

**Submission  
No 21**

**CRITICAL TRANSPORT INFRASTRUCTURE SUPPORTING THE WESTERN  
SYDNEY INTERNATIONAL AIRPORT AND WESTERN SYDNEY  
AEROTROPOLIS**

**Organisation:** NSW Government

**Date Received:** 28 March 2024



Transport  
for NSW

# NSW Government

Inquiry into critical transport infrastructure  
supporting the Western Sydney International Airport  
and Western Sydney Aerotropolis

Executive summary ..... 3

Terms of Reference a and d ..... 4

Funding of transport infrastructure ..... 8

The impacts of employment movements in Western and South Western suburbs of  
Sydney ..... 10

Reducing road usage around the new airport and surrounding regions..... 11

## Executive summary

---

Transport is a crucial enabler of social equity and a strong economy. With Western Sydney evolving at an unprecedented pace, development of a transport infrastructure network and services is critical to provide sustainable travel options. Transport infrastructure is key in connecting communities to economic opportunities, enhancing access to essential services such as health and education and in facilitating social connection. As such, Transport for NSW (Transport) is helping deliver one of Australia's biggest city-shaping programs in the Western Sydney Aerotropolis, an area expected to provide 100,000 jobs and 40,000 homes by 2056.

The announcement of an airport at Badgerys Creek in 2014<sup>1</sup> and the signing of the Western Sydney City Deal in 2018 were catalysts for significant planning and development in the Western Parkland City<sup>2</sup>. An integrated transport network that connects communities to jobs and services is vital to fully realise the benefits of the investment in the Airport.

Transport's Western Sydney Airport Precinct 30-year transport strategic vision<sup>3</sup>, published by the NSW Government in November 2023, sets out the transformational change agenda for the transport in Aerotropolis. Three key outcomes (*City shaping and precinct making; Excellent services; Supporting strong economic growth*) are guiding planning, decision making and engagement with communities, developers and stakeholders.

The strategic vision explains Transport's long-term plan to activate the Aerotropolis by delivering a fully integrated, easy-to-navigate, transport network that connects people to housing, new and better jobs, and economic opportunities. It outlines how freight networks, roads, metro, buses and active transport will connect and evolve in and around the Aerotropolis, with public and active transport becoming a mode of choice for surrounding communities.

Several key projects have already been delivered or are in flight, which will help realise the promise of Western Sydney International Airport (WSI) and the surrounding Aerotropolis, to enable successful day one operations. Transport is conducting planning work to further unlock precincts and significant employment opportunities within the Aerotropolis, to sustainably deliver infrastructure and services in line with growth and travel demand in the years following the Airport's opening.

The NSW Government recognises the role it plays as an enabler of social equity and to support economic, cultural and social opportunities flow across Western Sydney and beyond. While significant work is underway and progress is being made, there is a lot of work ahead and remains committed to continuing to improve transport connectivity across Western Sydney.

---

<sup>1</sup><https://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;query%3DId%3A%22media%2Fpressrel%2F3113890%22>

<sup>2</sup><https://www.wpca.sydney/our-region/the-western-parkland-city/>

<sup>3</sup>[https://media.caapp.com.au/pdf/tatyjw/18aa0711-db1f-41ce-9f2f-4476ef5be4ca/WPC-230728-WSA-Integrated-Transport-Network-Strategy\\_v11\\_WCAG.pdf](https://media.caapp.com.au/pdf/tatyjw/18aa0711-db1f-41ce-9f2f-4476ef5be4ca/WPC-230728-WSA-Integrated-Transport-Network-Strategy_v11_WCAG.pdf)

## Terms of Reference a and d

---

This section responds to Terms of Reference a: an analysis of options for transport infrastructure and d: integration with existing transport infrastructure.

The Aerotropolis is strategically located at the edge of Greater Sydney, in the heart of one of the most geographically expansive and culturally diverse regions in Australia.

The NSW Government is working to realise the benefits of the Airport and surrounding Aerotropolis. This involves connecting the community to the Airport and Aerotropolis through public and active transport, point-to-point transport, and critical road connections from day one of operations. This is key to supporting curfew-free operations, including international, domestic and freight services.

