

Western Sydney International (Nancy-Bird Walton) Airport

Preliminary flight paths



The new Western Sydney International (Nancy-Bird Walton) Airport (WSI) is set to open for freight, domestic and international travellers by late 2026.

The Australian Government has released the preliminary flight paths for WSI for the community to view. These flight paths have yet to be assessed and approved by the regulatory authority and will be subject to a formal statutory planning and consultation period later this year.

View the preliminary flight paths

Designing flight paths is highly technical work. The work involves thorough validation and review to ensure aircraft can use the flight paths. The design has to balance the needs of the community, environment, industry and users of the Greater Sydney airspace, while maintaining safety as the priority.

You are encouraged to visit the [Aircraft Overflight Noise Tool](#), which can be accessed through the [Online Community Portal](#), to see the preliminary flight paths and the predicted aircraft noise impacts. We understand that you may have a wide range of questions about the preliminary flight paths, and are available to speak with you at our Community Information and Feedback Sessions, on **1800 038 160** or via email at wsiflightpaths@infrastructure.gov.au. Detailed information is also available on our [Online Community Portal](#).

Approvals process

Formal feedback for the preliminary flight paths can be provided during the draft Environmental Impact Statement (EIS) exhibition period in the second half of 2023. In the meantime, you can contact our community engagement team with any questions and concerns. Details are below.

Contact us



Visit the [Aircraft Overflight Noise Tool](#) to view the preliminary flight paths in more detail at wsiflightpaths.gov.au



Keep up-to-date with information via our [Online Community Portal](#): wsiflightpaths.gov.au



Email us your questions at wsiflightpaths@infrastructure.gov.au



Call us on 1800 038 160



Attend our [Community Information and Feedback Sessions](#) to find out more and speak to a member of our team.

These information sessions will be held across Western Sydney. You can register to attend via wsiflightpaths.gov.au. Further engagement will be held with the community when the draft EIS is released in the second half of 2023.



Scan this QR code to access our [Online Community Portal](#).

A new airport for Western Sydney

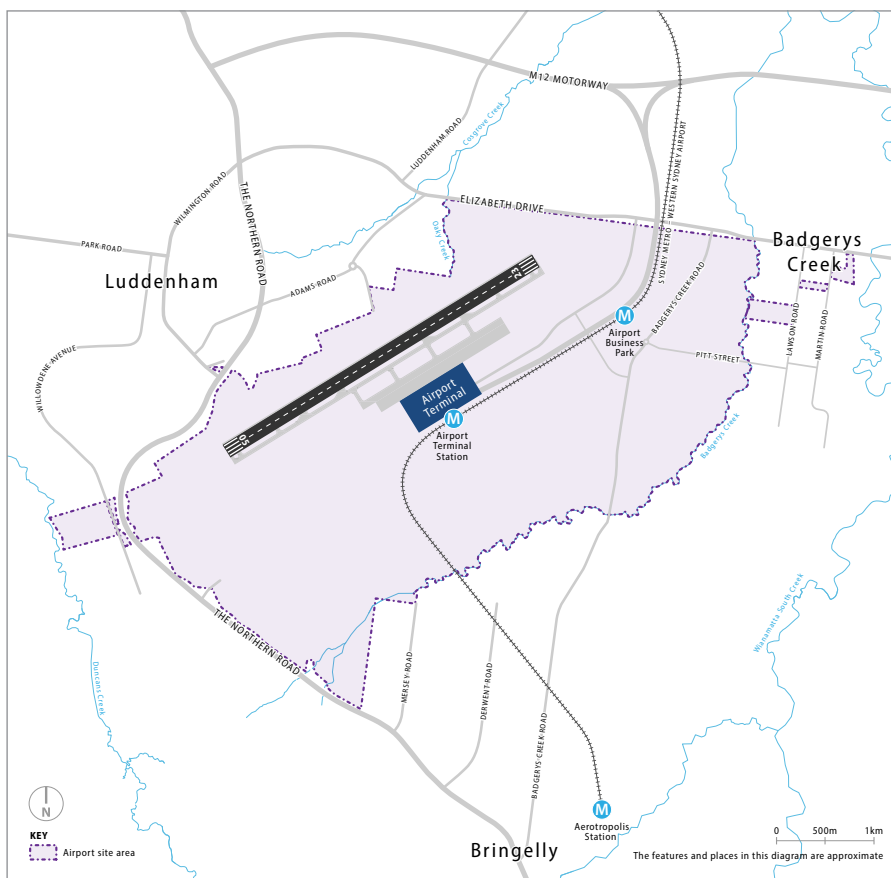
In April 2014, the Australian Government announced that Badgerys Creek would be the location of a new airport for Western Sydney. WSI will be a 24-hour airport capable of handling domestic and international passengers and freight services.

