

## Forum on Western Sydney Airport (FoWSA)

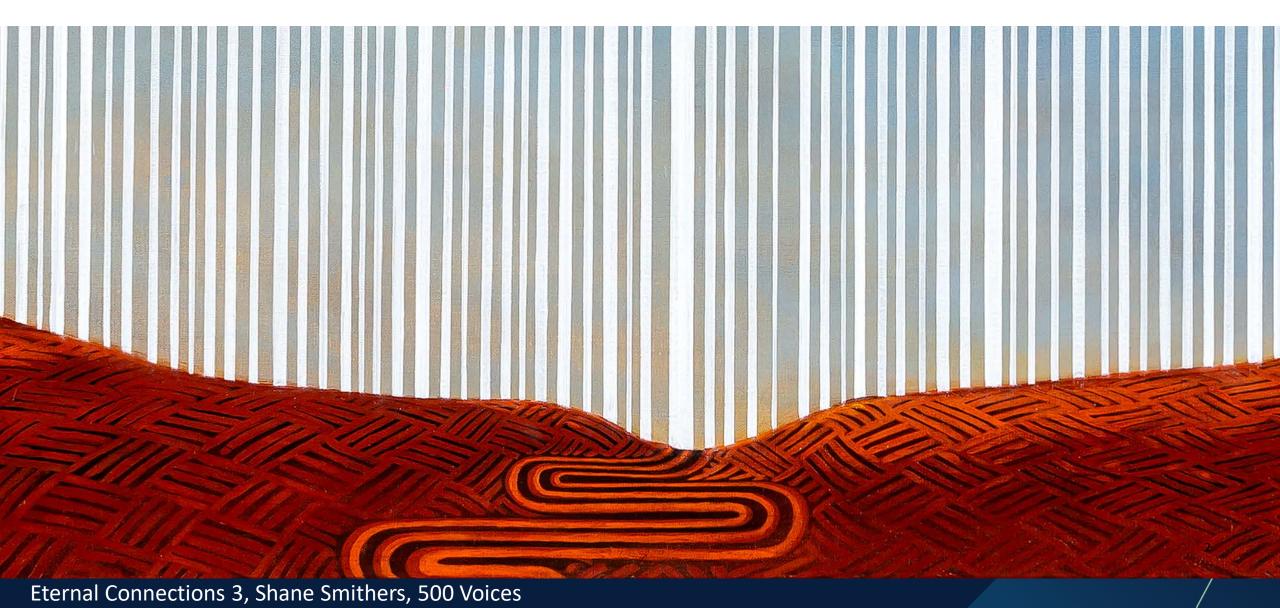
**Open Meeting** 

18 March 2023



## **Acknowledgement of Country**

I would like to begin by acknowledging the Traditional Owners and Custodians of the land on which we meet today, and pay my respects to their Elders past, present and emerging. I extend my respect to Aboriginal and Torres Strait Islander people joining us today.



## 1. Welcome from the Chair

#### Ms Lee de Winton

#### Agenda

N	o. Item	Presenter	Time
1.	Welcome from the Chair	Lee de Winton	2:00PM
2.	Action items	Lee de Winton	2:05PM
3.	Department update	Department	2:10PM
4.	Preliminary Airspace and Flight Path Design	To70	2:40PM
5.	Community and Stakeholder Engagement Plan for 2023	WSP	3:15PM
6.	Online Community Portal	WSP	3:30PM
7.	Update from the Airport operator	WSA	3:40PM
8.	Other business	All	3:50PM
•	Next meeting		
•	Future discussion items		
9.	Q & A		4:00PM
N	Meeting close		4:30PM



## 2. Actions from Previous Meetings

#### Meeting 17, 14 October 2022

	Action Item
3	Department to provide FoWSA a presentation on the Aviation White Paper
4	Department to provide members with information on the functional requirements for airspace and flight path design
6	WSA Co to provide the Member representing the residents of Luddenham with additional information regarding the storage cell for contaminants at the Airport.



#### Meeting 18, 2 December 2022

#### **Action Item**

- 1 Department to advise the Member for Macquarie of the First Nations Consultation.
- 2 WSP will advise Member for Macquarie if the SEIA assessment on childcare and health services within 15km of WSI includes any of these services that are provided from the blue mountains.
- The Department will advise members what area the draft EIS is defining the Greater Blue Mountains World Heritage Area as.
- 4 The Department to distribute a community newsletter with the minutes.
- 5 WSA to share video with FoWSA members.
- 6 WSA to forward newsletters to the FoWSA secretariat, who will forward this to members.



## 3. Departmental Update

#### Mr Richard Wood

First Assistant Secretary
International Aviation, Technology and Services Division

Department of Infrastructure, Transport, Regional Development, Communications and the Arts



## www.wsiflightpaths.gov.au



Western Sydney International (Nancy-Bird Walton) Airport Airspace and flight path design

Virtual information stall Resources Get involved Contact us



The preliminary flight paths and draft Environmental Impact Statement will be publicly exhibited in the second half of 2023. The Government is committed to engaging the community on the potential impacts of flight paths.

Sign up here for email updates about the WSI flight paths.

# Western Sydney International (Nancy-Bird Walton) Airport flight path design for single runway operations

The Australian Government is responsible for developing the flight paths for single runway operations at Western Sydney International (Nancy-Bird Walton) Airport (WSI) by the end of 2026.

