

PUBLIC TRANSPORT VICTORIA'S RESPONSE

# DONCASTER RAIL STUDY

PHASE ONE  
RECOMMENDATIONS  
REPORT



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## FOREWORD

Public Transport Victoria welcomes the submission of the Doncaster Rail Study Phase One Recommendations Report. The independent study team, led by URS and leader Tim Gosbell, conducted a comprehensive investigation into the feasibility of a Doncaster rail line and did so with thoroughness and dedication, to ensure Government would be provided with the best possible advice to consider.

The study team comprised experts from URS, Aecom, Aurecon and SKM (now Jacobs) and incorporated the views of hundreds of community members and council representatives from the Manningham, Boroondara, Whitehorse and Yarra municipalities.



**Mark Wild**  
Chief Executive Officer

Over two years, the team worked to provide advice based on engineering assessments, patronage projections, population, demographic and travel pattern data, community and stakeholder views, and transport and land use integration.

The result is a comprehensive report, which provides government with valuable advice and a solid foundation for planning a railway line to Doncaster.

The identification of an alignment, understanding of travel time and patronage projections, a cost estimate and recommendations for further work gives Public Transport Victoria a direction in which to now continue the development of a Doncaster rail line.

In line with the findings of the study, particularly with regard to rail network capacity constraints, Public Transport Victoria (PTV) will continue to plan for a railway line to Doncaster to be delivered in Stage Three of the *Network Development Plan: Metropolitan Rail*. PTV will also continue to assess opportunities to reduce the cost of the rail line.

PTV will prioritise delivering immediate public transport benefits for the corridor through the Hoddle Street and Victoria Parade bus improvements funded as part of East West Link, updating network patronage projections with recent census and official population data, and further developing the rail alignment and station footprints, to enable the future protection of the rail corridor.



# 1. KEY FINDINGS AND INDEPENDENT STUDY TEAM RECOMMENDATIONS

The Doncaster Rail Study team’s final recommendations report was submitted to PTV for consideration in February 2014.

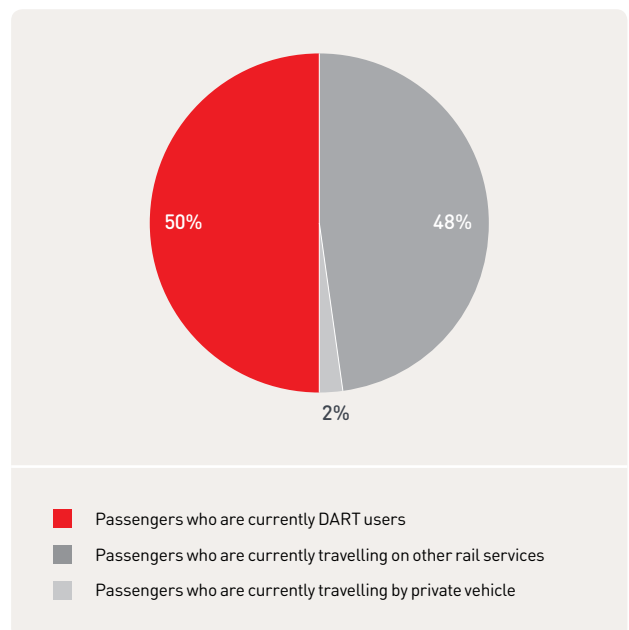
## The independent study team’s final report finds that:

- > A rail alignment commencing at the current Doncaster park-and-ride facility following the Eastern Freeway with a connection near Collingwood station is preferred. Though there was a community preference for the rail line to extend to Doncaster Hill, the steep underground tunnel makes this extension prohibitively expensive when compared with the high-frequency bus connection service between Doncaster Hill and the park-and-ride that could be provided.
- > The preferred alignment forecasts around 56,000 average weekday boardings in 2031, would provide a journey time of 25 minutes and has an estimated construction cost of between \$3 billion and \$5 billion. The final report includes new mode shift data, which indicates that morning peak patronage would comprise:
  - 50% of passengers who are currently DART users
  - 48% of passengers who are currently travelling on other rail services
  - 2% of passengers who are currently travelling by private vehicle.
- > To enable sufficient capacity on the Clifton Hill group for Doncaster trains, the South Morang line will first need to be de-coupled with a new dedicated route to the city.

The study team broadly recommends the following as areas for focus in further developing the rail line:

- > assessment of opportunities for delivering the rail link at a lower cost
- > developing a more detailed understanding of the requirements of the de-coupled South Morang line and Clifton Hill – Southern Cross tunnel
- > assessment of an alternative connection point for the Doncaster rail line, possibly connecting to the Hurstbridge line at Fairfield
- > investigating opportunities to further enhance the DART bus service
- > assessment of required alterations to the local bus network to provide feeder services
- > determination of station car park requirements
- > further engineering assessments to enable the future protection of the rail corridor
- > confirmation of station locations, taking patronage and travel time projections into consideration
- > exploration of funding options, including a public-private partnership arrangement
- > further economic evaluations.

FIGURE 1: WHERE WOULD DONCASTER RAIL LINE PASSENGERS COME FROM?



## 2. STUDY PARAMETERS AND RECENT DEVELOPMENTS

The Doncaster Rail Study team conducted its feasibility assessments based on the transport projects either committed to or planned at the time of the study.

The study team referenced PTV's plans for the development of the metropolitan rail network, formally released as the *Network Development Plan: Metropolitan Rail* (NDPMR) in March 2013, to provide context for any future projects which may enable a Doncaster rail link or which may interact with a Doncaster rail link.

