



SYDNEY AIRPORT MASTER PLAN 2039







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Foreword

I am very pleased to present our Master Plan 2039 which sets out the strategic direction for the development of Sydney Airport over the next 20 years.

Sydney Airport is an exciting place to work, visit or travel to and from. As Australia's international gateway and an essential part of the transportation and infrastructure network, it connects Sydney to over 100 regional, national and international destinations.

Today, Sydney Airport is a vital infrastructure asset that generates over \$38 billion in economic activity per annum for NSW and Australia. It also generates or facilitates more than 30,900 jobs on airport and 338,500 Full-time equivalent (FTE) jobs across NSW and Australia. Planning for the continued growth of Sydney Airport is vital to achieving our local, state and national employment, tourism and development objectives.

Master Plan 2039 is designed to accommodate the forecast 51 per cent increase in passenger numbers to 65.6 million over the planning period. International passengers, who contribute the most to the NSW and Australian economies, will be the main driver of growth and, by 2039, the mix of international and domestic passengers is expected to be 48 percent and 52 percent respectively.

Importantly, Master Plan 2039 embeds our approach to sustainability into the planning and design for future Sydney Airport expansion. We have achieved a 4-Star Green Star Communities rating from the Green Building Council of Australia for this master plan.

Fundamentally, our development plans will maintain our sharp focus on safety and security, enhance the capacity and efficiency of the airport, and deliver continually improving passenger, community and environmental outcomes.

The plans are flexible and adaptable and will be developed in collaboration with our airline partners and in consultation with the community in which we operate. It is vital that in the evolving world of aviation and technology we are able to respond quickly to economic or aviation industry change.

In the following chapters you will find details of our proposed improvements to the airfield, aviation facilities, terminals and infrastructure. It also covers commercial opportunities in the landside and airside areas of the airport that complement aviation operations and enhance facilities and services to passengers, airport partners and other airport users.

Master Plan 2039 also contains a Five-Year Ground Transport Plan and 20-Year Ground Transport Strategy to improve road network performance in and around Sydney Airport. The ground transport solutions have been designed recognising potential changes to traffic volumes and patterns resulting from the opening of WestConnex and any Sydney Gateway connection.

We also acknowledge the impact major airports have on the environment and our local community. We are committed to reducing the carbon footprint of the airport, ensuring it is resilient to climate change, conserving significant items of natural, indigenous or heritage value and protecting environmentally significant areas. Details of what we are intending to achieve are contained in our separate Environment Strategy 2019-2024 which is an addendum to Master Plan 2039.

I commend Master Plan 2039 to you and encourage you to read it. Please contact us if you have questions and to share your views.

Geoff Culbert
Chief Executive Officer

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Executive Summary



Welcome to the Sydney Airport Master Plan 2039

Sydney Airport is one of Australia's most important and most utilised pieces of infrastructure. It is our international gateway and an essential part of the transportation network connecting Sydney to over 100 regional, national and international destinations.

The continued growth of Sydney Airport is vital to achieving local and State employment, tourism and development objectives.

The **Sydney Airport Master Plan 2039** (Master Plan 2039) has been prepared to ensure that this growth can be achieved in the next 20 years.

Master Plan 2039 provides a strong planning framework for Sydney Airport consistent with regional economic conditions and major infrastructure delivery strategies in and around the airport. It delivers a flexible plan for Sydney Airport that can adapt to changing conditions in the economy and aviation industry more broadly.



The developments proposed in Master Plan 2039 are subject to an extensive public consultation process. Delivery of the developments will be further subject to macroeconomic conditions, technological advancements and collaboration, and consultation with key stakeholders and the community.

In addition to being a plan that positions Sydney Airport for growth, Master Plan 2039 is a statutory document prepared in accordance with the requirements of the Commonwealth *Airports Act 1996*.

Sydney Airport Corporation Limited, as the lessee of Sydney Airport, has prepared this Master Plan 2039.

Master Plan 2039 refreshes the current Sydney Airport Master Plan 2033 – approved in 2014 – and extends the planning period to 2039. It includes our development plans that reflect changes in the past five years, new forecasts for aviation and commercial activity, and ground transport improvements to be undertaken at the airport. The Five-Year Ground Transport Plan has been included within the body of Master Plan 2039.

Included as an addendum to Master Plan 2039 is the **Environment Strategy 2019-2024**, which has been prepared in accordance with the specific legislative requirements for environmental matters at Sydney Airport. It is also subject to an extensive public consultation process.

Future development options are variously described in this Master Plan 2039 as "proposed", "planned", "potential", "likely", "possible" and other terms with similar meaning. In each case, these terms are describing potential developments at the airport at various stages in the planning and approval process that may or may not be implemented over the period of Master Plan 2039, or at all.



Image 1: Our Sydney Airport Ambassadors assist passengers with queries across our terminals

Our Vision for Sydney Airport

At Sydney Airport, our Vision is to deliver a world-class airport experience and foster the growth of aviation for the benefit of Sydney, NSW and Australia.

We are committed to responsible growth that delivers positive outcomes for our customers, investors and the community in which we operate. Master Plan 2039 outlines our 20-year strategies to deliver our Vision.

Our development plans will enhance the passenger experience and efficiency of the airport, focus on safety and security, drive productivity, jobs and economic growth, and improve environmental outcomes, while being a good neighbour and making a positive contribution to our community.

Master Plan 2039 Objectives

To ensure our Vision for the airport can be achieved over the 20-year planning period, the following Objectives have been developed for Master Plan 2039.



