



Suburban Rail Loop

UE BUS 5.02 - Suburban rail loop -
Jan2020 - Public

Regulatory proposal 2021–2026

Business	United Energy
Title	Suburban Rail Loop
Identifier	UE BUS 5.02 - Suburban rail loop - Jan2020 - Public
Category	Connections
Identified need	As part of the Victorian Government's Suburban Rail Loop project, a 23 kilometre section of underground tunnel between Cheltenham and Box Hill will be bored. Twin boring machines will require electricity supply for the duration of the tunnel construction. The identified need for this project is to meet our obligations under our Electricity Distribution Licence to offer connection services to provide electricity supply.
Recommended option	The following option is recommended to facilitate the Suburban Rail Loop project: <ul style="list-style-type: none"> • provide construction supply for the tunnel • provide operational and traction supply for the new railway station and the tunnel.
Supportive Documents	1. UE ATT024 - ESC - Electricity distribution licence - Jan2005 - Public

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1 Overview

In the coming years, Melbourne's transport system will face pressure as the State continues to grow. Suburban Rail Loop is a new rail link, initiated by the Victorian State Government, connecting Melbourne's middle suburbs to priority growth precincts. It will include new stations and connect major railway lines from the Frankston line to the Werribee line via Melbourne Airport. A 23 kilometre southeast section of the rail link from Cheltenham to Box Hill will be constructed first, referred to as Stage One.

In support of the project we will need to provide construction, operational and traction supplies. The cost of this works will be customer funded and is outlined in the table below.

Table 1 Cost for preferred option (\$ 000, 2019)

