Zenith Model of Victoria

Technical Note 11
Reference Case Model Assumptions and Results

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VEITCH LISTER CONSULTING PTY LTD

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Zenith Model of Victoria

Technical Note 11: Reference Case Model Assumptions and Results

Date	Revision	Prepared By	Checked By	Approved By	Description
18-07-2011	A	AMA	JP	AMA	Draft Report
06-12-2011	B	AMA	NV	AMA	Second version, including 2016, 2026 & 2031
13-12-2011	C	AMA	LS	AMA	Minor changes to the tram service plans
25-01-2012	D	AMA	AMA	AMA	Minor changes to the Related Documents Section
19-03-2012	E	AMA	LS	AMA	Inclusion of Results

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1 Introduction

The Zenith travel model of Victoria is one of a family of models developed by Veitch Lister Consulting (VLC) for transport planning in Australian cities and regions.

This document is one in a series of technical notes that collectively describe the Zenith Model of Victoria.

1.1 Related Documents

This technical note is the eleventh of eleven. The other technical notes are:

- Working Paper 1: Model Validation Framework and Data Sources
- Working Paper 2: Review of VISTA07
- Working Paper 3: Home Based Trip Production Model
- Working Paper 4: Non-Home Based Trip Production Model
- Working Paper 5: Household Segmentation & Travel Market Segmentation Models
- Working Paper 6: Period Allocation and Vehicle Occupancy Models
- Working Paper 7: Mode Choice Model
- Working Paper 8: Destination Choice and Trip Attraction Model
- Working Paper 9: Overall Model Validation
- Working Paper 10: Backcasting and Sensitivity Testing
- Working Paper 11: Reference Case Model Assumptions and Results

1.2 Scope of This Document

The primary focus of this report is the documentation of the Reference Case assumptions for 2016, 2021, 2026 and 2031.

2 Zenith Model Coverage and Travel Zone System

2.1 Geographical Coverage of the Zenith Model

The model coverage includes the regional areas of Geelong, Ballarat, Bendigo and Traralgon, allowing better representation of travel behaviour especially between the major regional cities and Melbourne. Note that the Zenith model has been extended to Traralgon during the Model Recalibration process, and has since been extended to include all of Victoria. Figure 1 shows the extent of the Zenith model coverage, as used for the current Reference Case work and the Rail Revival project (as identified by the black links, while the red links identify the development for the remainder of Victoria). The decision has been made to use a sub-set of the Victoria wide model due to the restrictions in computers powerful enough to handle a model of this size. More details on the version of the model used for the Rail Revival project are in the Rail Revival Model Development report.

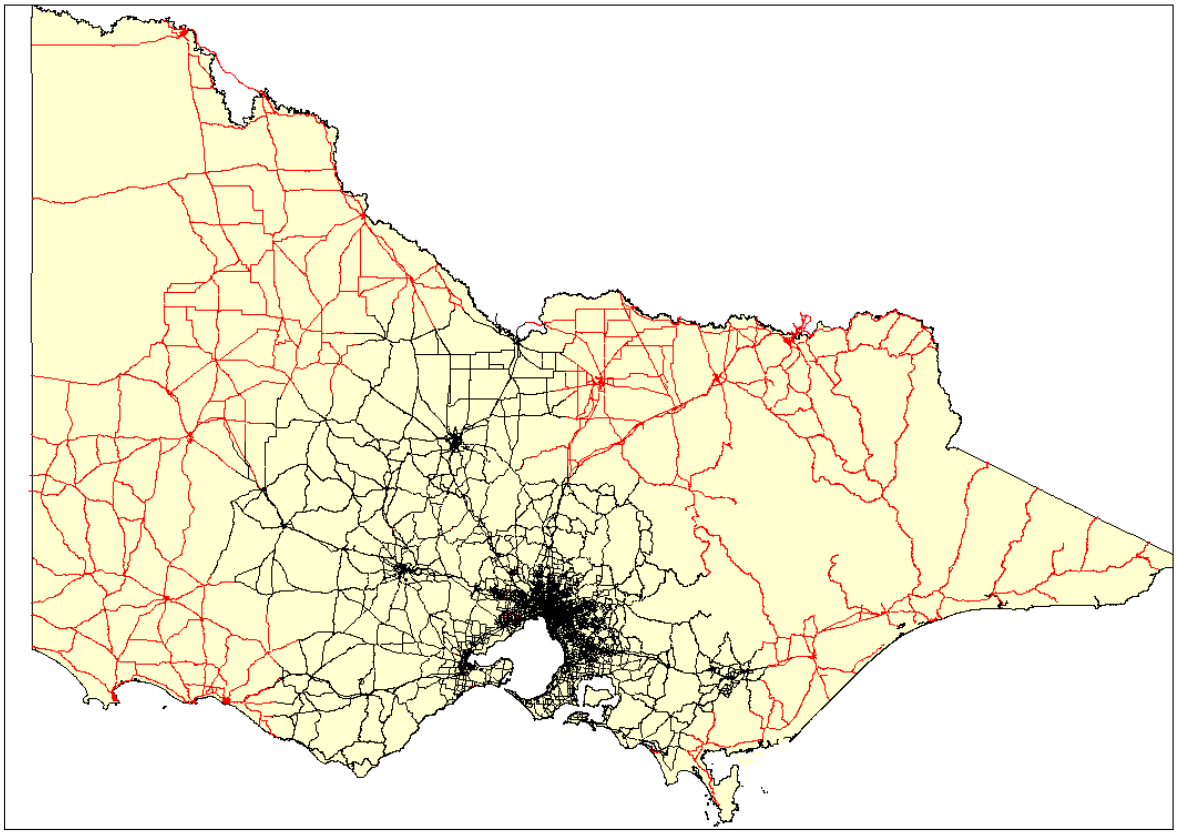


Figure 1 - The Zenith Model Transport Infrastructure Network; Black links identify the coverage used in the current Reference Case

2.2 The Travel Zone System

2.2.1 What are Travel Zones?

The geographical area to be modelled is divided up into discrete areas called travel zones. The travel zones are the basic building blocks for the model as they define the level of geographical travel detail the

model produces when run. One of the primary objectives of the model is to accurately predict the quantum of travel that occurs from each travel zone to every other travel zone.

The finer-grained the travel zone system, the more accurate the travel forecasts are, particularly on the lower trafficked sections of the transport network. For each zone the demand on each element of transport infrastructure is predicted.

The Zenith forecasting model uses a Standard travel zone system and a Small Area travel zone system across the MSD and Regional Victoria.

2.2.2 MSD Travel Zone Systems

2.2.2.1 Standard Travel Zone System (MSD)

During model calibration, the standard travel zone system within the MSD was reviewed in detail and the decision was made to use 2,068 zones, as seen in Figure 2.

Figure 2 – The Standard Zenith Travel Zone System in the MSD

2.2.2.2 Small Area Travel Zone System (MSD)

A far more disaggregated travel zone system is also maintained by VLC, see Figure 3. This Small Area travel zone system includes 8,266 travel zones within the MSD and is based upon the combination of the following geographical zonal systems:

- Local Government Authorities, Statistical Local Areas
- ABS census collector districts (2001 & 2006),
- ABS journey to work destination zones (2001 & 2006),
- SGS 2253 & 2893 travel zone (TZN) system (MSD), SGS 2,702 TZN system (Regional),
- Additional regions that are expected to experience rapid population and employment growth
- Census of Land Use and Employment (CLUE) region maps

