STRATEGY FOR A HIGH PERFORMING BALLARAT RAILWAY

BALLARAT RAIL ACTION COMMITTEE
MAY 2018
‘Ballarat needs a world class railway – our ambition is to have the best regional railway in Australia’

– Councillor Samantha McIntosh, Mayor for City of Ballarat
– Councillor David Clark, Mayor of Pyrenees Shire Council
– Councillor Gwenda Allgood, Acting Mayor Ararat Rural City Council

KEY ARGUMENTS FOR A HIGH-PERFORMANCE BALLARAT TRAIN SERVICE

→ The Ballarat line is already at near capacity for peak period travel
→ The 2017-18 upgrade program will improve train service reliability and add off-peak frequency but won’t provide trains with more seats or enable faster journeys
→ Strong growth will continue for rail travel to Melbourne; improved services for travel into Ballarat will also be an attractive option for workers and students from Melbourne’s booming west and places west of Ballarat
→ Ballarat’s population will grow by over 70% by 2050 – high performance rail is vital infrastructure to make this growth liveable
→ Ballarat region’s excellent housing stock and lower housing costs can help address Melbourne’s need for more affordable housing
→ Ballarat is now home to nationally significant trip attractors such as Sovereign Hill, The Art Gallery of Ballarat and Eureka Stadium and rail can offer convenient access to these sites.
Over the past two decades, Victorian Governments have invested over $6 billion dollars in improving regional rail passenger services, providing faster journey times, and more frequent and reliable rail services to many parts of Victoria.

Substantial effort and funding has also been put into the development of better co-ordinated road coach and urban bus services, with the overall result that Victoria as a whole has the best regional passenger services of any Australian state.

The railway between Melbourne, Ballarat and Ararat provides a critical transport link for the communities it serves, including extended catchments that are connected to the railway by bus and coach services. The role of the railway is expected to become even more vital in coming years as population growth continues and the road network is increasingly unable to accommodate travel demand.

The railway between Melbourne and Ballarat is now an intensely used commuter line, having seen in usage more than triple over the past decade as journey times have been reduced by successive investments in the Regional Fast Rail, VLocity railcars and Regional Rail Link (RRRL) projects. A further $518 million was committed to further improvements in the 2016 State budget. Despite these welcome investments, much of the line much of the line will still be single track, resulting in delays while trains wait to pass each other, and other infrastructure including stations, signalling, train stabling, car parking, security and bus and coach connections require further improvement.

The next 20 years will require transformative development of rail services and infrastructure in the corridor from Sunshine via Ballarat to Ararat and beyond to accommodate demand fuelled by rapid population growth, especially between Sunshine and Bacchus Marsh, in Ballarat, and to a lesser extent in all communities served by the corridor. Rapid urban growth west of Melbourne is expected to add another 700,000 people to areas served by the Ballarat and Geelong rail corridors by 2036 (less than 20 years away).

Ballarat is set to become a major regional rail hub as services to Ararat and Maryborough increase and, we hope, also return to Horsham and Hamilton. Direct rail links will also be needed from Ballarat to Geelong and Bendigo to support increasing travel needs as these major centres expand and develop.

The six Councils along the Ballarat line — Brimbank, Melton, Moorangool, Ballarat, Pyrenees and Ararat - are united in seeking for our residents the best regional railway in Australia. We have the basics, we have the need, we use the train. We ask for the planned investment that’s needed. This document presents a strategy to get there.
OUR VISION FOR THE BALLARAT RAILWAY

An extremely reliable and fast rail connection from Ararat and Ballarat to Melbourne Southern Cross, supporting the needs of the corridor’s booming population to travel to Ballarat, Melbourne, Melbourne Airport and connected places by quicker and more effective means than car travel, supporting inwards domestic and international tourism and allowing a travel time between Ballarat and Southern Cross of 55 minutes by 2030 and 45 minutes by 2050.

THE ACTIONS NEEDED TO REALISE THIS VISION:
- A corridor development plan
- Electrification to Melton
- Quadruplication between Sunshine and Melton
- Duplication of more single line sections
- Creation of new Warrenheip Parkway station
- Raising track speed wherever practicable
- Longer platforms for longer trains
- Better station facilities
- Better bus connections

THESE ARE REALISTIC ASPIRATIONS THAT CAN BE ACHIEVED IF:
- A long term Ballarat rail corridor plan is developed and implemented
- The required investments are implemented sequentially
- Involvement is achieved from all levels of government
- The community is engaged and excited as each upgrade is implemented

