Australian Aviation Network Overview

August 2024

airservices
australia

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.

Executive Summary

In August 2024, the Australian aviation network recorded a slight reduction (0.5%) in daily average flights following the July school holiday period and Paris Olympic Games.

While traffic demand has remained strong, economic uncertainties in Australia and globally present risks to the growth of our sector. In navigating this environment, the release of the Aviation White Paper underscores the need for transparency and cross-industry collaboration which are more crucial than ever to enhance outcomes for the travelling public and the communities impacted by aviation.

Overall industry on-time performance (OTP) in Australia declined in July 2024 after peaking in April. As noted in the July report, this was mainly due to the CrowdStrike outage causing disruptions to operators' IT systems and adverse weather conditions which heavily affected Sydney. We expect OTP to improve again, based on lead indicators such as first-rotation performance.

August saw the lowest application of the Ground Delay Program (GDP) without adversely impacting airborne delays since January 2023, demonstrating Airservices focus on continually refining network decisions to minimise delay outcomes. However, GDP compliance remained below historical benchmarks and active industry engagement is underway to improve network predictability.

Air traffic service outcomes continue to improve with a 60% reduction in airspace service variations in 2024 to date, compared to the same period last year. There were no Airservices-attributable ground delays at Brisbane and Perth in August. Our Sydney operations, underpinning overall Australian network efficiency, require greater resilience. Extensive recruitment and training of additional air traffic controllers has been in progress since early 2023, with further cross-training, rostering improvement and customer-focused operational decision-making among the measures Airservices is undertaking to deliver more consistent performance for our customers.

Economic and social trends

Economic factors

There are ongoing economic uncertainties in Australia and globally, with domestic GDP growth at its slowest rate since the 1990s. We have also seen persistently low consumer confidence and weakened economic outlook from major trading partners.

Figure 1. Australia's GDP Growth Forecast August 2024
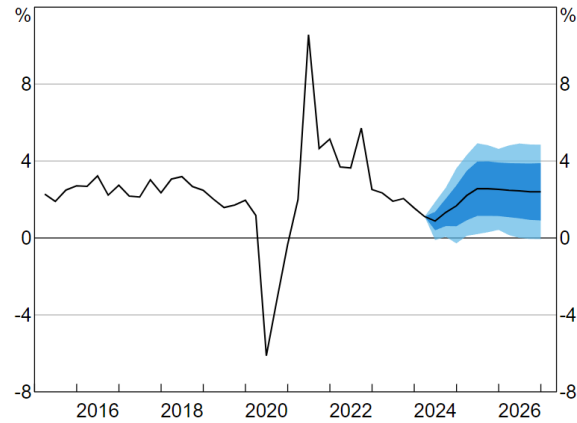
Source: RBA (website)

### Figure 2. Westpac-Melbourne Institute Consumer Sentiment Index

Sources: Westpac Economics, Melbourne Institute
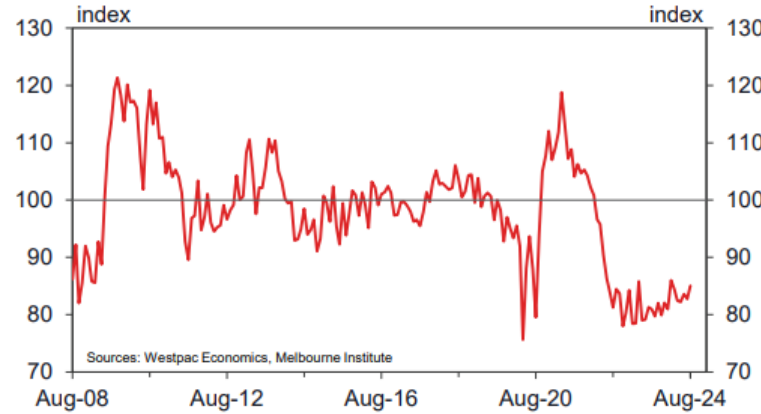
Source: Westpac (website)

Figure 3. Global manufacturing Purchasing Managers Index (PMI)

Improving business conditions

Deteriorating business conditions

Source: S&P Global (website) – using PMI data updated to August 2024

Figure 4. Jet fuel and Brent crude oil prices

Singapore Jet Kero Spot (AUD)
Brent Crude Spot (AUD)
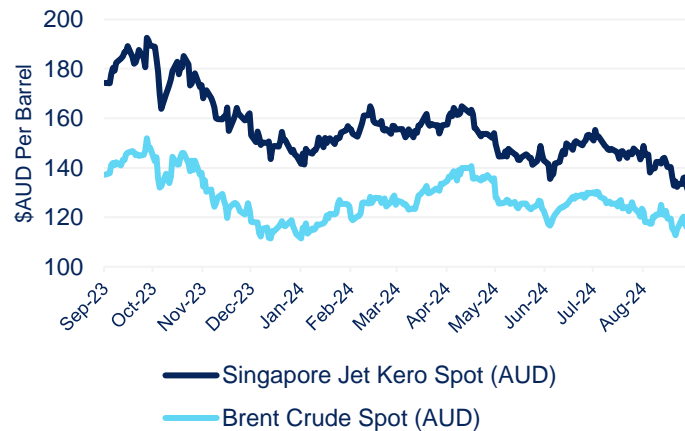
Source: Bloomberg

Figure 5. Consumer Price Index (CPI) Indicator

Monthly CPI indicator (%)
Monthly CPI excluding volatile items & holiday travel (%)
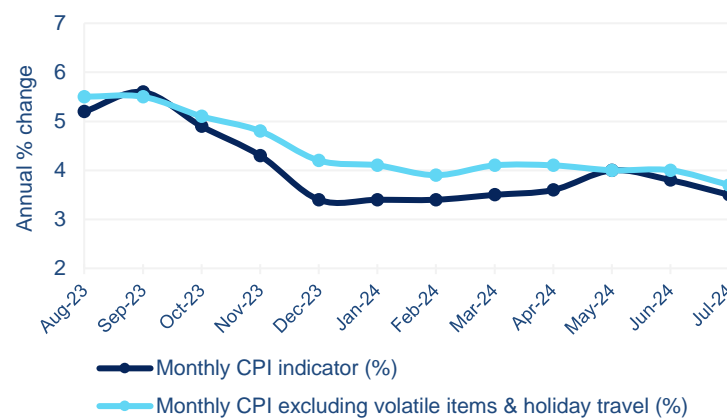
Source: ABS (website) – data released 28/8/2024 up to July 2024

Figure 6. Domestic air fares by fare class

Real Business Class (13 Month Moving Average)
Real Restricted Economy (13 Month Moving Average)
Real Best Discount (13 Month Moving Average)
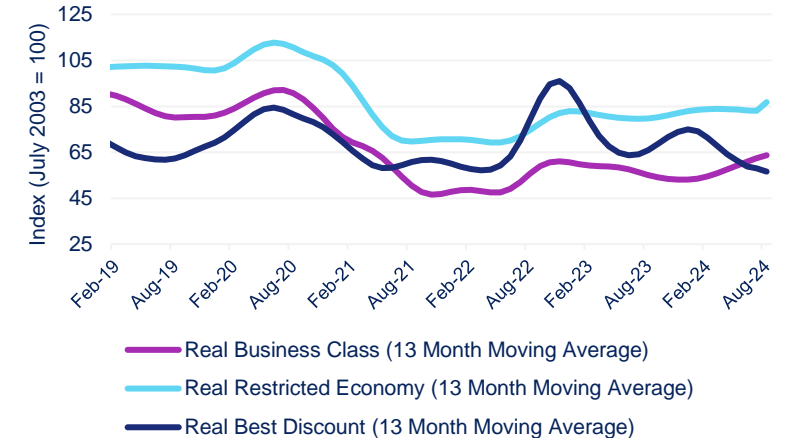
Source: BITRE (website)

Social factors

The importance of balancing sustainable aviation growth with aircraft noise reduction will only continue to increase. Ongoing efforts to improve noise mitigation near major airports and trialling more efficient fight paths in less community-sensitive upper airspace demonstrate ongoing efforts to improve overall environmental and community outcomes to foster the industry's collective social licence.

