

Australian Aviation Network Overview

July – August 2023



Executive Summary

The Australian aviation network recorded 22% growth over the last 12 months to August 2023. Demand for air travel is proving resilient despite continued economic headwinds such as volatile jet fuel prices, supply chain constraints, labour shortages and trust challenges across the Australian economy.

In July-August 2023, domestic flights approached pre-pandemic levels. International traffic recovery further accelerated, with over 50% growth over the same period last year. Indo-Pacific markets have shown remarkable growth above or near historical record. For this region, it highlights the important role of aviation to support the Australian Government's International Development Policy released in August. This presents opportunities to promote cross-border collaboration and capability development for more seamless air travel experience and collectively address sustainable development goals on a regional basis.

In contrast to the strong rebound in passenger services, we are seeing general aviation and air cargo rebalancing to the long-term trend. This reflects uneven conditions across different industry segments. The active fleet in the Australian network remain largely unchanged over the last 12 months, at a time when demand/capacity imbalance needs to be urgently addressed to improve outcomes for the travelling public.

The overall Australian aviation network performance is improving in terms of on-time performance, but still below historical levels. Returning to long-term performance expectations while navigating post-pandemic uncertainty and complexity requires greater resourcing and resilience. Collaboration across the network is more critical than ever to enhance the whole-of-system performance and rebuild Australian aviation's world-leading track record.

The release of the Aviation Green Paper last week provided an opportunity for our industry to engage with the Government on these strategic matters and a broad range of other considerations that will influence our individual and collective performance in the short, medium and long term.



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.

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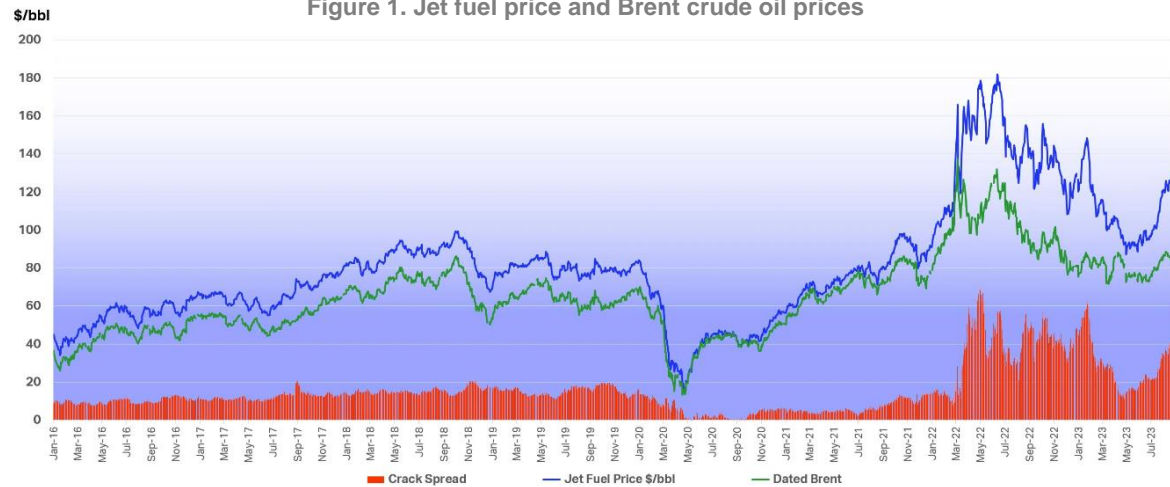
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Economic and social trends

Economic and social factors

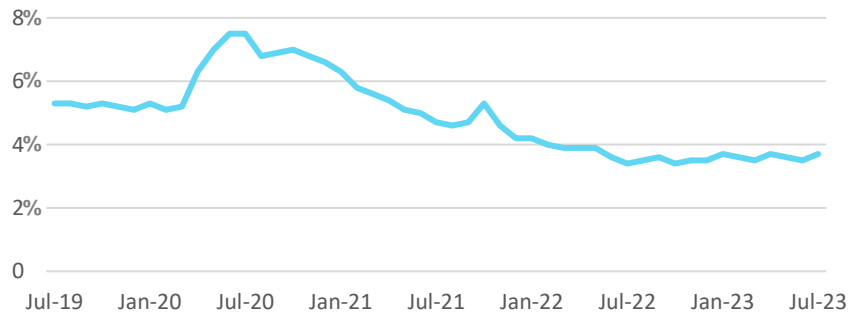
The Australian aviation industry is still experiencing significant risks on multiple fronts, including volatile jet fuel prices, supply chain constraints and labour shortages. There are also growing expectations around social responsibility, environmental sustainability and trust across the Australian economy, highlighting the opportunity to carefully balance aviation growth and airport infrastructure investment with social development needs.

Figure 1. Jet fuel price and Brent crude oil prices



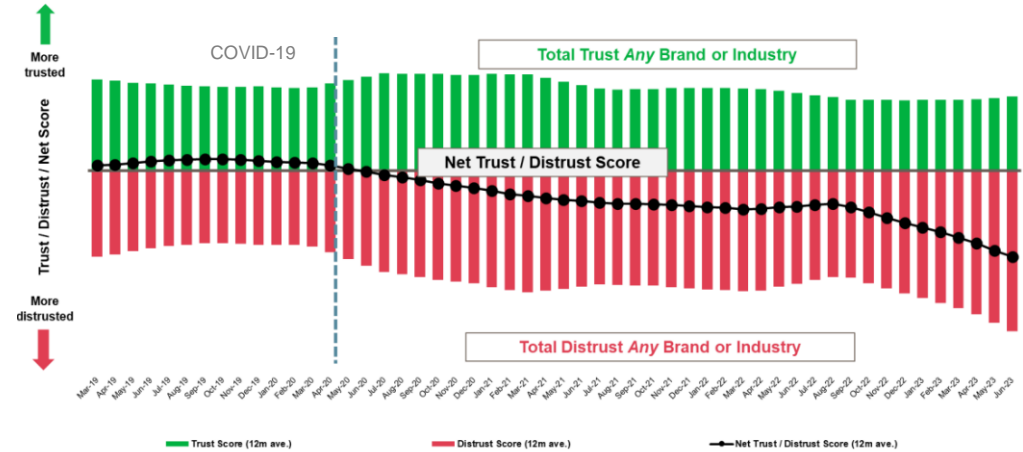
Source: IATA fuel price monitor ([website](#))

Figure 3. Unemployment rate (seasonally adjusted)



Source: ABS ([website](#))

Figure 2. Overall levels of trust across the Australian economy



Source: Adapted from Roy Morgan

Figure 4. Aircraft noise complaints and complainants and CO₂ Emissions in July-August 2023 and percentage change from the same period

Aircraft noise complaints	Aircraft noise complainants	Total CO ₂ Emissions
13,677	1,168	3.3 Million Tonnes
▲ 255%	▲ 37%	▲ 30%

Source: Airservices Noise Complaints and Information Service (NCIS) and Airservices Operational Data Analysis Services (ODAS)

Australian aviation and regional context

Overall traffic compared to forecast

Demand for air travel remains high. Domestic flights remain above pre-COVID levels. International flights continue to rebound above expectations.

