.5577 0.0000 0.3558 0.0000 0.3558 0.0000 0.3558 1.9401 101.9590 47.7746 149.7337 0.0000 251.6738 4.0368 23.2767 9.1414 32.4181 0.0000 86.4549 2.0340 12.2353 6.6219 18.8573 0.0000 40.8912 3.7549 0.0000 0.0000 0.0000 0.0000 3.7549 1.1149 0.0000 0.0000 0.0000 0.0000 1.1149 5.0534 6.6728 1.0864 7.7592 0.0000 1.7339 5.3075 30.1336 6.1541 36.2877 0.0000 71.5952 0.4882 1.1517 0.0000 1.1517 0.0000 7.5719 0.0000 1.36250	03R	B789	10.3432	2.0630	12.4061	11.3762	2.1515	13.5278	0.0000	25.9339
0.0000 9.3121 7.1883 16.5003 0.0000 16.5003 4.7016 12.4774 11.3788 23.8562 0.0000 28.5577 0.0000 0.3558 0.0000 0.3558 0.0000 0.3558 1.9401 101.9590 47.7746 149.7337 0.0000 251.6738 4.0368 23.2767 9.1414 32.4181 0.0000 86.4549 2.0340 12.2353 6.6219 18.8573 0.0000 40.8912 3.7549 0.0000 0.0000 0.0000 0.0000 3.7549 1.1149 0.0000 0.0000 0.0000 0.0000 1.1149 5.0534 6.6728 1.0864 7.7592 0.0000 1.7339 5.3075 30.1336 6.1541 36.2877 0.0000 71.5952 0.4882 1.1517 0.0000 1.1517 0.0000 1.6400 0.5719 0.0000 0.0000 1.1965 0.0000 1.965 0.0000 1.3626 0.2441 1.6068 0.0000 1.6068 5.6895 10.4097 </td <td>03R</td> <td>BE30</td> <td>0.0000</td> <td>0.0000</td> <td>0.0000</td> <td>1.1029</td> <td>0.0000</td> <td>1.1029</td> <td>0.0000</td> <td>1.1029</td>	03R	BE30	0.0000	0.0000	0.0000	1.1029	0.0000	1.1029	0.0000	1.1029
4.7016 12.4774 11.3788 23.8562 0.0000 28.5577 0.0000 0.3558 0.0000 0.3558 0.0000 0.3558 1.9401 101.9590 47.7746 149.7337 0.0000 251.6738 4.0368 23.2767 9.1414 32.4181 0.0000 86.4549 2.0340 12.2353 6.6219 18.8573 0.0000 40.8912 4.4324 4.2484 0.7593 5.0077 0.0000 19.4401 3.7549 0.0000 0.0000 0.0000 0.0000 3.7549 1.1149 0.0000 0.0000 0.0000 0.0000 1.1149 5.0534 6.6728 1.0864 7.7592 0.0000 1.7339 5.3075 30.1336 6.1541 36.2877 0.0000 71.5952 0.4882 1.1517 0.0000 1.1517 0.0000 0.5719 3.7791 13.6250 2.3942 16.0192 0.0000 39.7982 0.0000 1.3626 0.2441 1.6068 0.0000 19.5304	03R	C441	0.0000	0.0000	0.0000	0.7338	0.5233	1.2572	0.0000	1.2572
0.0000 0.3558 0.0000 0.3558 0.0000 0.3558 1.9401 101.9590 47.7746 149.7337 0.0000 251.6738 4.0368 23.2767 9.1414 32.4181 0.0000 86.4549 2.0340 12.2353 6.6219 18.8573 0.0000 40.8912 4.4324 4.2484 0.7593 5.0077 0.0000 19.4401 3.7549 0.0000 0.0000 0.0000 0.0000 3.7549 1.1149 0.0000 0.0000 0.0000 0.0000 1.1149 5.0534 6.6728 1.0864 7.7592 0.0000 12.8127 0.0000 1.5305 0.2034 1.7339 0.0000 71.5952 0.4882 1.1517 0.0000 1.1517 0.0000 71.5952 0.4882 1.1517 0.0000 1.0000 0.0000 39.7982 0.0000 1.1965 0.0000 1.1965 0.0000 1.965 0.0000 1.3626 0.	03R	DH8D	0.0000	0.0000	0.0000	9.3121	7.1883	16.5003	0.0000	16.5003