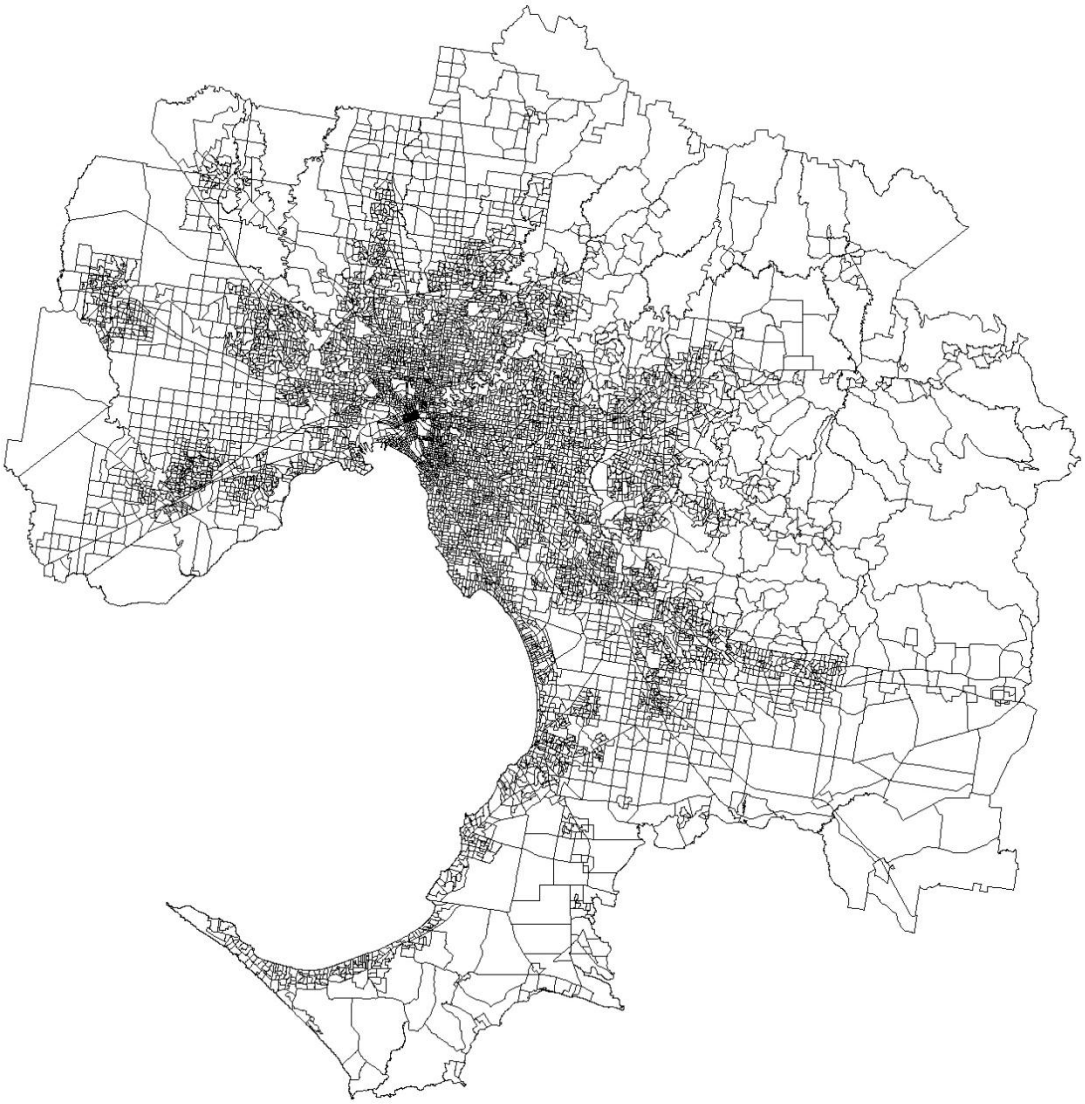


Figure 3 – The Small Area Zenith Travel Zone System

Small Area travel zones include detailed geographic coverage across the entire modelled area, including the Melbourne CBD grid which includes 371 small area travel zones. Figure 4 highlights the difference

between the Standard Zenith travel zone system (black) and the Small Area Zenith Travel Zone System (red) in the CBD and inner Melbourne.

These disaggregated Small Area travel zones can be fairly seamlessly substituted for the standard zone system in regions of the modelled area where more detailed and accurate travel forecasts are required, usually on a project by project case.

Figure 4 –Difference between the Standard and Small Area Zenith Travel Zone System in Inner Melbourne

2.2.3 Regional Travel Zone Systems

VLC received regional land-use boundaries from SGS Economics and Planning (SGS) for the whole of Victoria, outside of the Melbourne Statistical Division. There are 2,702 SGS regional zones in total, which can be seen in Figure 5. VLC has adopted the SGS boundaries as the travel zones outside of the MSD.

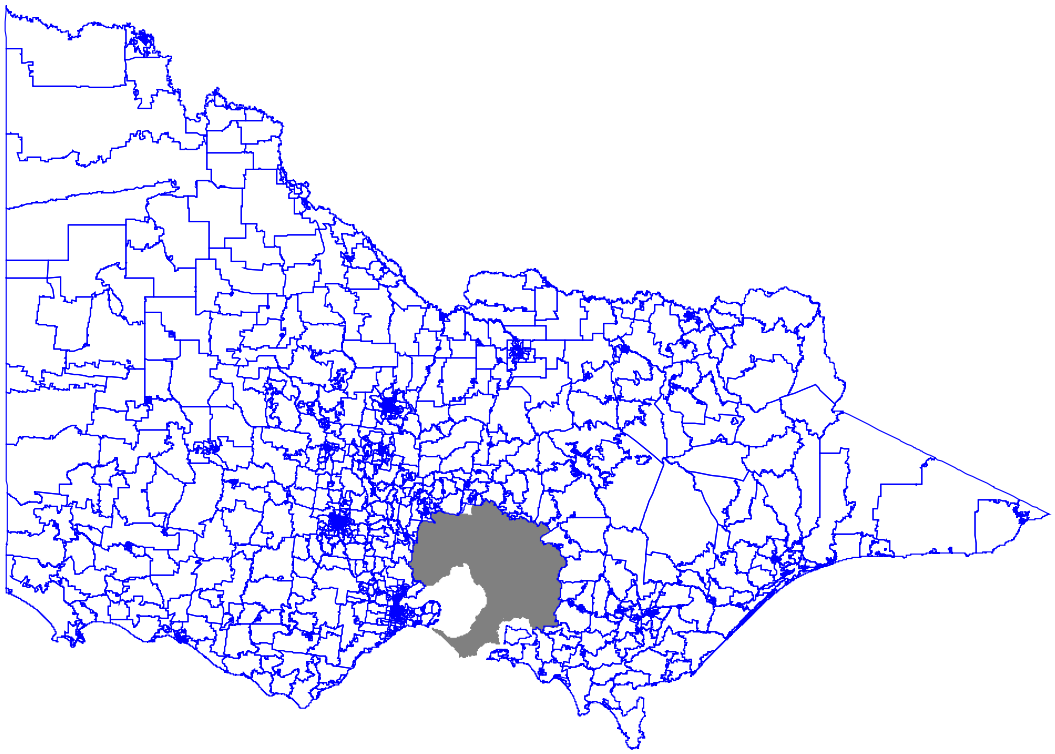


Figure 5 – The SGS Regional Travel Zone System

3 Demographics

3.1 Description of Demographics

3.1.1 What are Demographics?

The Zenith transport forecast model incorporates a series of data sets called demographics to predict the changes in traffic patterns, including:

- **Population** refers to the total number of people who live in the area. In addition, average household profiles are determined including number of households, household size, three age profiles (0-17, 17-65, 65+), car ownership, and number of visitors
- **Employment** refers to the number of employed persons at their place of work (not the number of people of who are employed and live in the area). 13 Australian Bureau of Statistics (ABS) derived employment categories are used
- **Education** refers to the total number of students enrolled at primary, secondary and tertiary institutions, including private and public schools

3.1.2 How does Zenith use Demographic Information?

Demographics are a key input for the Zenith transport forecast model. They are used to estimate the amount and type of travel generated on a typical weekday, also known as trip generation. The Zenith transport forecast model utilises information on trip producers, such as the number of residential households and where they are situated, as well as trip attractors, such as the scale and location of work places, shopping precincts, schools, universities, entertainment and recreation centres and other community facilities.

3.2 Demographic Information Used

During the Model Recalibration Process, SGS produced revised 2006 to 2046 (and every 5 years in between) population, education enrolments and employment forecast scenarios for use in transport models. This information was provided at a refined zone level (TZN 2,893 in the Melbourne Statistical Division (MSD) and TZN 2,702 throughout the rest of Victoria). Although no documentation was provided to VLC when receiving these forecasts, VLC believes they are based on 2006 Census Estimated Residential Population (ERP) figures and ABS Journey-to-Work, the Labour Force surveys and Victoria in Future (VIF2011) - the State Government forecasts household and population estimates.

The model coverage includes the regional areas of Geelong, Ballarat, Bendigo and Traralgon. This allows better representation of travel behaviour especially between the major regional cities and Melbourne.

For areas outside the MSD, the SGS regional TZN 2,702 system was utilised which are based upon the Victorian State Government Victoria projections (Victoria in Future 2011 - VIF2011) for population and households.

The SGS reference numbers for each data type are listed in Table 1.

Description	Region	SGS Reference	SGS Date	SGS Name
Population	MSD	20110236	23/09/11	Small Area Land Use Projections
	Regional	20110236	08/09/11	Small Area Land Use Projections
Enrolments	MSD	20110182	23/09/11	Small Area Land Use Projections
	Regional	20110321	20/10/11	Small Area Land Use Projections - Rail Revival: Evolution Scenario
Employment	MSD	20110182 / 20100248	23/09/11	Small Area Land Use Projections
	Regional	20110236	08/09/11	Small Area Land Use Projections

Table 1 – Source of Demographic Assumptions

3.3 Adjustments to the Demographic Information Used

3.3.1 Total Employment

As the Zenith model is calibrated using Census employment totals, a factor is determined for each Statistical Local Authority (SLA) in order to bring the SGS employment totals (which are created using the Labour Force survey) down to Census employment totals (referred to as the 'Labour Force survey factor' below). Census employment totals make allowance for people not attending their place of employment (due to leave, working several days a week etc., but does not make allowance for incomplete Census surveys) on Census day and VLC believes it more accurately reflects a typical weekday. The Labour Force survey employment estimates include the entire labour force (whether or not they worked on Census night), and also makes adjustments for undercounting and non-response.

Note that this results in approximately 8% less employment than the Labour Force survey in Melbourne.

3.3.2 Total Cars

The number of cars per travel zone, or the average number of cars per household for each travel zone was not provided to VLC. As car ownership is required for each travel zone for Zenith model runs, the decision was made to take the number of cars per persons aged 18 and above (i.e. the "driving population") from 2006 Census data, and apply this to the forecasted population figures. This enables us to utilise the varying car ownership levels that exist due to geographical and transportation reasons.

3.3.3 Tertiary Enrolments

Following a review of the SGS tertiary enrolments, it was determined that they were not suitable to use in the Zenith model due to the different definitions of tertiary enrolments.

Without the provision of detailed documentation it is difficult to comment, however, VLC understands that the SGS tertiary enrolments include anyone with at least one hour per week over the year. E.g. If someone had completed a one week training course they would be included as a single tertiary enrolment. Over a year, if 30 people completed 30 consecutive one week training courses, they could

equate to 30 tertiary enrolments. At any time, only one person would be travelling to the training course per day, so (for transport modelling purposes) a total of 30 tertiary enrolments would not reflect the number of students utilising the tertiary institution on a typical weekday.

The Zenith model is calibrated using 'Full time equivalent' tertiary enrolments. The full time equivalent tertiary enrolments were obtained via a desktop exercise that involved the review of the 2006 ABS Census, Government websites and publications and the websites of tertiary institutions. The University Full Time Equivalence data is published in their annual reports, while for TAFE, we have assumed 'Full Time Equivalent' to be 'total student contact hours'/450 (or equivalent to 15 contact hours/week over 30 weeks/year). This results in 'Full time equivalent' tertiary enrolments that can be expected on a typical weekday.