# 4. Western Sydney International Airport Preliminary Airspace and Flight Path Design

Journey through the flight path design process



## **Contents**

High-Level Project Plan

Airspace and Flight Design Process

Airspace and Flight Path Design Decisions

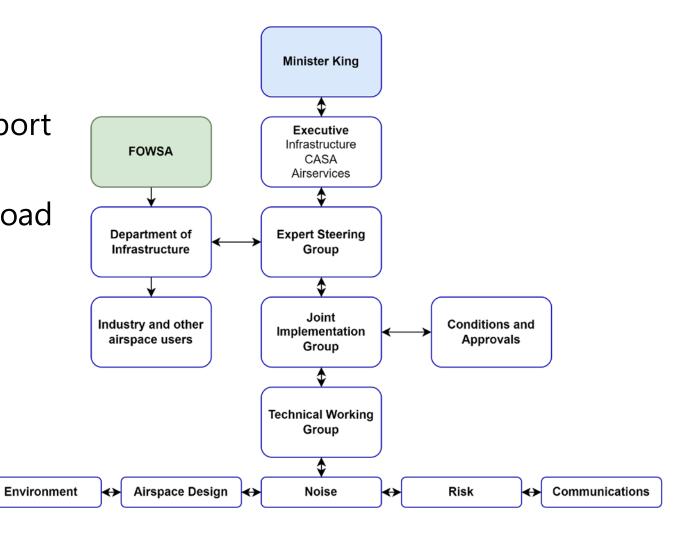
ATC Procedures

Technical Advice



#### **Governance Structure**

- Key elements defined in the Airport Plan
- Core working groups contain broad membership



