

Section Two

Airport Development Plan

66	7. Development Plan overview
74	8. Terminal Development Plan
82	9. Airfield Development Plan
94	10. Commercial Development Plan
99	11. Ground Transport Development Plan
112	12. Utilities Development Plan

7. Development Plan overview

To accommodate growth and achieve our vision and objectives, the Airport Development Plan outlines Sydney Airport’s plans for airfield, aviation facility, terminal and infrastructure improvements over the next 20 years.

The Airport Development Plan contains Sydney Airport’s:

- Terminal Development Plan
- Airfield Development Plan
- Commercial Development Plan (identifying complementary and beneficial landside commercial property opportunities)
- Ground Transport Development Plan
- Utilities Development Plan

We will facilitate sustainable long-term growth through careful planning, remaining flexible and agile to changing market trends, industry needs and passenger demands.

See Appendix C for a detailed breakdown of existing facilities at Sydney Airport.

Key achievements since approval of Master Plan 2039

The Master Plan 2039 Airport Development Plan identified a series of priorities for the initial five-year planning period. Many of these have been progressed or delivered (see Table 7-1), improving operational efficiency and capacity, and facilitating future growth.

This progress forms the foundation for Master Plan 2045 development planning.

Table 7-1 Key achievements since Master Plan 2039

Development / Initiative	
Terminal	– Commenced major refurbishments of T2 check-in and security hall including major technology changes to enhance passenger check-in and security screening experience.
	– Upgraded and streamlined security and screening facilities at all terminals.
	– Upgraded the T1 inbound primary lines to improve efficiency and processing rates using biometrics, self-service processing and installation of additional eGates.
	– Upgraded baggage handling with new screening machines.
	– Upgraded accessibility compliance and installed hearing loop throughout T2 and T3 gate lounges.
	– Redesigned, upgraded and constructed new bathrooms across the three terminals, delivering adult changing places facilities, greater accessibility, more parent facilities and better amenity.
	– Redeveloped the T1 Departures entry, with an iconic timber wall feature and entry to enhanced security hall access.
Airfield	– Upgraded T1 Bussing Facility.
	– Delivered four new Code E layover bays, upgraded the existing two Code E parking bays in the South East Sector and extended Taxiway J to the east to Taxiway D.
	– Upgraded bays 30, 32, 34 and 36 on the Terminal 1 Pier B South aprons to accommodate longer, new generation aircraft, and replaced aged and deteriorating apron pavement.
	– Upgraded and replaced approximately 5 km of airside security fence line to align with new legislative requirements.
	– Upgraded Northern Pond apron bays 83, 84 and 85 from layover positions to serviced active bays with in-ground fuel supply, ground power, PCA systems, guidance systems and additional area for GSE.
	– Upgraded 16R approach with high-intensity approach lights (HIAL).



7. Development Plan overview

Table 7-1 Key achievements since Master Plan 2039 continued

Development / Initiative	
Commercial	– Constructed new North East aircraft hangar with associated maintenance facilities and parking.
	– Upgraded the T1 Singapore Airlines Lounge to enhance the passenger experience.
	– Activated more than 12,000 m² of land in the South East Sector for airport use.
	– Provided Australia’s first in-airport hotel, T1 Aerotel, situated landside within the T1 Arrivals hall.
Ground transport	– Opened Sydney Gateway with TfNSW, linking Sydney Airport to the motorway network.
	– Improved valet offering, including the introduction of premium parking service at T1 and Fast Park Valet at T2, and the upgrade of Qantas Valet at T3.
	– Moved Uber pick-up zones kerbside at T1 and T3.
	– Demolished P1 and opened surface level car park Prime Park.
	– Active transport link opened, connecting the international and domestic precincts to the improved cycle network, including the provision of improved lighting and CCTV.
	– Adjusted and extended T2 Departures kerb, delivering more drop-off capacity.
	– Upgraded peak-time departures overflow operations at T1, including line marking, barriers and wayfinding.
	– Installation of digital variable message signs to provide real-time information.
Utilities	– Replaced the main substation for Sydney Airport, the AZS, with modern electrical equipment and controls.
	– Upgraded the main substation at T2 (Substation 21) with new infrastructure and technology.
	– Replaced T3 chillers and cooling systems with efficient state-of-the-art infrastructure.
	– Upgraded terminal sewer systems for more reliability and resilience.
	– Modified and upgraded the high voltage and hydraulic network to enable construction of Sydney Gateway.
	– Upgraded JFI to improve capacity, resilience, and environmental outcomes.



Section Two Airport Development Plan

7. Development Plan overview

20-Year Airport Development Plan summary

Our 20-year development plans aim to deliver:

- An enhanced passenger experience across the entire airport precinct.
- The continual improvement of operations.
- Sustainable growth to meet increasing demands (see Chapter 6 Air traffic forecasts).
- The flexibility to adapt to change as required.

Any future development at Sydney Airport, from construction to operational stage, will adhere to all relevant Australian aviation safety standards, including the National Airports Safeguarding Framework (NASF) and Sydney Airport's BES Standards.

Key regulators and authorities – including DITRDCSA, Airservices Australia and the Civil Aviation Safety Authority (CASA) – will be consulted through the design phase of proposed developments, prior to approval being sought and the commencement of construction.

Airport sectors

Master Plan 2045 divides Sydney Airport into six sectors, each comprising an airside and a landside component, except for the Runways Sector. Minor adjustments have been made to the identifying sector boundaries included in Master Plan 2039. As there are no proposed changes to runways during the Master Plan period, sector boundary revisions aim to improve the clarity and legibility of proposed developments across the sectors.

Proposed improvements in the Airport Development Plan are shown for each sector in Map 7-1.

Runways Sector

Proposed taxiway improvements set out to:

- Reduce taxiing times.
- Facilitate airline operating efficiency, including the introduction of international, domestic and regional operations in the North East Sector.
- Eliminate crossings of the main and busiest north-south runway for arrivals/departures originating from/taxiing to the North East Sector.
- Support new apron developments and operations in the South East and South West sectors.

North West Sector

- Expansion of T1 terminal infrastructure, accommodating additional airline and gate lounges, contact gates, processing area, security and border passenger processing facilities, passenger dwell and retail areas, and baggage check-in, reclaim and handling facilities.
- Apron and stand infrastructure, facilitating aircraft arrivals and departures, including fixed electrical ground power units (FEGPU), PCA and fuel.
- Consolidation of air freight facilities.
- Ground transport upgrades for better access to terminal landside areas and utilities improvements.
- Hotel, office and commercial developments of up to 120,000 m² floor space.
- An inter-precinct passenger transfer product.
- Expansion of the JFI facility.
- Development of sustainable technologies to optimise environmental outcomes, and energy and water efficiencies.

Map 7-1 Airport Development Plan – Sectors



Legend

- | | | |
|------------------------------|----------------|-----------------------|
| Sydney Airport boundary | LGA boundary | Sydney passenger rail |
| Sydney Airport freehold land | Existing roads | Sydney freight rail |
| Runways | | |

Section Two Airport Development Plan

7. Development Plan overview

North East Sector



- Expansion of T2, facilitating next-generation check-in and security facilities.
- Investment in new technology, refurbishment and upgrade of passenger processing facilities in T2 and T3.
- Links between T2 and T3 for passenger and baggage handling facilities.
- Facilities for the processing of international passenger operations.
- Apron and stand infrastructure to increase contact gate capacity and facilitate arrivals and departures. This may include FEGPU, PCA, fuel, swing gates for international and domestic operations, and regional aprons.
- Improved inter-precinct passenger transfer product(s).
- Relocation and redevelopment of aircraft maintenance facilities.
- Consolidation and modernisation of air freight facilities.
- Ground transport upgrades for better access to landside areas and utilities improvements.
- Hotel, office and commercial developments of up to 120,000 m² floor space.
- Integration of sustainable technologies to optimise environmental outcomes, and energy and water efficiencies.

South East Sector



- Apron and stand infrastructure, facilitating aircraft arrivals and departures, including FEGPU, PCA and fuel.
- Subject to market demand, areas to accommodate commercial facilities, car parking, car rentals, aircraft maintenance facilities, aviation support infrastructure, and corporate and general aviation facilities.
- New air traffic control and firefighting facilities in a centralised location, near existing facilities.
- Ground transport facility expansion and utilities improvements.
- Infrastructure to accommodate an airside connection between the aprons and terminal areas.
- Consolidation and redevelopment of air freight facilities.

Northern Lands Sector



- New landside and airside aviation support activities including freight, catering, GSE maintenance, truck staging, car parking and vehicle storage.
- Additional landside and airside access connections and ground transport infrastructure.

South West Sector



- Progressive extension of active gates.
- Infrastructure to accommodate an airside shuttle bus service between the South West and North West sectors.
- Apron and stand infrastructure, facilitating aircraft arrivals and departures, including FEGPU, PCA and fuel.

Implementation

Sydney Airport's development plans are flexible, designed to be adapted as needed in the face of changing property and aviation industry trends, utility demands, ground transport context, and more.

We will work closely with industry and commercial partners to monitor demand and continually improve the passenger experience. As such, our development plans will evolve in consultation with stakeholders.

Accessibility

Our vision for accessibility is to transform travel by creating efficient, service-driven experiences that empower every passenger. We aim to create experiences that are inclusive, barrier-free, efficient, and safe for everyone every day.

To achieve our accessibility vision, we have prioritised our actions under five priority areas: governance, proactive and inclusive design, people and community, digital experience and service delivery; each with clear deliverables, measurable outcomes, and defined success indicators to track progress and impact.

Guided by SYD's key principles to reduce barriers to travel, we will drive real change and service improvements through early planning and meaningful consultation with people with lived experience. By embedding diverse perspectives into every decision, accessibility—including for passengers with reduced mobility and hidden disabilities—is woven into our design and delivery ethos, ensuring we deliver world-class service and experience outcomes through initiatives and frameworks including our Accessibility Strategy 2026–2029.

Aviation operations

Aviation operations and safety remain key considerations when progressing and assessing proposed developments. This includes factors such as:

- Windshear and turbulence
- Public Safety Areas (PSA)
- Obstacle Limitation Surfaces (OLS)
- Noise and air quality during construction and operation
- PANS-OPS.



Section Two Airport Development Plan

8. Terminal Development Plan

Sydney Airport's Terminal Development Plan accommodates the projected passenger, aircraft and ground transport traffic flows over the planning period of Master Plan 2045. We are focused on enhancing the passenger experience, creating operational efficiencies and optimising infrastructure use, while remaining flexible to change as it happens.

Key objectives



Increased capacity with the integration and expansion of international, domestic and regional operations in the T2/T3 Integrated Operations Precinct.



Accommodating growth to 2045 with flexible, optimised infrastructure to cater for different aircraft, changing airline business models, and fluctuating demand for international, domestic and regional operations.



Holistic and targeted focus and investment in accessibility and barrier free travel, as defined in our Accessibility Strategy 2026–2029.



Enhanced safety and security, including the introduction of advanced screening technologies.



Improved passenger experience through enhanced inter-terminal connectivity, integrated terminal operations, and access to improved transport facilities and services.



Enhanced airline efficiency of inter/intra-precinct transfers by reducing minimum connection times (MCT) and improving aircraft utilisation.



Improved landside road network and terminal kerbside through the upgrade of road links between airport sectors.



Sustainable growth, with BES Standards adopted for terminal development projects.



Potential terminal developments

Across both the T1 International Operations Precinct and the T2/T3 Integrated Operations Precinct, proposed developments aim to improve the passenger experience and meet demands, even on our busiest forecast days.

Subject to aviation needs, collaboration with our airline partners and extensive community consultation, potential developments to Sydney Airport terminals in the near future may include:

- New generation technology, and the refurbishment and upgrade of passenger facilities to improve the door-to-door experience of passengers, including terminal access from ground transport facilities.
- Upgraded contact gates (direct terminal access for planes) accommodating a broader range of aircraft to support aircraft utilisation and airline service delivery.
- Additional and upgraded passenger and baggage processing facilities (including advanced check-in technology, and bag drop, biometrics, security and border processing equipment) to improve integration, efficiency and flexibility.

- Integration of sustainable technologies, design and operations that deliver environmental solutions, such as energy and water efficiencies, through our BES Standards.
- Additional gate lounges, retail, airline lounges and contact stands (plane parking positions) to meet airline-demand.
- An autonomous inter-precinct passenger transfer product that will improve passenger experience and reduce MCT.

Section Two Airport Development Plan

8. Terminal Development Plan

T1 International Operations Precinct

Throughout the planning period, the T1 International Operations Precinct can be incrementally expanded to accommodate future demand.

As outlined in Map 8-1, developments at T1 may include:

- South West Sector bay activation.
- A northern terminal extension, providing additional facilities including bussing, seamless transfer, and baggage reclaim.
- A southern terminal expansion, accommodating a new bussing lounge and passenger processing facilities.
- Additional contact bays for next-generation aircraft.
- Apron reconfiguration to cater for next-generation aircraft.
- Improvements to baggage handling systems and inbound and outbound processing facilities to improve resilience, redundancy, and capacity.
- Enhanced ground transport facilities.
- City View expansion providing integrated and centralised passenger dwell, retail and airline lounge opportunities.

T2/T3 Integrated Operations Precinct

An expanded T2/T3 Integrated Operations Precinct – with new infrastructure between/or adjacent to the existing T2 and T3 terminals – will provide Sydney Airport with the flexibility and capacity to meet increased and fluctuating demand for international, domestic, and regional operations. An adaptable approach with improved security processing will make welcoming international arrivals smoother through a new centralised point.

Over the 20-year planning period, there are a series of proposed changes specific to the T2/T3 precinct that will support aircraft utilisation and airline service delivery.

There are a number of different options to expand and integrate services in the T2/T3 precinct. In Map 8-2, Sydney Airport has set out examples of development options. Future development decisions would be made in collaboration with our airline partners, subject to aviation demand and following extensive stakeholder and community consultation.

These options consider:

- The integration of T2/T3 into a single terminal precinct with improved connectivity, flexible facilities, increased contact aircraft bays, and increased capacity for international and domestic departures and arrivals.
- International capability through a common-use outbound terminal processor with segregated international arrivals.
- Apron reconfiguration to cater for a greater variety of operating aircraft.
- Staged retention of Jet Base infrastructure as required to meet aircraft maintenance requirements.
- Automation of passenger services.
- New associated freight facilities to cater for the integrated operations.