Enhance **safety** and **security** for users of the airport



Improve the **efficiency** of the airport



Consider the **community** impact in all planning, development and operational activities



Provide **adaptable** and **flexible** plans to accommodate aviation growth



Enhance the **experience** of all passengers and airport users



Maximise the **capacity** of the airport to meet demand within existing operational constraints



Continue to improve **ground access** to, from and past the airport



Stimulate leisure and business travel to **generate benefit** and value for the economy



Continue to improve **environmental performance** at the airport



Create an airport that is able to **compete internationally** to capture aviation demand



Further embed **sustainability** into airport decision-making

About Sydney Airport

As the gateway to Australia, Sydney Airport connects people, places and communities every day. It is located only eight kilometres south of the Sydney Central Business District (CBD), and less than 10 kilometres from Sydney Harbour and major tourist destinations.

Sydney Airport is Australia's largest transport and logistics hub, with 43 international airlines and seven domestic and regional airlines serving 54 international and 49 domestic destinations in 2017.

Surrounding the airport is a network of light industrial and airport related businesses, and emerging residential areas. Nearby businesses include freight and logistics, catering, engineering, vehicle rental and accommodation, which rely on or support the airport and nearby Port Botany.

Sydney Airport at a glance

More than

43.3 million passengers

(A)

Passed through Sydney Airport's terminals in 2017

348,520



Aircraft movements in 2017

907 hectares adjacent to Botany Bay



Sydney Airport has been the site of aviation activities since the early 1900s

Sydney Airport generates and facilitates (directly and indirectly):



\$38 billion in economic activity

6.8% of the NSW economy



338,500 jobs

30,900 jobs on-airport



\$17.6 billion

freight exports annually

Sydney Airport provides
Sydney, NSW and Australia with
an unmatched network of intrastate,
interstate and international routes



Direct services to 27 countries and over 100 destinations



Over 50 airlines

Sydney Airport is committed to meeting the needs of its customers and delivering a world class passenger experience

Sydney Airport has invested more than \$4.3 billion on facilities, capacity, safety and security since 2002 following extensive and ongoing consultation with airlines



The continued growth of Sydney Airport is vital to achieving local, State and National-based employment, tourism and development objectives

Development

Tourism

Employment

Sustainability at the Airport

At Sydney Airport, our ambition is to be an industry leader in sustainability, driving responsible growth that balances social and environmental needs with corporate objectives. Central to realising this aim is Master Plan 2039, which embeds the Sydney Airport Sustainability Policy and Sustainability Strategy commitments into planning and design for future Sydney Airport expansion.

Master Plan 2039 considers existing and anticipated environmental and sustainability performance, and local, District and State plans and priorities, to adopt resilient options that meet the needs of current and future airport stakeholders.

We have embedded our approach to sustainability across our development plans. We have achieved a 4-Star Communities rating for Master Plan 2039 under the Green Building Council of Australia's Green Star Communities rating. Rating criteria have been integrated into Master Plan 2039 to drive sustainability in airport planning.

Master Plan 2039 is therefore the first step towards meeting our sustainability ambitions, and will inform future proposed designs, construction activities and operations.

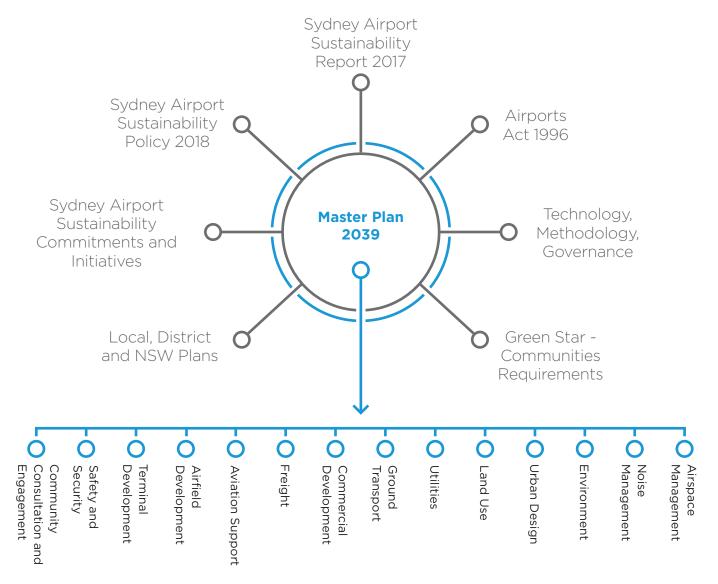


Figure ES-1: Inputs and implications of sustainability for Master Plan 2039

Stakeholder and Community Engagement

We are committed to strengthening and expanding our strong links with the community, not just in the vicinity of the airport but across Sydney, NSW and Australia. We actively engage with our local communities and organisations on an ongoing basis regarding airport operations, proposed development and future planning.

We also take an active role in supporting our local community and sporting groups, raising funds for charitable causes through corporate initiatives, and supporting the tourism industry through sponsorship and partnership programs.

With a large number of stakeholders who have a diverse range of interests, we ensure that our community and stakeholder engagement processes are inclusive, accessible and transparent. We have undertaken a broad stakeholder and community engagement process while developing Master Plan 2039.

Our ongoing engagement took into account the wide diversity in our local community to consider factors such as age, education, language, cultural background and mobility. A variety of engagement and communication mechanisms were used that are suitable for a wide range of people and groups, including:

- Face-to-face engagement activities
- Digital engagement through social media and an interactive and engaging website dedicated to Master Plan 2039
- Supporting information targeting key issues including noise management, environment, heritage, ground transport, air traffic forecasts, safety and security and the overarching vision for Sydney Airport



Image 2: Sydney Airport consulting with airport tenants about our Airport Environment Strategy

Air Traffic Forecasts

Forecasts of peak period passengers, aircraft movements and air freight volumes provide the fundamental basis for the planning of airport facilities at Sydney Airport. Air traffic forecasts have been independently prepared in consultation with the major international, domestic and regional airlines and airline associations, to ensure that the planning context for Master Plan 2039 is robust and provides confidence for our organisation and our stakeholders.

