

Submission  
No 67

## INQUIRY INTO CURRENT AND FUTURE PUBLIC TRANSPORT NEEDS IN WESTERN SYDNEY

**Organisation:** Transport for NSW and Department of Planning and  
Environment

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Transport  
for NSW

# **Transport for NSW and Department of Planning and Environment submission**

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needs in Western Sydney

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# Executive Summary

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The NSW Government is committed to continuously improving public transport connectivity across Western Sydney.

Transport for NSW has three different lenses when considering the requirements for public transport in Western Sydney, each with unique challenges and opportunities:

- Integrated public transport network planning over a broad geographic area west of Sydney Olympic Park
- Development of place-based transport plans in the Western Parkland City (WPC)<sup>1</sup>
- Planning and delivery of services and infrastructure to support the Aerotropolis

The NSW Government is committed to improving the essential services that Western Sydney residents rely on. This is shown through the \$116.5 billion Essential Infrastructure Plan. The Plan sets aside \$72.3 billion for transport infrastructure across NSW, including significant public transport enhancements across Western Sydney.

As part of this Plan, the NSW Government is delivering a broad range of infrastructure to enhance access to public and active transport across Western Sydney. Projects such as Sydney Metro Western Sydney Airport, Parramatta Light Rail (including expediting Stage 2), investment in the Western Sydney Rapid Bus Network and additional funding for active transport will offer better connectivity and in turn new opportunities to enhance social and economic outcomes for the communities they serve.

Extensive planning is underway to cater for the current and future transport needs of Western Sydney. This includes work across all modes of public transport including Metro, buses, light rail, and active transport. This work is critical in enhancing service provision, providing better access to employment and recreation, reducing car dependency, and improving socio-economic and environmental outcomes.

Currently, most residents in Western Sydney have low to medium access to public transport, other than in the morning peak period. This improves partially during traditional peak times when service frequencies are better. Western Sydney's population is also growing at rapid rates, Western Sydney residents typically have longer distances to travel and spend more on transport. In this context, enhancements to public and active transport can make a significant positive impact on socio-economic outcomes in the region.

The NSW Government acknowledges that improving public transport connectivity across Western Sydney requires ongoing and sustained investment over the long-term. This requires continuing strong partnerships between all levels of the Government, the community and other stakeholders.

Transport for NSW developed this submission in conjunction with the Department of Planning and Environment.

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<sup>1</sup> <https://www.wpca.sydney/our-region/the-western-parkland-city/>

## Infrastructure, planning and programs

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The NSW Government is undertaking an extensive program of work to both plan and deliver infrastructure improvements across all modes of public transport.

Public spaces play a vital role in connecting people and creating vibrant and inviting places, such as transport nodes/interchanges that are safe and welcoming. Smart interventions can play a role in bridging the equity divide, with technology that enables real time information improving the experience of public transport users in Western Sydney.

Improvements to public transport connections should consider the principles and core values of the NSW Public Spaces Charter<sup>2</sup> to help improve public space outcomes, such as for streets and plazas in transport hub precincts. Two key charter principles that align with the connectivity between hubs are “Safe and secure” and “Healthy and active.” Through these principles, the charter looks to help improve perceptions of safety by ensuring that public spaces are well-used and inclusive, encourage a diverse mix of intergenerational and intercultural users, and ensure that these spaces are well connected and high-quality, to encourage a culture of walking and cycling.

### Buses

Planning is well progressed on enhancements to existing bus services and new routes. There is an opportunity and untapped demand for greater public transport use, with enhanced and new services to tap into social and recreational trips – connecting people to parklands, schools, and the network of attractions that are growing in Western Sydney.

The provision of infrastructure plays a key role in enabling the operation of bus services in new growth areas, and how the infrastructure is used can result in more reliable bus services and increased transport network capacity to support development. Bus network planning considers the role of both services and infrastructure, including the prioritisation of existing road space for bus lanes to increase road network capacity to move people. Infrastructure contributions play an important role in the funding and delivery of bus infrastructure.

### ***Western Sydney Rapid Bus Network***

As part of the 2023-24 Budget, \$302.7 million has been reserved within the Restart NSW Fund to deliver the Western Sydney Rapid Bus Network. The project will connect Penrith, Liverpool, and Campbelltown to the new airport.

### Metro

#### ***Independent review***

In April 2023, the NSW Government announced it would be launching an independent review into Sydney Metro.

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<sup>2</sup> [NSW Public Spaces Charter](#)

Sydney Metro is working collaboratively with the Independent Reviewers to ensure they have the assistance and support they need.

The NSW Government will use the initial findings from the Review to inform the 2023 Budget process, with final findings to be completed later this year.

The Terms of Reference<sup>3</sup> outline the scope of the Review. This includes that for the Sydney Metro West Project, the Review is to take into 'account of the current status of approvals, delivery contract procurement and construction' to 'assess whether any adjustments to scope should be considered to improve customer and community outcomes from the project'.