Greater Sydney's transport system has historically been designed with an emphasis on moving people out of the region, west to east for work, rather than efficiently within the region. Through the development of the Aerotropolis, there is a rare opportunity to enhance the way people in Western Sydney live, work and travel in the coming decades.

Planned and future Aerotropolis transport links and services will connect the growing north and south regions of Western Sydney, and link the Aerotropolis to the rest of Sydney, the Blue Mountains, Central Coast and Illawarra, and more. Additional integrated transport solutions are planned to be delivered progressively to support development and growth of the Aerotropolis. Transport will advise the NSW Government on transport infrastructure priorities and options, including staging and sequencing, to inform investment decisions that consider Whole-of-Government priorities. The NSW Government will continue to be transparent with stakeholders on the funding status of projects, to assist with their long-term planning.

Further, in the next 30 years more than 80 per cent of imported shipping containers from Port Botany will have an origin or destination in the Western Parkland City. Freight is critical to Australia's future global competitiveness and an essential part of creating thriving places and communities in Western Sydney. An integrated freight network underpins a 24/7 economy and the successful movement of goods across air, road and rail across Sydney, NSW and beyond.

### **Delivering transport to support Airport operations from day one**

Building a smart, connected, and vibrant city will take time. Planning and delivery for foundational transport connections have been in flight for over a decade. Delivery of upgrades to The Northern Road<sup>4</sup> and Bringelly Road<sup>5</sup> along with the new M12 Motorway<sup>6</sup> and M7-M12 interchange<sup>7</sup> were identified as initial priorities, followed by future upgrades of Mamre Road<sup>8</sup> and Elizabeth Drive<sup>9</sup>.

The new M12 Motorway will provide direct access to the Airport from the M7 Motorway and the upgraded The Northern Road. Short-term upgrades to the existing road network, including safety improvements and enabling works on Elizabeth Drive (expected to commence later in

---

<sup>4</sup> <https://www.transport.nsw.gov.au/projects/current-projects/northern-road-upgrade>

<sup>5</sup> <https://www.transport.nsw.gov.au/projects/current-projects/bringelly-road-upgrade>

<sup>6</sup> <https://www.transport.nsw.gov.au/projects/current-projects/m12-motorway>

<sup>7</sup> <https://www.m7m12integrationproject.com.au/jhg/m7-m12-integration-project>

<sup>8</sup> <https://www.transport.nsw.gov.au/projects/current-projects/mamre-road-upgrade-between-m4-motorway-st-clair-and-erskine-park-road>

<sup>9</sup> <https://www.transport.nsw.gov.au/projects/current-projects/elizabeth-drive-upgrade>

2024), will connect local communities and enable 24-hour freight operations at the Airport and local industrial locations.

The significant investment in foundational work – which also includes the development of Sydney Metro - Western Sydney Airport<sup>10</sup>. This is a new 23-kilometre metro rail service stopping at six new stations between St Marys and Bradfield. Alongside new bus services which will connect local population centres including Campbelltown, Penrith and Liverpool to the Aerotropolis, it means early operations at WSI Airport will be supported by an integrated transport network that will be ready to serve passengers and workers before it opens in late 2026.

To ensure new local bus services are running as soon as possible, they will mostly make use of existing infrastructure. However, there will be new transport interchanges at Bradfield and the Airport to make it easy for users to change modes. Additional bus services are planned to meet growing demand in the years following WSI opening.

The Sydney Metro – Western Sydney Airport is expected to carry up to 7,740 passengers each hour in each direction, operating every five minutes during the peak and every 10 minutes in the off-peak. Once complete, it will take approximately 15 minutes to travel from the new airport to St Marys, where customers can connect to the rest of Sydney’s rail network.

The journey time from the airport terminal to Parramatta (via the interchange at St Marys) will be approximately 38 minutes and about 70 minutes to the Sydney CBD.

Active transport will also form a key component of transport infrastructure. The Active Transport Strategy guides how facilities will integrate with new infrastructure and the precinct. Further, the Strategic Cycleway Corridor program identifies approximately 295 kilometres of strategic cycleway corridors across the Western Parkland City and highlights connections between existing and future employment centres.

