

CHATSWOOD TO SYDENHAM

SUBMISSIONS AND PREFERRED INFRASTRUCTURE REPORT

OCTOBER 2016

MAIN REPORT



Transport
for NSW





EXECUTIVE SUMMARY



Executive summary

Sydney Metro is Australia's biggest public transport project. A new standalone railway, this 21st century network would deliver 31 metro stations and more than 65 kilometres of new metro rail for Australia's biggest city – revolutionising the way Sydney travels.

The first stage of Sydney Metro – Sydney Metro Northwest – is currently being built between Rouse Hill and Chatswood.

The NSW Government is now proposing to build the second stage – Sydney Metro City & Southwest. The first component of this stage is the Chatswood to Sydenham project (the project), which would extend the metro rail line under Sydney Harbour, through new Sydney CBD stations and south to Sydenham.

The project is due to open in 2024 with the capacity to run a metro train every two minutes each way through the centre of Sydney – a level of service never before seen in Sydney. Sydney's new metro railway would have a target capacity of about 40,000 customers per hour, similar to other metro systems worldwide. This is a major increase on Sydney's current suburban system, which can reliably carry 24,000 people an hour per line.

Sydney Metro is part of a plan identified in *Sydney's Rail Future* to transform and modernise Sydney's rail network so it can grow with the city's population and meet the future needs of customers. The project is fully integrated with transport and planning strategies, being specifically addressed in the NSW Governments *State Infrastructure Strategy* and *Long Term Transport Master Plan*.

Sydney Metro, together with signalling and infrastructure upgrades across the existing Sydney rail network, would increase the capacity of train services entering the Sydney CBD – from about 120 an hour today to up to 200 services beyond 2024. This is an increase of up to 60 per cent capacity across the network.

The key components of the project would include about 15.5 kilometres of rail track within tunnels located between Chatswood and Sydenham. New metro stations would be built at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street and Waterloo, as well as new underground platforms at Central Station. The project would also include realignment of the T1 North Shore Line surface tracks, traction power substations and a number of ancillary components.

Project benefits

Sydney Metro City & Southwest and the project would deliver the following significant benefits:

- The Sydney Metro network would substantially increase rail network capacity by introducing new high-capacity rail connections between the Sydney CBD and other key economic centres in Sydney. It would cater for expected increased demand for rail services and accommodate an extra 100,000 customers per hour across the Sydney CBD rail lines
- Sydney Metro City & Southwest would relieve platform crowding at existing Sydney CBD stations, and reduce the amount of time customers spend on heavily crowded platforms. The new stations and platforms at Martin Place, Pitt Street, Central and Barangaroo would spread customers across more stations, thereby reducing crowding at Town Hall and Wynyard stations
- The project would substantially improve travel times for customers. The largest travel time savings would be experienced by customers travelling from new stations (such as Crows Nest), or where the project provides a more direct route of travel (such as Victoria Cross to Martin Place)
- The project would substantially increase accessibility to the broader transport network by extending the metro network under Sydney Harbour through the Sydney CBD and by increasing the number of Sydney CBD rail stations; and providing extra connectivity and interchange capacity at existing stations
- Sydney Metro City & Southwest would substantially increase transit amenity throughout Sydney, which would facilitate increased economic productivity and land use efficiency. This would provide the opportunity for development adjacent to metro stations within existing centres, activating precincts and providing new communities around metro station locations.

Consultation on the Environmental Impact Statement

In May 2016, the Environmental Impact Statement was placed on public exhibition for a period of 48 days (six weeks). During this time, consultation activities were carried out to engage key stakeholders and the community on information in the Environmental Impact Statement, encourage participation in exhibition activities and provide guidance on the submissions process. Submissions on the project were received by the NSW Department of Planning and Environment during the exhibition period.

Key stakeholders, such as local and State government departments and peak bodies, were briefed via emails, meetings, presentations and phone calls, to ensure they were adequately informed of the project.