1.9401 101.9590 47.7746 149.7337 0.0000 251.6738 4.0368 23.2767 9.1414 32.4181 0.0000 86.4549 2.0340 12.2353 6.6219 18.8573 0.0000 40.8912 4.4324 4.2484 0.7593 5.0077 0.0000 19.4401 3.7549 0.0000 0.0000 0.0000 0.0000 3.7549 1.1149 0.0000 0.0000 0.0000 0.0000 1.1149 5.0534 6.6728 1.0864 7.7592 0.0000 1.7339 5.3075 30.1336 6.1541 36.2877 0.0000 71.5952 0.4882 1.1517 0.0000 1.1517 0.0000 1.6400 0.5719 0.0000 0.0000 0.0000 0.0000 39.7982 0.0000 1.36250 2.3942 16.0192 0.0000 1.965 0.0000 1.3626 0.2441 1.6068 0.0000 19.5304	03R	E190	4.5009	0.2006	4.7016	12.4774	11.3788	23.8562	0.0000	28.5577
4.0368 23.2767 9.1414 32.4181 0.0000 86.4549 2.0340 12.2353 6.6219 18.8573 0.0000 40.8912 4.4324 4.2484 0.7593 5.0077 0.0000 19.4401 3.7549 0.0000 0.0000 0.0000 0.0000 3.7549 1.1149 0.0000 0.0000 0.0000 0.0000 1.1149 5.0534 6.6728 1.0864 7.7592 0.0000 12.8127 0.0000 1.5305 0.2034 1.7339 0.0000 71.5952 0.4882 1.1517 0.0000 1.1517 0.0000 1.6400 0.5719 0.0000 0.0000 0.0000 0.0000 39.7982 0.0000 1.1965 0.0000 1.1965 0.0000 1.6068 0.0000 1.3626 0.2441 1.6068 0.0000 19.5304	03R	PA31	0.0000	0.0000	0.0000	0.3558	0.0000	0.3558	0.0000	0.3558
2.0340 12.2353 6.6219 18.8573 0.0000 40.8912 4.4324 4.2484 0.7593 5.0077 0.0000 19.4401 3.7549 0.0000 0.0000 0.0000 0.0000 3.7549 1.1149 0.0000 0.0000 0.0000 0.0000 1.1149 5.0534 6.6728 1.0864 7.7592 0.0000 12.8127 0.0000 1.5305 0.2034 1.7339 0.0000 1.7339 5.3075 30.1336 6.1541 36.2877 0.0000 71.5952 0.4882 1.1517 0.0000 1.1517 0.0000 1.6400 0.5719 0.0000 0.0000 0.0000 0.0000 39.7982 0.0000 1.1965 0.0000 1.1965 0.0000 1.6068 0.0000 1.3626 0.2441 1.6068 0.0000 19.5304	03R Tota	al	79.8737	22.0664	101.9401	101.9590	47.7746	149.7337	0.0000	251.6738
4.4324 4.2484 0.7593 5.0077 0.0000 19.4401 3.7549 0.0000 0.0000 0.0000 0.0000 3.7549 1.1149 0.0000 0.0000 0.0000 0.0000 1.1149 5.0534 6.6728 1.0864 7.7592 0.0000 12.8127 0.0000 1.5305 0.2034 1.7339 0.0000 1.7339 5.3075 30.1336 6.1541 36.2877 0.0000 71.5952 0.4882 1.1517 0.0000 1.1517 0.0000 1.6400 0.5719 0.0000 0.0000 0.0000 0.0000 39.7982 0.0000 1.1965 0.0000 1.1965 0.0000 1.6068 0.0000 1.3626 0.2441 1.6068 0.0000 19.5304	21L	A20N	37.6220	16.4148	54.0368	23.2767	9.1414	32.4181	0.0000	86.4549
