

Australian Aviation Network Overview

March 2024

Executive Summary

In March 2024, the overall Australian aviation network recorded similar daily average flights compared to the previous month. This indicates that our industry is stabilising to a normalising trend.

The last ten days before Easter Friday recorded a 12 per cent increase in flights compared to a similar period in 2023. Easter Thursday was another busiest day in the last four years. This illustrates the ongoing leisure-driven demand pattern.

The overall industry on-time performance (OTP) continued to improve since November 2023, but remained below long-term and global benchmarks. In efforts to understand the building blocks of OTP, preliminary analysis has shown that disruptions during the first rotation of the day can potentially cause up to 45 per cent of subsequent flight arrival delays in the morning. Throughout the day, experience shows it is generally not possible to recover the impact given that 78% of major airlines' fleet rotate through major airports multiple times a day. Measures to build layers of network resilience to protect the first rotation period are being progressed with industry inputs.

The improving trend in air traffic management outcomes was maintained over the last two months. In March, Airservices attributed capacity constraints affected 1.3 per cent of flights. Where GDP periods were implemented, four per cent of ground delay periods and one per cent of cancellations were attributable to Airservices, the lowest level in twelve months.

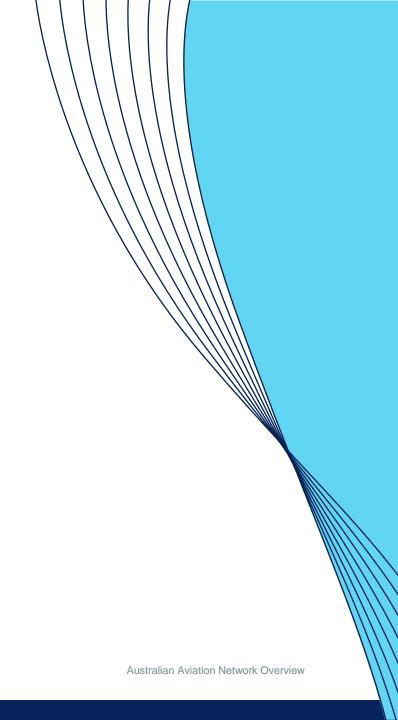
The consistency of air traffic service provision improved in March 2024. The overall variations to published services reduced by 80 per cent compared to the average trend in the previous 12 months, following concentrated efforts to maximise resource availability to protect peak demand periods. However further sustained efforts are needed to embed greater flexibility and resilience. This requires higher levels of resourcing (as compared to pre-pandemic) combined with transformation of processes and systems to meet long-term performance expectations.



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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Economic and social trends

Economic factors

The Australian aviation sector continues to face difficult economic conditions including volatile jet fuel prices, subdued GDP growth, continued cost-of-living pressures and tight labour market conditions. Despite these challenges, tourism demand remains strong particularly from markets such as India, South Korea and New Zealand that exceeded pre-pandemic levels.

Figure 1. Jet fuel and Brent crude oil prices



Figure 4. Domestic air fares (best discount)

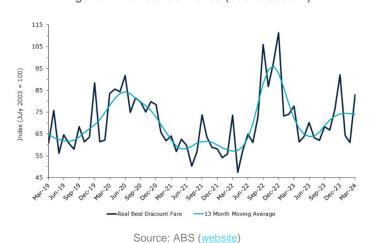
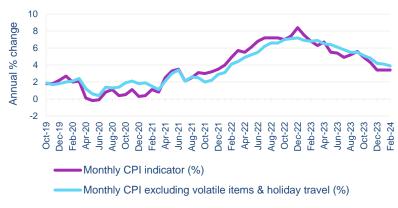
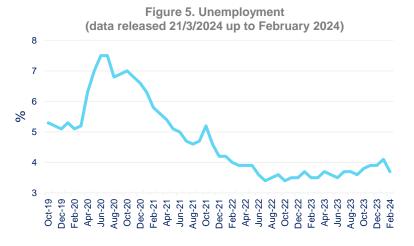