4 Transport Network

The Zenith Model's transport network contains all freeway, arterial and collector roads, railway lines and road infrastructure dedicated to the use of trams and buses. It also includes details of all public transport routes, stop locations, service frequencies and stopping patterns by time of day. The transport network assumptions in the Reference Cases are described in the following sections.

4.1 Road Network

During the Model recalibration process, VLC was given a list of future road network assumptions for modelling purposed by the Economics & Transport Modelling Branch of the Policy & Communications Division. VLC believes that this list was completed following detailed discussions with VicRoads. This list was out-of-date at the time it was provided to VLC (as it included road projects that had already been completed before 2008), however it is believed to have been the best available list at the time.

These developments include all major road projects and many road upgrades that would be expected under a "business as usual" regime for 2021 and 2031. Figure 6 and Figure 7 show the extent of road network improvements from 2008 to 2021 and 2021 to 2031 respectively. New and upgraded infrastructure is shown in orange. Key projects included in the reference cases include:

- M1 upgrade (Monash, CityLink, West Gate upgrade from the South Gippsland Freeway to the West Gate Bridge)
- M80 upgrade (entire length of the Western and Metropolitan Ring Road)
- Calder Freeway Widening
- Geelong Bypass
- Aitken Boulevard (E14) and E6
- E6 arterial road in Whittlesea linking up to the Metropolitan Ring Road
- Dingley Bypass
- Peninsula Link
- Duplication and extension of some outer suburban roads
- Upgrading of major arterial roads

Note that the inclusion of the CBD parking levy (implemented in 2006 and increased in 2007) was included in all the transport models, including in the base year.

As the road network assumptions were only provided for 2021 and 2031, the 2021 road network assumptions have been used in the 2016 reference case, and the 2031 road network assumptions have been used in the 2026 reference case.

Appendix B lists the Road Infrastructure assumptions used for the 2021 and 2031 reference cases.

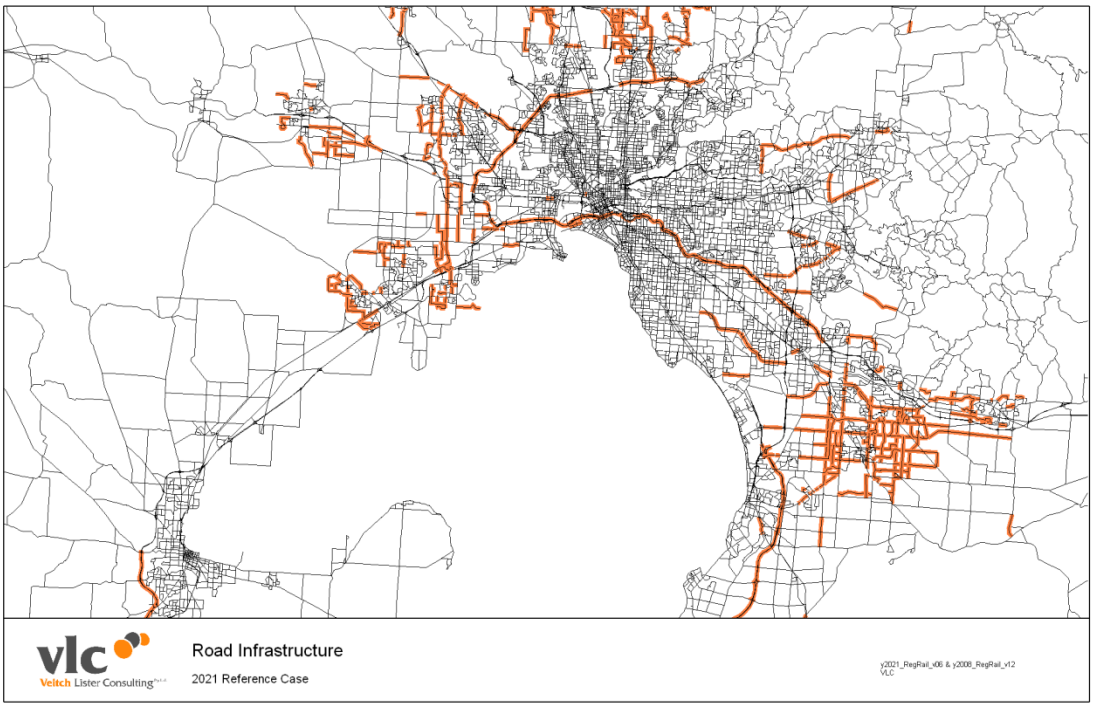


Figure 6 – Road Network Improvements 2008 to 2021

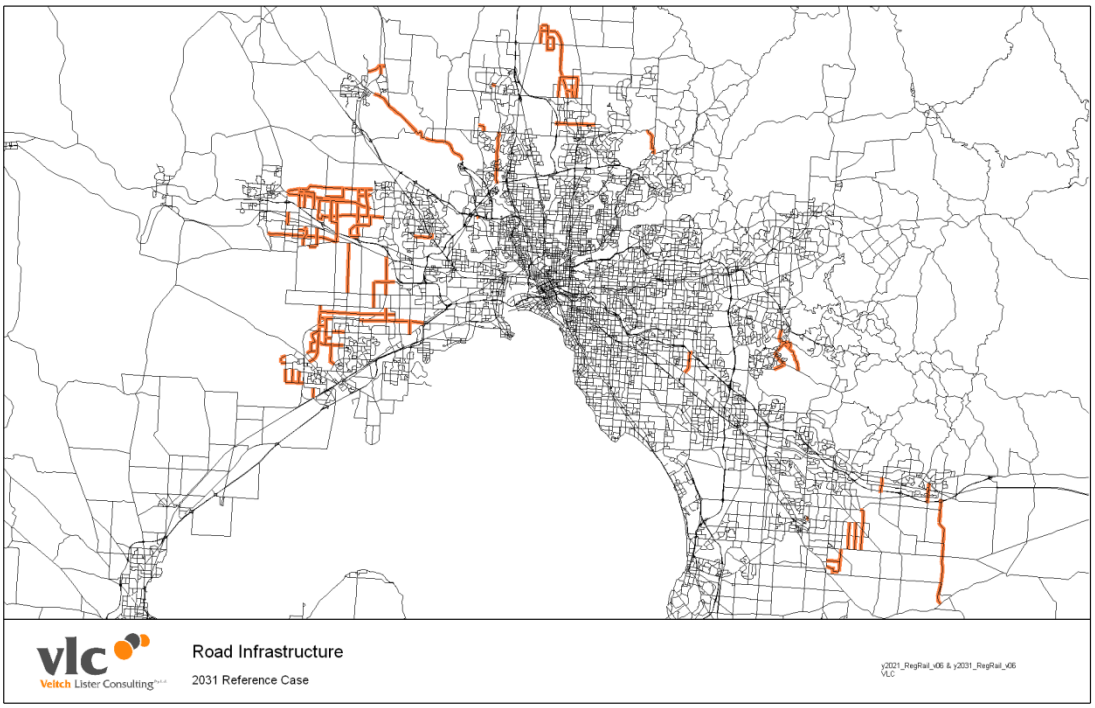


Figure 7 – Road Network Improvements 2021 to 2031

4.2 Public Transport

The PTD provided a listing of the proposed upgrades to the Public Transport system which have been incorporated into the Zenith model reference case.

These upgrades include the expansion of the Public Transport System and operational improvements that would be expected under a "business as usual" regime including:

Year	Source of Public Transport Assumptions – Reference Cases
2016	2008 base year assumptions plus: • 2016 Train Service Plan – Based upon 2014 MRUP (vers. 30, 13/10/2011) • 2016/2021 Tram Service Plan – Based on Yarra Trams update 16/08/11 including St Kilda Road Route Design (vers. 3, 16/11/2011) • 2021 Bus Service Plan –(received 25/11/2011)
2021	2008 base year assumptions plus: • 2021 Train Service Plan – Based upon 2022 MRUP (vers. 30, 13/10/2011) • 2016/2021 Tram Service Plan – Based on Yarra Trams update 16/08/11 including St Kilda Road Route Design (vers. 3, 16/11/2011) • 2021 Bus Service Plan –(received 25/11/2011)
2026	2008 base year assumptions plus: • 2026 Train Service Plan – Based upon 2026 MRUP (vers. 30, 13/10/2011) • 2026/31 Tram Service Plan – Based on Yarra Trams update 16/08/11 including St Kilda Road Route Design (vers. 3, 07/12/2011) • 2031 Bus Service Plan –(received 25/11/2011)
2031	2008 base year assumptions plus: • 2031 Train Service Plan – Based upon 2030 MRUP (vers. 30, 13/10/2011) • 2026/31 Tram Service Plan – Based on Yarra Trams update 16/08/11 including St Kilda Road Route Design (vers. 3, 07/12/2011) • 2031 Bus Service Plan –(received 25/11/2011)

Table 2 – Source of Public Transport Assumptions

Note that the removal of Zone 3 public transport fare pricing was included in the base year, as well as the future year models.

4.2.1 Rail Service Plan

Figure 8 to Figure 11 show the metropolitan rail improvements assumed up to the year 2016, 2021, 2026 and 2031 respectively. Appendix C lists the Reference Case Train Service Plan (metropolitan and regional) assumptions for the same years, including route extensions, city loop direction and average headway for each time period, along with seating and crush capacity.