Figure 5a. Domestic daily average flights compared to forecast and percentage recovery (monthly) compared to 2019

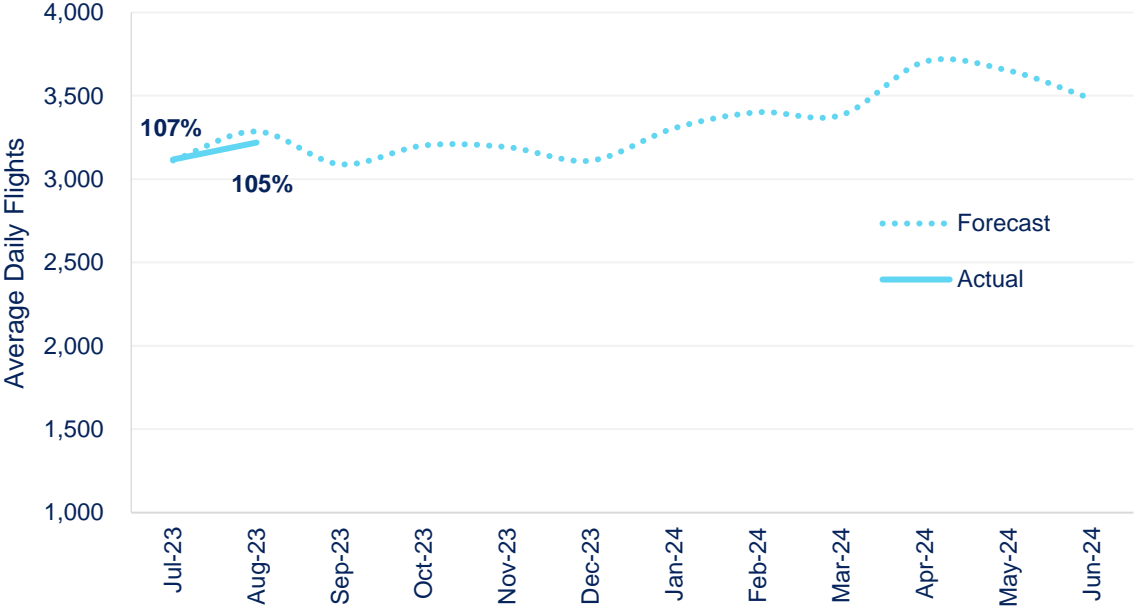
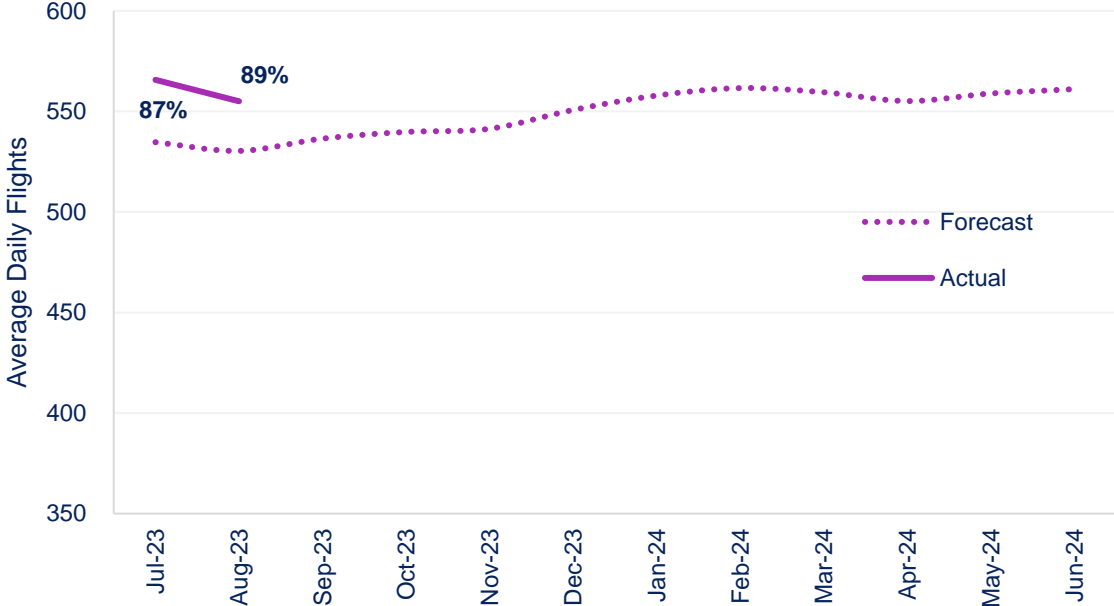


Figure 5b. International daily average flights compared to forecast and percentage recovery (monthly) compared to 2019



Source: Airservices aeronautical charge database (exclude some general aviation flights that are not subject to Airservices aeronautical charges)

State of Australian aviation growth

In July-August 2023, daily flights across the Australian aviation network were 98% of 2019 levels. The 10% decline in cargo flights in Australia reflects global influencing factors such as contraction in e-commerce growth following the height during the pandemic, changes in cross-border goods trade impacted by geopolitical dynamics and the return of passenger aircraft belly capacity.