Figure 7. National aircraft noise complaints (top) and complainants (bottom) per month

Figure 9. CO2 emissions savings from optimised User Preferred Routes (UPR) across oceanic and cross-continental airspace per month

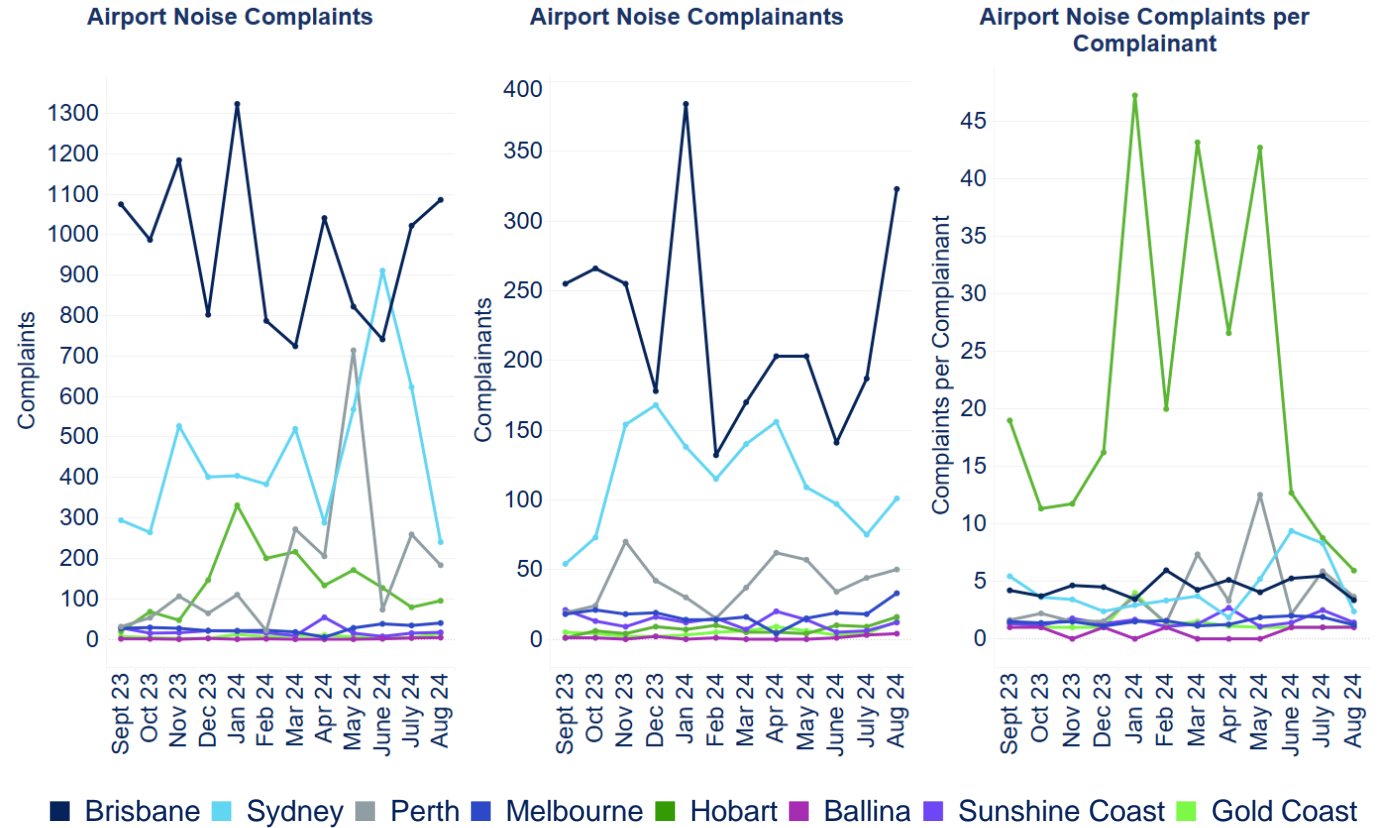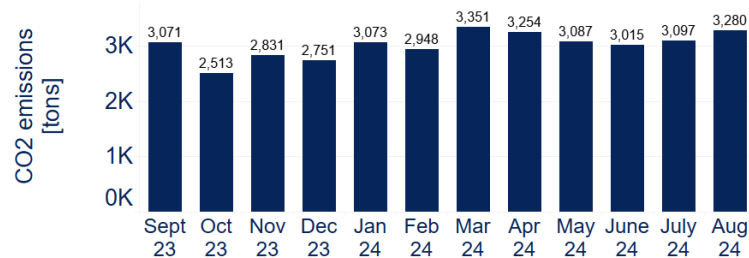**Figure 8. Airport aircraft noise complaints, complainants, and complaints by complainant per month**

Source: Airservices Noise Complaints and Information Service (NCIS) and Airservices ODAS.

Australian aviation and regional context

State of Australian aviation growth

In August 2024, the Australian aviation network recorded a slight reduction (0.5%) in daily average flights from the previous month, in line with seasonal trends. Domestic growth continues to lead recovery.

Average Daily Flights
(August 2024 and % of August 2019)

3,785
102%

Total Domestic Flights
(August 2024 and % of August 2019)

99,086
103%

Total International Flights
(August 2024 and % of August 2019)

18,236
94%
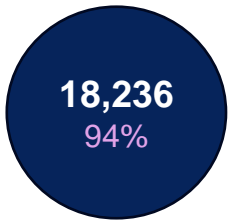
Figure 10. Domestic and international average daily flights compared to Airservices' forecast (shown in dotted line) per month

Domestic Flights

(Forecast, Actual)

International Flights

(Forecast, Actual)

Figure 11. Average daily flights by industry segment per month

Domestic Airlines
General Aviation: Other
General Aviation: Flight Training
International Airlines
Medical / Mercy
Military
Freight / Cargo

Source: Airservices aeronautical charge database. Excludes some general aviation flights that are not subject to Airservices aeronautical charges. Airservices' forecast proposed as of July 2024 and is subject to review by ACCC.

Source: Airservices ODAS (excludes helicopters).
Data for 'General Aviation: Flight Training' is one month in arrears.

Top aircraft operators

Following the July school holiday period and Paris Olympics Games, most operators have returned to seasonal activity levels. Compared to last August and the pre-pandemic period, growth has been concentrated among a few domestic airlines while the top international operators have yet to reach historic traffic levels.

Figure 12. Average daily flights by top operators (August 2024) and comparisons across three reference periods

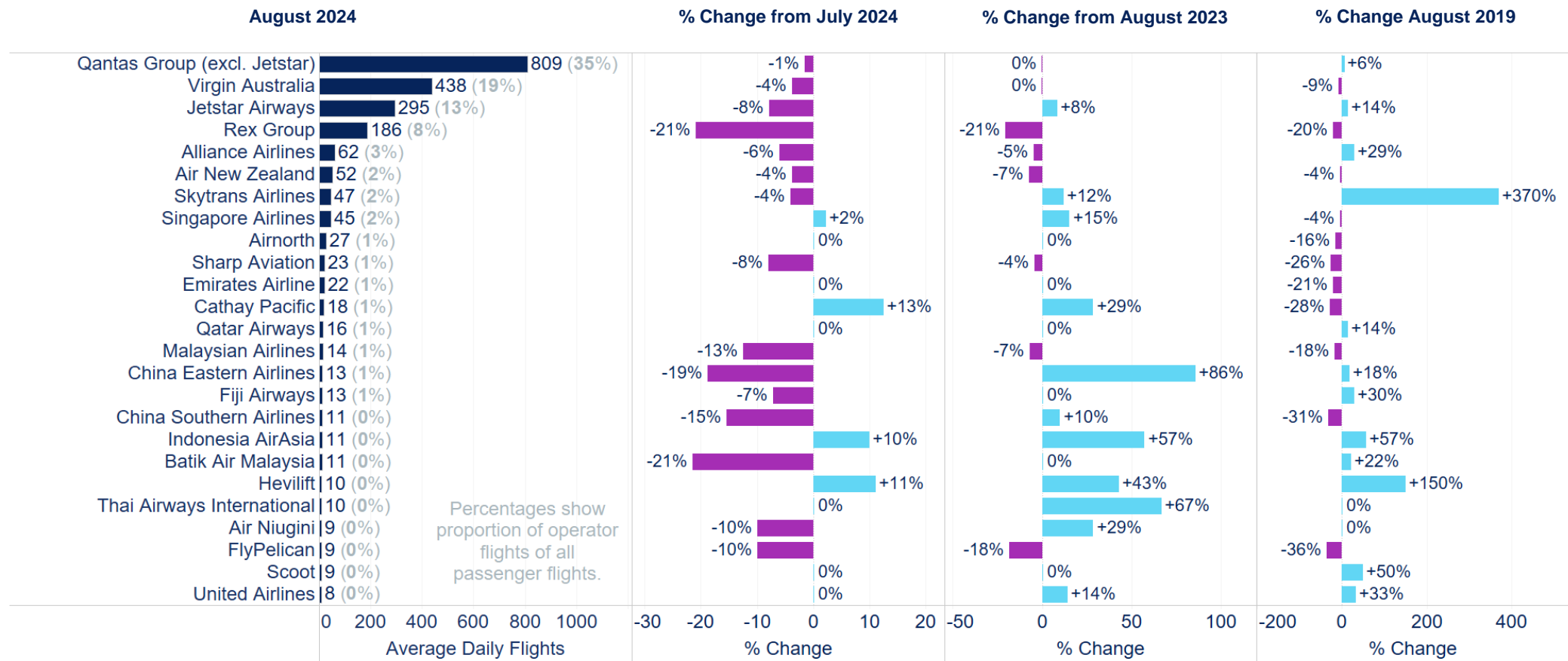| Operator	August 2024	% Change from July 2024	% Change from August 2023	% Change August 2019
Qantas Group (excl. Jetstar)	809 (35%)	-1%	0%	+6%
Virgin Australia	438 (19%)	-4%	0%	-9%
Jetstar Airways	295 (13%)	-8%	+8%	+14%
Rex Group	186 (8%)	-21%	-21%	-20%
Alliance Airlines	62 (3%)	-6%	-5%	+29%
Air New Zealand	52 (2%)	-4%	-7%	-4%
Skytrans Airlines	47 (2%)	-4%	+12%	+370%
Singapore Airlines	45 (2%)	+2%	+15%	-4%
Airnorth	27 (1%)	0%	0%	-16%
Sharp Aviation	23 (1%)	-8%	-4%	-26%
Emirates Airline	22 (1%)	0%	0%	-21%
Cathay Pacific	18 (1%)	+13%	+29%	-28%
Qatar Airways	16 (1%)	0%	0%	+14%
Malaysian Airlines	14 (1%)	-13%	-7%	-18%
China Eastern Airlines	13 (1%)	-19%	+86%	+18%
Fiji Airways	13 (1%)	-7%	0%	+30%
China Southern Airlines	11 (0%)	-15%	+10%	-31%
Indonesia AirAsia	11 (0%)	+10%	+57%	+57%
Batik Air Malaysia	11 (0%)	-21%	0%	+22%
Hevilift	10 (0%)	+11%	+43%	+150%
Thai Airways International	10 (0%)	0%	+67%	0%
Air Niugini	9 (0%)	-10%	+29%	0%
FlyPelican	9 (0%)	-10%	-18%	-36%
Scoot	9 (0%)	0%	0%	+50%
United Airlines	8 (0%)	0%	+14%	+33%