### **As the Aerotropolis grows, its transport network will need to evolve**

Transport is planning for future rail, road and bus connections including:

- **Elizabeth Drive Upgrade:** Two Reviews of Environmental Factors for an upgrade of Elizabeth Drive between the M7 Motorway at Cecil Hills and The Northern Road at Luddenham were on public display in late 2023<sup>11</sup>. The upgrade will provide direct access to WSI and access to employment lands within the Airport.
- **Mamre Road Upgrade:** A concept design for an upgrade of Mamre Road between Erskine Park Road, Erskine Park and Kerrs Road, Kemps Creek is also underway. The project will meet the future transport demand associated with the Western Sydney Priority Growth Area.
- **Western Sydney International Airport Precinct Road Network program**<sup>12</sup>: A Strategic Business Case has recently been completed which identified seven prioritised road corridors for development, which will enable economic development and activate the Aerotropolis, through the Aerotropolis Transport Network Strategy. The Strategic Business Case includes recommendations for staging and sequencing of delivery.

---

<sup>10</sup> <https://www.sydneymetro.info/westernsydneyairportline>

<sup>11</sup> <https://www.transport.nsw.gov.au/projects/current-projects/elizabeth-drive-upgrade>

<sup>12</sup> <https://www.nsw.gov.au/have-your-say/wsi-airport-precinct-roads-network>

- **Metro/rail extensions:** The NSW Government has committed to working with the Australian Government to fund a business case to consider potential future rail connections between Bradfield and Leppington/Glenfield, and between Bradfield and Campbelltown/Macarthur. The NSW Government has also committed to fund a business case to consider a potential future rail connection between St Marys and Tallawong. These business cases will provide detailed design, cost estimates and economic assessment to inform government consideration of investment priorities for future rail extensions. Key parts of these corridors have been identified and protected through gazettal of future transport corridors. Potential future extensions to the St Marys-Bradfield line are future-proofed through the provision of stub-tunnels at St Marys and Aerotropolis stations.
- **Freight:** Planning for the future Western Sydney Freight Line<sup>13</sup> and Intermodal Terminal is underway to enable the substantial growth of the already large freight task, as the Aerotropolis develops.
- **Buses:** Transport is planning to introduce new bus connections between the Aerotropolis and key population centres in Western Sydney<sup>14</sup>.
- **Active Transport:** Strategic Cycleway corridors have been identified by Transport to support active transport across the Western Parkland City.

### **Planning work considers information on where growth is happening**

Using insights from engagement with industry and the community, detailed modelling and analytics and land use data provided by Department of Planning, Housing and Infrastructure (DPHI), Transport's analysis guides optimal staging and sequencing for delivery, which is being used to inform future Government decisions around investment and prioritisation.

Transport recognises that while new and upgraded roads are planned and delivered, the existing road network will experience increasing levels of traffic. NSW Government agencies and local councils are working together to scope a program of short-term safety and access improvements across the Aerotropolis, including on council-maintained roads. Short-term safety and access are a priority in all staging and sequencing planning for the Aerotropolis.

To help with optioneering and ensure consistent road network and land use assumptions are used in traffic impact assessments across the Aerotropolis, Transport has developed a detailed traffic model specific to the Aerotropolis: the Sydney Dynamic Traffic Assignment (SDTA). The SDTA ensures common assumptions and baseline information is applied in traffic model development and applications. For an administrative fee to cover costs, Transport can provide developers an extract of the SDTA model to forecast traffic data which serves as a good starting point for developers to establish their base case and various future reference cases in options analyses. The NSW Government is working with developers in the Mamre Road precinct to ensure new transport infrastructure helps to unlock land to deliver economic growth. This process will take place across the Aerotropolis as plans for the road network develop.

### **Working closely with industry, Government partners and local community**

Different groups have vastly different priorities when it comes to transport solutions to service the short, medium and long term needs of the Aerotropolis. The NSW Government engages with the community, Western Sydney International Airport and councils to understand their needs and challenges to inform planning and delivery. The NSW Government values these

---

<sup>13</sup> <https://www.transport.nsw.gov.au/corridors/wsfli>

<sup>14</sup> <https://www.transport.nsw.gov.au/projects/current-projects/new-bus-services-for-western-sydney>

discussions and partnerships, engaging regularly across several multi-stakeholder several fora and through individual engagements. An interactive portal was also launched in 2023, where the community and stakeholders can access information on progress and share feedback.

