

Chapter 25

Project justification and conclusion

25 Proposal justification and conclusion

This chapter presents the justification for the proposal and a conclusion to the Environmental Impact Statement. The justification is based on the strategic need for the proposal and in particular whether the proposal has achieved the objectives of Sydney Metro West as set out within the Concept approval and has met the object of the *Environmental Planning and Assessment Act 1979*.

25.1 Summary of strategic need

Sydney Metro is Australia's biggest public transport project. Services between Rouse Hill and Chatswood started in May 2019 on the first stage of this new stand-alone automated railway network, which is revolutionising the way Sydney travels.

Sydney is expanding and the NSW Government is working hard to deliver an integrated transport system that meets the needs of customers now and in the future. The delivery of Sydney Metro West is critical to keeping Sydney moving.

Sydney Metro West would involve the construction and operation of a largely underground metro rail line, around 24 kilometres long between Westmead and the Sydney CBD, including new metro stations at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays and Hunter Street (Sydney CBD).

The approved Sydney Metro West Concept included consideration of the justification of the project as a whole in the *Sydney Metro West Environmental Impact Statement – Westmead to The Bays and Sydney CBD* (Sydney Metro, 2020a). This proposal is seeking planning approval to enable the Sydney Metro West Concept to be realised by undertaking major civil construction work from The Bays to Sydney CBD.

Sydney Metro West would provide city-shaping benefits as the significant increase in transport connectivity, capacity and amenity in the Greater Parramatta to Sydney CBD corridor would boost the economic productivity of Sydney and unlock planned land use outcomes in the CBDs, planned precincts and urban renewal areas.

Sydney Metro West would also provide a direct, fast, reliable and frequent connection between Greater Parramatta and the Sydney CBD and would:

- Link communities along the way that have previously not been serviced by rail
- Relieve the congested T1 Western Line, T9 Northern Line and T2 Inner West and Leppington Line
- Double the rail capacity between the Parramatta and Sydney CBDs
- Significantly boost economic opportunities for Greater Parramatta
- Support new residential and employment zones along the Greater Parramatta to Sydney CBD corridor – Providing improved transport for the additional 420,000 new residents and 300,000 new workers forecast to be located within the corridor over the next 20 years
- Allow customers fast and easy transfers with the T1 Western Line at Westmead, T9 Northern Line at North Strathfield and the Sydney Trains suburban rail network and Sydney Metro in the Sydney CBD
- Allow for transfers with the future Parramatta Light Rail (Stage 1) at Westmead and Parramatta, as well as the planned Parramatta Light Rail (Stage 2) at Sydney Olympic Park
- Create an anticipated 10,000 direct and 70,000 indirect jobs during construction (based on Sydney Metro analysis).

This proposal, the major civil construction work between The Bays and Sydney CBD, would include:

- Enabling work such as demolition, utility supply to construction sites, utility adjustments, and modifications to the existing transport network
- Tunnel excavation including tunnel support activities
- Station excavation for new metro stations at Pyrmont and at Hunter Street in the Sydney CBD.

The *Sydney Metro West Environmental Impact Statement – Westmead to The Bays and Sydney CBD* (Sydney Metro, 2020a) included a station in Pyrmont as a strategic station option to be further investigated. The subsequent evaluation of this station option confirmed that the inclusion of Pyrmont Station would support the vision for Pyrmont as the western gateway to the Sydney CBD, forming a continuous innovation corridor between The Bays and Eveleigh. This would also support the Department of Planning, Industry and Environment’s *Pyrmont Peninsula Place Strategy (2020)* that positions Pyrmont as an attractor for global investment driven by connectivity to the Sydney CBD.

The *Sydney Metro West Environmental Impact Statement – Westmead to The Bays and Sydney CBD* (Sydney Metro, 2020a) also noted that the preferred location for a Sydney CBD Station was being investigated at the time of exhibition. It detailed that the metro station would enable interchange with existing public transport networks, including Sydney Metro City & Southwest, the existing Sydney Trains suburban rail network, Light Rail (L2 Randwick Line and L3 Kingsford Line) and bus networks. Detailed assessment of shortlisted station locations in the Sydney CBD found that the Hunter Street Station (Sydney CBD) option was the most favourable, providing a suitable station location in the mid to north of the Sydney CBD which would be critical to the success of the Sydney Metro West project and provide direct access to the commercial core of the Sydney CBD.