Percentages show proportion of operator flights of all passenger flights.

Source: Airservices ODAS (includes airline flights only).

Airline route changes across the network

Reflecting leisure-driven demand, there are now 108 new airline routes compared to August 2019, enhancing point-to-point connectivity both within Australia and with key overseas tourism markets such as Japan, South-East Asia, Pacific and Europe.

Figure 13. New domestic routes for domestic airlines (August 2024 vs August 2019)
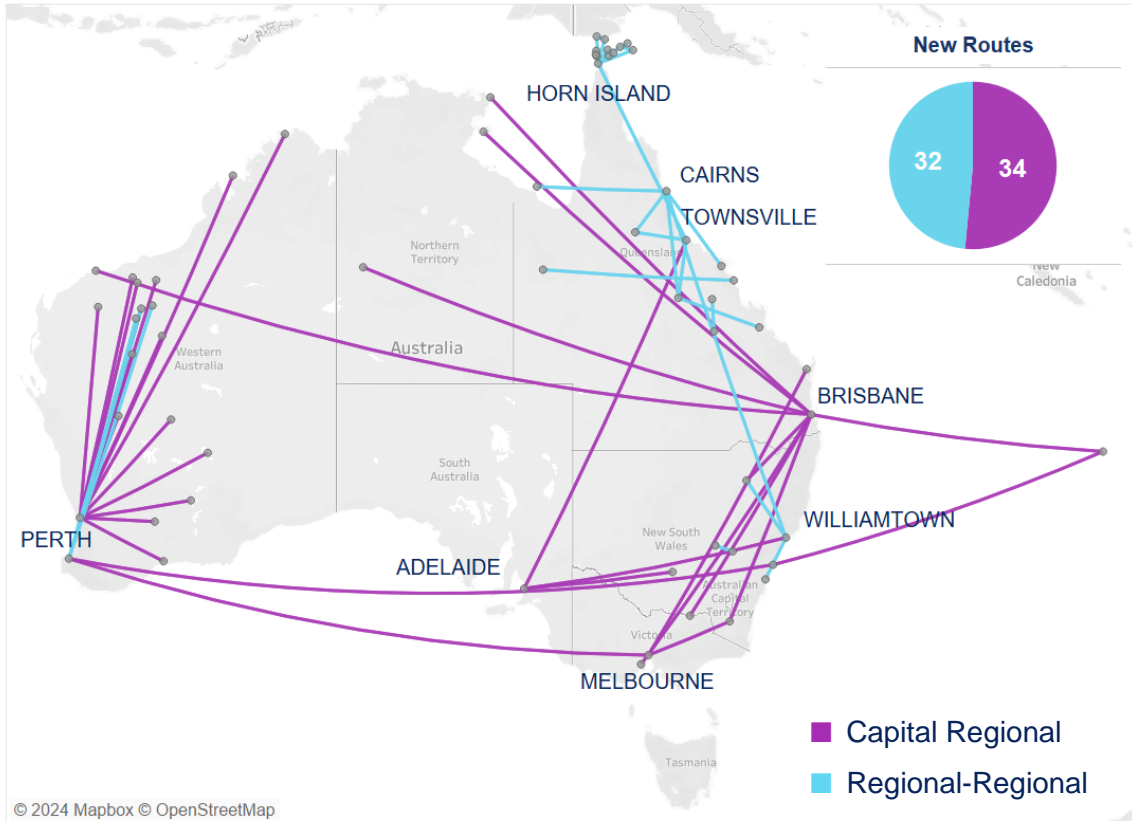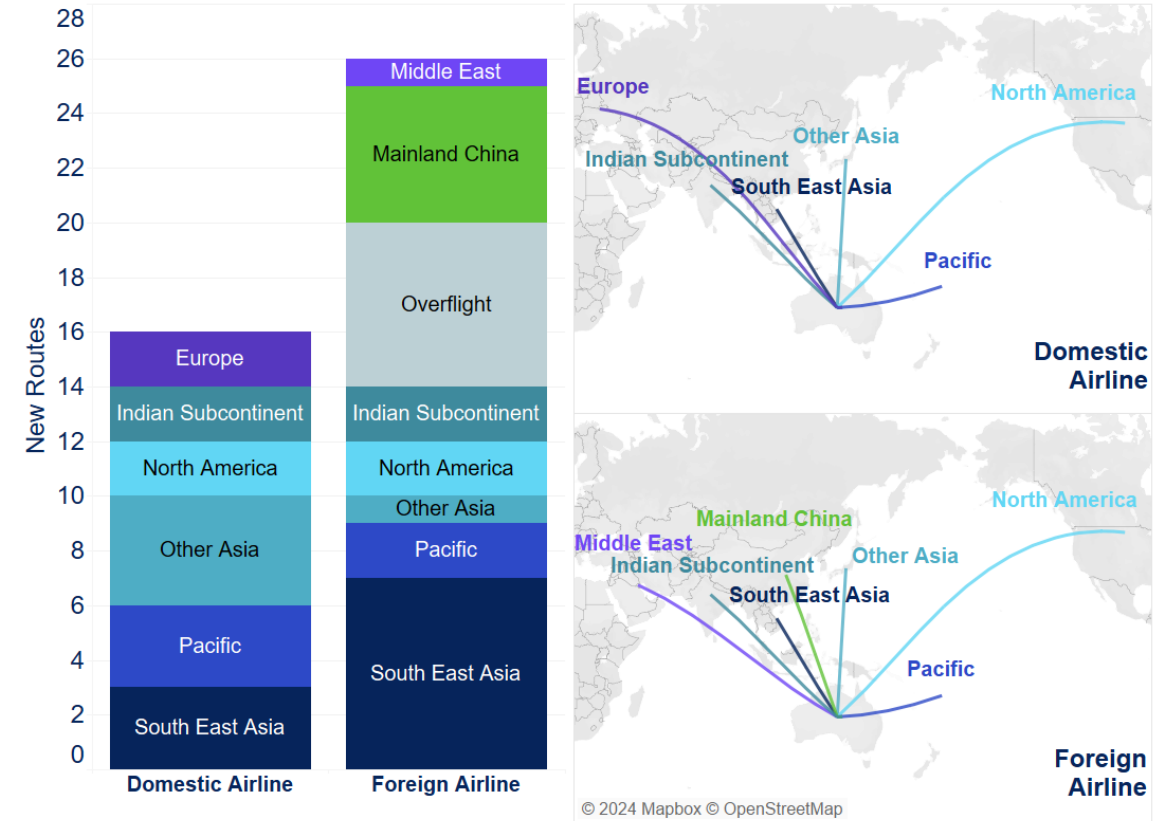
Figure 14. New international routes for domestic and foreign airlines (August 2024 vs August 2019)
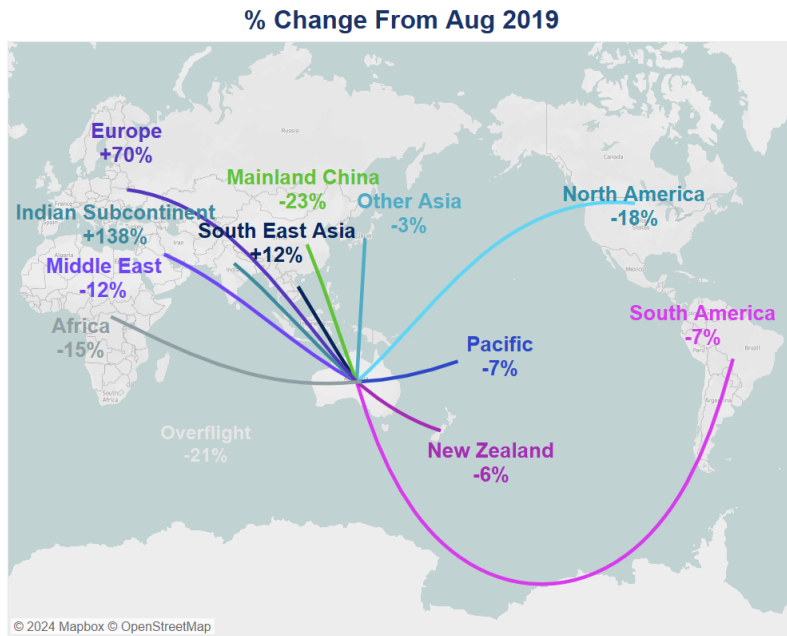

