

Perth Airport 

# Master Plan 2020

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APRIL 2020







# Section 1: **Introduction**

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Perth Airport is Australia's western hub linking Western Australia to the rest of the state, country and world. Perth Airport is a vital infrastructure asset for Western Australia.



Every five years, Perth Airport develops a master plan to comply with the *Commonwealth Airports Act 1996*. The master plan outlines Perth Airport's development plans for a 20-year planning period.

## 1.1 Perth Airport

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

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 more than 50 destinations.

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 resources sector supply chain, providing connectivity for the fly-in fly-out (FIFO) workforce and for Western Australians who live in remote communities.

Internationally, Perth Airport is strategically located for access to Southeast Asia, the Middle East, Europe and Africa. Perth Airport's contribution to tourism is significant. Approximately 93 per cent of people visiting Western Australia arrived by air and contributed more than \$4.1 billion to the Western Australian economy in 2018.

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, linking the city, north-south and east-west. The location of Perth Airport in relation to the Perth metropolitan region and key transport infrastructure is shown in Figure 1-1.

Perth's metropolitan community is inextricably linked to its airport. The 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.

The growth of Perth is driven by Western Australia's emergence as a global resources centre. This has spurred Perth's population growth to just over two million in 2017. The Western Australian Government's strategic planning documents anticipate that the population in the Perth and Peel region will reach 3.5 million by 2050.

This growth has driven significant infrastructure development in Perth, particularly new road and rail transport infrastructure.

Additional transport infrastructure is under construction by the State Government, including the Forresterfield-Airport Link (FAL). FAL is being delivered as part of the State Government's METRONET program. The FAL project will deliver a new rail service to the eastern suburbs of Perth with three new stations at Redcliffe, Airport Central and Forresterfield. Due to be completed in 2021, this project will:

- support domestic and international tourism with improved access between the city and Perth Airport,
- act as a catalyst for residential and commercial development around the new stations at Redcliffe and Forresterfield,
- increase public transport options for the eastern suburbs and foothills area, and
- relieve pressure on Perth's roads.

Perth Airport is the biggest 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 airport and handles smaller general aviation traffic (refer Figure 1-1). The Royal Australian Air Force (RAAF) has two aerodromes in the region, with RAAF Pearce and 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 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. Land not required for aviation purposes can be used for commercial and industrial purposes.



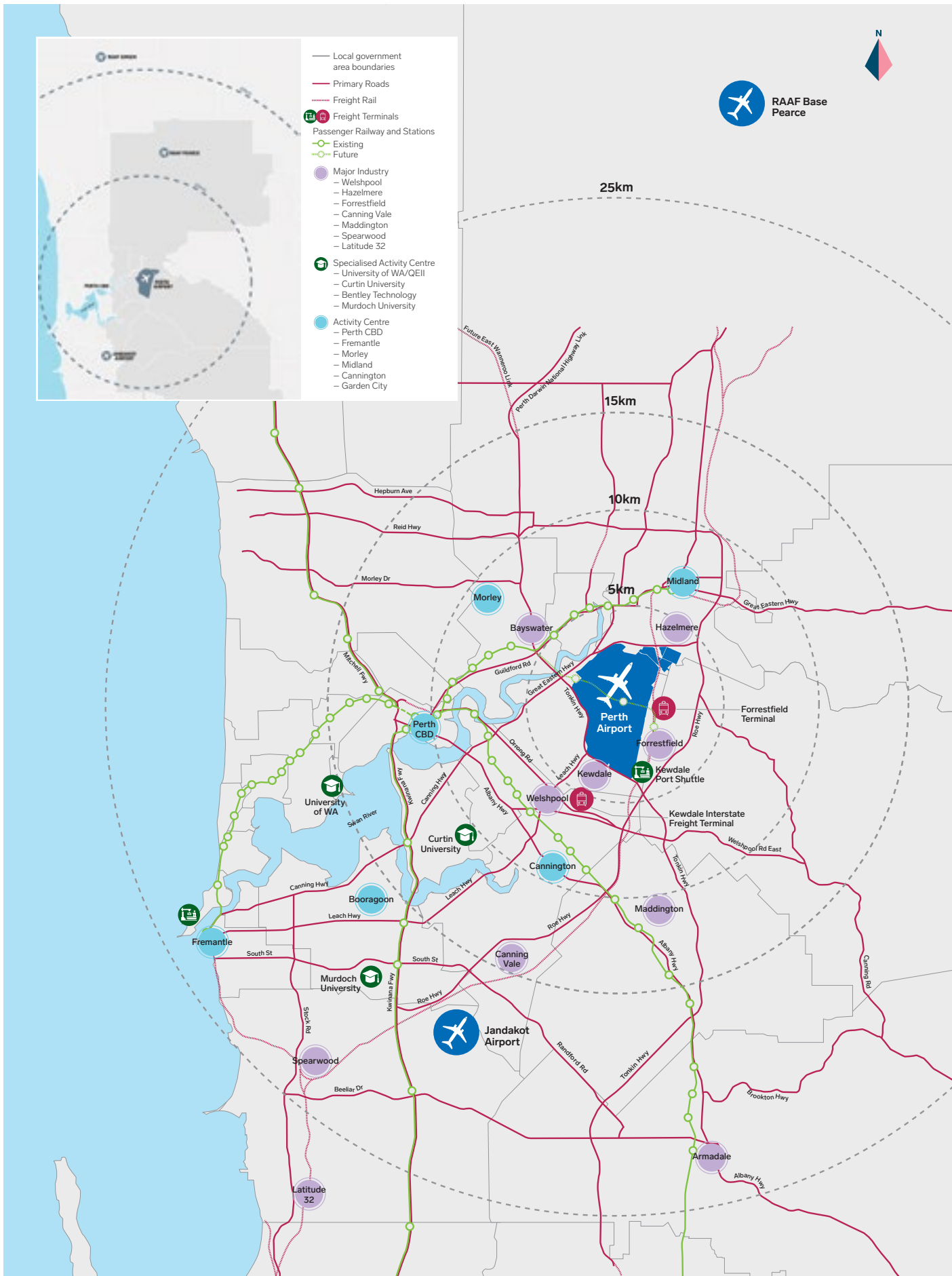


Figure 1-1 Perth Airport in relation to key infrastructure  
Source: Perth Airport

## 1.2 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 under a 50-year lease with a 49-year option for extension. 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). The shareholders of PADG, as at March 2019, are shown in Table 1-1.

A breakdown of the shareholder representation highlights that superannuation funds make up 70 per cent of the ownership and Australia's sovereign wealth fund comprises 30 per cent. The investment strategies of superannuation funds, which include having funds allocated to long-term infrastructure investments, together with their continuing inflow of funds, 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.