Biophysical, economic and social considerations have been assessed in the context of the principles of ecologically sustainable development. This is discussed in Chapter 23 (Synthesis of the Environmental Impact Statement) and summarised below:

- **Precautionary principle** – The environmental risk analysis documented in Chapter 24 (Environmental risk analysis) addresses the potential impacts of the proposal. That analysis, together with the assessment carried out in preparing this Environmental Impact Statement indicates that there would be no threat of serious or irreversible damage to the environment
- **Intergenerational equity** – The objectives of Sydney Metro West are essentially around ensuring an efficient and reliable public transport network. This would benefit current and future generations. Once operational, Sydney Metro West would leave a positive legacy for future generations. It would provide long term benefits by strengthening connections and access across Sydney, providing improved connectivity on the rail network and improving the capacity, reliability and efficiency of the existing transport system
- **Conservation of biological diversity and ecological integrity** – Conservation of biological diversity and ecological integrity has been considered throughout the development and design stages. The proposal would be located within a highly urbanised area that does not possess large expanses of intact native vegetation with high biodiversity value. As the majority of this proposal would be underground or in pre-existing developed areas, potential direct impacts to terrestrial biodiversity has been largely avoided and/or minimised
- **Improved valuation and pricing of environmental resources** – The value placed on the environment was inherent in the development of the design. In addition, the costs associated with the planning and design of measures to avoid/minimise potential adverse environmental impacts and the costs to implement them have been built into the overall costs. Ongoing and detailed design together with specific issue-based management plans would represent further commitment to the recognition of the value of protecting environmental resources.

25.2 Achieving the Sydney Metro West objectives

The approved Sydney Metro West Concept included consideration of the justification of the project as a whole in the *Sydney Metro West Environmental Impact Statement – Westmead to The Bays and Sydney CBD* (Sydney Metro, 2020a). Table 25-1 and Table 25-2 provide an assessment of the proposal, which is a staged planning approval to enable the Sydney Metro West Concept to be realised, against the Sydney Metro West network and corridor objectives.

Table 25-1 Assessment against the Sydney Metro West network objectives

Sydney Metro West objectives	Assessment
Ensure transport services are meeting the needs of customers	<ul style="list-style-type: none"> • Relieves the congested T1 Western Line, T9 Northern Line and T2 Inner West and Leppington Line • Provides travel-time savings for customers • Reduces station crowding at some stations • Provides rail transport to areas where this is currently not available

Sydney Metro West objectives	Assessment
Deliver outcomes that align with and support key strategic land use and transport frameworks including the Smart Cities Plan, Greater Sydney Region Plan, Future Transport Strategy and the relevant District Plans	<ul style="list-style-type: none"> • Connects Greater Parramatta and the Sydney CBD and supports the vision for a metropolis of three cities, as identified in the <i>Greater Sydney Region Plan</i> (Greater Sydney Commission, 2018) • Supports the delivery of the '30-minute city' as identified in <i>Future Transport 2056 Strategy</i> (Transport for NSW, 2020) • Acts as a catalyst for realising the vision of the Greater Parramatta and the Olympic Peninsula • Reinforces Greater Parramatta as the Central River City
Boost Sydney's international competitiveness, productivity and employment growth by supporting new and existing strategic centres	<ul style="list-style-type: none"> • Supports the three-cities vision to re-balance economic opportunities • Allowing a connection to the Sydney CBD would help Parramatta CBD become more attractive for business investment, and facilitates the planned growth of an additional 49,000 jobs by 2036 • Facilitates the planned growth of an additional 70,000 jobs by 2036 in the Westmead health and medical research innovation district, Sydney Olympic Park State significant lifestyle precinct and The Bays future knowledge hub by allowing a connection to the Sydney CBD • Improves connectivity to major attractions and key precincts located along the corridor, including at The Bays
Support future housing needs by increasing housing supply, choice and affordability	<ul style="list-style-type: none"> • Facilitates the planned growth for an additional 46,000 homes within the walking catchment of proposed metro stations by providing a connection to the Sydney CBD from those stations • Facilitates more choices of affordable housing close to where people work resulting in: <ul style="list-style-type: none"> • Improved liveability from improved commute time and a less congested transport network • Improved household budgets from reduced reliance on cars • Lower cost for parking spaces in new developments
Improve liveability and provide a catalyst for positive change by enabling urban renewal opportunities, enhancing housing supply and supporting productivity of centres	<ul style="list-style-type: none"> • Supports the masterplanned growth in precincts and urban renewal areas targeting an additional 169,000 jobs and 46,000 dwellings for 106,000 people between 2016 and 2036 • Centralised growth would be accommodated within masterplanned precincts and urban renewal areas. This would streamline opportunities for masterplanned growth with careful planning of transport, social infrastructure, services and placemaking • More opportunities for people to live close to where they work in mixed-use precincts such as The Bays while: <ul style="list-style-type: none"> • Reducing potential impacts on amenity from continued reliance on cars • Increasing opportunities for walking and cycling
Improve access to and resilience of the transport network through integrated land use and transport planning, including integration of Sydney Metro West with other modes	<ul style="list-style-type: none"> • Effectively doubles rail capacity from Parramatta to the Sydney CBD with the delivery of a new high capacity rail connection • Reduces congestion and helps alleviate platform and station crowding • Provides new stations at localities not serviced by the existing Sydney Trains suburban rail network, including The Bays and Pyrmont • Provides additional multi-modal interchange capability at the Sydney CBD
Ensure value for money and a sustainable and deliverable solution.	<ul style="list-style-type: none"> • Decreased emissions from reliance on cars to support Sydney's growing population • Proactively addresses forecasted crowding issues before the rail network reaches capacity and results in potential economic impacts • Supports timely investment in planned urban renewal and growth areas attracting businesses, workers and residents