Expenditure forecast	2021/22	2022/23	2023/24	2024/25	2025/26	Total
█	█	█	█	█	█	█

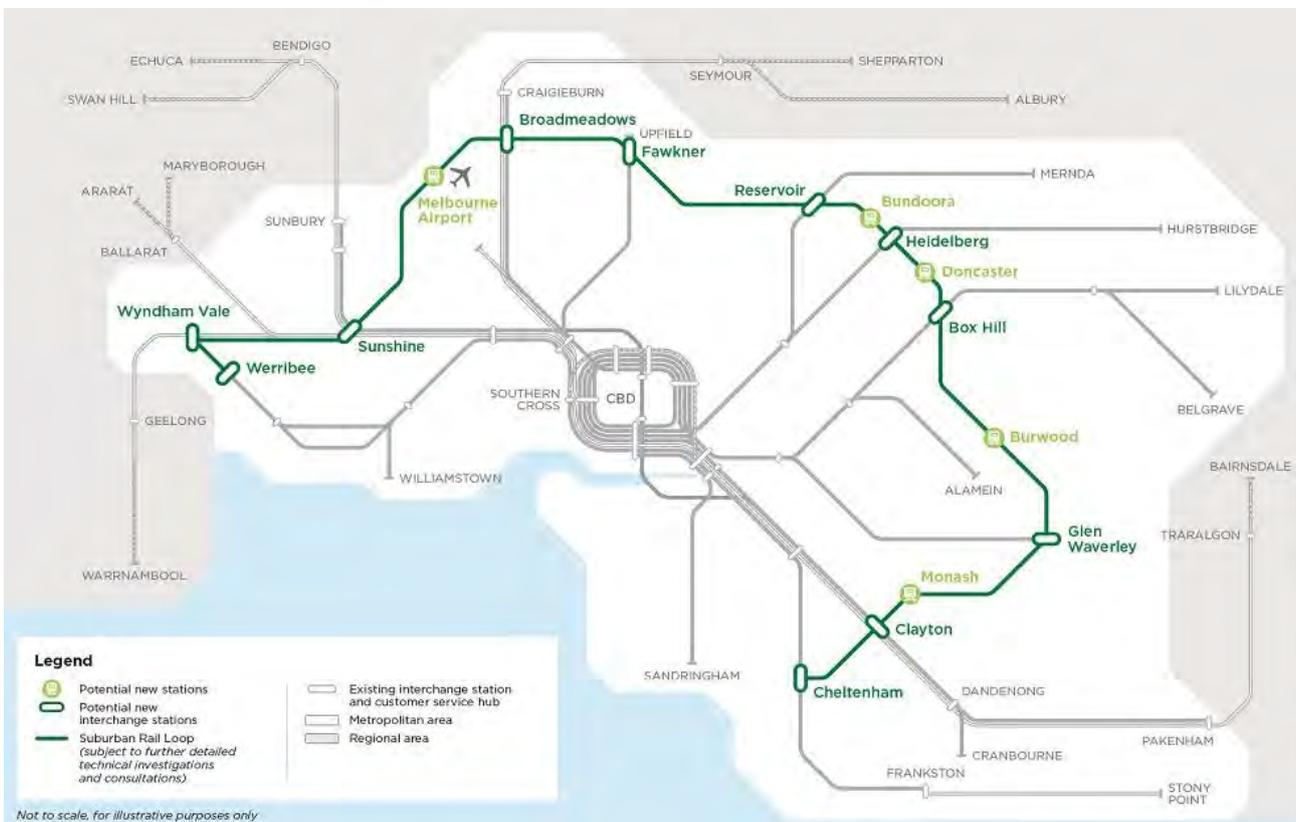
Source: United Energy

2 Background

Melbourne is Australia’s fastest growing city and a sizeable proportion of its economy and population depends on its rail network. In the coming years, Melbourne's transport system will face unprecedented pressure as it continues to grow.

Suburban Rail Loop (SRL) is a new rail link, initiated by the Victorian State Government, connecting Melbourne's middle suburbs. It will include new railway stations and connect major railway lines—from the Frankston line to the Werribee line via Melbourne Airport. Figure 1 shows the schematic view of the SRL project. SRL will be the biggest infrastructure investment undertaken in Victoria and will require significant development and staged delivery over several years.

Figure 1 Schematic view of Suburban Rail Loop project



Source: Suburban Rail Loop Authority

In 2019 the Victorian Government established a dedicated authority to lead the design and delivery of the program.¹ The Victorian Government has committed \$300 million to planning and design work for the SRL, and initial construction work on Stage One of the project will commence in 2022²

¹ Suburban Rail Loop Authority <<https://suburbanrailloop.vic.gov.au/News/SRLA-building-a-high-performing-team>>

² Suburban Rail Loop, Newsletter ISSUE 01 // SEPTEMBER 2019 < <https://suburbanrailloop.vic.gov.au/News/September-2019-newsletter>>

2.1 Purpose and scope of the Suburban Rail Loop

The Suburban Rail Loop is being designed to:³

- improve travel around Melbourne and reduce pressure on the roadways
- create jobs and grow the economy
- improve connectivity to growth and employment centres
- improve connectivity to regional Victoria.

The southeast section of the Suburban Rail Loop includes works to connect the middle suburbs of Cheltenham, Clayton, Glen Waverley, Burwood and Box Hill.⁴ This section will be located underground and falls entirely in our distribution supply area. The works in this area involves constructing:

- two new railway stations at Monash and Burwood
- new tunnels between Box Hill and Cheltenham of approximately 23 kilometres.

The Victorian Government has prioritised the 23 kilometre section from Box Hill to Cheltenham as the first stage of the project.

Site investigations for the SRL started in the early second half of 2019 with geotechnical work beginning at Box Hill. These investigations at Box Hill signal the start of a program of ground works across Melbourne's southeast that will help understand ground conditions and plan for the new underground alignment and specific station locations. SRLA is leading the design development, location assessments and operational requirements for new stations and the route. In September 2019 the Victorian Government confirmed the preferred route for Stage One of the project. More information is provided in appendix A.

Project staging, timing, construction methodology, and cost will be confirmed as part of development and technical work that commenced in early 2019. This is expected to be finalised by the time the Revised Regulatory Proposal will be submitted, at the conclusion of geotechnical work and an extensive engagement program, currently underway.

³ Suburban Rail Loop Authority <<https://suburbanrailloop.vic.gov.au/>>

⁴ Suburban Rail Loop Authority <<https://suburbanrailloop.vic.gov.au/>>

3 Identified need

The identified need for this project is to meet our obligations under our Electricity Distribution Licence to offer connection services and supply to a customer.⁵

We will be required to provide supply for the construction and operation of the Box Hill-Burwood-Glen Waverley tunnel (9 kilometres) by [REDACTED] and the Glen Waverley-Monash-Clayton-Cheltenham tunnel (13.8 kilometres) by [REDACTED]. The table below outlines our expected electricity supply requirements for the duration of the tunnel construction.