Key projects included within the Train Service Plan include:

- South Morang Extension - 2016
- Regional Rail Link - 2016
- Melbourne Metro - 2021
- Sunbury Electrification and Extension - 2016

- Cranbourne East & Pakenham East Electrification and Extension - 2021
- Avalon Airport Rail Link - 2021
- Melbourne Airport Rail Link – 2031
- Various Cross City services –2016, 2021, 2026 & 2031

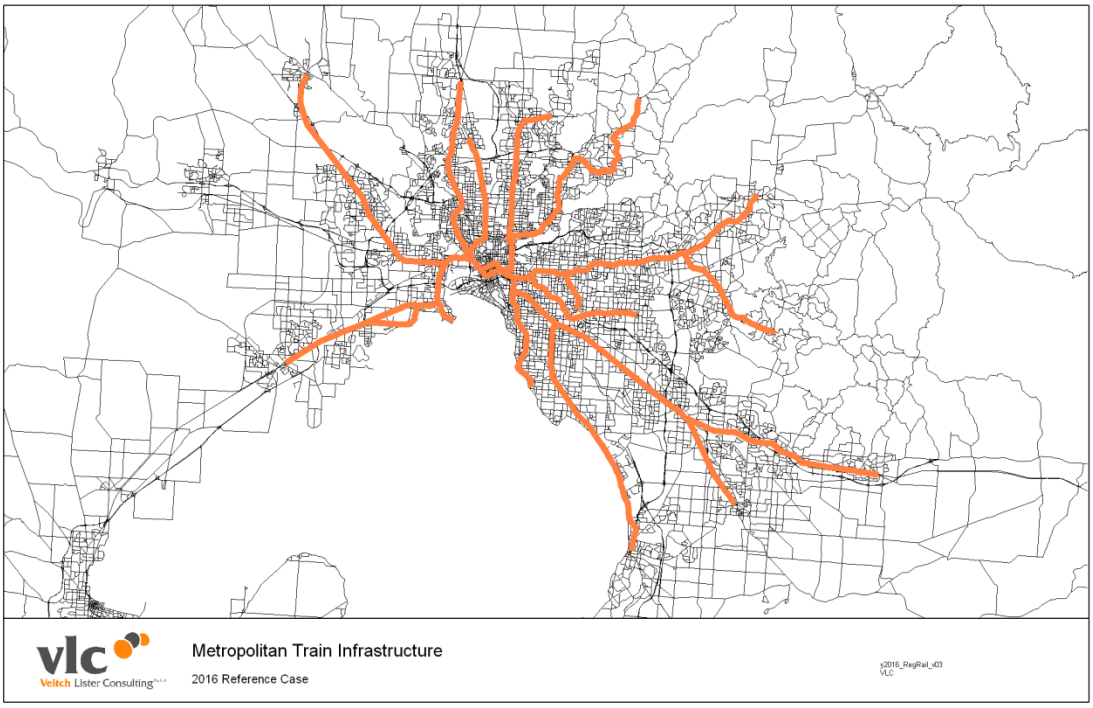


Figure 8 –Train Network in 2016 (Metropolitan)

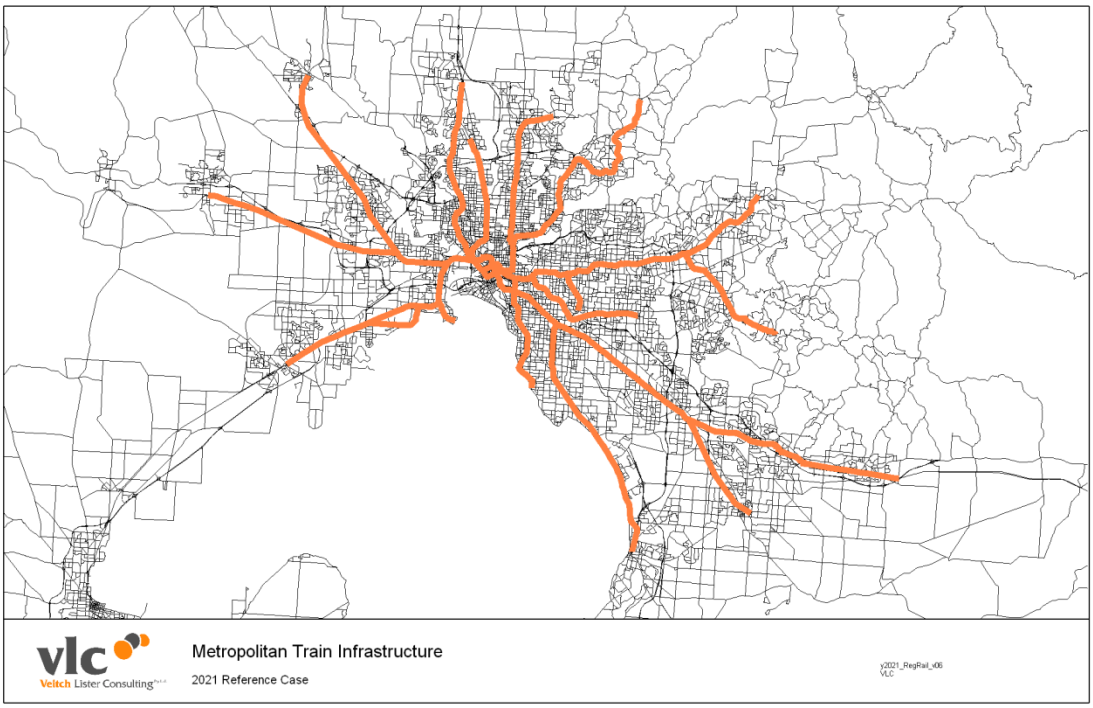


Figure 9 – Train Network in 2021 (Metropolitan)

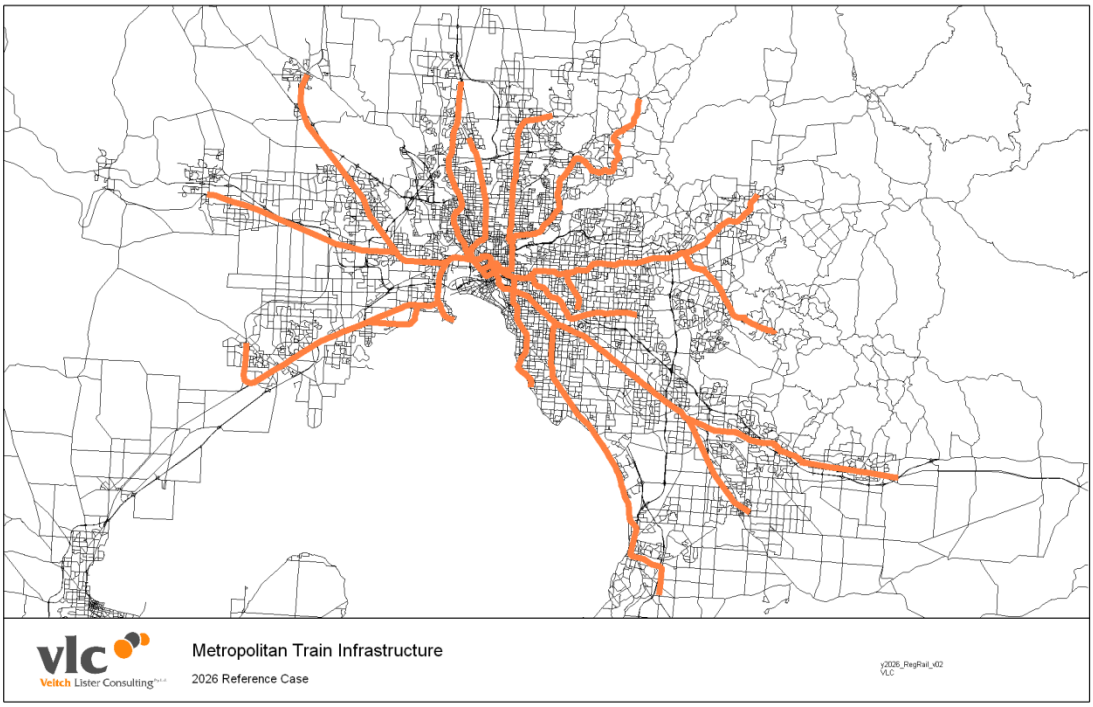


Figure 10 – Train Network in 2026 (Metropolitan)

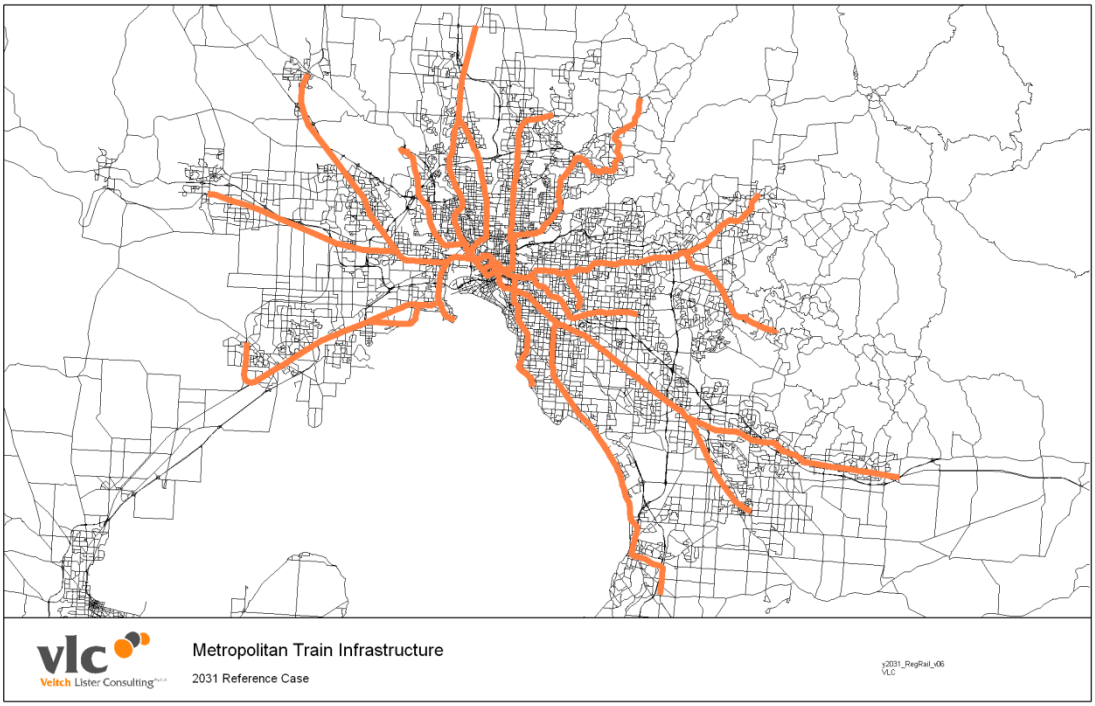


Figure 11 – Train Network in 2031 (Metropolitan)

4.2.2 Regional Rail Service Plan

Figure 12 shows the regional rail improvements assumed up to the year 2031. Appendix C lists the Reference Case Train Service Plan (metropolitan and regional) assumptions for 2016, 2021, 2026 and 2031.