Shareholders of Perth Airport Development Group Pty Ltd	Percentage Ownership
Utilities of Australia Pty Ltd ATF Utilities Trust of Australia (UTA)	38.26%
The Northern Trust Company (TNTC) TNTC in its capacity as custodian for Future Fund Investment Company No.3 Pty Ltd (FFIC3), a wholly owned subsidiary of The Future Fund Board of Guardians (FFBG)	30.01%
Utilities of Australia Pty Ltd ATF Perth Airport Property Fund (PAPF)	17.34%
Gardior Pty Ltd as trustee for The Infrastructure Fund	7.19%
AustralianSuper Pty Ltd	5.25%
Sunsuper Pty Ltd	1.95%

**Table 1-1 Shareholders of Perth Airport Development Group Pty Ltd as at December 2019**

Source: Perth Airport

## 1.3 Perth Airport Lease

Perth Airport Pty Ltd is the lessee of 214 lots of land which make up the 2,105 hectares of airport estate (refer Figure 1-2). The lease with the Commonwealth of Australia was executed on 1 July 1997, for a period of 50 years, with an option of a further 49 years 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 1996* (Airports Act). Perth Airport's substantial program of investment in aviation infrastructure is consistent with the company's obligations under the lease to develop the airport, 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 estate 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 airport estate development must be in accordance with the approved master plan.

There have been no lease boundary changes since the Master Plan 2014. Perth Airport is in the process of minor land acquisition, disposal and land swaps with State and Local Governments in consultation with the Commonwealth Department of Infrastructure, Transport, Regional Development and Communications (formerly Department of Infrastructure, Transport, Cities and Regional Development).







Figure 1-2 Perth Airport Estate  
Source: Perth Airport



## 1.4 History and Development of Perth Airport

There is a long and rich history of activity on the Perth Airport estate. Western Australia can claim to be the birthplace of civil aviation in Australia with the nation's first significant flight taking place in 1911 in addition to the earliest and largest civil aviation network of any State. The State therefore has a long history of enjoying the benefits of air travel, and Perth Airport has played a major role in this history.

### 1.4.1 Pre-European

Leading archaeologists date Aboriginal activity in the Perth area to around 40,000 years ago. The land on which the estate is located forms part of the traditional network of communication routes, meeting places and camping sites of the Noongar people. A number of archaeological and ethnographic sites have been identified on the estate. As the Traditional Custodians, the Noongar people maintain a strong interest in the land use of the airport and its operations.

### 1.4.2 Early Airport Development

The first recorded flight in Western Australia occurred in 1911, when Joseph Hammond flew a biplane from a makeshift airstrip at the Belmont Racecourse over the city and Kings Park. In 1919, Norman Brearley started operating demonstration 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 Perth city centre. In 1925, 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 growth, the Dunreath Golf Course and market garden land was acquired in 1938 as the site of the new Guildford Aerodrome. In early 1942, this land was converted to a Royal Australian Air Force (RAAF) base and the first runway (the now closed runway 01/19), 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. As Maylands Aerodrome was too small for the larger passenger aircraft being used, in 1944 the Commonwealth 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 a 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 with 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 began 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 (Jumbo) flight to Perth on 3 September 1971, the facilities at Perth Airport were battling to cope with the demand for domestic and international flights.

### 1.4.3 Airport Expansion

In 1973, a Joint State and Commonwealth Committee completed a study which confirmed that the Perth Airport site would continue as the sole Regular Passenger Transport (RPT) airport for the Perth region.

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

Following the Committee's recommendations, additional land was acquired to the east to accommodate the long-term expansion of the airport, 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 Committee, the Commonwealth 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.

On 25 October 1986, Prime Minister Bob Hawke opened a new \$60 million International Terminal Complex (Terminal 1) on the eastern side of the airport, along with a new Air Traffic Control tower.

In the late 1980's, Qantas 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.

### 1.4.4 Privatisation

As a result of the increasing cost of maintaining aging airfield infrastructure and the need for major redevelopment of airport facilities, the Commonwealth Government commenced the privatisation of major Australian airports on a leasehold basis.

As part of the first phase of privatisation of Australian airports, in 1997, control of Perth Airport was transferred to Perth Airport Pty Ltd (then Westralia Airports Corporation) under a 50-year plus 49-year leasehold option.

As a condition of the lease, Perth Airport was required to gain approval for a new master plan. The Commonwealth Minister for Transport and Regional Services approved the 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 Commonwealth Minister every five years.

In 2001, Perth Airport purchased T3 following the financial collapse of Ansett. At that time, T3 became a multi-user terminal, servicing Skywest, Virgin Australia and Alliance Airlines operations.





**Figure 1-3 Vision for the future - Airport Central consolidation**

Source: Perth Airport

### 1.4.5 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. The future high-level concept for the Airport Central consolidation, which includes a hotel and MMTI facilities, is shown in Figure 1-3.

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. A summary of the key projects is shown in Figure 1-4 and Figure 1-5. The opening of the \$121 million T2, adjacent to T1 International, in March 2013 marked the first stage of consolidation, with Alliance Airlines, Virgin Australia Regional Airlines (formerly Skywest) and Tigerair relocating from T3 into the new T2. T2 has a gross floor area of approximately 21,500 square metres and parking for up to 36 aircraft.

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 new T1 Domestic pier was opened in 2016. 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.

T1 provides up to nine aircraft parking bays, 12 aerobridge serviced gates, 28 domestic check-in kiosks and 14 hybrid self-service bag drop desks incorporating a new fast-track check-in system, and a new Virgin Australia Lounge with views of the Perth CBD. The project 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.

The pier design also 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. Additional swing gates are planned for the proposed new terminal building and expanded international facilities. Up to eight parking bays will be able to accommodate either international or domestic operations, delivering further operational flexibility for our airline partners.

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 a Category III (CAT III) aerodrome to allow landings in reduced visibility during adverse weather, such as fog. Although fog and periods of severe low visibility 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.



**Project**  
**New Domestic Terminal (T2)**

T2, which opened in March 2013 next to T1, marked the first stage of consolidation when Alliance Airlines, Virgin Australia Regional Airlines (formerly Skywest) and Tigerair relocated from Terminal 3 (T3) into T2.

T2 has a gross floor area of approximately 21,500 square metres and aircraft parking for up to 36 aircraft.

**Value**  
**\$121 M**



**Project**  
**Terminal 1 (T1) International Arrivals Expansion**

Transformation of the international arrivals experience, including substantially expanded and enhanced customs, baggage reclaim, biosecurity and duty free retail areas. The first stage opened in November 2013, with full completion in late 2014.

**Value**  
**\$80 M**



**Project**  
**T1 International Departures Upgrade**

Outbound immigration, passenger security screening and retail areas expanded and renewed, with the project completed in 2015.

**Value**  
**\$41 M**



Figure 1-4 Stage 1 Capital investment program for consolidation  
Source: Perth Airport





**Project**  
**T1 Domestic Pier and International Departures Expansion**

The T1 Domestic Pier and International Departures Expansion projects were completed in 2016.

These projects allowed Virgin Australia to consolidate its services into Airport Central.

**Value**  
**\$338 M**



**Project**  
**Forecourt Upgrade**

Landscaping of Terminal 1 Forecourt with native Western Australian species and materials to provide visitors with a glimpse of the unique landscape of the State.

**Value**  
**\$22 M**



**Project**  
**Airfield Projects**

Upgrades to airfield infrastructure including new taxiways, to deliver increased efficiencies for aircraft moving around the airport, and lighting upgrades, allowing aircraft to land in low visibility when they would otherwise need to divert to another airport.