Stage 1 of WSI is now under construction and will open by late 2026. The Stage 1 development includes a single runway, a single integrated domestic and international passenger terminal and road and rail links to Sydney's transport network.

The runway is orientated on an approximate north-east/south-west or 050/230-degree orientation (referred to as Runway 05 and Runway 23). This runway alignment was evaluated and approved during the planning process for the Stage 1 WSI development in 2016.

WSI will initially handle up to 10 million passengers annually and around 81,000 air traffic movements per year by 2033, including freight operations. Single runway operations are expected to reach capacity at around 37 million passengers annually and 226,000 air traffic movements per year in 2055. Future planning for WSI includes a second parallel runway and space has been reserved for this within the airport site.

Operating without a curfew or other operating restrictions is important to the economic viability of WSI and the contribution that WSI will make to the regional, state, and national economies. WSI has been designed to operate 24-hours per day and 7-days per week and land use planning controls have been put in place to ensure that incompatible developments are minimised in noise affected areas in proximity to WSI.



WSI Stage 1 development



WSI runway construction



WSI terminal construction

WSI terminal construction photos: WSA Co

What's happening now?

The Australian Government is responsible for developing the flight paths for single runway operations at WSI by the end of 2026. We are currently in the preliminary design and environmental assessment phase for single runway operations.

Information on the flight paths and estimated noise impacts is now available to the community.

A draft Environmental Impact Statement (EIS) will be released in the second half of 2023. The draft EIS will examine the noise, social and environmental impacts of the proposed flight paths. At that time, we will be seeking feedback from the community during the formal public exhibition period. Following this period, the feedback will be considered in finalising the EIS and refining the flight paths.

Flight path design for WSI

This brochure sets out the flight paths and explains some of the key factors that have influenced the design of the preliminary flight paths for WSI.

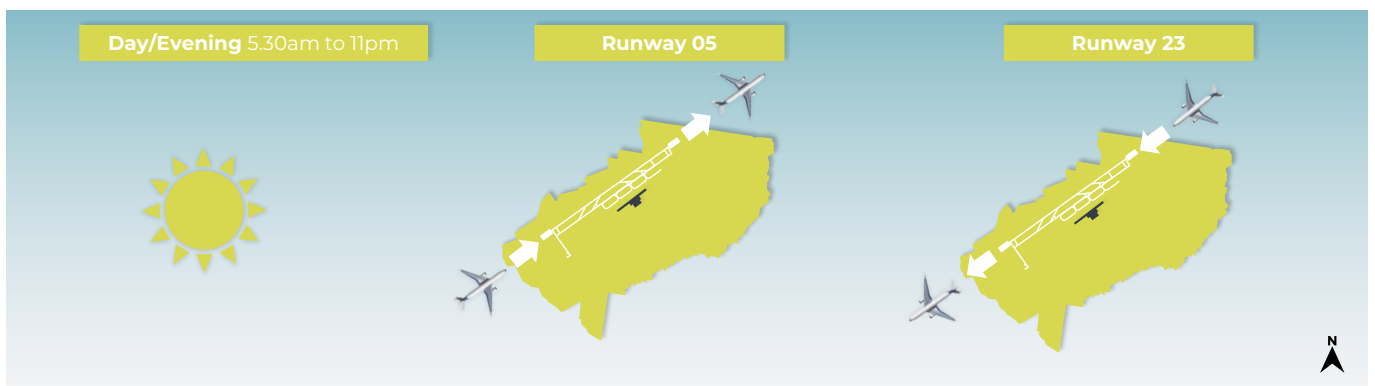
For further detailed information on flight paths, please see our [Fact Sheets](#) and companion brochure on Aircraft Noise available on our [Online Community Portal](#).