A Southern Terminal Expansion

Expansion for additional aviation support (baggage, terminal and bussing) and commercial facilities

B Pier B South Extension

Extension to accommodate additional aircraft contact capacity (access directly to terminal)

C South West Sector Activation

Activation of existing layover bays to allow arrival and departure of passenger aircraft

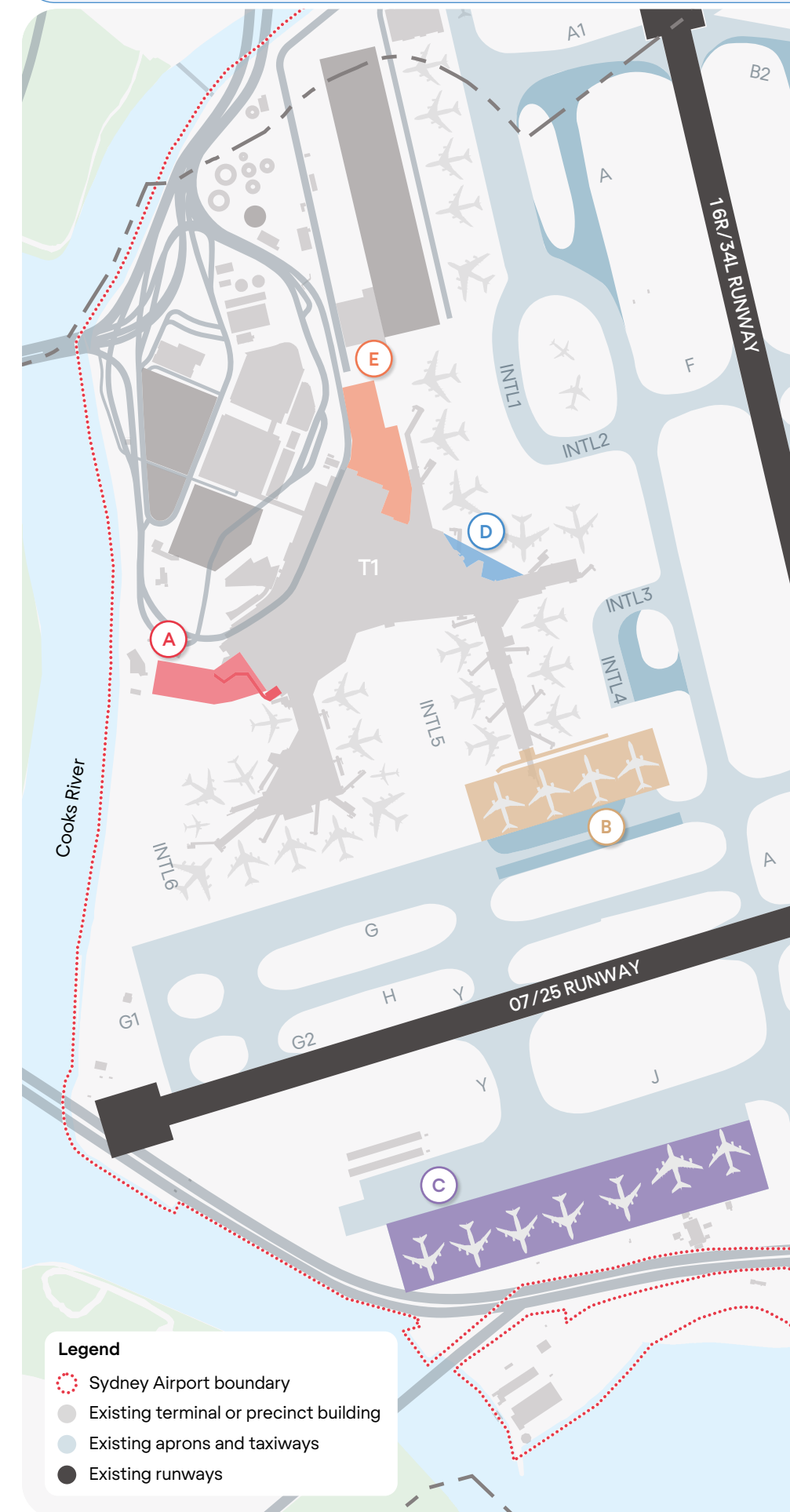
D City View Expansion

Expansion to accommodate additional seating, retail, food and beverage with potential bussing and airline lounge

E Northern Terminal Expansion

Expansion for additional lounges and aviation support (baggage, terminal transfer and bussing)

Map 8-1 T1 International Operations Precinct Terminal Development Plan 2045

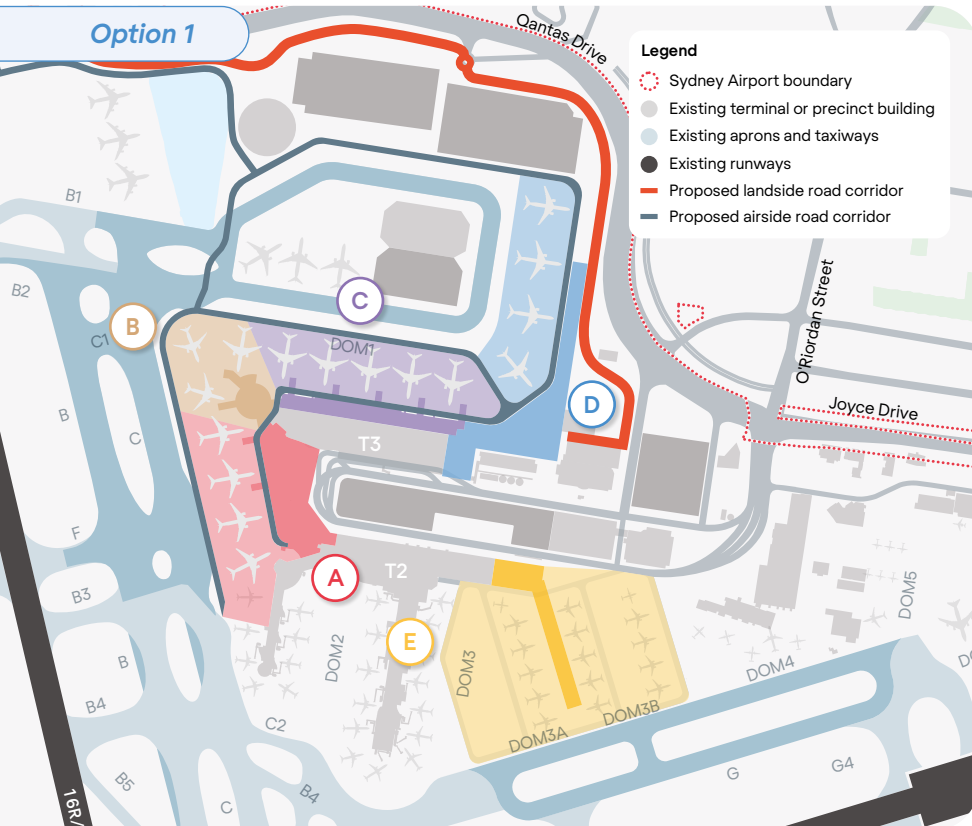


Section Two Airport Development Plan

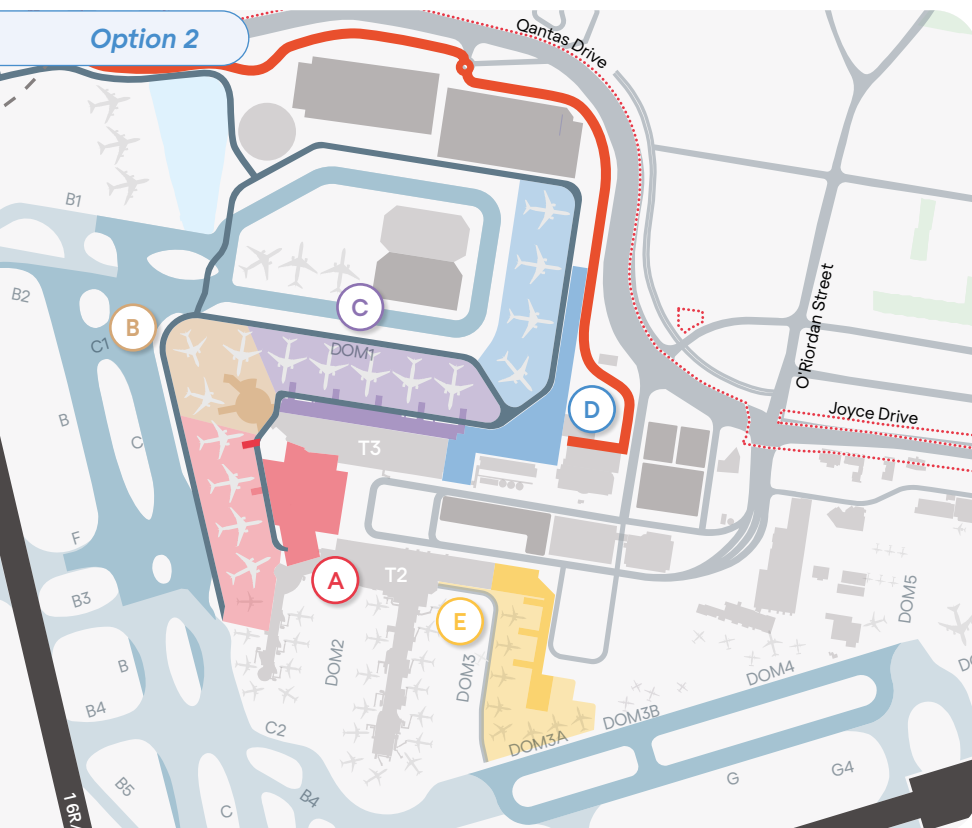
8. Terminal Development Plan

Map 8-2 T2/T3 Integrated Operations Precinct
Terminal Development Plan 2045

Option 1



Option 2



A New Western Concourse

Expansion and link between T2 and T3 to accommodate domestic and international aircraft, passenger processing and dwelling areas, retail, food and beverage, other commercial uses, bussing and airline lounges. The alignment, shape and scale of the proposed development is indicative and subject to consultation and detail design

B T3 Rotunda upgrades

Upgrade of existing terminal rotunda to accommodate domestic and international aircraft, passenger processing and dwelling areas, retail, food and beverage, and other commercial uses

C T3 North Face upgrades

Upgrade of existing terminal to accommodate domestic and international aircraft, passenger processing and dwelling areas, retail, food and beverage, and other commercial uses

D New T3 North Pier

Extension to accommodate additional contact gates, airlines lounges, new dwell area, retail, and food and beverage areas

E New T2 Pier C

Extension to accommodate additional contact gates, airline and departure lounges, new passenger dwell area, retail, and food and beverage areas. The alignment, shape and scale of the proposed development is indicative and subject to consultation and detail design



Artist's impression: Western Concourse.

Departing passenger plan

Before heading to the airport, passengers will use smart airport technology to access information on optimal travel modes, vehicle and people traffic, and anticipated travel and processing times.

Departing passengers will soon be able to directly access our terminals in weather-protected connections from multi-modal transport facilities, minimising interaction with vehicles.

Passengers will use new-generation bag drop facilities, skipping the check-in counter and enjoying the efficiency of an improved baggage handling system.

New technologies, such as biometrics, will improve emigration, border control and security processing to facilitate a seamless passenger experience. Any future security requirements, including enhanced inspection points, changed technology, screening facilitation, or intervention rates, will be accommodated within the expanded footprint of the terminal.

After security, all passengers proceed to an enhanced retail and entertainment environment, with dwell zones, airline lounges and gate lounges directly boarding aircraft through new aerobridge and associated support facilities.

For passenger boarding at remote aprons, convenient shuttle bus services will transfer passengers from new facilities to remote active stands. In a northern T1 extension, passengers may board aircraft directly from airline lounges.

Airline product differentiation is offered through dedicated departures processing facilities, accessible directly from ground transport facilities.

Section Two Airport Development Plan

8. Terminal Development Plan

Arriving passenger plan

Passengers arriving at Sydney Airport will enjoy improved efficiency and reduced processing time. Smart airport technology will enable staff to respond in real-time, direct passengers to optimal processing paths, and utilise both landside and airside space effectively.

Arriving and departing international passengers will continue to be separated in line with security and border control requirements.

Expanded facilities and new technologies offer passengers a smoother border control processing experience. We will continue to work with the Australian Government agencies responsible for border control to accommodate customs and quarantine requirements.

The arrivals and baggage reclaim halls may be expanded with additional baggage reclaim units to meet future demand.

Transfer facilities for moving between international and domestic or regional flights remain adjacent to the terminal. Passengers will be processed through a common-use transfer lounge and can travel between the T1 International Operations Precinct and the T2/T3 Integrated Operations Precinct via an airside corridor.

Terminating passengers continue to have the choice of transport modes including train, bus, taxi, rideshare, limousine, rental car, and public parking facilities.

Intra-terminal transfer passenger plan

Intra-terminal transfer facilities for international travellers transferring or transiting within T1 will use a common transit screening point.

Transfer facilities for passengers moving between international, domestic and regional flights within the T2/T3 Integrated Operations Precinct are planned to be under ‘one roof’ and incorporated into terminal expansions and new infrastructure. Proposed new airside and landside links will be provided between the T2 and T3 buildings.

Facilities will be enhanced as needed to meet future requirements.



Inter-precinct airside transfer plan

We are reducing inter-precinct transfers and minimum connection times (MCT).

While some airlines currently provide passengers with a dedicated inter-precinct transfer product, passengers of other airlines use the Sydney Airport T-Bus, trains, rideshare services or taxis to travel between the precincts.

The ability to transfer passengers and baggage within the same or adjacent terminal facility is the most reliable, convenient and efficient method of transfer, significantly reducing the MCT.

New airside transfer services and conveyance of rolling stock will let passengers move between flights without being processed twice, using a dedicated shuttle corridor for easy connections.

9. Airfield Development Plan

The Airfield Development Plan sets out to improve airfield and aviation support infrastructure, responsibly planning for forecast demand in 2045.

To support terminal developments, Sydney Airport’s airfield will be better equipped to accommodate growth. Simulation modelling has validated plans to improve taxiing, passenger experience, and operational efficiency.

All plans will include sustainable technologies and practices that meet our BES Standards, delivering environmental solutions.



Taxiways and aprons

- Facilitate integrated operations in the T2/T3 Precinct.
- Additional and upgraded contact capacity at T1.
- Additional active remote and layover aircraft parking stands in the North East, South East and South West sectors to increase capacity.
- Additional active remote aircraft parking in the South East Sector.
- Taxiway upgrades will be developed consistent with aviation safety legislation.



Supporting infrastructure

- Additional storage areas for GSE, along with further deployment of next-generation FEGPUs and PCAs at aircraft parking stands.
- Expansion of the JFI facility and extension of apron hydrant systems to serve new terminal infrastructure and remote stands.
- Progressive relocation of aviation support facilities in the North East Sector and new aviation support facilities in the South East Sector.
- Continuous improvements to air navigation and surveillance.



Freight facilities

- Consolidation and redevelopment of freight facilities in the T1 International Operations Precinct and T2/T3 Integrated Operations Precinct.
- Development of new freight and logistics facilities in the North West, North East, Northern Lands and South East sectors to provide efficient and effective handling of freight.

