Australian Aviation Network Overview

April 2024

Executive Summary

In April 2024, the overall Australian aviation network grew by two per cent compared to the previous month in terms of daily average flights driven by Easter school holiday demand.

The aviation sector continues to face significant challenges, as seen in Bonza's suspension of services, disruptions to some airlines' long-haul networks due to Middle East geopolitics, the continuing tight labour market and aircraft delivery constraints.

In navigating this environment, our industry remains focused on improving service reliability and rebuilding trust. In March, the industry on-time performance (OTP) reached its highest level in two years. Some measures to enhance passenger experience include deploying new aircraft, hiring more frontline staff, building standby resources, better matching schedules to actual demand to minimise cancellations, and greater transparency on airport operations. Comparing to top performers globally, further efforts are still required to build resilience and flexibility into airline schedules, airport capacity and whole-of-network planning.

Overall air traffic management outcomes trended favourably in recent months. In April, Airservices attributed capacity constraints affected 2.1 per cent of flights, similar to the rate observed in March. Where ground delay program (GDP) periods were implemented, 9.2 per cent of ground delay periods and 0.4 per cent of cancellations were attributable to Airservices well below the monthly average of the past year. However short-term staff availability challenges particularly in the second half of April around Sydney and Perth demonstrate that service levels continue to be variable. Significant training and recruitment programs and refining enabling processes and systems remain our priority focus areas to continue to improve service outcomes.

Report content

We acknowledge and embrace a culture that celebrates diversity, inclusion, and equality for all. In making this statement we acknowledge Aboriginal and Torres Strait Islander peoples as the Traditional Owners and Custodians of the country on which we operate, now called Australia.

1

2

3

Economic and social trends

Economic factors

Air traffic demand remains resilient against the backdrop of rising fuel prices, geopolitics in the Middle East, subdued GDP growth and sticky inflation. Strong inbound traffic for visiting family/friends and employment, as well as tourism to key Asia Pacific markets have underpinned traffic growth. To match capacity to demand, there are increasing investments in aviation jobs and skills development across the sector.
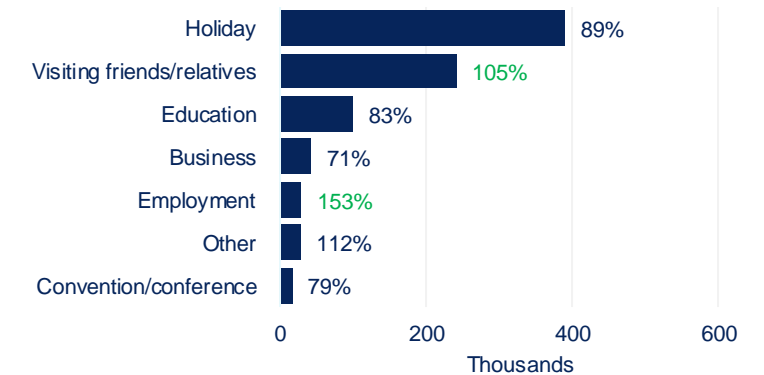
Figure 1. Jet fuel and Brent crude oil prices
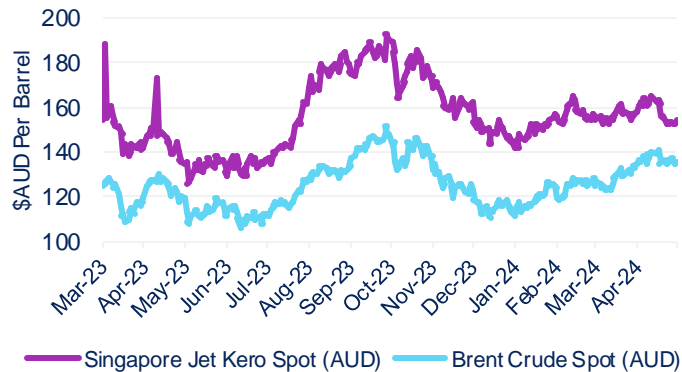
Source: Bloomberg

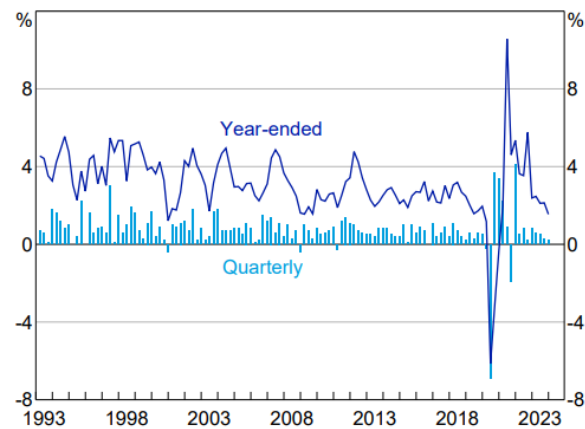**Figure 2. Monthly Consumer Price Index (CPI) Indicator**
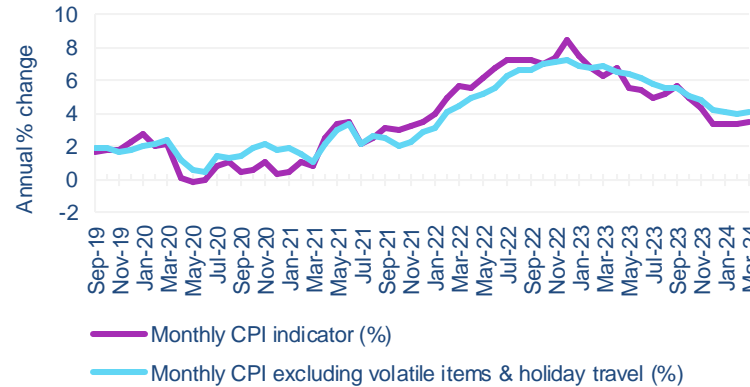
Source: ABS (website) – data released 24/4/2024 up to March 2024

Figure 3. International visitor numbers by reason and percentage of recovery (February 2024 vs February 2019, above pre-pandemic growth noted in green)

Reason	% recovery
Holiday	89%
Visiting friends/relatives	105%
Education	83%
Business	71%
Employment	153%
Other	112%
Convention/conference	79%

Source: ABS (website) – data released 16/4/2024 up to February 2024

Figure 4. GDP growth

Source: RBA (website)

Figure 5. Employment in the aviation sector
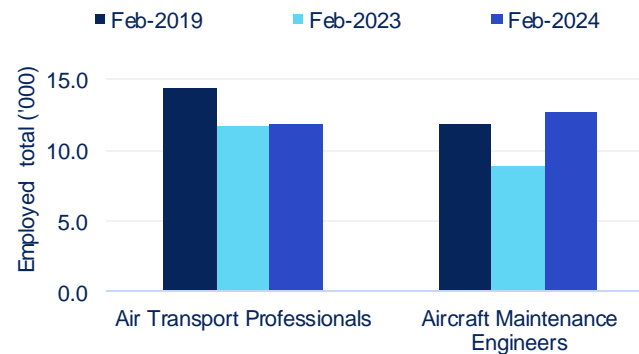
Source: ABS (website) – data released 18/4/2024 up to March 2024

Figure 6. International visitor numbers by country and percentage of recovery (February 2024 vs February 2019, above pre-pandemic growth noted in green)

Country	% recovery
China	73%
New Zealand	115%
USA	98%
UK	90%
Korea, South	136%
Japan	92%
India	111%
Singapore	83%
Hong Kong	69%
Vietnam	164%
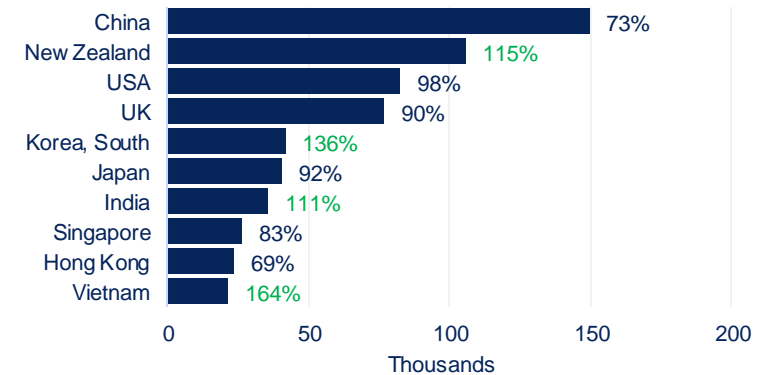
Source: ABS (website) – data released 16/4/2024 up to February 2024

Social factors

While the annual number of aircraft noise complainants each year is below pre-pandemic levels, the intensification of complaints by some complainants indicates a reduced tolerance for aircraft noise. With the Senate inquiry into aircraft noise now underway, it provides a valuable opportunity to increase awareness of the causes, trade-offs and mitigation of aircraft noise by all actors in the aviation ecosystem.