Total air passenger numbers are forecast to increase by 51 percent, from 43.3 million in 2017 to 65.6 million in 2039.

International passengers are forecast to be the main driver of growth at Sydney Airport. International passenger numbers are forecast to nearly double from 15.9 million in 2017 to 31.5 million in 2039. International passenger traffic contributes the most value to the NSW and Australian economies.

Our proximity to Asia and increases in global tourism and travel are expected to drive international travel. In particular, growth in major Asian markets, including China, India, South Korea and Vietnam. By 2039 we anticipate that the split between domestic and international passengers travelling through the airport will be 52 percent and 48 percent respectively.

Growth in total aircraft movements is expected to be significantly lower than passenger growth; 408,260 aircraft movement are forecast in 2039, an increase of 17 percent on 2017. This reflects airline feedback and expectations regarding continued up-gauging of aircraft and increased seat density and load factors.

Total freight at Sydney Airport is forecast to grow by 58 percent to one million tonnes in 2039. Passenger aircraft carry about 80 percent of all air freight. Consequently, freight is an important income stream for passenger airlines, which we support through land and facilities.

All of the forecasts for Sydney Airport assume that from late 2026 Sydney's aviation demand will be served by two international airports. Sydney Airport is expected to continue to benefit from its proximity to the Sydney CBD and local tourist attractions, and its breadth of network connectivity for passengers travelling internationally, domestically and regionally.

In 2039, Sydney Airport is projected to handle approximately:



65.6 million passengers







31.5 million international



34.1 million domestic (including regional)



Image 3: Standoff Bays

Airport Development Plan

The Airport Development Plan contains the detailed plans to accommodate growth at Sydney Airport in accordance with our Vision and Objectives.

It outlines our proposed improvements to the airfield, aviation facilities, terminals and infrastructure to support the forecast increase in passenger numbers and aircraft movements over the planning period for Master Plan 2039. It also covers the commercial property opportunities in the landside and airside areas of the airport that complement aviation operations and support economic growth for the local economy.

The Airport Development Plan details the improvements to the ground transport network required to accommodate increased passenger, visitor, staff and freight traffic requirements to 2039. Specific actions for the 2019-2024 period are incorporated in the Five-Year Ground Transport Plan, as required by the Airports Act.

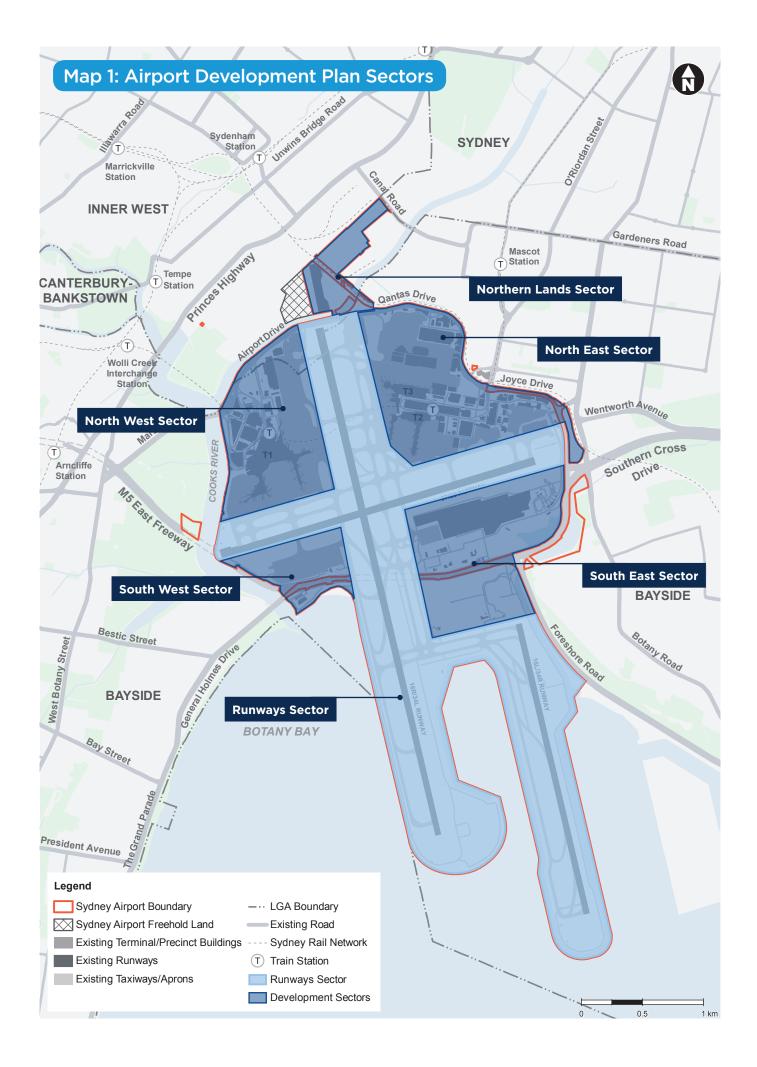
Our key operational strategies for the Airport Development Plan are:

- Continued development of capacity in the T1
 International Operations Precinct in the North West and South West Sectors
- Expanded capacity in the North East Sector to create a T2/T3 Integrated Operations Precinct that provides for international, domestic and regional passenger services

Sydney Airport is committed to embracing technology to deliver a world class airport experience. Embedded within our development plans are innovative solutions to enhance the passenger experience, improve the operations of the airport, and engage more effectively with our community.