The Airfield Development Plan prioritises sustainable growth while minimising environmental impacts. We will stay flexible for new aircraft types, industry trends, and decarbonisation initiatives like SAF and hydrogen and electric planes, and focus on sustainability in all developments. For example:

- Energy efficiency initiatives will be integrated into taxiway and apron improvement projects.
- All new aircraft maintenance hangars will be free of perfluoroalkyl and polyfluoroalkyl substances (PFAS).
- BES Standards will be adopted by Sydney Airport airfield infrastructure projects.



Airfield development approach

Apron and parking stand demand

Planned apron and parking stand developments are designed to meet the 2045 ‘busy day’ forecast for aircraft parking and airfield demand (see Chapter 6 Air Traffic Forecasts), based on the largest aircraft using each stand.

Testing confirms they will meet forecast demand (see Table 9-1), and the flexible design can adapt to changing airline needs.

Table 9-1 Forecast apron and parking stand demand, 2045

Contact/Bus	Category	T1	T2/T3
Active			
Contact	Widebody	25	12
Bus	Widebody	16	
Contact	Narrowbody	2	32
Bus	Narrowbody	3	12
Active total	102	46	56
Layover			
	Widebody		26
	Narrowbody		8
Layover total			34

Airfield modelling

Based on a series of assumptions agreed with Airservices Australia, we undertook airfield simulation modelling to verify the capacity and efficiency of the 2045 Airfield Development Plan.

- The airfield modelling used a gate-to-gate fast-time simulation model, structured around:
- The Airfield Development Plan for the 2045 airfield movement area layout.
 - The 2045 representative busy day forecast schedule.
 - Weather assumptions facilitating maximum runway capacity in parallel runway modes of operation (RMO) 9 and 10 used during peak demand periods.
 - Calibration and testing against the existing traffic and movement area configuration.

- Proposed taxiway enhancements consider congested areas, with new taxiway configurations developed to minimise conflicts under the most demanding conditions. As shown in Map 9-1, these enhancements are proposed to be delivered in the short-to-medium term. The modelling demonstrates:
- Improved capability for aircraft departure queues near runway thresholds.
 - Reduction in aircraft taxiing conflicts.
 - Capability to assist with disruption management.
 - Capability to accommodate the performance characteristics of all aircraft types.
 - Elimination of the need for jet aircraft operating from the North East Sector to cross Runway 16R/34L.
 - Enhanced efficiency, safety and environmental outcomes with aircraft departures to the west from taxiway extensions to the south of Runway 16R/34L.

Section Two Airport Development Plan

9. Airfield Development Plan

Proposed airfield developments

Taxiway developments

- 1
- Realignment of Taxiways B and C between the Runway 16R threshold and Taxiway G if required to accommodate independent Code E operations, and retain Code F capability on Taxiway B – planned to be undertaken by 2030
- 2
- Taxiway access improvements to the reconfigured maintenance and freight precinct in the North East Sector – planned to be undertaken by 2030
- 3
- Dual taxiway A to facilitate improved efficiency
- 4
- Extension of Taxiway U1 between Taxiway L and B10 to enhance safety and provide taxiway flow flexibility – planned to be undertaken by 2030
- 5
- Development of an additional entry/exit taxiway on Runway 16L/34R between Taxiways T2 and T3 for more efficient regional aircraft operations – planned to be undertaken by 2030
- 6
- Extension of Taxiway B to the full length of Runway 16R/34L, eliminating runway crossings and allowing for optimised departure sequencing, runway access and balancing, increased safety, and fuel burn reduction – northern stage 1 planned to be undertaken by 2030
- 7
- Development of an additional runway crossing on Runway 16R/34L between the extended Taxiway B and Taxiway A (south of Taxiway L)
- 8
- Development of an eastern rapid exit taxiway (RET) to B10 for Runway 16R arrivals heading to the North East Sector
- 9
- Potential realignment of Taxiway G south of T2 and development of a new parallel Code C taxiway to improve aircraft circulation

Apron and parking stand developments

North East Sector (T2/T3 Integrated Operations Precinct)

- 10
- Development of the existing T3 terminal building to allow for progressive upgrades to Code E contact swing gates, accommodating increased wide body aircraft, and international and domestic operations
- 11
- Development of T2 Pier C to provide contact gate for displaced domestic demand
- 12
- Development of additional remote Code C/TP gates for displaced domestic demand
- 13
- Redevelopment of DOM1 Southern hangar line to provide taxi access for larger aircraft types and additional Code C/TP gates for displaced domestic demand
- 14
- Terminal integration to facilitate international and domestic swing gates

South West Sector

- 15
- Progressive extension of active gates

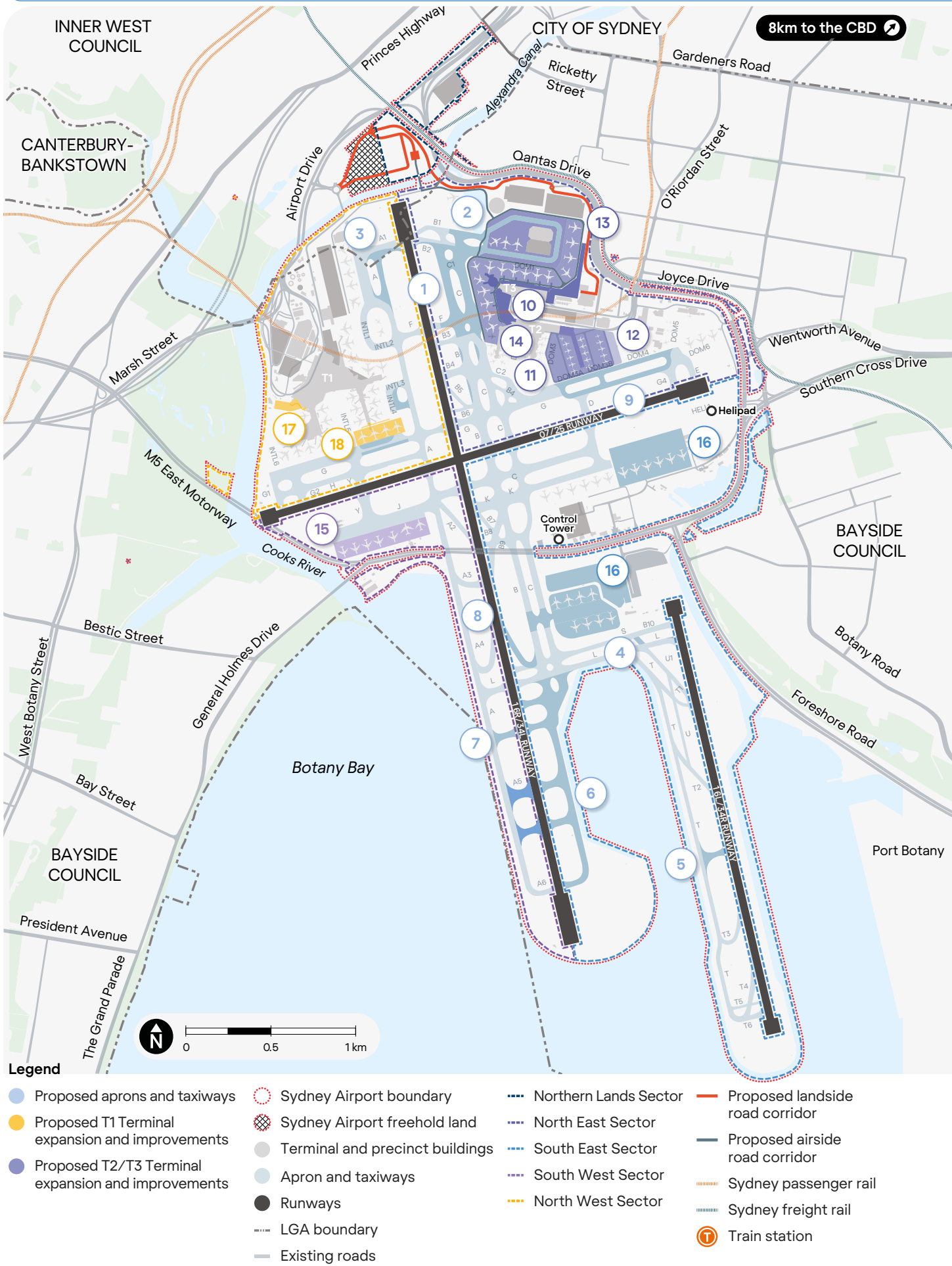
South East Sector

- 16
- New remote parking and development precincts to provide flexibility to meet future requirements for apron and aviation support (i.e. freight, GSE storage, catering and maintenance)

North West Sector

- 17
- Potential additional contact capacity at T1 Pier C
- 18
- Potential additional contact capacity at T1 Pier B South

Map 9-1 Airfield Development Plan 2045



Section Two Airport Development Plan

9. Airfield Development Plan

Airfield supporting infrastructure

Sydney Airport continually upgrades airfield supporting infrastructure to meet demand and improve safety and operations.

Sydney Airport utilises precision approach aids such as instrument and satellite landing systems (ILS) and distance measure equipment (DME) systems, which aircraft utilise. These services are provided by Airservices Australia, which also supplies Required Navigation Performance (RNP) approach procedures enabled by Global Navigation Satellite System (GNSS).

Most modern aircraft can fix their position using air navigation systems, such as satellite-assisted navigation technology.

On-board aircraft technologies support standard instrument departures (SIDs) and standard arrival routes (STARs).

For more information on existing air navigation and surveillance technologies and infrastructure, see Appendix C.

Airservices Australia facilities and services

Proposed developments to the South East Sector in Master Plan 2045 will be designed to accommodate the existing ATC tower sightlines and ARFF line-of-sight requirements, along with navigational and radar aids and future airside fire station requirements.

Given the criticality of these services to all airport users, we maintain an ongoing dialogue with Airservices Australia on a range of issues, including:

- The impact and timing of any developments on the manoeuvring area.
- Protection of potential sites for any new ATC tower near the centre of the airfield, and advanced surface movement guidance and control system (A-SMGCS) remote units, with appropriate sites to be made available when required.
- Protection of centralised location for airside fire station optimisation and enhancement of airside operation.

Aviation supporting infrastructure

Aviation support infrastructure is essential to airport operations and includes facilities for:



Sydney Airport will continue to support aviation infrastructure, with growth driving future developments such as terminal and apron expansion, and possible expansion and relocation of some aviation support infrastructure.

The Airfield Development Plan provides Sydney Airport with maintenance and engineering facilities across the aerodrome to accommodate latest generation aircraft, including:

- Additional aircraft parking.
- Increased aviation fuel storage areas.
- New GSE storage areas.
- Additional areas for maintenance, flight catering, and freight handling and transport facilities.
- Upgraded capacity and distribution for utilities and services.

Corporate and general aviation

Corporate and general aviation operators are an important part of the aviation community at Sydney Airport, alongside essential aeromedical services. Legacy support facilities may be progressively upgraded as required to accommodate and facilitate a new generation of quieter and efficient aircraft. New facilities may be accommodated in the South East Sector as required.

Regarding access to arrival and departure slots, the forecast schedule hourly aircraft movements show availability during the middle and end of the day for itinerant corporate and general aviation fixed-wing movements. Helicopter movements to and from Sydney Airport will continue to be facilitated as they are currently.

Ground support equipment (GSE)

GSE refers to the range of motorised and non-motorised equipment used to service aircraft between flights while passenger and cargo loading and unloading, maintenance and other activities are carried out. This includes baggage and cargo equipment, buses, stairs, vehicles used for aircraft refuelling, waste disposal, servicing and catering, and more.

For efficiency of aircraft turnaround, it is important GSE storage and staging is accessible from aircraft parking positions. The required area depends on the number of each aircraft type served during peak periods.

Many ground handlers, contracted to airlines to provide aircraft support services, utilise the GSE. The Airfield Development Plan proposes more GSE storage and maintenance facilities at new parking stands and remote areas to improve efficiency and use across the airfield.

New GSE storage and maintenance facilities are proposed in the South East Sector, to replace facilities that are to be relocated to accommodate expansion in the North East and North West sectors.

Additional satellite facilities will continue to be provided near terminals.

Sydney Airport will keep exploring and using new technology to boost efficiency, reduce manual handling, and cut emissions through enabling electric GSE.

Section Two Airport Development Plan

9. Airfield Development Plan

Aviation fuel

Sydney Airport acquired the JFI facility in September 2020 and appointed Skytanking, a global leader in aviation fuelling services, to operate and maintain it from 1 October 2020.

The JFI facility is expected to remain and be expanded on its current location in the northern part of the North West Sector. It comprises:

- Five storage tanks with a maximum capacity of 29 megalitres (ML) of aviation fuel, which currently provides up to three days' supply for the airport.
- 11 hydrant pumps, used to pressurise the hydrant lines, with a capacity of 45,000 L per minute at 1,000 kilopascals (kPa).
- Approximately 11 km of underground pipelines (the reticulation hydrant network) connecting the storage tanks to the international and domestic terminals.
- 170 hydrant points at the aprons of the international and domestic terminal aircraft bays.

In addition to the JFI, some corporate and GA operators at Sydney Airport have small refuelling storage facilities and equipment close to their operations.

The area surrounding Sydney Airport contains significant aviation fuel supply and storage infrastructure, with an estimated storage capacity of approximately 196 ML.

While some jet fuel is supplied to the Sydney Airport JFI facility by trucks, it is primarily sourced via two independently owned pipelines:

- Viva Energy pipeline from Clyde Terminal.
- Ampol pipeline from Kurnell Terminal via Port Botany.

Aviation fuel is pumped through the Ampol pipeline from separate facilities, including the Ampol Kurnell facility and the Vopak storage facilities in Port Botany.

Aviation fuel imports are currently handled through Gore Bay and Port Botany terminals and distributed across Sydney Airport via a network of underground pipelines from the JFI to apron hydrant outlets, adjacent to aircraft gates.

Into-plane (ITP) dispensing is undertaken directly by the fuel companies (or their appointees) at the aircraft parking position. Where hydrant access is not available, bulk tanker vehicles are used to fuel some aircraft.

To meet forecast demand for aviation fuel, the following will be required:

- Upgraded supply from Port Botany which is recommended to include sustainable aviation fuel (SAF) storage and blending infrastructure.
- New storage tanks, ancillary infrastructure, related pumping equipment and pipework.
- Extended and augmented hydrant lines, servicing new terminal extensions, aircraft parking configurations, and remote active aprons.
- Tankering operations to remote aprons where hydrant access is not available.
- Upgrades or relocation of ITP workshop and ancillary facilities.

Sustainable aviation fuel (SAF)

Sydney Airport supports the Australian Government's work to develop a domestic low-carbon liquid fuels industry and is committed to helping grow a local SAF industry. In May 2025, this commitment was formalised in an MoU with Qantas to work towards this goal through joint advocacy and research.