Place Managers engaged residents, tenants and businesses throughout the exhibition period to ensure they were aware of the Environmental Impact Statement. Place Managers build relationships and act as a feedback mechanism to help ensure community and stakeholder aspirations are consistently considered in the planning process.

The project team hosted six information sessions where information about the project was displayed and explained. All members of the community were invited to attend these sessions and meet expert members of the project team and have questions answered. In addition, representatives from the Department of Planning and Environment attended all sessions.

Purpose of this report

This Submissions and Preferred Infrastructure Report documents and considers the issues raised in community and stakeholder submissions received during the public exhibition of the Environmental Impact Statement. Transport for NSW has carefully considered the content of the submissions and has prepared clarifications and responses to the issues raised in the submissions. This report also details project changes and additional investigations carried out since the exhibition of the Environmental Impact Statement.

In preparing this report and responding to some of the submissions, Transport for NSW has updated a number of the key management strategy documents for the delivery of the project, as appended to this report. In addition, archaeological heritage has been assessed further. Guidance on the management of heritage during construction is provided in the appended reports.

Overview of submissions

The Department of Planning and Environment received 318 submissions during the Environmental Impact Statement exhibition period. Of these submissions, 17 were from government agencies and local councils. These groups raised a range of issues relevant to their respective areas of interest and responsibility. Further information on key issues raised by each groups is provided in Chapter 5 (Submissions received).

A total of 301 submissions were received from the community and businesses. Key issues of most concern to the community and businesses included:

- Pedestrian and motorist safety around construction sites and haul routes
- Noise and vibration impacts during construction and operation, including during out of hours work
- Construction traffic impacts
- Impacts on the performance of the local road network during construction and operation
- Suggestions for alternative tunnel alignments and additional station locations
- Future development opportunities around stations
- Impacts on property values and the need for property condition surveys
- Access and amenity related impacts to businesses during construction
- Direct and indirect impacts on heritage items, including areas of potential archaeological value
- Visual impacts during construction and operation.

Chapter 6, Chapter 7 and Chapter 8 of this report present the issues raised in submissions and corresponding responses.

Changes to the project made since exhibition

Since exhibition of the Environmental Impact Statement, some changes have been made to the project design or construction methodology to minimise the environmental impact of the project and / or to address issues raised in submissions and during the assessment.

Among these are changes to the northern surface track works at Chatswood, changes to the proposed solution at the Pacific Highway / Mowbray Road intersection, changes to the design at Central Station, and the removal of rock breaking for cut-and-cover stations and station shafts (except for Central Station) outside of standard construction hours to reduce noise impacts. These changes are summarised below and further details are provided in Chapter 9 (Preferred Infrastructure Report).

Northern surface track works

Ongoing construction planning has identified the need to change the construction methodology for the proposed retaining wall beside the track. Frank Channon Walk, between Albert Avenue and Nelson Street, Chatswood, would be reconstructed in stages and would need to be closed for a longer period of time. To improve the safety of access to the western side of the rail corridor, there is a need to introduce a new temporary construction access point from Gordon Avenue.

Pacific Highway / Mowbray Road intersection

Consultation with stakeholders (including Roads and Maritime Services) on a solution for the Pacific Highway and Mowbray Road intersection has identified that it would be preferable to take into account broader road network requirements, and that it would be more desirable for upgrades of this intersection to be carried out at the one time to avoid multiple traffic disruptions. As a result, Transport for NSW would need to identify an intersection arrangement that improves on the solution described in the Environmental Impact Statement.