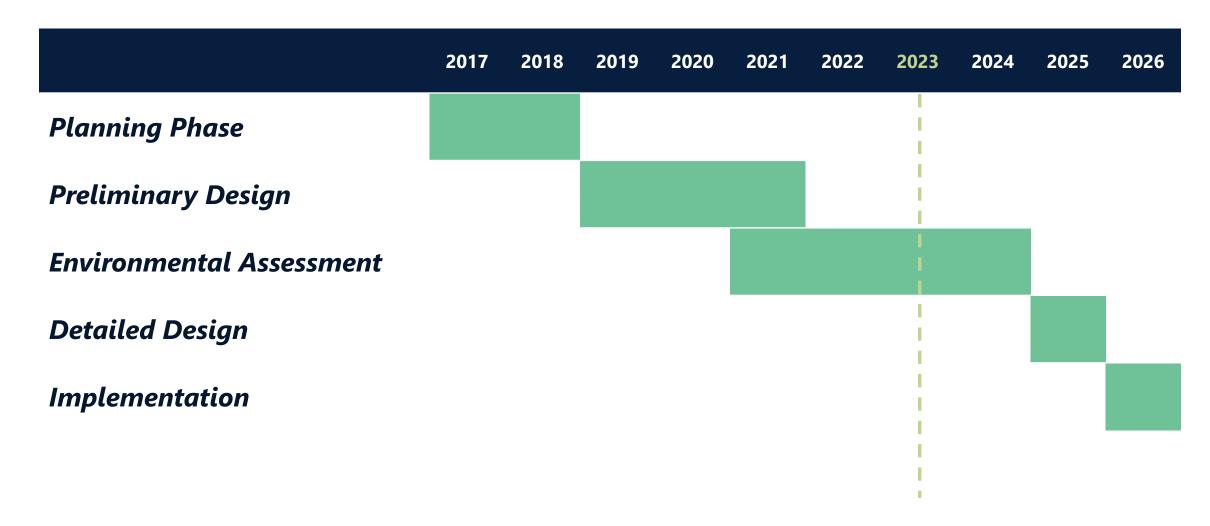
# **High-level Project Plan**



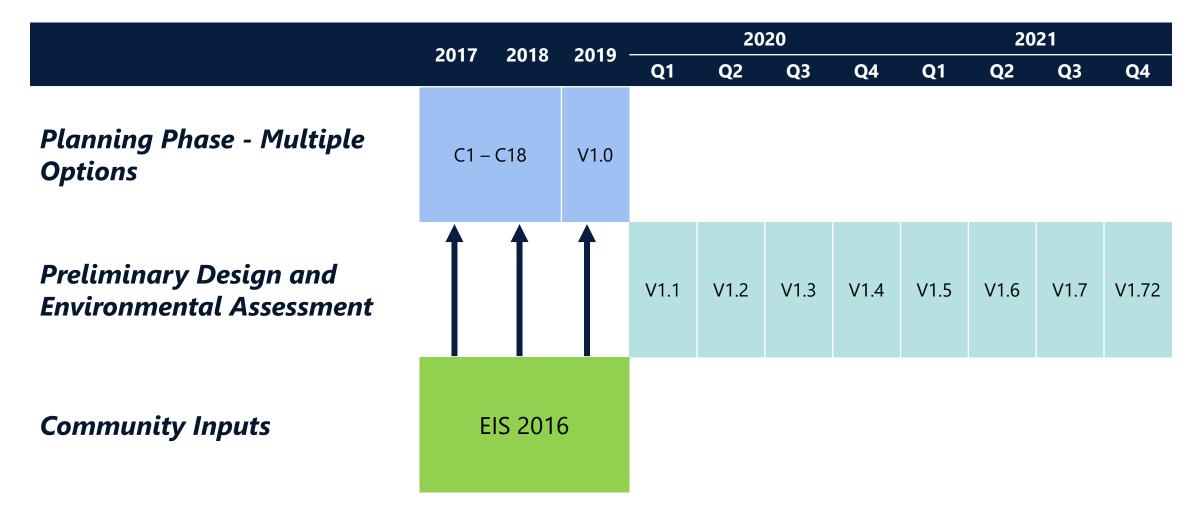
### The Project Plan encompasses

- Planning Phase
- Preliminary Design and Environmental Assessment phases
- Detailed Design Phase
- Describes governance, processes and outcomes of the design project
- Outlines steps to be followed for each phase

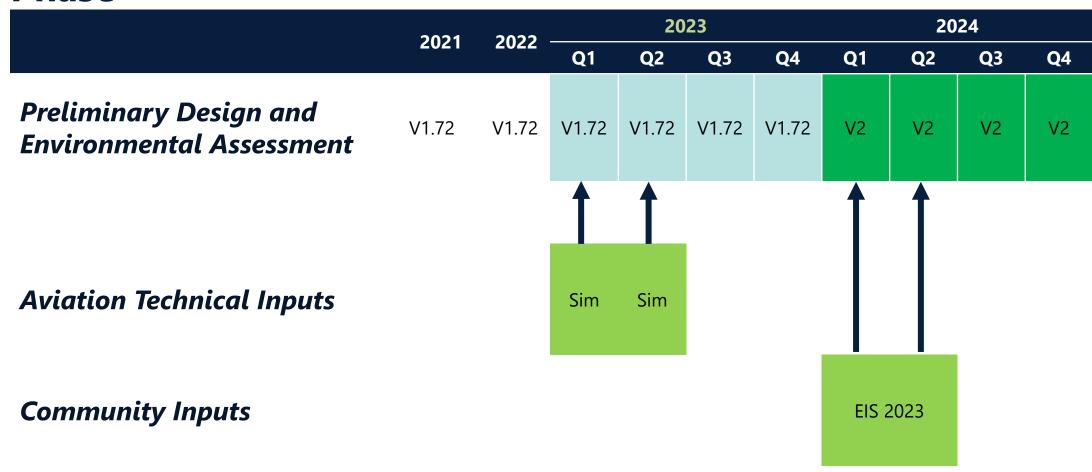
## **Project Timeframes**







# **Project Timeframes – Preliminary Design and Environmental Phase**



# **Project Timeframes – Detailed Design Phase**

	20	24		20	25			20	26	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	<b>Q</b> 4
Preliminary Design	V2	V2								
Detailed Design and Implementation					Prepa	aration				

## **Airspace and Flight Path Design Process**



- Set out the work undertaken in the Planning Phase
- Set out the process that was followed to develop the Preliminary Airspace and Flight Path Design

# **Basis for all design activities**



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.



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.



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.



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.





Noise mitigation measures will be developed.



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



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



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



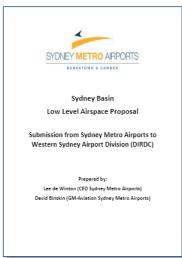
## Planning Phase: Stakeholder consultation

- In mid-2018 the Department commenced gathering stakeholder requirements:
  - Input from airlines, industry bodies, airspace managers
  - Guidance and environmental input from WSIA Airport Plan and 2015 EIA
- Based on the data gathered, the Department generated:
  - Functional Requirements
  - Performance criteria

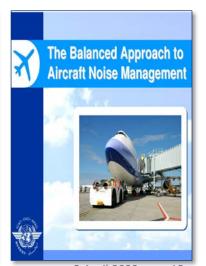






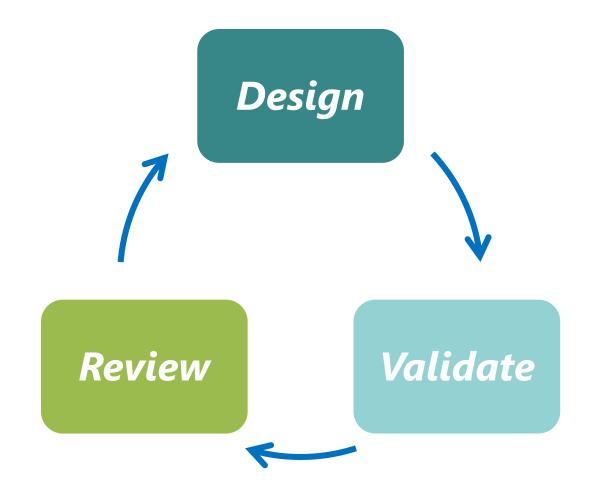








# **Planning Phase**



- Multiple concept designs developed through Evaluation Workshop
- Key Performance Areas
  - Safety
  - Capacity
  - Efficiency
  - Environment

# Airspace and Flight Path Design Process Perfo

## **Performance Assessment Process**

#### **Safety**

Measured by minimising the flight path conflicts between WSIA and existing KSA tracks. In the Preliminary Design Phase this was measured through the application of Airservices safety processes.