As discussed in Chapter 4 Decarbonisation Initiatives and climate resilience, SAF is widely recognised as the primary pathway for aviation to credibly reduce carbon emissions in the medium-long term. With IATA's goal to reach net zero carbon emissions in aviation by 2050, it is expected that use of SAF will increase through the planning period.

Our long-term goal is for 50% of fuel at Sydney Airport to be SAF by 2050, although we recognise that this will require the right policy settings by government and the development of a local SAF industry. Progress has already been made towards this goal, with the largest ever commercial import of SAF into Australia made in May 2025.

Sydney Airport supports the NSW Renewable Fuels Strategy and continues to advocate for further SAF-specific policy support to enable the state to realise the opportunities associated with NSW-based SAF refining capacity.

In early 2026, the University of NSW (UNSW) delivered a NSW SAF Techno-Economic Analysis (TEA) for Sydney Airport in collaboration with Boeing Australia, Qantas, and the NSW Government. Sydney Airport looks forward to engaging further with the NSW Government on implementing the recommendations from this analysis and realising the benefits that a NSW-based SAF refining industry can bring to the NSW state economy, jobs creation, regional development, and fuel resilience.

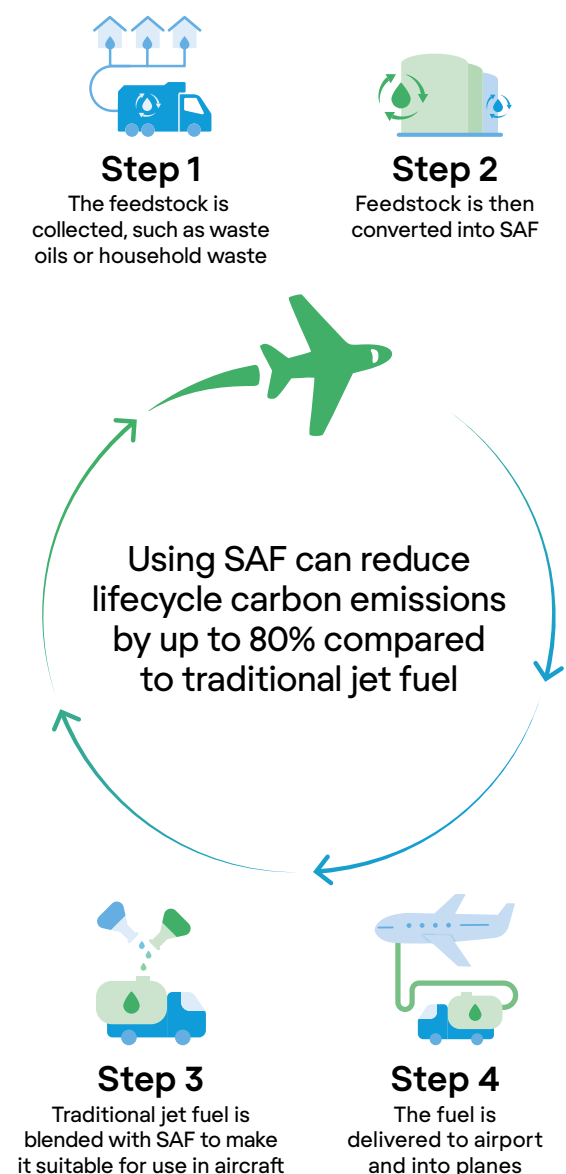
Currently, the blending of up to 50% SAF with conventional aviation fuel (CAF) is acceptable for use in commercial aircraft of all ages (this limit is expected to increase in the future). Blended CAF and SAF is likely to be the predominant fuel type required for aviation energy from 2025-2050.

Sydney Airport is well placed to receive SAF blended as a drop-in fuel in Jet A1. For continued compliance with the aviation fuel supply chain standards (JIG standards), 100% SAF would need to be manufactured by the approved pathways, certified for use, and blended off-site (see Figure 9-1). If this standard is met, there are no physical or other barriers to the use of blended SAF at Sydney Airport.

No changes to infrastructure, fuel quality controls, or operating standards are needed to accept blended SAF as a drop-in fuel. This allows for use of SAF as an interim solution while electric and clean hydrogen powertrains are developed, tested and deployed, and while the ground infrastructure is built out.

Figure 9-1 SAF production process

The production process for sustainable aviation fuel (SAF)



Source: Air bp, 'What is sustainable aviation fuel (SAF)?', <https://www.bp.com/en/global/air-bp/news-and-views/what-is-sustainable-aviation-fuel-saf-and-why-is-it-important.html>

Section Two Airport Development Plan

9. Airfield Development Plan

Air freight facilities

Sydney Airport has a number of freight facilities in the North West and North East sectors, servicing international and domestic freight. These facilities are leased and operated by a variety of companies.

The total on-airport land and building areas (warehouse and office total area) dedicated to freight are outlined in Table 9-2. On-airport infrastructure is supported by an off-airport air freight ecosystem, including freight forwarders and ground transport service providers that interface with the Cargo Terminal Operators (CTOs).

Table 9-2 Size of freight facilities at Sydney Airport, 2024

Terminal precinct	Land area (ha)	Building area (m²)
T1	9.2	37,823
T2/T3	4.5	25,099
Total	13.7	62,922

Sydney Airport aims to be a more active player working collaboratively in the air freight supply chain to improve outcomes for all participants.

A potential investment will deliver enhanced full-service on-airport freight facilities within ten years. The world-class solution will enhance connectivity with Australia's national supply chain and drive further efficiency in air freight processing to meet global KPIs.

The development of additional freight facilities will:

- Provide sufficient cargo terminal operating facilities in the vicinity of passenger terminals to support growth in freight volumes (i.e. up to 1.4 million tonnes by 2045).
- Improve airport land and infrastructure efficiency.
- Improve safety and reduce congestion by minimising the interface between landside freight and passenger traffic.
- Include sustainability-in-design principles, access to renewable electricity, and eGSE charging infrastructure.

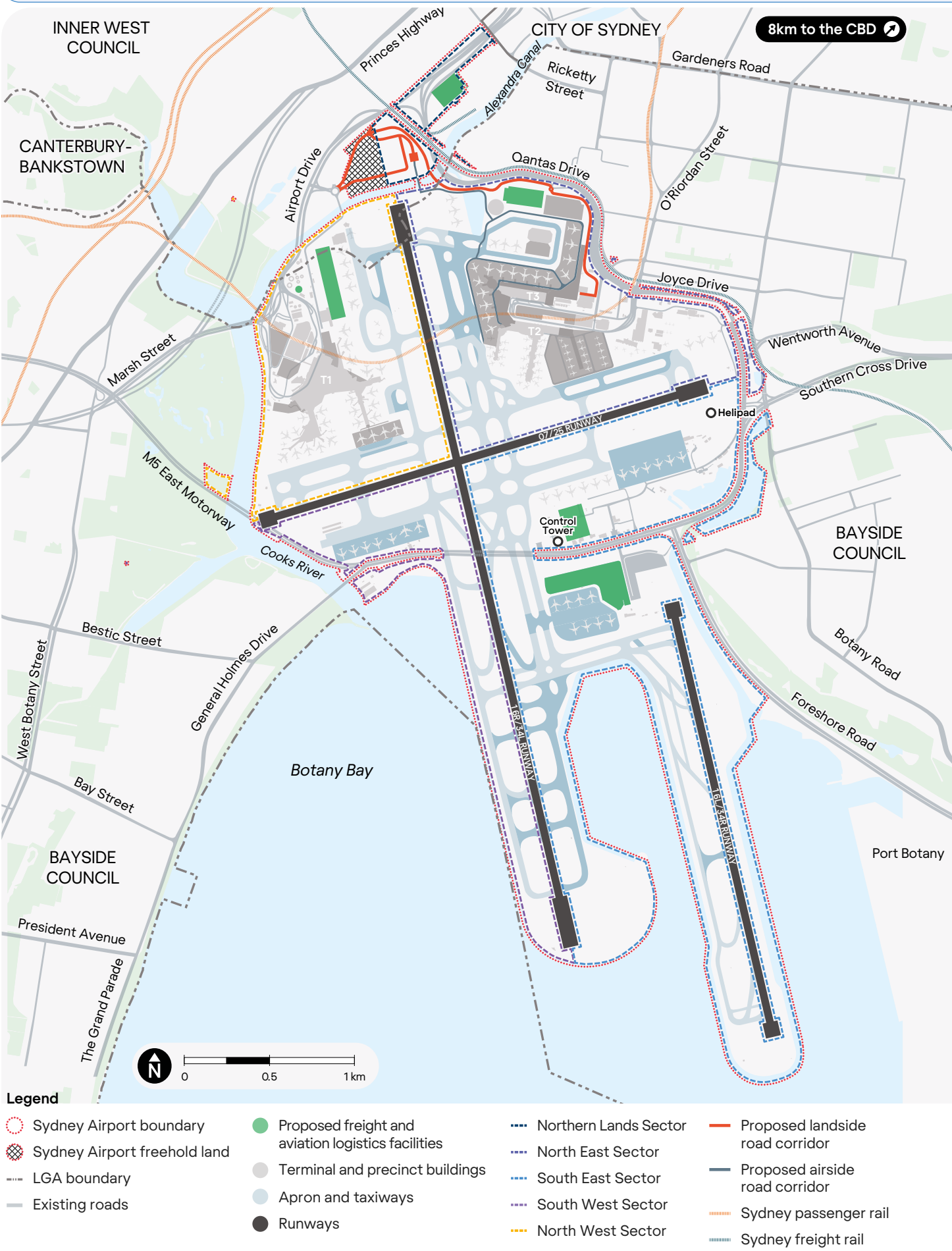
Accordingly, we propose to consolidate freight facilities at the T1 International Operations Precinct and the T2/T3 Integrated Operations Precinct, and develop new areas and ground access arrangements as illustrated in Map 9-2.

Flight catering facilities

While there is a facility in the North East Sector, most flight catering facilities are located off-airport.

Flight catering facilities will continue to operate from a balance of on and off-airport locations. There is potential for new facilities to be located on the airport site, if demand requires.

Map 9-2 Proposed freight and aviation logistics facilities



Section Two Airport Development Plan

9. Airfield Development Plan

Aircraft maintenance facilities

Any development of aircraft aprons, maintenance or other support facilities at Sydney Airport will maintain the integrity of associated Airservices Australia facilities, including radars, navigation aids and fire stations.

Proposed aviation support facilities for use by airlines, third-party service providers and their customers may include hangars, workshops, offices and staff amenities.

While line maintenance is usually undertaken at the aircraft gate, new facilities would cater for:



Base maintenance

Requiring 20 to 36 hours ground time in a hangar with simple access docking, or at an apron from the terminal. Some non-routine maintenance and supplemental checks can be carried out at an aircraft parking position in favourable weather conditions.



Heavy maintenance

Requiring significant ground time (6 to 50 days) in a hangar with extensive docking capability.

Proposed developments by sector (see Map 9-3)

North East Sector



In support of the proposed T2/T3 Integrated Operations Precinct, two aircraft maintenance areas in the North East Sector may be expanded, accommodating forecast passenger growth:

- Areas north of the existing T3 can potentially be made available for development of new maintenance and engineering facilities to the northern perimeter of the current site.
- The eastern part of the sector will be used for the maintenance and facilitation of GA and corporate aviation aircraft.
- New maintenance hangars.

South East Sector



Land in the South East Sector will be available to accommodate the relocation of displaced facilities and to meet demand for new facilities. This may include:

- New maintenance (typically for base maintenance), engineering and aviation support facilities.
- A range of hangar or canopy bays adjoining aircraft apron parking.
- Other existing developments, including contractor compounds, rental car, vehicle maintenance and catering facilities, may be retained in their current location or relocated over time.

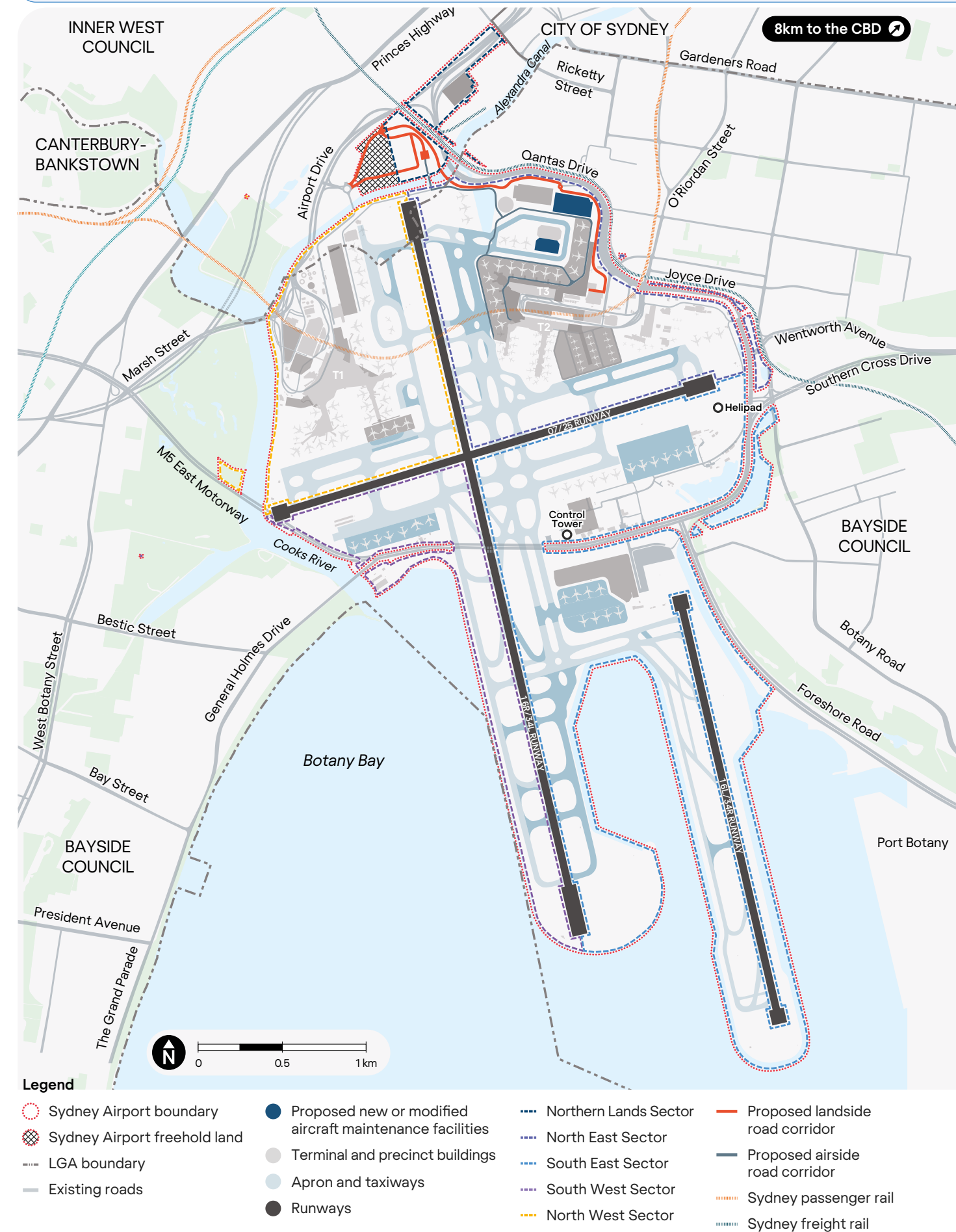
Northern Lands Sector



Developments in the Northern Lands Sector may include:

- Development of airport logistics facilities such as catering, freight and vehicle staging.
- Consolidation of current airfield security gates to a primary location between the North West and North East sectors.