Runway modes of operation

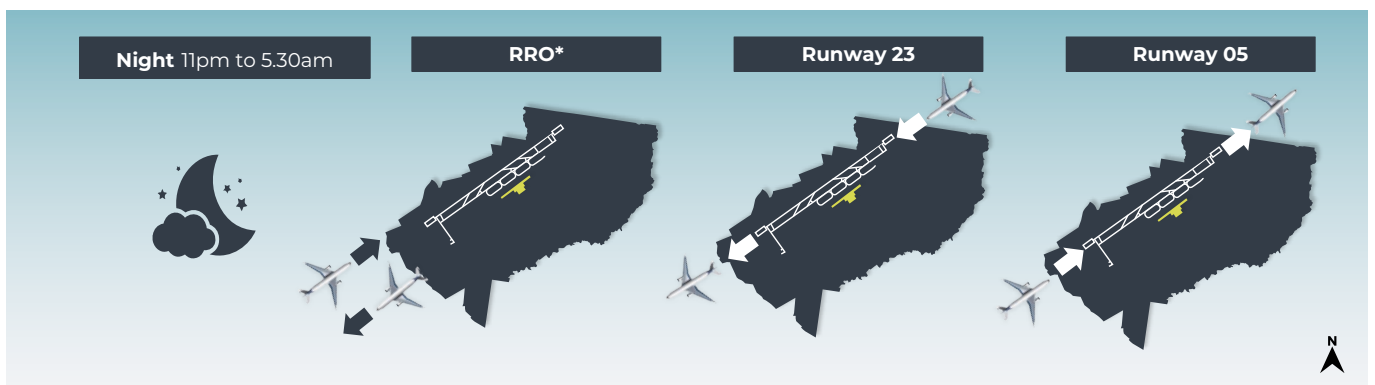
Generally, aircraft land and take-off into the wind. The prevailing wind conditions influence which runway direction is being used at any time during the day and evening. When **Runway 05** is used, all aircraft arrive from the south-west and depart to the north-east. When **Runway 23** is used all aircraft arrive from the north-east and depart to the south-west.

At night (11pm to 5.30am), when air traffic demand is lower and weather conditions permit (generally in calm wind conditions with no rain), head-to-head **Reciprocal Runway Operations (RRO)** can be used to minimise the impact of noise on the most heavily populated areas of Western Sydney. This means that aircraft would land on Runway 05 – arriving from the south-west – and take-off on Runway 23 – departing to the south-west.

WSI Day/Evening (5.30am to 11pm) runway modes of operation



WSI Night (11pm to 5.30am) runway modes of operation



*RRO is suitable only at night (11pm to 5.30am) when air traffic demand levels and weather conditions permit.

Airspace design principles

In response to feedback received during public exhibition of the draft EIS for the overall WSI Stage 1 Development in 2015, the Western Sydney Airport Plan sets out 12 Airspace Design Principles that the design process is required to follow:



Safety is non-negotiable.



Aircraft arrivals will not converge through a single merge point over any one residential area.



Overflights of residential areas and noise sensitive facilities will be avoided to the maximum extent possible.



Airspace design will consider the impacts of air operations on natural and visually sensitive areas.



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.



The community, aerodrome operators and airspace users will be consulted in determining the final flight paths.



Changes to the current noise sharing arrangements at Sydney (Kingsford Smith) Airport will be avoided.



Procedures will be developed to minimise the impact of night-time aircraft operations on the community while not constraining airport operations.



Current airspace restrictions, such as those associated with military establishments, will be reviewed to improve efficiency and environmental impacts.



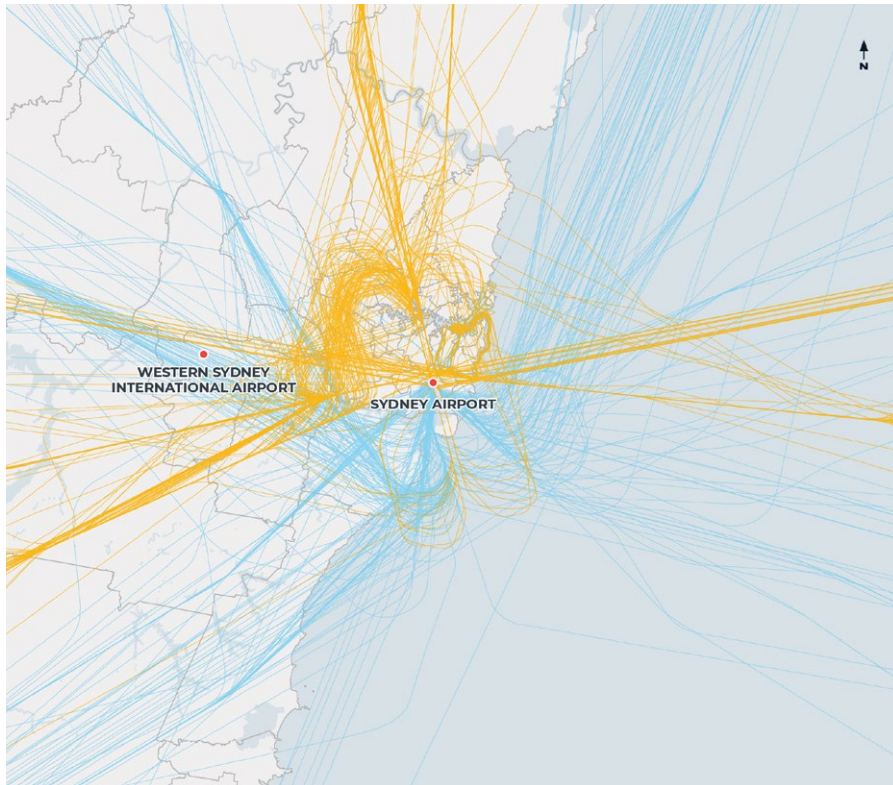
Noise mitigation measures will be developed.