### **Sydney Metro Western Sydney Airport**

Sydney Metro Western Sydney Airport connecting St Marys, Western Sydney International (Nancy-Bird Walton) Airport and the Western Sydney Aerotropolis, addresses a core transport problem in the Western Parkland City - limited connectivity between its people, places and businesses. Sydney Metro Western Sydney Airport will service two stations at the Airport itself – the Airport Terminal and Airport Business Park – and will provide a line capacity of at least 7,740 passengers per hour per direction with 12 services per hour on day one of operations. The 2023-24 Budget includes \$7.9 billion over the next four years towards delivering the project.

### **Sydney Metro City & Southwest**

The Sydney Metro City & Southwest line extends metro rail from the end of Northwest Metro at Chatswood under Sydney Harbour, through new central business district (CBD) stations and southwest to Bankstown. Transport benefits of the new Sydney Metro City & Southwest include enabling the longer-term development of the Sydney rail network, supporting growth in rail patronage from 168,400 to 288,000 trips in the one-hour AM peak period by 2036 (growth of 71 per cent), increasing total rail network capacity by 60 per cent (through the addition of 60 high-capacity metro train paths each hour), delivering 31 per cent more train services in 2024 (40 additional services in 2024), attracting 16,300 more rail customers in 2036 in the one-hour AM peak period, reducing road congestion, providing customers with travel time savings of up to 21 minutes while reducing train crowding. An additional \$1 billion is included in the 2023-24 Budget to complete the project.

### **Sydney Metro West**

Sydney Metro West is planned to double rail capacity between Greater Parramatta and the Sydney CBD. Sydney Metro West will make it easier and faster to get around, boosting economic productivity by bringing new jobs and education opportunities closer to home. The construction of Sydney Metro West will support tens of thousands of jobs. Once opened, the new line is expected to support hundreds of thousands of jobs due to the economic growth generated. By 2036 Metro West will ensure more than 400,000 people are within 30 minutes of the Parramatta CBD and an additional 250,000 people are within 30 minutes of the Sydney CBD by public transport. It is anticipated Sydney Metro West will also move more than 40,000 people an hour in each direction between Westmead and the Sydney CBD. The 2023-24 Budget includes \$13.7 billion over the next four years towards delivering the project.

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<sup>3</sup> [Sydney Metro Review Terms of Reference](#)

## **Northwest Metro**

The introduction of the Northwest Metro Line, with a service every four minutes in the peak and connecting Cudgegong Road, Rouse Hill and Chatswood, has provided relief to the T1 Western Line. The total length of the project is 36 kilometres with parking for 4,000 cars provided across five railway station sites.

## **Parramatta Light Rail**

Stage 1 of the Parramatta Light Rail will connect Westmead to Carlingford via the Parramatta CBD and Camellia with a two-way track spanning 12 kilometres. The route will link Parramatta's CBD and train station to the Westmead Health Precinct, Cumberland Precinct, CommBank Stadium, the Camellia Town Centre, Powerhouse Parramatta, the private and social housing redevelopment at Telopea, Rosehill Gardens Racecourse and three Western Sydney University campuses. The 2023-24 Budget includes \$374.1 million to complete the project.

Planning and development work is underway for Stage 2 of the Parramatta Light Rail, which will connect Stage 1 and Parramatta's CBD to Sydney Olympic Park via Camellia, Ermington, Melrose Park and Wentworth Point. It will link communities north and south of the Parramatta River directly to the Parramatta CBD, the Camellia Town Centre, as well as to the sport, entertainment, education and employment hub at Sydney Olympic Park, and to the Carter Street Precinct. An additional \$200 million is included in the 2023-24 Budget to expedite planning for the procurement, construction, and delivery of the project.

## **Active transport and safety initiatives**

The Strategic Cycleway Corridor program provides the framework for establishing safe and convenient cross-city cycleway connections that better connect centres, precincts, and places, and enables councils to progressively expand local bike networks. 58 strategic cycleway corridors have been identified in Western Parkland City and Central River City, making up more than 635 kilometres through key centres and major points of interest. Exact routes and alignments will be investigated and will be subject to detailed design and collaboration with councils, other stakeholders and the community.

There is an opportunity to leverage existing Government spending on megaprojects to ensure active transport is included in early planning. Sydney Metro - Western Sydney Airport, Metro West, Northwest Metro and Parramatta Light Rail Stage 2 can drive placemaking and design factor in multimodal active transport infrastructure and corridors. Delivery of walking and cycling infrastructure through major project investment also significantly improves benefits realisation through more seamless delivery, cost savings and earlier adoption.

The NSW Government is committed to providing an additional \$60 million in active transport funding. The funding will prioritise active transport connections between key community hubs such as schools in greenfield developments. Western Sydney is identified as a priority area under the commitment.

In addition, the \$30 million Safer Cities program is helping improve perceptions of safety for first and last mile connectivity to public transport and active transport infrastructure, particularly for women, girls and gender diverse people. The program is engaging with women, girls and gender diverse people to understand their perspectives and co-design

place-based approaches to improve perceptions of safety when walking to, through and within public spaces including our streets.

## **Western Sydney Airport and the Aerotropolis**

Western Sydney Airport will help meet Sydney's growing aviation needs and within a decade of opening is expected to handle around 10 million passengers annually, similar to the volume of Adelaide Airport today. By around 2063, the Airport is expected to have the capacity to serve 82 million annual passengers after a second runway, additional aviation infrastructure and support precincts are developed.