Map 9-3 Future aircraft maintenance facilities



10. Commercial Development Plan

The availability of key services and amenities for airport passengers and workers is essential to providing convenience, time savings, simplified commuter travel and healthy lifestyle choices. The Commercial Development Plan proposes developments to improve efficiency and serve airlines, industry partners and airport users. Such developments to landside areas of the airport could include:

 On-airport offices for government agencies, airlines, and other airport service providers in aviation.

 Retail and food and beverage premises on-airport, outside of terminals.

 A variety of convenient hotel accommodation choices.

 Rental car products, servicing different market segments.

 Warehousing, maintenance and storage facilities.

Most of Sydney Airport is dedicated to aviation, leaving limited land for commercial use.

Our planning focuses on agility and flexibility, guided by customer research to anticipate changing needs and meet demand for diverse services from thousands of daily passengers, community and business partners.

These priorities are outlined in the Airport Development Plan (Map ES2-1) and detailed in Chapter 13 Land Use Plan.

Commercial services at Sydney Airport

- Hotel accommodation
- Commercial and serviced offices
- Meeting, conference and function facilities
- Food and beverage outlets
- Medical facilities
- Banking
- Convenience stores
- Staff support services
- Luggage services
- Rental car
- Pet consignment and boarding
- IT services
- Advertising and commercial signage
- Airline lounges
- Retail facilities
- Currency exchange

Commercial development strategy

Sydney Airport’s strategy for commercial development seeks to provide for a range of commercial land uses that support the airport’s aviation function, while providing civic amenity.

We are aware of increasing demand from businesses and agencies for facilities close to the airport or airside that support their operations, such as administrative offices. The timing and details of proposed developments will also be informed by market-driven factors and demand.

When assessing options and the merits of commercial developments, Sydney Airport considers the highest and best use of the subject land, customer value, and both developmental and operational sustainability credentials, through implementation of our BES Standards.

Our highest priority is the delivery of aviation needs and proposed terminal and airfield improvements (see Chapter 8 and Chapter 9). These developments may progressively displace some existing commercial activities.

The relocation of activities will be facilitated by ongoing occupancy tenure reviews and exploration of short-to-medium term alternative land uses. Land that isn’t required for aviation uses until later in the planning period could accommodate commercial activities in the intervening period.



10. Commercial Development Plan

Potential commercial development by sector

Map 10-1 indicates potential commercial developments by airport sector, including Sydney Airport freehold land. Aimed at supporting forecast growth and changing needs and trends, it identifies general long-term development considerations and proposed improvements for the first five years of the planning period.

North West Sector (to 2030)

Commercial floor space capacity: 120,000 m² (excluding T1)

- 1
- Additional hotel accommodation up to 500 rooms, including additional floors on exsting hotel, and to the north and south of Terminal 1. Additional airline lounges on upper levels of T1
- Other potential changes/additions:
- 2
- Commercial mixed-use development adjacent to the Cooks River waterfront and near the southern end of the T1 precinct
- 3
- T1 terminal upgrades and modifications to support office accomodation (for airport, airline, agency and service providers), and new airline lounges and commercial developments

North East Sector (to 2030)

Commercial floor space capacity¹: 120,000 m²

- 4
- Additional hotels totalling 500–900 rooms between T2/T3, and adjacent to current precinct hotels on Ross Smith Avenue
- Other potential changes/additions:
- 5
- Redevelopment of Ross Smith Avenue to accommodate a commerical mixed use precinct to support airport users, including potential offices, hotels, and other ancillary service functions (service stations, fast food outlets)
- 6
- New/upgraded facilities, developed in response to proposed terminal and airfield developments, including new or upgraded aircraft maintenance hangars, freight, catering

South East Sector (to 2030)

Freight, logistics and industrial floor space capacity: 70,000 m²

- 7
- Upgraded or new roadside services at the corner of General Holmes Drive and Butler Road to support anticipated ground access arrangements
- 8
- Airport and aviation support facilities (such as aircraft hangars, freight and logistics, airside and landside hardstand) to the south of General Holmes Drive to accommodate displaced facilities
- 9
- Current commercial uses, including rental car support and vehicle servicing facilities, part of the Blu Emu car park, and more, may be displaced for aviation-focused developments
- 10
- Development along Foreshore Road for ancillary roadside services such as fuel station, and fast food outlets
- 11
- Truck inspection facilities along Foreshore Road by Transport for NSW

Northern Lands Sector (to 2030)

Freight, logistics and industrial floor space capacity: 150,000 m²

Sydney Gateway connections facilitate the use of land north of the Alexandra Canal for potential landside and airside aviation support activities such as freight, catering, GSE storage and maintenance, truck staging, car parking, and vehicle storage.

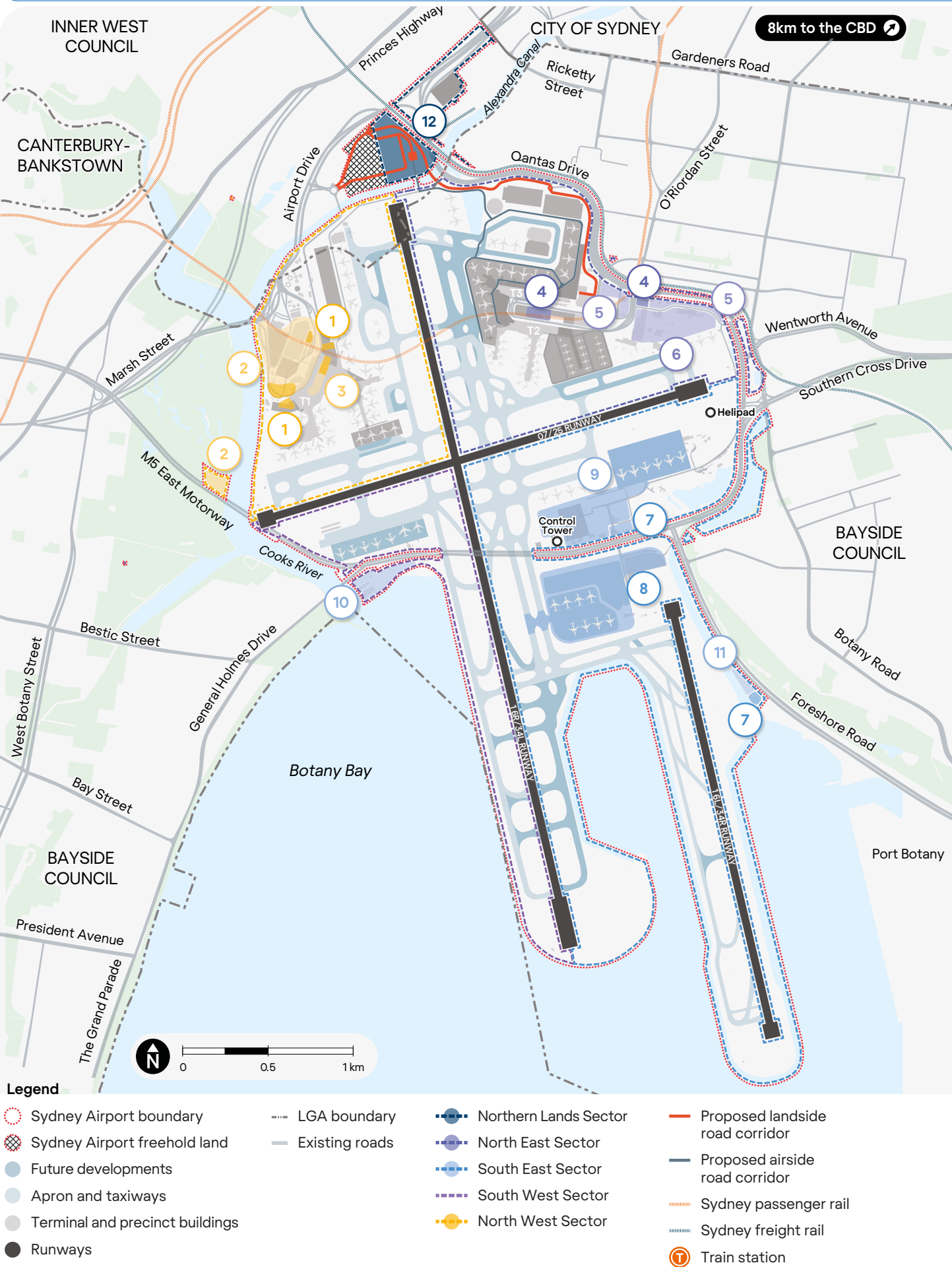
- 12
- The relocation of displaced activities, currently undertaken elsewhere on airport. Additional access connections and ground transport infrastructure are expected to be delivered as part of developing this area

Other airport lands

Sydney Airport may establish roadside services areas and advertising adjacent to transport routes on freehold land.

1. Excluding T2, T3 and potential terminal expansions.

Map 10-1 Commercial Development Plan 2045



10. Commercial Development Plan

Impact on local employment

Sydney Airport facilitates commercial developments which generate significant employment opportunities and have a major influence on the economy.

Table 10-1 outlines the forecast direct employment levels and economic impact of the airport precinct for the period to 2030.

Table 10-1 Sydney Airport impact on the local economy and employment

	2025	2026	2027	2028	2029	2030
Direct jobs (FTE) (number)	38,300	39,800	39,900	40,300	41,000	41,500
Direct economic impact (billions)	\$7.6	\$7.9	\$7.9	\$8.0	\$8.1	\$8.2

Source: 2024 Deloitte Access Economics.

11. Ground Transport Development Plan

Ground access within the airport precinct and beyond is important to our passengers and community. Our forecast growth to 2045 will increase demand on the internal and external transport networks.

To cater for this demand and enhance passenger experiences, our Five-Year Ground Transport Plan and 20-Year Ground Transport Strategy outline proposed improvements to network performance, centred around four key themes.



Infrastructure investment

Strategic network upgrades that are integrated with land use planning.



Demand management

Consideration of Travel Demand Management (TDM) tools for road-based trips such as pricing mechanisms, and dynamic demand and product management supported by real-time information.



Advocacy

Working with internal and external stakeholders to facilitate parallel planning and infrastructure that supports our goals.



Behaviour change

Provide greater user choice, encouraging staff and passengers to use more public or active transport to support sustainability and preserve road capacity.

In the next five years and beyond, potential developments aim to:

- Reduce congestion and conflict points.
- Improve conditions for public and active transport, with upgraded facilities and infrastructure to support increased bus and train services.
- Utilise advanced technology to improve information access and wayfinding to enable better travel choices and experiences.
- Respond to increasing demand for rideshare services by reconfiguring taxi and rideshare facilities to optimise use of available space.



11. Ground Transport Development Plan

Ground transport planning approach and considerations

Our Ground Transport Development Plan is informed by existing ground transport arrangements, trends and assumptions that will impact traffic demand, and a range of internal and external issues and opportunities.

To validate our plan, Sydney Airport has conducted transport modelling to understand our network constraints in the future. This provides confidence that proposed ground transport solutions will effectively accommodate forecast traffic volumes and passenger expectations relating to sustainability and service.

We will continue to use modelling to validate options as they progress through planning, design, and the Major Development Plan (MDP) phase, as appropriate.

Sydney Airport will work closely with Transport for NSW, local government and the local community and their representatives while implementing the Ground Transport Development Plan.

Ground transport since Master Plan 2039

As with broader airport developments, ground transport planning for the next 20 years is heavily influenced by the events, progress and trends since Master Plan 2039 was published.

The impacts of the COVID-19 pandemic were significant, beyond the initial sharp decline and then return of travel. Changes to preferred modes of transport, and therefore shifts in the demand for services and supporting infrastructure, have had a lasting effect.

These unforeseen changes meant that some aspects of the Five-Year Ground Transport Plan 2019–2024 were not delivered as intended.

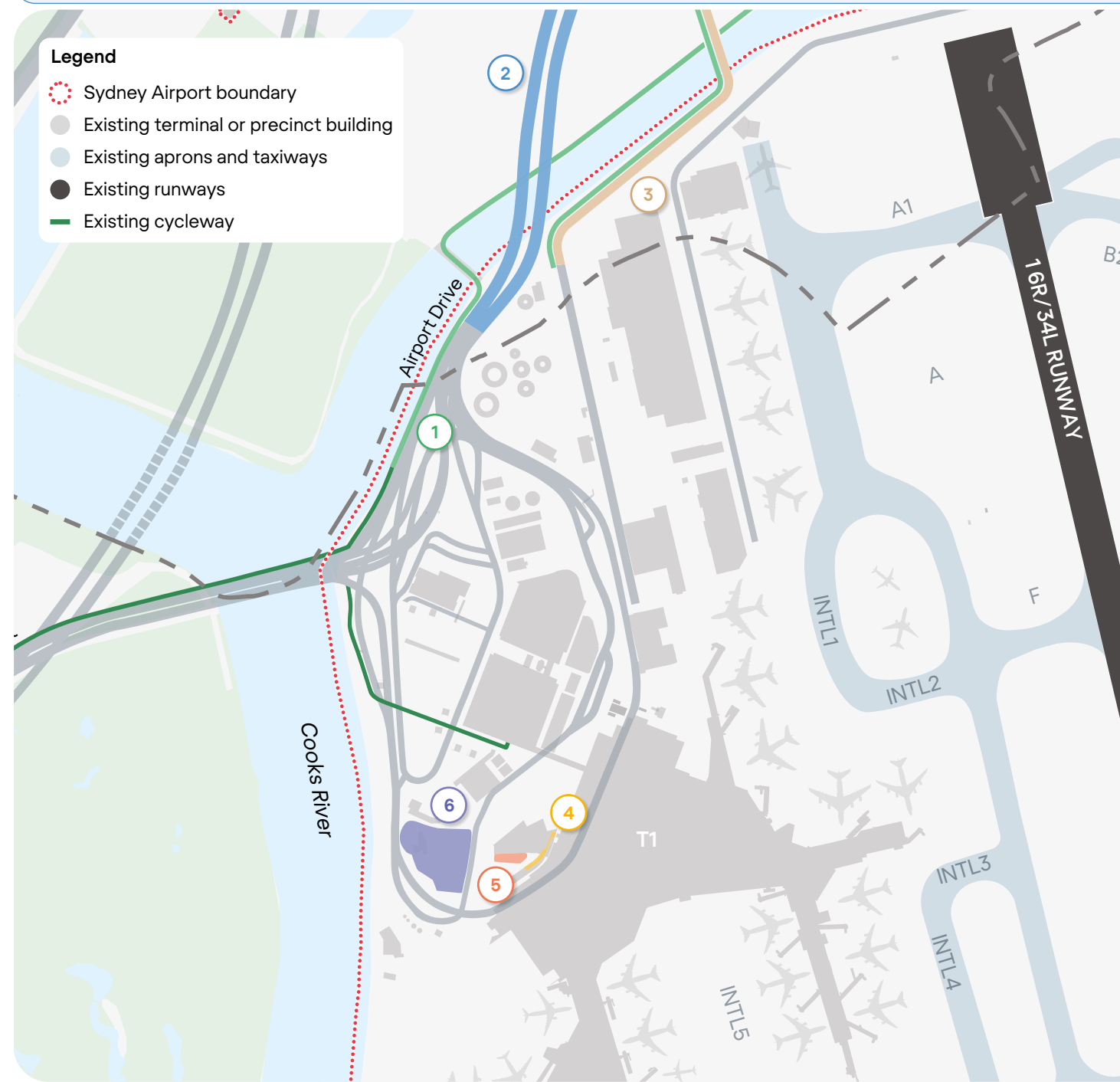
Despite these challenges we have continued to invest in ground transport in recent years and will continue to explore further previously proposed developments in the years to 2030.

