



Flight paths for Western Sydney International

December 2021

The process for developing Western Sydney International (Nancy-Bird Walton) Airport's flight paths is well underway and is on track for the airport's scheduled opening in 2026.

The Sydney Basin is home to a number of existing airports including Sydney (Kingsford Smith) Airport— Australia's busiest airport, Bankstown Airport and Richmond Air Force base. Designing flight paths for Western Sydney International is a large and complex task that will take several years to complete. This includes community consultation and feedback at the preliminary design phase.

The process for designing flight paths and airspace management for the airport will follow international best-practice approaches to optimise a balance of safety, technical efficiency, capacity and noise and environmental conditions. The flight paths design process will cover four main phases (see over page):

- Planning – Completed
- Preliminary design and environmental assessment – Ongoing
- Detailed design
- Implementation

Who will design flight paths?

The Department of Infrastructure, Transport, Regional Development and Communications (the Department) is

working closely with the national air navigation service provider, Airservices Australia, to develop the flight paths and airspace arrangements for the new airport. This includes completing the environmental assessment process.



An Expert Steering Group is overseeing the design process for the airport's flight paths, and compliance with the conditions and provisions of the Western Sydney Airport Plan. This group is led by the Department and includes representatives from industry and regulatory bodies, Airservices Australia, Civil Aviation Safety Authority (CASA) and the Chair of the Forum on Western Sydney Airport (FOWSA).

Key design principles

Airspace design in Australia generally starts with developing proof-of-concept flight paths. This first step was completed for Western Sydney Airport through developing indicative flight paths for the draft Environmental Impact Statement in 2015.

Significant changes were made to the approach to flight path design as a result of feedback received from the community on the indicative flight paths. The Airport Plan now includes 12 design principles that require the development of flight paths to minimise the impact on the community and the environment, while maximising the benefit of the airport. These principles include:

- Safety is non-negotiable.
- Flights over residential areas and noise-sensitive facilities will be avoided as much as possible.
- Where flight paths are unable to avoid residential areas:
 - Where possible, these areas should not be overflown by both arriving and departing aircraft.
 - Noise abatement procedures should be optimised to ensure that residents are impacted as little as possible.
- Procedures will be developed to minimise the impact of night-time aircraft operations on the community while not constraining airport operations.
- Aircraft arrivals will not converge through a single merge point over any single residential area.
- Airspace design will consider the impacts of air operations on natural and visually sensitive areas.
- The community, aerodrome operators and airspace users will be consulted in determining the final flight paths.

Engaging the community in the flight path design process

Community engagement will be ongoing throughout construction and implementation of the new airport and design of the flight paths and airspace.

The preliminary design phase is currently underway, and the preliminary airspace design will be open for public exhibition in

mid-2023 as part of the upcoming environmental assessment process. Feedback from the community and industry will be considered before a final airspace and flight path design is settled.

The Forum on Western Sydney Airport (FOWSA), a community and stakeholder reference group, has been established to consult and inform the community. FOWSA's role is to ensure that the community remains informed about key milestones in the airport's development and that the community's views are heard during the construction period.

Finalising the flight paths

Once complete, the preliminary flight path design will be subject to an environmental assessment under the *Environment Protection and Biodiversity Conservation Act 1999*. The environmental assessment will include thorough analysis on the impacts of the flight paths on the environment, community and detail any economic or social impacts.

Community consultation will be undertaken, including public exhibitions of the flight paths, community presentations, and the opportunity to provide feedback on the preliminary design. The feedback is part of the environmental assessment and will be closely considered before moving to the detailed design phase.

There are a number of checks and balances during this process in order to ensure that the design is safe and robust, and does not unduly impact the community and the environment.

Once the environmental assessment and detailed design processes are complete, CASA will consider the final airspace change proposal and validate the flight paths.

Flight path design pathway

2017	PHASE 1 (Complete)	Planning <ul style="list-style-type: none"> Establish community and stakeholder reference group (FOWSA) and Expert Steering Group. Confirm Sydney basin airspace requirements and constraints and undertake preliminary environmental assessment of standard arrival and departure routes.
2021	PHASE 2 (Underway)	Preliminary design and environmental assessment <ul style="list-style-type: none"> Evaluate flight path options – considering requirements set out in Airport Plan, existing air traffic constraints (other airports, defence and meteorological), and forecast air traffic loads. Design validation and refinement of preliminary flight path options. Refer preliminary airspace design to the Environment Minister for assessment under the <i>Environment Protection and Biodiversity Conservation Act 1999</i>. Develop and complete analysis on environmental, social and economic impacts of flight paths for public exhibition.
2022		
2023	Mid 2023 (approx.)	<ul style="list-style-type: none"> Undertake public exhibition and community consultation on preliminary airspace design, including detailed analysis of impacts. Policy on property acquisition and noise insulation announced.
2024	PHASE 3	Detailed design <ul style="list-style-type: none"> Listen to feedback from the community to refine the design. Final airspace design and noise abatement procedures ready for implementation.
2026	PHASE 4	Implementation <ul style="list-style-type: none"> Civil Aviation Safety Authority approves airspace change proposal and validates the flight paths. Notify airspace and air route changes. Commence operations in accordance with specific noise abatement and management procedures identified in the airspace design.