

# Media Release

**The Hon Jacinta Allan MP**  
Leader of the House  
Minister for Transport Infrastructure  
Minister for Suburban Rail Loop



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## MILLIE, ALICE, JOAN AND MEG REACH THE FINISH LINE

Four huge tunnel boring machines (TBMs) have finished 20 months of digging under Melbourne to create two nine kilometre-long, 6.3m-high rail tunnels lined with around 250,000 tonnes of concrete for the Metro Tunnel Project.

The incredible feat of engineering included tunnelling just 1.5m underneath the City Loop as trains continued to run, as well as digging 12 metres under the Yarra River bed and around seven metres below the Burnley Tunnel.

TBM Meg arrived at the Town Hall Station site 25 metres under Swanston and Collins streets, following Millie, Joan and Alice, which have broken through at the station over the past month.

TBMs Joan and Meg – dug their final 670 metres under Swanston Street from the State Library Station site over the past three months. TBMs Millie and Alice – began tunnelling in December to complete their final 1.8km leg under St Kilda Road and the Yarra River.

It's been a huge undertaking for the four machines, which have tunnelled on six separate legs between Kensington and South Yarra, installing more than 55,000 curved concrete segments to create a waterproof tunnel lining.

The TBMs have dug as deep as 40 metres below ground (under the northern end of Swanston Street) and tunnelled through basalt rock, gravel and silt and clay. After starting work progressively from August 2019, the TBMs tunnelled an average of 90 metres a week, with TBM Alice recording the best rate of 195 metres in a single week.

The machines have removed 600,000 cubic metres of rock and soil, or around one third of the total 1.8 million cubic metres to be excavated for the entire project - enough to fill the MCG 1.2 times.

While the TBMs have finished the rail tunnels between the project's five stations, roadheaders - huge digging machines excavating the CBD station caverns – are still at work digging the final section of tunnels alongside the platforms at Town Hall Station.

With their work in Melbourne finished, the four TBMs are being dismantled underground and retrieved, with the 'skin' of each TBM shield to remain in the tunnels to form part of the permanent lining. The remaining components will be assessed for potential reuse on other tunnelling projects.

Attention now turns to the next phase of works on the project, with construction well underway on the 26 cross passages – the short tunnels that connect the main tunnels and are an important safety feature for passengers should an incident occur. With the tunnel entrances at South Yarra and Kensington completed, work has also begun to connect the entrance structures to the tunnels.

A range of different systems are needed, including signalling, train control, security, communications, power, and mechanical systems, as well as associated control systems. Each of these systems must be able to function and interact safely with each other, and the existing network.

An enormous amount of testing needs to occur so that we can make sure that the new tunnels and stations can be operated safely and reliably. The Metro Tunnel will transform Melbourne's train network, deliver more trains to and from the suburbs and slash travel times by up to 50 minutes a day.

### Quotes attributable to Minister for Transport Infrastructure Jacinta Allan

*"This is a huge milestone for the amazing team at the Metro Tunnel. This vital project is a year ahead of schedule but there's still with a huge amount of work to be done to finish the stations and get the tunnel ready to deliver more trains, more often."*

*"Projects like the Metro Tunnel will connect key locations including the Parkville medical and education precinct, St Kilda Road and the Arden Precinct to the rail network for the first time and is supporting thousands of jobs."*

**Media contact:** Hayley Bester 0424 753 775 | Hayley.bester@minstaff.vic.gov.au