Source: Airservices ODAS (includes airline flights only). Only routes with a minimum of 1 airline operating at least 8 flights a month are shown.

Traffic flows from international markets

International demand at major capital-city airports remains five to ten per cent below pre-pandemic levels. Middle East geopolitical tensions present an ongoing risk to transcontinental flights. China's inbound traffic, historically the largest market for Australia, is still below 80 per cent of 2019 levels. In contrast, South-East Asia has seen a strong growth indicating a shift in trade and tourism.

Figure 15. Percentage change in total flights by international markets (August 2024 vs August 2019)

% Change From Aug 2019

Europe +70%
Mainland China -23%
Indian Subcontinent +138%
Other Asia -3%
North America -18%
South East Asia +12%
Middle East -12%
Africa -15%
Pacific -7%
South America -7%
Overflight -21%
New Zealand -6%

© 2024 Mapbox © OpenStreetMap

Note: Percentage changes for Europe and the Indian Subcontinent are from a low base.

Figure 16. Average daily flights by international markets per month

High Traffic Regions

Medium Traffic Regions

Low Traffic Regions
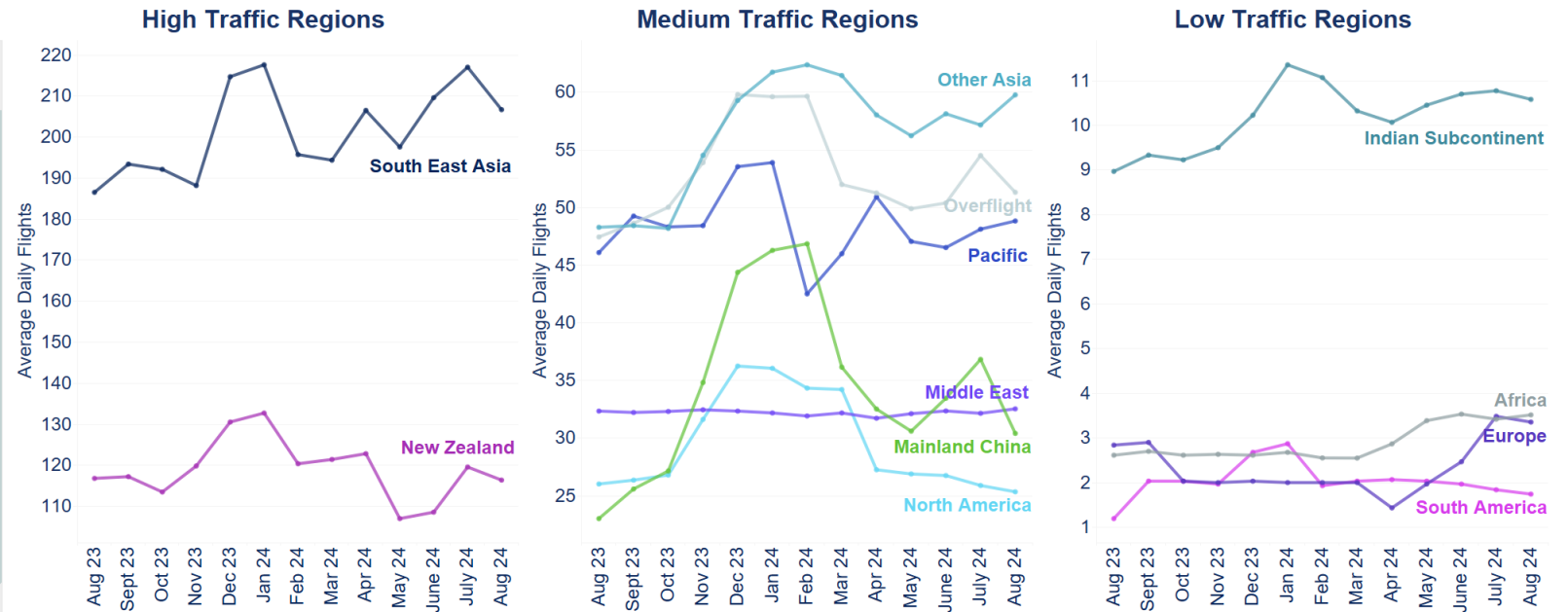
Source: Airservices ODAS (includes airline flights only).
For multi-leg flights, legs that start and end outside Australian airspace are not included.
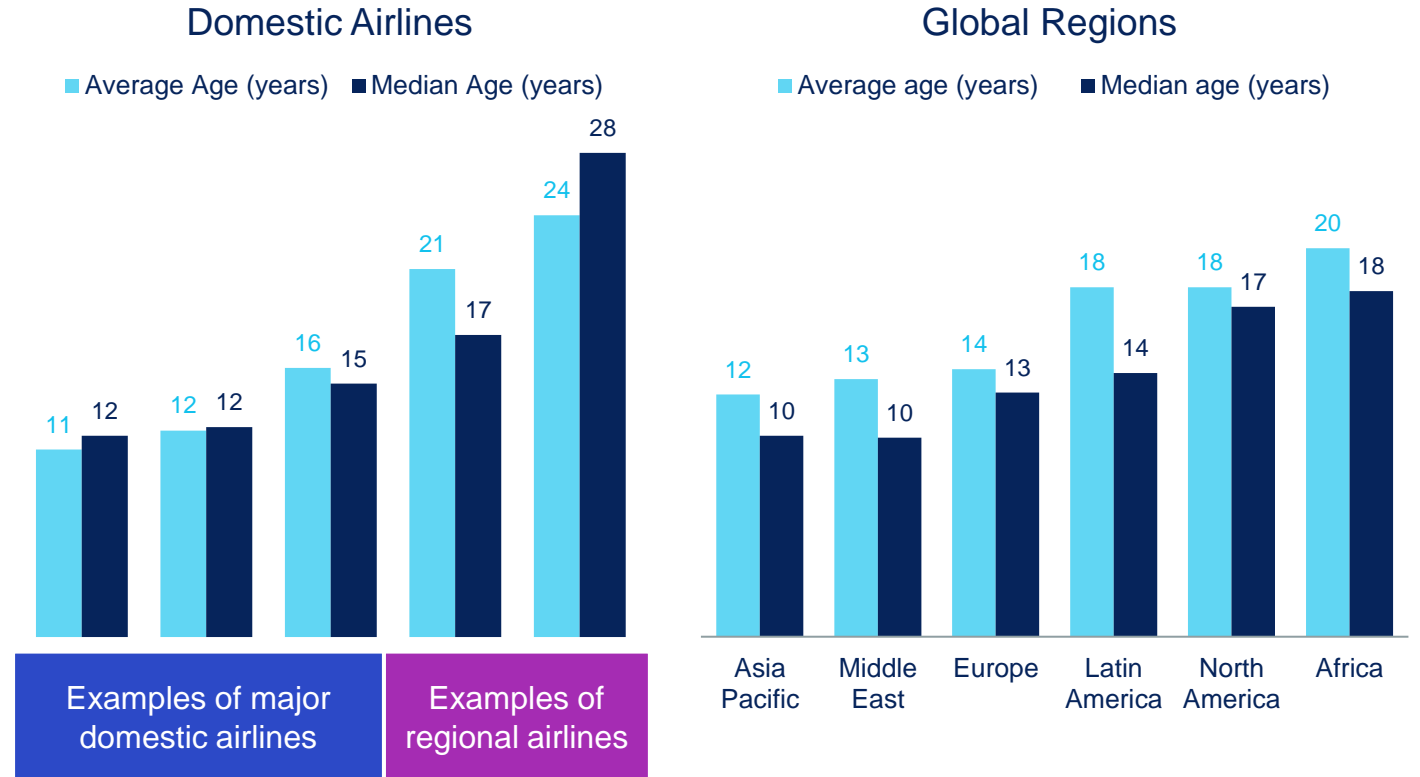
Australian fleet

The pace of fleet renewal in Australia remains slow, with one new Airbus A220 aircraft entering service in August 2024. Virgin Australia Regional Airlines' new order of 8 Embraer 190-E2s illustrates industry's ongoing efforts in leveraging modern aircraft capabilities for sustainable regional growth.

