

6 Aviation Forecasts

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.

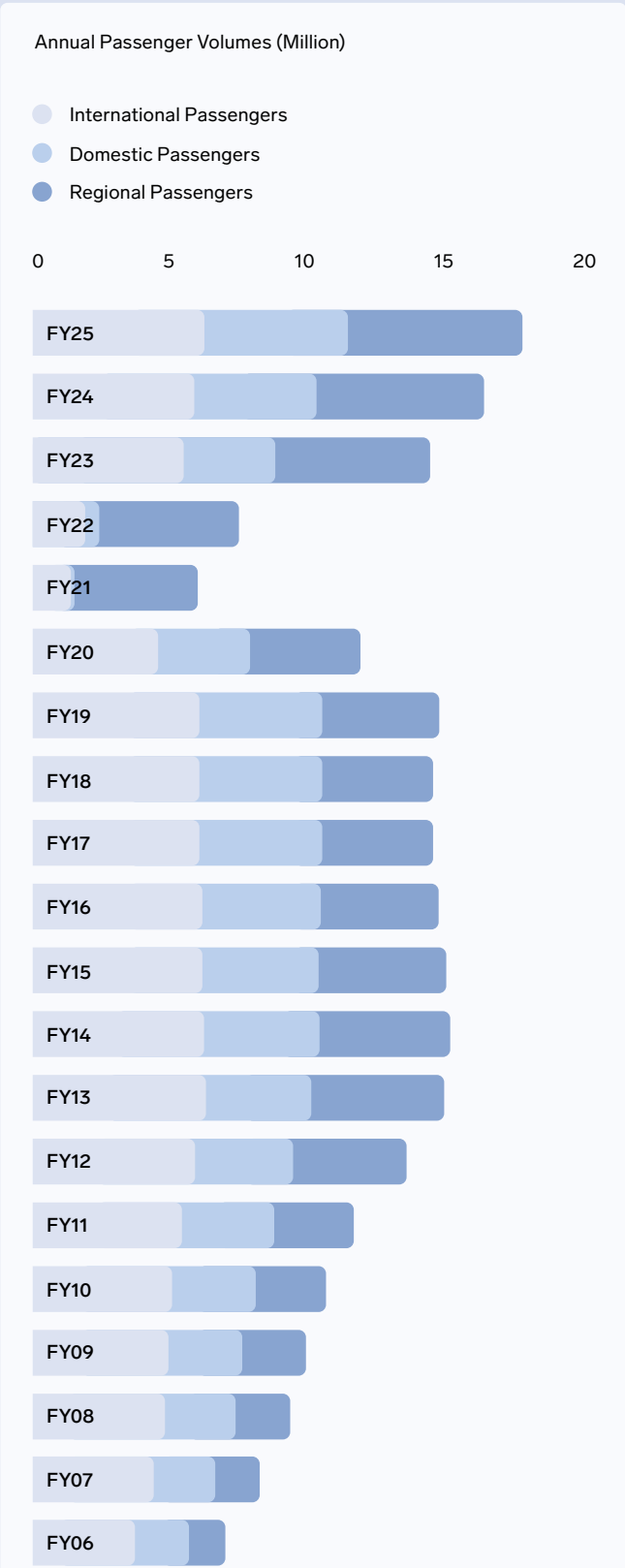


Figure 6-1 Perth Airport annual passenger volumes FY05 to FY25
Source: Perth Airport
Note: FIFO charter passenger numbers were not recorded until 2012 and are not included in the regional passenger counts for the years 2005 to 2011

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 disproportionately 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.

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.