**Value**  
**\$250 M**

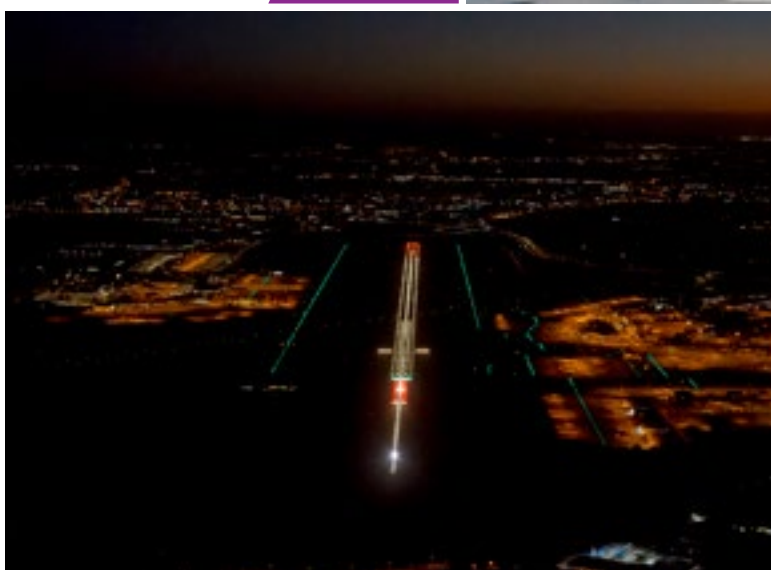


Figure 1-5 Stage 1 Capital investment program for consolidation  
 Source: Perth Airport



On 24 March 2018, Qantas commenced direct Perth-London flights using the new Boeing 787-9 Dreamliner aircraft, operating from T3. There is agreement for additional ultra-long routes to Europe to be facilitated through T3. To enable international services from the T3/T4 precinct, Perth Airport and Qantas undertook significant works to produce new and improved facilities, including a new international transit area to provide Qantas customers with a seamless and integrated travel experience. The \$28 million upgrade has provided an integrated terminal that can alternate between domestic and international operations and provides flexibility and a seamless journey for passengers who are transiting from international to a regional destination. The new international wing features a large outdoor deck with alfresco seating, a streamlined immigration and customs area to enable a faster transfer experience, additional food and beverage outlets, and a new duty-free store. This investment was undertaken to prove up Perth as the western hub for Australia with Qantas committing as part of this investment to ultimately move to Airport Central by no later than 31 December 2025.

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 the 31 January 2019, following the expiry of a 30-year lease.

Perth Airport has also undertaken significant investment in commercial and industrial property development on land not required for sustainable aeronautical development. The estate currently hosts more than 150 tenants, with planned further expansion. This includes expansion of services and ground transport networks to facilitate developments in consultation with external stakeholders such as Main Roads and the Public Transport Authority (PTA). The airport is recognised as a prime location for transport, logistics and resource sector companies because it gives 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 the State generally. These include:

- office developments such as Alpha, Bravo, Echo 1 and Echo 2 (tenanted by Rio Tinto's remote mining operations centre),
- various warehousing and logistics facilities (including Australia Post and Toll),
- the \$140 million Direct Factory Outlet (DFO) major destination retail development undertaken through a joint venture with Vicinity Centres (ASX:VCX) which opened in October 2018, and
- the \$55 million Costco large format retail warehouse which commenced construction in May 2019.

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. The co-location of Perth Airport operations with transport dependent businesses on the estate and in the neighbouring Kewdale precinct, together with the rail freight hub and the supporting major road network, reflects sensible long-term urban planning.

In addition to the Perth Airport funded projects, both the State and Commonwealth Governments have contributed significantly to fund infrastructure supporting the transformation of Perth Airport in recent years. The investments improved road access to the airport and were designed to support the consolidation of all commercial air services to the Airport Central Precinct.

The most significant infrastructure project completed to date is the \$1 billion Gateway WA project, Western Australia's largest-ever road project, that greatly improved access to Perth Airport as well as improving the safety and efficiency of one of the State's most important freight transport corridors. The Commonwealth Government provided \$676 million and the State contributed \$310 million to fund the development, with Perth Airport supporting the project through the contribution of nearly 30 hectares of land, a financial contribution, and the construction of roadworks valued at \$35 million within the estate. The Gateway WA Project, shown in Figure 1-6, was completed in April 2016.



