

Artist's impression of Sydney's new Metro train

Chatswood to Sydenham - Environmental Impact Statement

Sydney Metro is Australia's biggest public transport project.

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

Services start in the first half of 2019 using Sydney's new generation of fully-automated metro trains.

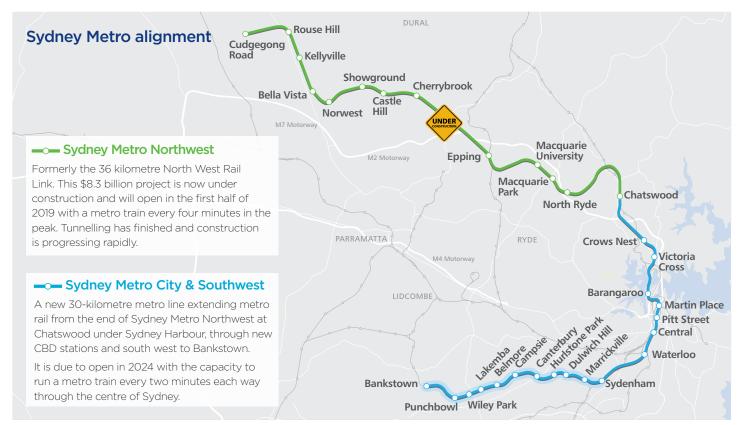
From Sydney's booming north west region, metro rail will run under Sydney Harbour, through new underground stations in the CBD and beyond to the south west.

Customers won't need a timetable when Sydney Metro opens - they'll just turn up and go. When Sydney Metro is extended into

the CBD and beyond in 2024, there will be ultimate capacity for a metro train every two minutes in each direction under the city - a level of service never before seen in Sydney.

Sydney's new metro railway will have a target capacity of about 40,000 customers per hour, similar to other metro systems worldwide. Sydney's current suburban system can reliably carry 24,000 people an hour per line.

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





The Sydney Metro experience

Sydney Metro will have an ultimate operating capacity of one metro train every two minutes in each direction under the CBD - a level of service never before seen in Sydney.

Customer benefits of Sydney Metro include:

- No timetable customers will just turn up and go
- Opal ticketing fares set and controlled by the NSW Government the same as the rest of Sydney
- Customer service assistants at every station and moving through the network during the day and night
- Australian-first platform screen doors which keep people and objects away from the edge, improving customer safety and allowing trains to get in and out of stations much faster. These doors run the full length of all metro platforms and only open at the same time as the train doors
- Continuous mobile phone coverage throughout the metro network
- 98 per cent on time running
- Clean platforms and trains
- Two multi-purpose areas per train for prams, luggage and bicycles

- Wheelchair spaces, separate priority seating and emergency intercoms inside trains
- Each train has 26 security cameras and customers can see from one end of the train to the other inside the train, a major safety benefit
- Video help points at platforms, connecting directly with train controllers – an Australian first
- Level access between the platform and train and three double doors per side per carriage for faster loading and unloading
- Heating and air-conditioning in all metro trains
- On-board real time travel information and live electronic route maps
- Customer safety is the Number 1 priority of Sydney Metro, which is Australia's first fully-automated railway. At all times, a team of expert train controllers will monitor the system, making sure everything runs smoothly.

Travel time savings

The Project will substantially improve travel times for customers. The largest travel time savings will 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).



Artist's impression of Martin Place Station

Key features

- More than **65 kilometres** of metro rail from Rouse Hill to Bankstown
- New generation of fast, safe and reliable metro trains
- No timetable just turn up and go
- Higher frequency trains during the day and late at night
- Reduced travel times for customers across the rail network
- More trains, more often in the peak through the CBD, providing more options for customers and less crowding on trains, stations and platforms
- Sydney Metro will help reduce crowding on the T1 Western Line and on trains from the south west, by creating extra capacity
- More trains from Sydney's north west and south west
- Opal ticketing and fares the same as the rest of Sydney providing a seamless journey for customers making it even easier to move around
- Fast and easy to change to trains, buses, ferries and light rail
- Stand-alone line operating independently of the existing rail network, not subject to wider suburban delays
- Connecting Sydney's economic centres with a boost of activity up to \$5 billion per year
- New choices for jobs, education and recreation
- Faster transport to employment growth areas.

About Chatswood to Sydenham

The Chatswood to Sydenham component of Sydney Metro City & Southwest involves the construction and operation of a 16.5-kilometre metro line that will extend from Chatswood, under Sydney Harbour through Sydney's CBD out to Sydenham.

This section of Sydney Metro City & Southwest will deliver seven new metro stations at:

- Crows Nest
- Victoria Cross
- Barangaroo
- Martin Place
- Pitt Street
- Central (new underground platforms)
- Waterloo.