Table 25-2 Assessment against the Sydney Metro West Greater Parramatta to Sydney CBD corridor objectives

Sydney Metro West objectives	Assessment
<p>Contribute towards the vision for a three cities metropolis established by the Greater Sydney Commission including the '30-minute city' concept</p>	<ul style="list-style-type: none"> Supports the vision for 30-minute cities as outlined in the <i>Greater Sydney Region Plan</i> (Greater Sydney Commission, 2018) by providing customers an easy connection to key destinations including cities, health and education precincts, diverse employment centres and residential precincts Enables an additional 730,000 jobs and 630,000 people to be within 30-minutes of the Parramatta and Sydney CBDs
<p>Support additional housing supply and employment growth opportunities and support urban renewal initiatives within the Greater Parramatta to Sydney CBD corridor including key government precincts such as the Greater Parramatta and Olympic Peninsula and The Bays</p>	<ul style="list-style-type: none"> Supports planned improvements in land use and a broader range of housing opportunities, which can offer improved and more affordable housing with better access to services and employment, and improved liveability By improving the connections between key economic centres, Sydney Metro West would foster significant growth in jobs Directly supports the creation of new jobs within the corridor, particularly at key precincts including The Bays Enables an additional 169,000 jobs within walking catchments of proposed metro stations. Of these new jobs, 47 per cent would not otherwise be achieved without Sydney Metro West
<p>Achieve customer outcomes including relieving congestion on the busy T1 Western Line and T2 Inner West and Leppington Line, increased rail patronage and mode shift, reduced travel times between key destinations, providing new access to mass transit rail and relieving bus and road congestion in the western corridor</p>	<ul style="list-style-type: none"> Effectively doubles rail capacity from Parramatta to the Sydney CBD moving up to 40,000 people an hour in each direction Significantly reduces train crowding on the T1 Western Line, T2 Inner West and Leppington Line and the T9 Northern Line Reduces crowding at Central station Substantially improves the public transport network accessibility to key economic centres across the Greater Parramatta to Sydney CBD corridor Increases the reach and use of Sydney's public transport network by providing new stations and additional interchange capability at Sydney CBD Improves travel times between key employment centres such as Parramatta, Sydney CBD, North Sydney, Chatswood and Sydney Olympic Park Improves resilience within the public transport network by providing an alternative to the existing Sydney Trains suburban railway route for customers during planned and unplanned network incidents Provides the opportunity to optimise the bus network by reducing the number of buses on congested corridors and increasing bus services on other parts of the network Provides the opportunity for mode shift from car to public transport, which could result in road user travel time savings

25.3 Objects of the Environmental Planning and Assessment Act 1979

The objects of the *Environmental Planning and Assessment Act 1979* provide a policy framework within which the justification of Sydney Metro West, including this proposal, can be considered.

Table 25-3 outlines those objects and provides comment on their relevance to this proposal, which is seeking planning approval to enable the Sydney Metro West Concept to be realised.

Table 25-3 Relevance of the objects of the *Environmental Planning and Assessment Act 1979* to this proposal