Figure 7. Annual total number of aircraft noise complainants (top) and noise complaints (bottom)

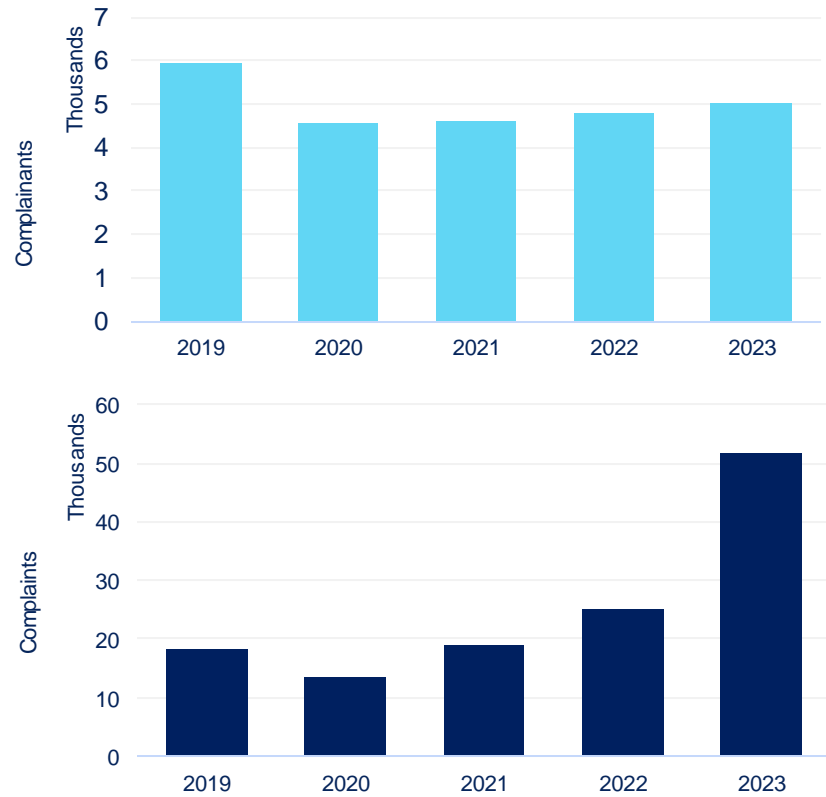**Figure 8. Monthly noise complaints per complainant for major airports**
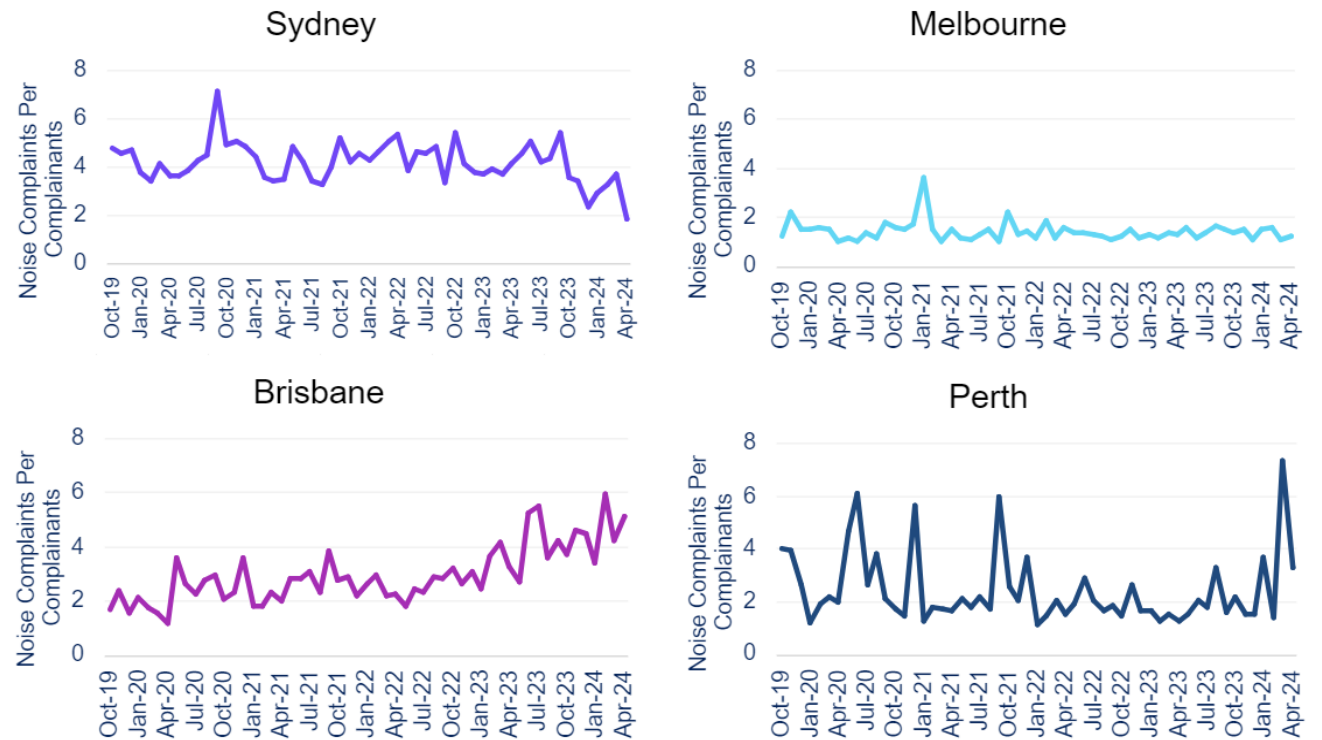
Source: Airservices Noise Complaints and Information Service (NCIS)

Australian aviation and regional context

State of Australian aviation growth

In April 2024, the Australian aviation network recorded two per cent growth in terms of daily average flights compared to the previous month driven by Easter school holiday demand. Domestic traffic is below Airservices' forecast, mainly due to the limited growth in business travel. In contrast, international traffic has remained above our forecast impacted by stronger than anticipated leisure demand, particularly in Asia.

Average Daily Flights
(April 2024 and percentage of April 2019)

3,842
99%
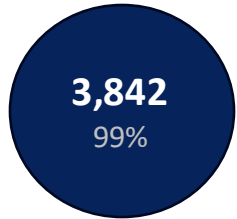
Total Domestic Flights
(April 2024 and percentage of April 2019)

97,253
99%

Total International Flights
(April 2024 and percentage of April 2019)

18,018
95%

Figure 9. Domestic (top) and international (bottom) average daily flights compared to Airservices' forecast
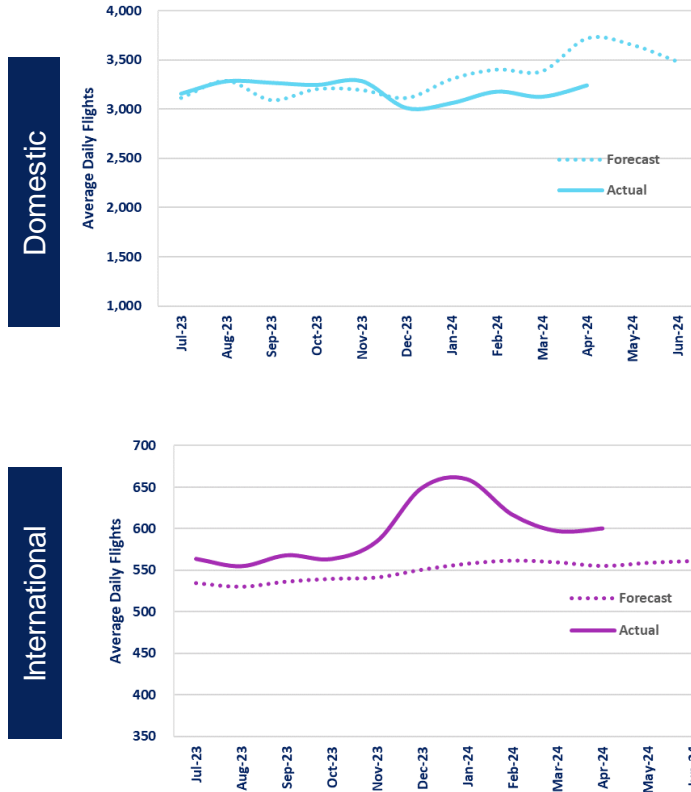
Figure 10. Average daily flights per month by industry segment
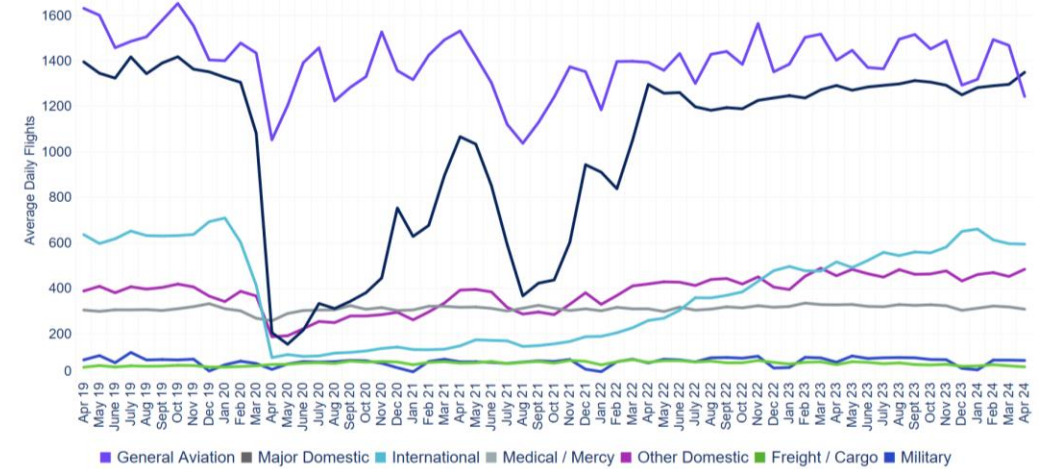
Source: Airservices ODAS

Source: Airservices aeronautical charge database (excludes some general aviation flights that are not subject to Airservices aeronautical charges; Airservices' forecast is as of June 2023).

Top aircraft operators

Qantas Group and regional airlines dominated recent growths. While Bonza's operations since 2023 have stimulated new markets in regional Australia, the competitiveness in the Australian aviation sector remains constrained given the airline's suspension of its services on 30 April 2024.