Figure 6. Monthly number of flights by industry segments

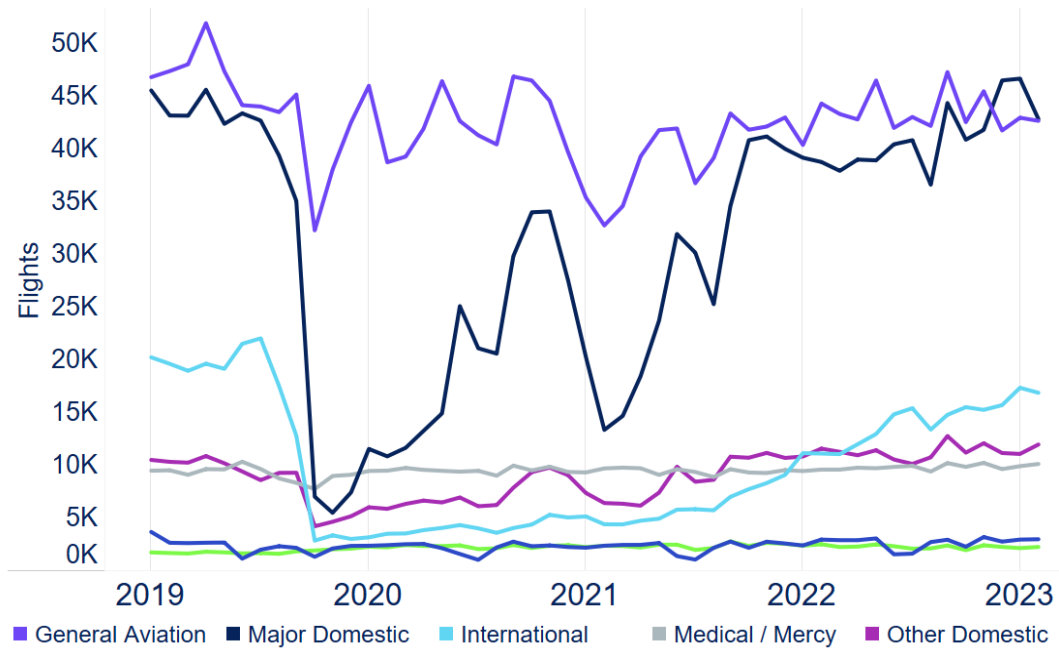
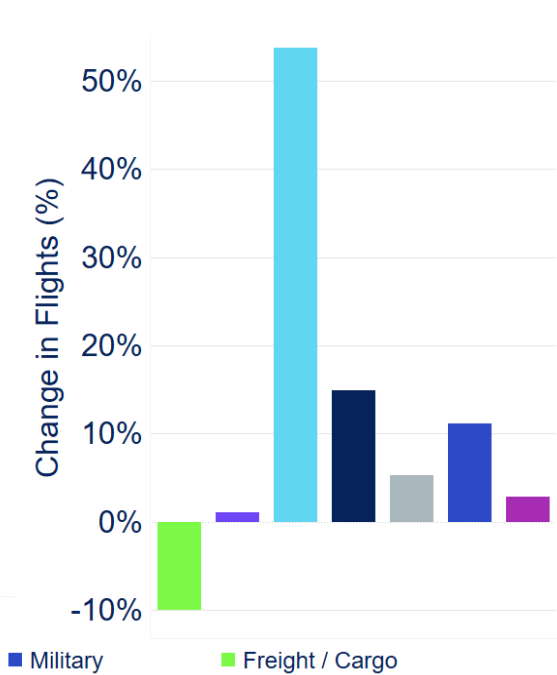


Figure 7. Percentage change in total flights by industry segments in July-August 2023 vs the same period in 2022



2,366
Average daily flights

▲ 20% vs Jul-Aug 2022
▼ -2% vs Jul-Aug 2019

Domestic aircraft movements

▲ 12% vs Jul-Aug 2022

▲ 3% vs Jul-Aug 2019

International aircraft movements

▲ 53% vs Jul-Aug 2022

▼ -14% vs Jul-Aug 2019

Ratio of domestic to international aircraft movements

77 : 23 in Jul-Aug 2023

82 : 18 in Jul-Aug 2022

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

Source: Airservices ODAS

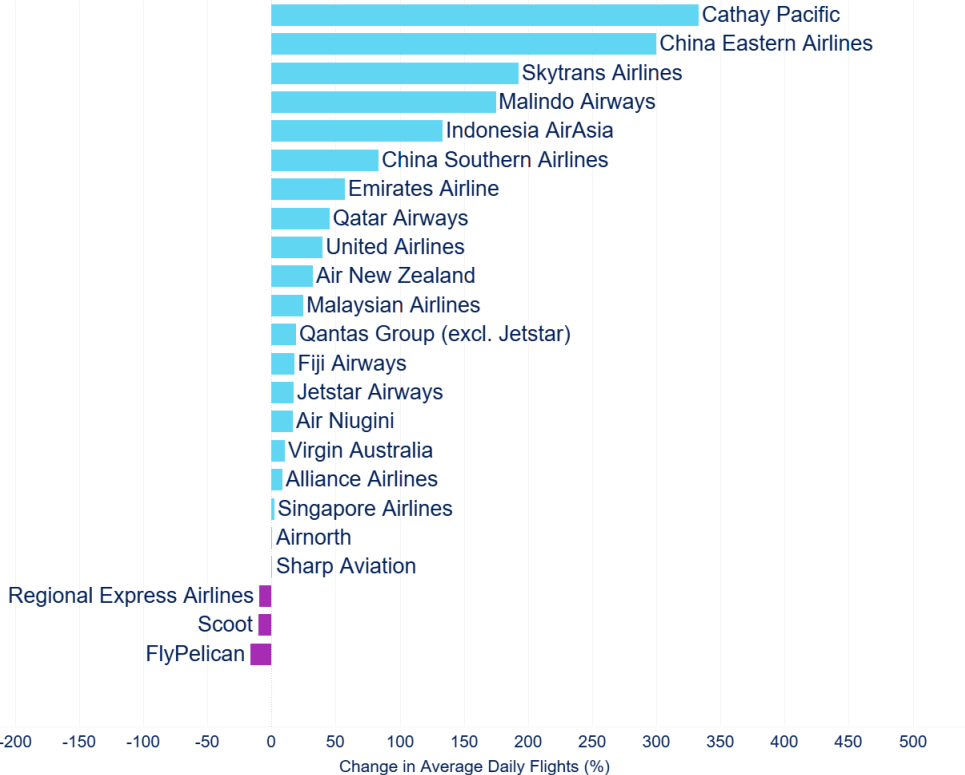
Top aircraft operators

75% of flights across the Australian network in July-August were driven by the top three domestic airline groups. We are seeing remarkable rebound from airlines in the Asia Pacific region, particularly those from China following its reopening. This region is regaining the dominant proportion (over 30%) of the global passenger demand.

Figure 8. Average daily flights of top aircraft operators in July-August 2023



Figure 9. Percentage change in average daily flights of top aircraft operators in July-August 2023 vs the same period in 2022



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

Traffic flows from international markets

In recent months, we are seeing strong traffic growth from markets across the Asia Pacific region. This reflects the net migration increase from these regions driven by the surge in international students which are 20-30% higher than comparable previous periods, and sourcing workers to address unprecedented labour shortages.

Indo-Pacific markets are leading the growth. While traffic from China, historically our largest inbound market, is recovering rapidly into Melbourne and Sydney, Chinese airlines are yet to return to Brisbane, Perth and Adelaide. This suggests a shift in the post-COVID international market dynamics, at least in the short term.