<table>
<thead>
<tr>
<th>OUR 2020 TARGET</th>
<th>OUR 2030 TARGET</th>
<th>OUR 2050 TARGET</th>
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<tbody>
<tr>
<td>95% Reliability</td>
<td>98% Reliability</td>
<td>100% Reliability</td>
</tr>
<tr>
<td>65 Minute journey</td>
<td>55 Minute journey</td>
<td>45 Minute journey</td>
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<tr>
<td>30 Minute peak frequency</td>
<td>20 Minute peak frequency</td>
<td>15 Minute peak frequency</td>
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# Proposed Infrastructure Investment Program

## 2018 – 2022

- Railway electrification – Southern Cross to Sunshine (RRL lines) and to Melton
- Ardeer and Deer Park – station reconstruction to allow for track quadruplication with 250m platforms for longer current diesel and future metro electric trains
- Level crossing removals at Fitzgerald Road, Derrimut Road and Robinsons Road
- Caroline Springs – Rockbank – Melton track duplication*
- Caroline Springs, Rockbank, Toolern, Melton and Bacchus Marsh – platform extensions to 250m for metro electric trains
- Provision for future station at Hopkins Road
- New station at Toolern (with provision for Ferris Road level crossing removal)*
- Bacchus Marsh – additional platform, removal of existing carriage sidings and additional car parking*
- Maddingley – new carriage sidings at Kerr’s Road*
- Ballan – new 5km passing lane, additional platform and car parking
- Bungaree Loop via Wallace and Bungaree to close (removes 5 level crossings)
- Bungaree direct line – new 4km passing lane*
- Ballarat station improvements (incl. DDA compliance) and additional car parking
- Wendouree – additional platform and car parking*
- Ballarat to Geelong, Maryborough, Mildura, Sea Lake and Manangatang – track conversion to standard gauge (part of Murray Basin Rail Project)

## 2023 – 2026

- Opening of Melbourne Metro tunnels – releases capacity on RRL lines by diverting Melton trains onto separate tracks at Hopkins Road
- Sunshine – grade separated junction of Bendigo line with Melton suburban lines
- Sunshine to Caroline Springs and Hopkins Road – track quadruplication
- Deer Park – two additional platforms
- Re-arrangement of Robinsons Road Junction
- Melton – third 250m platform for terminating trains
- Telephone Road to Parwan Loop and Bacchus Marsh track duplication including bi-directional signalling for overtaking movements
- Warrenheip – new Parkway station with parking for 1000+ cars
- Ballarat station – track and platform re-arrangement for better train/train and train/road coach/bus interchange
- Eureka Stadium – new platform and signalling
- Ballarat to Wendouree – track duplication and dual gauging
- Ballarat West – new train stabling sidings and servicing facility
- Wendouree to Ararat – track conversion to standard gauge
- All stations – additional car parking and improved bus interchanges

## 2027 – 2030

- Sunshine – new platforms for fast line to Melbourne Airport
- Hopkins Road to Melton – track quadruplication
- Hopkins Road – new station (linked to level crossing removal)
- Level crossing removals at Hopkins Road and Leakes Road
- Rockbank – station reconstruction (linked to Leakes Road level crossing removal)
- Level crossing removals at Paynes Road, Mount Cottrell Road and Ferris Road
- Level crossing removals at Station Street and Coburns Road
- Melton – station re-construction (linked to Station Street and Coburns Road level crossing removals)
- Melton to Telephone Road – track duplication (including Melbourne Weirbridge) and bi-directional signalling for overtaking movements
- Parwan – new station
- Warrenheip to Ballarat East – third (standard gauge) track linked to Geelong line
- Warrenheip Parkway station – additional platforms

## 2031 – 2040

- Rowsley to Ballan – passing lane track duplication (incorporating Bank Box passing loop);
- Ballan passing lane to Bungaree loop – duplication
- Bungaree passing lane to Warrenheip – track duplication
- Trawalla – new crossing loop between Wendouree and Beaufort

## 2041 – 2050

- New part tunnelled line between Southern Cross, West Footscray and Sunshine for Geelong and Ballarat line fast regional trains
- Extensive curve straightening to permit 200 km/h running where practicable
- Level crossing removal program Rowsley to Warrenheip
- High voltage (25Kv AC) electrification Southern Cross to Ballarat for new high performance regional trains, replacing VLocity fleet

*These projects form part of the current Ballarat Line Upgrade (BLU) project.
THE BALLARAT LINE UPGRADE

The $518 million allocation for the Ballarat Line upgrade in the 2016 State Budget will do much to help improve train service reliability and provide more passing lanes and platforms that will allow for more off-peak services. But much more is needed to support and encourage regional growth. The current upgrade doesn’t include platform extensions for the longer trains with more seats that will soon be needed and it can’t deliver the faster journey times Ballarat people want, especially for journeys to work.