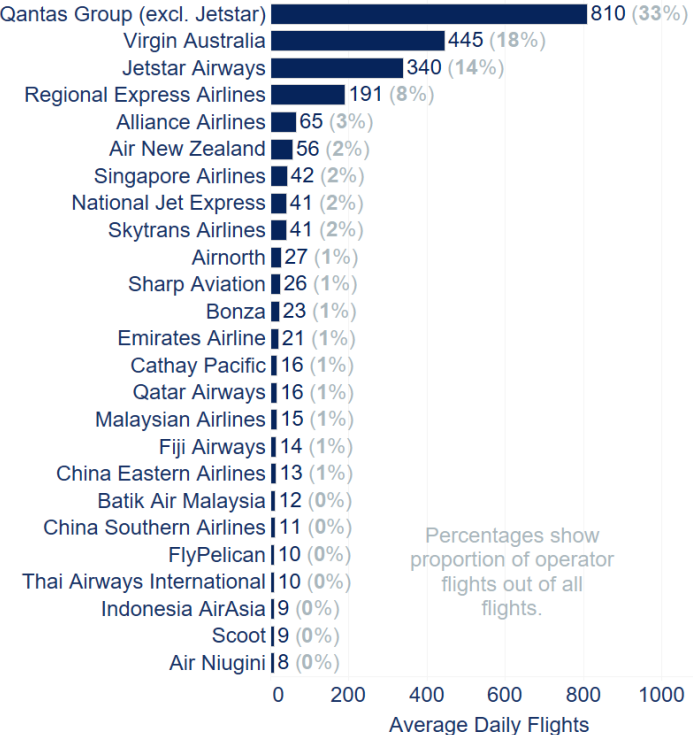**Figure 11. Average daily flights by top operators (April 2024)**

Operator	Average Daily Flights
Qantas Group (excl. Jetstar)	810 (33%)
Virgin Australia	445 (18%)
Jetstar Airways	340 (14%)
Regional Express Airlines	191 (8%)
Alliance Airlines	65 (3%)
Air New Zealand	56 (2%)
Singapore Airlines	42 (2%)
National Jet Express	41 (2%)
Skytrans Airlines	41 (2%)
Airnorth	27 (1%)
Sharp Aviation	26 (1%)
Bonza	23 (1%)
Emirates Airline	21 (1%)
Cathay Pacific	16 (1%)
Qatar Airways	16 (1%)
Malaysian Airlines	15 (1%)
Fiji Airways	14 (1%)
China Eastern Airlines	13 (1%)
Batik Air Malaysia	12 (0%)
China Southern Airlines	11 (0%)
FlyPelican	10 (0%)
Thai Airways International	10 (0%)
Indonesia AirAsia	9 (0%)
Scoot	9 (0%)
Air Niugini	8 (0%)

Percentages show proportion of operator flights out of all flights.

Figure 12. Top operators' change in average daily flights and percentage change (April 2024 vs April 2023)

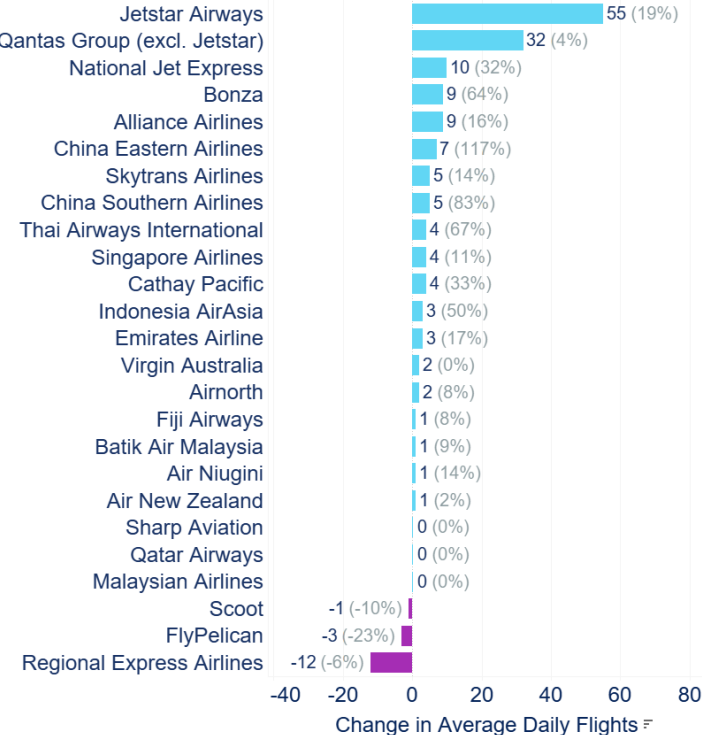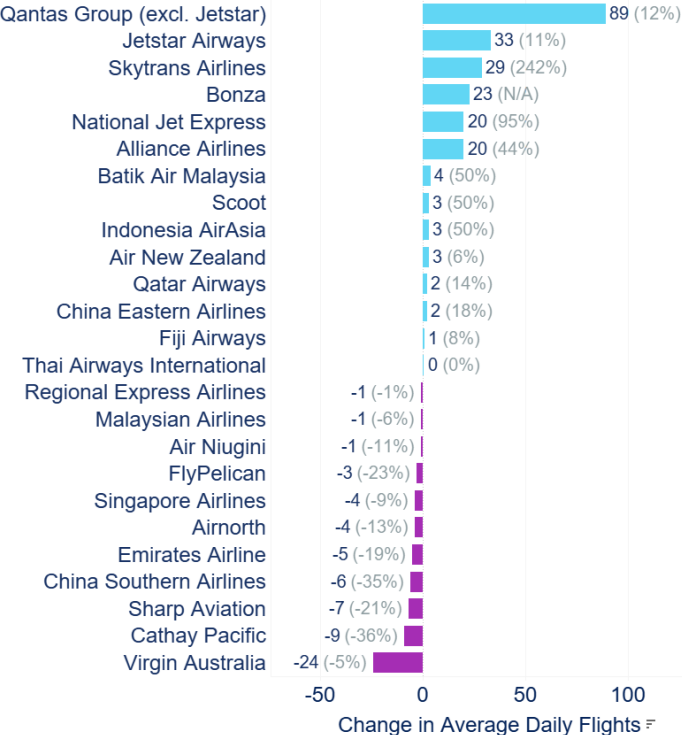| Operator	Change in Average Daily Flights
Jetstar Airways	55 (19%)
Qantas Group (excl. Jetstar)	32 (4%)
National Jet Express	10 (32%)
Bonza	9 (64%)
Alliance Airlines	9 (16%)
China Eastern Airlines	7 (117%)
Skytrans Airlines	5 (14%)
China Southern Airlines	5 (83%)
Thai Airways International	4 (67%)
Singapore Airlines	4 (11%)
Cathay Pacific	4 (33%)
Indonesia AirAsia	3 (50%)
Emirates Airline	3 (17%)
Virgin Australia	2 (0%)
Airnorth	2 (8%)
Fiji Airways	1 (8%)
Batik Air Malaysia	1 (9%)
Air Niugini	1 (14%)
Air New Zealand	1 (2%)
Sharp Aviation	0 (0%)
Qatar Airways	0 (0%)
Malaysian Airlines	0 (0%)
Scoot	-1 (-10%)
FlyPelican	-3 (-23%)
Regional Express Airlines	-12 (-6%)

Figure 13. Top operators' change in average daily flights and percentage change (April 2024 vs April 2019)

| Operator	Change in Average Daily Flights
Qantas Group (excl. Jetstar)	89 (12%)
Jetstar Airways	33 (11%)
Skytrans Airlines	29 (242%)
Bonza	23 (N/A)
National Jet Express	20 (95%)
Alliance Airlines	20 (44%)
Batik Air Malaysia	4 (50%)
Scoot	3 (50%)
Indonesia AirAsia	3 (50%)
Air New Zealand	3 (6%)
Qatar Airways	2 (14%)
China Eastern Airlines	2 (18%)
Fiji Airways	1 (8%)
Thai Airways International	0 (0%)
Regional Express Airlines	-1 (-1%)
Malaysian Airlines	-1 (-6%)
Air Niugini	-1 (-11%)
FlyPelican	-3 (-23%)
Singapore Airlines	-4 (-9%)
Airnorth	-4 (-13%)
Emirates Airline	-5 (-19%)
China Southern Airlines	-6 (-35%)
Sharp Aviation	-7 (-21%)
Cathay Pacific	-9 (-36%)
Virgin Australia	-24 (-5%)

Source: Airservices ODAS (excludes general aviation, cargo, military and medical/mercy flights)

Domestic network

Mining and tourism in Queensland, Western Australia and Northern Territory are driving diversification in regional routes. This contrasts with low rate of growth in capital-to-capital routes. With the rising demand for pilots and return of international students, there is an uptick in flight training activities at metropolitan airports. Modernisation of aviation infrastructure and skills investment in these locations is critical to foster the regional and general aviation sector.