Figure 10. Percentage change in total flights by international markets in July-August 2023 vs the same period in 2022

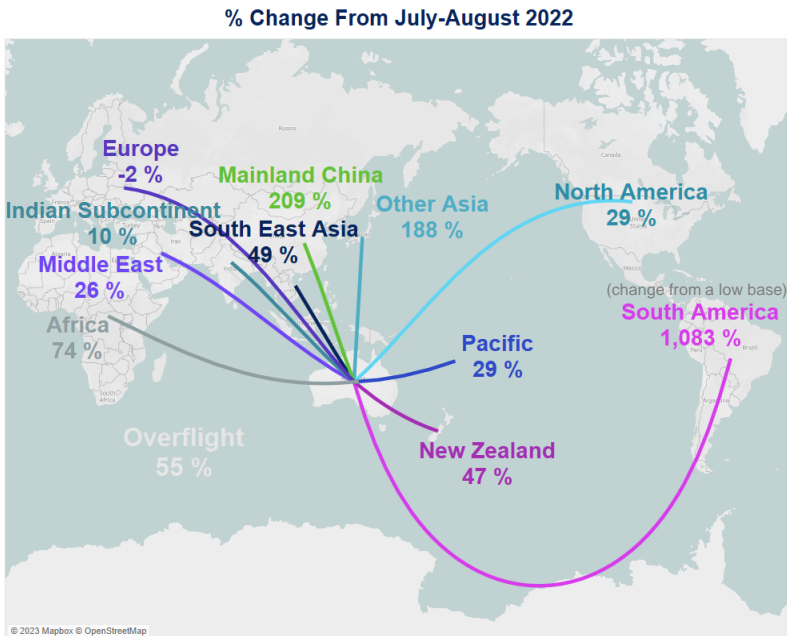
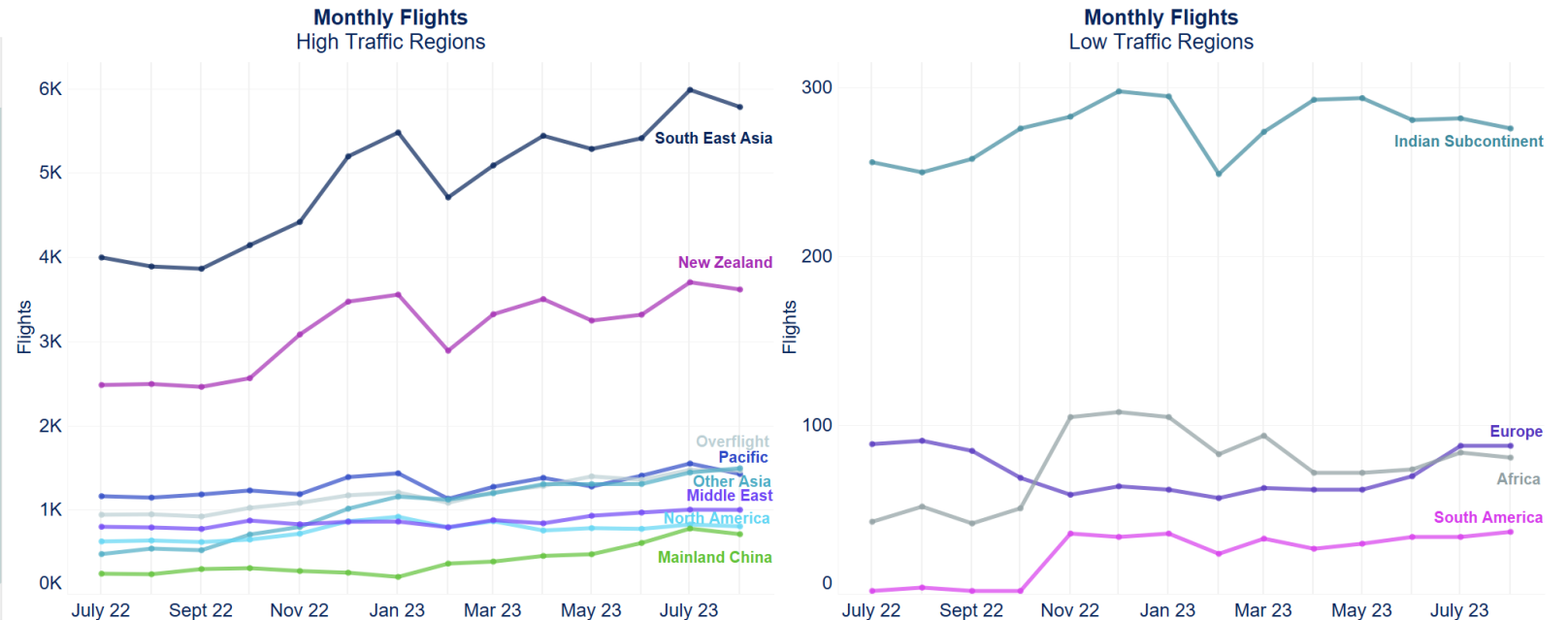


Figure 11. Monthly number of flights by international markets



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

Change in active fleet as a capacity indicator

The active fleet operating in the Australian network is largely unchanged over the last 12 months. Labour shortages and supply chain challenges experienced by commercial aircraft manufacturing and repair organisations highlight the difficulty in closing capacity/demand gap in the near term.

Figure 12. Airbus and Boeing annual aircraft deliveries to the end of August in the last three years

	Aircraft Deliveries		
	Sep 2018/ Aug 2019	Sep 2021/ Aug 2022	Sep 2022/ Aug 2023
Australia	5	2	16
Asia	750	330	409
Europe	310	313	338
North America	287	251	449

Figure 13. Active Airbus and Boeing Fleet by region (percentage change as of 31 August 2023 vs 31 August 2022)

	Active Fleet by Region			
	Aug 2019	Aug 2022	Aug 2023	% Change
Australia	379	357	361	▲ 1.1%
Asia	8,874	8,346	8,679	▲ 4.0%
Europe	5,862	5,577	5,651	▲ 1.3%
North America	5,672	6,138	6,159	▲ 0.3%

Figure 14. Active aircraft fleet in Australia as of 31 August 2022 and 31 August 2023

		Active Fleet in Australia	
		Aug 2022	Aug 2023
Narrowbody Jet	717	20	13
	727		
	737	187	193
	A32N	1	9
	A32X	83	79
	A220		
Widebody Jet	Other	3	
	747		
	767	3	3
	777		
	787	22	24
	A300		
	A330	32	32
	A350		
	A380	6	8
	Other		

Figure 15. Change in active Australian regional fleet as of 31 August 2023 vs 31 August 2022

Change in active Australian regional fleet	
	Aug 2023
Airbus	3
Boeing	1
Bombardier	-3
British Aerospace	-6
de Havilland	-10
Embraer	2
Fairchild	-6
Fokker	-11
SAAB	-20
Swearingen	-2