Figure 2. Monthly Consumer Price Index (CPI) Indicator (data released 27/03/2024 up to February 2024)

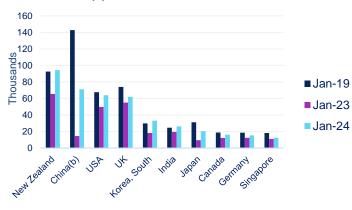


Source: ABS (website)



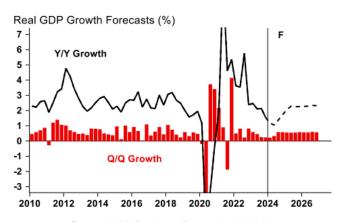
Source: ABS (website)

Figure 3. Short-term visitor arrivals, top 10 source countries (b) excludes SARs and Taiwan



Source: ABS (website)

Figure 6. Australia GDP growth



Source: NAB Business Research & Insights

Social factors

We are seeing increased intensity of noise complaints per complainant at some airports (e.g. a small number of complainants submitting a high number of complaints at Perth Airport recently). The Senate inquiry into the impact and mitigation of aircraft noise commencing mid April 2024 will increase awareness of the effects of aircraft noise and highlights the need to achieve a balanced outcome for the aviation industry with increasing societal expectations.

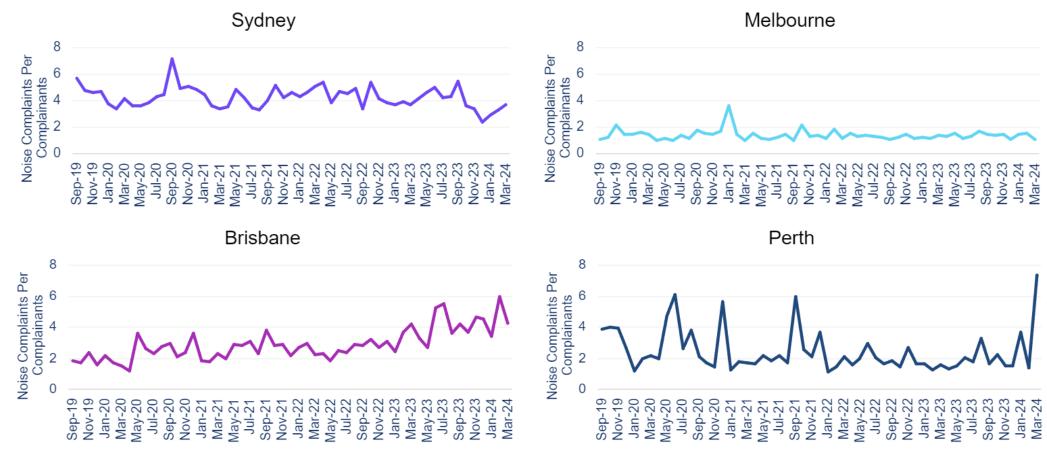


Figure 7. Aircraft noise complaints per complainant at major capital city airports

Source: Airservices Noise Complaints and Information Service (NCIS)



Australian aviation and regional context

State of Australian aviation growth

The last ten days before Easter Friday 2024 recorded a 12 per cent increase in flights across the Australian network compared to a similar period in 2023. Easter Thursday (the 28th March) recorded another busiest day in the last four years. This illustrates the ongoing leisure-driven demand pattern. Our industry is stabilising to a normalising trend based on the daily average flights over the last three months.