Figure 14. Domestic connectivity by month, in terms of unique routes

Figure 15. Daily average GA training flights by month, across major flight training airports
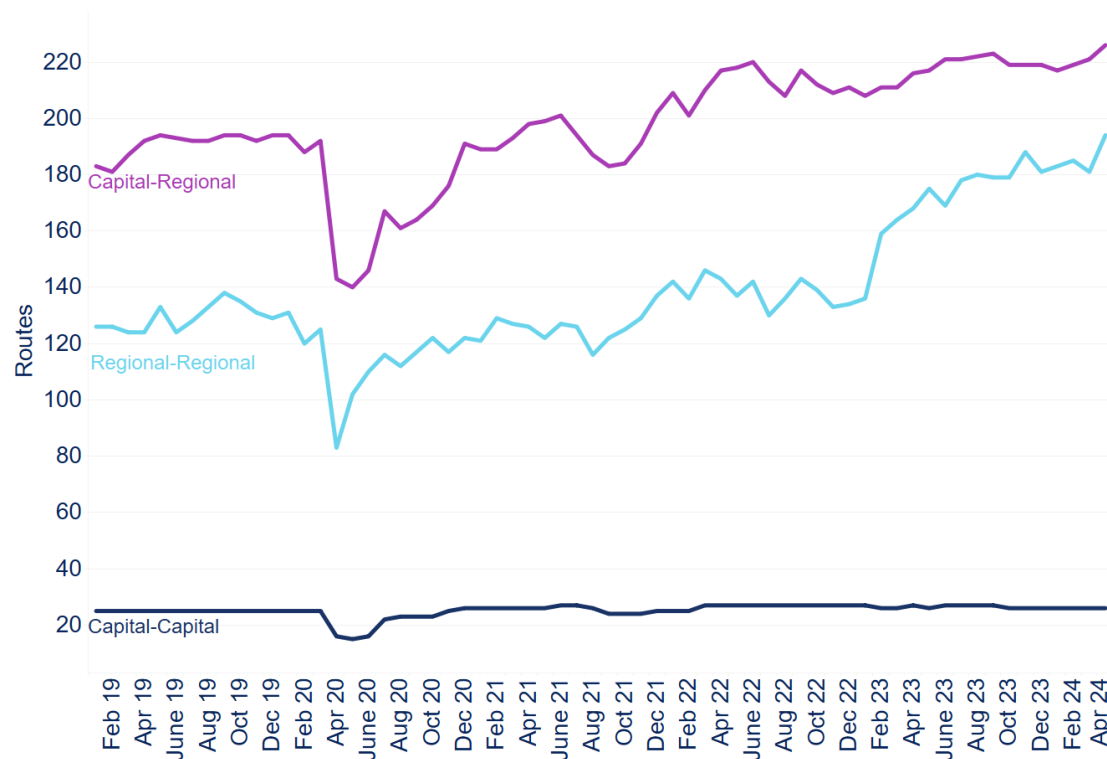
Source: Airservices (excludes military, medical/mercy, training, and return flights). Only operators with at least 2 flights weekly on a route are included.
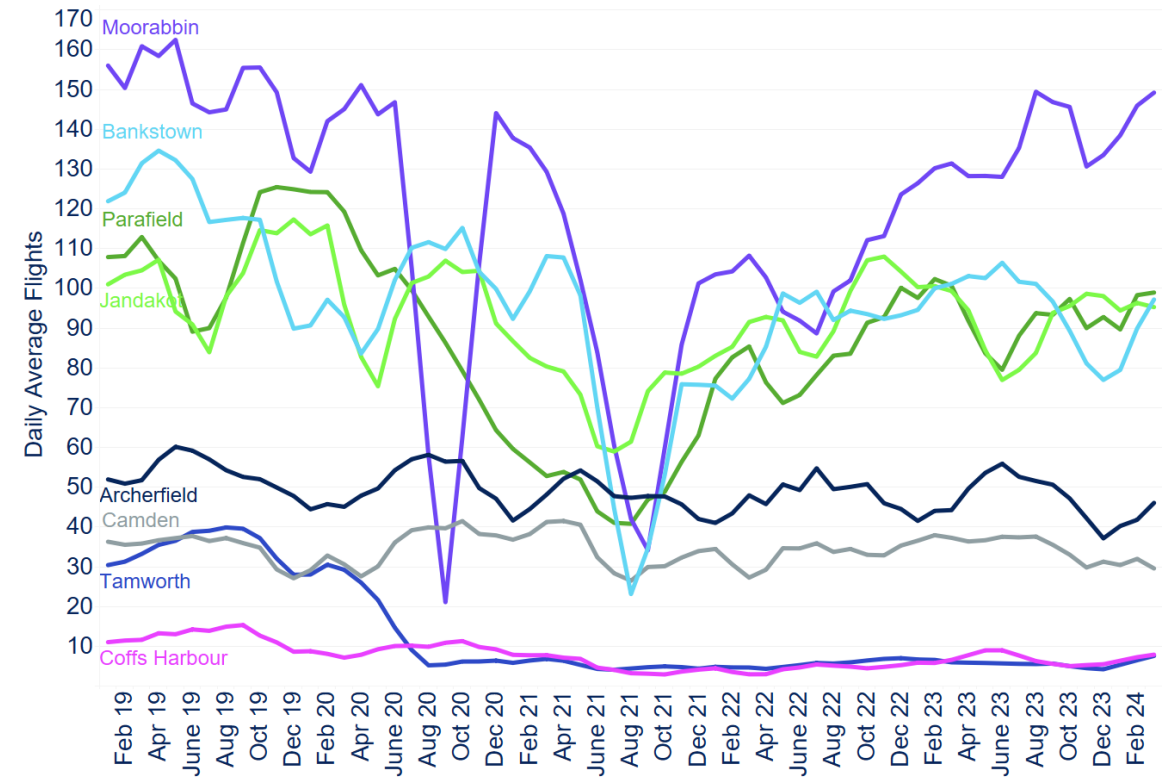
Source: Airservices ODAS. Data points have been averaged across ± 1 month.

Traffic flows from international markets

International traffic growth continues to reflect strong trade and tourism activities in neighbouring markets such as New Zealand, Vietnam, India and South Korea. The Middle East geopolitics is affecting some of the long-haul transcontinental traffic. Recovery from the Chinese market has slowed considerably over the last two months, indicating the current state of consumer confidence and economic growth in China.

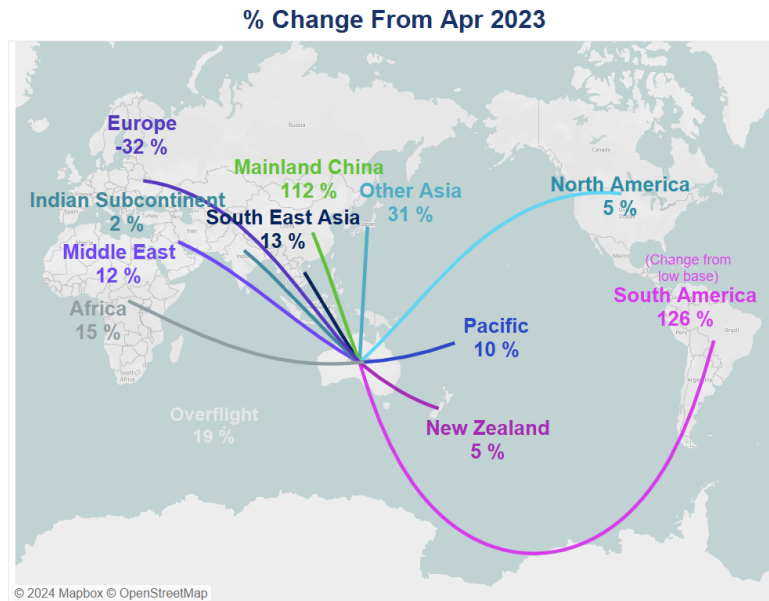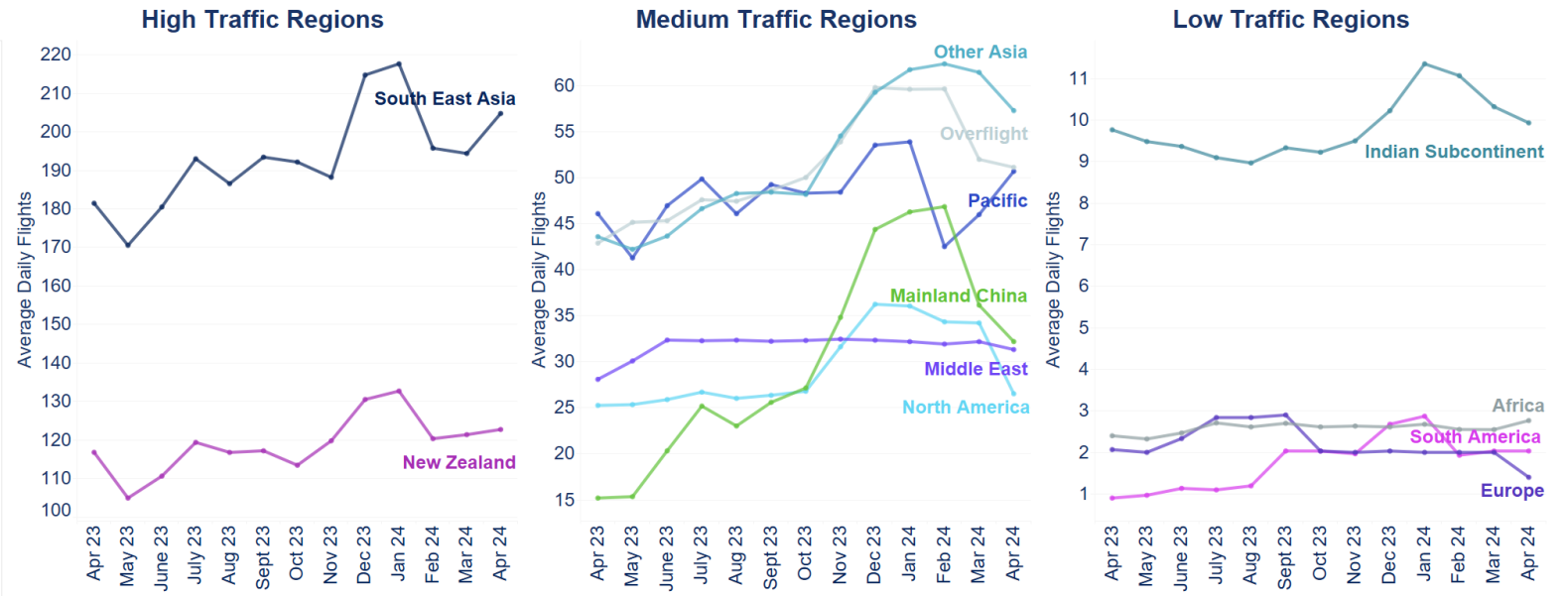**Figure 16. Percentage change in total flights by international markets in April 2024 vs April 2023**

Figure 17. Average daily number of flights per month by international markets

% Change From Apr 2023

- Europe **-32 %**
- Mainland China **112 %**
- Other Asia **31 %**
- North America **5 %**
- Indian Subcontinent **2 %**
- South East Asia **13 %**
- Middle East **12 %**
- Africa **15 %**
- South America **126 %** (Change from low base)
- Pacific **10 %**
- Overflight **19 %**
- New Zealand **5 %**

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High Traffic Regions — South East Asia, New Zealand

Medium Traffic Regions — Other Asia, Overflight, Pacific, Mainland China, Middle East, North America

Low Traffic Regions — Indian Subcontinent, Africa, South America, Europe

Source: Airservices ODAS (excludes general aviation, cargo, military and medical/mercy flights)
For multi-leg flights, legs that start and end outside Australian airspace are not included.

Change in active fleet as a capacity indicator

The pace of Australian airlines' fleet renewal and therefore aircraft capacity increase in 2024 continues to be constrained by the supply chain and production challenges in the aircraft manufacturing and supporting sectors. Nevertheless, the rate of fleet renewal is projected to increase considerably from 2025– including Qantas Group reports to take delivery of new aircraft every three weeks for the next few years.

