

## FACT SHEET

Sydney Metro is Australia's biggest public transport project – a 66km long standalone fully-automated railway system with 31 metro stations between Rouse Hill and Bankstown.

Stage 1 – the \$8.3 billion Sydney Metro Northwest – is 36km long and will open in the first half of 2019 with 13 metro stations and a metro train every four minutes in the peak, or 15 trains an hour.

Stage 2 – Sydney Metro City & Southwest – is a 30km extension of metro rail from the end of Sydney Metro Northwest at Chatswood, under Sydney Harbour, through new underground CBD stations and beyond to Bankstown in the southwest. It is expected to open in 2024.

Sydney Metro will be able to move more people across the Harbour in the busiest hour of the peak than the Sydney Harbour Bridge and Sydney Harbour Tunnel combined.

Customers will benefit from new-generation, fully air-conditioned metro trains, with a 98 per cent on time running reliability.

All stations will also feature Australian-first state-of-the-art platform screen doors, which keep objects like prams away from the edge and allow trains to get in and out of stations much faster.

Sydney Metro will have the ultimate 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.

Stage 2 includes new twin 15.5km rail tunnels from Chatswood to Sydenham and new stations at Crows Nest, Victoria Cross in North Sydney, Barangaroo, Martin Place, Pitt Street, Central and Waterloo, along with the upgrade of the T3 Bankstown Line from Sydenham to Bankstown to metro standards.

Planning approval for the Chatswood to Sydenham component was received in early 2017.

The first of five tunnel boring machines will be in the ground before the end of 2018.

Four double-shield, hard rock, gripper type TBMs will be used as well as one specialised TBM for tunnelling under Sydney Harbour.

The under-Harbour TBM technology balances the pressure between the machine and the ground in front of it, helping control the excavation process. This type of machine is commonly used in similar projects around the world and was also used to deliver Sydney's airport rail link tunnel in the 1990s.

Transport for NSW conducted geotechnical work deep under Sydney Harbour to help determine the best way to deliver the new metro railway tunnels, taking rock and soil samples from more than 50 boreholes.

These geotechnical works confirmed a specialised TBM will be required to tunnel through a combination of sandstone, clay and sediments between North Sydney and the new metro station at Barangaroo.

Crushed rock will be removed by barges for the excavation work that takes place at Blues Point, Barangaroo and under Sydney Harbour, reducing impacts to the road network and cutting truck movements.