<i>Environmental Planning and Assessment Act 1979</i> Objectives	Comment
To promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources	<p>This proposal has been designed to avoid potential impacts on the environment and to minimise the need for land acquisition, as well as potential impacts on existing development and local communities.</p> <p>This proposal has been designed to conserve the State's natural and other resources. During construction and operation of this proposal, opportunities would be taken to reduce material use and maximise the use of materials with low embodied environmental impact, where practical. In particular, water efficiency measures would be implemented with a focus on achieving water savings and targeting water recycling and reuse.</p>
To facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision making about environmental planning and assessment	<p>Sustainability has been a key driver for this proposal. The proposal is supported by the Sydney Metro Environmental and Sustainability Statement of Commitment and the future development of a Sydney Metro West Sustainability Plan (refer to Chapter 22 (Sustainability, climate change and greenhouse gas)). Further details on addressing the principles of ecologically sustainable development are also provided in Chapter 23 (Synthesis of the Environmental Impact Statement).</p>
To promote the orderly and economic use and development of land	<p>This proposal would help to provide a significant increase in transport connectivity, capacity and amenity in the Greater Parramatta to Sydney CBD corridor. This would boost the economic productivity of the greater Sydney area and unlock planned land use outcomes in the Parramatta and Sydney CBDs, planned precincts and urban renewal areas, including The Bays.</p> <p>It has been designed to minimise potential impacts to the surrounding natural and built environments, and to minimise disruption to existing development patterns. Provision of a mostly underground metro system is an orderly and economic approach to delivery of Sydney Metro West in the context of existing development along the corridor.</p>
To promote the delivery and maintenance of affordable housing	<p>Sydney Metro West would provide public transport accessibility to future growth areas including The Bays. It would also provide an affordable transport option for future residents by providing access from future growth areas, including the Greater Penrith to Eastern Creek Growth Investigation Area and the Western Sydney Aerotropolis to the Sydney CBD. This would support the planned growth for an additional 46,000 homes in the Parramatta to Sydney corridor by 2036.</p>
To protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats	<p>The proposal would be located within a highly urbanised area that does not possess large expanses of intact native vegetation with high biodiversity value. As the majority of this proposal would be underground or in pre-existing developed areas, direct potential impacts to terrestrial biodiversity have been largely avoided and/or minimised.</p> <p>Further details on potential biodiversity impacts and mitigation are provided in Chapter 18 (Biodiversity).</p>
To promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)	<p>The design development of the proposal has included a focus on avoiding or minimising potential Aboriginal and non-Aboriginal heritage impacts.</p> <p>Potential impacts on heritage items would be minimised during construction and works would be carried out in accordance with relevant management strategies for specific heritage items where impacts are unavoidable.</p>
To promote good design and amenity of the built environment	<p>This proposal has been designed to minimise potential impacts to community facilities and open space. Potential landscape and visual amenity impacts from the proposal would be managed in accordance with mitigation measures, the Construction Environmental Management Framework (Appendix C) and the Overarching Community Communications Strategy (Appendix B).</p>

<i>Environmental Planning and Assessment Act 1979 Objectives</i>	Comment
To promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants	The construction of all buildings would be completed consistent with the applicable Australian and international safety standards.
To promote the sharing of the responsibility for environmental planning between the different levels of government in the State	The responsibility for environmental planning and approval in relation to this proposal rests primarily with the NSW Government. Consultation has, however, occurred across all levels of the government (refer to Chapter 4 (Stakeholder and community engagement)).
To provide increased opportunity for community participation in environmental planning and assessment	The Sydney Metro West development process, including for this proposal, has involved extensive consultation with the community and stakeholders (refer to Chapter 4 (Stakeholder and community engagement)).

25.4 Conclusion

Sydney Metro West was declared as State significant infrastructure and critical State significant infrastructure under sections 5.12(4) and 5.13 of the *Environmental Planning and Assessment Act 1979* respectively on 23 September 2020. The Sydney Metro West Concept and Stage 1 were approved on 11 March 2021, under Part 5, Division 5.2 of the *Environmental Planning and Assessment Act 1979* as a staged State significant infrastructure application.

Key environmental issues have been examined throughout the design development process. Consultation has been carried out with affected stakeholders during the assessment process so that key potential impacts of the proposal have been identified at an early stage, and where possible, avoided or appropriate mitigation measures developed. This has resulted in a number of changes to the earlier designs that have mitigated many of the potential significant impacts.

Notwithstanding, it is inevitable that a project of this scale and location in a heavily urbanised environment would have some potential residual (unavoidable) impacts during construction.

Key potential residual impacts associated with this proposal are identified in Chapter 6 to 22 and would largely include:

- Potential temporary construction traffic and pedestrian impacts, deterioration of intersection performance around some construction sites and temporary loss of parking, especially at Pyrmont
- Potential temporary construction noise, ground-borne noise and vibration impacts
- Potential major impact to State and locally significant non-Aboriginal heritage items and archaeological remains
- Potential temporary local community amenity impacts associated with an increase in noise levels, traffic movements and congestion, dust, and changes in visual outlook
- Potential impacts to businesses from property and land acquisition and temporary environmental and amenity impacts
- Potential impacts on water quality of surrounding environments including White Bay and Sydney Harbour
- Groundwater drawdown during construction at Pyrmont Station construction sites and Hunter Street Station (Sydney CBD) construction sites where excavations would be drained
- Potential temporary cumulative impacts given the potential overlap with other projects and developments as listed in Appendix G (Cumulative impacts assessment methodology).

The potential residual impacts identified would not result in any unacceptable impacts and further mitigation would be considered during the detailed design stage. This would include the decision on appropriate construction methodologies and the implementation of the environmental management practices.

On balancing the strategic need and benefits of the proposal with the potential residual impacts, this proposal, as the second stage of the planning process for Sydney Metro West, is considered to be in the public interest.