Figure 18. Active Airbus and Boeing fleet in Australia and by region (as of 30 April in 2019, 2023 and 2024)
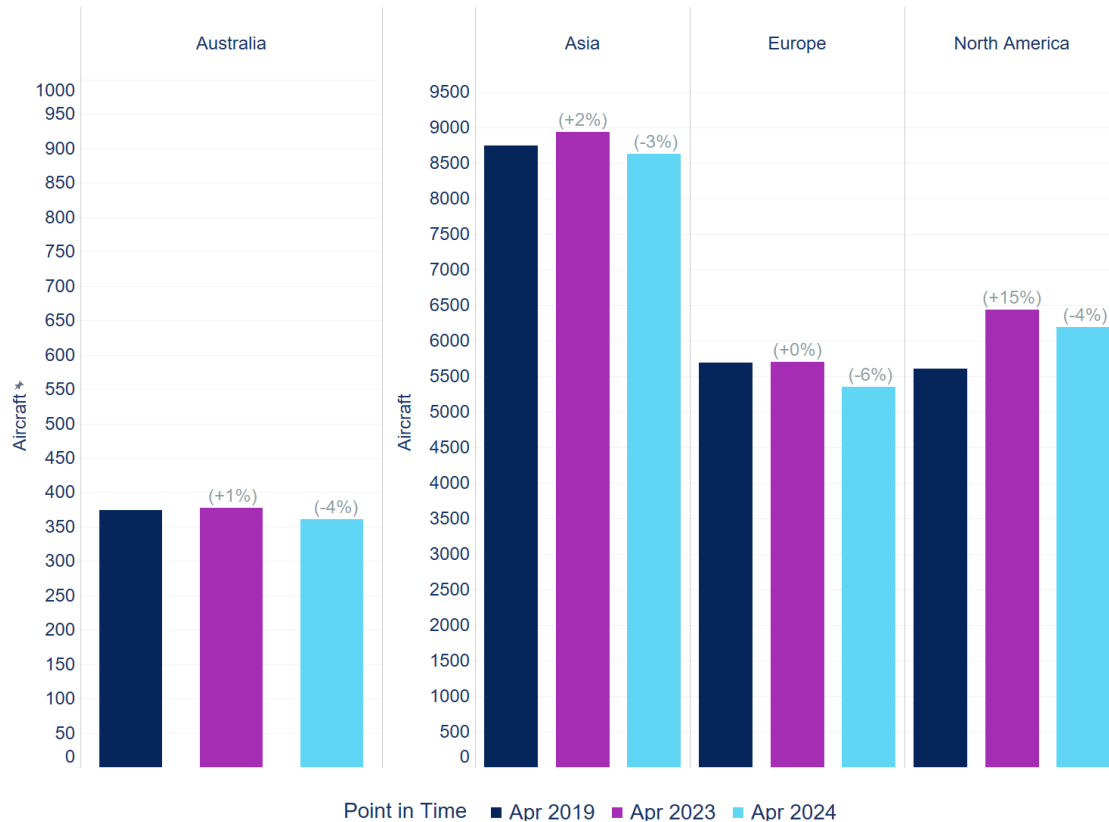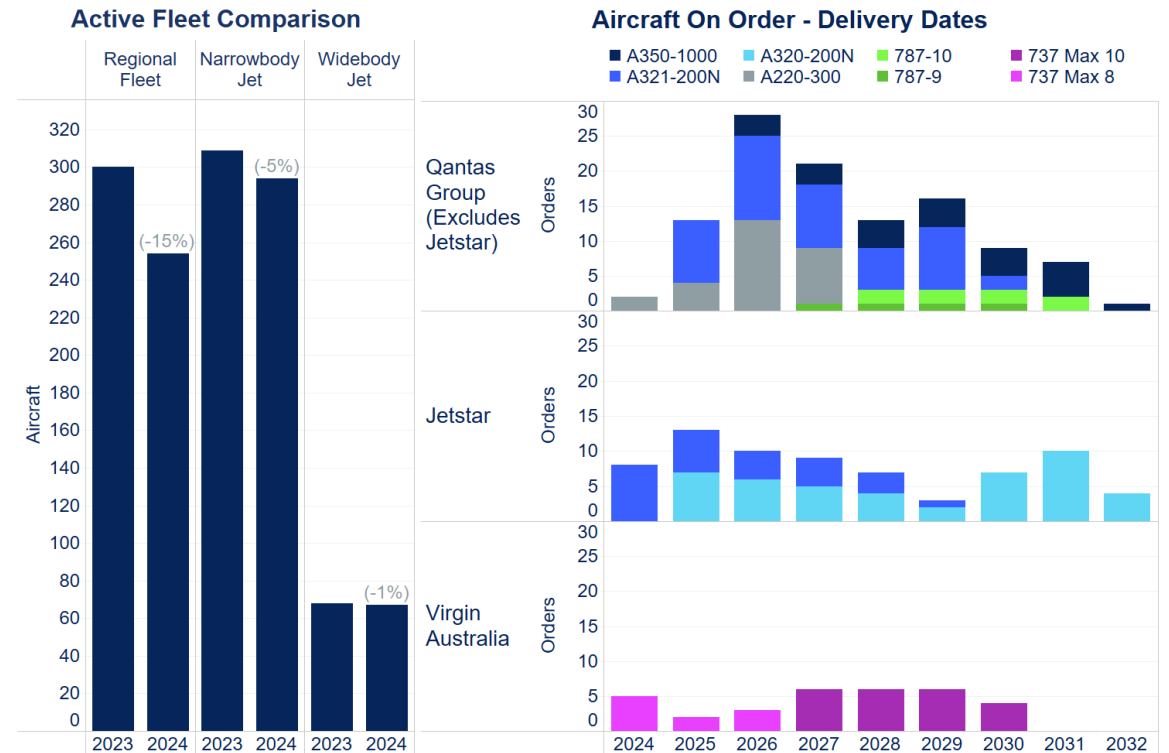
Figure 19. Change in total active Australian fleet (as of 30 April 2024 vs 30 April 2023) and aircraft orders and deliveries (as of 30 April 2024) for Qantas Group and Virgin Australia Group
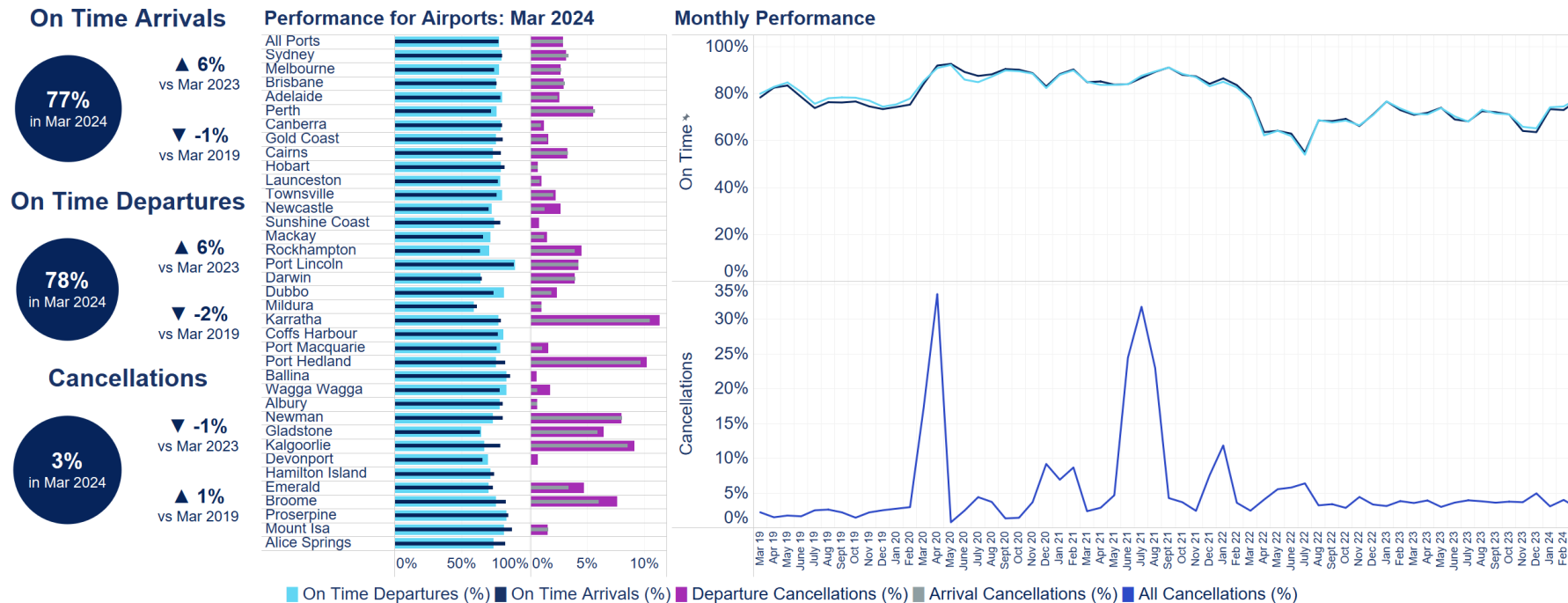
Source: Centre for Aviation Fleet (CAPA). Percentage comparisons are with respect to the previous period.

Australian aviation network performance

On-Time Performance (OTP)

In March 2024, the overall industry OTP reached its highest level in two years through measures such as introducing new aircraft, hiring more frontline staff, building standby resources, better matching schedules to actual demand to minimise cancellations, and greater transparency on airport operations. Comparing to top performers globally, further efforts are still required to build resilience and flexibility into airline schedules, airport capacity and whole-of-network planning.