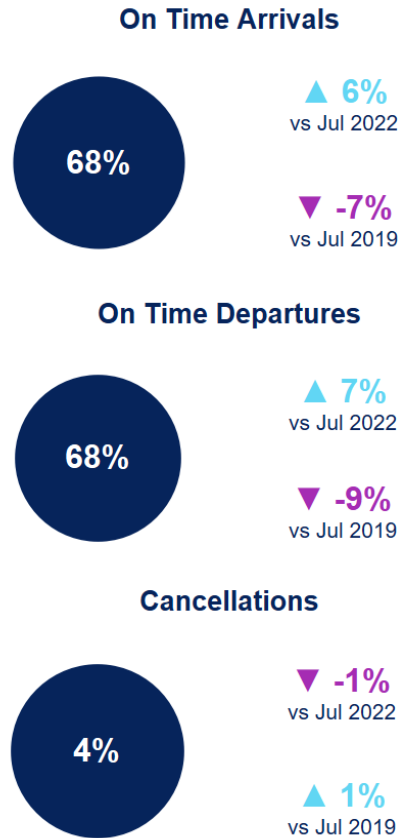
Source: CAPA Fleet Data

Australian aviation network performance

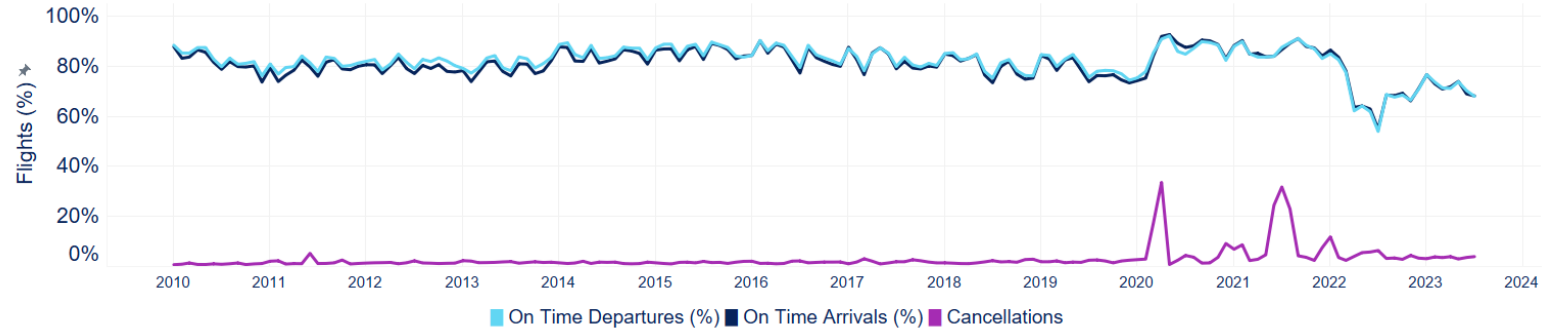
On-Time Performance (OTP)

Industry arrival and departure on-time performance is improving, but still well below long-term average performance expectations. Increasing customer satisfaction and trust is a key area of focus across the industry.

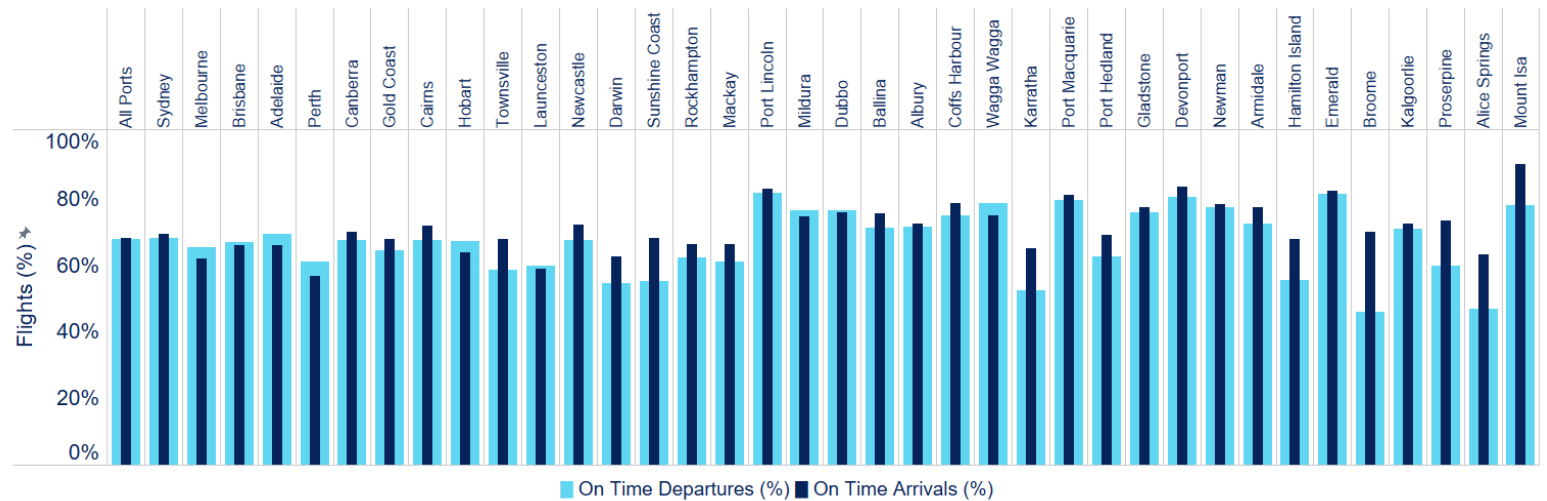
Figure 16. Total industry OTP by month (OTP data available up to 31 July 2023)



Monthly Performance



Performance for Airports (July 2023)