The adjoining Mamre Road Precinct is developing at a fast pace and will start to attract more industrial workers and new employees in the next few years. The rate of development is already causing increased traffic congestion on the existing network. This gives TfNSW an indication of the scale of the potential challenges associated with the development of other surrounding precincts, particularly the Aerotropolis Core and new Bradfield Town Centre, which are a few years behind the development of Mamre Road Precinct.

While this growth and economic activity brings with it significant opportunities for the people of Western Sydney, there are also substantial challenges particularly for Government. It is essential the provision of services and infrastructure keeps pace with growth. The provision of major public transport infrastructure needs to be coupled with enhanced connections to employment hubs and local communities (existing and planned). People should be encouraged to choose public or active transport as their first choice of travel through the provision of reliable, efficient and integrated public transport services and active transport links from day one.

The NSW Government acknowledges this requires renewed focus and ongoing and sustained investment over the long-term based on sound planning. This will ensure that the NSW Government – in partnership with the Australian Government, local governments and the community – can harness the full potential benefits presented by Western Sydney Airport and the investment it is supporting.

Alongside Sydney Metro Western Sydney Airport, the NSW Government is developing a staged bus servicing plan to introduce new and enhanced services as growth and new infrastructure comes online. This includes the planning of services to cover time periods where Sydney Metro Western Sydney Airport does not operate, such as during maintenance closedowns.

Transport for NSW and other agencies including WSA Co and DPE will continue to collaborate on matching projected passenger and employee trips at the future Western Sydney Airport and wider Aerotropolis with public transport services. This will ensure that planning and the design of suitable public transport service options will efficiently meet the evolving needs and expectations of passengers, employees and the local workforce. In addition, local public transport services to and from rapidly growing areas, such as the South West Growth Area, continue to be reviewed against actual and projected population growth on a regular basis. This ensures services are being planned for and delivered to emerging centres of population.



## **More Accessible, Safe and Secure Train Stations**

This funding is to upgrade train stations to make them more accessible, safe and secure. The 2023-24 Budget includes \$800.7 million over four years towards the program. It includes combining the Transport Access Program, the Commuter Car Park Program, alongside \$300 million in additional funding.

The Transport Access Program (TAP) is an initiative delivering safe, modern, and accessible public transport infrastructure across the state, improving access to public transport for people with disability or limited mobility, and parents and carers with prams. Several stations have been upgraded as a result on this program.

The Commuter Car Park Program provides passengers with more convenient access to public transport at key transport interchanges and helps to ease congestion on our roads. The program has delivered approximately 4,465 spaces in Western Sydney.

# ToR-A: Availability and accessibility of public transport services across Western Sydney, the adequacy of connectivity between public transport hubs and commercial hubs and any gaps in services

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## Availability and accessibility

The Public Transport Accessibility Level<sup>4</sup> (PTAL) measures public transport accessibility and is based on walking distance and time to nearby public transport stops and the frequency of public transport of services at each stop.

In Western Sydney, during the morning peak (7am-8am), 74 per cent of residents have low to medium public transport access. This figure is 29 per cent in the Eastern Harbour City. This continues to decline outside of peak periods, with the proportion of Western Sydney residents having low to medium access increasing to 99 per cent between 10pm-11pm.

Many employment precincts, hospitals, schools and higher education destinations in Western Sydney are underserved by public transport.<sup>5</sup> While school students are eligible for the School Student Transport Scheme<sup>6</sup>, this only applies if they live more than 2.3 kilometres (primary) or 2.9 kilometres (secondary) walking distance from their school. Students are unlikely to walk this distance so must pay for public transport or need to be dropped off by private vehicle if they live in this catchment. Walking trips in the Western Parkland City for all trip purposes have an average distance of 800 metres.<sup>7</sup>

Areas of Western Sydney are underserved with some areas having limited cycling and pedestrian infrastructure<sup>8</sup>. There is a lack of sealed paths limiting accessibility and creating unconducive and unsafe walking conditions. Green spaces, schools, universities, hospitals, and other key trip generators often lack active transport infrastructure to support healthy and sustainable transport behaviours. The lack of infrastructure prohibits mode shift and encourages car dependency in some instances.

Commute trips only make up 14 per cent of total trips across Western Sydney with shopping and social/recreation accounting for a much larger share of trips.<sup>9</sup> However, bus routes, operating hours and service frequencies are largely focused on transporting knowledge workers to large centres in peak periods. Many bus routes in Western Sydney have limited operating hours on weekdays and weekends, thus making them unusable by shift workers and other people travelling outside of peak periods.