#### **Capacity**

The capacity of WSIA and KSA operations was assessed by measuring the amount of delay experienced by aircraft and the expected throughput of each airport.



#### **Efficiency**

The efficiency of aircraft operations for flights accessing WSIA and the effects of those operations upon other aircraft operating within the Sydney Basin was assessed by measuring track miles and fuel burn.

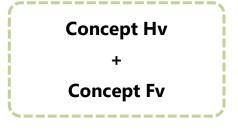
#### **Environment**

Assessed by measuring the numbers of people affected by aircraft overflight noise using relevant noise exposure measures, visual impacts and overflight of sensitive and recreational areas

# **Planning Phase**



Concept	Safety	Capacity	Efficiency	Environment
Hv	12	90	81	70
Fv	13	85	67	87
Jv	13	87	73	92
Cv	15	88	71	88
Dv	16	88	70	88
Α	25	99	99	62
В	25	99	93	62
Av	26	99	99	62
Bv	27	99	93	62
Н	31	90	81	70
C	33	88	71	88
D	33	88	70	88
F	51	85	67	87
J	56	87	73	92
Υ	77	98	84	77
R	80	90	92	61
S	87	89	90	100
Q	100	99	69	88





<sup>\*</sup> Lower scores indicate better performance

# **Planning Phase: Iterative Design Process**

		W0.1	W0.2	W0.3
	HIGH ATC workload interactions	36	30	4
SAFETY	MEDIUM ATC workload interactions	15	46	3
	LOW ATC workload interactions	146	212	117
	Average AIRBORNE DELAY	2.81 min	2.81 min	2.77 min
CAPACITY	P75% AIRBORNE DELAY	4.09 min	4.09 min	3.94 min
	Maximum sustainable CAPACITY	46 / hour	46 / hour	46 / hour
	P75% arrival track miles from 50NM	78.6 NM	78.6 NM	77.2 NM
	P75% departure track miles to 50NM	81.7 NM	81.3 NM	81.5 NM
FFFICIENCY	P75% arriving aircraft in level flight below FL100	9.43 NM	6.23 NM	6.67 NM
EFFICIENCY	P75% departing aircraft in level flight below FL100	3.53 NM	3.53 NM	3.44 NM
	P75% arrival track fuel burn from 50NM	0.431 T	0.431 T	0.431 T
	P75% departure track fuel burn to 50NM	2.54 T	2.53 T	2.53 T
Environment	All Criteria	No increase	No increase	No increase

PRELIMINARY DESIGN PHASE

#### **Document Decision Process**



Process involved introduction of more complexity for the design:

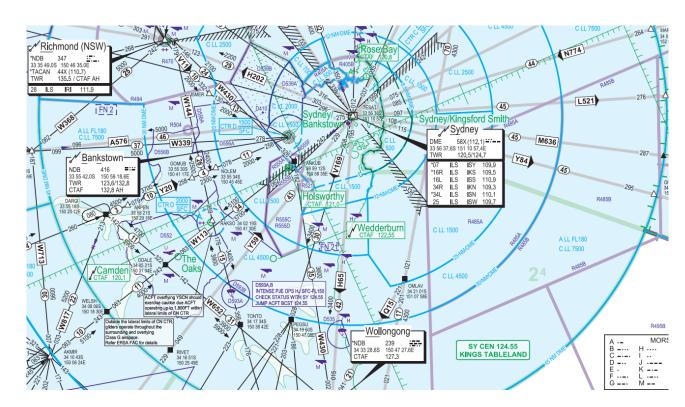
- Include other airports and other design constraints
- Establish detailed description of all flight path and airspace design decisions
- Maintain a full Flight Path iteration description



# **Flight Path Containment**

#### **Controlled Airspace**

- Design containment areas to segregate WSI aircraft from existing operations
- This is ongoing work and will not be finalised until the end of the Detailed Design Phase





## Military Volume Changes – Richmond and Orchard Hills

Concept designs considered for WSIA have considered the close proximity to:

- R502 (DEOH Orchard Hills)
- R469/470 (Richmond Airbase)

Infrastructure has worked with Defence to:

- Initiate a lateral change to R502
- Obtain access through R469/470

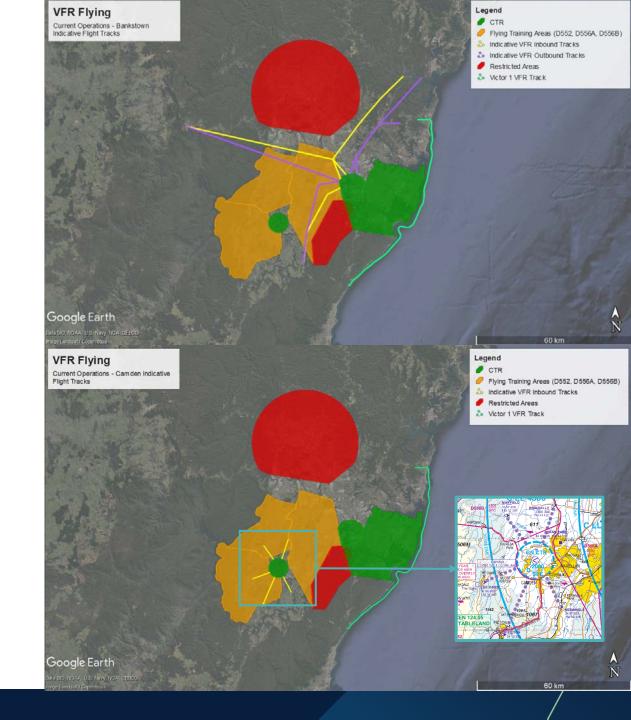




# **Equity of Access**

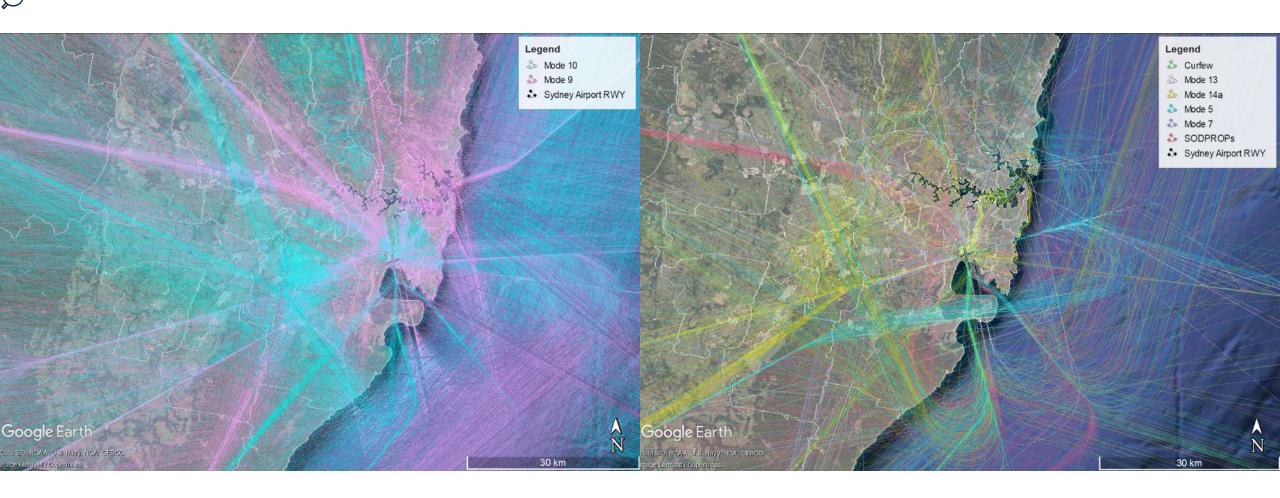
Important requirement in the WSI Airport plan:

Minimise impact to surrounding aerodromes and Flying Training Areas





## **KSA**

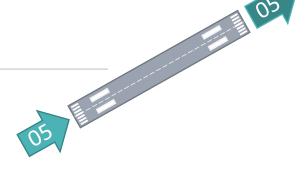




## **WSIA Mode Selection**

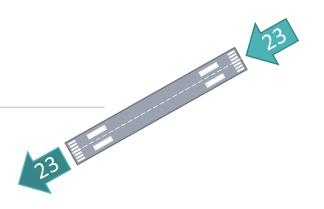
**Runway 05 Day** 

**Runway 05 Night** 

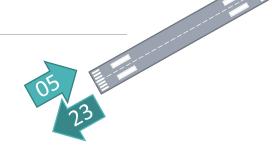


**Runway 23 Day** 

**Runway 23 Night** 



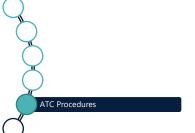
**RRO Night** 



#### **ATC Procedures**



- Established clear model of how the Flight Paths and airspace will be operated by Airservices Australia
- Key points:
  - Coordination
  - PBN separation
  - Internal airspace sectorisation
  - Departure processing
  - Arrival processing
  - Military interactions



# **Flight Procedure Separation**

**SID** Standard Instrument Departure

**STAR** Standard Instrument Arrival

**IFP** Instrument Flight Procedure



Designed to Required Navigation Performance 1 (RNP1) standards









when less than



Lateral Separation

## **Technical Expert Advice**



- Sought technical expert advice from the users and operators of the new WSI airport and association flight paths
- Sought input from experts with experience in aircraft environmental impacts such as emissions and overflight noise

# **Technical Expert Advice**

Technical Advice

### Technical experts include:

- Airlines
- Industry bodies
- Airports

Other stakeholders such as Airservices, CASA, and Defence have been engaged through the governance process