Table 2 Construction and operational supply requirements

Year	Description	Total Capacity (MVA)	Notes
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Source: United Energy

The existing electricity assets along the proposed routes are expected to require minimal relocations as the proposed routes will be much lower underground than our assets.

⁵ United Energy, Electricity Distribution Licence, 2005, clause 6 (UE ATT024).

4 Options analysis

There is only one technically viable solution, which is to provide five high voltage points of supplies to run the two boring machines, one section of tunnel at a time, in accordance with SRLA's requirements and our obligations. Points of supplies will be made available by new feeders from our zone substations at Box Hill, Glen Waverley, Notting Hill, Clarinda and Mentone.

The cost of providing construction supply of [REDACTED] for the Box Hill-Burwood-Glen Waverley tunnel is outlined below. This cost will be customer funded.

Table 3 Cost for preferred option (\$ 000, 2019)

Scope	Cost
[REDACTED]	[REDACTED]

Source: United Energy

At this stage we do not expect to be required to undertake upstream augmentation works because we intend to work with the customer to disconnect the construction supply should there be a constraint on the network triggered by an outage, which is typical of this type of construction work.

The cost of providing construction supply [REDACTED] for the Cheltenham-Clayton-Monash-Glen Waverley tunnel is outlined below. This cost will be customer funded.

Table 4 Cost for preferred option (\$ 000, 2019)

Scope	Cost
[REDACTED]	[REDACTED]

Source: United Energy

5 Recommendation

We recommend providing SRLA with the supply needed to develop the Suburban Rail Loop. The cost of this works will be customer funded and is outlined in the table below.

Table 5 Cost for preferred option (\$ 000, 2019)

Expenditure forecast	2021/22	2022/23	2023/24	2024/25	2025/26	Total
█	█	█	█	█	█	█

Source: United Energy

A Appendix: Media release from State Government

Media Release

The Hon Dan Andrews MP
Premier



Tuesday, 23 July 2019

SUBURBAN RAIL LOOP SITE INVESTIGATIONS START

The next stage of Suburban Rail Loop is now underway with geotechnical work beginning at Box Hill.

Premier Daniel Andrews and Transport Infrastructure Minister Jacinta Allan visited the site where the drilling has started, which marks another step towards transforming Victoria's public transport system.

Site investigations at Box Hill signal the start of a program of ground works across Melbourne's southeast that will help understand ground conditions and plan for the new underground alignment and station locations.

The geotechnical investigations involve drilling boreholes of depths between 30-60 metres. The rock and soil are then tested for composition and stability, with each site taking around two weeks to analyse.

The geotechnical investigations are a vital part of development and technical work that will determine the stages and timing of the project, and how it will be built.

The Suburban Rail Loop will connect Melbourne's middle suburbs to priority growth precincts, and link all Victorians to major health, education and employment centres.

The 90-kilometre rail link will connect every major railway line from the Frankston line to the Werribee line via Melbourne Airport, easing demand on existing lines and shifting more Melburnians out of their cars.

When finished, it'll mean that people living in the regions won't need to travel through the centre of Melbourne to access jobs in growing economic precincts outside the CBD.

Victorians are encouraged to have their say on all elements of the project through a community survey and local pop ups have begun along stage one of the Suburban Rail Loop.

Construction on the first stage of Suburban Rail Loop is expected to begin in 2022. To have your say visit railprojects.vic.gov.au.

Quotes attributable to Premier Daniel Andrews

"We said we'd get the Suburban Rail Loop started and that's what we're doing – with geotechnical work now underway in Box Hill."

"Suburban Rail Loop will change the way we move around Melbourne, slashing travel times and better connecting people with jobs, education and other vital services, wherever they live."

Quote attributable to Minister for Transport Infrastructure Jacinta Allan

"Whether it's removing level crossings, the Metro Tunnel or North East Link – we're getting on with the projects that Victorians voted for and need."

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Media Release

The Hon Dan Andrews MP
Premier



Thursday, 13 June 2019

SUBURBAN RAIL LOOP GOES TO MARKET FOR REGISTRATIONS OF INTEREST

The Andrews Labor Government today announced the commencement of a Registration of Interest (ROI) process for local and global firms to help deliver the Suburban Rail Loop.

The start of market engagement is the next major step to make the project a reality. The ROI will help government assess which organisations have the experience and capability to be part of the biggest transport investment ever undertaken in Victoria.

The search is open to firms with a variety of capabilities including designers, engineers, rail systems providers, rail operators, rolling stock providers, investors, financiers, and architects.