Rail services in some areas of Western Sydney are also more limited in some circumstances. For example, the T1 Richmond Line, which serves rapidly growing suburbs in the northwest,

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<sup>4</sup> <https://opendata.transport.nsw.gov.au/dataset/ptal-public-transport-accessibility-level>

<sup>5</sup> [greatercities.au/pulse-of-greater-sydney-2020/pi-2-30-minute-city](https://greatercities.au/pulse-of-greater-sydney-2020/pi-2-30-minute-city)

<sup>6</sup> <https://apps.transport.nsw.gov.au/ssts/assets/documents/sSTSFactsheetEnglish.pdf>

<sup>7</sup> <https://www.transport.nsw.gov.au/data-by-six-cities>

<sup>8</sup> [Cycleway Finder \(nsw.gov.au\)](https://www.transport.nsw.gov.au/cycleway-finder)

<sup>9</sup> <https://www.transport.nsw.gov.au/data-by-six-cities> (FY2022/23)

operates every 30 minutes, even in peak times, while most areas of Sydney typically have services every 15 minutes or better.

# ToR-B: Current and anticipated levels of demand for public transport services and the public transport requirements to meet this demand

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Transport for NSW has a transport planning and forecasting capability that measures current and future levels of demand for public transport services, and road use and freight. The planning is well-co-ordinated across Government and Common Planning Assumptions<sup>10</sup> are set and used by NSW Government agencies.

Overall travel demand is determined by the size and composition of the community, the networks and technologies available to the community, alongside their preferences, habits and behaviour. For a rapidly growing area such as Western Sydney, there is a significant opportunity to shape travel demand through integrated land-use and transport planning. A key challenge in Western Sydney is the rapid population growth that is forecast. Planning for that growth in a way that gives people choices about how they travel and can access the locations they need to in their daily lives is critical.

## Current demand

Over 44 million public transport trips were taken in Greater Sydney in July 2023. This comprises 22 million trips across the Sydney Trains network, 17 million across the bus network, and five million across the ferry, light rail and Metro networks.<sup>11</sup>

Public transport mode share in the Western Parkland City is five per cent while in other Greater Sydney cities, it is up to 10 per cent.<sup>12</sup>

Buses in the southwest regions (contract regions two and 15) had a combined 459,000 trips in July 2023, accounting just 2.7 per cent of Greater Sydney's total 17 million bus trips.<sup>13</sup> By comparison, these regions are home to around 425,000 people or 8.5 per cent of Greater Sydney's population. Patronage in these areas may be low due to an inadequate service provision. These two regions have around 23,000 total daily bus service kilometres, or around four per cent of Greater Sydney's total daily bus kilometres. This is approximately 55,000 daily bus service kilometres per million residents, while in the Eastern Harbour City service kilometres for bus and light rail exceed 170,000 per million residents.

## Anticipated demand

Up to an additional 600,000 people will live in Western Sydney by 2036. This represents 22 per cent growth across Western Sydney. This growth is concentrated in areas such as Austral, Wilton, Luddenham and Marsden Park. This will increase demand for public transport services in Western Sydney. The future Western Sydney Airport and Aerotropolis will be a 24-hour city. Many workers and residents will require public transport access at all times of the day.

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<sup>10</sup> [NSW Common Planning Assumptions](#)

<sup>11</sup> <https://www.transport.nsw.gov.au/data-and-research/data-and-insights/public-transport-trips-all-modes>

<sup>12</sup> <https://www.transport.nsw.gov.au/data-by-six-cities>

<sup>13</sup> <https://www.transport.nsw.gov.au/data-and-research/data-and-insights/public-transport-trips-all-modes>

This is further exacerbated as working from home patterns have changed substantially as a result of the COVID-19 pandemic. The transition of people to work from home is changing demand patterns for public transport and increasing localisation and demand for and connectivity between local centres, public spaces and residential areas. Given this, the NSW Government is establishing a common set of planning assumptions related to working from home to assist the public sector to plan for and deliver services and infrastructure that is fit-for purpose and meets community expectations.

Modelling shows that to support demand for bus routes in Western Sydney, up to an additional 190 bus services would be required in the peak hour by 2036.

Similarly, many heavy rail lines across the network may see passenger demand exceed available capacity by 2036. This is despite COVID-19 delaying migration rates and increasing the ability to work from home.

Supporting fleet, depots, infrastructure and staff are also required to meet this anticipated growth in demand for services. Planning for additional bus and train services and infrastructure to meet these demand challenges is underway.

Demand for Active Transport continues to rise in Western Sydney. This will require continued collaboration between Transport for NSW and councils to ensure schools, transport hubs and other key amenities are connected, particularly in areas of significant greenfield development.

## ToR-C: Changing nature of public transport needs due to shifting demographics, new suburbs, planned infrastructure and increased density

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Between 2021 and 2041, the population of Western Sydney (comprising the Western Parkland and Central River cities) is projected to increase by over 850,000 people, from 2.75 million to 3.61 million. Western Sydney has a younger population age profile than Eastern Sydney, but its population is ageing with almost one in five people aged 65 or older by 2041.

The record growth in new residents and jobs in these areas will place considerable demand on the public transport services.

The early provision of public transport infrastructure and services into high growth areas is critical to supporting the movement and place outcomes set in a suite of NSW Government strategic planning frameworks. Planning, delivery and servicing need to be flexible to allow early service provision in areas where new development triggers the need for augmented or new service patterns.