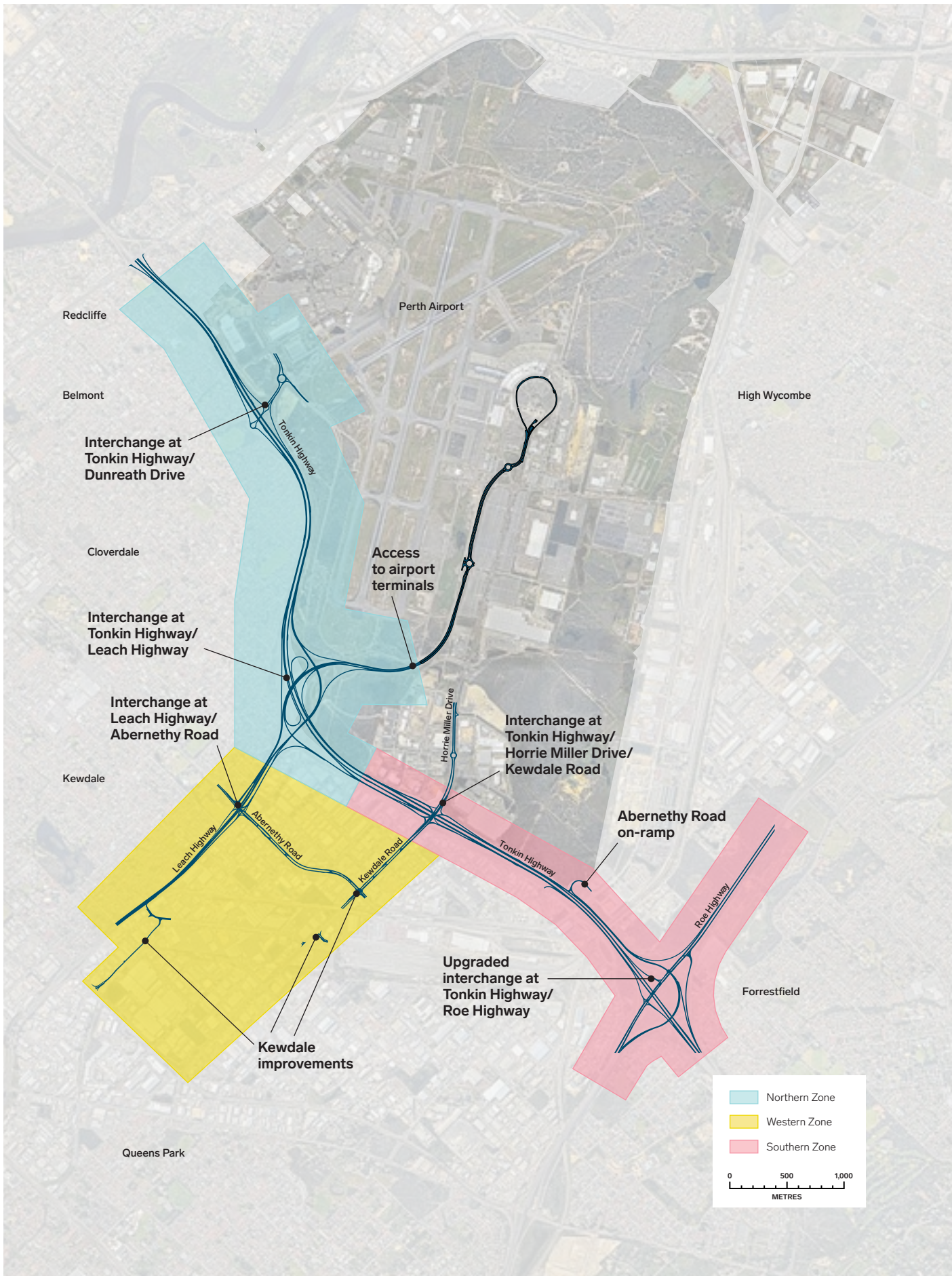


Figure 1-6 Gateway WA Perth Airport and Freight Access Project  
 Source: Main Roads WA



### 1.4.6 Current Developments

The completion of the \$1.86 billion Forrestfield-Airport Link will provide passengers arriving and departing Perth Airport with an alternative mode option. This project 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 is jointly funded by the Commonwealth (\$490 million) and State Government (\$1.37 billion) and is being delivered by the State Government. Perth Airport has contributed 2.2 hectares of land for the Airport Central Station, Redcliffe Station and the Redcliffe Station car park.

The rail link will form an integral component of Perth's long-term public transport network to meet existing and future public transport demand. The rail service will provide improved connectivity between Perth's eastern suburbs, Perth Airport and

the Perth CBD, as well as providing a viable alternative to car travel between these destinations.

As part of the Forrestfield-Airport Link project, the Airport Central Station is being constructed next to the Air Traffic Control tower and will give passengers access to T1 and T2 via a 280 metre long elevated 'Skybridge' walkway (the latter of which included an airport contribution \$8.6 million). The Forrestfield-Airport Link also provides two additional train stations outside the estate at Redcliffe (Redcliffe Station) and High Wycombe (Forrestfield Station). The delivery of Redcliffe Station will improve access to the Airport West Precinct. Works on the Forrestfield-Airport Link project commenced in October 2016 and are expected to be completed by the end of 2021.

Table 1-2 outlines the aviation and non-aviation related developments that were completed during the term of the Master Plan 2014.

#### Projects completed in 2015

Terminal 1 Domestic pier	New terminal and apron for Virgin Australia domestic operations. The pier provides nine aircraft parking bays, 12 aerobridge serviced gates, 28 domestic check-in kiosks and 14 hybrid self-service bag drop desks, and airline lounge
Terminal 1 International - First Floor Redevelopment	New screening, emigration outwards point and landside retail
Terminal 1 International - Arrivals Expansion	Expansion of the baggage reclaim hall, quarantine and Border Force areas
Terminal 1 International	Upgrade of the baggage handling system and screening equipment
Taxiway Charlie Extension	1,200 metre extension to Taxiway Charlie to provide improved aircraft access to the main runway 03 threshold
A380 Airfield Upgrade	Construction of pavement fillets (for turning aircraft) on various taxiways and blast pavements along taxiway Charlie for A380 operations
Airfield Transmissometers	Installation of sensors at key points within the airfield to allow air traffic controllers to determine visibility
T1/T2 Long Term Car Park H	Perth Airport constructed an expansion to an existing car park to provide an additional 1,290 parking bays
T2 Short Term Car Park	Perth Airport constructed a new car park to accommodate 440 bays for the new T2 terminal
T1/T2 Long Term Car Park J	Perth Airport constructed a new car park to accommodate 1,734 bays
T1/T2 Long Term Car Park K	Perth Airport constructed a new car park to accommodate 1,632 bays
Airport Drive Development	Perth Airport constructed a new two-lane dual carriageway road into T1 and T2 connecting into Gateway WA
Bravo Building	Four storey building with 9,000m <sup>2</sup> of 'A' grade office accommodation. Constructed by Perth Airport, the design incorporated Australian best practice environmental design (targeting 4.5 NABERS and 4-Green Star ratings) and has end-of-trip facilities including showers, change rooms and bicycle storage
Toll Express	Expansion and renovation of freight distribution warehouse, office building and truck parking area
Ceva Logistics	A new, sustainably designed 60,000m <sup>2</sup> multi-user warehouse complex including office space, advanced technology and efficient management systems
Siemens	This purpose-built industrial facility was constructed by Perth Airport to accommodate Siemens large drive servicing business. Siemens is one of the largest providers of energy and resource efficient technologies in the world, and the development included 3,100m <sup>2</sup> of office and workshop space with a highly technical integrated fit-out
Mainfreight	A new freight distribution facility providing 9,422m <sup>2</sup> of warehousing space and associated offices



### Projects completed in 2016

Terminal 1 International Departures Expansion	New departures lounge with over 700 seats; expansion of the check-in area with 16 new check-in desks; expanded outbound immigration area; expanded security screening area; and remodelling and refurbishing of level one to create a central retail and dining area
Dunreath Drive and Snook Road Roundabout	New dual-lane roundabout constructed by Perth Airport to facilitate access to T3 and T4
Fuchs & Speno	This 5,300m <sup>2</sup> industrial facility was constructed by Perth Airport in response to ongoing market demand for high quality industrial buildings in Perth's eastern industrial corridor. The building is split into two tenancies with Unit 1 utilised by the Fuchs Group as their primary WA distribution centre and Unit 2 housing Speno Rail Maintenance, one of the world's leaders in the field of rail maintenance, technology, diagnostics and rectification
Avis Car Rental Premises	Relocation of office and car rental facility to a new 1.1 hectare site with above ground fuel tank, cleaning facilities, car parking and office space
FedEx	New 3,000m <sup>2</sup> office and warehouse facility was constructed by Perth Airport for FedEx, the world's largest express transportation company, to accommodate the expansion of their package delivery business and includes a state of the art automated cargo sorting system
Europcar	Relocation of car rental facility to a new 6,000m <sup>2</sup> site with above ground fuel tank, cleaning facilities, car parking and office space
Bunnings	8,058m <sup>2</sup> trade warehouse and office on a 1.44 hectare site

### Projects completed in 2017

T3/T4 Apron Renewal	Asphalt overlay of the Terminal 3 apron and reconstruction of Terminal 4 pavement areas
Fauntleroy Avenue and Dunreath Drive Roundabout	New single-lane roundabout constructed by Perth Airport to improve traffic flow and direct access to T3 and T4
Hertz	Relocation of car rental facility to a new 0.8 hectare site with above ground fuel tank, cleaning facilities, car parking and office space

