Western Rail Plan

Fast, high-capacity rail for our regional cities and growing suburbs
This document sets out the future investments Victoria needs for a fast, high-capacity rail network servicing our growing suburbs and regional cities.

It outlines a plan for more reliable and frequent metropolitan and regional services, connecting our cities and our people to each other, and building on the major overhaul of metropolitan and regional rail networks currently underway across Victoria.

Extensive investment is underway in Victoria to achieve a generational shift in the operation of our rail network, including transformational projects like the Metro Tunnel, level crossing removals, the recently completed rail extension to Mernda and the Regional Rail Revival currently underway to upgrade every regional passenger line in the state.

While projects currently under construction will create a more reliable network and boost frequency and capacity, Victoria’s growth requires a continued investment pipeline to connect Victorians.

These next-stage investments, including the Melbourne Airport Rail Link and proposed Suburban Rail Loop, would change the way our network operates forever. Together with this plan for high-capacity metro services in Melbourne’s west and fast rail to regional cities, Victoria’s public transport network would be re-drawn.

Growing Regional Victoria

700,000 jobs

Home to one in four Victorians

Responsible for a third of Victoria’s total exports

A changing Victoria

Victoria is the fastest growing state in Australia, with Melbourne’s population expected to grow from 5 million today to 8 million by 2051. Central Melbourne is expected to become Australia’s largest business centre with jobs projected to more than double to almost 900,000 by 2051.

Geelong is the nation’s second fastest growing city and other regional centres including Ballarat and Bendigo are also growing fast. Victoria is uniquely placed with five regional cities within about 200 kilometres of central Melbourne, all connected by rail. Regional Victoria continues to be a driving force behind the state’s economic prosperity: it is home to one in four Victorians and accounts for 700,000 jobs.

The regions generate $72 billion in economic activity contributing almost 20 per cent to the state’s overall economy, and a third of Victoria’s total exports. While the state’s manufacturing sector will remain a key driver for jobs, our economy is projected to continue to shift towards knowledge-based services – and the distribution of employment across Victoria is expected to change as a result.

This population and jobs growth have seen demand for peak hour metropolitan rail services increase by 61 per cent since 2004, with a similar growth rate expected in the next decade. On the regional rail network, patronage has increased almost two-fold over the past decade and similar growth is forecast over the next 10 years.
Record rail investment

Over the last two decades, a significant series of investments have been made in the regional rail network. Regional Fast Rail saw the major upgrade of the rail lines to Ballarat, Geelong, Bendigo and Traralgon to increase services, reduce travel times and improve safety. It saw the introduction of modern, VLocity trains onto the regional network.

The Regional Rail Link project delivered 47.5 kilometres of new railway through the western suburbs of Melbourne to separate regional services from Ballarat, Bendigo and Geelong from electrified Melbourne suburban services. The project played a key role in increasing rail capacity, frequency and reliability on these lines. The V/Line rail network now carries nearly 50,000 passengers on a typical weekday, an increase of nearly 100 per cent in the past decade, with patronage forecast to double again over the next 10 years. The completion of Regional Fast Rail in 2006 and Regional Rail Link in 2015 has contributed to this rapid growth, together with population growth in outer Melbourne and regional areas.

With significant patronage growth and a rapidly growing state, the Victorian Government is now undertaking a record transport infrastructure investment. Today there are more than $38 billion worth of major transport infrastructure projects underway or in planning across the state, including:

- The $1.75 billion Regional Rail Revival program – an upgrade to every regional passenger line in the state and delivery of modern regional trains to achieve more frequent and reliable services.
- The Metro Tunnel – unlocking the bottleneck in the city loop as a first step towards a metro-style system.
- An extensive program to remove dangerous and congested level crossings, as well as upgrades to regional level crossings.
- The biggest ever procurement of new metropolitan and regional rolling stock.

The delivery of the Metro Tunnel project and Regional Rail Revival program support the Regional Network Development Plan to achieve a 20-minute peak and 40-minute off peak service to regional centres, and five services per day to outer regional centres (and at least nine to Shepparton).

The Government has also:

- Begun planning for a Melbourne Airport Rail Link – connecting Melbourne Airport to all metropolitan and regional rail lines via Sunshine.
- Proposed a Suburban Rail Loop – a rail network forming a circle around Melbourne’s suburbs, with 12 new underground stations and three regional super hubs at Sunshine, Broadmeadows and Clayton.

Next steps to deliver Victoria’s future rail network

Despite the record investment underway and projects identified for the future, there are still constraints to improving service frequencies across metropolitan and regional areas. The unprecedented population and patronage growth in the outer western suburbs is leading to overcrowding and reliability challenges.