Figure 20. Total industry OTP and cancellations (data available up to 31 March 2024 based on latest BITRE data release)

On Time Arrivals

77% in Mar 2024

▲ 6% vs Mar 2023

▼ -1% vs Mar 2019

On Time Departures

78% in Mar 2024

▲ 6% vs Mar 2023

▼ -2% vs Mar 2019

Cancellations

3% in Mar 2024

▼ -1% vs Mar 2023

▲ 1% vs Mar 2019

Legend: ■ On Time Departures (%) ■ On Time Arrivals (%) ■ Departure Cancellations (%) ■ Arrival Cancellations (%) ■ All Cancellations (%)

Source: BITRE (website)

Figure 21. Average arrival OTP by region, based on the top ten performing airlines (March 2024) for all regions except Australia, with change compared to previous month

Region	On Time Arrivals	Change from previous month
Global	86%	-
Asia Pacific	83%	-
Europe	87%	▼6%
Latin America	85%	▲1%
Middle East & Africa	87%	
North America	75%	▼5%
Australia	77%	▲4%

Source: Cirium (website) and BITRE (for Australia)

First rotation performance

First rotation delays have a significant knock-on effect on network performance, contributing to over a third of subsequent flight delays across all airports. Around 89% of delays in the first rotation were attributable to factors other than air traffic flow management measures. Therefore, sharing data insights on airlines and airports' demand/capacity practices during the first rotation is critical to identify opportunities to improve network reliability.

Figure 22. Percentage of arrival delay during subsequent rotations due to first rotation delays, across all airports and local hours of the day (April 2024)
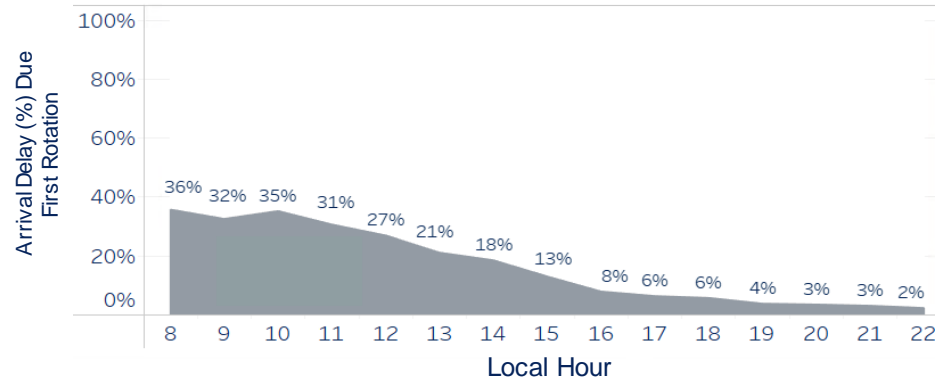
Figure 23. Average departure delays per flight during the first rotation by attribution, for flights arriving into major airports (April 2024)
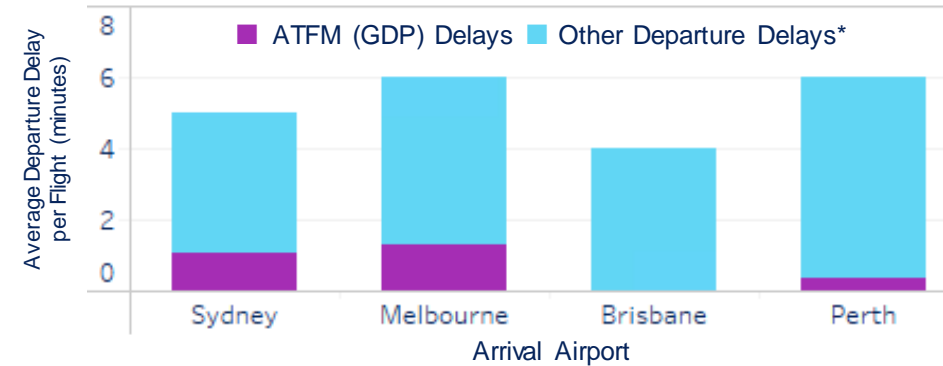
Figure 24. Operator departure OTP during the first rotation (left) and subsequent rotations (right) (April 2024)
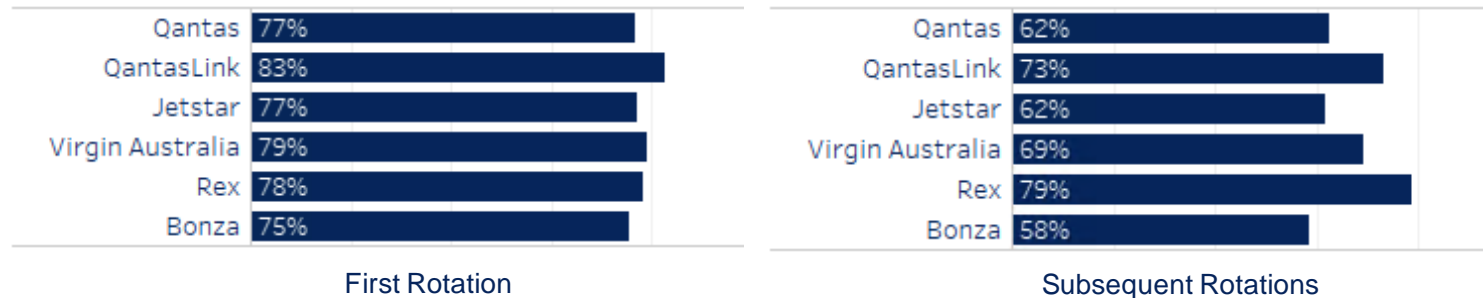
First Rotation		Subsequent Rotations	
Qantas	77%	Qantas	62%
QantasLink	83%	QantasLink	73%
Jetstar	77%	Jetstar	62%
Virgin Australia	79%	Virgin Australia	69%
Rex	78%	Rex	79%
Bonza	75%	Bonza	58%

Source: Airservices ODAS (excludes general aviation, cargo, military and medical/mercy flights).
The delay presented is an estimate based on domestic flight data available to Airservices for Qantas Group (incl. Jetstar), Virgin Australia, REX, and Bonza.
*Other departure delays include those due to airlines, technical issues, passengers, taxiing, etc.
Airservices is working with airlines and stakeholders to refine the estimation method and identify complementary data to better understand causal factors.

Airline Ground Delay Program (GDP) compliance

GDP compliance improved by four per cent compared to the previous 12-month average across all major airports and airline groups in April 2024. This indicates cross-industry efforts on network predictability through stronger compliance focus as well as minimising ad-hoc use of GDP designed as a more strategic demand/capacity balancing tool. However, more work is required to effectively balance the implementation of GDPs with the minimisation of airborne delays.

Figure 25. GDP compliance in April 2024, with comparison to previous 12 months
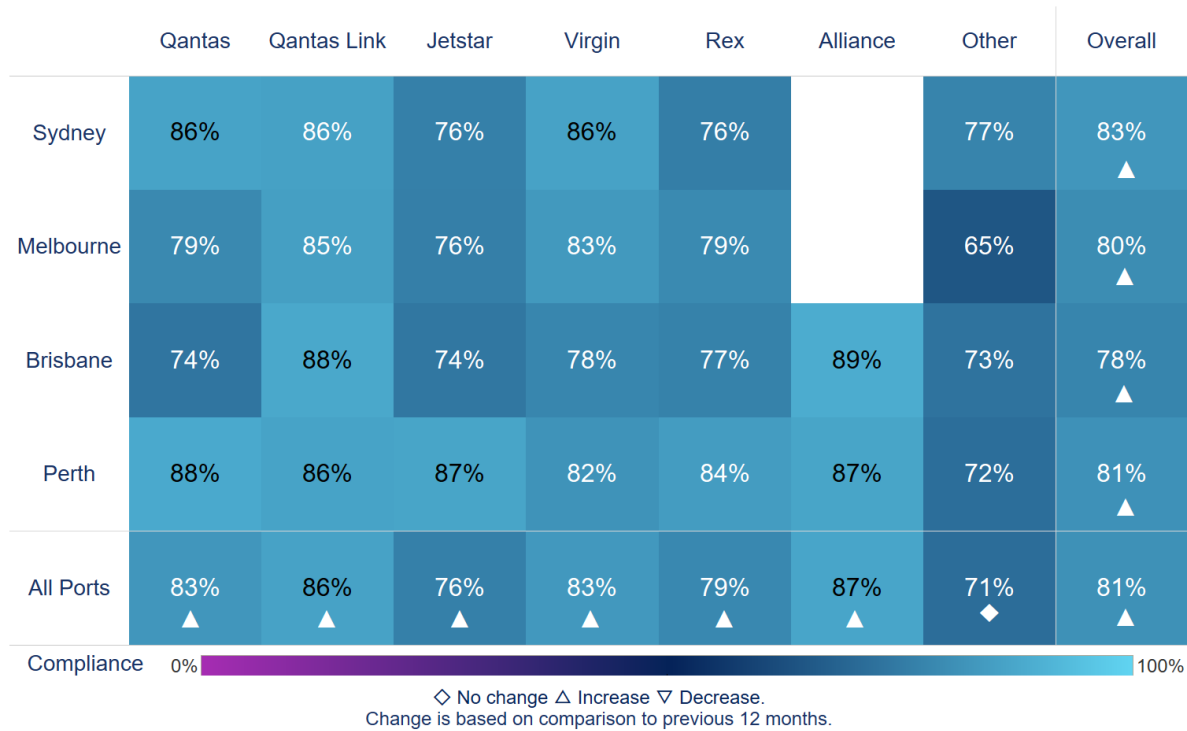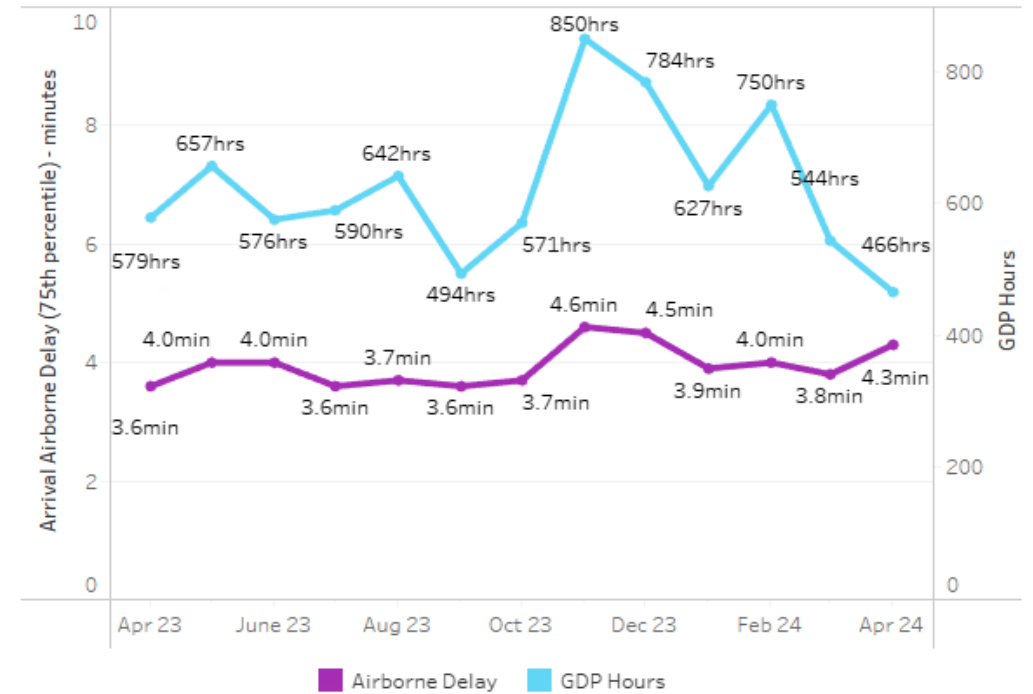
	Qantas	Qantas Link	Jetstar	Virgin	Rex	Alliance	Other	Overall
Sydney	86%	86%	76%	86%	76%		77%	83% ▲
Melbourne	79%	85%	76%	83%	79%		65%	80% ▲
Brisbane	74%	88%	74%	78%	77%	89%	73%	78% ▲
Perth	88%	86%	87%	82%	84%	87%	72%	81% ▲
All Ports	83% ▲	86% ▲	76% ▲	83% ▲	79% ▲	87% ▲	71% ◇	81% ▲