Arrivals will use a continuous descent approach where possible to reduce noise and greenhouse emissions.



Ensure land use planning continues to prevent noise sensitive development in the highest noise exposure areas.



Existing airports in Greater Sydney

The Greater Sydney Area covers the area between Sutherland and Bargo in the south, the Central Coast in the north, and Mt Victoria in the west.

The Greater Sydney airspace is the busiest airspace in Australia. Most areas, including Western Sydney, currently experience some level of daily aircraft overflight, with aircraft traveling to and from existing airports including Sydney Kingsford-Smith, Bankstown, Camden and surrounding military bases.

Recreational aviation activities also need to be considered in the flight path design process. These flights include gliders, ballooning, parachuting, and a number of daily emergency response aircraft movements.

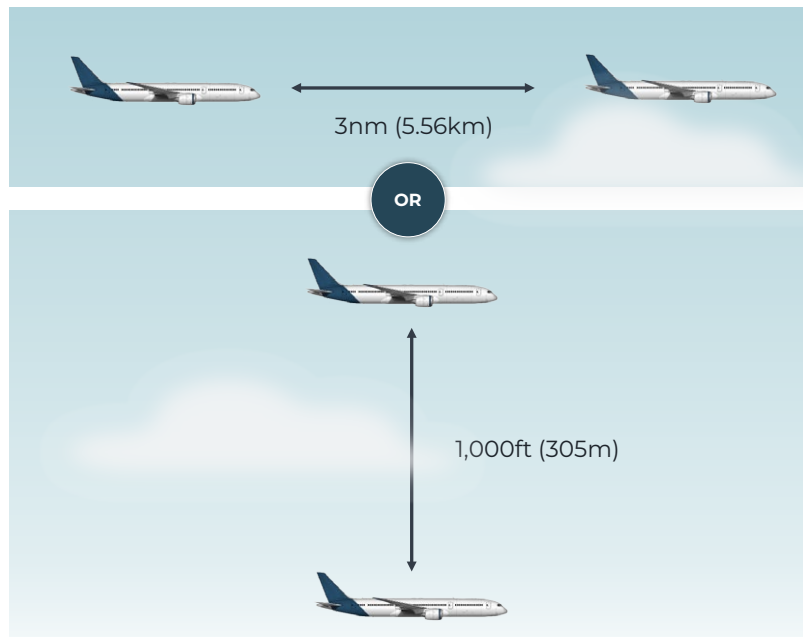
To learn more about Greater Sydney airspace please read our [Airspace Constraints Fact Sheet](#).

All flights arriving (gold) and departing (blue) Sydney Airport over a one-day period in 2017.

Safety requirements

All flight path designs must comply with Civil Aviation Safety Authority regulations and standards, and International Civil Aviation Organization Standards and Recommended Practices.

These include safe separation of aircraft from each other and clearance between aircraft and terrain and other obstacles.



Aircraft separation standards in terminal control areas

Preliminary flight paths for WSI

The following pages show the preliminary flight path diagrams for each of WSI's runway modes of operations. These flight paths are preliminary and detailed design will be undertaken from 2024 following consideration of feedback received during the public exhibition of the draft EIS in the second half of 2023.