MELTON ELECTRIFICATION

Electrifying the railway to Melton will triple its carrying capacity — electric trains can carry 1,100 or more people compared with 444 seats in a 6-car VLocity set. Population growth in Brimbank, Melton and Moorabool requires electrification, but the important connection with Ballarat can be retained, making Melton an interchange station with access to both suburban and regional trains. By 2026, it will also connect into the Melbourne Metro tunnels and release precious capacity on the RRL lines in from Deer Park, permitting more peak period services from and to Ballarat and Geelong.

QUADRUPLEMENTATION TO MELTON

The Ballarat line currently tries to serve both suburban and regional passengers — but mixing regional and suburban trains makes regional journeys much longer. Faster Ballarat trains will increasingly be caught behind frequent suburban trains that run at much lower average speeds, because of stops at suburban stations.

It is therefore vital that suburban and regional trains are segregated. Quadruplication (two additional express tracks) from Sunshine to Melton, extending the previously completed Regional Rail Link tracks between Sunshine and Southern Cross, together with duplication from Melton to Bacchus Marsh including signalling designed for overtaking by Ballarat express trains, is how this segregation and faster trips can be achieved on the Ballarat line.

COMPLETING DUPLICATION BACCHUS MARSH TO BALLARAT

Ultimately, the entire line to Ballarat needs to be duplicated. Grade separation will be needed to eliminate most level crossings and the line upgraded for 200 km/h operation where grades and curves allow it. These investments will allow the world class train service Ballarat needs. The Freeway has been duplicated; the railway will also need full duplication soon!
BOOMING DEMAND FOR RAIL TRAVEL

Already Ballarat citizens are provided with 22 trains a day. Very soon, the peak services will be filled to capacity. In the next ten years at least 30 trains a day will be needed, with a 20-minute service in the two-hour peak in each direction.

BOOMING POPULATION

Ballarat’s population is growing at 1.9% a year, and the present level of 104,000 will reach 137,000 by 2031 and could be 175,000 by 2050. By then, population of the wider Ballarat Region is likely to exceed 250,000. We must have the infrastructure to service that population.

High capacity electric trains being built now can carry 1,100 or more passengers; platforms will be built or extended to suit them. They need to run to Melton.

TRACK AND ROLLING STOCK

To provide for the needs of the next 5 and 10 years, investment is needed now in extra tracks, lengthened platforms and longer trains with more seats to support the level of service that will be needed. This planning must be done now!
ACCORDING TO THE VICTORIAN GOVERNMENT’S OFFICIAL POPULATION GROWTH FORECASTS VICTORIA IN FUTURE 2016:

The fastest growing metro municipality to 2051 will be Melton, served by the Ballarat line (4.4% growth)

The second fastest regional growth area to 2051 will be Moorabool (2.4% growth)

With 1.9% growth, Ballarat’s* population will be over 250,000 by 2051

The largest growth in numbers to 2051 will be Wyndham – (an additional 198,000 people) – Wyndham Vale trains will still be sharing the inner end of the Ballarat line

(Quadruplication will allow electric trains to Melton to operate on separate tracks).

*Ballarat Statistical Area (SA4) official projection. By 2051, population of the Ballarat Local Government Area (SA3) could be around 175,000.
IT'S THE TOTAL JOURNEY THAT COUNTS

The whole commute between Ballarat and Melbourne, or vice versa, includes the time needed to get to the station, wait for the train, and complete the journey. The journey time on the train can be expedited by better rail infrastructure, fewer curves and stops and faster rolling stock. But the journey to and from the station is very important too.

Many people want to drive to the station, and they need to be able to find a parking spot easily, leave their car in a safe place, and get easily to the platform. Our Warrenheip Parkway proposal, illustrated above, is designed for this purpose. It is planned to be an integrated new station complex at Warrenheip that will serve both Ballarat to Melbourne trains and future Ballarat to Geelong trains. It is designed to accommodate 1,000+ vehicles, within no more than a 5-minute walk to the platform, a convenient bus interchange and accommodation for a large number of bicycles.

There is no cost-efficient way to provide this many car parks in central Ballarat. And a Warrenheip Parkway will be ideal for all those living on the Melbourne side of Ballarat, as well as those from Mount Helen and Buninyong. It will complement the similar facility at Wendouree, already well used by those on the western side of the city.
The Ballarat railway can provide a fast gateway for residents and tourists to the region’s unique tourist attractions, communities and natural beauty.