### **Supporting uptake of newly integrated transport modes**

The NSW Government is working with agency partners, the Airport and local councils on plans to ensure customers and stakeholders are aware of new services and changes to networks as they happen so they can make journey choices that best meet their needs. This includes developing a wayfinding strategy that will ensure signage and wayfinding is integrated across the network, including new and existing roads, and public and active transport networks. It will also include development of customer journey planning tools that will be consistent across all modes.

Most airports around the world use point to point transport as an important part of the integrated network offering. As the Airport grows, it is expected options such as shuttlebuses will come to market to help move people to and from the Airport.

### **Consideration of necessary social infrastructure improvements**

Planning for new precincts, such as the Western Sydney International Airport and Western Sydney Aerotropolis, will consider necessary social infrastructure improvements, including education and health facilities, to support residential and population expansions.

For example, land provisioning for schools in growth areas is necessary, due to the impacts of increased employment movements in Western and South-Western Sydney suburbs and to accommodate increased student enrolment capacities that could result from increased housing density around transport infrastructure.

NSW Government agencies working to deliver the Western Sydney Aerotropolis precinct will work collaboratively to ensure the needs of social infrastructure, including education and health facilities, are integrated into the planning for housing growth, ensuring adequate resources and land are allocated well in advance of them being needed.



## Funding of transport infrastructure

---

To support the full activation of an integrated transport network over the next 30 years, investment will be required over time and in line with growth. The current total investment for the next four years to support growth and development within the Aerotropolis is approximately \$10 billion.

### Projects

The 2023-24 Budget commits approximately \$1.7 billion towards critical road infrastructure development and delivery needed to support the Airport opening and development in the broader Western Sydney Airport Precinct.

#### *Roads in and around Western Sydney Airport Precinct*

- **M12 Motorway:** \$1.1 billion<sup>15</sup> over four years to continue the delivery of a new M12 motorway as part of the Western Sydney Infrastructure Plan<sup>16</sup>
- **Elizabeth Drive:** \$200 million<sup>17</sup> to deliver safety initiatives and corridor enabling works on Elizabeth Drive
- **M7-M12:** \$106.2 million<sup>18</sup> to deliver the M7-M12 Integration Project (over four years), including:
  - M7-M12 Interchange
  - Elizabeth Drive Connection to the M12 Motorway
- **Westlink M7 Widening:** to improve connectivity, travel time and safety of motorists travelling between major roads in the Western Parkland City (state and federal funded).
- **Mamre Road:** \$253.6 million<sup>19</sup> (over four years) to deliver an upgrade for Mamre Road between the M4 Motorway and Erskine Park Road
- **Fifteenth Avenue:** \$50 million<sup>20</sup> for planning for the Fifteenth Avenue Transit Corridor linking Bradfield and the Western Sydney International Airport to Liverpool.

#### *Additional support for Western Sydney Aerotropolis projects*

- Western Sydney Freight Line and Western Sydney Intermodal Terminal: \$4.4 million<sup>21</sup> in 2023-24 for planning work
- **Buses:** \$302.7 million<sup>22</sup> to provide new bus connections between the Aerotropolis and key population centres including Penrith, Liverpool and Campbelltown.
- **Sydney Metro – Western Sydney Airport line:** \$7.9 billion<sup>23</sup> for the delivery of the Sydney Metro Western Sydney Airport line

---

<sup>15</sup>[https://www.budget.nsw.gov.au/sites/default/files/2023-09/2023-24\\_01\\_Budget-Paper-No-3-Infrastructure-Statement\\_infrastructure-statement.pdf](https://www.budget.nsw.gov.au/sites/default/files/2023-09/2023-24_01_Budget-Paper-No-3-Infrastructure-Statement_infrastructure-statement.pdf) p62 | 2-34

<sup>16</sup> <https://www.transport.nsw.gov.au/projects/current-projects/western-sydney-infrastructure-plan>

<sup>17</sup> <https://www.nsw.gov.au/media-releases/m12-hits-construction-milestone>

<sup>18</sup>[https://www.budget.nsw.gov.au/sites/default/files/2023-09/2023-24\\_01\\_Budget-Paper-No-3-Infrastructure-Statement\\_infrastructure-statement.pdf](https://www.budget.nsw.gov.au/sites/default/files/2023-09/2023-24_01_Budget-Paper-No-3-Infrastructure-Statement_infrastructure-statement.pdf) p58 | 2-30