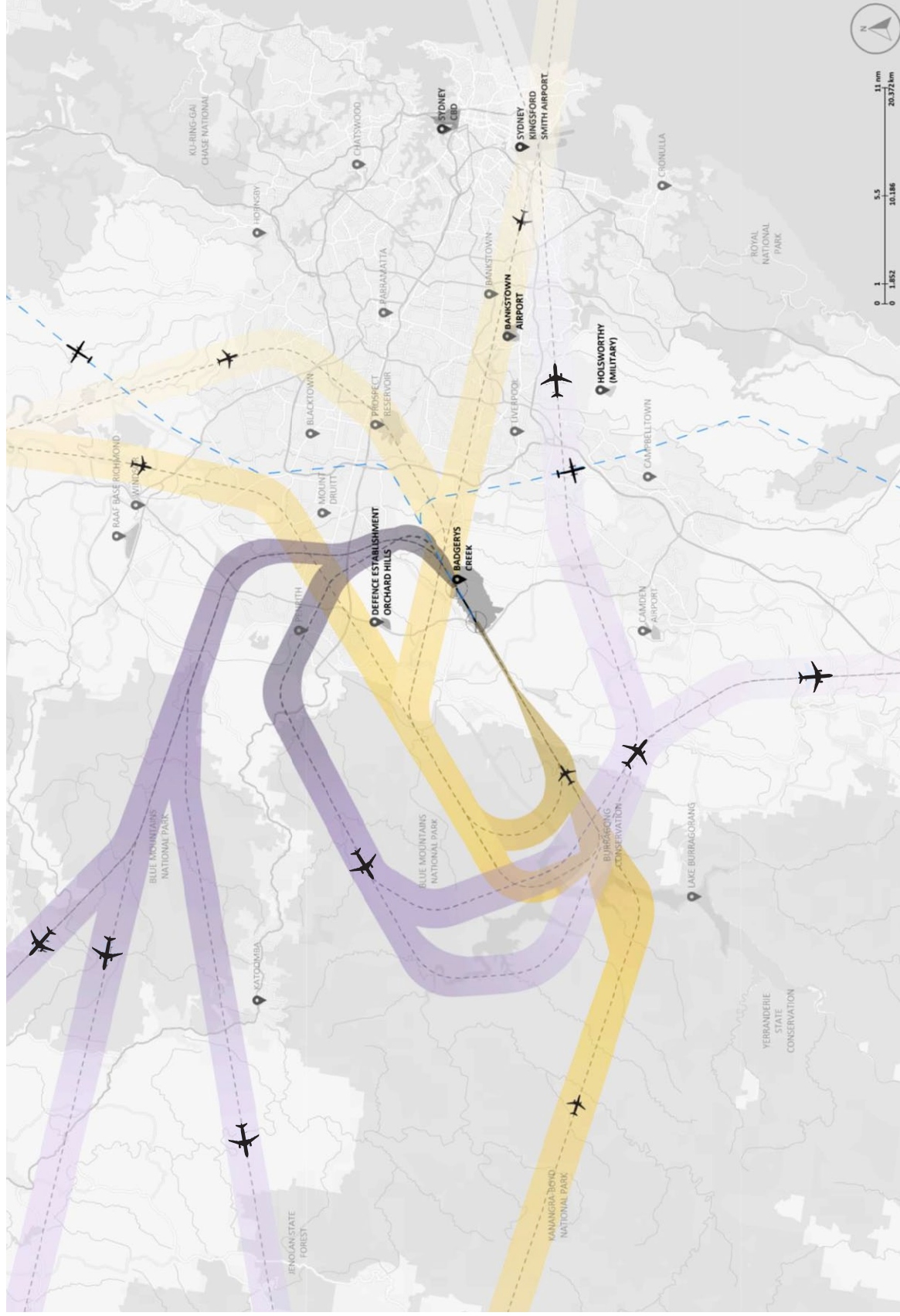
An Aircraft Overflight Noise Tool has been developed to better communicate the preliminary flight paths in an online interactive application.

To view the preliminary flight paths and accompanying noise assessment on your desktop or mobile please visit the Aircraft Overflight Noise Tool at our [Online Community Portal](#).

The Aircraft Overflight Noise Tool shows the aircraft arrival and departure flight paths and allows you to search an address and see the forecast indicative altitude of the flight paths, forecast number of flights, and noise mapping, including the estimated aircraft noise in decibels at different locations.

Runway 05 Day arrivals and departures

- Departing aircraft take-off from Runway 05 in a north-easterly direction. Arriving aircraft land on Runway 05 approaching from the south-west.
- Left turns after take-off are delayed to avoid the Orchard Hills Defence Establishment restricted airspace
- Left turns after take-off have been designed to reduce residential overflight noise north of WSI by tracking as far west as possible of St Clair.
- Minimises aircraft overflight noise for residential areas along the Great Western Highway to the extent possible. Departures to the west remain north of the Great Western Highway.
- Arrival turns onto the final approach for Runway 05 are designed to avoid low level overflight of Silverdale.
- Eastbound departures climb to the west and south-west, before turning east, to avoid conflict with Sydney and Bankstown airport traffic.