Transport for NSW's Future Transport Strategy<sup>14</sup> states a strategic ambition to “*Ensure public transport is available from day one*” with an aim of ensuring regular public transport is available as soon as an area is occupied by residents, schools or workers. This is particularly relevant in greenfield areas, both residential and employment. The Future Transport Strategy is periodically updated to respond to the changing needs of the community, evolving technologies and as opportunities emerge.

### Planning for population growth

The NSW Government's Urban Development Program<sup>15</sup> monitors and coordinates development, land supply and infrastructure delivery. The Urban Development Program Western Parkland City Pilot provides recommendations for housing and infrastructure prioritisation and sequencing. The highest level of housing completions over the next five years are expected to occur in the Local Government Areas of Blacktown, The Hills, Liverpool, Parramatta and Camden. A similar picture of housing completion activity also occurs over the next 20 years.

The Department of Planning and Environment has several planning frameworks across Western Sydney, including Greater Macarthur Growth Area 2040 plan<sup>16</sup>, Greater Macarthur Transit Corridor, South West Growth Area<sup>17</sup>, Western Sydney Aerotropolis<sup>18</sup>, Orchard Hills

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<sup>14</sup> <https://www.future.transport.nsw.gov.au/>

<sup>15</sup> [www.planning.nsw.gov.au/policy-and-legislation/housing/housing-supply-insights/quarterly-insights-monitor-q2/improving-coordination-of-housing-delivery](http://www.planning.nsw.gov.au/policy-and-legislation/housing/housing-supply-insights/quarterly-insights-monitor-q2/improving-coordination-of-housing-delivery)

<sup>16</sup> <https://www.planning.nsw.gov.au/plans-for-your-area/priority-growth-areas-and-precincts/greater-macarthur-growth-area/greater-macarthur-2040>

<sup>17</sup> [www.planning.nsw.gov.au/plans-for-your-area/priority-growth-areas-and-precincts/south-west-growth-area](http://www.planning.nsw.gov.au/plans-for-your-area/priority-growth-areas-and-precincts/south-west-growth-area)

<sup>18</sup> <https://www.planning.nsw.gov.au/plans-for-your-area/priority-growth-areas-and-precincts/western-sydney-aerotropolis>

precinct planning<sup>19</sup> and Greater Penrith to Eastern Creek Strategic Framework<sup>20</sup>, while Transport for NSW is preparing the South West Sydney Structure Plan. The Department of Planning and Environment is also working with Penrith City Council on their St Marys Town Centre Structure Plan and Master Plan<sup>21</sup>.

Transport for NSW and the Department of Planning and Environment work in partnership on planning for future transport requirements across Western Sydney. The current program of work is focused on master planning for the Western Sydney Aerotropolis and State-led rezonings in Orchard Hills, Riverstone East and State Assessed Planning Proposals in Greater Macarthur.

Further, Transport for NSW's road space allocation policy<sup>22</sup> is a valuable resource to influence how existing infrastructure is managed and operated to facilitate more reliable bus services and increased road network capacity to move people and enable more infill development.

Undertaking planning for mass transit where a significant amount of housing and employment will occur is critical. Mass transit in new suburbs will largely take place by buses, including the Western Sydney Rapid Buses and additional local bus service uplifts. Other mass transit public transport infrastructure is planned for areas such as the South West, Greater Macarthur and Wilton Growth Areas includes links between Bradfield and Campbelltown, Bradfield and Glenfield and enhancements of rail services beyond Macarthur to the Southern Highlands. Similarly, rail expansions and upgrades are planned in the North West such as a link between St Marys and Tallawong.

Mass transit supports concentrated higher density development, especially around the new Metro stations and surrounding high-amenity precincts. Without mass transit as a catalyst:

- Growth that occurs in areas, such as the Western Parkland City, will be geographically dispersed, with lower densities in detached dwellings and fewer knowledge-intensive jobs in high productivity precincts, increasing costs for population-supporting infrastructure.
- The Central River and Eastern Harbour cities will need to accommodate more residents and workers, over and above business-as-usual targets of an additional 2.4 million people by 2056. This will place increased pressure on existing communities and infrastructure networks.
- The Western Parkland City, and Greater Sydney as a result, will become a less attractive destination for investment and a less attractive place to live, making it harder to attract and retain high-value knowledge workers and international businesses.

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<sup>19</sup> [www.planning.nsw.gov.au/plans-for-your-area/priority-growth-areas-and-precincts/orchard-hills](http://www.planning.nsw.gov.au/plans-for-your-area/priority-growth-areas-and-precincts/orchard-hills)

<sup>20</sup> <https://www.planning.nsw.gov.au/plans-for-your-area/priority-growth-areas-and-precincts/greater-penrith-to-eastern-creek>

<sup>21</sup> <https://yoursaypenrith.com.au/stmarys2041>

<sup>22</sup> <https://www.transport.nsw.gov.au/system/files/media/documents/2021/road-user-space-allocation-policy.pdf>

# ToR-D: Social, economic and planning impacts of vehicle dependency and poorly integrated public transport

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Up to 70 per cent of global end use carbon emissions are generated by cities. Well-designed urban centres with integrated public and active transport and green infrastructure enable net-zero ambitions to be met by reducing car dependence. The impact of increasing temperatures and urban heat island effects may deter use of public transport options due to thermal discomfort. This may lead to more private vehicle use. Similarly, if active transport corridors are not designed with thermal comfort in mind, the zero emission and health and wellbeing benefits may not be realised.

