

Part C

Justification and conclusion

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22.0 Justification and conclusion

This chapter presents the justification for this proposal and conclusion to the Environmental Impact Statement. The justification is based on the strategic need for Sydney Metro West and, in particular, whether this proposal has achieved the objectives of Sydney Metro West as set out within the Concept approval and has met the objects of the EP&A Act.

22.1 Justification

22.1.1 Summary of the 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 standalone 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, Pymont 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 strategic benefits of the approved Concept to be realised by undertaking rail infrastructure, stations, precincts work and operation and maintenance of the Sydney Metro West line.

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 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 is seeking planning approval to enable the strategic benefits of the approved Concept to be realised. As this proposal is a subsequent stage within the approved Concept, it would continue to be consistent with the key strategic planning and transport infrastructure strategies and policies and contribute to providing the identified benefits of the approved Concept.

Biophysical, economic and social considerations have been assessed in the context of the principles of ecologically sustainable development. This is discussed in Chapter 20 (Synthesis) of this Environmental Impact Statement and is summarised below:

- precautionary principle – the environmental risk analysis documented in Chapter 21 (Environmental risk analysis) of this Environmental Impact Statement addresses the potential impacts of this proposal. That analysis, together with the detailed 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 based upon 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 transport system. It would address emerging issues with respect to capacity and congestion, which otherwise would be more difficult to address at a future stage
- conservation of biological diversity and ecological integrity – conservation of biological diversity and ecological integrity has been considered throughout the Sydney Metro West development and design stages. The construction footprint has been developed to avoid or minimise impact to areas of high ecological value. Detailed assessments have been carried out to identify flora and fauna impacts and a range of mitigation measures identified for implementation
- 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 design development, together with specific issue-based management plans, would represent further commitment to the recognition of the value of protecting environmental resources.

22.1.2 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 22-1 and Table 22-2 provide an assessment of this proposal, which is seeking planning approval to enable Sydney Metro West to be realised, against the Sydney Metro West network and corridor objectives.

Table 22-1 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.
Deliver outcomes that align with and support key strategic land use and transport frameworks including the <i>Smart Cities Plan</i> , <i>Greater Sydney Region Plan</i> , <i>Future Transport 2056 Strategy</i> and the relevant District Plans	<ul style="list-style-type: none"> • connects Greater Parramatta and the Sydney CBD and support 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, 2020a) • acts as a catalyst for realising the vision of Greater Parramatta and the Olympic Peninsula • reinforces Greater Parramatta as the Central River City • is consistent with and supports the delivery of the relevant district plans.

Sydney Metro West objectives	Assessment
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 rebalance economic opportunities • allows a connection to the Sydney CBD, which 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 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.
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 of the existing rail network • provides new stations at localities not serviced by the existing Sydney Trains suburban rail network, including Five Dock, The Bays and Pymont • 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 22-2 Assessment against the Sydney Metro West Greater Parramatta to Sydney CBD corridor objectives

Sydney Metro West objectives	Assessment
Contribute towards the vision for a three cities metropolis established by the Greater Sydney Commission including the '30-minute city' concept	<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, 2018a) 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.
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 Greater Parramatta and the Olympic Peninsula and The Bays	<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 • fosters significant growth in jobs by improving the connections between key economic centres directly supports the creation of new jobs within the corridor, particularly at key precincts including Westmead, Sydney Olympic Park and 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.
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	<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.

22.1.3 Meeting the objects of the Environmental Planning and Assessment Act 1979

The objects of the *Environmental Planning and Assessment Act 1979* (EP&A Act) provide a policy framework within which the justification of Sydney Metro West, including this proposal, can be considered. Table 22-3 outlines those objects and provides comment on their relevance to Sydney Metro West.

Table 22-3 Relevance of the objects of the EP&A Act to this proposal

EP&A Act objects	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	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 18 (Proposal-wide) of this Environmental Impact Statement). Further details on addressing the principles of ecologically sustainable development are also provided in Chapter 20 (Synthesis) of this Environmental Impact Statement.
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.</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	Sydney Metro West would provide public transport accessibility to future growth areas including The Bays, the Parramatta Road Corridor, Sydney Olympic Park, and Westmead. 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.
To protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats	<p>This 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 Part B (Environmental assessment) of this Environmental Impact Statement.</p>
To promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)	The design development of the proposal has included a focus on avoiding or minimising potential Aboriginal and non-Aboriginal heritage impacts. Aboriginal and non-Aboriginal heritage values have also been, and will continue to be, considered as part of the design development process.

EP&A Act objects	Comment
	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. In some cases, this proposal provides the opportunity for heritage benefits, such as providing an improved setting and greater public appreciation of Kia Ora at Parramatta.
To promote good design and amenity of the built environment	This proposal has outlined the Sydney Metro approach to ensuring good design outcomes, including through a collaborative design process, the use of a Design Review Panel and the implementation of the Design Guidelines (refer to Appendix E). 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 F) and the Overarching Community Communications Strategy (Appendix C).
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 government (refer to Chapter 3 (Stakeholder and community engagement) of this Environmental Impact Statement).
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 3 (Stakeholder and community engagement) of this Environmental Impact Statement).

22.2 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 EP&A Act respectively on 23 September 2020. The Sydney Metro West Concept and Stage 1 (*Sydney Metro West Environmental Impact Statement – Westmead to The Bays and Sydney CBD* (Sydney Metro, 2020a)) were approved on 11 March 2021, under Part 5, Division 5.2 of the EP&A Act as a staged State significant infrastructure application.

This Environmental Impact Statement has been prepared in accordance with the provisions of the EP&A Act. In particular, it addresses the requirements of the Secretary of the NSW Department of Planning and Environment. It also includes consideration of the issues raised by the community and stakeholders during the development of Sydney Metro West.

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 this 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 expected that a project of this scale and location in a heavily urbanised environment would have some potential residual (unavoidable) impacts, particularly during construction. During construction, most impacts would relate to the continuation of impacts associated with work carried out under the previous Sydney Metro West planning applications. While this would result in consecutive impacts, they would be generally less intensive and would be manageable to an acceptable level. There would be some additional construction footprints required at several construction sites. These additional sites would be small and would not result in substantial impacts beyond those already assessed as part of previous planning applications.

When operational, the benefits of Sydney Metro West would be substantial. In particular, it would provide improvements to the public transport network capacity and efficiency, including new public transport interchange facilities at and around stations. Key potential impacts would relate to noise and vibration from the operation of trains in tunnel and from the ongoing surface operations at the Clyde stabling and maintenance facility. Measures incorporated in the track form and acoustic shielding would enable compliance with all relevant noise and vibration criteria. Other operational issues would relate to transport network and parking changes to integrate the new metro stations, water quality control and flooding. These impacts would be managed to an acceptable level.

Any residual impacts as a result of this proposal need to be considered within the context of the significant city shaping, transportation and other strategic benefits it would provide over the medium to longer term, and for future generations. In particular, this includes the significant placemaking opportunities to facilitate the transformation of areas with new places, or to reinforce and enhance existing places.

Provided the measures and commitments specified in this Environmental Impact Statement are effectively implemented during the design, construction and operational phases, the identified environmental impacts would be acceptable and manageable. The consequences of not proceeding (do nothing) would result in unacceptable impacts on the transport network, particularly in terms of the inability to support growth and urban renewal. This would ultimately constrain Sydney's future liveability and global competitiveness.

On balancing the strategic need and benefits with the potential residual impacts, Sydney Metro West (including this proposal) would be in the public interest.