Design changes at Central Station

Several changes have been made to the design and construction methods at Central Station:

- The submission from the Heritage Council of NSW raised concerns regarding the impacts to heritage canopies from the proposed temporary pedestrian bridge. The project has now been revised and this bridge is no longer proposed. This would reduce impacts to heritage fabric at Central Station. Pedestrian movements would be mostly managed through underground subway connections
- Further construction planning has identified the need for an additional construction site to support the construction of the Sydney Yard Access Bridge. This is within the Sydney Yard area, just beyond the Regent Street access point
- Ongoing design development has identified the need for changes to the northern concourse to improve pedestrian circulation. This has resulted in the need to lengthen platforms 9 to 14
- It is now proposed to relocate the northern services building from the Eddy Avenue forecourt to the southern side of the Central Electric Building. This would consolidate the operational metro infrastructure.

Rock breaking

A number of submissions, including those from the Environmental Protection Authority and the community, raised concerns about the potential noise impacts outside standard daytime construction hours from rock breaking to excavate cut-and-cover stations and station shafts.

Ongoing construction planning has identified that it is no longer essential to carry out rock breaking for cut-and-cover stations and station shafts (with the exception of Central Station) outside of standard construction hours.

The removal of this previously proposed activity would substantially reduce the potential impacts associated with airborne and ground-borne noise in periods outside standard daytime construction hours.

Further investigations and clarifications

Since exhibition of the Environmental Impact Statement, additional investigations have been carried out into the following aspects of the project:

- Barangaroo track cross-over – a track cross-over north of Barangaroo Station (identified as the optimal location for the cross-over) has been described and assessed
- Barangaroo Station barging – the potential barging arrangements (in the event this solution is adopted) have been described and assessed
- O’Connell Street future underground pedestrian link – the construction of the proposed underground pedestrian link between Martin Place Station and O’Connell Street has been described and assessed
- Waterloo Station revised footprint – a larger station excavation at Waterloo to accommodate the structure required to tank the station (which is designed to inhibit the inflow of groundwater) has been described and assessed
- Additional heritage investigations – the results of the Historical Archaeological Research Design and the Aboriginal Cultural Heritage Assessment Report to fulfil the requirements of mitigation measures NAH2 and AH2 from the Environmental Impact Statement have been documented.

Details regarding these additional investigations are provided in Chapter 3 (Clarifications – with additional investigations).

In response to design development, refinements to the project definition have also been made which provide further explanation and clarification. These are:

- Chatswood dive structure – design refinement of the operational maintenance access
- Blues Point temporary site – description of the potential barging of the tunnel boring machine components, if this is determined to be a feasible solution
- Over station development – additional information regarding the provision for over station development and the relationship with the project
- Design principles for Sydney Yard Access Bridge – updated design principles in recognition of the sensitive visual and heritage setting in which the bridge would be placed
- Clarification of noise receiver types – revised noise and vibration assessment where further information on the specific use within some buildings has been obtained.

Details regarding these clarifications are provided in Chapter 2 (Clarifications).

Consultation on the Submissions and Preferred Infrastructure Report

During the preparation of this Submissions and Preferred Infrastructure Report, further engagement was carried out with stakeholders and community members who would be directly impacted by the following revised project scope items:

- Northern surface track works – changes in construction methodology
- O’Connell Street – future underground pedestrian link
- Waterloo Station – revised footprint.

Stakeholder and community engagement activities included phone calls, letterbox drops, doorknocks, information via email and website, briefings and a community information session held in Chatswood. Feedback received through this engagement is addressed in this Submissions and Preferred Infrastructure Report.

Next steps

The Department of Planning and Environment will, on behalf of the NSW Minister for Planning, review the Environmental Impact Statement and this Submissions and Preferred Infrastructure Report. Once the Department of Planning and Environment has completed its assessment, a draft assessment report will be prepared for the Secretary of the Department of Planning and Environment, which may include recommended conditions of approval.

The assessment report will then be provided to the NSW Minister for Planning for consideration. The Minister for Planning may then approve the project, with any conditions considered appropriate.

The NSW Minister for Planning’s determination, including any conditions of approval and the Secretary’s report, will be published on the Department of Planning and Environment’s website immediately after determination, together with a copy of this Submissions and Preferred Infrastructure Report.

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