Key projects included within the Regional Rail Service Plan include:

- Regional Rail Link - 2016
- Maryborough Line improvements (speed improvements, new stations and services to Southern Cross) – 2016
- Avalon Airport Rail Link – 2021

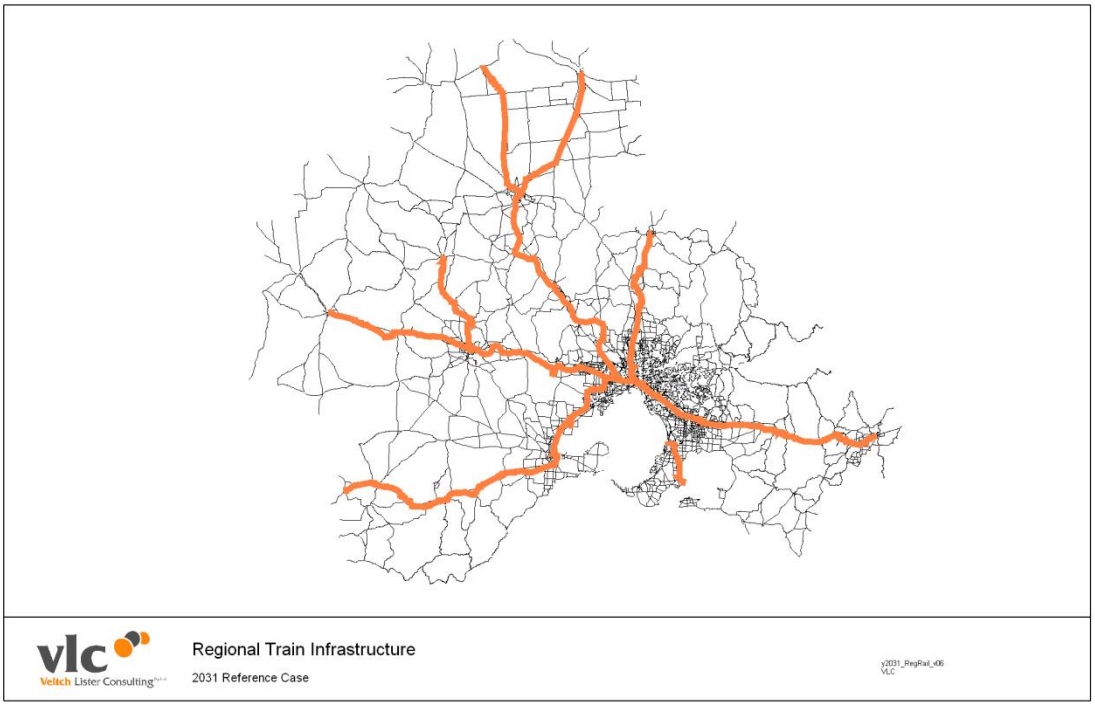


Figure 12 –Train Network in 2031 (Regional)

4.2.3 New Rail Stations

While Figure 8 to Figure 11 show the metropolitan improvements assumed in the 2016, 2021, 2026 and 2031 reference cases, there are also a number of proposed train stations on upgraded and new rail lines, including:

New Stations to Existing Rail Lines

- Coolaroo (from 2010)
- Cardinia Road (from 2016)
- Lynbrook (from 2016)
- Williams Landing (from 2016)
- Southland (from 2021)
- Allendale Road (from 2031)

South Morang Extension

- New Epping Station Location (from 2011)
- South Morang (from 2016)

Melton Electrification

- Toolern (from 2021)
- Caroline Springs (from 2021)

Sunbury Electrification

- Calder Park (from 2021)
- Holden Road (from 2031)
- Jacksons Hill (from 2031)

Dandenong Line Extensions

- Cranbourne East (from 2021)
- Pakenham East (from 2021)

Melbourne and Avalon Airport Rail Links

- Avalon Airport (from 2021)
- Melbourne Airport (from 2031)

Regional Rail Link

- Tarneit/Derrimut Road (from 2016)
- Wyndham Vale /Manor Lakes(from 2016)
- Blackforest Road (from 2026)
- Davis Road (from 2026)
- Sayers Road (from 2026)
- Truganina (from 2026)

Melbourne Metro (MM)

- Arden Street (2021)
- Parkville (2021)
- CBD North (2021)
- CBD South (2021)
- Domain (2021)

Maryborough VLine

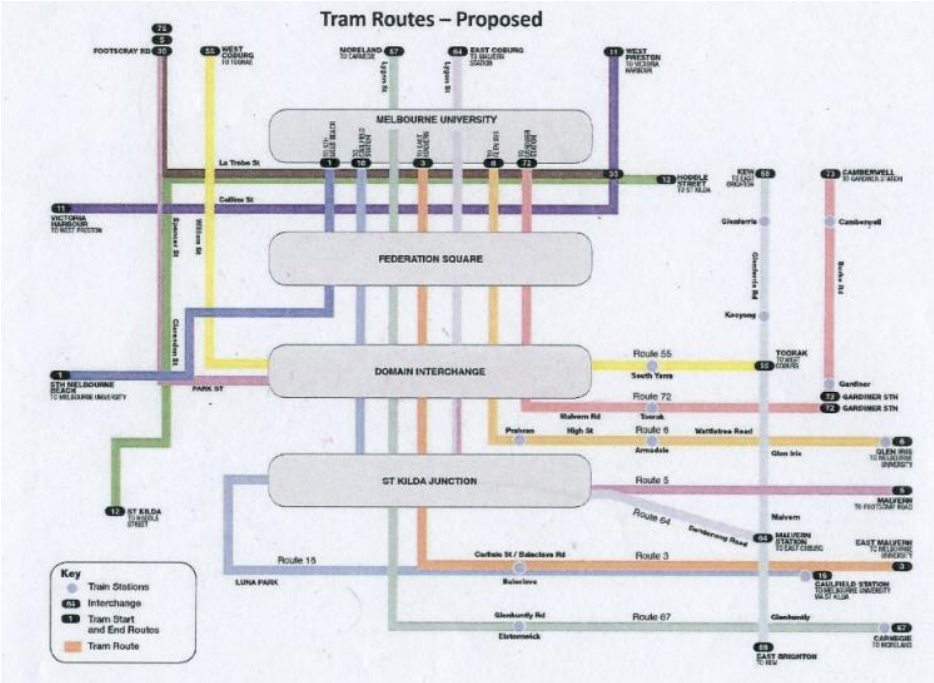
- Talbot (2016)
- Clunes (2016)
- Creswick (2016)

4.2.4 Tram

Figure 14 shows the tram improvements assumed up to the year 2016/21 and Figure 15 shows the improvements up to 2031, while Appendix C lists the Reference Case Tram Service Plan assumptions.

Key projects included within the Tram Service Plan include:

- St. Kilda Road Tram Route Re-design (see Figure 13)
- Additional services
- Removal of Route 8, 79 & 112
- Introduction of Route 11, 12, 68 & 73
- Truncation of Route 1, 16, 64, 72
- Extension of Route 11, 16, 48, 55, 64, 67 (where 11 and 48 terminate at Fishermans Bend)
- Fare Zone change to incorporate recent extension of the Zone 1 / 2 overlap to include all current trams routes