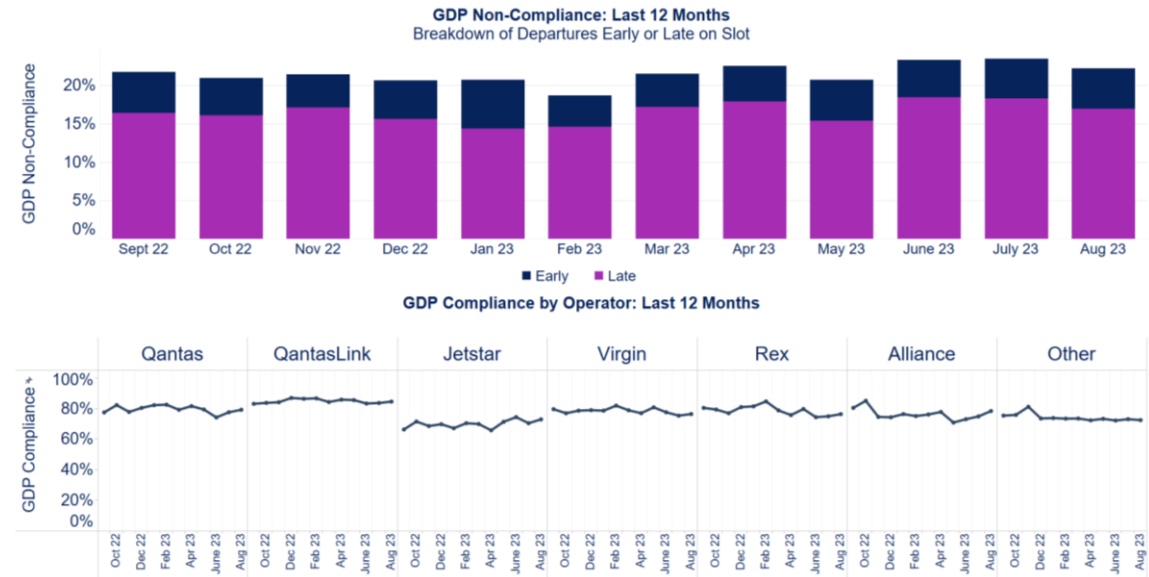
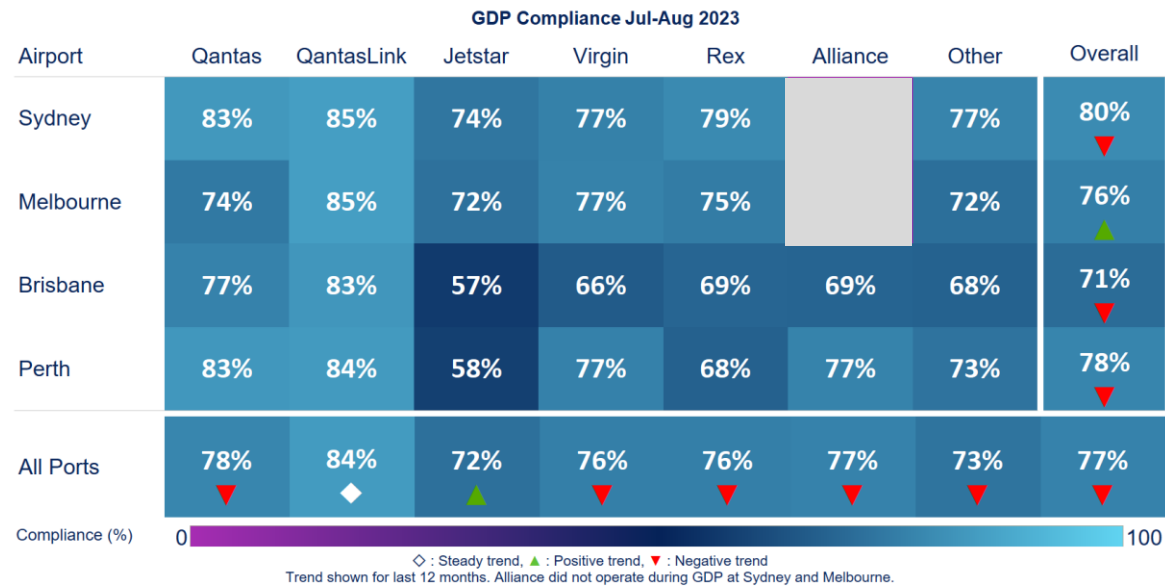


Source: BITRE ([website](#))

Airline Ground Delay Program (GDP) compliance

Overall industry GDP compliance has decreased over the last 12 months. Collaboration with airlines is underway to jointly review and improve GDP compliance, such as targeting reduction in early departures.

Figure 17. GDP compliance in July-August 2023 and trend over the last 12 months



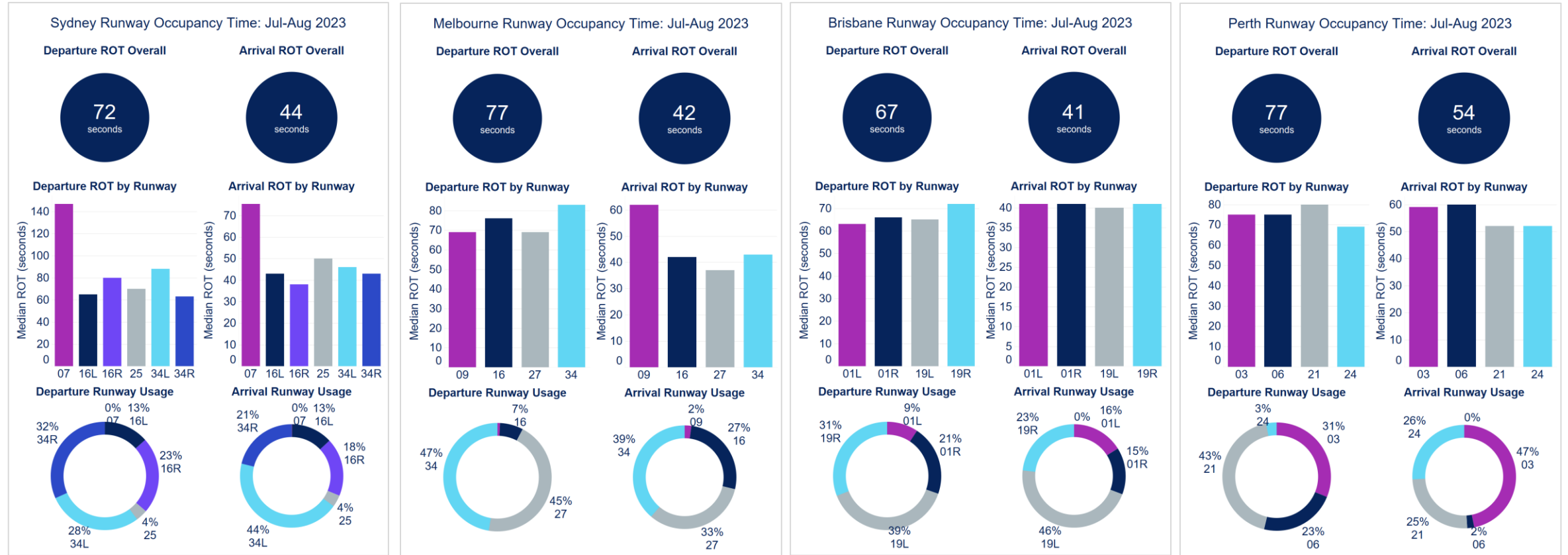
Source: Airservices ODAS

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](#)).

Runway occupancy time

Optimisation of runway occupancy is a critical factor of airport capacity. Longer than anticipated runway occupancy time (ROT) constrains the flow of successive arrival or departing aircraft. Further cross-industry efforts will be required to safely minimise runway occupancy time.