To ensure the Victorian rail network can continue to meet unprecedented demand and enable regional Victoria to grow and be a destination of choice, planning is needed for the following three major connected projects:

1. Two new electrified metropolitan rail lines through the western suburbs to growth areas in Melton and Wyndham Vale, separating them from the Ballarat and Geelong lines. This would give Melbourne’s growing suburbs frequent high-capacity services on the metro network, and return regional rail lines to regional passengers, creating the potential to run faster services. A potential connection from Wyndham Vale to Werribee would also be considered – with the potential for this link to become the western section of the proposed Suburban Rail Loop.

2. Increased track capacity between Sunshine and the CBD to cater for faster and more frequent metro and regional trains. This will be developed in conjunction with the Airport Rail Link which would also utilise the extra capacity.

3. Major investment in the Geelong and Ballarat lines – in addition to the separation of the Melton and Wyndham Vale lines – to run trains faster than 160km/h. This will include exploration of electrification of these lines and new, fast electric regional trains.
Planning for the future

The key priority is untangling the regional and metropolitan rail lines in Melbourne’s west by delivering new separate metro lines and giving regional trains and lines to regional passengers.

The Airport Rail Link, including a new super hub at Sunshine, provides an opportunity to deliver the infrastructure needed to make this happen.

Planning for the future rail network is needed for:

✓ The Airport Rail Link and the Sunshine Super Hub
✓ New metropolitan lines to Melton and Wyndham Vale
✓ Fast Rail to Geelong
✓ Fast Rail to Ballarat
✓ Fast Rail to other regional cities in the future
✓ New rail access from Sunshine and the CBD
✓ The proposed Suburban Rail Loop with three regional super hubs.

Victoria’s future rail network
1 New metropolitan lines to Melton and Wyndham Vale

Two new electrified metropolitan rail lines through the western suburbs to growth areas in Melton and Wyndham Vale, separating them from the Ballarat and Geelong lines. This would give Melbourne’s growing suburbs frequent high-capacity services on the metro network, and return regional rail lines to regional passengers, creating the potential to run faster services. A potential connection from Wyndham Vale to Werribee would also be considered – with the potential for this link to become the western section of the proposed Suburban Rail Loop.

New electrified metropolitan rail lines to Melton and Wyndham Vale is the next step to boosting capacity on the Victorian rail network. This will improve travel times, accommodate increasing patronage and deliver greater comfort for regional and metropolitan passengers.

The patronage growth on the Melton and Wyndham Vale corridors is significant. Currently, Melbourne’s growing western suburbs are only serviced by regional rail lines – leaving them without access to the metro network. Instead they utilise space in regional trains and prevent fast, express services from Geelong or Ballarat.

Fast rail services to Geelong and Ballarat are not possible without new Melton and Wyndham metro lines. New metro lines to Melton and Wyndham would cater for patronage growth in Melbourne’s west and give our two busiest regional rail lines back to regional passengers, paving the way for fast rail from Geelong and Ballarat.

Western section of Suburban Rail Loop

By connecting a new Wyndham Vale line to Werribee there is potential for this new rail link to form the western section of the the proposed Suburban Rail Loop. Planning for both projects would explore the best network option to connect the west to this new proposed loop.

Melton and Wyndham monthly patronage

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<thead>
<tr>
<th></th>
<th>Melton Patronage</th>
<th>Wyndham Patronage</th>
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<tbody>
<tr>
<td>2015</td>
<td>75,000</td>
<td>95,000</td>
</tr>
<tr>
<td>2018</td>
<td>129,000</td>
<td>166,000</td>
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**Source:** Transport for Victoria

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2 Increased capacity from Sunshine to CBD

Increased track capacity between Sunshine and the CBD to cater for faster and more frequent metro and regional trains. This will be developed in conjunction with the Airport Rail Link which would also utilise the extra capacity.

Sunshine has the potential to become a major hub and interchange between metropolitan and regional rail services and a gateway to Melbourne Airport via a new rail link.

But right now, there is limited available space for additional tracks between Sunshine and Southern Cross. Extra track capacity will be needed in the future to deliver new metro lines, the Airport Rail Link and fast rail services to our regional cities.

Work is needed to identify options to increase rail capacity between a future Airport Rail Link and Sunshine Super Hub and the city, including a possible new rail tunnel from Sunshine to the CBD. This planning will take place in conjunction with the development of the Airport Rail Link.
Planning for fast rail to regional cities

**Major investment in the Geelong and Ballarat lines** – in addition to the separation of the Melton and Wyndham Vale lines – to run trains faster than 160km/h. This will include exploration of electrification of these lines and new, fast electric regional trains.