This consultation is on-going

















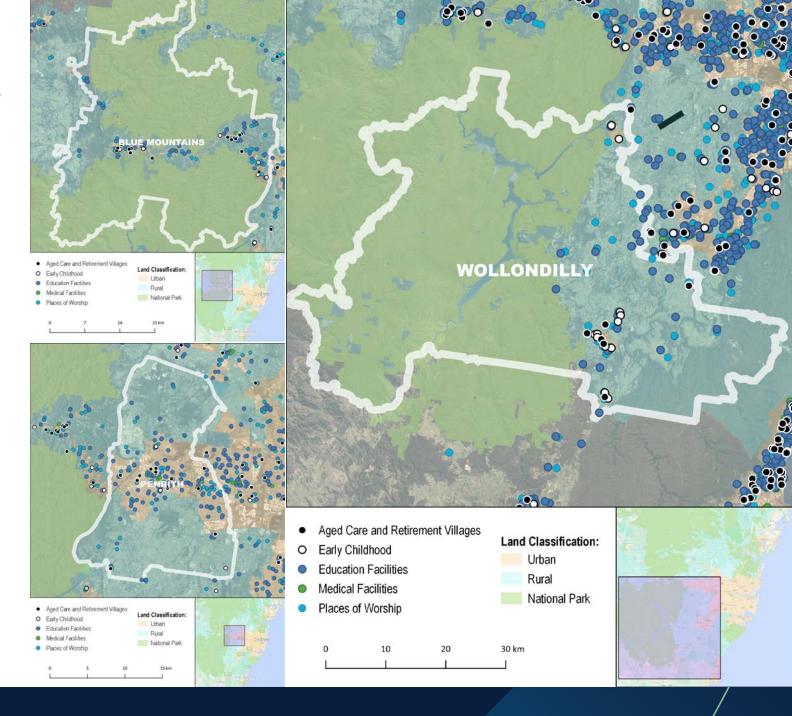


# **Social Impact Analysis**

Technical Advice

### Typical data includes:

- people's way of life community values and/or functions
- impacts on culture, history, and ability to access cultural resources
- communities' quality of life
- communities' physical and mental health and wellbeing,
- livelihoods



# Thank you

High-Level Project Plan

Airspace and Flight Path Design Process

Airspace and Flight Path Design Decisions

ATC Procedures

Technical Advice





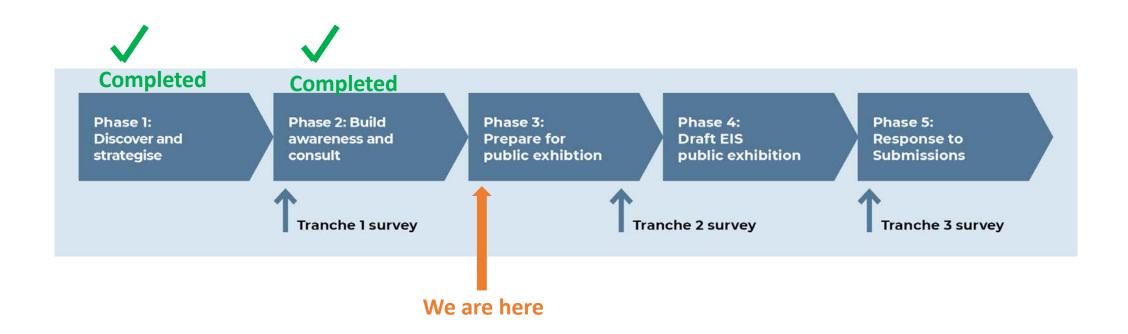
Ms Deborah Palmer

Stakeholder Engagement and Community Consultation Specialist

**WSP** Australia

### **Engagement approach**

- EIS to discuss consultation, as defined by EIS guidelines
- Engagement Plan has been informed by market research



#### Phase 3: Prepare for public exhibition

- Online Community Portal (website)
  - Information on upcoming engagements
  - Containing flight paths design and EIS process information
  - Updated in each phase of engagement
  - Later will also be the home to the Interactive Flight Paths and Noise
     Tool and draft EIS when released
- Updated collateral on
  - Draft EIS, Flight Path Design, Aircraft Noise, Airspace Management,
     Airspace Constraints, Airspace Operations
  - Who is Nancy-Bird Walton postcard

#### Phase 3: Prepare for public exhibition

More stakeholder briefings, including with local councils

Advertised community information and feedback sessions

- Tranche 2 market research
  - Focus groups in language and for groups with access barriers (e.g. disabilities)

#### **Phase 3: Prepare for public exhibition**

**Advertise** community information stalls. Initial stalls – more to be confirmed.

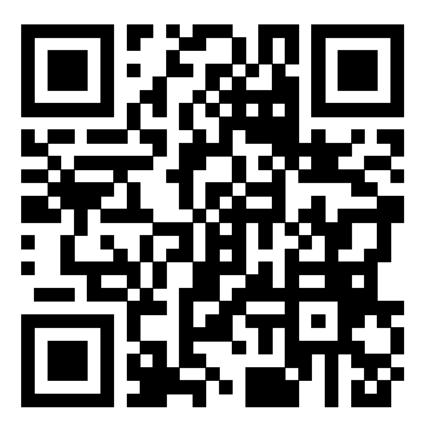
Date	Location
MARCH	
Saturday 18 March	FOWSA Meeting, Penrith Leagues Club  1pm – 5:30pm
Saturday 25 March	Camden Show, Camden Showground 8am – 6pm
APRIL	
Friday 28 April	Hawkesbury Show, Hawkesbury Showground  10am – 9pm
Saturday 29 April	Wallacia Festival, Wallacia Public School  10am – 4pm
Sunday 30 April	Multicultural EID Festival and Fair, Fairfield Showground  10am – 5pm

#### Phase 4: Draft EIS public exhibition

- Community information sessions
- Updated and new collateral
  - EIS chapter summaries
- Stakeholder briefings
- Updates to Online Community Portal formal submission webpage

#### **Phase 5: Response to submissions**

- Tranche 3 Market research
- Preparation of final EIS, taking into account community feedback submissions
- Final EIS will contain summary of submissions and how they have been addressed



WSIflightpaths.gov.au

#### 7. Western Sydney Airport Update

Mr Scott MacKillop

Chief Corporate Affairs Officer

Western Sydney Airport



# **Airport Benefits**



### SECURING SYDNEY'S AVIATION CAPACITY

- Kingsford-Smith Airport already constrained and approaching capacity.
- 24/7 international, domestic and air cargo operations will provide a source of aviation growth for Sydney for decades.