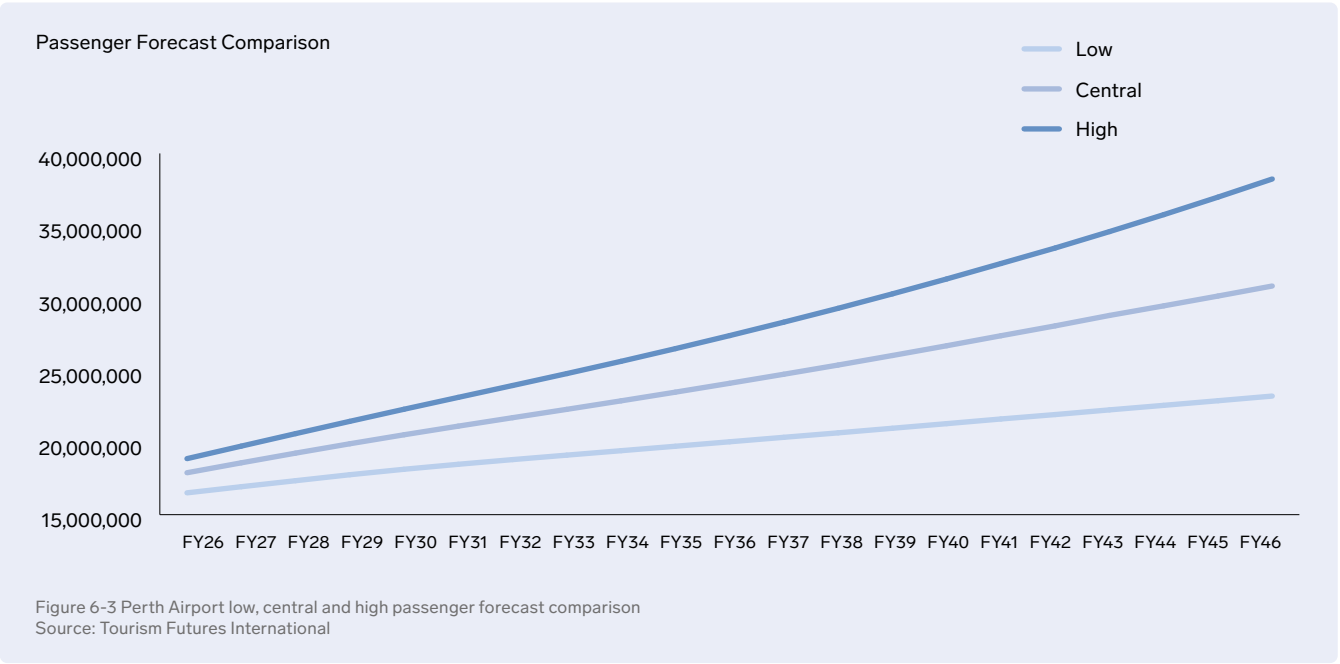
The proportion of international passengers is expected to increase from 30 per cent in FY19 (pre-COVID) to 37 per cent of all passengers by FY46, while the proportion of regional passengers is expected to reduce from 29.4 per cent in FY19 to 21.8 per cent by FY46. The proportion of interstate passengers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



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

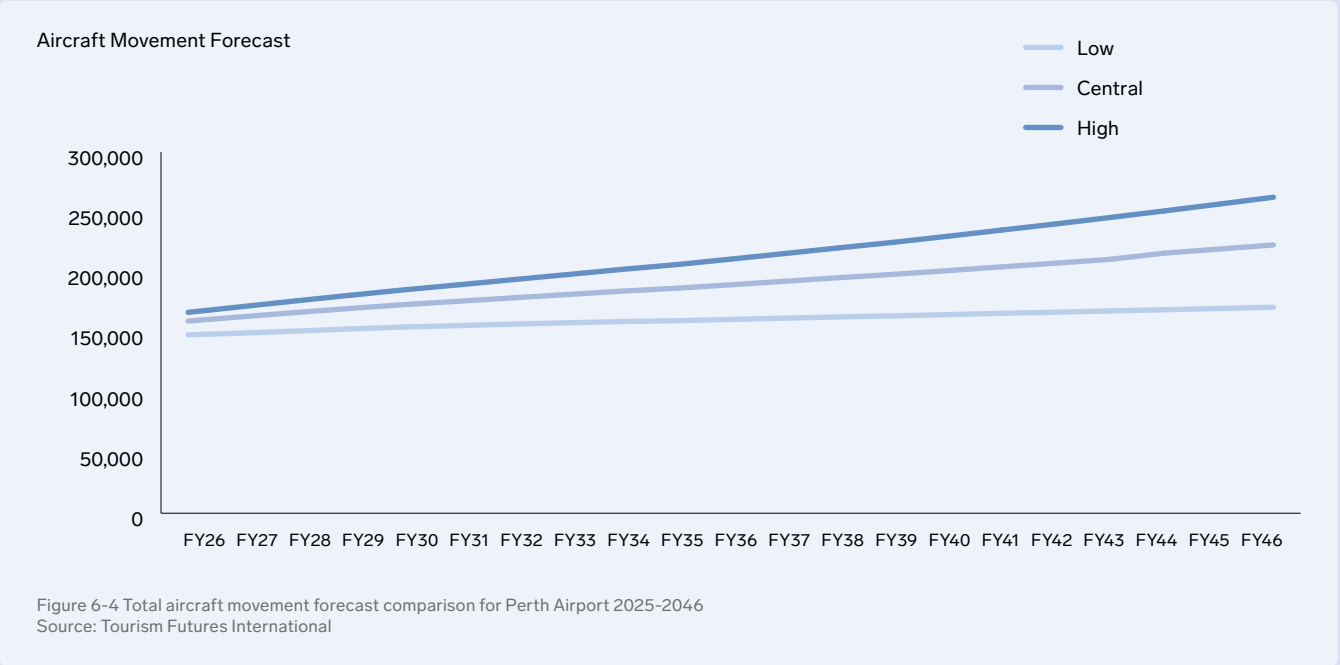
aviation and charter) are forecast to grow from 133,320 in FY24 to 175,420 in FY46. Total annual aircraft movements are forecast to grow from 156,760 in FY24 to 222,790 movements in FY46.