### Projects completed in 2018

Terminal 1 Departure Lounge	Expansion of seating areas, reconfiguration of the airline lounges, new food and beverage outlets and expansion of duty-free store
Terminal 3 International	Redevelopment of Terminal 3 to provide an integrated terminal that can alternate between domestic and international operations. The new international wing features a large outdoor deck with alfresco seating, a streamlined immigration and customs area to enable a faster transfer experience, additional food and beverage outlets, and duty-free store
Category III Instrument Landing System Lighting Upgrade	Installation of airfield ground lighting to improve runway visibility during adverse weather. The two-year project was undertaken by Perth Airport and required approximately 3,800 lights, 650 kilometres of cabling and 150 kilometres of electrical conduit  Airservices Australia also upgraded the Instrument Landing System (pilot navigation aid)
Thrifty	New 476m <sup>2</sup> building and car rental facility on a 0.55 hectare site with above ground fuel tank, cleaning facilities, car parking and office space
Epiroc	This modern 5,250m <sup>2</sup> office and warehouse facility has been purpose built by Perth Airport for the Epiroc Group and will be utilised by their warehousing and distribution operations
Direct Factory Outlet	Opened in October 2018, the 24,000m <sup>2</sup> retail outlet centre features 110 speciality retail stores, food and beverage outlets, and 1,600 car parking spaces. The development is a joint venture between Perth Airport and Vicinity Centres

### Projects in 2019/2020

Runway and taxiway works	Surface and structural pavement overlays on the main runway, cross runway and various taxiways
Terminal 4	Redevelopment and refurbishment of 15 retail and food and beverage stores in T4, following the transfer of the operation and management of T4 from Qantas to Perth Airport
Costco	14,000m <sup>2</sup> large format retail warehouse, including an optical centre, hearing aid centre, tyre centre and petrol station (completed March 2020)
Geodis	Purpose built for Geodis Australia, a world leading logistics company, the 2,900m <sup>2</sup> office and warehouse facility is being constructed by Perth Airport and will be utilised by Geodis as its primary WA warehousing and distribution centre

Table 1-2 Perth Airport aviation and non-aviation developments between 2015 and 2019

### 1.4.7 Future Consolidation

Perth Airport is committed to the consolidation of all commercial air services into the Airport Central Precinct.

An investment program of up to \$2.5 billion is planned to be undertaken over the next decade to support consolidation.

The key projects are shown in Figure 1-7 and include:

- expansion of international facilities through the international terminal upgrades,
- construction of a new terminal for the consolidation of Qantas operations to the Airport Central Precinct by 2025, and
- construction of the new runway.

International terminal upgrades will include:

- a new international departures area,
- greatly expanded retail offering,
- new airline lounges,
- new baggage handling system,
- new aerobridge-services and aircraft parking positions for wide-bodied aircraft, and
- new taxiways to connect the terminal to the existing and future airfield systems.

The first stage of the international terminal upgrades is expected to be completed in 2020.

The final stage of consolidation is the relocation of the Qantas Group from its existing location in T3 and T4, on the west of the airport, to expanded terminal facilities that are proposed to be constructed in Airport Central to the east of T1 (referred to as the new terminal). Perth Airport is working with Qantas towards consolidation by 31 December 2025.

The new runway forms a key part of supporting the consolidation of operations into Airport Central. Consistent with the first master plan released in 1985 and based on the extensive studies and reviews in the 1970's, consolidation was identified as a fundamental principle in achieving an effective primary airport to meet the needs of the Perth metropolitan region.

The new runway, as part of a parallel runway system, is critical to enabling the full and intended operation of all passenger operations from a centralised precinct. The additional infrastructure will support the new terminals by providing access for arrivals and departures to be balanced on either side of the Airport Central terminal precinct.

The Preliminary Draft Major Development Plan for the New Runway Project was released for a 60-business day public comment period between May and August 2018. The Major Development Plan identified that the runway is expected to be operational between 2023 and 2032, subject to demand and agreement with airlines. The Draft Major Development Plan was submitted to the Federal Minister for Infrastructure, Transport and regional Development in late-2019 for consideration.

The consolidation of commercial services into the Airport Central Precinct is also underpinned by recent significant State and Commonwealth Government investment in key infrastructure projects, such as Gateway WA and the Forrestfield-Airport Link, which have been designed to improve access to the future consolidated precinct.



Figure 1-7 Key projects in the next decade to support consolidation  
Source: Perth Airport







The Chamber of Minerals and Energy Western Australia (CMEWA) estimates that the number of direct employees in the Western Australian resource sector was approximately 118,000 at April 2018. CMEWA also estimates that FIFO workers account for 55 per cent of the resource sector workforce in Western Australia, with the majority of these workers residing in the Perth and Peel regions. Perth Airport estimates (developed by Tourism Futures International) indicate that FIFO accounts for approximately 70 per cent of all intrastate passengers, the majority of these being regular FIFO employees.

### 1.5.2.2 Tourism

The aviation activities at Perth Airport generate additional benefits for Perth and Western Australia by facilitating tourism spending by domestic and international visitors who arrive in the region by air.

In 2018, Perth Airport enabled more than \$4.1 billion of tourism activity in the state that supported more than 37,600 full time equivalent (FTE) jobs. This is forecast to increase to \$5.4 billion in 2025 with approximately 46,000 FTE positions, and \$9 billion in 2040 with approximately 74,000 FTE positions.

Tourism Enabled	Full Time Employment	Annual Adding Value to GRP
Direct Value	28,860	\$2.548 billion
Indirect	8,778	\$1.598 billion
Total	37,638	\$4.146 billion

**Table 1-4 Current annual tourism enabled economic benefit of Perth Airport (2018)**

Source: ACIL Allen

According to Tourism Research Australia (TRA), there were 1.422 million interstate overnight visitors to Western Australia in the year ended 31 March 2018. Of these visitors, 93 per cent used air transport. In addition, there were 8.42 million intrastate overnight visitors, of which 16 per cent travelled by air, and 20.186 million day visitors, of which five per cent travelled by air.

Data also collected by the International Visitor Survey show that there were 719,000 international visitors to Perth and 967,000 international visitors to Western Australia in the year ended 31 March 2018. During this time, these visitors spent a total of \$2.28 billion in the state, of which \$2.11 billion was spent in Perth.

Interstate and intrastate overnight visitors spent a total of \$3.06 billion in Perth and \$3.64 billion in regional Western Australia (including airfares). Day visitors spent a total of \$1.17 billion in Perth and \$802 million in regional Western Australia.