The Suburban Rail Loop is a new rail network linking Melbourne's middle suburbs, with new stations connecting major railway lines from the Frankston line to the Werribee line via Melbourne Airport.

The transformational project would be the biggest transport investment undertaken in Victoria. It will change the way people move around Melbourne – enabling Victorians to get to major suburban employment, education and health precincts without having to travel in and out of the CBD.

The project will take thousands of passengers off existing rail lines and 200,000 cars off our major roads, it's anticipated to also create more than 20,000 jobs during construction.

The ROI announcement follows the commencement of an extensive stakeholder engagement process for Suburban Rail Loop, focusing on Stage One – the South East Section, between Cheltenham and Box Hill.

As detailed planning gathers pace, the Andrews Labor Government will seek input from communities, local government, peak bodies, as well as key stakeholders along the proposed corridor. We have started briefing Local Government stakeholders in the cities of Whitehorse, Monash and Kingston.

Further consultation will follow, as well as the beginning of site investigations - expected to start later this year - including ecology and geotechnical studies. General precincts and a broad alignment have been identified for the Suburban Rail Loop, but specific station locations are yet to be finalised.

Alignment options and station locations will be considered as part of the development work and the site investigations will provide an understanding of ground conditions and environmental considerations.

All registrations of interest should be lodged at SRL-ROI@railprojects.vic.gov.au. Further information is available at www.railprojects.vic.gov.au.

Quotes attributable to Premier Daniel Andrews

"As we get on with our Suburban Transport Blitz, we're also getting on with planning the next stage of projects our growing city and state needs."

"The Suburban Rail Loop will create tens of thousands of jobs during construction and will change the way we move around Melbourne forever, slashing travel times and getting you where you need to go."

Quote attributable to Transport Infrastructure Minister Jacinta Allan

"Just like the Metro Tunnel, North East Link and vital suburban road upgrades – we're getting on with the projects that Victorians voted for and need."

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Media Release

The Hon Dan Andrews MP
Premier



Tuesday, 3 September 2019

NEW AUTHORITY AND PREFERRED ROUTE FOR SUBURBAN RAIL LOOP

The Andrews Labor Government has confirmed the preferred stage one route for the biggest transport project ever built in Victoria and a dedicated new authority to deliver it.

Premier Daniel Andrews joined Minister for Transport Infrastructure Jacinta Allan today to confirm the preferred alignment and station precinct locations from Cheltenham to Box Hill for the Suburban Rail Loop – a 90-kilometre rail ring around Melbourne’s middle suburbs that will better connect people to jobs, universities, TAFE’s, healthcare and each other.

The project will connect every metropolitan train line from Cheltenham to Werribee, create a rail link to the airport and build three transport super hubs at Clayton, Broadmeadows and Sunshine to connect regional passengers to the Suburban Rail Loop.

The design and delivery of the project will be led by the Suburban Rail Loop Authority. The new Authority will start its work this week and be headed by incoming Chief Executive Nick Foa, who has extensive experience in infrastructure, planning and government administration.

Mr Foa and his team will immediately begin consultation with local government, universities and other key institutions and stakeholders on options for where stations will be located in the precincts.

This consultation, along with the geotechnical work already underway, will inform the development of the Business Case. A Registration of Interest process for local and global firms has also begun to establish the best team to build the project from 2022.

The Suburban Rail Loop will cut congestion right across Melbourne’s transport network and create more than 20,000 jobs during construction.

For more information or to have your say visit www.suburbanrailloop.vic.gov.au.

Quotes attributable to Premier Daniel Andrews

“This dedicated new authority will ensure the biggest public transport project in our state’s history becomes a reality.”

“The Suburban Rail Loop will better connect Victorians to jobs, education and each other. We promised to get on with it, and that’s exactly what we’re doing.”

Quote attributable to Minister for Transport Infrastructure Jacinta Allan

“Right now we’re delivering the West Gate Tunnel, removing level crossings, upgrading suburban roads, getting on with the Metro Tunnel – the Suburban Rail Loop is the next step in the future of our transport network.”

Quote attributable to Chief Executive Suburban Rail Loop Authority Nick Foa

“I’m excited to work on this once in a generation project, which will create stronger connections between suburban Melbourne, create more open spaces and provide new opportunities for business in the suburbs.”

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B Appendix: Southeast route map