Figure 17. Aircraft on order and the service status for Jetstar, Qantas Group, and Virgin Australia Group (August 2024 and change vs July 2024) – as of 9 September 2024.

Operator	Aircraft Type	Status	Aug-24	Month-on month change
Virgin Australia	737 Max 8	On Order	6	0
		In Service	8	0
	737 Max 10	On Order	22	0
Virgin Australia Regional Airlines	ERJ190-E2	On Order	8	+8
Qantas Group (excl. Jetstar)	A350-1000	On Order	24	0
	A321-200N	On Order	47	0
	A220-300	On Order	26	0
		In Service*	3	+1
	787-10	On Order	8	0
	787-9	On Order	4	0
		In Service	14	0
Jetstar	A321-200N	On Order	22	0
		In Service	15	0
	A320-200N	On Order	45	0

Figure 18. Active fleet age in years (average and median) for domestic airlines and global regions – as of 2 September 2024.

Domestic Airlines — Average Age (years), Median Age (years)

Examples of major domestic airlines: 11/12, 12/12, 16/15, 21/17
Examples of regional airlines: 24/28

Global Regions — Average age (years), Median age (years)

	Asia Pacific	Middle East	Europe	Latin America	North America	Africa
Average	12	13	14	18	18	20
Median	10	10	13	14	17	18

Source: Centre for Aviation Fleet (CAPA) data.
* Source: Airservices ODAS (operated by National Jet Systems).

12

Australian aviation network performance

On-Time Performance (OTP) in the previous month

Overall industry OTP in Australia declined in July 2024 after reaching a peak in April 2024. This was attributed to CrowdStrike disruptions to operators' IT systems, along with adverse weather such as strong crosswinds at Sydney and low visibility operations at Melbourne and Brisbane. OTP globally also decreased, with CrowdStrike resulting in the cancellation of over 5,000 flights worldwide.

Figure 19. Total industry OTP and cancellations (data available up to 31 July 2024 based on latest BITRE data release).
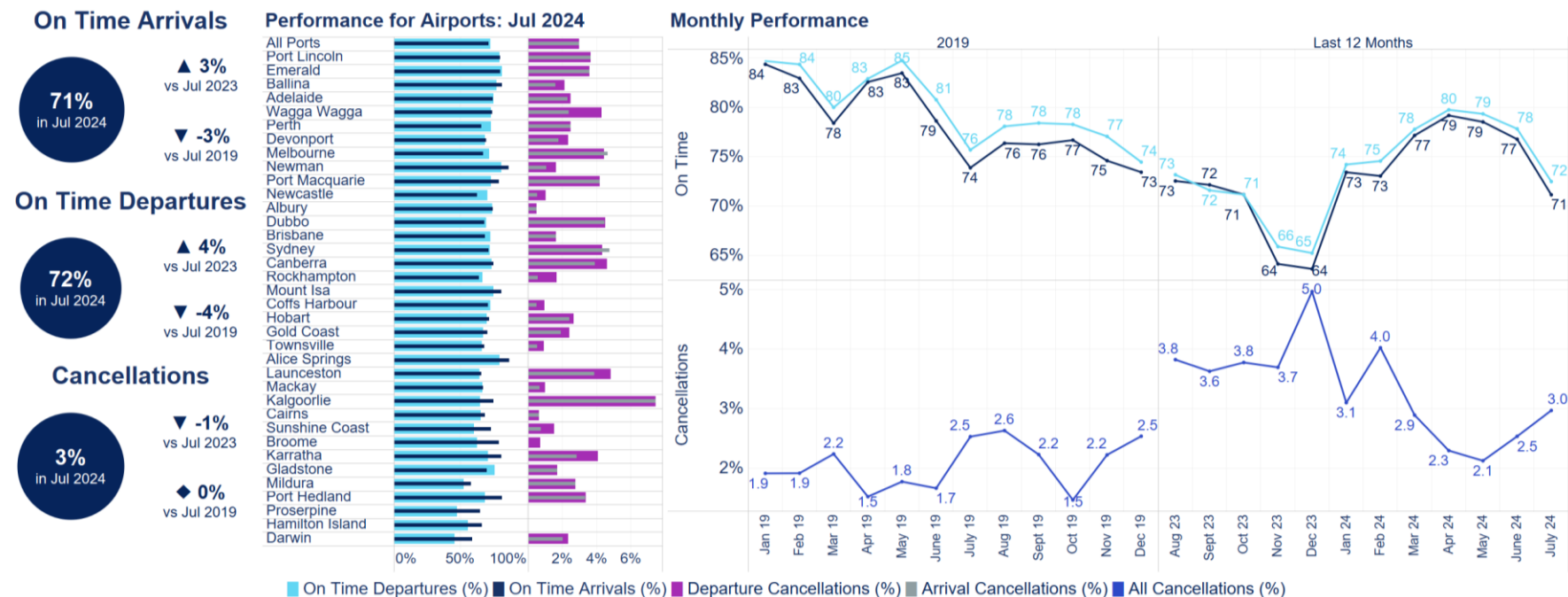
Figure 20. Average arrival OTP by region, based on the top ten performing airlines (July 2024) for all regions except Australia (top eight), with change compared to previous month.
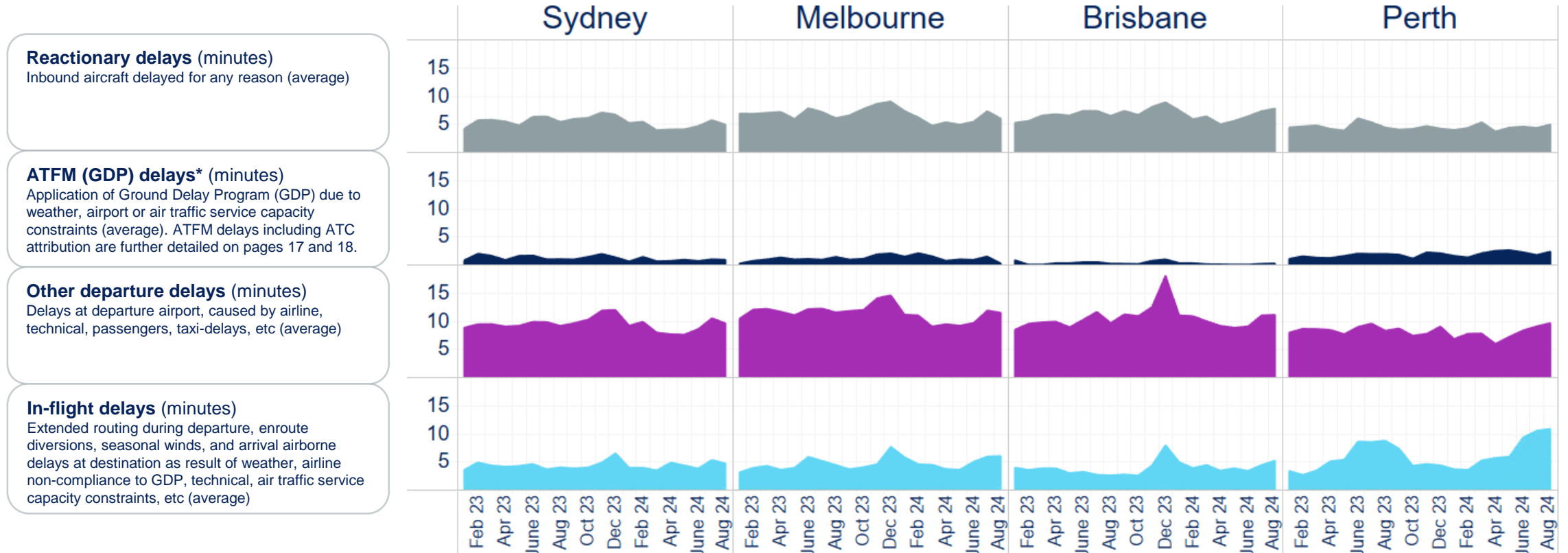

Region	On Time Arrivals	Change from previous month
Global	81%	▼ 2%
Asia Pacific	74%	▼ 6%
Europe	74%	▼ 2%
Latin America	82%	▼ 2%
Middle East & Africa	80%	▼ 6%
North America	69%	▼ 4%
Australia	71%	▼ 6%

Source: BITRE for Australian data ([website](#)) and Cirium ([website](#)).