<sup>19</sup>[https://www.budget.nsw.gov.au/sites/default/files/2023-09/2023-24\\_01\\_Budget-Paper-No-3-Infrastructure-Statement\\_infrastructure-statement.pdf](https://www.budget.nsw.gov.au/sites/default/files/2023-09/2023-24_01_Budget-Paper-No-3-Infrastructure-Statement_infrastructure-statement.pdf) p63 | 2-35

<sup>20</sup> <https://www.nsw.gov.au/media-releases/m12-hits-construction-milestone>

<sup>21</sup>[https://www.budget.nsw.gov.au/sites/default/files/2023-09/2023-24\\_01\\_Budget-Paper-No-3-Infrastructure-Statement\\_infrastructure-statement.pdf](https://www.budget.nsw.gov.au/sites/default/files/2023-09/2023-24_01_Budget-Paper-No-3-Infrastructure-Statement_infrastructure-statement.pdf) p143 | 4-61

<sup>22</sup>[https://www.budget.nsw.gov.au/sites/default/files/2023-09/2023-24\\_01\\_Budget-Paper-No-3-Infrastructure-Statement\\_infrastructure-statement.pdf](https://www.budget.nsw.gov.au/sites/default/files/2023-09/2023-24_01_Budget-Paper-No-3-Infrastructure-Statement_infrastructure-statement.pdf) p28 | 1 18

<sup>23</sup> <https://www.nsw.gov.au/media-releases/2023-24-budget-invests-in-transport>

### ***Future rail connections***

- The NSW and Australian Governments jointly committed \$60 million<sup>24</sup> to support investigations into a potential future rail connection between Bradfield and Leppington/Glenfield.
- The NSW Government also committed an additional \$60 million to fund a business case to consider a potential future rail connection between St Marys and Tallawong, and to expand the scope of the Leppington/Glenfield business case to include consideration of the Campbelltown/Macarthur corridor.<sup>25</sup>

---

<sup>24</sup>[https://www.budget.nsw.gov.au/sites/default/files/2022-06/2022-23\\_Budget-Paper-No-3-Infrastructure-Statement.pdf](https://www.budget.nsw.gov.au/sites/default/files/2022-06/2022-23_Budget-Paper-No-3-Infrastructure-Statement.pdf)

<sup>25</sup> <https://www.sydneymetro.info/planning-future-extensions>

# The impacts of employment movements in Western and South Western suburbs of Sydney

---

## **Generating jobs and stimulating the economy**

The Aerotropolis is forecast to create more than 100,000 new jobs by 2056. A high proportion of these jobs will require qualifications delivered by TAFE NSW, universities and other providers. The NSW Government is planning an integrated transport network that will help foster growth in the Aerotropolis and unlock its full economic potential as it evolves into a 24/7 economic hub. Multi-modal connections between the Aerotropolis and other key centres within Western Sydney will facilitate the growth and operation of freight and logistics, while attracting new businesses and investment that will help boost the local economy. This growth will create new and better jobs for residents of Western Sydney.

Further, the pipeline of projects that will be delivered over the next 30 years to further enhance the Aerotropolis' transport network will also provide new jobs in Western Sydney and opportunities for local suppliers. The Sydney Metro – Western Sydney Airport project alone will provide for more than 14,000 jobs during construction, including 250 apprentices. As of January 2024, Sydney Metro – Western Sydney Airport project has had 9,463 workers with 53 per cent from Western Sydney as well as 91 apprentices

## **Connecting the people of Western Sydney to new and better jobs**

Sustainable travel options are vital for reducing road congestion and improving access to opportunities for all residents of Western and Southwestern Sydney. The NSW Government is working with the Airport and developers to understand how short, medium and long-term growth will occur in the Aerotropolis. It will also engage with end users to understand when and where their workforces travel to and from the Aerotropolis. This is informing the planning for new public transport services to ensure they will support the operational requirements of the Airport and meet the needs of local workers and passengers commuting to the first buildings at Bradfield from 2026.

Sydney Metro – Western Sydney Airport will connect St Marys to the Airport and the Aerotropolis, linking residential areas with job hubs and connecting travellers to the rest of Sydney's rail network.