At the time of finalisation of the report, the Melbourne Metro project (Metro Rail Capacity Project) was the next major public transport project to be delivered in PTV's plan. This project was called for to increase the capacity of our rail network by building new tracks in the inner core.

In May 2014, the Victorian Government announced funding for the Melbourne Rail Link project.

The Melbourne Rail Link project provides the necessary capacity benefits but in a more cost effective way, is integrated with central city development and will generate less disruption to CBD streets than the Melbourne Metro project.

### The project will deliver:

- > twin tunnels from Southern Cross to South Yarra as part of a new Frankston to Lilydale/ Belgrave line
- > new underground stations at Fishermans Bend (Montague) and Domain
- > new underground platforms at Southern Cross and South Yarra stations
- > the Melbourne Airport Rail Link, connecting Melbourne Airport to Southern Cross Station and the Cranbourne-Pakenham corridor
- > train-tram interchanges at the new underground stations
- > supporting works across the rail network to improve train reliability and passenger interchange facilities
- > a package of tram and bus improvements to the Parkville precinct.

The Melbourne Rail Link is due for completion in 2026, which is consistent with PTV's plans for the commencement of a metro-style system. The additional capacity-building projects called for in stage two of the NDPMR – the introduction of high capacity signalling and the upgrade of the Dandenong rail corridor – are planned to be delivered under the Cranbourne Pakenham Rail Corridor project.

Public Transport Victoria has assessed the work carried out by the independent study team in the context of the Melbourne Rail Link and Cranbourne Pakenham Rail Corridor projects, and finds that a commitment to these projects does not materially affect the feasibility, projected cost, or projected patronage of a Doncaster rail line.

### 3. TIMEFRAMES FOR DELIVERY

A key finding of the Doncaster Rail Study was that an extension to Doncaster could not occur without first creating additional capacity on the Clifton Hill group, by delivering a new tunnel connecting the South Morang line to Southern Cross Station.

This capacity constraint will be required to be addressed, even with the delivery of the Melbourne Rail Link; however, opportunity exists to now consider how this tunnel could service the Parkville precinct and connect with the Fishermans Bend urban renewal area. Such a connection was envisaged by PTV in the NDPMR, with a Fishermans Bend extension to the South Morang line tunnel planned for Stage 4.

The Doncaster Rail Study uses 2021 as the earliest possible commencement date for a Doncaster rail line. However, given the need to build capacity in the inner-core of the rail network as a priority, and before any new rail lines are added, a Doncaster rail line would not be delivered prior to the completion of the Melbourne Rail Link in 2026.

This is consistent with PTV's plans to introduce a Doncaster rail line in Stage 3 of the NDPMR.





## 4. INTEGRATION WITH EAST WEST LINK

### Alignment compatibility

The final recommendations report provides additional information relating to the interaction of the Doncaster rail line with East West Link, in response to community concerns that the Doncaster rail line's delivery would be impacted by the road tunnel alignment.

The Doncaster Rail Study Team worked closely with the Linking Melbourne Authority (LMA) in developing possible rail alignments, to ensure both projects would be compatible. The Doncaster rail alignment moves out of the freeway median at a more easterly point to ensure both projects can be designed and constructed independently; however, there is no significant additional cost associated with this more easterly deviation.

East West Link and a Doncaster rail line are considered to be compatible projects and serve complementary transport functions. A future Doncaster rail line will provide CBD and inner-city access for public transport customers while the East West Link project will deliver a city bypass for both private vehicles and freight traffic.

The Doncaster Rail Study's findings that there would only be a 2 per cent mode shift from private vehicle to the rail line in the morning peak period in 2031 is consistent with the Linking Melbourne Authority's findings that the vast majority of morning peak traffic on the Eastern Freeway is not travelling into the city.

### Public transport improvements

Importantly, East West Link provides opportunities to enhance the future use of the DART service to provide shorter term improvements to DART journey time and service reliability along the Eastern Freeway.

In February 2014, the Government announced a \$47 million upgrade of the Doncaster Area Rapid Transit (DART) bus service.

The upgrade of DART will incorporate new bus lanes along Hoddle Street and Victoria Parade, including a new free-flowing exit off the Eastern Freeway, along with upgraded bus stops.

Approximately 3.8 million passenger trips are made on DART each year and these improvements will deliver benefits to those passengers, reducing delays, improving travel time reliability and creating potential for additional services.

PTV considers the delivery of these upgrades to be the most important short-term public transport improvement that can be made in this corridor and is working with LMA and VicRoads to deliver these improvements as soon as possible.

## 5. RESPONSE TO RECOMMENDATIONS AND NEXT STEPS

Public Transport Victoria welcomes the findings and recommendations of the Phase One recommendations report. The work carried out in this study provides PTV with valuable information and a solid foundation upon which to continue planning for a Doncaster rail line.

All of the recommendations made by the study team are considered by PTV to be sensible and prudent steps in the long-term planning of a new rail line.

PTV supports the study team's preferred alignment for a Doncaster railway line and will not actively pursue further investigations into any of the alternative alignments at this stage.

As discussed in section 3 above, based on the findings of the Doncaster Rail Study, PTV will now continue planning for a Doncaster rail line to be delivered within 15 years. As part of this planning, PTV will assess opportunities to reduce the cost of the rail line.

**PTV will prioritise the following in 2015-16:**

1. delivering immediate public transport benefits for the corridor through the Eastern Freeway – Hoddle Street – Victoria Parade bus improvements funded as part of East West Link
2. updating network patronage projections with recent census and official population data, to help provide a better understanding of the demand for a Doncaster rail line
3. undertaking further engineering work to refine the rail alignment and station footprints, which is a critical step in enabling the future protection of the rail corridor.





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