Image 4: The airfield at Sydney Airport looking towards the Sydney skyline



Terminals

After significant consultation with stakeholders, we propose expansions of the existing terminal precincts to meet forecast growth in passenger numbers. Our plans will improve the passenger experience, reduce transfer times and enable more effective utilisation of terminal and airfield infrastructure.

Efficiency improvements include the introduction of new technologies and service systems, which are expected to continue to occur over the next few years. Such systems are envisaged to assist airlines in offering product differentiation and achieving operational efficiencies. This will also improve passenger facilitation and choice, while reducing queues and wait times.

Security and border control facilities are likely to see ongoing technology and automation enhancements, which should improve efficiency and passenger processing times in line with current and future protocols being put in place by the Australian Government's Department of Home Affairs.

In the same way that automation and technology improvements are seen as vital customer service initiatives, the advent and roll-out of these systems also provides opportunities for efficient use of terminal floor space and optimisation of capital investment. This will allow us to invest in terminal and airfield expansions and enhancements.



Image 5: An exterior shot of the Marketplace at T1 International

In addition to the initiatives outlined above, our Terminal Development Plan to 2039 includes:

- Provision of new terminal infrastructure north of T1 and east of T2 and T3, to deliver additional active stands:
 - 17 additional contact stands
 - Seven additional active bussed aircraft parking positions
- Development of a satellite pier in the South West Sector providing a passenger product with a similar experience to that provided in the current terminal connected piers
- Enhancements to the terminal forecourts and landside areas to improve passenger and visitor experiences
- Optimising the use of terminal infrastructure by introducing swing gates that can accommodate international and domestic/regional aircraft
- Improving the door to door experience for all passengers with investment in next generation technology, as well as enhanced access to multimodal ground transport facilities
- Enhancing the retail and food and beverage offering throughout the terminals
- Improving passenger connectivity by reducing inter-precinct transfers
- A sustainable inter-precinct passenger transfer product that over time would utilise autonomous vehicles
- Solutions to enhance airline efficiency by reducing minimum connection times and improving aircraft utilisation
- Increasing the flexibility of terminal infrastructure to respond to changing airline business models

Airfield

Developments and enhancements are planned throughout the airfield at Sydney Airport to provide sufficient capacity to meet the projected passenger demand and forecast air traffic movements in 2039. The three existing runways can accommodate growth in aviation, with improvements to taxiways, aprons and infrastructure delivering operational efficiencies.

Taxiway developments are based on efficiency of operation, safety and meeting demand. Apron developments are based on the planned terminal developments at the T1 International Operations Precinct and the T2/T3 Integrated Operations Precinct. Additional apron developments are also planned in the South East Sector to enable growth of aviation support facilities and to provide aircraft parking flexibility.

Consistent with Master Plan 2033, together with Airservices Australia we have undertaken considerable upgrades over the past five years to meet aviation demand and improve safety and operations. This includes the implementation of new air navigation systems, planning for a new air traffic control tower and upgrades to approach lighting and associated infrastructure to improve aircraft operations during periods of low visibility.



mage 6: Sydney Airport T1 Precinc

The following improvements are proposed to airfield and aviation support infrastructure over the planning period to 2039:

- Taxiway improvements, which have been tested with fast time simulation modelling, to reduce taxiing times for aircraft, and improve passenger experience and airlines' operating efficiency
- New apron developments across each of the terminal precincts to accommodate aircraft stand demand in 2039, as well as aviation support infrastructure to minimise impacts on the environment and community
- New active remote aircraft parking stands in the North East and South West Sectors to increase the capacity of the airport
- New remote aircraft parking stands in the South East Sector
- Additional storage areas for ground service equipment and further deployment of ground power and preconditioned air systems at aircraft parking stands
- Flexibility to accommodate new aircraft types that are being introduced into airline fleets serving Sydney Airport
- Flexibility to respond to aviation industry changes and growth
- A new air traffic control tower in the South East Sector to be developed by Airservices Australia
- Expansion of the Joint User Hydrant Installation and extension of apron hydrant systems to serve new terminal infrastructure and remote stands
- Consolidation and redevelopment of freight facilities in the T1 International Operations Precinct and the T2/T3 Integrated Operations Precinct
- Development of new freight facilities in the Northern Lands and South East Sectors to provide efficient and effective handling of freight
- Progressive relocation of aviation support facilities within the North East Sector and potential new aviation support facilities in the South East Sector

Commercial

The Airport Development Plan makes the majority of the airport site available for aviation activity. The remaining land is available for business activity, interim land uses, utilities and environmental conservation.

The Commercial Development Plan identifies the commercial and property developments proposed in landside areas. These developments are intended to support the efficient operation of the airport and provide facilities and services to passengers, airport partners and other airport users.

We continually seek to improve our facilities and services to reflect new markets and changing customer expectations, while addressing customer growth requirements in a sustainable manner. Our aim is to maintain flexibility in commercial development planning in order to respond to customer needs as they arise.

Potential commercial developments at Sydney Airport over the next 20 years are summarised below:

- The North West Sector can accommodate demand for up to 120,000 square metres of floor space (excluding the T1 terminal) for hotel, office and commercial development
- Additional hotels covering a range of product offerings with approximately 200 to 500 rooms in total could be developed in the North West Sector over time
- The North East Sector can accommodate demand for up to 120,000 square metres of floor space (excluding the T2 and T3 terminals) for hotel, office and commercial development
- By 2024, it is proposed that an approved 430 room hotel will be developed in the North East Sector, together with a multi-storey ground transport interchange
- Additional hotels covering a range of product offerings with approximately 500 to 900 rooms in total could be developed in the North East Sector over time
- Up to 70,000 square metres of freight, logistics and industrial developments could be developed in the South East Sector
- Up to 150,000 square metres of freight, logistics and industrial developments could be developed in the Northern Lands Sector
- Employment levels at Sydney Airport are forecast to increase to 35,800 jobs by 2023

Note that terminal and airfield developments proposed to 2039 are likely to displace some existing commercial developments.