The NSW Government's Budget for 2023-24 included \$302.7 million<sup>26</sup> for new bus services which will connect local population centres including Campbelltown, Penrith and Liverpool to the Aerotropolis, providing additional public transport options that will be available even before the Airport opens.

The NSW Government has also committed to fund a business case to consider a potential future rail connection between St Marys and Tallawong, and to expand the scope of the Leppington/Glenfield business case to include consideration of the Campbelltown/Macarthur corridor.

---

<sup>26</sup>[https://www.budget.nsw.gov.au/sites/default/files/2023-09/2023-24\\_01\\_Budget-Paper-No-3-Infrastructure-Statement\\_infrastructure-statement.pdf](https://www.budget.nsw.gov.au/sites/default/files/2023-09/2023-24_01_Budget-Paper-No-3-Infrastructure-Statement_infrastructure-statement.pdf) p28 | 1 - 18

## Reducing road usage around the new airport and surrounding regions

---

While roads will continue to be a key enabler for a fully integrated transport network to and within the Aerotropolis, reducing reliance on private vehicles through better access to public and active transport options and moving more freight by rail are key elements of our long-term vision.

Full development and activation of an integrated transport network in the Aerotropolis will take time. The NSW Government is working with the community and industry to understand how growth will happen over time, with infrastructure to be delivered in line with demand and as funding becomes available.

The Aerotropolis is a historically rural area with limited and narrow local roads. Development of new and existing local roads will form the foundation of a seamless and reliable transport network, from which buses, freight connections, walking and cycling paths, enhanced accessibility and increased productivity will grow.

Additional freight corridors will enable high productivity vehicles to operate across the Aerotropolis, allowing greater volumes to be transported by fewer vehicles, resulting in economic, safety and environmental benefits.

Public transport options will include a new 23-kilometre metro service from St Marys to the new WSI Airport terminal and Bradfield City. Once operational, the Sydney Metro – Western Sydney Airport is expected to take about 110,000 vehicles off local roads every day, significantly reducing local traffic. This will be complemented by new bus services which will connect local population centres including Campbelltown, Penrith and Liverpool to the Aerotropolis, providing direct access to and from the Aerotropolis.

As Bradfield City Centre continues to grow, technology-enabled public transport options will be integrated to match. Real-time information, personalised trips, and seamless travel experiences 24 hours a day will be standard offerings. Active transport infrastructure will also support future demands for active lifestyles.

Private car use is the main way people and businesses travel in the area today and will continue to increase in the lead up to the Airport opening and Transport is looking at how we can support successful behaviour shifts over time. As more transport options come online, public and active transport connections will give people reliability and choice around how and when they travel, with less reliance on cars.

For example, the recently upgraded The Northern Road and Bringelly Road both include active transport infrastructure. All new roads in planning and delivery, including the M12 Motorway, also include provision for cycling and walking. Working with agencies and developers to provide active transport connections between public transport stops and interchanges to key destinations across the Aerotropolis is a priority.

Opportunities exist to leverage existing transport infrastructure projects to provide active transport facilities for walking and bike riding as a core part of the work in line with Transport's Providing for Walking and Cycling in Transport Projects Policy<sup>27</sup>.

Alongside this, Transport has developed an Active Transport Strategy<sup>28</sup> that is guiding the development of active transport infrastructure across the state, including Western Sydney. For example, the Strategic Cycleway Corridor program<sup>29</sup> aims to connect centres and places across Greater Sydney to allow local bike routes to go beyond each individual local council's jurisdiction with approximately 295 kilometres of strategic cycleway corridors identified for Western Parkland City. Emerging e-micro mobility technologies will also enhance accessibility and enable more active transport for first and last mile journeys and last mile freight.

Walking, riding or scooting contributes to the physical, social and mental well-being of communities. It also assists in reducing traffic congestion and peak demand on transport infrastructure. The consideration of new social infrastructure, including education and health facilities, in the planning of major developments and precincts helps to achieve these benefits.

---

<sup>27</sup><https://www.transport.nsw.gov.au/system/files/media/documents/2021/providing-for-walking-and-cycling-in-transport-projects-policy.pdf>

<sup>28</sup> <https://www.future.transport.nsw.gov.au/future-transport-plans/active-transport-strategy>

<sup>29</sup> <https://www.transport.nsw.gov.au/operations/walking-and-bike-riding/strategic-cycleway-corridors>