PERTH AIRPORT MASTER PLAN 2020

Understanding aircraft noise

Perth Airport is committed to working with Airservices Australia, airline partners and Commonwealth, State and Local Governments to manage aircraft noise.

Perth Airport operates 24 hours a day, seven days a week and is a critical element of public transport infrastructure in Western Australia. The airport supports jobs growth, tourism, leisure travel and provides economic, social, cultural and lifestyle benefits. Importantly, Perth Airport also plays a critical role in economic development by providing transport services for businesses, and supporting them to undertake their operations, service their customers and grow.

People living in the Perth metropolitan region can experience varying levels of aircraft noise at some point from either Perth Airport, Jandakot Airport or RAAF Base Pearce. Noise from aircraft landing and departing from Perth Airport, and from aircraft operations on the airfield are unavoidable impacts of providing air services.

Perth Airport works with Airservices Australia (the air traffic management authority), airline partners and Commonwealth, State and Local Governments to manage aircraft exposure in surrounding communities.

Perth Airport

How is aircraft noise managed?

Perth Airport has adopted the International Civil Aviation Organization's (ICAO) 'balanced approach' for aircraft noise management.

Perth Airport also believes it is important to communicate aircraft noise information as simply as possible. For further information regarding aircraft noise management visit perthairport.com.au/aircraft noise.

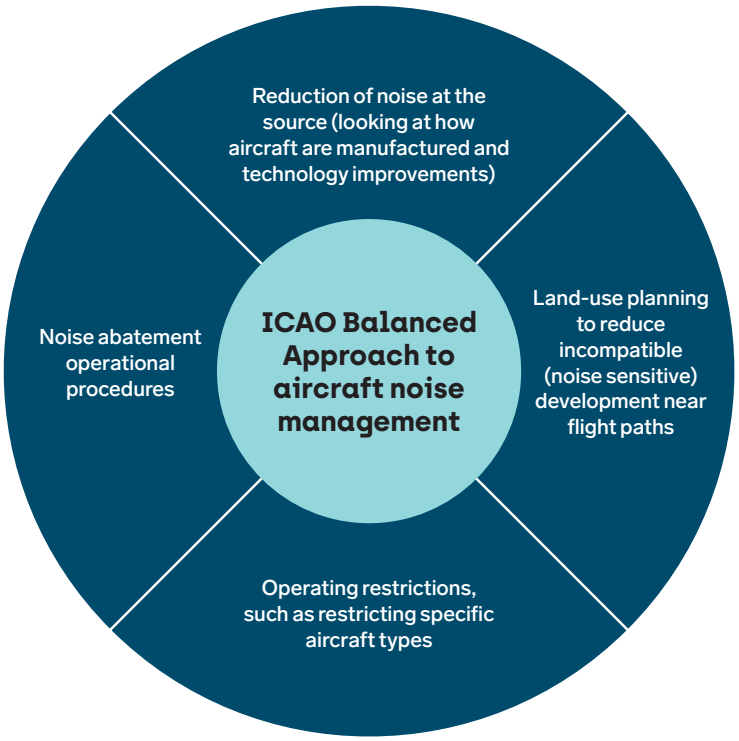
What is noise?

Noise is a sound vibration through the air that is received and 'heard' by a person. A decibel, or dB, is the standard unit for measuring noise and is typically adjusted to 'A' weighted decibels, or dBA, to account for the relative loudness perceived by the human ear.

What causes aircraft noise?

Aircraft noise is generated by both the aircraft engines as well as the flow of air around the aircraft body and wings.

Different aircraft types generate different levels of noise, depending on the engine design, size of the aircraft, speed they are flying, aircraft performance and operating procedures. Weather conditions such as wind, temperature and air pressure can also affect how noise is perceived.