Figure 18. Aircraft runway Occupancy Time at major capital-city airports (July-August 2023)

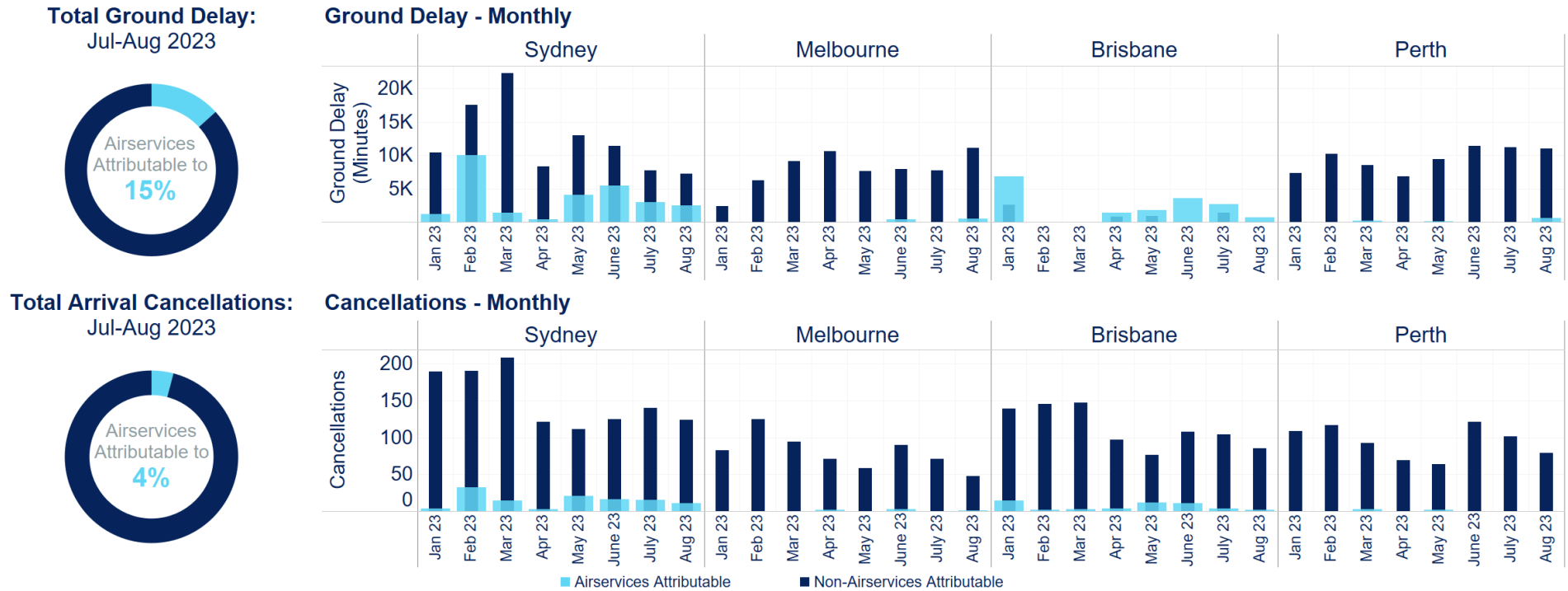


Source: Airservices ODAS. For departures, the runway occupancy time is calculated from when an aircraft leaves the holding point and moves onto the runway, until it is airborne and has left the runway area (overflies threshold at runway end or turned away from runway centreline). For arrivals, the runway occupancy time is calculated from when an aircraft flies over the runway threshold until it vacates the runway after landing.

Aviation network performance

While Airservices' operating performance is stabilising, we are still facing workforce deployment issues. Returning to long-term performance expectations in the post-pandemic environment requires greater resourcing and resilience. We are actively recruiting and strengthening our rostering and training systems and refining service variation processes to minimise our constraint on the aviation network performance.

Figure 19. Air traffic management outcomes at major airports (July-August 2023)



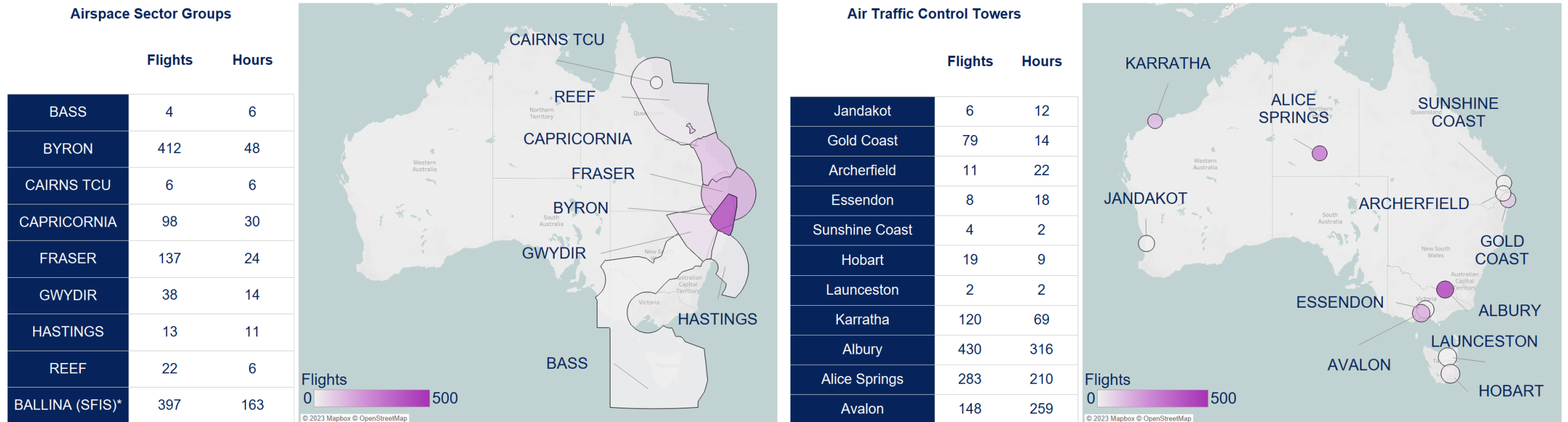
Source: Airservices ODAS.

Airservices attributable ground delay and flight cancellations 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.

Air traffic management service provision

While safety performance of the network has been maintained, the capacity of the aviation network can be constrained at times due to Airservices service variations. Ongoing efforts to limit industry impact (e.g., moving service variation to low traffic periods) are still needed, notably for certain airspace volumes around Brisbane and some regional aerodromes. We are prioritising our Performance and Customer Experience (PACE) improvement actions to strengthen the consistency of our services that influence network efficiency and regional connectivity.