## Car dependency and inactivity

A higher concentration of car ownership in Western Sydney exists where 94 per cent of households own private vehicles in the Western Parkland City compared to 83 per cent in the Eastern Harbour City. The share of households with two or more cars is higher across Western Sydney with 72 per cent in the Western Parkland City compared to 51 per cent in the Eastern Harbour City. For work trips, approximately 40 per cent of residents in the Metro West corridor drive a car or are driven in a car.

Communities face growing traffic congestion that is estimated to cost more than \$5 billion a year by 2031. Cars and light vehicles are responsible for more than 60 per cent of the Transport sector emissions in NSW.

This is exacerbated as more than two million car trips are made each day for distances of less than two kilometres, and another six million are made for distances of less than five kilometres.

Limited public transport availability can cause an increase in car dependency, high levels of congestion and poor socio-economic outcomes. This can entrench socio-economic outcomes, perpetuating disadvantage over generations, and making ongoing and future provision of public transport services more difficult.

Poor public transport availability also reduces access to opportunities as they have to wait longer for services, travel further, which takes more time and costs more. Poor public transport connectivity and integration mean people have less free time and less flexibility in what jobs, education and recreation opportunities are available to them.

There are alternatives to short car trips help manage congestion and support net zero targets. Walking and riding can be the most convenient, sustainable and healthy way of travelling for short trips. Safe, direct, and connected cycleways can be attractive options for 70 per cent of people.

Lack of physical activity in adults is also a growing concern. Inactive lifestyles are associated with rising rates of obesity and can lead to poor long-term health outcomes. Physical inactivity not only can lead to poor health outcomes, but also costs around \$20 billion in lost productivity each year.



Children spend an average of 18 minutes per day (less than one third of their recommended daily minutes) walking or riding a bike. Approximately 50 per cent of students are driven to school, despite a majority of school students living within a 20-minute bike ride to school.

## ToR-E: Affordability compared with other areas of Greater Sydney and New South Wales and relative to means

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In the Western Parkland City, average trip distances are around 12 kilometres, while in the Eastern Harbour City, average trip distances are around six kilometres. When the purpose of the trip is to commute, Western Parkland City trip distances average 20 kilometres, while Eastern Harbour City commute distances average 13 kilometres.<sup>23</sup>

These Western Sydney distances are more comparable to averages observed in outer metropolitan regions, such as the Central Coast, Illawarra-Shoalhaven and Lower Hunter/Greater Newcastle Cities than those observed in other parts of Sydney.

Western Sydney residents have to travel further for all purposes than people in other parts of Sydney. This means their costs to travel are often higher, reducing the affordability of travel compared. Western Sydney is also more socio-economically disadvantaged than other areas of Sydney, with more than 60 per cent of the population in the lower half of socio-economic index. Conversely, only eight per cent of the Eastern Harbour City population is in this cohort. This level of socio-economic disadvantage is also similar to that observed in the outer metropolitan regions.<sup>24</sup>

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<sup>23</sup> <https://www.transport.nsw.gov.au/data-by-six-cities> FY 2022/23

<sup>24</sup> Socio-Economic Indexes for Areas – Index of Relative Socio-Economic Advantage and Disadvantage 2021

# ToR-F: Role of public transport and future transport technologies to reduce car dependency in Western Sydney, including barriers to improve public transport services

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Public transport and the effective adoption of future technologies is essential to reducing car dependency in Western Sydney. Good provision of public transport allows people to access their everyday and irregular needs including employment, recreation, education, shopping without having to rely on a private vehicle.

Public transport services are critical to reducing car dependency and enabling a healthy, walkable western Sydney. A survey of 3700 people in Sydney researching what people want from town centres found that walking, cycling and public transport options were more valued than car accessibility and car parking across all age cohorts. (Legge, K. and S. Burgess, 2017).

Connected and Automated Mobility technology could reduce car dependency. Automated driving means vehicles can move between trips independently. This opens up a range of sharing opportunities that would traditionally only be possible with a driver tied to the vehicle. This could reduce the need for individuals to own a car, and therefore reduce the higher car ownership per household found in Western Sydney.

Automation could also enable faster connections to rapid, frequent and high-capacity routes by reducing the need for bus routes that run on long circuit routes to maximise coverage. Reduced land dedicated to parking and general traffic could be further benefits from automation.

Technologies, such as real-time passenger information displays and integrated signal priority, can improve the customer experience and public transport uptake by reducing anxiety around late-running trips. Improvement of bus priority (traffic signal phasing adjustments, dedicated bus lane, bus jumps, fixing the pinch points, grade separation) along key bus routes will improve the bus customer journey experience and encourage a mode shift from cars in high car-dependent areas of Western Sydney. This corridor-level bus planning should be completed before demand reaches capacity in the next decade.