3.7549 0.0000 0.0000 0.0000 0.0000 3.7549 1.1149 0.0000 0.0000 0.0000 0.0000 1.1149 5.0534 6.6728 1.0864 7.7592 0.0000 12.8127 0.0000 1.5305 0.2034 1.7339 0.0000 1.7339 5.3075 30.1336 6.1541 36.2877 0.0000 71.5952 0.4882 1.1517 0.0000 1.1517 0.0000 1.6400 0.5719 0.0000 0.0000 0.0000 0.0000 39.7982 0.0000 1.1965 0.0000 1.1965 0.0000 1.1965 0.0000 1.3626 0.2441 1.6068 0.0000 19.5304	21L	A21N	11.0461	10.9879	22.0340	12.2353	6.6219	18.8573	0.0000	40.8912
1.1149 0.0000 0.0000 0.0000 1.1149 5.0534 6.6728 1.0864 7.7592 0.0000 12.8127 0.0000 1.5305 0.2034 1.7339 0.0000 1.7339 5.3075 30.1336 6.1541 36.2877 0.0000 71.5952 0.4882 1.1517 0.0000 1.1517 0.0000 1.6400 0.5719 0.0000 0.0000 0.0000 0.0000 0.5719 3.7791 13.6250 2.3942 16.0192 0.0000 39.7982 0.0000 1.1965 0.0000 1.1965 0.0000 1.6068 0.0000 1.3626 0.2441 1.6068 0.0000 19.5304	21L	A223	11.1172	3.3152	14.4324	4.2484	0.7593	5.0077	0.0000	19.4401
5.0534 6.6728 1.0864 7.7592 0.0000 12.8127 0.0000 1.5305 0.2034 1.7339 0.0000 1.7339 5.3075 30.1336 6.1541 36.2877 0.0000 71.5952 0.4882 1.1517 0.0000 1.1517 0.0000 1.6400 0.5719 0.0000 0.0000 0.0000 0.0000 0.5719 3.7791 13.6250 2.3942 16.0192 0.0000 39.7982 0.0000 1.1965 0.0000 1.1965 0.0000 1.6068 0.0000 1.3626 0.2441 1.6068 0.0000 19.5304	21L	A339	1.0376	2.7173	3.7549	0.0000	0.0000	0.0000	0.0000	3.7549
0.0000 1.5305 0.2034 1.7339 0.0000 1.7339 5.3075 30.1336 6.1541 36.2877 0.0000 71.5952 0.4882 1.1517 0.0000 1.1517 0.0000 1.6400 0.5719 0.0000 0.0000 0.0000 0.0000 0.5719 3.7791 13.6250 2.3942 16.0192 0.0000 39.7982 0.0000 1.1965 0.0000 1.1965 0.0000 1.1965 0.0000 1.3626 0.2441 1.6068 0.0000 1.6068 5.6895 10.4097 3.4311 13.8408 0.0000 19.5304	21L	A359	1.1149	0.0000	1.1149	0.0000	0.0000	0.0000	0.0000	1.1149
5.3075 30.1336 6.1541 36.2877 0.0000 71.5952 0.4882 1.1517 0.0000 1.1517 0.0000 1.6400 0.5719 0.0000 0.0000 0.0000 0.0000 0.5719 3.7791 13.6250 2.3942 16.0192 0.0000 39.7982 0.0000 1.1965 0.0000 1.1965 0.0000 1.1965 0.0000 1.3626 0.2441 1.6068 0.0000 1.6068 5.6895 10.4097 3.4311 13.8408 0.0000 19.5304	21L	AT75	5.0534	0.0000	5.0534	6.6728	1.0864	7.7592	0.0000	12.8127
0.4882 1.1517 0.0000 1.1517 0.0000 1.6400 0.5719 0.0000 0.0000 0.0000 0.0000 0.5719 3.7791 13.6250 2.3942 16.0192 0.0000 39.7982 0.0000 1.1965 0.0000 1.1965 0.0000 1.1965 0.0000 1.3626 0.2441 1.6068 0.0000 1.6068 5.6895 10.4097 3.4311 13.8408 0.0000 19.5304	21L	B190	0.0000	0.0000	0.0000	1.5305	0.2034	1.7339	0.0000	1.7339
0.5719 0.0000 0.0000 0.0000 0.0000 0.5719 3.7791 13.6250 2.3942 16.0192 0.0000 39.7982 0.0000 1.1965 0.0000 1.1965 0.0000 1.1965 0.0000 1.3626 0.2441 1.6068 0.0000 1.6068 5.6895 10.4097 3.4311 13.8408 0.0000 19.5304	21L	B38M	21.2126	14.0949	35.3075	30.1336	6.1541	36.2877	0.0000	71.5952