Lead indicators of OTP: Delay components

In line with improved first rotation performance at Sydney and Melbourne, reactionary delays at these ports were lower in August 2024 than the previous month. Air traffic flow management (ATFM) delays remain a small proportion of overall delays. They are most notable for flights to Perth due to demand exceeding capacity during peak morning and afternoon periods. This is compounded by runway works that accounted for 30 per cent of ATFM delays (4,400 minutes out 14,000 minutes) for flights into Perth.

Figure 21. Delay components of OTP (January 2023 to August 2024) and average flight values by airport per month

Reactionary delays (minutes)
Inbound aircraft delayed for any reason (average)

ATFM (GDP) delays* (minutes)
Application of Ground Delay Program (GDP) due to weather, airport or air traffic service capacity constraints (average). ATFM delays including ATC attribution are further detailed on pages 17 and 18.

Other departure delays (minutes)
Delays at departure airport, caused by airline, technical, passengers, taxi-delays, etc (average)

In-flight delays (minutes)
Extended routing during departure, enroute diversions, seasonal winds, and arrival airborne delays at destination as result of weather, airline non-compliance to GDP, technical, air traffic service capacity constraints, etc (average)

Source: Airservices ODAS (includes airline flights only).

The delay presented is an estimate based on domestic flight data available to Airservices. Airservices is working with airlines and stakeholders to refine the estimation method and identify complementary data to better understand causal factors.

*The ATFM system allows airlines to change GDP slots to respond to reactionary delays, which may allow a GDP slot to be obtained closer to the updated departure time. Therefore, the additional ground delay as result of a GDP can appear low but should be considered in conjunction with reactionary delay.

Ground Delay Program (GDP) application

Network decisions are continually refined to minimise delay outcomes, notwithstanding that aircraft operators can flexibly swap allocated landing times across flights within the ATFM system to optimise the amount of ground delay at the flight execution stage. August 2024 saw the lowest application of GDPs without adversely impacting airborne delays since January 2023, despite runway works at Brisbane and Perth and three sequential days of fog at Brisbane. Weather disruptions remained the dominant driver of ad-hoc GDPs. Industry GDP compliance remained below historical benchmarks, and active industry engagement is continuing to enhance network predictability and minimise airborne delays.

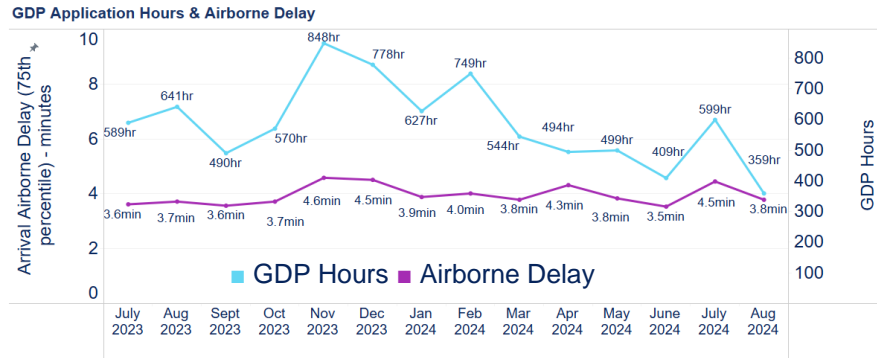## Figure 22. GDP application measures by month

GDP Application Hours & Airborne Delay

GDP Compliance

Multiple GDP Application (East Coast)

Legend: 1 GDP, 2 GDP, 3 GDP

Ad-hoc GDPs

Figure 23. GDP compliance August 2024, with overall comparison to annual average

	Qantas	Qantas Link	Jetstar	Virgin	Rex	Alliance	Other	Overall
Sydney	78%	87%	78%	81%	74%		81%	80% ▲1%
Melbourne	72%	68%	75%	72%	73%		57%	72% ▼-6%
Brisbane	67%	86%	60%	72%	50%	55%	51%	68% ▼-3%
Perth	80%	83%	54%	78%	75%	87%	70%	78% ▼-1%
All Ports	76% ▼-3%	83% ▼-1%	75% ▲1%	78% ▼-1%	73% ▼-1%	85% ▲2%	70% ▼-1%	78% ◆0%

Compliance 0% — 100%

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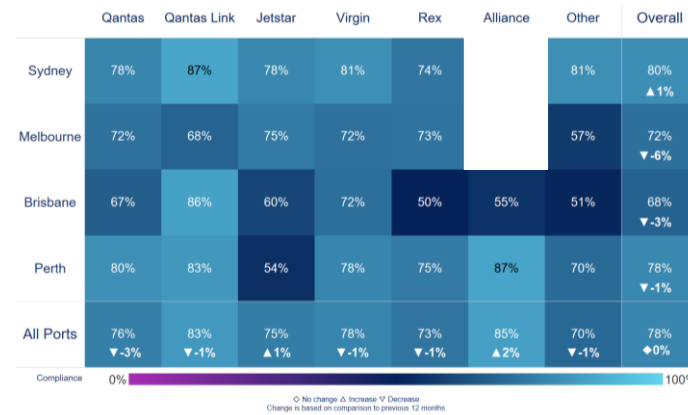Change is based on comparison to previous 12 months

Figure 24. ATFM program allocated delay vs. ATFM delay absorbed by operators per month to understand delay progression at planning and execution stages
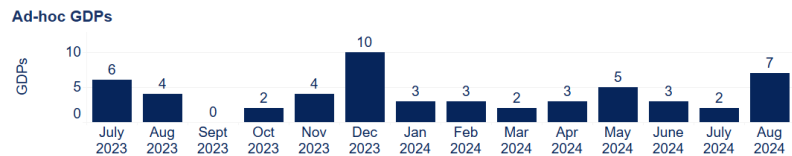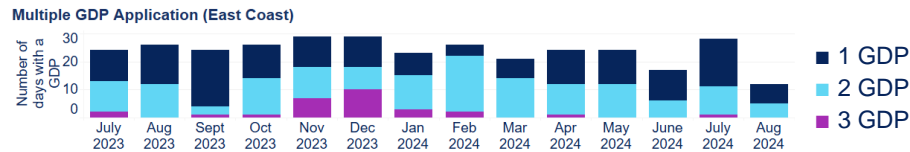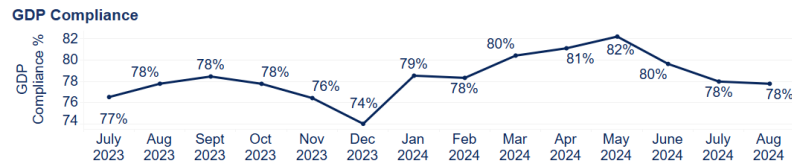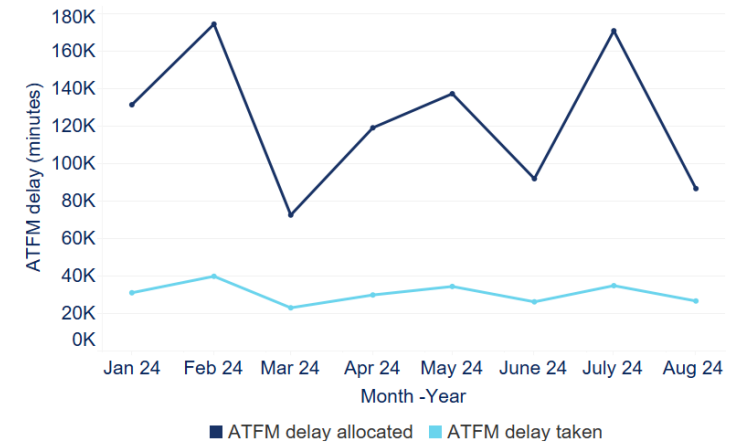