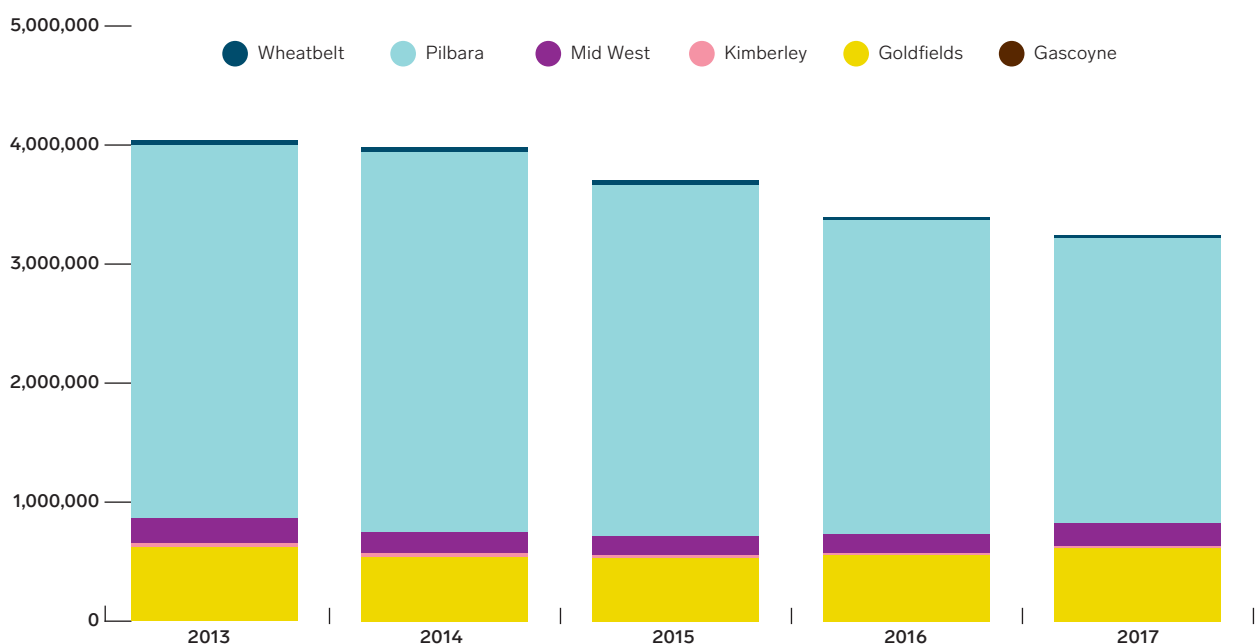
### 1.5.2.3 Education

The export of international student services has become increasingly important to the Australian economy. Between 1994 and 2017, the number of international student enrolments in Australia rose from less than 100,000 to 800,000. In Western Australia, enrolments rose from 27,100 in 2002 to 50,500 in 2015.

In the 12 months to March 2018, nearly seven per cent of international passengers arriving at Perth Airport stated that their main reason for travel was for education purposes.

A 2016 report by the Bankwest Curtin Economics Centre identified that 46.4 per cent of expenditure by international students enrolled in Western Australian universities are on fees, with the next highest expenditure category being food, drink and accommodation (34.4 per cent). The study estimated that, in 2015, international students delivered a value-add of \$770 million to the Western Australian economy, of which \$520 million was delivered by those enrolled in higher education and \$150 million by those enrolled in Vocational Education and Training (VET). In addition, it is estimated that the expenditure of international students generated additional employment of 8,070 FTEs in Western Australia that year, of which 3,515 FTEs were the result of the expenditure on food, drink and accommodation.

The study also projected international student enrolments to increase from 50,500 in 2015 to 67,300 in 2025 (of which 15.5 per cent are projected to be from India and 12.5 per cent from China). These students are forecast to spend \$1.82 billion on fees as well as goods and services, which will in turn result in a value add of \$1.1 billion and an additional 11,200 FTEs in employment in Western Australia.



**Figure 1-10 Perth Airport FIFO passenger movements by region**

Source: ACIL Allen

**1.5.2.4 Agriculture**

The use of air freight allows producers of agricultural products, particularly those that are time-sensitive and perishable, to service overseas and interstate markets. Perth Airport handles a large variety of agricultural products including fresh fruit and vegetables, seafood and fresh meat. The majority of agricultural freight is carried as cargo on regular passenger flights.

Figure 1-11 shows the key agricultural products exported through Perth Airport in the 12 months to the end of March 2018. In this period, nearly 34,000 tonnes of agricultural products worth over \$566 million were exported through the airport. Nearly two thirds (64 per cent) of this value was made up of fish and crustacean products, while fresh meat comprised 22 per cent of the total value exported. Meat exports out of Perth Airport have increased nearly threefold from 7,000 tonnes in 2011-12 to 20,500 tonnes in 2017-18.

Perth Airport is an essential link in facilitating the movement of perishable consumer goods to international markets. Providing appropriate infrastructure and strategic air linkages is critical to continued growth of the agricultural export markets.

**1.5.3 Future Economic Importance**

Taking into consideration the developments proposed in the first five years of this Master Plan 2020, it is forecast that by 2025 the total number of direct and indirect aviation-related full-time employees will be approximately 12,200, accounting for approximately \$3.08 billion of GRP (at 2017/18 prices). The total number of non-aviation-related full-time employees is forecast to be approximately 9,100 contributing approximately \$1.84 billion to the GRP.

In 2025, the spending by domestic and international tourism enabled by Perth Airport is forecast to generate approximately 46,300 full-time employees, adding value to the GRP of approximately \$5.420 billion per year.

2025	Full Time Employment	Annual Adding Value to GRP
Aviation (direct and indirect)	12,238	\$3.084 billion
Non-aviation (direct and indirect)	9,097	\$1.842 billion
Total	21,336	\$4.927 billion

**Table 1-5 Annual economic benefit of Perth Airport in 2025**

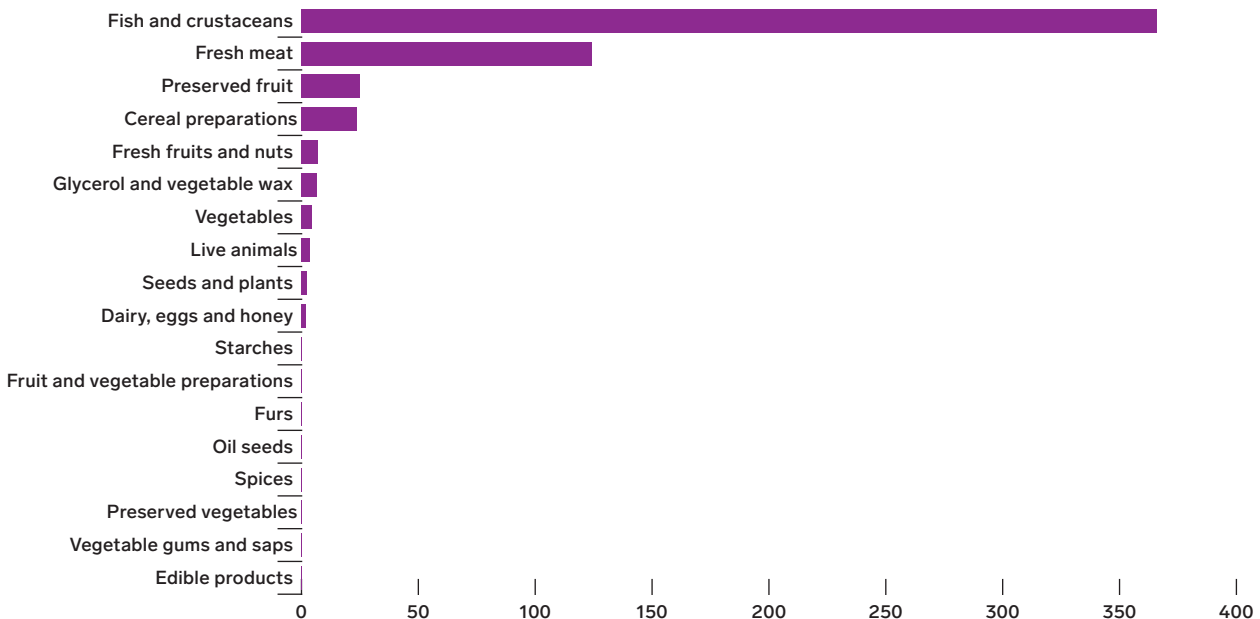
Source: ACIL Allen

For the proposed developments over the 20 year planning period of this Master Plan 2020, it is forecast that by 2040, the total (direct and indirect) number of aviation-related full-time employees will be approximately 18,700 accounting for approximately \$5.1 billion of GRP at 2017/18 prices. In 2040, the spending by domestic and international tourism enabled by Perth Airport is forecast to generate approximately 74,600 full-time employees, adding value to the GRP of approximately \$9.04 billion per year.