Building Chatswood to Sydenham

Subject to approval, work will start in early 2017 and Sydney Metro City & Southwest will open to customers by the end of 2024.

Tunnel boring machines (TBMs) will be used to excavate 15.5 kilometres of twin rail tunnels between Mowbray Road, Chatswood and Bedwin Road, Marrickville.

12 construction sites will be established to build the tunnels, stations and other facilities.



Chatswood Station

Chatswood dive site and tunnel portal





The site will be built adjacent to the T1 North Shore Line at Chatswood between Mowbray Road and Nelson Street. The site will be used to launch and support two TBMs, and support the realignment of the T1 North Shore Line between Chatswood Station and Brand Street, the construction of about 250 metres of above ground metro tracks and tunnel fit-out

Artarmon substation

The substation will be built to supply traction power to the metro trains on open space alongside the Gore Hill Freeway (access via Barton Road)

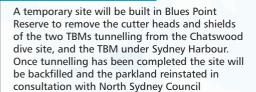
Crows Nest Station

The station will be built between the Pacific Highway and Clarke Lane (eastern side of the Pacific Highway) and between Oxley Street and south of Hume Street. There will be two construction sites on either side of Hume Street

Victoria Cross Station

The station will be built beneath Miller Street between McLaren Street and south of Berry Street. There will be two construction sites, one on the corner of Miller and Berry streets and another smaller site on Miller Street, just south of McLaren Street

Blues Point temporary retrieval site



Work in Sydney Harbour

A specialised TBM that can tunnel through rock and harbour sediment will be used to tunnel under Sydney Harbour. In order to tunnel through the sediment, it is likely that ground improvement work may be required in Sydney Harbour

Barangaroo Station

The station will be built beneath Hickson Road, at Central Barangaroo. The site will also be used to launch and support the TBM under Sydney Harbour and retrieve the cutter heads and shields of the two TBMs, tunnelling from the Marrickville dive site

Martin Place Station

The station will be built beneath the existing Martin Place Station. There will be two constructions sites, one bordered by Martin Place, and Castlereagh and Elizabeth streets, and the other bordered by Castlereagh, Hunter and Elizabeth streets

Pitt Street Station

The station will be built beneath Pitt and Castlereagh streets. There will be two constructions sites, one on the corner of Bathurst and Pitt streets (around the Edinburgh Hotel) and the other bordered by Pitt, Park and Castlereagh streets

Central Station

The new metro platforms will be built within the existing Central Station precinct and will require the area around the existing platforms 13, 14 and 15

Waterloo Station

The station will be built between Botany Road and Cope, Raglan and Wellington streets

KFY

Surface track works

Tunnelling



New Metro station



Construction site





Tunnel boring machine launch site



Suburban rail network

Existing stations



Marrickville dive site and tunnel portal

The site will be built adjacent to the T3 Bankstown Line at Marrickville, between Sydney Steel and Edinburgh roads. The site will be used to launch and support two TBMs, and support the manufacture of the pre-cast concrete tunnel lining segments, the tunnel fit-out and the building of the Southern Services Facility



Your invitation to learn more about Sydney's biggest rail project - Sydney Metro Environmental Impact Statement - now on exhibition

The Project must be assessed and approved under the *Environmental Planning and Assessment Act 1979* (NSW) before major construction can start.

The Chatswood to Sydenham Environmental Impact Statement is on public exhibition until **Monday 27 June 2016**. The Sydenham to Bankstown component of the Project will be subject to a separate environmental assessment process.

Anyone may make a submission and these submissions will be considered by the NSW Department of Planning and Environment in its assessment of the Project.

What's in the Environmental Impact Statement?

The Environmental Impact Statement assesses environmental issues including:

- traffic and transport
- noise and vibration
- land use and property
- business impacts
- o non-Aboriginal heritage
- Aboriginal heritage
- landscape character and visual amenity
- groundwater and geology
- o soils, contamination and water quality
- social impacts and community infrastructure
- biodiversity
- flooding and hydrology
- air quality
- hazard and risk
- waste management
- sustainability
- o cumulative impacts.

Strategies to avoid, mitigate and manage potential impacts have also been identified and developed.



Artist's impression of Crows Nest Station

Have your say

Your submission must reach the NSW Department of Planning and Environment by Monday 27 June 2016 and must include:

- 1. Your name and address
- 2. The name of your application
- 3. The application number SSI 15_7400
- 4. A brief statement on whether you support or object to the proposal
- 5. The reasons why you support or object to the proposal.