Key infrastructure changes since 2019

Sydney Airport, TfNSW and partners have delivered several internal and external transport infrastructure projects which improve mode choice and passenger experience. Developments shown in maps 11-1 and 11-2 reduce travel times and congestion and make it easier and safer for people to get to and from the airport precinct by public or active transport. These include:

- Improved road and freight access via Sydney Gateway (opened September 2024) and other major road upgrades, such as the new St Peters Interchange, M4-M8 Link Tunnels and Rozelle Interchange.
- New, easier and safer active transport connections between all terminals and Tempe and Mascot with over 3 km of pedestrian and cycling paths, a footbridge, and additional bike parking. Speed calming measures have been implemented to slow traffic in high walking and cycling areas.
- Improved user experience with ongoing upgrades to the T8 train line as part of the More Trains More Services program, and increased access to public transport with the opening of Sydney Metro City.
- Additional parking and pick-up and drop-off facilities at all terminals, and new Uber ranks at T1 and T3 kerbsides for streamlined pick-ups, supporting efficient use of private vehicles, taxis, rideshare, coaches and minibuses.
- Share bike trials to test demand for these services.

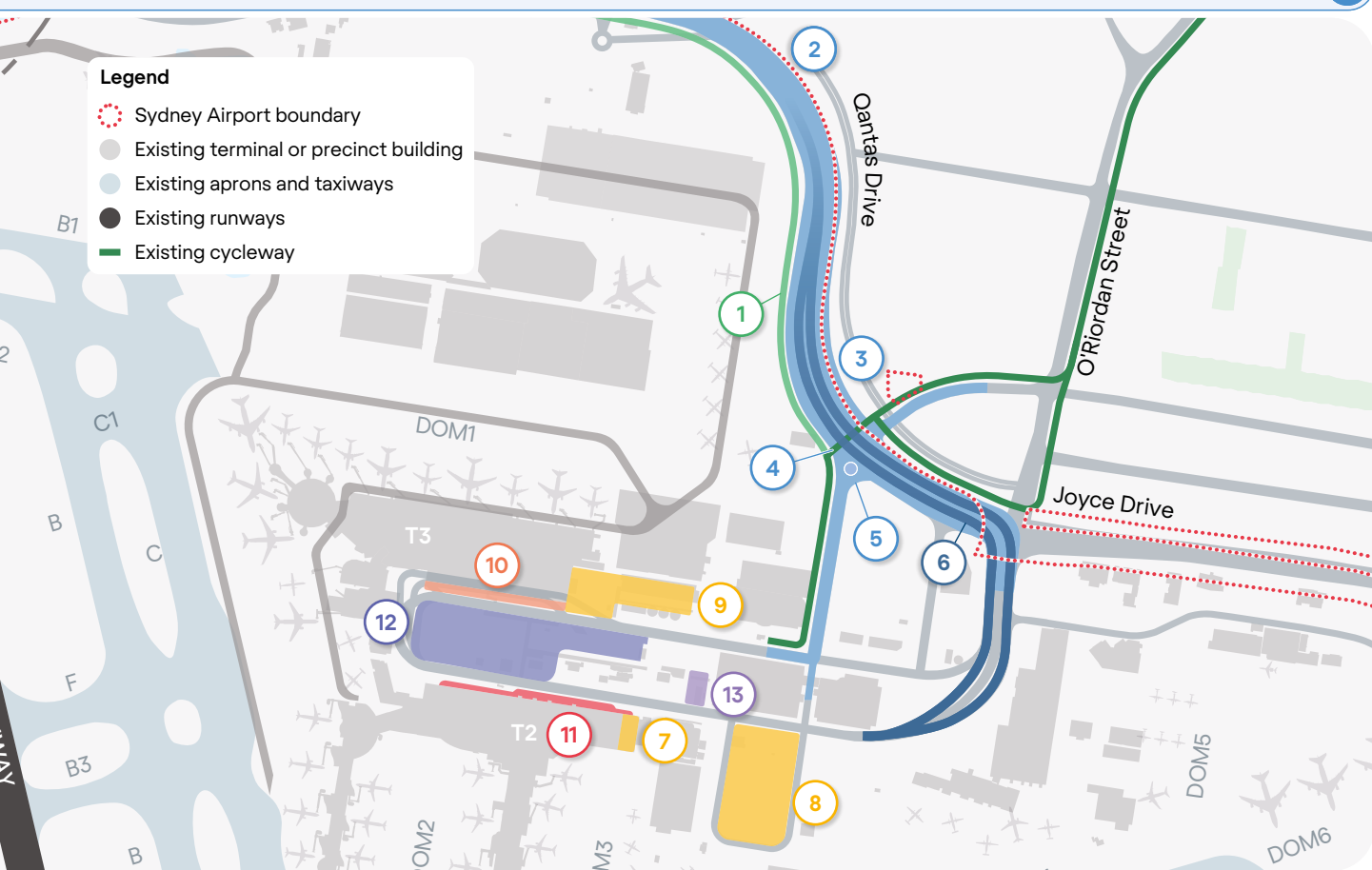
Map 11-1 Ground transport improvements at T1 since 2018



- 1 Delivery of an active transport link connecting T1 and T2/T3 as part of the Sydney Gateway project
- 2 Delivery of a new high capacity connection as part of the Sydney Gateway Project, improving capacity, journey times and user experience
- 3 Delivery of the New Link Road Freight access link
- 4 Delivery of T1 Premium Valet product at T1 Departures
- 5 Provision of Uber facilities at T1 kerbside to provide greater customer choice
- 6 Introduction of Uber holding area at T1 to provide more capacity

11. Ground Transport Development Plan

Map 11-2 Ground transport improvements at T2/T3 since 2018



- 1

Delivery of an active transport link connecting T1 and T2/T3 as part of the Sydney Gateway project
- 2

Widening of Qantas Drive as part of the Gateway Project, improving journey times and user experience
- 3

Improvements to the left turn from Qantas Drive to Robey St as part of the Sydney Gateway Project, improving journey times and user experience
- 4

Improvements to the left turn from Seventh Street to Qantas Drive as part of the Sydney Gateway project, improving journey times and user experience
- 5

Optimisation of traffic signals as part of the Sydney Gateway Project, improving journey times and user experience
- 6

Dedicated flyover from Qantas Drive to T2/T3 entry as part of the Gateway Project, improving journey times and user experience
- 7

Delivery of a T2 Premium Valet offering
- 8

Delivery of FastPark Valet services at T2
- 9

Expansion of Qantas Valet at T3 (under construction)
- 10

Provision of Uber facilities at T3 kerbside to provide greater customer choice
- 11

Continued optimisation of operations at T2 Departures kerb
- 12

Delivery of an interim solution at P1 car park
- 13

Upgraded end-of-trip facilities

Forecasts, trends and assumptions

In line with air traffic forecasts (see Chapter 6), ground transport demand is expected to rise with the increase of passengers, their greeters and farewellers, and the staff needed to meet operational demand. As shown in Figure 11-1, ground transport traffic demand is forecast to grow by up to 32% by 2030 and up to 66% by 2050.

To effectively and sustainably support forecast growth, we need to understand current and future traveller behaviour and how people will travel to and from the airport over the next 20 years.

While remaining flexible to change, ground transport planning and modelling in Master Plan 2045 assumes a range of ongoing trends will continue.

Passenger expectations

With increasing focus on decarbonisation initiatives and reducing the impacts of airport operations, customers and stakeholders expect sustainable ground transport options. We anticipate increasing demand for infrastructure, such as charging stations, that supports electric vehicle usage, and more efficient and accessible public and active transport options.

Technology and demand for access to live information has also evolved since Master Plan 2039. As advancements continue, passenger expectations for the use of information technology to improve travel experiences will rise.

Mode share

Sydney Airport's 2024 Ground Transport Survey showed a change in how passengers travel to the airport. There has been significant increase in rideshare and on-demand services, with a general decline in taxi use. It is expected that rideshare will continue to gain a higher proportion of mode share with a corresponding reduction in taxi shares.

Currently, the majority of greeters, farewellers and staff travel to the airport by private car or by train. Our Ground Transport Survey found that many staff who drive to work do so because the cost of public transport is too high, but the majority would consider travelling by train if driving was not an option.

We expect these trends to continue unless public transport (including frequency, cost and wider network connectivity) to the airport is improved.

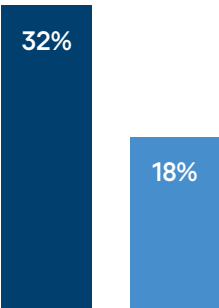
While relevant long-term data is limited, informal observations of on-demand e-bike and bike rack usage suggests that demand for active transport is increasing as connectivity is improved. Active transport presents an affordable and 24/7 option for local airport access, particularly for staff.

Sydney Airport extended peak times

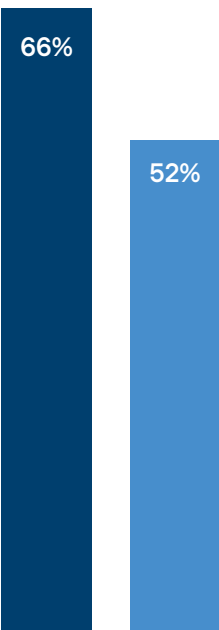
Sydney Airport experiences an early morning peak and late evening peak which do not correspond with the traditional traffic peaks seen on the broader transport network. This means that at these times when demand on the airport is highest, the frequency of public transport is generally lower, increasing demand and pressure on the road network.

Figure 11-1 Forecast ground transport traffic growth

Forecast traffic growth 2024 – 2030



Forecast traffic growth 2024 – 2050



● T1 (International)
● T2/T3 (Domestic)

Section Two Airport Development Plan

11. Ground Transport Development Plan

Issues and opportunities

In developing Master Plan 2045, we have identified key issues and opportunities for improvement across the existing airport ground transport infrastructure and Sydney’s broader transport network.

Capacity constraints

Sydney Airport’s terminal precincts see several capacity constraints, particularly kerbside, approaching departures at T1, at the exit road to Airport Drive, and the airport exit at Seventh Street. The T2/T3 Integrated Operations Precinct’s horseshoe design means that the precinct is spatially constrained and is likely to see increasing challenge with future changes to land use.

Recirculation of rideshare and taxis is placing additional pressure on the existing network and the taxi holding area is often at capacity. Modelling shows taxi and rideshare pick-up points will exceed capacity within the planning period.

In addition to network constraints, insufficient parking capacity and long wait times impact customer experience at the Blu Emu car park.

Land use changes

Over the planning period, proposed changes to land use will impact how people move around the airport, presenting an opportunity to update the ground transport network to optimise access and wayfinding. Land use changes that will have a large impact on the ground transport network include:

- Northern Lands Sector development including a new car park and other commercial facilities.
- Introduction of new and upgraded freight facilities in the North West and North East sectors.
- Eastern terminal expansion, facilitating international operations at T2/T3.
- Expansion of remote parking facilities.



External transport networks

While external road and public transport networks are beyond our remit, Sydney Airport continues to work with the NSW Government for mutually beneficial network outcomes. Ground transport planning is informed by recent government improvements, planned infrastructure developments, and strategies including the [Future Transport Strategy](#) to be sure our internal changes support the broader vision for transport in NSW.

Planned external network changes – through projects such as the Western Harbour Tunnel, the M6 Motorway Extension, including upgraded active transport facilities, and the delivery of Sydney Metro Southwest and West – will provide more route choice and impact how people arrive at the airport.

Public transport is a vital component of the ground transport network to and from Sydney Airport, with the airport rail stations currently servicing around 25,000 trips on a busy day.

As part of the Rail Service Improvement Program, the NSW Government has indicated that the T8 rail line servicing the airport has the potential to provide greater long-term capacity. In March 2025, funding was announced for a preliminary business case for upgrades to support more public transport trips to the airport.

Master Plan 2045 considers how Sydney Airport could be better served by public transport. Sydney Airport will continue to identify opportunities to enhance the journey quality for public transport users upon arrival at the airport precinct. In addition to reducing the cost and increasing the frequency of rail services, we continue to advocate for increased bus connectivity such as:

- A rapid bus route between Sydenham and Mascot train stations, capitalising on the new Sydney Metro.
- The extension of route 420 to better service southern suburbs.
- An extension of route 477 from Miranda to Rockdale to reach the airport precinct, servicing the catchment south of Rockdale, where a significant proportion of our workforce reside.
- Enhancements to services offered during Sydney Airport’s peak hours, noting that these often fall outside of the wider network peak periods.

Section Two Airport Development Plan

11. Ground Transport Development Plan

Five-Year Ground Transport Plan (2025–2030)

Over the next five years, we will implement solutions to improve reliability and efficiency of travel to, from and through the airport precinct.

We are focused on:



Reducing congestion
and conflict points



Supporting the uptake of sustainable
modes by improving conditions for
public and active transport



Improving information access
and wayfinding to enable better
travel choices and enhanced
passenger experiences

This will be achieved through infrastructure delivery, demand management initiatives, policy, technology and advocacy.