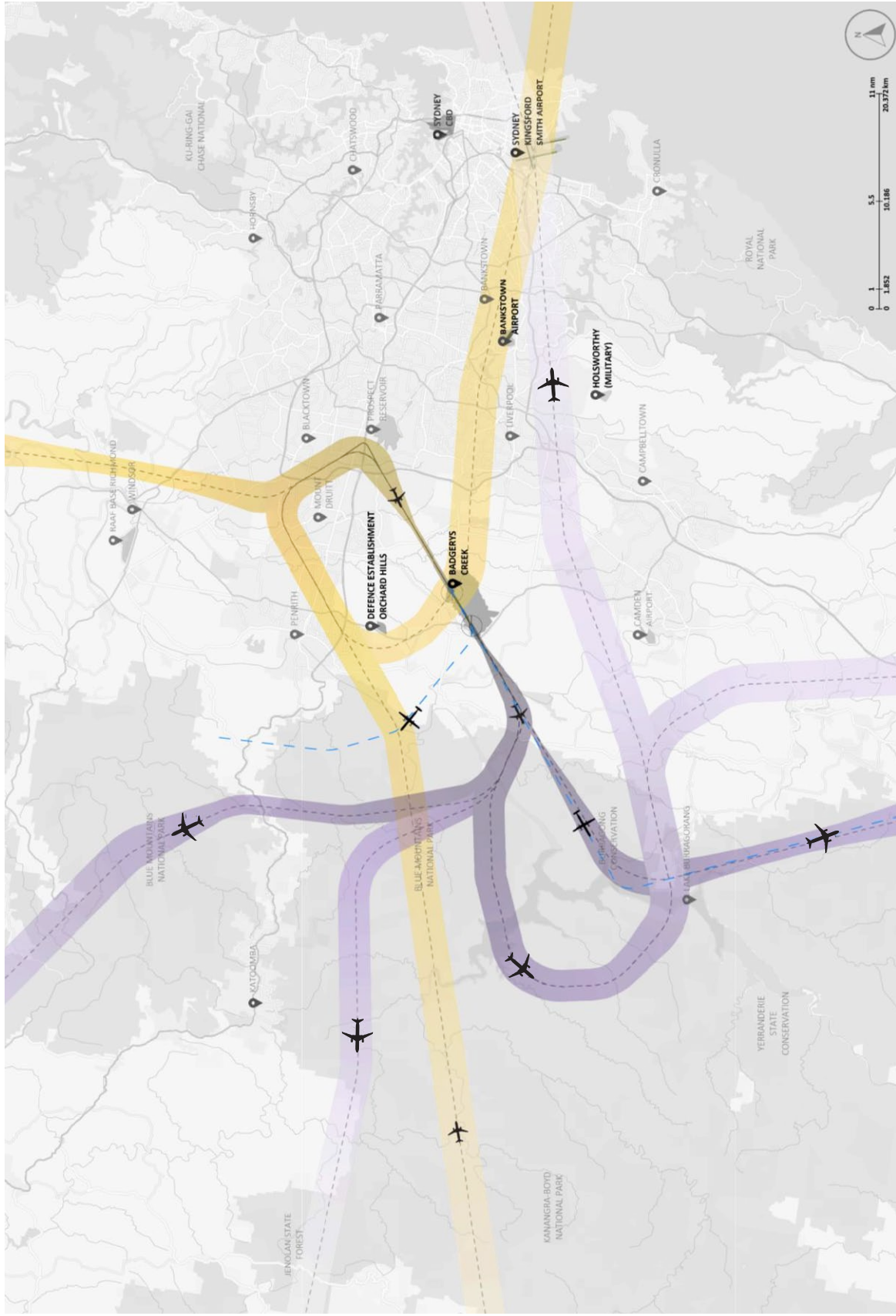
ARRIVALS INDICATIVE ALTITUDE AMSL (ft)
 >0 ft
 ≈ 20,000 ft

DEPARTURES INDICATIVE ALTITUDE AMSL (ft)
 >0 ft
 ≈ 20,000 ft

RUNWAY 05 DAY ARRIVALS AND DEPARTURES

Runway 23 Day arrivals and departures

- Departing aircraft take-off from Runway 23 in a south-westerly direction. Arriving aircraft land on Runway 23 approaching from the north-east.
- Right turns after take-off for jet aircraft have been delayed to reduce residential overflight noise by avoiding Silverdale.
- Departures to the north are designed to cross the Great Western Highway at an area of low population density.
- Departure turns onto southerly tracks gain height over non-residential areas to avoid conflict with Sydney, Bankstown and Camden airport traffic.
- Arrivals tracks from the north have been designed where possible to avoid current and future residential areas in the north-west growth areas.
- Arrival and departure tracks from the west are designed to avoid residential areas in the lower Blue Mountains to the extent possible.



RUNWAY 23 DAY ARRIVALS AND DEPARTURES



Night Reciprocal Runway Operations (RRO) arrivals and departures

- Departing aircraft take-off from Runway 23 in a south-westerly direction. Arriving aircraft land on Runway 05 approaching from the south-west.
- The RRO runway mode may be utilised at night, when it is safe to do so, depending on suitable meteorological conditions and aircraft traffic levels. It positions aircraft manoeuvring at lower altitudes to the immediate south-west of WSI, over the lower density rural and rural-residential zones.
- In RRO runway mode, departing aircraft are required to turn as early as possible to avoid conflict with arriving aircraft, and maintain sufficient arrival/departure capacity.
- Night arrival and departure flight paths are designed to take advantage of the increased airspace flexibilities resulting from reduced overnight flight activities at Sydney, Bankstown and other airports in the Greater Sydney area.
- Departures to the north are designed to cross the Great Western Highway at an area of low population density.
- Aircraft departing to the south and east remain clear of Camden, The Oaks, Picton, Tahmoor and Wilton.
- All arriving aircraft turn on to final approach south-west of The Oaks and south of Silverdale to minimise the aircraft overflight noise for residential areas.