Over the last few years, there has been a shift to more people choosing to ride a bike. An appetite now exists for new forms of active transport and emerging technologies. Personal mobility devices, such as e-scooters, are still being trialled and have not been fully legislated. These devices offer the opportunity to connect first and last mile trips across customers' journeys. Transport for NSW trialling of e-scooter shared schemes<sup>25</sup> in select metropolitan and regional areas.

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<sup>25</sup> <https://www.transport.nsw.gov.au/projects/current-projects/nsw-e-scooter-shared-scheme-trial>

Transport for NSW is also managing the Digital Smart Kerb pilots, funded by the Smart Places Acceleration Program<sup>26</sup>. The Western Sydney pilots for several technologies are capturing real-time kerb use data, creating a digital inventory of how and when kerbsides are used in several Western Sydney council areas. The data insights will help councils and Transport for NSW plan and allocate space flexibly, with spaces available to different users at various times, depending on the needs of the community. The trial will help to make streets safer for pedestrians, cyclists, transport and freight, and make access to the road network more efficient.

Transport for NSW is evaluating connected vehicle data for insights into vehicle movements, transport planning and to assist in identifying locations for potential safety improvements. Applying learnings from existing On Demand services<sup>27</sup> and considering further implementation of On Demand bus services could improve the coverage and flexibility of the public transport network. Ensuring micro mobility technologies are well integrated (and supported by policy and infrastructure) can also reduce the barriers associated with public transport by increasing the catchment and number of people the system supports.

Technology has also been deployed to support safety initiatives. For example, on some commuter car park projects motion activated lights, lighting levels and the design of some walls to be below ceiling height to allow light and passive surveillance have been deployed.

Technology is also utilised on rail fleets for safety and security. Lighting, CCTV surveillance, communications and clear sight lines act to enhance passenger safety.

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<sup>26</sup> [www.transport.nsw.gov.au/industry/cities-and-active-transport/smart-places/smartnsw-action/smart-places-acceleration-program](http://www.transport.nsw.gov.au/industry/cities-and-active-transport/smart-places/smartnsw-action/smart-places-acceleration-program)

<sup>27</sup> <https://transportnsw.info/travel-info/ways-to-get-around/on-demand>

## **ToR-G: Role of the public and private sector, including local government and the use of innovative funding models such as transit orientated development and value capture mechanisms, in public transport provision**

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The broader objective behind investing more on public transport in Western Sydney is to achieve a more equitable, sustainable and healthier city. Better coordination, more efficient processes, and supporting land uses and funding all play a part in achieving the efficient delivery of transport options.

Integrated public sector planning (across State and Local Government) continues to be useful to develop staged and committed infrastructure and services' delivery plans. This will enable the public sector to engage with the private sector to fulfil staged delivery plans. Key elements of this transit-oriented approach include:

- Establishing a coordinated and strategic approach for the development and delivery of growth areas or major infill redevelopment, through state infrastructure, services, and funding plans that support sequencing of development. Land release or rezoning should occur after all the planning (including funding earmarked) for utilities, transport networks and services, centres, schools, medical centres, recreational areas, and community facilities has taken place.
- Developing strategic transport plans to inform planning for growth areas, in partnership with local government. This plan then becomes the basis of engaging with developers for co-delivery in a timely and affordable way. A base level of public transport service, and provision for active transport, is essential in growth areas from when housing is put up for sale and when jobs are advertised.
- In greenfield areas, ensuring the prompt delivery of neighbourhood and/or town centres to encourage active transport and provide a place for community activity, and to connect to public transport stations and stops.

The Housing and Productivity Contribution<sup>28</sup> and Transport Project Component<sup>29</sup> are critical funding instruments to support the early delivery of transport options in growth areas. The Housing and Productivity Contribution replaces the previous Special Infrastructure Contribution in the NSW planning legislation. The Housing and Productivity Contribution is a development charge that will help fund the delivery of infrastructure in high growth areas. The Transport Project Component is a variable charge for developments that benefit from government investment in major projects. It applies only to new development in defined service catchments of major transport projects in Regional Infrastructure Contribution Framework.

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<sup>28</sup> <https://www.planning.nsw.gov.au/policy-and-legislation/infrastructure/infrastructure-funding/improving-the-infrastructure-contributions-system>

<sup>29</sup> <https://www.planning.nsw.gov.au/policy-and-legislation/infrastructure/infrastructure-funding/improving-the-infrastructure-contributions-system/new-framework-for-state-infrastructure-contributions>

Future greenfield development and state significant precincts have an opportunity to ensure Active Transport is part of a Voluntary Planning Agreement or Infrastructure Contributions mechanisms.

Sydney Metro has utilised an innovative model whereby private sector developers and builders help integrate station delivery with over station developments and place outcomes. An integrated station and precinct development is made up of the metro station and building(s) above and/or around the station that could deliver several uses like community facilities, new homes and green spaces, shops, restaurants, and commercial office spaces.

For example, the proposed Pymont Station under the Sydney Metro West project will be funded through a Special Infrastructure Contribution. Property owners that benefit from increased land values along the Pymont peninsula will make an annual contribution to contribute to offsetting the cost of the station. The Special Infrastructure Contribution will collect up to \$280 million from developers to help fund the new Pymont Metro station.