Image 7: The Mantra Hotel at Sydney Airport located near T2/T3 Domestic

Utilities

To support the efficient operation of Sydney Airport, we own and maintain an extensive network of utilities to supply the various developments across the airport site with power, water, sewer, natural gas, telecommunications and stormwater. We work closely with external utility authorities to ensure that these essential services are available in sufficient quantity and reliability to support the operation of the airport.

Substantial investments have been made to our utilities networks in recent years, aligned with our objectives of:

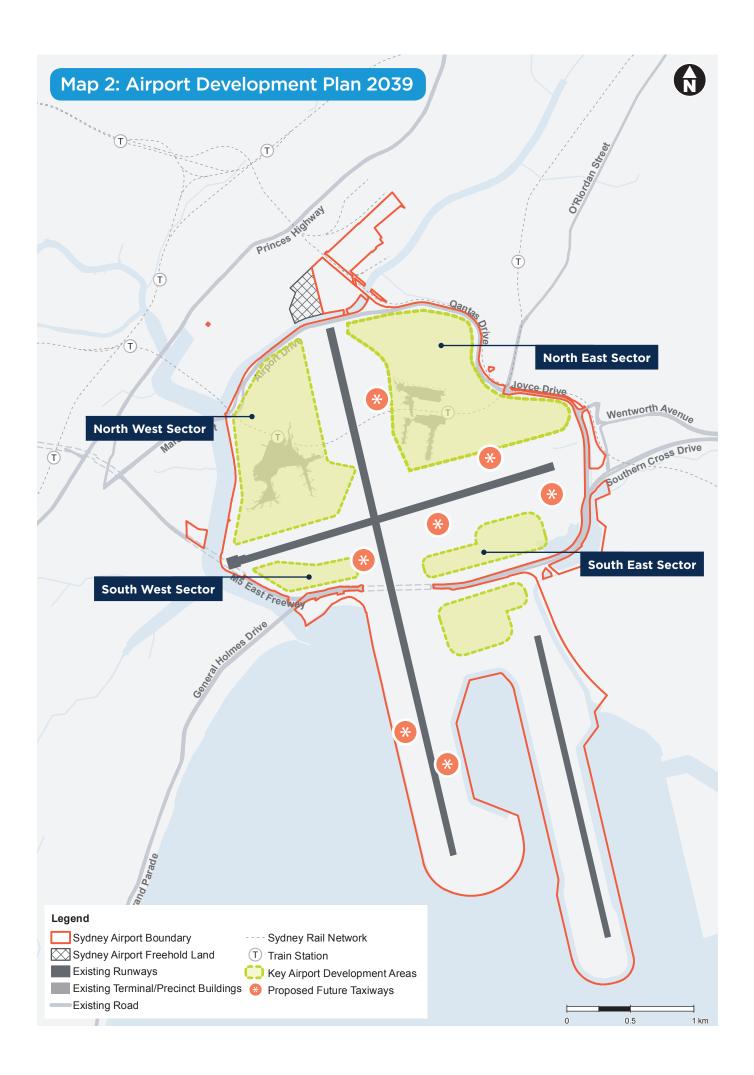
- Continuing to support projected growth at the airport
- Improving the reliability and redundancy of the utility networks
- Improving the sustainability of the supply arrangements

Aligned to our focus on sustainability, demand management and investigation of alternative supply arrangements will play a key role in ensuring that the utility networks are able to efficiently and sustainably support the growth projected at the airport. We have implemented a range of such initiatives in recent years, including expansion of the current recycled water facility, installation of rooftop solar and implementation of our energy and water savings action plans.

It is proposed that utility networks will continue to be expanded to meet increases in demand across the airport, arising from increased passenger movements and new developments. Augmentation of the existing utility networks will likely include:

- Upgrade to the key electrical feeds
- Increase in recycled water treatment capacity
- Trunk drainage improvements
- Expansion of networks to supply new areas of development

New infrastructure will be provided to the existing South West Sector and the Northern Ponds area of the North East Sector to support remote active aircraft operations, including ground-based power units and preconditioned air.





North West Sector

T1 International Operations Precinct

- New terminal infrastructure
- Apron and stand infrastructure
- Ground transport and utilities improvements
- Expansion of JUHI facility
- Air freight facilities consolidation
- Commercial developments of approximately 120,000m² floor space



North East Sector

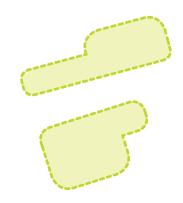
T2/T3 Integrated Operations Precinct

- New terminal infrastructure
- Apron and stand infrastructure
- Ground transport and utilities improvements
- Relocation of aircraft maintenance facilities
- Air freight facilities consolidation
- Commercial developments of approximately 120,000m² floor space



South West Sector

- Satellite pier development
- Apron and stand infrastructure
- Airside terminal and satellite pier connections



South East Sector

- Apron and stand infrastructure
- Satellite pier development
- Airside terminal and satellite pier connections
- General aviation facilities relocation
- Aircraft maintenance facilities
- Aviation support infrastructure
- Air traffic control tower
- Ground transport and utilities improvements
- Air freight facilities
- Commercial development

Ground Transport

Managing ground access in and around the airport is important for our customers and our local communities. Development and urbanisation in areas around the airport, together with passenger growth has increased demand on ground transport infrastructure as more people travel to, from and past Sydney Airport.

Growth in demand from passengers and commuters is expected to continue over the planning period of Master Plan 2039, placing increasing pressure on the road network within and surrounding the airport.