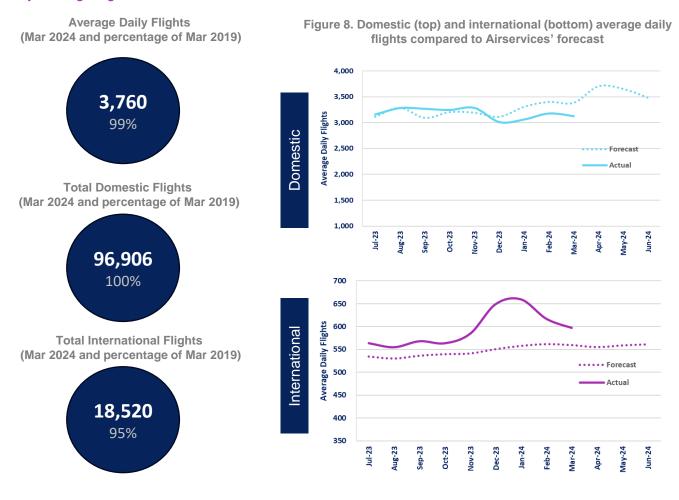
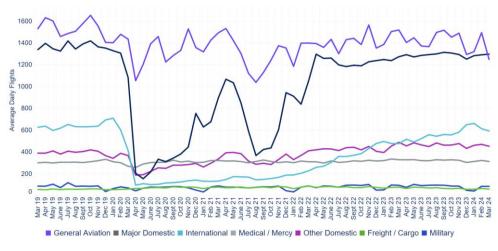


Figure 9. Average daily flights per month by industry segment



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

Recent growth in the network is dominated by a number of domestic airlines expanding into the regional markets, including the low-cost carrier Bonza and regional airlines such as Skytrans and National Jet Express alongside Qantas Group airlines. However this growth has not been uniform, with some operators cutting services due to availability of air crew and aircraft delivery challenges.

Figure 10. Average daily flights by top operators (March 2024)

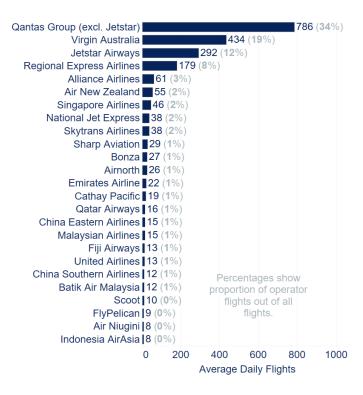


Figure 11. Top operators' change in average daily flights and percentage change (March 2024 vs March 2023)

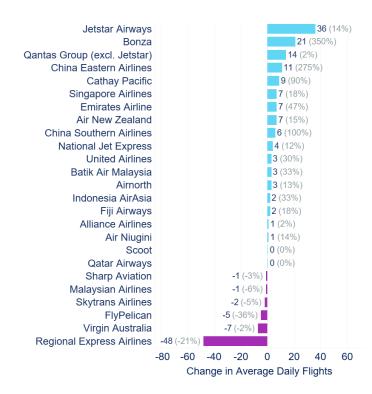
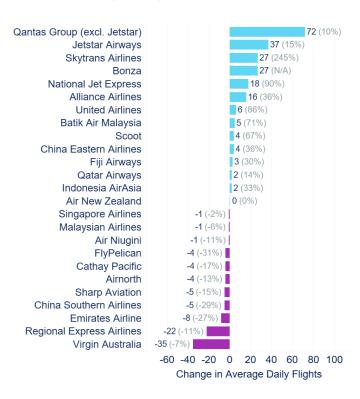


Figure 12. Top operators' change in average daily flights and percentage change (March 2024 vs March 2019)



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

Domestic network

We are seeing ongoing diversification in regional networks, with increased consumer choice across routes connecting Queensland-Northern Territory and Northern Territory-Western Australia. As air travel grows, the demand for pilots is rising rapidly driving up the demand for flight training. Flight training activities are at 88 per cent of pre-pandemic levels across all Metropolitan Class D airports, with Moorabbin Airport having fully returned to pre-pandemic levels of activity.