## **ToR-H: Staffing and future workforce planning, taking into account predicted service demand based on predicted population growth in Western Sydney**

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Up to an additional 600,000 people will live in Western Sydney home by 2036. This represents 22 per cent growth across Western Sydney, with concentrated growth in areas such as Austral, Wilton, Luddenham and Marsden Park. This will increase demand for public transport services in Western Sydney.

Several Local Government Areas with the largest project population increases between 2014 and 2021 are Parramatta, Blacktown, The Hills Shire and Camden. Local Government Areas with the fastest annual average growth rates include Camden, Wollondilly, The Hills Shire and Parramatta.

Supporting fleet, depot, infrastructure and staff will be required needed to meet this anticipated growth in demand for services. Fleet and fleet storage are increasingly critical issues as the price of land continues to increase. In many cases, this will require multiple parcels of land across Western Sydney.

Staffing will continue to be critical in terms of conducting front-line roles including driving and customer service. Staffing is also essential for maintenance and upkeep of the fleet to ensure safety and reliability. In recent times, there have been driver shortages in the industry. While Western Sydney has been impacted less by these shortages than other parts of Sydney staffing requirements must be established in line with additional service and fleet requirements.

The 24-hour operation of the WSI Airport and large-scale development of the Mamre Road and Aerotropolis precincts will continue to bring high levels of construction and shift workers into the area. This has brought about a significant increase in traffic congestion on the existing network, highlighting the criticality of planning for public transport.

Further, delivering Sydney Metro projects requires the mobilisation of a highly skilled workforce to ensure that the design, construct and operation of the metro is delivered safely and on time. Sydney Metro's Workforce Development and Industry Participation<sup>30</sup> is a holistic concept that sets out how the project will build a pipeline of resources to design, construct and operate the railway, leave a lasting skills legacy for industry, inspire future talent while also addressing challenges relating to skills, employment, diversity and the supply chain.

Sydney Metro provides employment opportunities across Sydney with a targeted approach for Greater Western Sydney it also increases opportunities for small medium enterprises, including Recognised Aboriginal Business to access Sydney Metro supply chains, together with supporting industry to compete in home and global markets.

Sydney Metro will implement a coordinated approach between Sydney Metro West and Sydney Metro – Western Sydney Airport. The projects present an opportunity to work with

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<sup>30</sup> <https://www.sydneymetro.info/workforce-development-and-industry-participation>

stakeholders and delivery partners to ensure a coordinated and collaborative approach in delivery of skills development. It will also support greater participation for local employment and increased diversity in the workforce and supply chain.



## ToR-I: Any other related matters

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### Priority roads program

Transport for NSW is developing the priority roads program to upgrade roads to support the local bus network in the Aerotropolis. This program follows more than 10 years of integrated multi-modal planning, which aligns with the strategic Aerotropolis land use plans. The integrated and prioritised road network has been a collaborative effort across government, and has consistently considered the following criteria developed in collaboration with representatives across the Department of Planning and Environment, Western Parkland City Authority, Greater Cities Commission, and Sydney Water in 2020/21:

- Airport readiness, construction access, interim bus and connectivity links that support construction, testing and opening phases of Western Sydney Airport and Sydney Metro Western Sydney Airport
- Precinct staging alignment - links that facilitate development of initial Aerotropolis precincts
- Integrated multimodal network - links that separate, and support efficient operation of, non-complementary road users (eg, transit and freight)
- Higher-order bus services - links that support operation of rapid or frequent bus services
- Safeguarding place outcomes - links that ensure amenity of high-activity places is not compromised by traffic movements.

### Rail Infrastructure and Systems Review

In March 2023, the NSW Government announced an independent review of Sydney Trains' Rail Infrastructure and Systems.

The initial focus of the review has been to consider whether Sydney Trains' Reliability and Resilience performance is meeting appropriate standards and the performance of the network in recovering from significant incidents and events which impact standards of service delivery.

The Review has the capacity to consider any functions and issues which it believes impact on Sydney Trains' Reliability and Resilience performance and to identify, consider and recommend areas where performance can and should be improved.

The Review provided an interim report to the NSW Government which was released in May 2023. The NSW Government accepted all 12 recommendations in the interim report and is working on implementing those recommendations.

### Sydney Metro Western Sydney Airport to Glenfield – Extension from Bradfield to Macarthur via Oran Park and Narellan

Sydney Metro is progressing work to expand the existing business case for Sydney Metro Western Sydney Airport to Glenfield (via Leppington), to also include planning for an extension from Bradfield to Macarthur via Oran Park and Narellan. This work is in addition to developing a second business case to extend the Sydney Metro Western Sydney Airport line from St Marys to Tallawong, as part of the NSW Government's 2023 Election commitments.

An independent review<sup>31</sup> of Sydney Metro is taking place, conducted by Mike Mrdak and Amanda Yates. Sydney Metro is working to implement and respond to the Review's initial recommendations and is ready to address any additional recommendations from the Final Report anticipated later in 2023.

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<sup>31</sup> <https://www.sydneymetro.info/article/sydney-metro-review-announced>