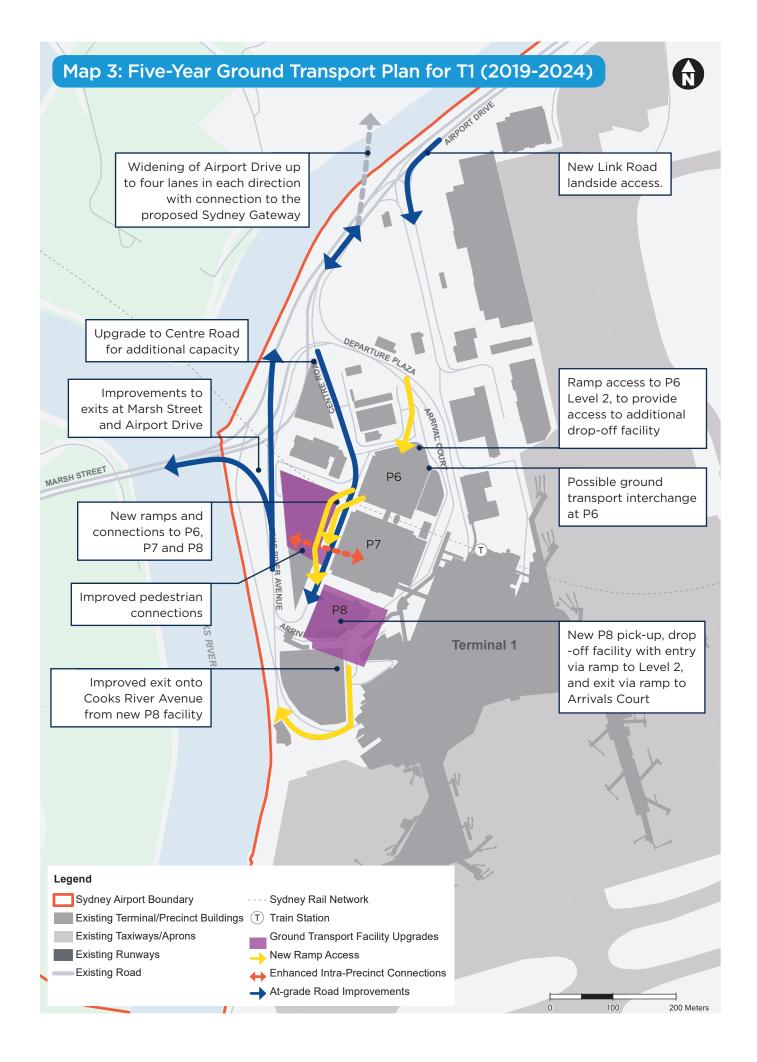
The Five-Year Ground Transport Plan and 20-Year Ground Transport Strategy contained in Master Plan 2039 is designed to improve road network performance in and around Sydney Airport. The ground transport solutions have been designed recognising the potential changes in traffic volumes and patterns resulting from the opening of WestConnex and the proposed Sydney Gateway connection.

We welcome the recent growth in rail passenger demand to/from the airport and continue to advocate for further improvements to public transport, including provision of additional bus and rail services.

Five-Year Ground Transport Plan for T1

Ground transport solutions proposed in the Five-Year Ground Transport Plan for the T1 precinct include:

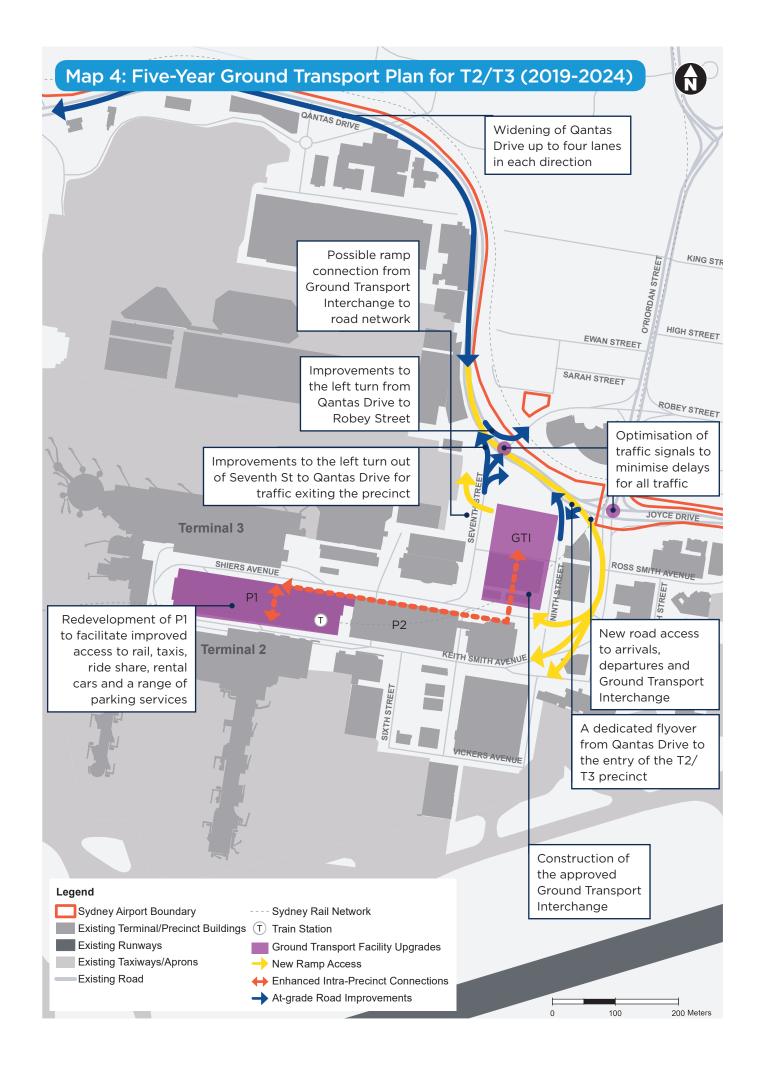
- Construction of a new integrated multi-storey pickup/drop-off facility at P8, separating internal traffic and reducing conflicts and delays. It is proposed to include:
 - Direct vehicle access from Centre Road with a potential elevated ramp access to P8 to minimise traffic conflicts;
 - Direct vehicle exit onto Cooks River Avenue
 - Direct pedestrian connections to the terminal to enable a seamless customer experience
- Elevated ramp access to P6 from Arrivals Court or Departures Plaza, with exit on to Centre Road
- Subject to terminal infrastructure development, reconfiguration of P6 and P7 to incorporate a multimodal ground transport interchange
- Upgrading Centre Road to accommodate increased vehicle movements
- Widening of Airport Drive to four lanes between the precinct and any proposed Sydney Gateway connection, to provide additional capacity to allow vehicles exiting the precinct to merge safely and efficiently with traffic to/from Marsh Street
- Additional exit ramp capacity to Marsh Street and Airport Drive to improve conditions for vehicles exiting the precinct
- Reconfigured access to Link Road from the proposed Sydney Gateway connection