Figure 13. Domestic airport connectivity in terms of unique connections (March 2024 vs January 2023, three months ago)

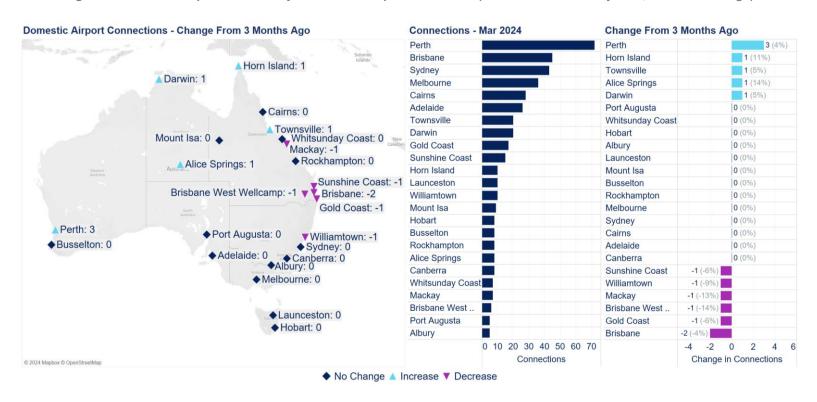


Figure 14. Daily average GA training flights by month

Airport	March 2019	March 2023	March 2024
Moorabbin	131	122	132
Bankstown	126	101	112
Jandakot	107	99	96
Parafield	100	90	84
Archerfield	48	42	44
Camden	33	34	32
Coffs Harbour	12	6	11
Tamworth	31	6	10
All	588	500	520

Source: Airservices ODAS (excludes military, medical/mercy flights, and general aviation). Only airports with at least 5 unique connections are shown, and connections with at least two movements weekly per airline are included.

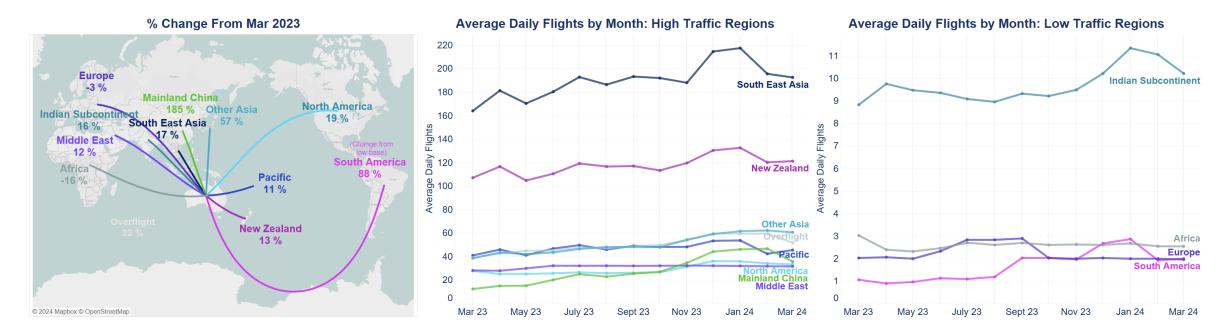
Source: Airservices ODAS. Data up to 15 March 2024.

Traffic flows from international markets

Leading into Easter school holiday period, popular holiday destinations in Indonesia, Singapore, New Zealand and India drove international traffic growth. We are also seeing new partnerships among domestic and international airlines (e.g. the new interline agreement between Rex and Etihad and codeshare agreement between Virgin Australia and United Airlines) improving connectivity and consumer choices. However, major carriers in China, Middle East and Europe are yet to recover fully to pre-pandemic levels.

Figure 15. Percentage change in total flights by international markets in March 2024 vs March 2023

Figure 16. Average daily number of flights per month by international markets



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

Notwithstanding airlines' significant fleet renewal programs, there is a net reduction in active aircraft fleet in Australia as aircraft manufacturing, maintenance and repair organisations continue to face supply chain challenges and production delays. This is increasing pressure for airlines to seek alternative approaches to match capacity to meet demand needs.