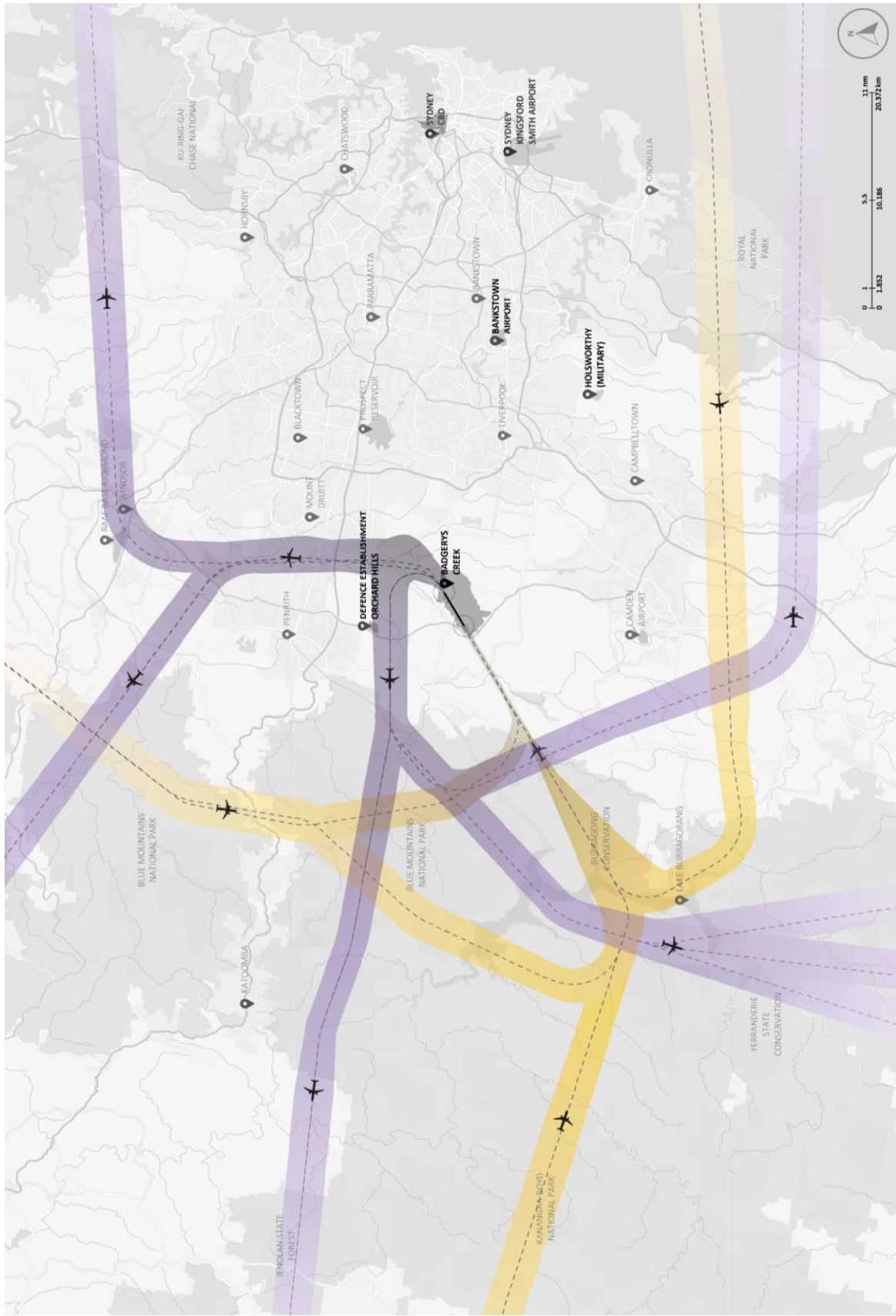


NIGHT RECIPROCAL RUNWAY OPERATIONS (RRO) DAY ARRIVALS AND DEPARTURES



Runway 05 Night arrivals and departures

- Departing aircraft take-off from Runway 05 in a north-easterly direction. Arriving aircraft land on Runway 05 approaching from the south-west.
- Night arrival and departure flight paths are designed to take advantage of the increased airspace flexibilities resulting from reduced overnight flight activities at Sydney, Bankstown and other airports in the Greater Sydney area.
- Left turns after take-off have been designed to reduce residential overflight noise north-east of WSI by turning early to avoid St Clair. Departures to the north track over non-residential land between Werrington and St Marys.
- Minimises aircraft overflight noise for residential areas along the Great Western Highway to the extent possible. Departures to the west remain south of the Great Western Highway.
- Departure tracks to the south and east remain clear of Picton, The Oaks, Tahmoor and Wilton.