Source: Department of Transport

Figure 13 – St. Kilda Road Tram Route Re-design

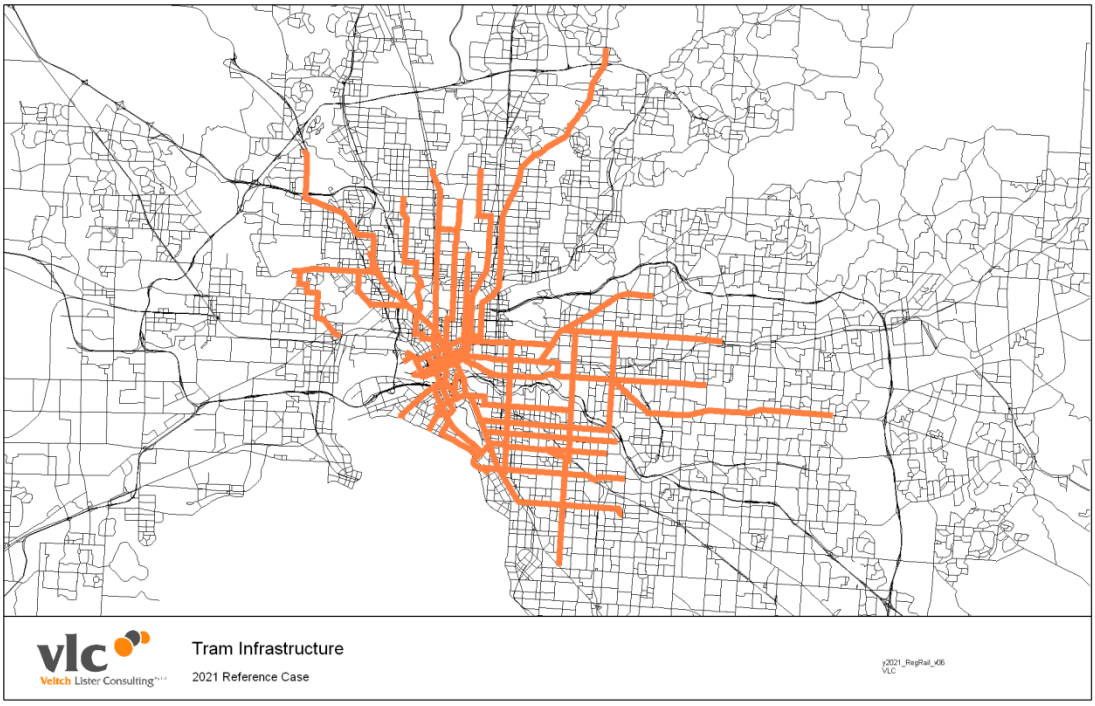


Figure 14 – Tram Network in 2016/21

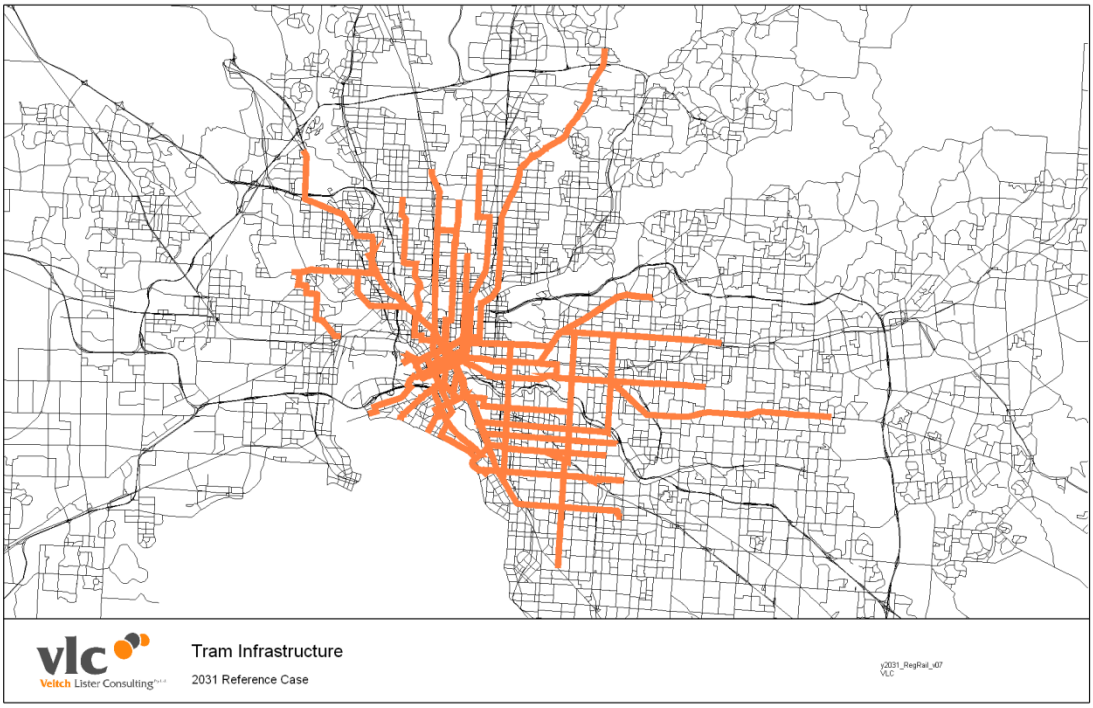


Figure 15 – Tram Network in 2026/31

4.2.5 Bus

Figure 16 to Figure 19 show the Metropolitan bus and SmartBus networks assumed for 2021 and 2031. Figure 20 shows the 2031 Regional bus and coach networks, while Appendix C lists the Reference Case Bus Category assumptions for 2021 and 2031. The crush capacity for all buses has been assumed as 50 seats and 25 standing on each bus.

Each bus in the Metropolitan area has been defined by a bus category (by PTD), including:

- **SmartBus:** Premium bus services which provide direct links to major destinations, and operate on major arterial roads with high frequencies, extended operating hours, on-road priority, and high quality passenger information
- **Direct Bus:** Services which provide direct links within moderate demand corridors not served by SmartBus, operating on main roads with moderate frequencies and operating hours
- **Special:** Industrial areas, shuttles, commuter services, on-demand services - a variety of other bus services which are part of the Melbourne suburban bus network. These include services such as:
    - services to major industrial employment areas, which may operate with low headways and restricted span of hours
    - shuttles to major destinations, which typically have short route lengths and high frequencies
    - commuter services, which provide express connections to the CBD and operate during peaks
- **Coverage Bus:** Services which provide local connections and ensure that all Melbourne residents are within an easy walk of the public transport network. Coverage services may operate on connector roads
- **Intertown:** Regular bus services (not including any V/Line services) which provide connections to satellite townships and peri-urban areas with Melbourne suburbs

Key projects included within the Bus Service Plan are shown in Table 3:

Year	Source of Public Transport Assumptions – Reference Cases
2021	2008 base year assumptions plus: • Existing and orbital Smartbuses: 703, 900 , 901 (Yellow Orbital – Frankston to Melbourne Airport), 902 (Green Orbital – Chelsea to Werribee), 903 (Red Orbital – Mordialloc to Altona), 905, 906, 907 & 908 • Upgrades of existing buses to SmartBus: 207, 215, 216, 238, 246, 251, 400, 406, 446, 468, 472, 478, 506, 510, 548, 561, 624, 630, 691, 732, 737, 791, 822, 828 & 841 • New SmartBuses: SM6, SM7, SM11, SM16, SM18, SM24, SM25, SM052 & SM-902e
2031	2021 reference case assumptions plus: • Upgrades to SmartBus: 562, 788, 926, SM19 & SM054 • New SmartBuses: SM15 & SM130

Table 3 – Summary of Bus Service Plan Assumptions

- Additional Growth Area Buses in 2021 and 2031
- Improvements in minimum service level headway, as shown in Table 4.

Bus Service Type	2021	2031
SmartBus	10	10
Direct	20	15
Special	4	4
Coverage	60	60
InterTown	60	60

Table 4 – Minimum Bus Service Level Headways (mins)

Note that no service improvements have been included for all other buses including Skybus, regional buses and regional coaches.