Figure 17. Active Airbus and Boeing fleet in Australia and by region (comparisons across the March period in 2019, 2023 and 2024)

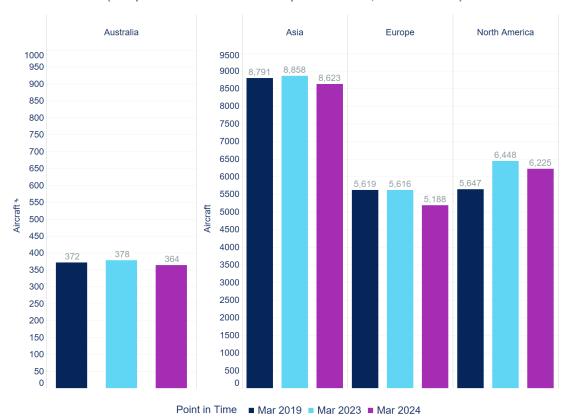
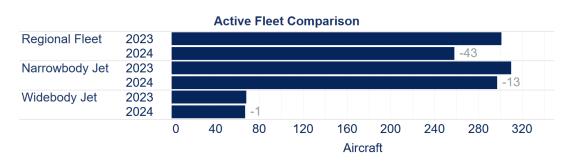


Figure 18. Change in total active Australian fleet
(as of 31 March 2024 vs 31 March 2023) and aircraft orders and deliveries (as of 31 March 2024) for Qantas and Virgin Group





Source: Centre for Aviation Fleet (CAPA)



Australian aviation network performance

On-Time Performance (OTP)

The overall industry OTP continued to improve since November 2023. Removing the effects of significant weather disruptions, such as Cyclone Lincoln in Western Australia in February 2024, cancellation rates reduced at most airports compared to the previous month. However, delivering OTP to long-term and global benchmarks above 80 per cent remains a cross-industry challenge.

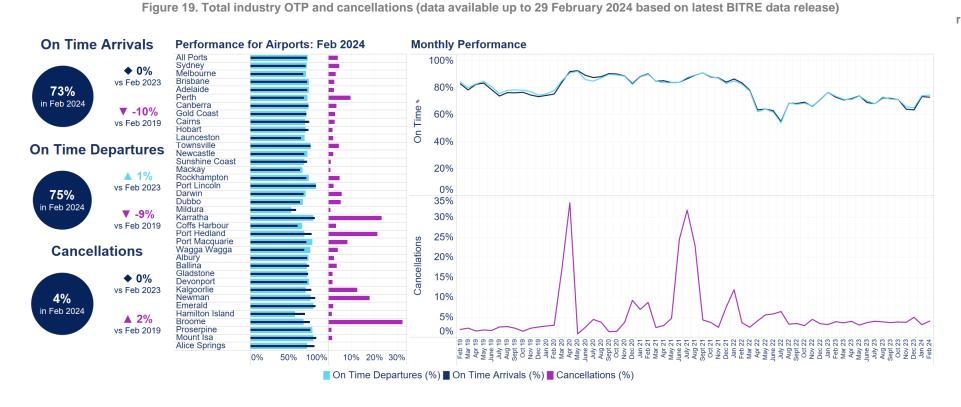


Figure 20. Average arrival OTP by region, based on the top ten performing airlines (February 2024) for all regions except Australia (Source: Cirium)

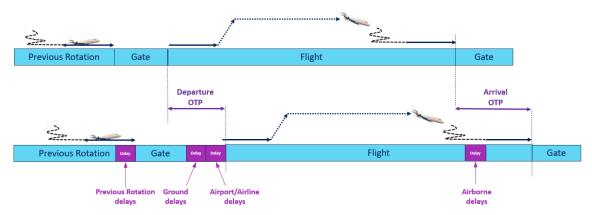
Region	On Time Arrivals
Europe	93%
Latin America	84%
Middle East	81%
North America	80%
Australia	73%

Source: BITRE (website)