2040	Full Time Employment	Annual Adding Value to GRP
Aviation (direct and indirect)	18,671	\$5.080 billion
Non-aviation (direct and indirect)	17,996	\$3.934 billion
Total	36,667	\$9.015 billion

**Table 1-6 Annual economic benefit of Perth Airport in 2040**

Source: ACIL Allen



**Figure 1-11 Value of agricultural exports products exported through Perth Airport (12 months to March 2018) ('000,000)**

Source: Maritrade



### 1.5.4 Social and Cultural Benefits of Perth Airport

The location 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.

Without aviation, personal travel beyond 300 kilometres would become more difficult. People would travel less and part of the time away would be unproductive, travelling for long periods in cars, buses and trains. This would reduce the amount of personal 'connectivity' with friends and relatives, the ability to attend important family events and the opportunity for holidays, as well as cultural and sporting trips.

The development of the unique whole-of-state FIFO method of employment and services sourcing by the resource sector has largely been driven by the fact that Western Australia remains primarily a single-city State. The bulk of high-level services, including health, education, retail and recreational services, are located within the Perth metropolitan area. These factors mean that Perth Airport is critical to the lives of many West Australians.

The role of Perth Airport is not confined to providing and operating airport infrastructure: significant resources are also applied by Perth Airport through working with airline partners and the State Government for expansions to available air services.

Over the past 10 years, Perth Airport and the State Government have continued to be successful in attracting international airlines to Perth. As shown in Table 1-7, the number of airlines, destinations and aircraft seats to Perth has increased from 11 airlines and 12 international ports, to 21 airlines operating to 17 international ports. New and expanded services at Perth Airport include:

- China Southern Airlines launched flights to Guangzhou in 2011 and currently operate up to four services per week,
- Scoot introduced services in December 2013 and now operate nine services per week between Perth and Singapore,
- Qantas resumed services to Singapore in June 2015 and currently operate a daily service,
- Malindo Air launched services to Kuala Lumpur in November 2015, and currently operate 12 services each week,
- Batik Air launched services to Denpasar in June 2017 and currently operate a daily service,

- Qantas commenced a daily direct flight to London Heathrow in March 2018,
- in May 2018, Garuda Indonesia added a fifth service on the Perth-Jakarta route,
- from 9 June 2019, Indonesia AirAsia commenced four services per week to Lombok, Indonesia, and
- from 1 September 2019, All Nippon Airways (ANA) commenced a daily direct service to Tokyo Narita.

In the past few years, several airlines have consolidated operations and withdrawn some services out of Perth. This includes Virgin withdrawing its flights to Phuket in January 2016, Jetstar Asia withdrawing its Singapore services in March 2018, and Etihad withdrawing its Abu Dhabi services in October 2018. Notable changes driving the consolidation of services through the Middle East include tougher trading conditions and increased competition from direct flights.

Perth Airport targets specific markets to introduce new routes or increase capacity in existing routes. To leverage Perth's favourable geography and as the western gateway to Australia, Perth Airport is currently targeting routes to India and additional services to Europe. India is currently the fastest growing inbound market into Perth and the growth potential from a direct flight is significant, while further non-stop flights to Europe are possible following the success of the Perth-London service.

Perth Airport is also targeting direct flights to Vietnam, The Philippines and Phuket, Thailand. Non-stop flights to these markets are possible with new aircraft technology which enables cost-efficient narrow-body aircraft to fly longer distances of up to 7 hours.

Table 1-7 provides a comparison of international capacity at Perth Airport between 2008 and 2018.



## SECTION 1: INTRODUCTION

Port	Airline	2007/08		2017/18		Percentage Change	
		Seats	Flights	Seats	Flights	Seats	Flights
Abu Dhabi	Etihad Airways			212,778	730		
Auckland	Air New Zealand	142,450	607	246,345	830	73%	37%
	Qantas Airways			8,672	32		
Bangkok	Thai Airways	115,774	366	190,872	729	65%	99%
Brunei	Royal Brunei Airlines	96,328	490			-100%	-100%
Christchurch	Air New Zealand			21,663	72		
Christmas Island	Alliance Airlines			5,280	66		
	National Jet Systems	5,418	71	164	2	-97%	-97%
	Virgin Australia			18,984	113		
Cocos Island	National Jet Systems	4,028	53			-100%	-100%
	Virgin Australia			15,792	94		
Denpasar	Batik Air			233,916	1,313		
	Garuda Indonesia	192,116	1,235	157,471	681	-18%	-45%
	Indonesia AirAsia			383,220	2,129		
	Jetstar Airways			386,718	2,144		
	Ozjet Airlines	17,820	162			-100%	-100%
	Qantas Airways	57,768	332	522	3	-99%	-99%
Doha	Qatar Airways			280,342	730		
Dubai	Emirates	477,080	1,464	581,312	1,460	22%	0%
Guangzhou	China Southern Airlines			113,726	434		
Hong Kong	Cathay Pacific Airways	152,797	491	264,361	997	73%	103%
	Qantas Airways	84,601	314			-100%	-100%
Jakarta	Garuda Indonesia	41,880	417	70,386	433	68%	4%
	Qantas Airways	50,982	293			-100%	-100%
Johannesburg	Qantas Airways	5,400	12			-100%	-100%
	South African Airways	135,534	537	181,154	696	34%	30%
Kota Kinabalu	Malaysia Airlines			16,012	100		
Kuala Lumpur	AirAsia X			429,026	1,138		
	Malaysia Airlines	278,422	961	152,384	804	-45%	-16%
	Malindo Airways			188,100	1,150		
London Heathrow	Qantas Airways			46,256	196		
Mauritius	Air Mauritius	61,902	207	80,498	288	30%	39%
	Qantas Airways	229	1			-100%	-100%
Phuket	Thai Airways	49,576	156			-100%	-100%
Singapore	Jetstar Asia			133,920	744		
	Qantas Airways	449,591	1,457	173,678	987	-61%	-32%
	Scoot Tigerair	138,240	768	240,936	696	74%	-9%
	Singapore Airlines	635,419	2,073	822,827	2,933	29%	41%
Tokyo-Narita	Qantas Airways	74,538	314			-100%	-100%
Grand Total		3,267,893	12,781	5,657,315	22,724	73%	78%

Table 1-7 Comparison of international capacity at Perth Airport between 2008 and 2018

### 1.5.5 Connectivity within Western Australia

Perth Airport is both the primary airport in Western Australia and the hub through which nearly all regional aviation is serviced.