Compliance 0% ▬▬▬▬▬▬▬▬▬▬ 100%

◇ No change △ Increase ▽ Decrease.
Change is based on comparison to previous 12 months.

Figure 26. GDP usage (duration in hours) and arrival airborne delay (75th percentile, in minutes)

GDP Hours: Apr 23: 579hrs; 657hrs; 576hrs; 590hrs; 642hrs; 494hrs; 571hrs; 850hrs; 784hrs; 627hrs; 750hrs; 544hrs; Apr 24: 466hrs

Airborne Delay: 3.6min; 4.0min; 4.0min; 3.6min; 3.7min; 3.6min; 3.7min; 4.6min; 4.5min; 3.9min; 4.0min; 3.8min; 4.3min

Legend: ■ Airborne Delay ■ GDP Hours

Source: Airservices ODAS.

A GDP is an agreed industry plan to balance the demand (based on airline schedules) to the available runway capacity that is collaboratively agreed by Airservices, airlines and the Bureau of Meteorology based on weather and other operating constraints (refer to GDP Fact Sheet). GDP compliance represents the proportion of flights into an airport that departed compliant with their assigned GDP slot. GDP typically starts one hour ahead of a period where the number of scheduled flights exceeded the predicted available capacity at an airport.

Runway occupancy time

Examples of contributing factors to variable departure runway occupancy times include differing levels of air crews' operating experience at an airport and increased complexity during tactical changes in runway modes (e.g. due weather or runway works). Performance groups at key airports are being progressed seeking to improve runway occupancy time and maximise the utilisation of available airport capacity.

Figure 27. Departure and arrival runway occupancy times (median to 75th percentile) during peak periods (April 2024) by runway and taxiway at major capital-city airports
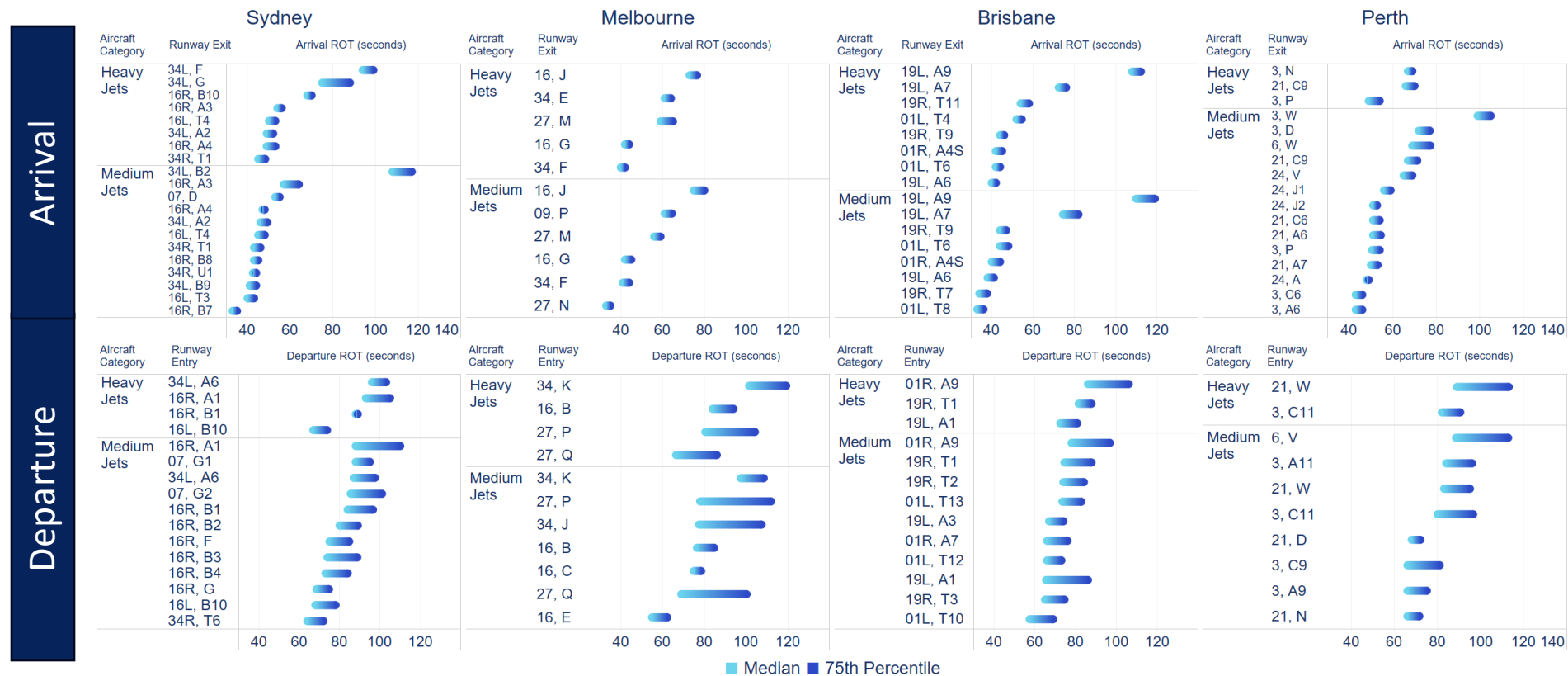
Source: Airservices ODAS (data for Perth in 2019 are not available, and Brisbane runway 01L/19R opened in 2020).
For departures, the runway occupancy time is calculated from when an aircraft enters the runway area until it is airborne and has left the runway area (overflies threshold at runway end or turned away from runway centreline).
For arrivals, the runway occupancy time is calculated from when an aircraft flies over the runway threshold until it has left the runway area after landing.

Air traffic management outcomes

Overall air traffic management outcomes trended favourably in the last few months. Where GDP periods were implemented, 9.2 per cent of ground delay periods and 0.4 per cent of cancellations were attributable to Airservices well below the monthly average of the past year. However, short-term staff unavailability particularly in the second half of April 2024 around Sydney and Perth shows that further service resilience efforts are required.

Figure 28. Air traffic management outcomes at major airports

Overall outcome April 2024

Estimated flights impacted by Airservices capacity constraints as a proportion of all flights

2.1%

Proportion of Air Traffic Flow Management (ATFM) delay (GDP) minutes attributable to Airservices

9.2%

Proportion of arrival cancellations attributable to Airservices

0.4%

Monthly ATFM Delay (GDP) Minutes by Attribution (%)

	Airservices %	Airports %	Other %
May 23	16.0%	0.1%	83.8%
June 23	23.3%	0%	76.7%
July 23	16.8%	3.0%	80.2%
Aug 23	13.9%	0%	86.1%
Sept 23	11.5%	0.3%	88.2%
Oct 23	11.2%	0.8%	87.9%
Nov 23	10.8%	0%	89.2%
Dec 23	16.2%	0%	83.8%
Jan 24	12.2%	0%	87.8%
Feb 24	7.9%	0.5%	91.6%
Mar 24	4.0%	0%	96.0%
Apr 24	9.2%	1.3%	89.6%

Monthly Arrival Cancellations by Attribution (%)

	Airservices %	Airports %	Other %
May 23	10.2%	0%	89.8%
June 23	6.3%	0%	93.7%
July 23	4.4%	0%	95.6%
Aug 23	4.1%	0%	95.9%
Sept 23	4.9%	0%	95.1%
Oct 23	4.4%	0%	95.1%
Nov 23	5.0%	0%	95.0%
Dec 23	6.5%	0%	93.5%
Jan 24	1.3%	0%	98.2%
Feb 24	5.9%	0%	94.1%
Mar 24	1.1%	0%	98.9%
Apr 24	0.4%	0%	99.6%