Understanding the building blocks of OTP

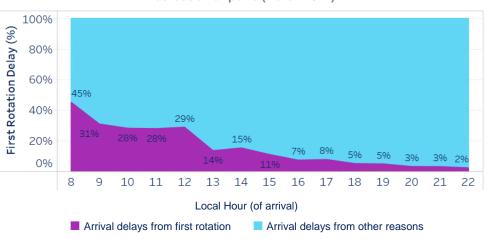
In efforts to understand the effects on OTP across the actors in the aviation ecosystem, we are applying the IATA delay attribution framework in consultation with industry to establish the building blocks of OTP. Our preliminary analysis has identified that typically, previous rotation delays contribute to 33 per cent of subsequent flight arrival delays, while disruptions during the first rotation of the day can potentially cause up to 45 per cent of subsequent flight arrival delays in the morning. Throughout the day, experience shows it is generally not possible to recover the impact given that 78% of major airlines' fleet rotate through major airports multiple times a day.

Figure 21. Preliminary analysis of the building blocks of OTP (based on estimated delays using domestic flight data in March 2024 for major domestic airline groups)



Previous Rotation **Ground Delays** Airport/Airline Delays Airborne Delays Delays Demand/capacity Demand/capacity imbalance at destination or Examples of Delays at departure imbalance at influencing Inbound aircraft airport, caused by en-route, including destination with GDP delayed for any factors across airline, technical, weather, airline nondue to weather or air the aviation reason passengers, taxicompliance to GDP, traffic service technical, air traffic service ecosystem delays, etc. capacity constraints capacity constraints, etc. Arrival delay 33% 4% 53% 10% contribution (March 2024)

Figure 22. Arrival delays from first rotation, as a percentage of arrival delays across all airports (March 2024)



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.

Definition of metrics is preliminary and subject to change in subsequent releases.

Airline Ground Delay Program (GDP) compliance

Compliance

GDP compliance improved by at least five per cent at all four major airports in March 2024, compared to the previous month. This is indicative of additional governance and fine tuning the criteria for GDP application assisting airlines to improve compliance. In March, ad-hoc GDP was only implemented once at Brisbane Airport on 22 March. The number of GDP hours on average has also reduced from 170 to 118 hours per week in the last two months.

Qantas QantasLink Jetstar Virgin Rex Alliance Other Overall 84% 89% 77% 84% 77% 91% 83% Sydney 86% 85% 77% 83% 65% 83% Melbourne 88% Brisbane 68% 100% 82% 81% 43% 43% 74% 78% 82% 75% 80% 48% 83% 63% 75% Perth 84% 85% 77% 82% 78% 83% 65% 81% All Ports $\mathbf{\nabla}$ Δ

Figure 23. GDP compliance in March 2024 and change compared to the previous 12 months

♦ No change △ Increase ∇ Decrease.
Change is based on comparison to previous 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). 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.

Air traffic management outcomes

In March 2024, where GDP periods were implemented, four per cent of ground delays and one per cent of cancellations were attributable to Airservices, the lowest level in twelve months. Monitoring and reporting on additional controls to tighten the demand/capacity balance is in place to ensure the impact of Airservices' constraints on the network is minimised.