3.7791 13.6250 2.3942 16.0192 0.0000 39.7982 0.0000 1.1965 0.0000 1.1965 0.0000 1.1965 0.0000 1.3626 0.2441 1.6068 0.0000 1.6068 5.6895 10.4097 3.4311 13.8408 0.0000 19.5304	21L	B738	0.0000	0.4882	0.4882	1.1517	0.0000	1.1517	0.0000	1.6400
0.0000 1.1965 0.0000 1.1965 0.0000 1.1965 0.0000 1.3626 0.2441 1.6068 0.0000 1.6068 5.6895 10.4097 3.4311 13.8408 0.0000 19.5304	21L	B77W	0.5719	0.0000	0.5719	0.0000	0.0000	0.0000	0.0000	0.5719
0.0000 1.3626 0.2441 1.6068 0.0000 1.6068 5.6895 10.4097 3.4311 13.8408 0.0000 19.5304	21L	B789	15.9163	7.8628	23.7791	13.6250	2.3942	16.0192	0.0000	39.7982
5.6895 10.4097 3.4311 13.8408 0.0000 19.5304	21L	BE30	0.0000	0.0000	0.0000	1.1965	0.0000	1.1965	0.0000	1.1965
	21L	C441	0.0000	0.0000	0.0000	1.3626	0.2441	1.6068	0.0000	1.6068
2.6553 16.6859 5.5052 22.1910 0.0000 34.8463	21L	DH8D	2.2711	3.4184	5.6895	10.4097	3.4311	13.8408	0.0000	19.5304
	21L	E190	10.9548	1.7005	12.6553	16.6859	5.5052	22.1910	0.0000	34.8463
0.5555 0.0000 0.0000 0.0000 0.0000 0.5555	21L	GL7T	0.0000	0.5555	0.5555	0.0000	0.0000	0.0000	0.0000	0.5555
0.0000 0.3853 0.0000 0.3853 0.0000 0.3853	21L	PA31	0.0000	0.0000	0.0000	0.3853	0.0000	0.3853	0.0000	0.3853

RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
21L Tota	l	117.9179	61.5556	179.4735	122.9140	35.5411	158.4551	0.0000	337.9286
21R	A20N	6.0989	3.2837	9.3825	15.1871	6.2650	21.4521	0.0000	30.8347
21R	A21N	0.8798	2.5684	3.4482	2.4811	1.7576	4.2388	0.0000	7.6870
21R	A223	0.0000	0.0000	0.0000	5.4961	2.0316	7.5277	0.0000	7.5277
21R	A339	2.1566	2.1242	4.2808	3.5370	3.9511	7.4882	0.0000	11.7689
21R	A359	1.6868	0.0000	1.6868	1.1334	1.6664	2.7998	0.0000	4.4866
21R	A35K	1.1374	0.5296	1.6671	0.0000	1.5198	1.5198	0.0000	3.1868
21R	AT75	3.0007	1.1852	4.1859	0.9050	0.0000	0.9050	0.0000	5.0909
21R	B190	2.3816	0.0000	2.3816	0.2010	0.0000	0.2010	0.0000	2.5826
21R	B38M	12.9178	3.6190	16.5368	6.3774	2.2134	8.5908	0.0000	25.1276
21R	B77W	3.6085	0.8244	4.4329	2.7532	2.0160	4.7692	0.0000	9.2021
21R	B788	2.2755	0.0000	2.2755	2.0435	0.5668	2.6103	0.0000	4.8858
21R	B789	5.1408	4.2358	9.3766	9.9782	6.4776	16.4558	0.0000	25.8323
21R	B78X	3.6190	1.4881	5.1070	3.8314	1.5467	5.3781	0.0000	10.4851
21R	BE30	1.7916	0.0000	1.7916	0.1929	0.0000	0.1929	0.0000	1.9846
21R	C441	1.8828	0.0000	1.8828	0.0000	0.0000	0.0000	0.0000	1.8828
21R	DH8D	12.7626	0.0000	12.7626	1.2619	0.0000	1.2619	0.0000	14.0245
21R	E190	15.7514	9.5792	25.3306	6.0085	3.3076	9.3162	0.0000	34.6467