Legend: ATFM delay allocated, ATFM delay taken

Figure 25. Single runway mode utilisation by month
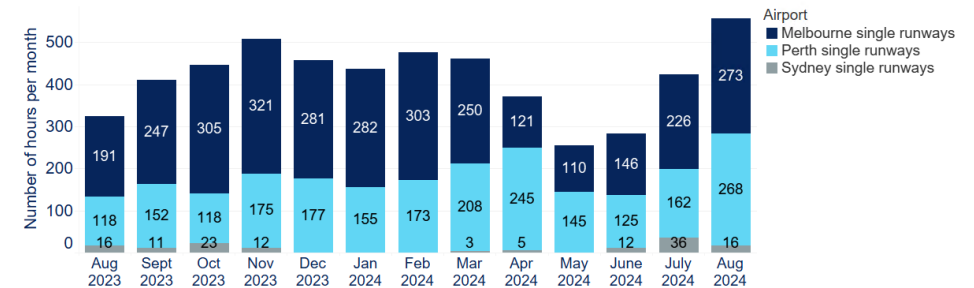
Airport: Melbourne single runways, Perth single runways, Sydney single runways

Air traffic management outcomes

There were no Airservices-attributable ATFM delays at Brisbane and Perth in August. However, our Sydney operations, underpinning overall Australian network efficiency, require greater resilience. Extensive recruitment and training has been in progress since early 2023, with further cross-training, rostering improvement and customer-focused operational decision-making remaining the priority to deliver consistent service on a daily basis.

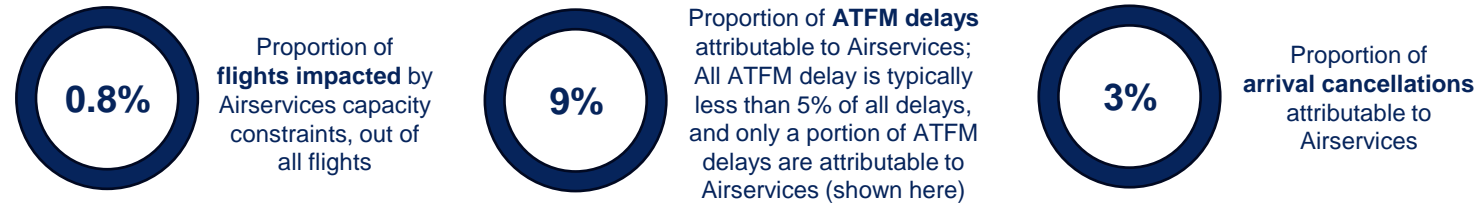**Figure 26. Airservices attribution of ATFM outcomes (August 2024)**

0.8% — Proportion of **flights impacted** by Airservices capacity constraints, out of all flights

9% — Proportion of **ATFM delays** attributable to Airservices; All ATFM delay is typically less than 5% of all delays, and only a portion of ATFM delays are attributable to Airservices (shown here)

3% — Proportion of **arrival cancellations** attributable to Airservices

Figure 27. Relative ATFM (GDP) delay and cancellations attributed to Airservices (% of flights subject to ATFM measures, not % of total delays)
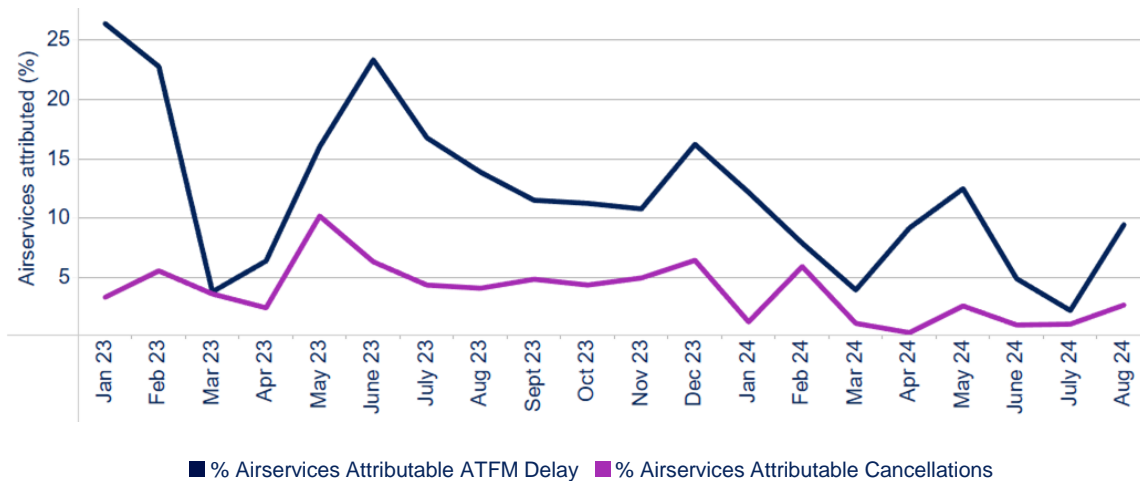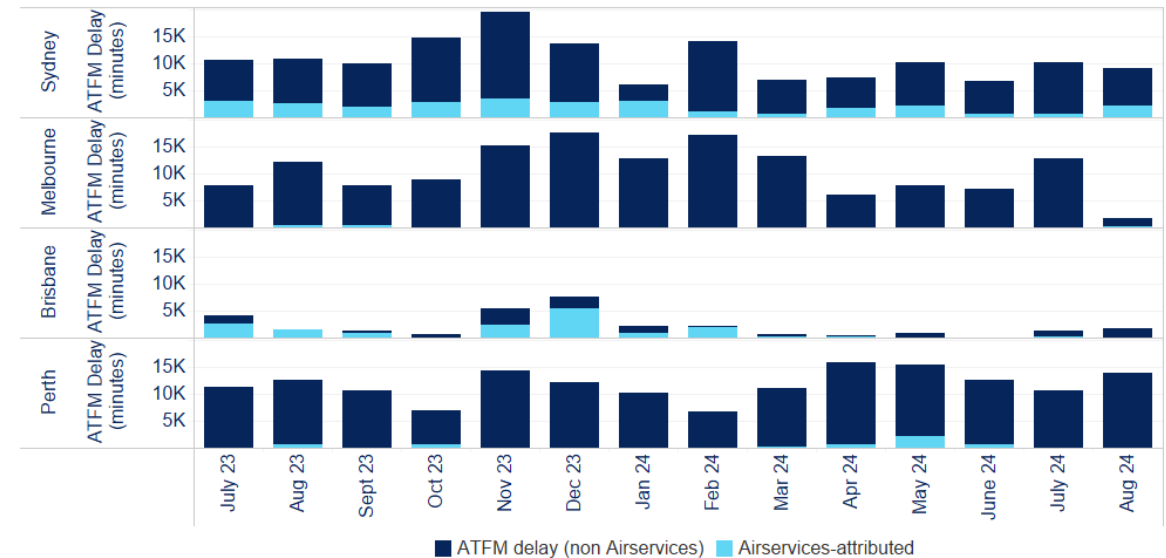

Figure 28. ATFM (GDP) delay by airport per month
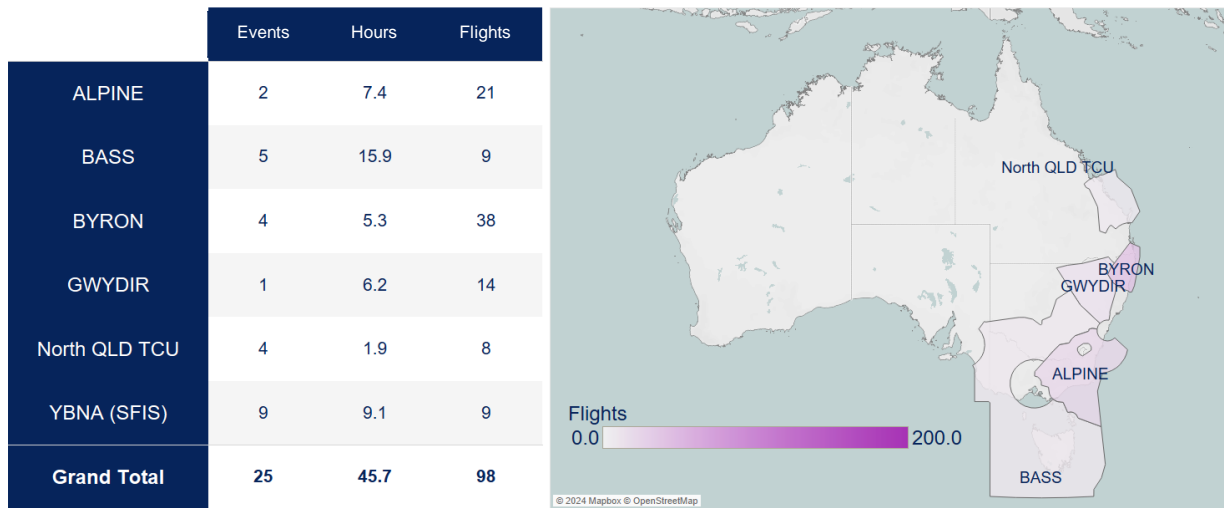
Source: Airservices ODAS.