Monthly ATFM Delay (GDP) Minutes by Attribution

Sydney | Melbourne | Brisbane | Perth

Monthly Arrival Cancellations by Attribution

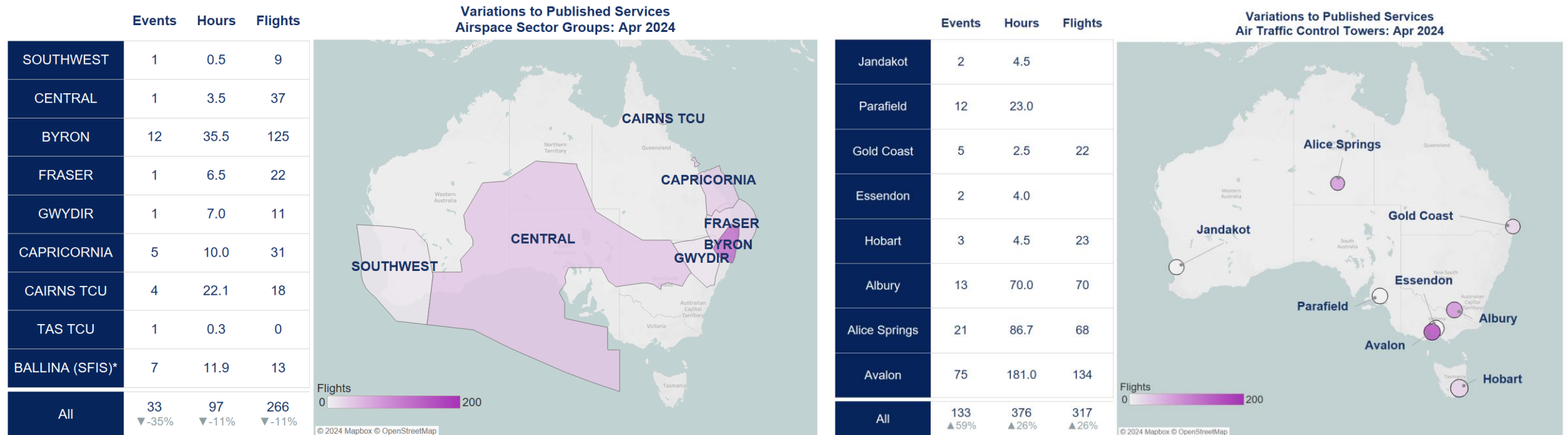Sydney | Melbourne | Brisbane | Perth

■ Airservices ■ Airports ■ Other

Source: Airservices ODAS.

Flights impacted are estimated as scheduled to arrive at the four major airports during a period with slot reduction attributable to Airservices. ATFM delay (GDP) and flight cancellations attributable to Airservices are only estimated for flights arriving at Sydney, Melbourne, Brisbane and Perth Airports, including measuring the flow-on effects into the subsequent hours at the arrival airport. Airservices is working with airlines, airports and stakeholders to refine the estimation method and identify complementary data to better understand causes of delays and cancellations. As part of the actions to address the recommendations from the IATA review (published on Airservices website), the delay attribution and analysis methods are being reviewed in consultation with industry.

Air traffic service provision

The consistency of air traffic service provision continues to improve comparing the April 2024 performance to the previous 12-month average. However, reducing variability in service levels due to unforeseen staff unavailability remains a key focus area. Further efforts to strengthen resilience and resourcing flexibility are in progress, such as significant training and recruitment programs and refining enabling processes and systems.

Figure 29. Number of flights and hours during the periods when air traffic services delivered varied from published levels (April 2024)

	Events	Hours	Flights
SOUTHWEST	1	0.5	9
CENTRAL	1	3.5	37
BYRON	12	35.5	125
FRASER	1	6.5	22
GWYDIR	1	7.0	11
CAPRICORNIA	5	10.0	31
CAIRNS TCU	4	22.1	18
TAS TCU	1	0.3	0
BALLINA (SFIS)*	7	11.9	13
All	33 ▼-35%	97 ▼-11%	266 ▼-11%

**Variations to Published Services
Airspace Sector Groups: Apr 2024**

	Events	Hours	Flights
Jandakot	2	4.5	
Parafield	12	23.0	
Gold Coast	5	2.5	22
Essendon	2	4.0	
Hobart	3	4.5	23
Albury	13	70.0	70
Alice Springs	21	86.7	68
Avalon	75	181.0	134
All	133 ▲59%	376 ▲26%	317 ▲26%

**Variations to Published Services
Air Traffic Control Towers: Apr 2024**

◆ No change ▲ Increase ▼ Decrease
Change is based on comparison to the previous 12-month average.

Source: Airservices ODAS. Variations to published services comprise of Temporary Restricted Areas and tower closure periods. During the periods of variations to published services at regional aerodromes, services in adjacent Class G airspace are generally unaffected (e.g. provision of flight, traffic information and safety alerting). Flights are estimated by historic airline, charter, cargo and medical flights that typically operate during the periods of variations to published services. General aviation, military and government flights are excluded.

*When there is a variation to published Surveillance Flight Information Service (SFIS) at Ballina, standard Class G services as regulated by the Civil Aviation Safety Authority (CASA) are still provided by Brisbane Air Traffic Services Centre.

Drone activities

The Automated Airspace Authorisations Trial by the Civil Aviation Safety Authority (CASA) and Airservices is underway in efforts to streamline airspace access for remote pilot aircraft operators near controlled airports, notably in Adelaide, Canberra, Perth, Sydney Harbour and surrounding areas. High demand in Perth and Sydney Harbour indicates drone application in support of media and tourism industry. We are also seeing increased drone sightings in locations such as Sunshine Coast, Port Hedland and Moorabbin, as drones become an increasingly common and important feature of our airspace nationally.

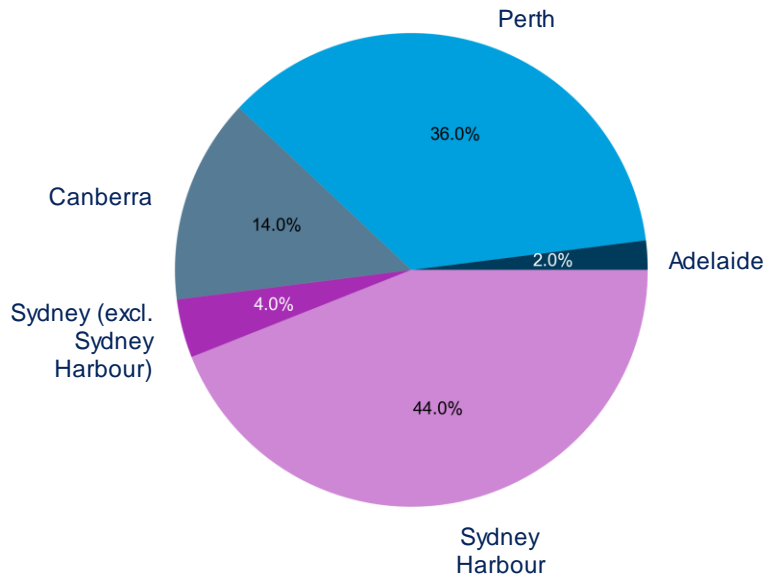**Figure 30. Automated Airspace Authorisations by location (April 2024)**

Figure 31. Number of CIRRIS occurrences by month and location (rolling 12 months from 1 May 2023 to 30 April 2024)
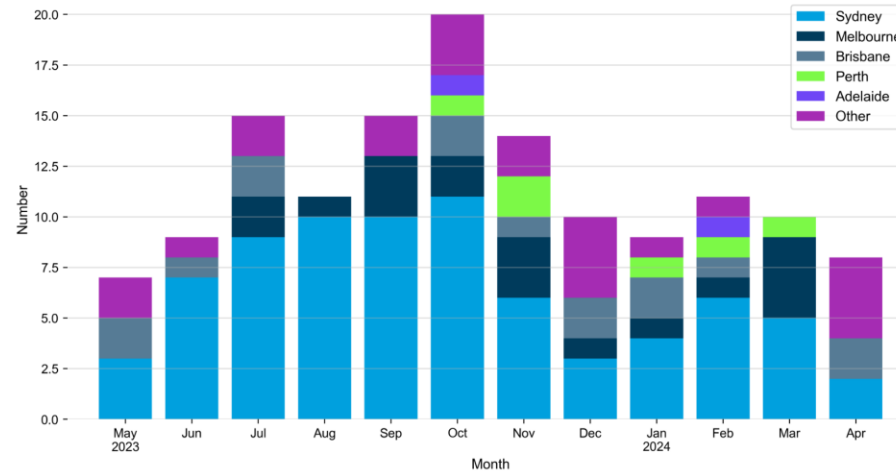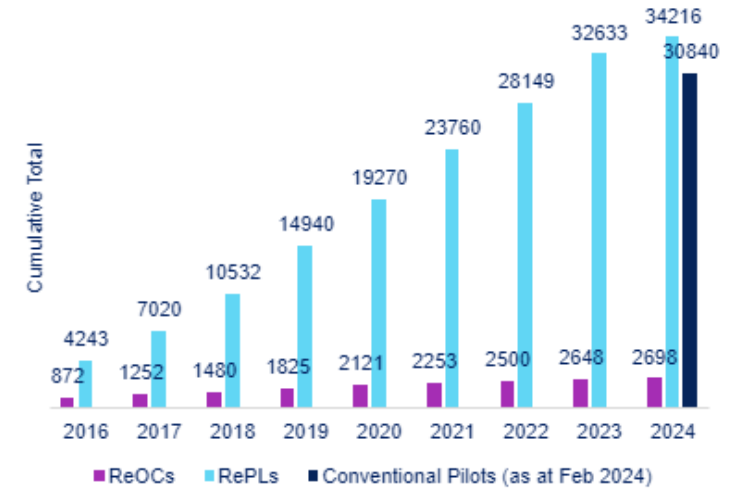
Figure 32. Cumulative totals of Remote Pilot Licences (RePLs) and Remotely Piloted Aircraft Operator's Certificates (ReOCs) (as of 3 May 2024)

Sources:
CASA – The Automated Airspace Authorisations Trial (AAAT) has been implemented in Adelaide, Perth, and Canberra since 10 May 2021 and in Sydney, Sydney Harbour and surrounding areas since 2023.
Airservices – Corporate Integrated Reporting and Risk Information System (CIRRIS).

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