Relative decibel levels

140+ dBA — Threshold of pain

110 dBA — Club / rock concert

100 dBA — Large jet arrival at 500 metres from the runway end

90 dBA — Heavy truck at 7 metres distance

80 dBA — Busy city road at kerbside

70 dBA — Small jet departure at 6.5 kilometres from the runway end

60 dBA — Normal conversation

50 dBA — Background level in suburb during daytime

40 dBA — Living room

30 dBA — Whispering

20 dBA — Quiet bedroom

0 dBA — Total silence

Why does Perth Airport operate 24/7?

Maintaining operational flexibility is critical to supporting Western Australia's economy. Perth Airport is part of a national and global aviation network and, as such, flight times and schedules are not directly controlled locally.

The viability of many international air services depend on linking with connecting networks through hub airports, such as Dubai and Singapore. Any restrictions on the operations of Perth Airport would lead to a significant loss of air services, which may result in a reduction of service levels and a possible increase in the cost of flying for all travellers. International passengers are critical to the success of the WA tourism industry and the many jobs directly and indirectly generated by that industry. The reduced level of international air services that would arise from restrictions on Perth Airport would have profound impacts on tourism and all those who depend on that industry.

What are the flight paths for the new runway?

As part of Perth Airport's $2.5 billion investment program, a new runway is planned to be operational between 2023 and 2028, subject to demand and a commercial agreement with airlines being reached.

The new runway will occupy 293 hectares, be 3,000 metres long and will be located parallel to the existing main runway with a 2km separation so that both runways can be used independently.

A draft airspace management plan for the proposed new flight corridors was completed as part of the Major Development Plan made available for public comment in 2018. The final flight paths will be designed by Airservices Australia prior to opening of the new runway.

Information about the new runway project, including the indicative flight corridors, is available at newrunway.com.au and perthairport.com.au/aircraftnoise.

What is an Australian Noise Exposure Forecast?

The Australian Noise Exposure Forecast (ANEF) system was developed as a land use planning tool. The ANEF is a central component of the Australian Standard 2021:2015 (Acoustics – Aircraft Noise Intrusion – Building Siting and Construction), which provides guidance on the acceptability of new building sites based on an ANEF zone. The State Government has acted to restrict inappropriate development, mostly residential, in the vicinity of Perth Airport by adopting the Perth Airport ANEF into State Planning Policy 5.1 Land Use Planning in the Vicinity of Perth Airport since 1997. Perth Airport recognises that the ANEF is a land use planning tool and does not effectively convey aircraft noise exposure to the community, and for this reason, other metrics are required, such as Number Above contours.

What are Number Above contours?

'Number Above' noise contours illustrate the average number of events per day that exceed a certain sound level. For example, an N65 contour would represent the average number of events per day over 65 decibels dBA for a particular area. This corresponds to an indoor noise level of approximately 55 decibels dBA, which is considered the sound level at which conversation can generally be disturbed. For information on future noise impacts visit perthairport.com.au/aircraftnoise.

Aircraft Noise Information Portal

To ensure the community and stakeholders are fully informed and aware of noise exposure and flight paths, Perth Airport has developed an interactive web-based Aircraft Noise Information Portal. Through this portal you can view how flight paths, the ANEF contours and the N65 contours apply to your property, or to a property you may be looking to move into. Visit perthairport.com.au/aircraftnoise

Thinking of moving into a new home?

If you are thinking of moving into a new home, it is important to understand how aircraft noise could affect you. Perth Airport encourages members of the public to visit the Aircraft Noise Information Portal to educate themselves regarding what aircraft noise they could expect to experience if relocating to a new residence. Additional information can be obtained by contacting Perth Airport.

How can I report my concerns about aircraft noise?

Airservices Australia manages enquiries and complaints regarding aircraft noise through its Noise Complaints and Information Service (NCIS). You can contact the NCIS using WebTrak or the online form available at airservicesaustralia.com, telephoning 1800 802 584 (freecall), or by writing to PO Box 211, Mascot NSW 1460.