One quarter of Western Australia's population live in regional areas. The vast area of Western Australia and the distances between the regions and Perth mean that air travel is often the quickest method of travel. Perth Airport is vital for people living in these communities to gain access to medical care, education, legal and government services, and a range of cultural, sporting and recreational activities.

Due to the remote location of many of Western Australia's resource developments, aviation plays an essential role in helping to attract and maintain staff on site. FIFO commuting to work is not only a major economic facilitator for Western Australia, it is also a social facilitator allowing workers to remain living in their home location while commuting to work.

Seven airlines currently operate intrastate services in Western Australia and they account for more than 50 per cent of all flight movements through Perth Airport. Around 80 per cent are scheduled flights; the remainder are charter and general aviation flights.

In 2017, Perth Airport recorded more than 2.5 million passengers that travelled through Perth Airport on intrastate RPT services representing 20 per cent of all RPT movements through the airport. In addition, charter flights, particularly those catering to the resources related industries carry large numbers of passengers through the airport. In 2017, charter flights catering to resource-related industries carried around 3.2 million passengers.

The change in regional aviation at Perth Airport between 2014 and 2018 is shown in Table 1-8.

Year	Total Perth Airport Passengers (Million)	Number of Intrastate Passengers (Million)	Intrastate Percentage of Total Passengers
2014	14.91	4.73	31.7
2015	14.76	4.59	31.1
2016	14.49	4.23	29.2
2017	14.28	4.00	28.0
2018	14.29	4.04	28.3

**Table 1-8 Intrastate aviation passenger growth at Perth Airport**

Source: Perth Airport

### 1.5.6 Connectivity with the rest of Australia

Perth Airport is the largest airport on the west coast of Australia and the key port of entry and departure for anyone arriving to or departing from the State. Reflecting this, domestic passengers make up the majority of passengers through Perth Airport.

In 2017, there were 5.4 million interstate RPT passengers through Perth Airport, comprising 46 per cent of all passengers. The number of interstate passengers has increased from nearly 3.1 million in 2014 to just over 5.8 million in 2017. The change in interstate services over the past five years is shown in Table 1-9.

Year	Total Perth Airport Passengers (Million)	Number of Interstate Passengers (Million)	Interstate Percentage of Total Passengers
2014	14.91	6.07	40.7
2015	14.76	5.98	40.5
2016	14.49	6.00	41.4
2017	14.28	5.88	41.2
2018	14.29	5.88	41.2

**Table 1-9 Interstate aviation passenger growth at Perth Airport**

Source: Perth Airport

Given the vast distances to other Australian states, interstate air services are the only efficient passenger transport mode. In terms of population increases in Western Australia, interstate migration has, over a long period, provided an important contribution to Western Australia's population growth.



**1.5.7 Connectivity with the world**

International passenger numbers have typically represented a third of total passengers through Perth Airport.

International passengers at Perth Airport have grown at an average annual rate of 7.4 per cent over the past ten years. In 2017, there were nearly 4.4 million international passengers that travelled through Perth Airport on regular passenger transport services. This is equivalent to 34 per cent of all passengers.

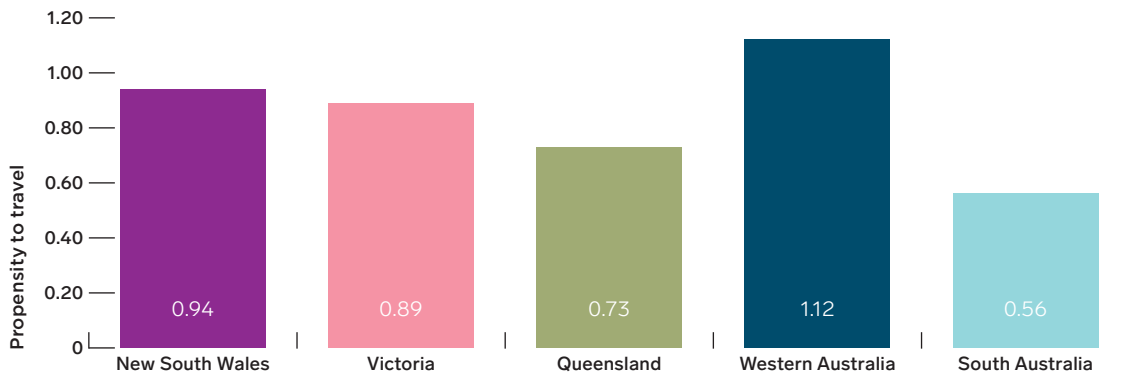
Figure 1-12 shows that Western Australians have the highest propensity for international air travel compared to all other Australian States. Propensity to travel is calculated by dividing resident passenger movements by the resident population. Factors contributing to this feature are the higher proportion of the State's population with overseas and interstate family ties, accessibility to high quality leisure destinations within Asia, and the nature of Western Australia's economy with its strong global connections.

The 2016 Australian Bureau of Statistics (ABS) Census recorded that 39.7 per cent of all Western Australians were born outside Australia compared to 33.3 per cent for the average total Australian population. This trend is even more pronounced for Perth where 42.7 per cent were born outside of Australia.

Perth Airport plays a vital role in assisting these residents to stay connected with families, friends and cultures in their place of origin. However, it is not only social and cultural ties that encourage overseas travel; Western Australia's proximity to South East Asia means that countries such as Indonesia, Thailand and Malaysia have become popular holiday destinations for Western Australians, and Perth has become a convenient and attractive place for people from those countries to visit, study, live and invest in. Growing economic ties means that Australian businesses are increasingly forming business relationships with South East Asian countries and China.

**1.5.8 Community Benefit of Perth Airport**

Perth Airport 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 our community. Our relationship with the Western Australian community is an important part of our values and over the past decade, we have invested more than \$7.5 million to positively impact the lives of many Western Australians.



**Figure 1-12 Comparison of propensity for international travel for each State**  
Source: BITRE 2017 / ABS 2016 Census



## The importance of Perth Airport



**4.30am – 7.30am**

Demand linked to resource sector shifts

### INTRASTATE

**45.5%**

of Australian export income generated by resource sector

**24%**

of traffic is FIFO related



**10pm – 2am**

Airline schedules linked to international

### INTERNATIONAL

**967,000**

International visitors to WA

**\$4.6 billion**

Tourism enabled in WA



**10pm – 1am**

Interstate nightly services

### INTERSTATE

**24/7**

Due to demand airlines need to use larger aircraft & offer services 24/7



**Red-eye special**

provides a cheaper alternative



**12pm – 6am**

Possible lower airfare alternatives

### FREIGHT

**34,000**

tonnes of agricultural produce per year



**Express post**

Supports express postage services and online shopping



**95%**

of visitors travelling to WA use air transport



**35 million**

Passengers will grow from 14.3 million in 2018 to 35 million in 2045

### Benefits of Perth Airport to WA 2018 → 2040



**36,600**

Employment will grow from 16,700 Full Time Equivalents in 2018 to 36,000 in 2040



**\$9 billion**

Contribution to Gross Regional Product will grow from \$3.5 billion in 2018 to \$9 billion in 2040