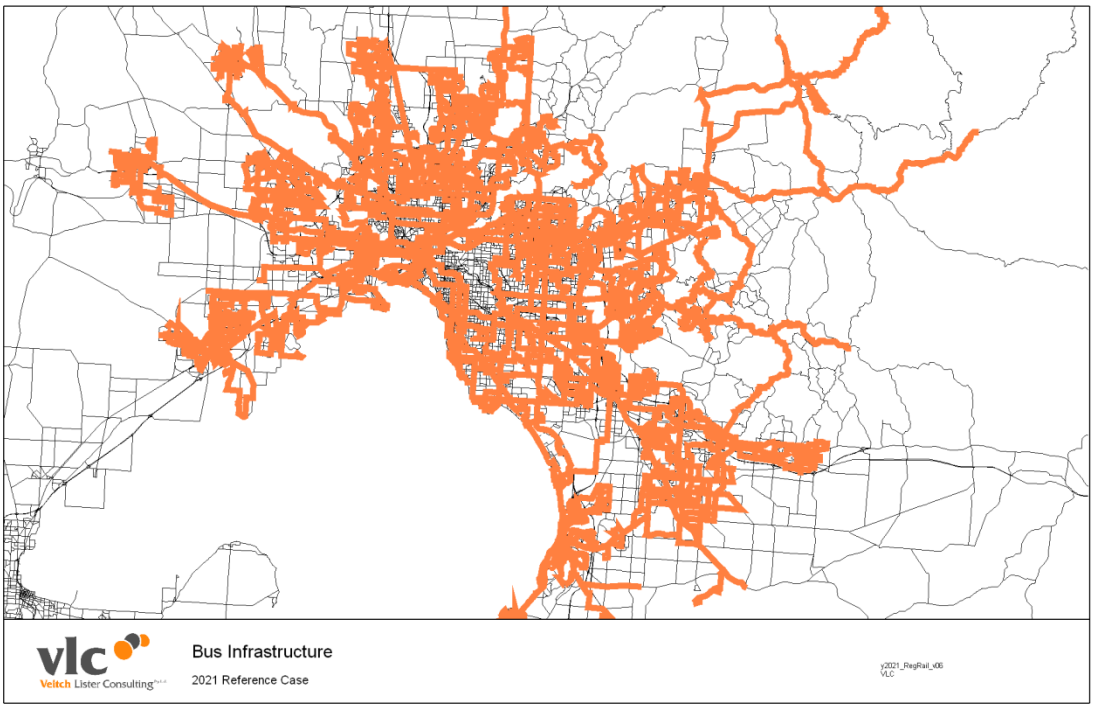


Figure 16 – Metropolitan Bus Network in 2021

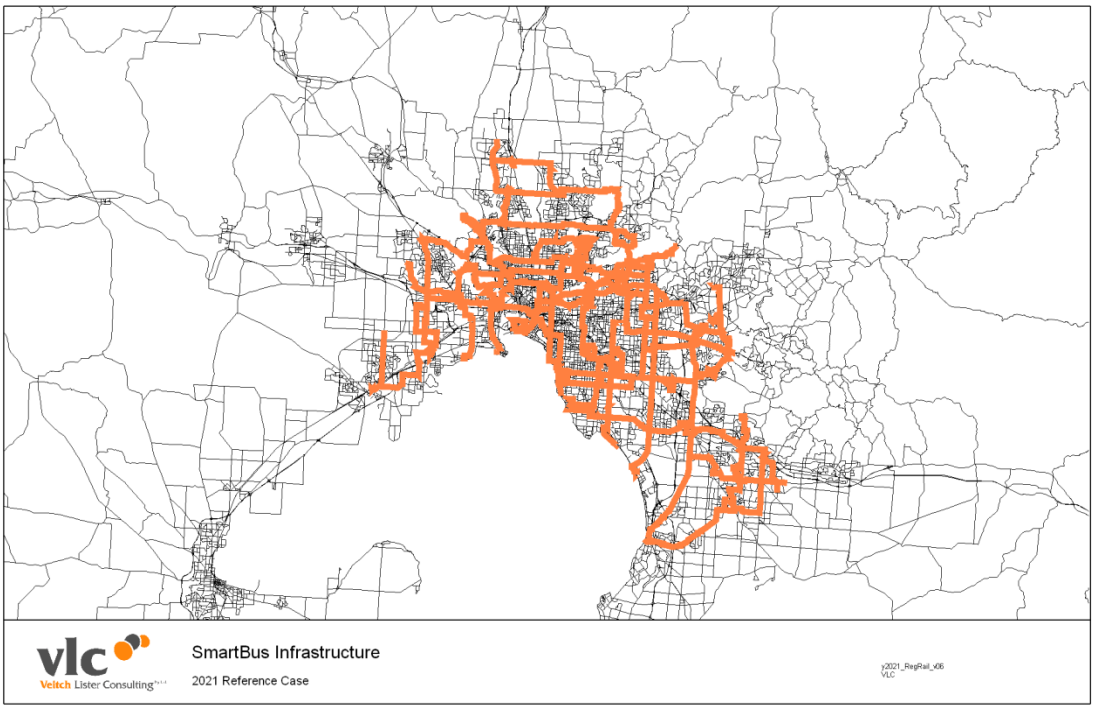


Figure 17 – SmartBus Network in 2021

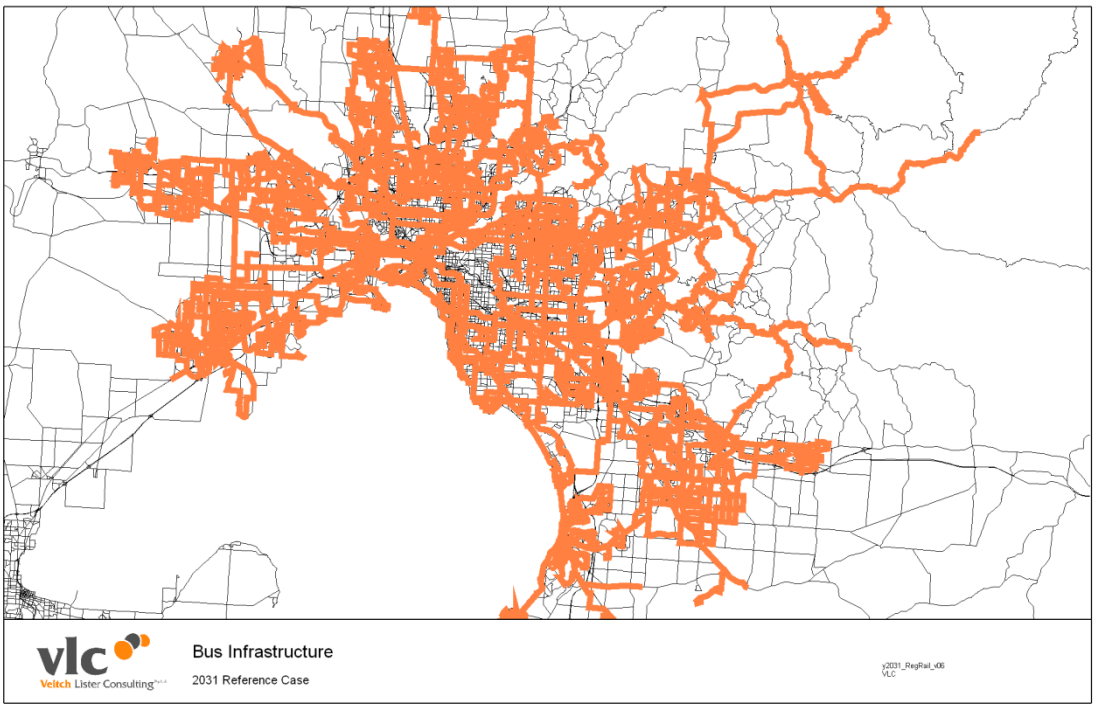


Figure 18 – Metropolitan Bus Network in 2031

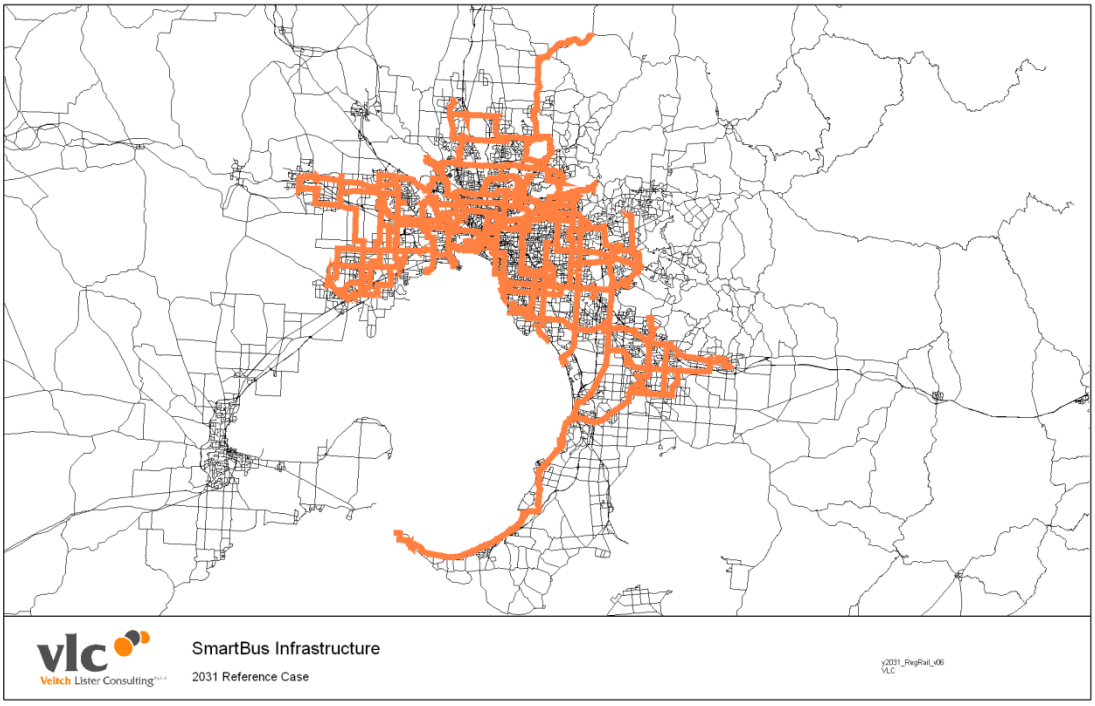


Figure 19 – SmartBus Network in 2031

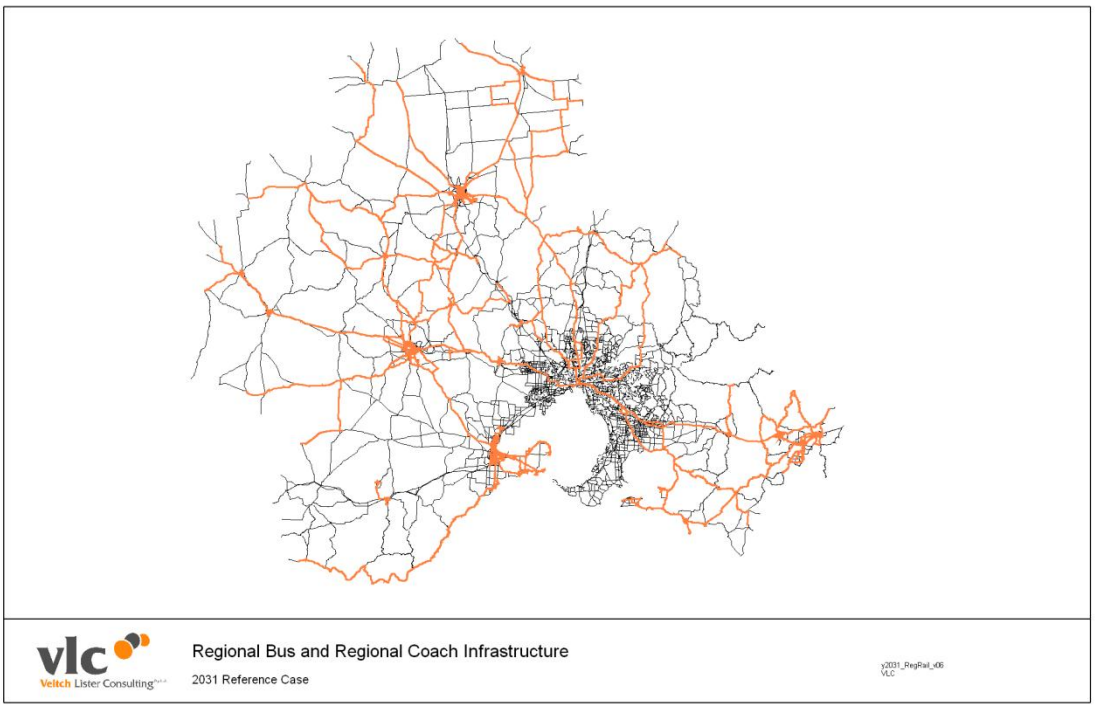


Figure 20 – Regional Bus and Coach Network in 2031

4.3 Policy Inputs

In addition to the infrastructure and operational changes described in above, the models are sensitive to pricing and policy issues such as:

- fuel price movements
- parking supply and pricing
- road user charging
- real movements in public transport fares
- toll levels

There are, in addition, influences beyond the influence of policy-makers directly involved in transport decision-making and strategic planning. This includes, for example, the increase in real income levels (reflected in transport models by value-of-time (VOT)), which theoretically affects travel patterns and mode choice. Fuel price levels are also by and large market-driven.