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											
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 Movements											
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

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.

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

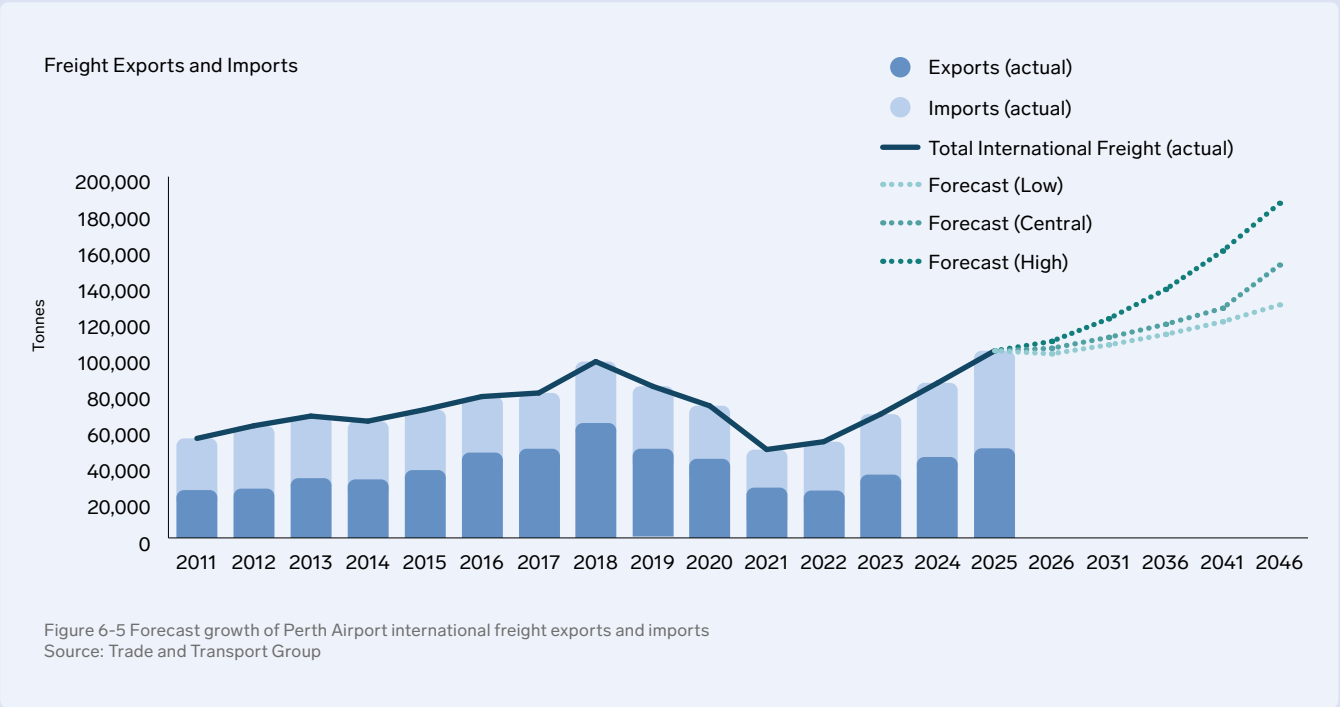
perishables, as well as a mix of other industrial and consumer products. Perth has a higher share of machinery and equipment as a percentage of total air imports, as compared to other Australian states.

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.

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.