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 these 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. More detailed ATFM delay reporting can be found at Australian Aviation Network Performance - Airservices (airservicesaustralia.com)
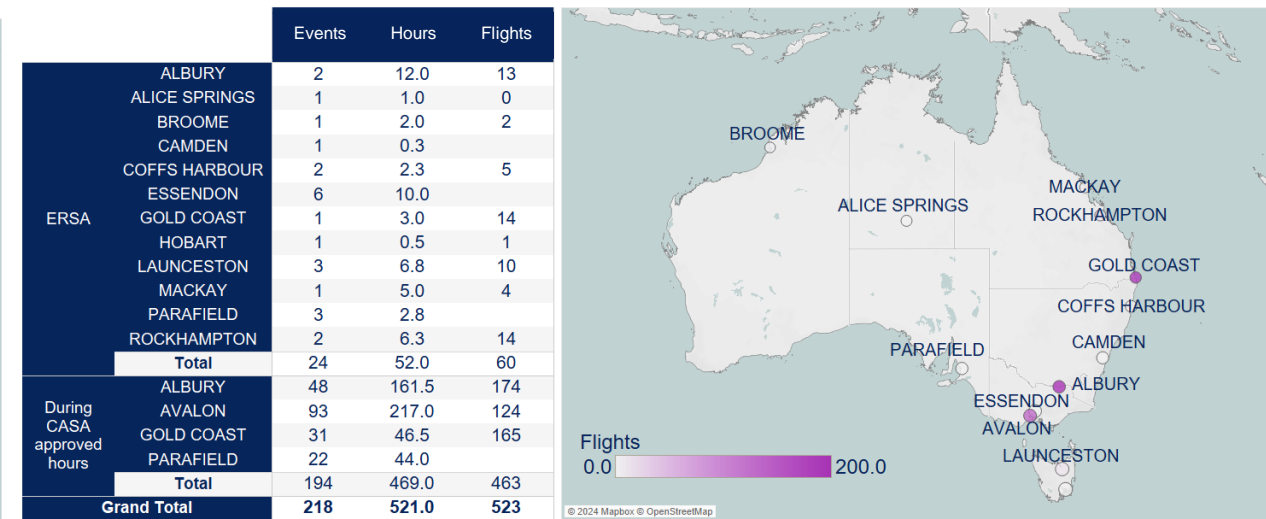
Air traffic service provision

Airspace service variations in 2024 to date reduced by nearly 60% compared to the same period last year. Efforts are continuing to return to published hours of service in most regional aerodromes by late 2024.

Figure 29. Number of events, hours, and flights estimated to operate during the periods when air traffic services delivered varied from published levels (August 2024)

Variations to Published Services
Airspace Sector Groups: August 2024

	Events	Hours	Flights
ALPINE	2	7.4	21
BASS	5	15.9	9
BYRON	4	5.3	38
GWYDIR	1	6.2	14
North QLD TCU	4	1.9	8
YBNA (SFIS)	9	9.1	9
Grand Total	**25**	**45.7**	**98**

Flights 0.0 — 200.0

Variations to Published Services
Air Traffic Control Towers: August 2024

		Events	Hours	Flights
ERSA	ALBURY	2	12.0	13
	ALICE SPRINGS	1	1.0	0
	BROOME	1	2.0	2
	CAMDEN	1	0.3	
	COFFS HARBOUR	2	2.3	5
	ESSENDON	6	10.0	
	GOLD COAST	1	3.0	14
	HOBART	1	0.5	1
	LAUNCESTON	3	6.8	10
	MACKAY	1	5.0	4
	PARAFIELD	3	2.8	
	ROCKHAMPTON	2	6.3	14
	Total	**24**	**52.0**	**60**
During CASA approved hours	ALBURY	48	161.5	174
	AVALON	93	217.0	124
	GOLD COAST	31	46.5	165
	PARAFIELD	22	44.0	
	Total	**194**	**469.0**	**463**
Grand Total		**218**	**521.0**	**523**

Flights 0.0 — 200.0

Source: Airservices ODAS (General aviation, military, and government flights are excluded).

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). Service variations are with respect to published services as per ERSA including any approvals by the Civil Aviation Safety Authority (CASA) for temporary amendments.

Flights shown are estimated approximations by historic airline, charter, cargo and medical flights that typically operate during the periods of variations to published services, noting the exact impacts to flights cannot be directly inferred from information on flight times or tracks. Airservices is working with airlines to refine the estimation method to better understand the impact of variations to published services.

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

Runway Occupancy Time (ROT)

Efficient use of airport infrastructure, in particular, rapid exit taxiways, is a key influencing factor of runway occupancy time. In August, there was reduced usage of preferred exits at Brisbane due to airport works which led to an increase in runway occupancy time during peak periods on Runway 01R.

Figure 30. Departure and arrival flight ROT per month (75th percentile, seconds) by airport and runway during peak periods at major capital-city airports (June to August 2024). Departure runway occupancy times are higher during crossing/intersection modes at Melbourne and Perth due to operational requirements.
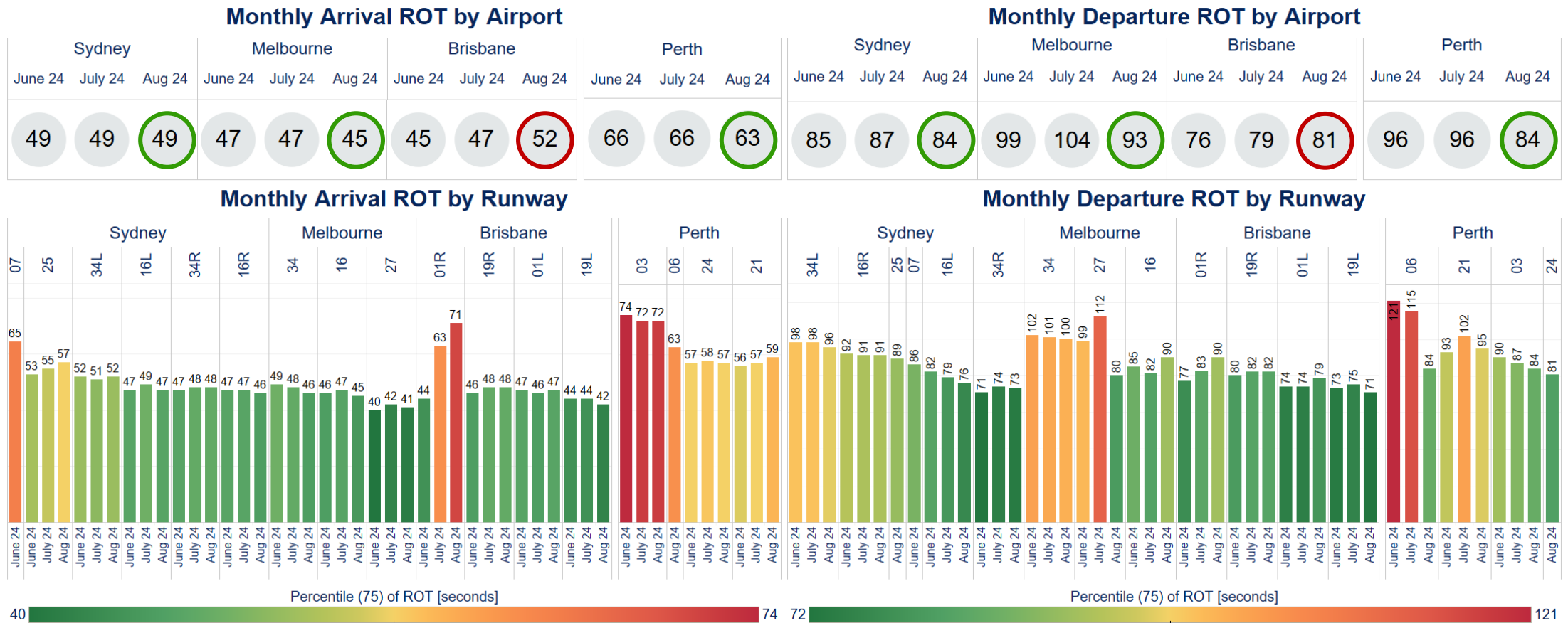
Source: Airservices ODAS. Only groups with at least 10 movements are shown. Not shown are months where a particular runway was not used.

For more information
stakeholder@airservicesaustralia.com

airservices
australia