The Victorian Government invested $50 million in the 2018/19 Budget for detailed planning to achieve true high-speed rail to Geelong, followed by other regional cities.

This document is a result of that work identifying additional investments – including the separation and electrification of the Wyndham Vale and Melton lines and additional track capacity between Sunshine and the city – needed to deliver high speed regional rail in the future.

There are efficiencies in planning for fast rail to both Geelong and Ballarat in tandem, with delivery to Geelong remaining the highest strategic need due to the city’s growing population. In planning for fast rail to these regional centres, all options would be considered.

This includes electrification to Geelong and Ballarat with fast, electric regional trains.

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**Geelong Line annual patronage**

- Regional Rail Link opens
- Wyndham Vale Station opens
- Tarneit Station opens

Source: Transport for Victoria

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**Geelong Line**

- **Fast Geelong line**
- **Fast Ballarat line**
- **New metro lines**
- **New Sunshine to CBD access**
- **Sunshine Super Hub**
- **CBD**
- **ARARAT**
- **MARYBOROUGH**
- **BALLARAT**
- **MELTON**
- **WYNDHAM VALE**
- **WERRIBEE**
- **GEELONG**

**Rail patronage along the Geelong Line** (including South Geelong growth area - Waurn Ponds, Marshall, and South Geelong)
Faster and more reliable travel for Victoria

We are investing in faster and more reliable travel to all corners of our state with upgrades to every regional passenger line as part of the $1.75 billion Regional Rail Revival program. We are also looking at future regional service improvements.

While delivering fast rail to Geelong and Ballarat is the first priority, upgrades are already underway for faster, more frequent and reliable rail to other regional cities.

**Bendigo**
The Bendigo and Echuca line upgrade will enable faster and more frequent services to Echuca through track and signalling upgrades. The project will also upgrade signalling between Epsom, Eaglehawk and Bendigo to deliver Bendigo Metro Stage Two, giving passengers a metro-style train service.

To facilitate fast rail to Bendigo in the future, dedicated tracks between Sunshine and Watergardens to separate Sunbury and Bendigo services are likely to be needed. This would increase reliability and reduce travel times, as the first step towards a true fast rail service for the region. Track upgrades between Kyreen and Sunbury would be needed to provide consistent high speeds on both lines, run more services and improve journey times.

**Gippsland**
The Gippsland Line upgrade will enable much needed extra services on the Gippsland line. Improved train detection at level crossings along the line will improve safety for motorists and trains and allow VLocity trains to travel to and from Traralgon for the first time. The next step would be to electrify the line to enable VLocity trains to travel to Gippsland and Melbourne and help pave the way for VLocity trains on the line.

**North East**
The North East line upgrade will enable improved services for north-east Victoria. The upgrade will enable VLocity trains to run to Albury/Wodonga for the first time, delivering a more reliable and comfortable service for passengers.

**Warrambool**
The Warrambool line upgrade will lead to improved train services, with works to include a new crossing loop, level and pedestrian crossing upgrades and improved signalling between Warrnambool and Warrnambool. This will allow for a fifth daily return service between Warrnambool and Melbourne and help pave the way for VLocity trains on the line.

**Shepparton**
The Shepparton corridor upgrade will deliver faster and more frequent services and will allow modern VLocity trains to travel to and from Shepparton for the first time. The stabling upgrade as part of Stage One will enable a fifth daily return service between Shepparton and Melbourne in 2019. Stage Two of the upgrade will allow VLocity trains to run to and from Shepparton for the first time with planning work underway to deliver up to nine return services. To facilitate faster and more reliable services to Shepparton in the future, there is a need to electrify the track to Wallan to enable the introduction of high capacity metro services to the Northern growth corridor. This would increase capacity and reliability and reduce travel times along the corridor, as well as being a key step towards a true fast rail service for the region.

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Next steps

The development of a full business case is required to progress fast rail towards construction. That work will be informed by this document and further technical studies.

Further planning on fast rail will take place in conjunction with the full Airport Rail Link business case, due to be completed in 2019/20. It is anticipated that the three major network changes identified in this document would be undertaken in stages and take around a decade to complete.

Major regional track upgrades are already occurring as part of the Regional Rail Revival. It is likely that the next step in delivering fast regional rail will be the separation of Wyndham Vale and Melton lines from regional lines, returning regional lines to regional passengers.

Additional capacity between the CBD and Sunshine is being examined as part of Airport Rail and is being contemplated as part of that project, which is targeted to begin construction in 2022.