Five-Year Ground Transport Plan for T2/T3

Ground transport solutions proposed in the Five-Year Ground Transport Plan for the T2/T3 precinct include:

- Construction of the approved Ground Transport Interchange, providing additional capacity for a range of uses including for public and private bus operations
- Development of improved pedestrian connectivity and amenity between the Ground Transport Interchange and the two terminals, including through the existing P1, P2 and P3 car parks
- Redevelopment of P1 to facilitate improved access to rail, taxis, rideshare, rental cars and a range of parking services
- Improved loading dock facilities for terminal development, which provide ease of access and security
- Improvements to the current road network particularly at the intersections of Sir Reginald Ansett Drive/O'Riordan Street/Joyce Drive and Seventh Street/Robey Street/Qantas Drive. In particular this will include:
 - As part of the proposed Sydney Gateway connection, a dedicated flyover from Qantas Drive to the entry of the T2/T3 precinct
 - Improvements to the left turn out of Seventh Street to Qantas Drive (for traffic exiting the precinct)
 - Optimisation of traffic signal settings to minimise delays for all traffic
- Continued development of new facilities for vehicle pick-up/drop-off operations



Land Use Plan

The Land Use Plan in Master Plan 2039 has been prepared to provide the community and all levels of government with an understanding of future activities that could be located on different parts of the airport site. It has been prepared in accordance with section 70(2) of the Airports Act.

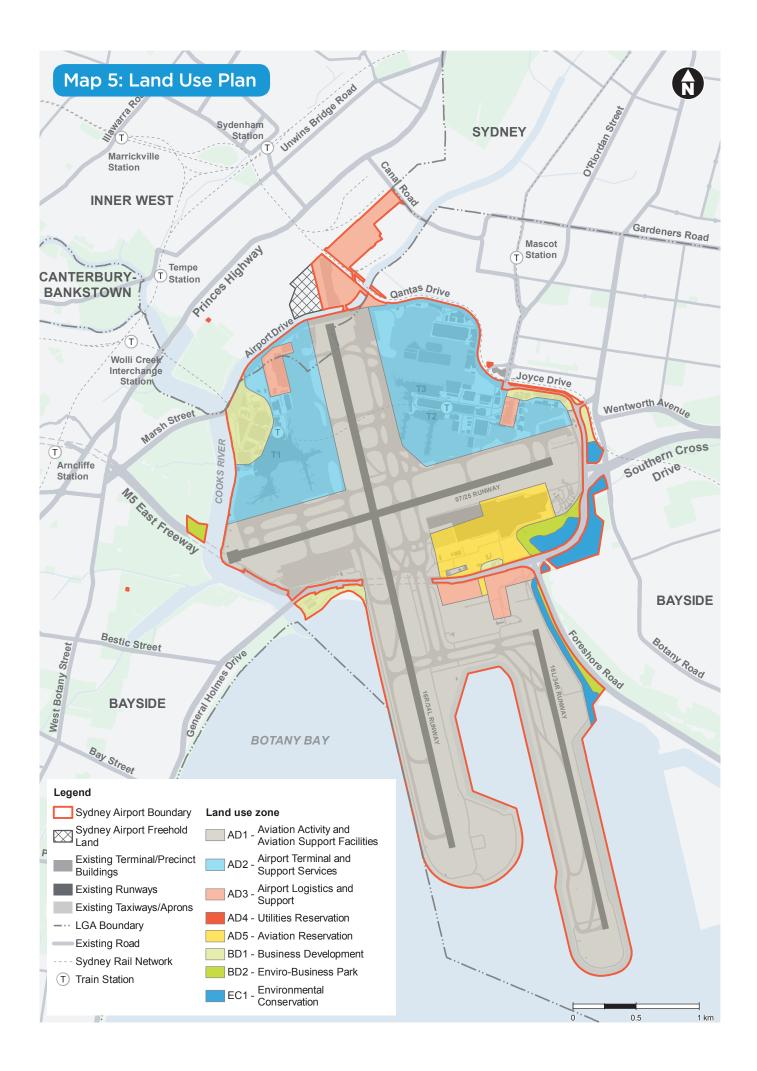
The Land Use Plan will guide future development of Sydney Airport, but does not lock in the future development outcomes. It must provide a degree of certainty for stakeholders and flexibility to allow investment and development decisions to be able to respond to changing economic conditions and market demands.