In addition to the proposed development options (outlined opposite and in maps 11-3 and 11-4), we will:

- Continue to advocate for enhanced and more affordable public transport.
- Continue to identify opportunities to improve journey quality for public transport users upon arrival into the airport precinct.
- Make sure publicly available information on our website reflects the latest changes to the transport network and explore ways to provide live updates and journey planning advice.
- Explore options and mechanisms to manage growth in pick-up and drop-off demand and diversify terminal access, such as multiple drop-off locations within the airport precinct.
- Investigate infrastructure solutions that encourage the use of electric vehicles by passengers and operators of rental car, driver and rideshare services.
- Develop an overarching Sydney Airport Ground Transport Strategy that will set the long-term direction and priorities for ground transport planning at Sydney Airport. As highlighted in Chapter 8, there are a number of options to expand and integrate the terminals within the T2/T3 precinct. Further development decisions, in particular, relating to ground transport, will be made in collaboration with our airline partners and key stakeholders.

Active transport

To encourage more walking and cycling, especially for staff, we will focus on improving and maintaining facilities and closing gaps in the network to provide a seamless user experience. This includes our support for a cycleway on Sydney Airport land along the western foreshore of the Cooks River.

We will investigate opportunities for secure longer-term cycle parking as part of airport transformation projects, along with active transport links, and delivery of end-of-trip upgrades.

We will investigate monitoring of active transport links and deliver quick end-of-trip upgrades. Improved connections, signage and public information will also support wayfinding for all users in both terminal precincts.

To ensure ongoing engagement with key active transport stakeholders, Sydney Airport has established an Active Transport Forum on which Transport for NSW, City of Sydney Council, Bayside Council, Inner West Council, Bicycle NSW and a number of local Bicycle User Groups are represented. This Forum meets regularly to discuss active transport issues and consider how active transport access to the airport can be improved.

Road network upgrades

Targeted network upgrades will be required to reduce pinch points, provide access to changed land uses, improve efficiency, and accommodate future demand.

An extra exit lane may be added from Cooks River Drive to Airport Drive. We will collaborate with TfNSW to optimise signals at the Seventh Street/Qantas Drive junction and deliver localised upgrades to the Seventh Street approach.

We will review and upgrade access routes to support freight, particularly from Sydney Gateway through the New Link Road and around the Northern Lands Sector to T2/T3.

Parking and transport facilitation

Parking facilities will be reviewed to accommodate expected demand and trends that arise in the coming years.

Proposed improvements include:

- Providing parking options in the Northern Lands Sector, with a shuttle bus service to connect to the terminal.
- Extension to P7 car park.
- New multi-storey P9 car park, delivering approximately 3,000 additional spaces.
- Elevated parking access and/or egress directly from T1 car parks.
- A new P1 car park and ground transport interchange.
- A new P4 car park and ground transport interchange, including connection to elevated entry and exit ramps.
- Improved valet services, including EV charging, and vehicle storage.
- Capacity and access upgrades to support the augmentation of the Blu Emu parking facility.
- Enhancements to the shuttle service to improve journey times and user experience between remote parking facilities and terminals.

Rideshare and taxi

To respond to the increasing demand for rideshare services, we will reconfigure and maximise use of available space in all terminal precincts.

Changes may result in:

- Optimisation of Taxi, Uber, limousine and other rideshare facilities at T1.
- Adjustments to T2 arrivals kerb to accommodate Uber.
- Centralising of taxi services at T2/T3.
- Relocating existing holding areas across both precincts.

To mitigate the impact of recirculation at T1, an access road from Departures Plaza to Cooks River Avenue will provide a dedicated recirculation lane for Uber vehicles, removing them from the core network.

Demand management

There is a limit to the amount of traffic that can be accommodated within the footprint of the airport, particularly within the T2/T3 Integrated Operations Precinct's existing roads, which have terminals to the north and south. A long-term land use reconfiguration and modal shift exercise is required to maximise efficiency inside the precinct and beyond. This may include:

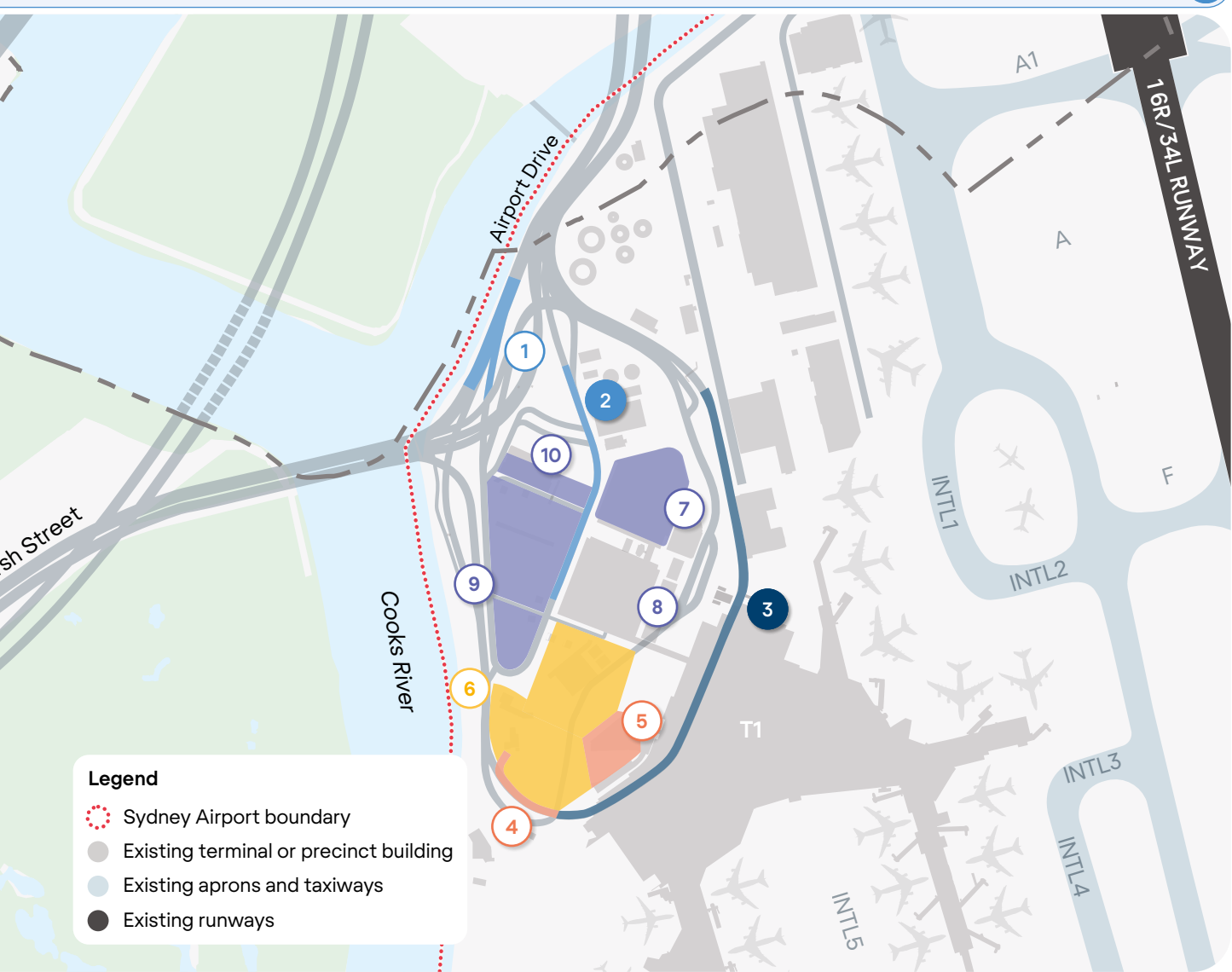
- Relocation of shuttle services adjacent to P3.
- Relocation of dock facilities.
- Implementation of additional drop-off and pick-up facilities within the broader precinct.
- Ground transport interchange within the precinct.

As we continue to advocate for more bus services, future provision of a ground transport interchange facility (likely integrated within a car park) would provide the necessary additional bus bay capacity. As required, we will also work with TfNSW to upgrade access routes to support reliable journey times and enhance passenger experiences.

Section Two Airport Development Plan

11. Ground Transport Development Plan

Map 11-3 Five-Year Ground Transport Plan for T1 (2025–2030)



- 1

Provide an additional exit lane at Airport Drive to increase capacity
- 2

Improve parking access/egress to streamline customer journeys
- 3

Optimise activities at the departures kerb to maximise operational efficiency
- 4

Infrastructure to reduce the recirculation of Ubers on the road network
- 5

Reconfigure the taxi/Uber areas for improved pick-up efficiency and reduced wait times
- 6

Consolidate activities in holding areas to maximise operational efficiency
- 7

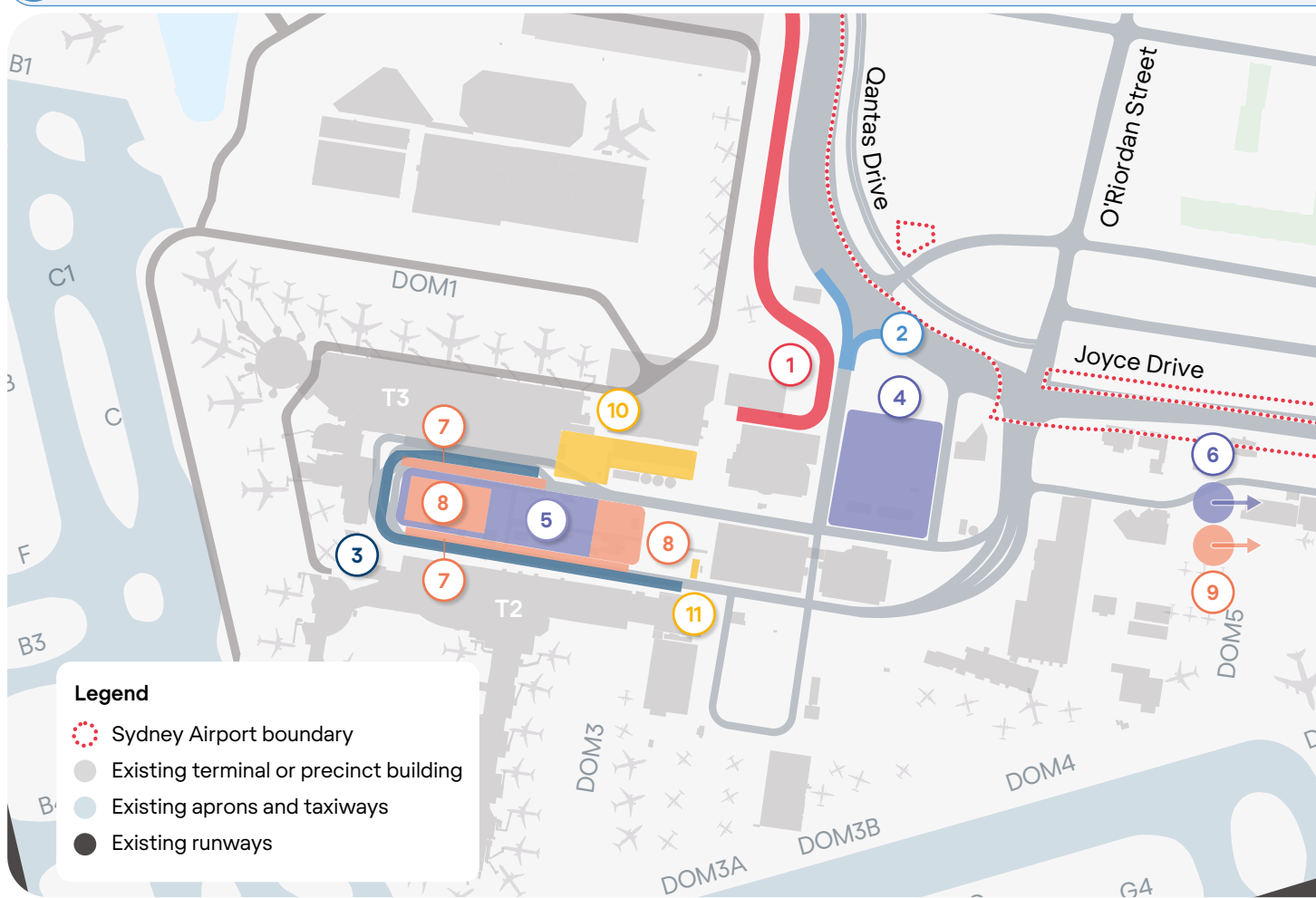
Review parking products and capacity at P6 car park
- 8

Additional levels on P7 car park
- 9

P9 alternate drop-off and multi-storey car park
- 10

Enhancements to P9 express pick-up area

Map 11-4 Five-Year Ground Transport Plan for T2/T3 (2025–2030)



- 1

Proposed landside road corridor
- 2

Identify improvements to the Seventh Street junction approach to improve driver experience, particularly in relation to weaving
- 3

Optimise and assess alternative layouts to maximise the efficiency of drop-off and other kerbside functions
- 4

Investigate the use of P4 car park for mixed-uses, including pick-up, drop-off, parking and/or valet products to expand parking capacity
- 5

Deliver a ground transport interchange within a multi-storey car park, collocated with VIP and rental products and incorporating alternate drop-off facilities. There is also the opportunity to incorporate alternate drop-off facilities to provide greater customer choice
- 6

Expand the Blu Emu site to provide additional capacity for employees and long-stay customer parking
- 7

Consider options to enhance Uber pick-up facilities and incorporate technological advances to align with broader airport reconfiguration and reduce wait times
- 8

Investigate the suitability of a centralised domestic taxi pick-up facility to improve overall network operation and improve customer experience
- 9

Explore the viability of introducing a rideshare and taxi holding area to a consolidated site to expand capacity and reduce network congestion
- 10

Increase storage capacity for valet to meet demand
- 11

Relocate and upgrade existing end-of-trip facilities to a permanent location, supporting active travel uptake across the domestic precinct

11. Ground Transport Development Plan

20-Year Ground Transport Strategy

In the years to 2045, Sydney Airport will strategically optimise ground transport facilities to meet forecast demands for sustainability and service levels, while remaining flexible to respond to unforeseen events. Our 20-Year Ground Transport Strategy supports shifts in ground transport needs and how people move around the airport as a result of the development of the T2/T3 Integrated Operations Precinct and other land use changes.

We will continue to develop road and ground transport upgrades across the airport precinct and the surrounding road network, integrating government transport projects and strategies.

Across all ground transport developments, we will actively seek out ways to use technological advancements to deliver efficiencies, increased sustainability and enhanced passenger experiences.