RUNWAY 05 NIGHT ARRIVALS AND DEPARTURES

Next steps



Use the Aircraft Overflight Noise Tool to view preliminary WSI flight paths and how they are likely to affect specific addresses or places of interest.



Go to the WSI airspace and flight path design [Online Community Portal](#) for more information on the draft EIS process, flight path design process, videos and details of upcoming community engagement events.



A draft noise insulation and property acquisition policy will be released with the draft EIS on preliminary flight paths in the second half of 2023. Once released, you will be able to make a submission on the draft policy as part of the draft EIS.

Your feedback

If you would like to provide feedback on the preliminary flight paths at this stage, you can do so at [this link](#). Your feedback will be considered by the flight paths design team.

For your feedback to be considered by the Minister for the Environment, we recommend you make a formal submission on the draft EIS. This is because the final EIS must take account of any comments received during the exhibition period and contain a summary of comments and how comments have been addressed under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

Formal submissions on the WSI preliminary flight paths will open once the draft EIS is on public exhibition in the second half of 2023. The draft EIS will be available on the [Online Community Portal](#) once released. If you would like to stay informed about the WSI flight paths and be notified when the draft EIS is released, you can sign up for email updates at wsiflightpaths.gov.au/get-involved/#stay-in-touch

Attend our Community Information and Feedback Sessions

You are invited to attend our Community Information and Feedback Sessions to find out more and speak to a member of our team.

Information sessions will be held across Western Sydney. Further engagement will be held with the community when the draft EIS is released in the second half of 2023.

Contact us



To register to attend our **Community Information and Feedback Sessions**, at a time that suits you, visit wsiflightpaths.gov.au or call our engagement team 1800 038 160 to make a booking.



Visit the Aircraft Overflight Noise Tool to view the preliminary flight paths in more detail at wsiflightpaths.gov.au



Keep up-to-date with information via our **Online Community Portal**: wsiflightpaths.gov.au



Email us your questions at wsiflightpaths@infrastructure.gov.au



Call us on 1800 038 160

Information in your language



Translating and Interpreting Service
(TIS National)

If you require the services of an interpreter, please contact the Translating and Interpreting Service on **131 450** and ask them to call the WSI Flight Paths team on **1800 038 160**.

Nếu quý vị cần thông dịch viên, vui lòng gọi cho Dịch vụ Thông Phiên dịch (Translating and Interpreting Service) qua số **131 450** và yêu cầu họ gọi cho đội ngũ phụ trách Đường bay Sân bay Quốc tế Western Sydney (Western Sydney International Airport Flight Paths) qua số **1800 038 160**.

如果您需要口译服务, 请致电 **131 450** 联系笔译与口译服务署 (Translating and Interpreting Service), 并请他们拨打 **1800 038 160** 联系西悉尼国际机场飞行路径团队 (Western Sydney International Airport Flight Paths)

यदि आपको दुभाषिए की सेवाओं की ज़रूरत है, तो कृपया **131 450** पर अनुवाद और दुभाषिया सेवा (Translating and Interpreting Service) से संपर्क करें और उनसे **1800 038 160** पर पश्चिमी सिडनी अंतरराष्ट्रीय हवाई अड्डा उड़ान पथ (Western Sydney International Airport Flight Paths) टीम को कॉल करने का अनुरोध करें।

إذا كنت بحاجة لخدمات الترجمة الشفوية, فيرجى الاتصال بخدمة الترجمة الكتابية والشفوية (Translating and Interpreting Service) على الرقم **١٣١ ٤٥٠** وأطلب منهم الاتصال بالفريق المعني بمسارات الطيران في مطار سيدني الغربية الدولي (Western Sydney International Airport Flight Paths) على الرقم **١٨٠٠ ٠٣٨ ١٦٠**

Kung kailangan mo ng mga serbisyo ng isang tagasaling pasalita (interpreter), mangyaring makipag-ugnayan sa Serbisyo ng Pagsasaling Pasulat at Pasalita (Translating and Interpreting Service) sa **131 450** at hilingin sa kanila na tawagan ang pangkat ng Mga Landas ng Paglipad sa Paliparang Internasyonal ng Western Sydney (Western Sydney International Airport Flight Paths) sa **1800 038 160**.

View this brochure in languages other than English

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Vui lòng quét mã QR này để xem thông tin bằng các ngôn ngữ khác ngoài tiếng Anh.

请扫描二维码查看中文信息。

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