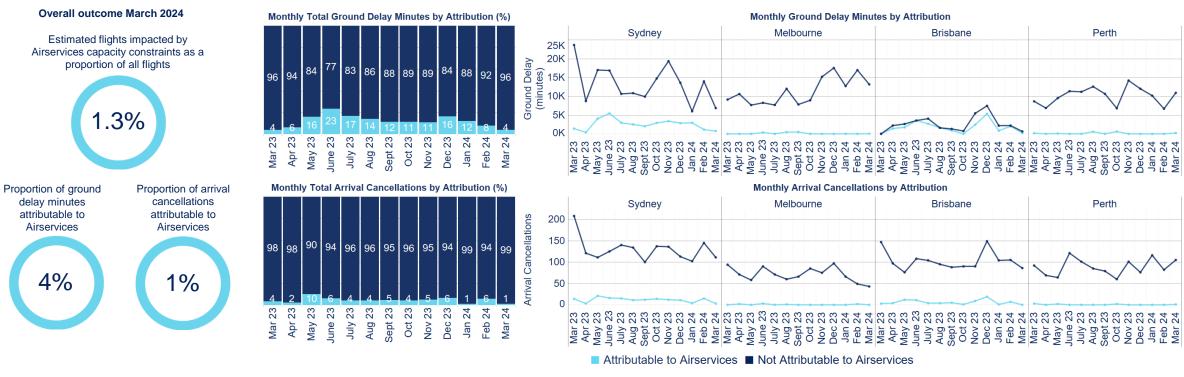


Figure 24. Air traffic management outcomes at major airports

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. Ground delay 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 <u>Airservices website</u>), the delay attribution and analysis methods are being reviewed in consultation with industry.

Air traffic service provision

The consistency of air traffic service provision improved in March 2024. The overall variations to published services reduced by 80 per cent compared to the average trend in the previous 12 months, following concentrated efforts to maximise resource availability to protect peak demand periods in late March. However further sustained efforts are needed to embed greater flexibility and resilience. This requires higher levels of resourcing (as compared to pre-pandemic) combined with transformation of processes and systems to meet long-term performance expectations.



Figure 25. Number of flights and hours during the periods when air traffic services delivered varied from published levels (March 2024)



♦ No change ▲ Increase ▼ Decrease Change is based on comparison to 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.

**At Canberra Tower during the periods of service variation, the Canberra Approach service managed the airspace surrounding the airport to the ground. Instead of contacting the tower, aircraft contacted Approach directly for instructions.

Drone activities

As we move into Autumn, we are continuing to see high numbers of drones operating into the late evening, particularly at Adelaide, Sydney, Melbourne, and Perth. This has been influenced by a number of key sporting events held during March. We also saw a corresponding rise in the number of reported drone occurrences at Melbourne, driven by heightened pilot awareness.

Figure 26. Average number of detected drone flights per hour within No-Fly Zones* at major capital-city airports (1 December 2023 to 31 March 2024)

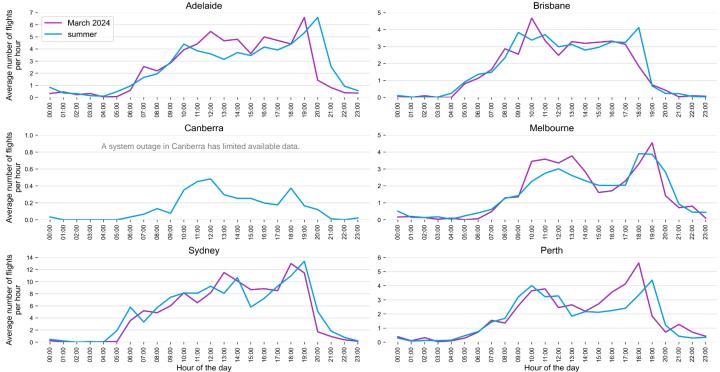
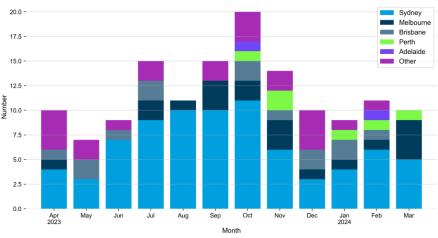


Figure 27. Number of reported drone occurrences at Australian civil controlled airports (1 April 2023 to 31 March 2024)



Source: Airservices' Corporate Integrated Reporting and Risk Information System (CIRRIS). Drone sightings may be reported by pilots, air traffic controllers or the public.

The data do not distinguish authorised or approved operations.

Source: Drone detection equipment. Data is limited to drone activity detected by drone surveillance equipment installed at 29 controlled civil aerodromes. 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 (known as the no fly zone). Micro drones (<250g) are allowed to operate within 5.5 kilometres of a controlled airport consistent with the requirements of the Civil Aviation Safety Regulations Part 101 Manual of Standards (outside the approach/departure splays). All drones are allowed to operate in the outer runway splays of a controlled airport up to a height of 90 metres.





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