Your submission should be marked Attention: Director, Infrastructure Projects and can be sent via:

o Email: plan_comment@planning.nsw.gov.au

www.majorprojects.planning.nsw.gov.au
and follow the 'on exhibition' links

o Post to:

Major Projects Assessment
Department of Planning and Environment
GPO Box 39, SYDNEY, NSW 2001

Anyone lodging submissions must declare reportable political donations (including donations of \$1000 or more) made in the previous two years.

For more details, and a disclosure form, go to www.planning.nsw.gov.au/donations

Under section 1152(5) of the *Environmental Planning and Assessment Act 1979* (NSW), the Director-General may provide copies of submissions received during the exhibition period, or a summary of the submissions, to the proponent.

All submissions and information obtained during the public exhibition period will be used in accordance with the *Privacy Act 1988*. All submissions received are regarded as public documents and any information contained in them can be published in subsequent assessment documents.

Copies of the submissions received on the Project may be issued to interested parties. If the author of a submission does not wish the information to be distributed, this needs to be clearly stated in the submission.

Enquiries: please contact the NSW Department of Planning and Environment:

o Phone: 1300 305 695

o Email: information@planning.nsw.gov.au



Where to view the Environmental Impact Statement

The Environmental Impact Statement and its accompanying documents may be viewed on the NSW Department of Planning and Environment website: www.majorprojects.planning.nsw.gov.au and www.svdnevmetro.info

You can also view the documents at:

- NSW Department of Planning and Environment Information Centre: 23-33 Bridge Street, Sydney
- Transport for NSW Community Information Centre:
 388 George Street, Sydney
- Sydney Metro Northwest Community Information Centre:
 Shop 490, Castle Towers Shopping Centre, Castle Hill
- Willoughby Council Customer Service Centre: Level 4, 31 Victor Street, Chatswood
 - Willoughby Council Libraries
 - Chatswood Library on The Concourse: 409 Victoria Avenue, Chatswood
 - Artarmon Library: 139 Artarmon Road, Artarmon
- North Sydney Council Customer Service Centre:
 200 Miller Street, North Sydney
 - Stanton Library: 234 Miller Street, North Sydney
- Lane Cove Council:
 48 Longueville Road, Lane Cove
- Crows Nest Centre:2 Ernest Place, Crows Nest
- o City of Sydney Customer Service Centre:

Town Hall House Level 2, 456 Kent Street, Sydney

- City of Sydney Libraries
- Haymarket: 744 George Street, Sydney
- Waterloo Town Hall: 770 Elizabeth Street, Waterloo
- State Library:

Macquarie Street, Sydney

- Nature Conservation Council: Level 2. 5 Wilson Street. Newtown
- Marrickville Council Customer Service Centre:
 2-14 Fisher Street, Petersham
 - Marrickville Council Libraries
 - Marrickville Town Hall: Corner Marrickville and Petersham Roads. Marrickville
 - St Peters Town Hall: Unwins Bridge Road, Sydenham.

Sydenham to Bankstown upgrade

The Sydenham to Bankstown component of the Project will be subject to a seperate environmental assessment process.

Working with the community

Community information sessions

The Project team has organised a series of community information sessions where displays and information about the Environmental Impact Statement will be available.

You are invited to attend these sessions and meet expert members of the Project team who will be there to answer any questions you may have.

There is no need to make a booking.

Date and time	Location
Saturday 21 May 10 am-2 pm	Dougherty Community Centre 7 Victor Street, Chatswood
Wednesday 25 May 4-8 pm	Masonic Centre: 66 Goulburn Street, Sydney
Saturday 28 May 10 am-2 pm	McMahons Point Community Centre 165 Blues Point Road, McMahons Point
Wednesday 1 June 4-8 pm	Northside Conference Centre Oxley Street & Pole Lane, St Leonards
Saturday 4 June 10 am-2 pm	Redfern Oval 51 Redfern Street, Redfern
Thursday 16 June 4-8 pm	Concordia Club 1 Richardson Crescent, Tempe

Information stalls

The Project team will also have a stall at the following community markets:

Date and time	Location
Saturday 28 May	Kirribilli Markets
8 am-12 pm	Kirribilli Bowling Green, Kirribilli
Saturday 18 June	Crows Nest Markets
9 am-1 pm	Ernest Place, Crows Nest

Place Managers

Our Place Managers will continue to play a vital role in maintaining close and ongoing contact with local communities and stakeholders during the design and delivery of Sydney Metro.

Their role is to be a direct point of contact between affected members of the community and the Project team.

To speak to your local Place Manager or a member of the Project team, please contact us.

- o community information line: 1800 171 386
- o project email: sydneymetro@transport.nsw.gov.au