Figure 20. Number of flights and hours during the periods when air traffic services delivered varied from published levels (July-August 2023)



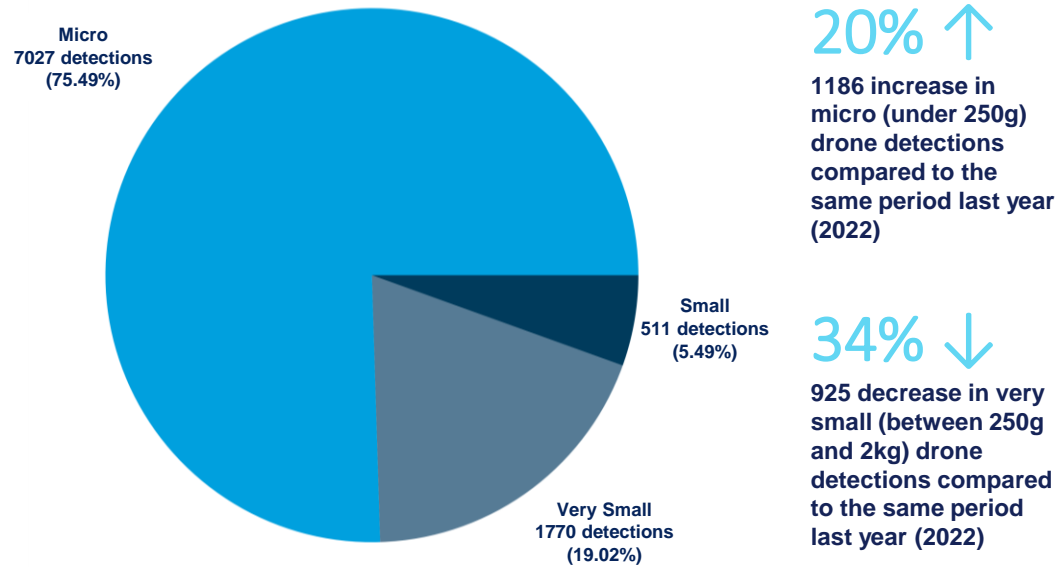
Source: Airservices ODAS. Flights impacted are estimated by airline, charter, cargo and medical flights, but excludes the impacts on general aviation, military and government flights.

*At Ballina, Airservices provides Surveillance Flight Information Service (SFIS) from Brisbane Air Traffic Services Centre while the airspace classification remains Class G (i.e., entry into the airspace does not require air traffic control clearance).

Drone activities

There has been a net increase in drone detections within the No Fly Zones* of major airports. The increase in micro drones may suggest that smaller drone technology is gaining market momentum, as their features and capability catch up to those found in larger products and their barriers to operate across metropolitan locations are lower. Government and industry cooperation is progressing trials and enhancing surveillance capability to ensure the safe integration of drone activities and protect the overall aviation network.

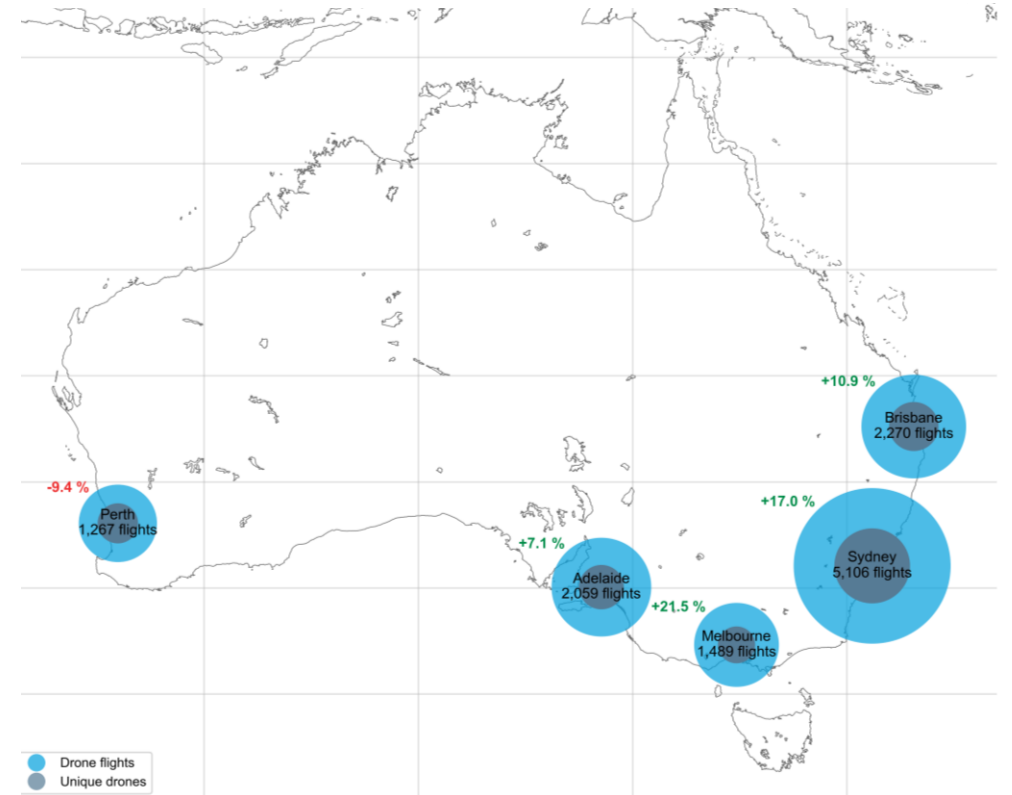
Figure 21. Breakdown of drones detected within No-Fly Zones* at major Australian airports by size (July-August 2023)



*No-Fly Zones refer to the 5.5 km boundary, and inner and outer runway spays. Percentages shown are across all detected drone flights.
Drone detection reports do not distinguish between authorised and non-compliant operations: The Civil Aviation Safety Authority (CASA) can approve operations within the 3 nautical mile (5.5 kilometre) boundary and in the approach/departure paths of a controlled aerodrome.
Micro drones (<250g) are allowed to operate within 5.5 kilometres of a controlled airport up to a height of 45 metres consistent with the requirements of the Part 101 MOS (outside of the no-fly zone).
All drones are allowed to operate in the outer runway spays of a controlled airport up to a height of 90 metres.

Source: Drone detection equipment

Figure 22. Drones* within No-Fly Zones detected at major Australian airports (July-August 2023) and percentage change vs the same period in 2022



* Data is limited to drone activity detected by drone surveillance equipment installed at 29 controlled civil aerodromes, and does not distinguish approved or allowed operators. Percentage changes are calculated relative to the period 1 July 2022 to 31 August 2022.

For more information
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