Airport-wide developments

It is likely that many of the focus areas identified in the five-year plan will continue over the next 20 years. Our work could include:

- Optimising existing facilities and delivering terminal connections to respond to changes in the airport such as the Northern Lands Sector development, T2/T3 terminal integration, Blu Emu car park changes, and T2 Pier C expansion.
- Considering parking arrangements, including the expansion or relocation of the Blu Emu car park, delivery of new car parks, and the introduction of changes to payment mechanisms.
- Monitoring active transport uptake and responding to anticipated demand by upgrading facilities.
- Wayfinding upgrades as required to support changes to the network and/or land use.
- Upgrades to bus bays and access routes to accommodate additional services, and continued advocacy for a ground transport interchange.
- Advocating for additional public transport services and the removal of the Station Access Fee.
- Maintaining and improving publicly available travel information, including identifying initiatives to provide live information direct to travellers.
- Providing travel planning advice to staff and exploring other initiatives to support the transition of viable trips to active or public transport.
- Improving integration of public transport and terminal facilities.

T1 International Operations Precinct

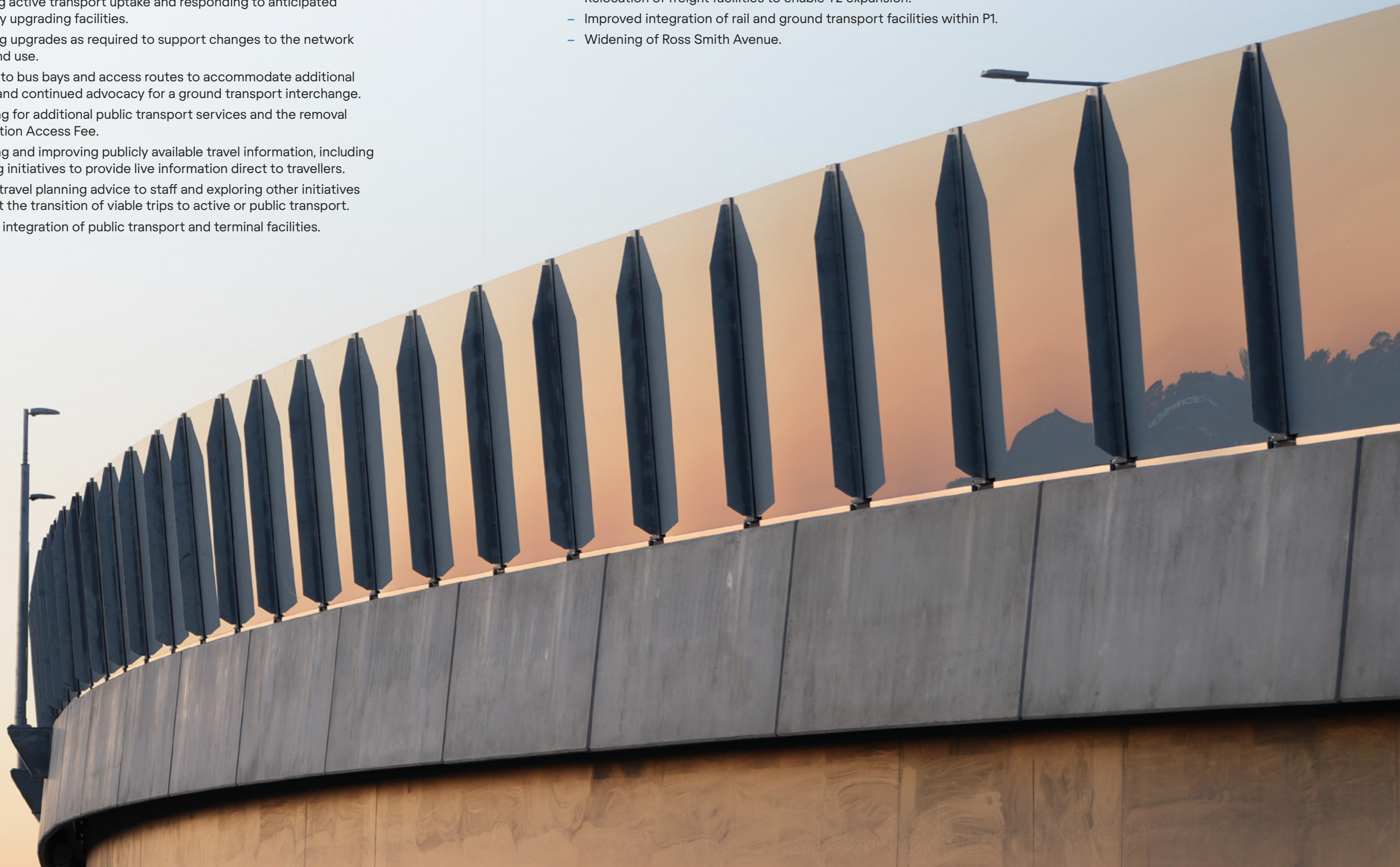
The addition of extra lanes towards the T1 Departures kerb and from Cooks River Avenue to Airport Drive will reduce congestion, with other improvements to be considered as further details are confirmed around land use changes.

We will support the continued delivery of pick-up and drop-off enhancements at T1, including broader reconfiguration of the southern end of the T1 precinct.

T2/T3 Integrated Operations Precinct

Initiatives to support long-term changes to ground transport demand at the T2/T3 Integrated Operations Precinct may include:

- Relocation of the FastPark Valet facility to P1.
- Relocation of freight facilities to enable T2 expansion.
- Improved integration of rail and ground transport facilities within P1.
- Widening of Ross Smith Avenue.



Section Two Airport Development Plan

12. Utilities Development Plan

Sydney Airport owns and maintains a comprehensive network of utilities to supply power, water, sewer, natural gas, telecommunications, and stormwater infrastructure across the airport site.

We're investing in a modern utilities network to:



Support Sydney Airport's forecast growth



Improve the sustainability and viability of supply arrangements



Improve reliability, resilience and redundancy



Progress decarbonisation and climate resilience initiatives

Working closely with utility providers, we will continue to expand and improve the utilities network to meet increases in demand and reliably support airport operations and growth (see Map 12-1). Innovative design, material selection and new technologies will position infrastructure to actively contribute to climate resilience.

Potential developments:

- Modernisation and upgrade of key electrical feeds, utilising sustainable products and technologies where possible.
 - Increased recycled water treatment capacity to improve resilience and environmental performance.
 - Potable water supply.
 - Upgrades to trunk drainage systems, including the optimisation of catchments, improving management and resilience.
- Network expansion to facilitate development in new areas.
 - New utilities and the replacement of current infrastructure to facilitate aviation operations and reduce reliance on aircraft APUs, including FEGPUs and PCA.
 - Additional aviation fuel tank.

Effective demand management and investigations into alternative supply solutions are well underway. Initiatives implemented in recent years include the expansion of the current Airport Zone Substation, and implementation of the Energy Plan.

Electrical network

The airport is connected to the external electrical grid by Ausgrid at two points in the North West and North East sectors, feeding an internal network that is owned and maintained by Sydney Airport. This supply is supported by numerous diverse feeders, for a high level of redundancy.

In accordance with CASA and ICAO requirements, Sydney Airport has a back-up power system, which allows continuation of essential aviation operations during mains outage events.

In recent years, Sydney Airport has undertaken substantial works to improve capacity, reliability and redundancy, including:

- Reconfiguration of networks to remove single points of failure.
- Retirement or replacement of old equipment.
- Network expansion, across the airport site.

Energy efficiency

We have recently made substantial investments in the optimisation of energy usage, including demand-side management, installation of energy efficient equipment, and feasibility studies for alternative generation sources. Notably, this includes the installation of new:

- Energy efficient chillers at T3.
- LED lighting on our runways and taxiways.
- Lighting in the terminal and baggage handling areas, reducing energy usage by 30%.

Sydney Airport will continue to implement demand-side management measures to monitor the practicality and feasibility of alternative supply options.

Proposed electricity infrastructure

As development progresses across the airport, the electrical network will be augmented and upgraded as required. Sydney Airport works closely with Ausgrid to be sure the supplying grid can service this growth.

In addition to enhancing the lead-in supply capacity, the on-airport network will need to be bolstered to support growth, while delivering reliability and redundancy. Such expansion and improvements will need to consider demand-side management and sustainability initiatives.

Network development will consider:

- Upgrades to zone substations in the North East and North West sectors.
- Ongoing replacement and retirement of aged equipment.
- Improved interconnectivity between sectors to enhance redundancy.
- Augmentation of the network capacity to supply proposed developments, including electrification projects.
- Alignment of the electrical network development with broader sustainability initiatives, such as expansion of ground power and PCA to aircraft parking positions.
- Resilience planning to respond to network outages.
- Climate resilience, including planning for extreme weather events, assessment of asset vulnerability and criticality, and lifespan of the asset.
- Solar infrastructure.
- Opportunities to introduce a battery energy storage solution.



Section Two Airport Development Plan

12. Utilities Development Plan

Water supply

The airport receives potable water from the external Sydney Water network at multiple points across the site. In the North West and North East sectors, this supply feeds a network of tanks, pumps and pipes that are owned and maintained by Sydney Airport. Generally, other areas across the site are supplied directly via Sydney Water assets.

Additionally, Sydney Airport operates a recycled water treatment plant in the North West Sector. This system provides non-potable water for toilet flushing and air conditioning cooling towers in the T1 precinct, reducing reliance on potable water sources.

To assess efficiency and reliability, we have conducted studies on the status of our water supply network. These studies will inform future infrastructure planning and investment.

Water efficiency

As part of our commitment to reduce water consumption per passenger, we have implemented conservation measures such as water-efficient fittings, leak detection infrastructure, and alternative supply options.

The North West Sector recycled water treatment plant is currently capable of meeting over 60% of the airport demand within the T1 precinct.

Sustainability will be central to future water network development. We will explore the expansion of the recycled water plant to introduce recycled water in other areas of the airport and improve water efficiency.

Proposed water infrastructure

We work closely with Sydney Water to make sure the external network can accommodate the forecast growth at Sydney Airport.

Network-wide developments will include water saving and recycling initiatives, and ongoing maintenance and upgrades, such as:

- Exploring different connection points to improve reliability and resilience.
- Investigating recycled water capacity to address increased demand for non-potable water sources.
- Upgrading supply arrangements and assets, and increasing storage capacity in the North East and North West sectors.
- Expanding the reticulation network to support development in areas with limited supply and align with water saving efficiencies.
- Ongoing investment to improve network reliability and efficiency.



12. Utilities Development Plan

Stormwater

As Sydney Airport is bordered by water bodies with large upstream catchments, flood events can cause significant water level increases.

Sydney Airport has 11 internal sub-catchments that ultimately drain to Botany Bay. The airport site is relatively self-contained, with minimal external areas contributing to runoff in the airport catchment.

We maintain an extensive stormwater drainage network with water quality control assets including:

- Gross pollutant traps.
- Ongoing water quality monitoring.
- Flame traps on aprons.
- Emergency shut-off valves for spill containment and spill response.

Sydney Airport has undertaken a flood study to assess the resilience and performance of the stormwater network, which may be affected by increased frequency and intensity of rainfall, rising sea levels, and other climate change impacts.

The flood study is a key input in the development of Sydney Airport’s Stormwater Resilience Management Strategy, which will guide investment in infrastructure based on our flood risk appetite to improve resilience to flooding.

We are also investigating the potential redirection of stormwater from the North East Sector to the South East Sector to optimise catchment management.

Proposed stormwater infrastructure

New developments and aircraft parking areas may require additional or upgraded stormwater assets. While it is unlikely proposed developments will increase stormwater runoff, all new developments will be assessed for water quantity and quality mitigation measures, to minimise off-site impacts.

Water sensitive urban design is a consideration in the development assessment process for infrastructure projects. These initiatives will assist Sydney Airport in meeting key water cycle commitments, including:

- All public space and public realm water will come from alternative (non-potable) sources.
- All terminal and airport buildings will have access to alternative water sources.
- Key pollutants in stormwater will reduce, relative to untreated runoff.

Proposed developments must meet flood immunity criteria, including appropriate floor levels and supporting resilience infrastructure. Where existing flood issues are identified, we will assess the feasibility of implementing appropriate management and mitigation measures.

Sewerage

Sydney Airport operates an internal sewerage network, with gravity mains and pump stations connecting to the external Sydney Water network in multiple locations. This network discharges into the Southern and Western Suburbs Ocean Outfall Sewer (SWSOOS), which extends from the Malabar Wastewater Treatment Plant (WWTP).

A portion of sewage from the North West Sector is diverted from our recycled water treatment plant before being sent to the external network.

Recent upgrades have focused on improving network reliability and redundancy, including refurbishment of the critical pump station in the North East Sector. Major pumping stations are equipped with emergency storage and backup power for resilience during outages.

Recycled water

Around 50% of the sewage from the North West Sector is recycled through our water treatment plant, easing the burden on the external network and reducing the volume of effluent discharged to the WWTP.

Through water saving measures, a reduction in overall water consumption will lower the per passenger amount of sewage requiring treatment and disposal.

Proposed sewerage infrastructure

To keep up with forecast growth, we will need to upgrade existing gravity mains and increase the capacity of existing sewage pump stations, associated emergency storage and rising mains.

Sydney Airport will coordinate the planning of these works with Sydney Water to confirm the external network can support future demand.

Development of the sewerage network will consider:

- Reconfiguration of the network and external discharge arrangements, facilitating future connections within the North West Sector.
- Minor extensions of the reticulation network and minor network diversions, facilitating new development footprints.



Section Two Airport Development Plan

12. Utilities Development Plan

Natural gas

Jemena supplies natural gas to Sydney Airport via high-pressure mains to facilities in the North East, North West, and South West sectors.

This natural gas supplies the T3 trigeneration facility, which Sydney Airport does not intend to augment.

As part of an electrification initiative, we are currently investigating how we can reduce reliance on natural gas heating boilers.

This would be achieved with electrification resulting in less gas use.

Aviation fuel

As outlined in our Airfield Development Plan, Sydney Airport has extensive infrastructure supporting the supply and storage of aviation fuel. Over the planning period, we plan to improve this infrastructure through:

- The introduction of up to two additional fuel tanks.
- Pump and pipeline upgrades.
- The expansion of hydrant lines.

Communications

We are deploying a new campus communications and core network, enhancing resilience and technology services across Sydney Airport.

Optical fibre networks support the Airport Management System, along with critical operational and security functions, while a second secure network serves airside areas for airfield lighting control and monitoring. These networks integrate with Airservices Australia’s communication systems for navigational aids.

We manage the installation of telecommunications infrastructure, including cabling for voice, video, data and mobile/wireless systems, while providing commercial access to third parties on the external network.

Proposed communications infrastructure

As new developments are planned and delivered, new and upgraded communication networks will be required. Sydney Airport will facilitate the integration of emerging technologies as part of the ongoing extension and improvement of our communications infrastructure.



Map 12-1 Utilities Development Plan 2045