# CREATING JOB OPPORTUNITIES IN WESTERN SYDNEY

- Will create thousands of local jobs in construction and even more in operation.
- Indirect job creation as the flow-on benefits of the airport stimulate the local economy.



• Will have the third largest catchment of any Australian airport on day one of operation.



## IMPROVING AIR FREIGHT CAPACITY AND ACCESS

- Set to become the new centre of air freight for Sydney.
- Taking advantage of transformative growth in the sector during COVID-19.
- Connecting NSW producers with the globe and



# CONTRIBUTING TO AUSTRALIA'S GDP

 Predicted to generate an estimated \$24.6 billion in direct expenditure by 2060 and contribute a \$23.9 billion increase in the nation's GDP.



# **Construction Progress**



**Major Earthworks** 



**Terminal** 



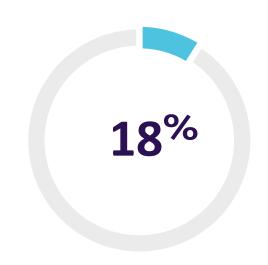
Airside



Landside











# **Updates from the last quarter**

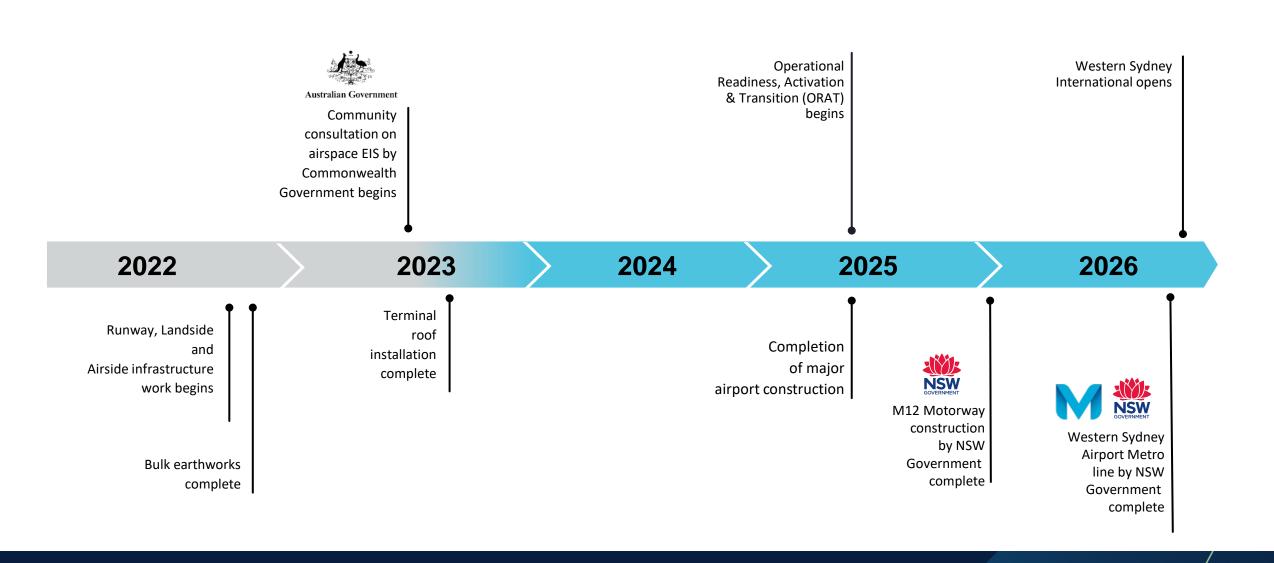
- Registrations of Interest to establish shops, food outlets and travel services at Western Sydney International Airport opened to the public in February.
- The project reached a milestone of more than \$400 million invested in local Western Sydney businesses to date.
- In a global first, Western Sydney
   International Airport provisionally secured its three-letter code more than three years ahead of opening (WSI).
- WSI announced a new partnership with NBN, which will see more than 25km of fiber optic cabling laid to bring NBN to our terminal and Business Precinct

#### Community Engagement quarterly update

- Cabramatta Lunar New Year Festival
- Western Sydney Women Careers Connect
- Western Sydney Community Forum airport tour
- Luddenham Show
- Aviation Careers Forum for Women
- Future of Women in Western Sydney Summit
- Kimberwalli Careers Expo
- Blacktown Show
- Thirlmere Steam Festival
- Ingleburn Alive Festival
- Castle Hill Youth Agricultural Expo
- Camden Show
- Nirimba Education Precinct Experience Centre visit
- ABCN First Nations My Career Footprints
- AtWork Career Event



#### WSI is on course...





#### 8. Other Business

FoWSA Members



#### 9. Questions and Answers

55 questions received in total from 16 people

All questions and answers will be published at: <a href="https://www.westernsydneyairport.gov.au/fowsa">www.westernsydneyairport.gov.au/fowsa</a>



#### **Environmental impact assessment (EIS) process**

Some questions ask specifically about the environmental assessment and EIS process, including the validity of the process.