21R	GL7T	0.0000	0.0000	0.0000	0.0000	0.5555	0.5555	0.0000	0.5555
21R	PA31	0.8086	0.0000	0.8086	0.0000	0.0000	0.0000	0.0000	0.8086
21R Tota	al	77.9004	29.4375	107.3378	61.3878	33.8751	95.2629	0.0000	202.6008
PER	EC130	1.7143	0.4286	2.1429	1.7143	0.4286	2.1429	0.0000	4.2858
PER Tota	al	1.7143	0.4286	2.1429	1.7143	0.4286	2.1429	0.0000	4.2858
Total		356.8107	141.8742	498.6849	344.1762	154.5088	498.6849	0.0000	997.3699

	Aircraft	ARR day	ARR night						
03L A			AKKIIIGIIL	ARR total	DEP day	DEP night	DEP total	Circuits	All
	A20N	4.5240	2.8994	7.4235	12.6019	11.6418	24.2438	0.0000	31.6673
03L A	A21N	0.6627	5.3526	6.0153	1.8719	2.1793	4.0512	0.0000	10.0665
03L /	A223	0.0000	0.0000	0.0000	4.9778	2.9171	7.8949	0.0000	7.8949
03L /	A339	2.7047	3.7196	6.4243	4.3698	2.1542	6.5241	0.0000	12.9484
03L /	A359	0.9681	0.0000	0.9681	0.3851	0.4903	0.8754	0.0000	1.8435
03L /	A35K	0.3706	0.1861	0.5567	0.0000	0.7154	0.7154	0.0000	1.2721
03L /	AT75	7.5986	0.3352	7.9338	2.5336	0.3072	2.8408	0.0000	10.7746
03L E	B190	1.3385	0.0000	1.3385	0.7103	0.0000	0.7103	0.0000	2.0488
03L E	B38M	10.3719	3.8214	14.1933	4.7761	3.6206	8.3967	0.0000	22.5900
03L E	B738	0.0000	0.9189	0.9189	0.0000	0.0000	0.0000	0.0000	0.9189
03L E	B77W	1.9066	0.7080	2.6146	1.6418	0.9311	2.5730	0.0000	5.1875
03L E	B788	1.5328	0.0000	1.5328	1.0017	0.1603	1.1620	0.0000	2.6948
03L E	B789	6.9230	5.4584	12.3814	9.1150	3.3262	12.4412	0.0000	24.8226
03L E	B78X	2.4078	1.4378	3.8457	2.1839	1.2977	3.4816	0.0000	7.3273
03L E	BE30	1.1569	0.0000	1.1569	0.5193	0.0000	0.5193	0.0000	1.6762
03L (C441	1.0933	0.0000	1.0933	0.2032	0.0000	0.2032	0.0000	1.2965
03L [DH8D	12.3068	0.9796	13.2864	1.0104	0.0000	1.0104	0.0000	14.2968
03L E	E190	19.1853	3.0614	22.2467	4.4749	5.7547	10.2296	0.0000	32.4763
03L (GL7T	0.0000	0.1634	0.1634	0.0000	0.1634	0.1634	0.0000	0.3269
03L F	PA31	0.3385	0.0000	0.3385	0.3460	0.0000	0.3460	0.0000	0.6845
03L Total		75.3900	29.0420	104.4320	52.7227	35.6595	88.3823	0.0000	192.8143
03R A	A20N	28.8250	5.1425	33.9675	17.2411	7.2499	24.4911	0.0000	58.4586
03R A	A21N	9.4813	2.5258	12.0071	11.1175	4.3697	15.4872	0.0000	27.4943
03R A	A223	8.6659	1.0166	9.6826	1.8832	1.3645	3.2478	0.0000	12.9303
03R A	AT75	0.0000	0.0000	0.0000	5.4562	0.0000	5.4562	0.0000	5.4562
03R E	B190	0.0000	0.0000	0.0000	0.6474	0.3829	1.0303	0.0000	1.0303

RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
03R	B38M	15.3853	3.6675	19.0528	26.0681	4.7017	30.7698	0.0000	49.8226
03R	B738	0.0000	0.0000	0.0000	0.3349	0.0000	0.3349	0.0000	0.3349