The Land Use Plan is generally consistent with Master Plan 2033; however there have been changes to land use zones to reflect changes to the Airport Development Plan.

The zones proposed for Sydney Airport describe the list of land uses and developments that are permissible in each of the six sectors of the airport. Assessment requirements are provided to guide proponents, our teams and the Airport Building Controller of the specific requirements for development in each zone.

Sydney Airport is divided into eight zones:

- AD1 Aviation Activity and Aviation Support Facilities
- AD2 Airport Terminal and Support Services
- AD3 Airport Logistics and Support
- AD4 Utilities Reservation
- AD5 Aviation Reservation
- BD1 Business Development
- BD2 Enviro-Business Park
- EC1 Environmental Conservation



Environment

All major airports have an impact on the environment and local communities. Aircraft and ground-based noise and air emissions are of particular concern for local communities. Airport operations and development can either directly or indirectly generate carbon emissions and waste, consume water and energy, or affect local waterways, wildlife, biodiversity and heritage values.

Managing and/or minimising these environmental impacts is essential for Sydney Airport to operate sustainably. Environmental management at the airport focuses on a co-operative, proactive approach with regulatory agencies, airport stakeholders and business partners working together to ensure that potential impacts of airport operations are avoided or minimised. We are committed to working with others to ensure that aviation plays its role in protecting the environment.

The industry's challenge is to retain the many positive economic and social benefits that aviation provides, including providing the global economy with the benefits of fast, reliable, safe and efficient connectivity while reducing or eliminating its negative environmental impacts through the introduction of technological, operational and efficiency advances.

One of our objectives for Master Plan 2039 is to continually improve environmental performance at the airport over the planning period in order to:

- · Reduce the carbon footprint of the airport
- Ensure the airport is resilient to climate change
- Conserve significant items of natural, indigenous or heritage value
- Protect environmentally significant areas

The details of what we are intending to achieve in the first five years of the planning period are provided in the separate Environment Strategy 2019-2024, which is an addendum to Master Plan 2039.

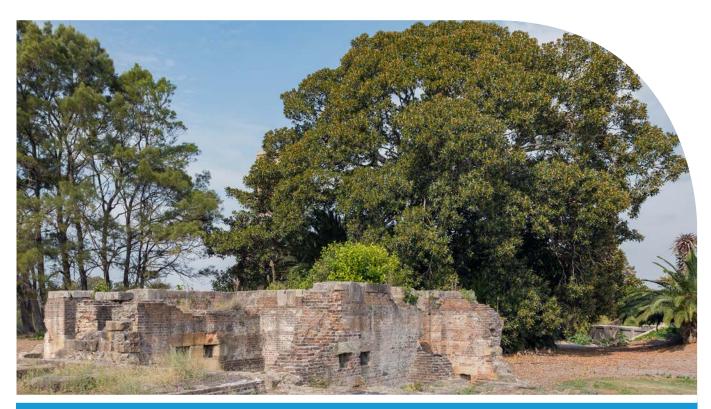


Image 8: Botany Water Pumping Station ruins that supplied water to Sydney from 1859 to 1885

Aircraft Noise

We recognise that noise from aircraft operations continues to be one of the most significant environmental issues for people living close to airports. We work closely with the community, aviation industry, and the Australian, NSW and local governments to manage and, where possible, minimise aircraft noise impacts.

The responsibility to manage aircraft noise impacts at Sydney Airport is shared by many organisations, including our own. Other organisations that play important roles in managing aircraft noise include:

- International Civil Aviation Organization
- The Australian, NSW and local governments
- Airlines
- Aircraft and engine manufacturers
- Regulators

Noise sharing is the key aim of our Long Term Operating Plan, which involves varying the use of our runways to produce different combinations of flight paths affecting different parts of Sydney.

Master Plan 2039 assumes that there will be no change to the curfew, aircraft movement cap or noise sharing arrangements at Sydney Airport, and no change to the flight paths or runways within the planning period.

Some of Sydney Airport's key intitiatives to minimise aricraft noise impacts include:

- Continuing to provide and maintain the necessary on-airport intrastructire that allows noise sharing to be implemented
- Investing in infrastructure to support next generation quieter aircraft
- Working closely with the Australian, NSW and local governments to ensure appropriate planning policies are in place
- Consulting and engaging with the local community and airlines that use Sydney Airport, such as the Sydney Airport Community Forum



Image 9: The Airbus A350-1000 visiting Sydney on its world demonstration tour

Safeguarding Sydney Airport

Safeguarding operations at Sydney Airport and addressing internal safety and security is critical for the airport's ongoing operations and growth.

We proactively manage safety, security and protection of the ongoing operations of the airport. All airport developments are subject to an internal safety and security review to ensure compliance with our legislative obligations.

Inappropriate development, obstacles and certain land uses in areas surrounding Sydney Airport can severely restrict its operations and growth. While we can control development and activities on the airport, off-airport development involves external agencies and authorities, and needs to be managed co-operatively. Safeguarding Sydney Airport is an ongoing and shared responsibility between all levels of government and the airport.

The Australian Noise Exposure Forecast (ANEF) contained in the Master Plan 2039 is a land use planning and aircraft noise exposure tool. The ANEF assists in managing noise sensitive land uses around Sydney Airport.

The National Airport Safeguarding Framework (NASF), which applies to Sydney Airport and the surrounding areas, provides a national land use planning framework to:

- Minimise aircraft noise-sensitive developments near Sydney Airport and communicate noise metrics
- Improve safety outcomes by ensuring aviation safety requirements are recognised in land use planning and development decisions

We support the NASF and actively promote its implementation by the NSW Government and local councils.





Image 10: The Integrated Operations Centre at Sydney Airport