- Q. How can the Environmental Impact Statement process be considered sound and be relied upon?
- Q. How is it possible that the airport is already in an advanced state of construction, while the flight path EIS has not been finalised?

#### **Community engagement and consultation**

Questions ask about the time available for public consultation and the need for clear and easy to understand information. One question asks about the purpose of FoWSA its role as a consultative forum.

- Q. There have been short response times for previous important consultations, including the 2016 EIS, and the process to submit questions to this FoWSA meeting. What assurances can you give that there will be realistic timeframes for future consultations?
- Q. Are members of the Forum prepared to commit to plain speaking when consulting about the Western Sydney Airport flight paths and noise impacts, and not rely on standard words or obfuscation?
- Q. Is FoWSA actually fulfilling its role as a consultative forum?

#### Flight paths

Many questions have been received regarding the status of the proof-of-concept flight paths presented in the 2016 EIS – including whether these are still being used as the basis for flight path design, and if arriving aircraft will all merge over Blaxland. Some submissions provided detailed suggestions to modify the flight paths presented in 2016.

Some questions have asked for specific details of the new preliminary flight paths at specific locations – for example the likely number of aircraft and their altitude. Questions have also been asked about the flight path design process – what factors determine flight paths, and why it takes so long to design and release information.

One question acknowledges flight path redesign that has happened at Brisbane airport, and asks what lessons there are for the WSI process.

#### Flight path questions

- Q. Were flight paths considered in the 2016 EIS?

  Are the 2016 flight paths still going ahead?
- Q. Will Blaxland be used as a merge point for all arriving aircraft?
- Q. What factors do you use to determine flight paths?
- Q. What possibilities for flight paths have you considered already, and do residents get to have a say?
- Q. Do not fly over any of the Greater Blue Mountains World Heritage Area or any Blue Mountains villages.
- Q. Why is information on the new flight paths taking so long to release?
- Q. What lessons, if any, have been learned from the recent expansion of the Brisbane Airport in relation to noise impacts?
- Q. Numerous questions how many aircraft will fly overhead my specific location, and at what time?

#### Aircraft noise

Many submitted questions ask what the expected noise levels will be at specific locations. The status of the noise assessments and modelling from the 2016 EIS has also been raised.

Questions have been received asking about detailed aspects of the noise modelling process, for example, the impacts of terrain, and ambient noise measurement.

Many questions ask when information on noise impacts will be released, and this this will be presented.

- Q. Numerous questions what noise levels can I expect at my specific location?
- Q. What is the status of the noise impacts assessed in the 2016 EIS?
- Q. Is topography considered in modelling how noise travels and is heard? for example, the Blue Mountains valleys and cliffs.
- Q. Has the higher ground elevation of the Blue Mountains been factored into modelling aircraft noise impacts.
- Q. Have existing ambient noise measurements been taken, and do they meet the Australian Standard 1055:2018 (Acoustics)?
  Will these results be reported?
- Q. Will the impacts of aircraft noise on health and sleep patterns be considered?
- Q. When will information be released about what areas will be affected by aircraft noise?
- Q. Will an online noise tool be available, and how will it present noise levels?
- Q. Why was the previous online noise tool, showing ANEC contours, removed from the website?

#### **Noise mitigation**

Questions have noted the provision of noise insulation schemes at other Australian airports, and ask whether a similar scheme may apply at WSI.

- Q. Will those people affected by aircraft noise be offered soundproofing for their homes?
- Q. Is there noise mitigation funding being provided to impacted residents?

  If so, who will be able to receive funding?

#### **Environment and biodiversity**

Questions relating to the environmental and biodiversity impacts of WSI flight paths have focused on the Greater Blue Mountains World Heritage Area and issues of air and water pollution.

- Q. Will the proposed 24 hour nature of the airport risk the world heritage listing status of the Blue Mountains National Park?
- Q. From a water supply security perspective, has the catchment area for Warragamba Dam been designated a 'no fly zone'?
- Q. Have studies been done on the on the amount of extra air pollution that may be trapped in Western Sydney as a result of aircraft movements. Will this be monitored when the airport is operational?
- Q. What is the plan to reduce the air pollution that will be created by the introduction of a new airport in the Sydney Basin?
- Q. Aircraft flying over water catchments is polluting, dangerous and risky. How will these risks be ameliorated?

#### Airport and aircraft operations

Questions were received on the planned curfew-free operation of the airport.

Questions also received on specific aircraft operational issues, and transport to and from the airport.

- Q. How can Western Sydney airport be allowed to operate 24 hours a day 7 days a week?
- Q. Is there any potential for noise concerns to be minimised by imposing a curfew on the airport at night as is the case with Sydney Airport?
  - If not, why are the residents of Western Sydney to be afforded a different status to residents around Sydney Airport affected by noise?
- Q. Will crosswinds be an issue (given one runway). What other airports can be used for diversions
- Q. How will aircraft land safely at WSI given higher terrain to the west, including the Blue Mountains

#### Thank you for attending

Please visit the Online Community Portal for more information

WSIflightpaths.gov.au