03R	B789	9.9587	1.6287	11.5875	10.6891	1.1488	11.8379	0.0000	23.4254
03R	BE30	0.0000	0.0000	0.0000	0.9906	0.0000	0.9906	0.0000	0.9906
03R	C441	0.0000	0.0000	0.0000	0.7259	0.4595	1.1853	0.0000	1.1853
03R	DH8D	0.0000	0.0000	0.0000	8.6584	6.3303	14.9887	0.0000	14.9887
03R	E190	4.1156	0.1603	4.2759	11.7549	10.0389	21.7937	0.0000	26.0697
03R	PA31	0.0000	0.0000	0.0000	0.3522	0.0000	0.3522	0.0000	0.3522
03R Tot	al	76.4318	14.1416	90.5734	95.9194	36.0462	131.9656	0.0000	222.5390
06	A20N	0.0000	0.0000	0.0000	0.0000	1.2202	1.2202	0.0000	1.2202
06	A21N	0.0000	0.0000	0.0000	0.0000	0.8561	0.8561	0.0000	0.8561
06	A339	0.0000	0.0000	0.0000	0.0000	0.6883	0.6883	0.0000	0.6883
06	B38M	0.0000	0.0000	0.0000	0.0000	0.6973	0.6973	0.0000	0.6973
06	B789	0.0000	0.0000	0.0000	0.0000	0.5652	0.5652	0.0000	0.5652
06	B78X	0.0000	0.0000	0.0000	0.0000	0.0431	0.0431	0.0000	0.0431
06	E190	0.0000	0.0000	0.0000	0.0000	0.1252	0.1252	0.0000	0.1252
06 Total		0.0000	0.0000	0.0000	0.0000	4.1952	4.1952	0.0000	4.1952
21L	A20N	38.7109	16.7747	55.4856	24.2013	7.0825	31.2838	0.0000	86.7694
21L	A21N	11.5972	9.5452	21.1424	13.0317	5.4006	18.4323	0.0000	39.5747
21L	A223	11.2878	3.5881	14.8759	4.2564	0.9378	5.1942	0.0000	20.0702
21L	A339	1.2063	3.1307	4.3371	0.0000	0.0000	0.0000	0.0000	4.3371
21L	A359	1.1418	0.0000	1.1418	0.0000	0.0000	0.0000	0.0000	1.1418
21L	AT75	5.2592	0.0000	5.2592	7.1766	1.1637	8.3403	0.0000	13.5995
21L	B190	0.0000	0.0000	0.0000	1.5898	0.2567	1.8465	0.0000	1.8465
21L	B38M	22.0790	12.6645	34.7435	31.7511	5.1357	36.8869	0.0000	71.6304
21L	B738	0.0000	0.6160	0.6160	1.2000	0.0000	1.2000	0.0000	1.8160

RWY	Aircraft	ARR day	ARR night	ARR total	DEP day	DEP night	DEP total	Circuits	All
21R	GL7T	0.0000	0.0000	0.0000	0.0000	0.6040	0.6040	0.0000	0.6040
21R	PA31	0.8127	0.0000	0.8127	0.0000	0.0000	0.0000	0.0000	0.8127
21R Tota	ıl	80.4258	35.6762	116.1020	64.6828	45.2129	109.8957	0.0000	225.9976
24	A20N	0.0000	0.4393	0.4393	0.0000	0.0000	0.0000	0.0000	0.4393
24	A21N	0.0000	0.5796	0.5796	0.0000	0.0000	0.0000	0.0000	0.5796
24	B38M	0.0000	0.7564	0.7564	0.0000	0.0000	0.0000	0.0000	0.7564
24 Total		0.0000	1.7753	1.7753	0.0000	0.0000	0.0000	0.0000	1.7753
PER	EC130	1.7143	0.4286	2.1429	1.7143	0.4286	2.1429	0.0000	4.2858
PER Tota	al	1.7143	0.4286	2.1429	1.7143	0.4286	2.1429	0.0000	4.2858
Total		356.8107	141.8742	498.6849	344.1762	154.5088	498.6849	0.0000	997.3699

Part D

Section 18: Appendices





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