In consultation with the DOT and the Zenith model recalibration Technical Reference Group, the impacts and sensitivities of various levels of policy/ pricing inputs have been evaluated. While the final model inputs for the reference case are yet to be determined, the current policy / pricing input assumptions supplied by the DOT include:

Policy / Pricing Item	Reference Case Specification	Implemented into Zenith
Vehicle Operating Costs (VOC) - Petrol	+2% pa, compounding to 2021 +1.4% pa compounding from 2021 to 2031	2016 Ref Case: 2008 prices, x 1.17 2021 Ref Case: 2008 prices, x 1.29 2031 Ref Case: 2008 prices, x 1.49
Parking costs	+2.3% pa for work parking, compounding to 2021 +3.9% for non work parking, compounding to 2021 +2.1% pa compounding from 2021 to 2031 (both work and non work)	2016 Ref Case: 2008 prices, x 1.30 2021 Ref Case: 2008 prices, x 1.34 2031 Ref Case: 2008 prices, x 1.65
Public Transport Fares	+5% p.a. for 2012 and 2013 only	2016 Ref Case: 2008 prices, x 1.10 2021 Ref Case: 2008 prices, x 1.10 2031 Ref Case: 2008 prices, x 1.10

Note, all other policy/ pricing input assumptions not included above remain as 2008 conditions, i.e. no real increase/decrease is included in the reference case assumptions.

5 OmniTRANS Project

On 25 January 2012, an OmniTRANS project called "OtZenith_3958zone_V2.0.0" was delivered to DOT. The variants in this project relate to Zenith Version 2.0.0 and include all the assumptions listed in this report. The variant names are:

Variant Name	Year	Description	Source
y2008_Validation	2008	Validation	y2008_RegRail_v13d
y2016_ReferenceCase	2016	Reference Case	y2016_RegRail_v05
y2021_ReferenceCase	2021	Reference Case	y2021_RegRail_v08
y2026_ReferenceCase	2026	Reference Case	y2026_RegRail_v07
y2031_ReferenceCase	2031	Reference Case	y2031_RegRail_v10

OmniTRANS Version 6.0.10 was also provided with the OmniTRANS project. More information on this version of OmniTRANS can be found on their website (http://www.omnitrans-international.com/en).

6 Model Results

6.1 Comparison with Findings of Previous Reports

The Zenith transport model has evolved since the original reference case model results were provided to PTD. A summary of recent changes and improvements relevant to the reference case results are outlined below:

- Model Expansion and Zone System Upgrades as discussed in Section 2
- Updated Public Transport service plans, as listed in earlier versions of this report
- Revised Land Use assumptions, as listed in earlier versions of this report
- New version of OmniTRANS (Version 6.0.10)
- Updated CBD specific period factors

6.2 Model Results - Forecast Growth Rates

The forecast growth rates of the reference case results are summarised in the following sections. Detailed results for each of the reference cases have been provided to the Public Transport Division, including:

1. Model run report:
    a. Demographics
    b. Trip matrix totals
    c. Cost skim totals
    d. Public transport statistics
    e. Traffic statistics
2. PT Patronage and Highway Summaries:
    a. Screenline totals
    b. Mode of access and egress for each rail station
    c. Rail load at the CBD Cordon
    d. Tram boadrings by region
    e. Tram load at the CBD Cordon
    f. Bus boadrings by region

6.2.1 Model Wide Key Performance Indicators

Table 5 highlights the growth rates in model wide key performance indicators between the Base year (2008) and 2016, 2016 and 2021 and 2021 and 2031.

Key Performance Indicators – Model Wide	2008 to 2016	2016 to 2021	2021 to 2031
PRIVATE VEHICLE STATISTICS (Daily)			
Car Trips	1.7%	1.3%	1.3%
Car KMs	2.5%	1.5%	1.3%
Person Car Hours	2.5%	1.8%	1.7%
TOTAL PT STATISTICS (Daily)			
Total PT Trips	3.2%	3.5%	2.9%
Total PT Boardings	4.0%	3.3%	3.2%

Key Performance Indicators – Model Wide	2008 to 2016	2016 to 2021	2021 to 2031
Interchanges	5.7%	2.9%	3.8%
Mode Share (Mech. Trips)	1.3%	1.9%	1.4%
PT MODAL STATISTICS			
Daily Boardings By PT Mode (incl. interchanges)			
Suburban Rail	4.0%	5.1%	3.6%
Suburban Tram	3.4%	0.3%	2.7%
Suburban Bus	4.9%	2.8%	2.6%
Regional Rail	5.5%	0.7%	6.2%
Regional Bus	1.6%	2.5%	2.0%
AM Boardings By PT Mode (incl. interchanges)			
Suburban Rail	4.4%	5.1%	3.2%
Suburban Tram	3.6%	0.6%	2.4%
Suburban Bus	4.7%	2.7%	2.4%
Regional Rail	5.4%	1.4%	7.2%
Regional Bus	1.7%	2.6%	2.0%

Table 5 –Growth Rate in Model Wide Key Performance Indicators (CAGR)

Table 5 indicates that total transport demand (both private vehicle and public transport trips) are forecast to increase at a higher rate in the short term, before slowing down slightly approaching 2031. Vehicle trips increase at 1.7% p.a. between 2008 and 2016, and 1.3% p.a. through to 2031. Most of this increase in demand is expected to be in the growth areas. In comparison, public transport trips are forecast to increase at a higher rate; by 3.2% p.a. between 2008 and 2016, 3.5% p.a. through to 2021 and 2.9% p.a. through to 2031. This is reflected in the increase in public transport mode share (based on mechanised trips).

All public transport modes are expected to experience an increase in boardings in the AM peak and across the day. Both rail boardings are expected to increase between 2016 and 2021, at the expense of tram and regional rail boardings, mainly due to the inclusion of the Melbourne Metro (and the electrification of the Melton line) in 2021.

6.2.2 Growth in Traffic across VicRoads Screenlines

Table 6 highlights the inbound and outbound growth rates in traffic crossing the standard VicRoads screenlines between the Base year (2008) and 2016, 2016 and 2021 and 2021 and 2031.

	2008 - 2016	2016 - 2021	2021 - 2031
900	3.7%	2.4%	1.9%
Inbound Total	3.7%	2.4%	1.9%
Outbound Total	3.7%	2.4%	1.9%
901	1.6%	0.9%	0.8%
Inbound Total	1.6%	0.9%	0.8%
Outbound Total	1.6%	0.8%	0.8%
902	1.6%	0.8%	0.8%
Inbound Total	1.6%	0.8%	0.7%
Outbound Total	1.6%	0.8%	0.8%
903	1.8%	0.6%	0.4%
Inbound Total	1.7%	0.6%	0.4%
Outbound Total	1.8%	0.6%	0.5%
904	3.9%	1.6%	1.4%
Inbound Total	3.9%	1.6%	1.4%
Outbound Total	3.8%	1.7%	1.4%
905	1.8%	0.7%	0.9%
Inbound Total	1.8%	0.7%	0.9%
Outbound Total	1.8%	0.7%	0.9%
906	1.8%	0.9%	0.8%
Inbound Total	1.8%	0.9%	0.8%
Outbound Total	1.8%	0.9%	0.8%
907	3.0%	2.6%	1.2%
Inbound Total	3.0%	2.6%	1.2%
Outbound Total	3.0%	2.6%	1.2%
908	2.7%	1.0%	0.9%
Inbound Total	2.7%	1.0%	0.9%
Outbound Total	2.7%	1.0%	0.9%
909	1.4%	0.6%	0.7%
Inbound Total	1.3%	0.6%	0.7%
Outbound Total	1.5%	0.6%	0.6%
910	1.9%	0.6%	0.7%
Inbound Total	1.9%	0.6%	0.7%
Outbound Total	1.9%	0.6%	0.7%
911	1.9%	0.7%	0.7%
Inbound Total	1.9%	0.7%	0.6%
Outbound Total	1.9%	0.7%	0.7%
912	2.5%	1.2%	0.9%
Inbound Total	2.5%	1.2%	0.9%
Outbound Total	2.5%	1.2%	0.9%
913	2.3%	1.1%	0.9%
Inbound Total	2.2%	1.2%	0.9%
Outbound Total	2.3%	1.1%	0.9%
914	2.8%	1.6%	1.3%
Inbound Total	2.8%	1.6%	1.3%
Outbound Total	2.9%	1.6%	1.3%
915	3.4%	1.5%	1.0%
Inbound Total	3.4%	1.5%	1.0%
Outbound Total	3.3%	1.5%	1.0%
916	1.8%	1.4%	1.2%
Inbound Total	1.8%	1.3%	1.3%
Outbound Total	1.7%	1.4%	1.2%
917	1.3%	0.9%	0.6%
Inbound Total	1.2%	1.0%	0.7%
Outbound Total	1.4%	0.8%	0.6%
918	1.5%	0.7%	0.7%
Inbound Total	1.7%	0.7%	0.6%
Outbound Total	1.4%	0.7%	0.7%
919	2.6%	1.0%	0.8%
Inbound Total	2.6%	1.0%	0.8%
Outbound Total	2.7%	1.0%	0.8%
920	2.6%	0.7%	0.6%
Inbound Total	2.6%	0.7%	0.6%
Outbound Total	2.7%	0.7%	0.5%
Grand Total	2.2%	1.0%	0.9%

Table 6 –Growth Rate in Traffic crossing the VicRoads Screenlines (CAGR)

Table 6 indicates that the inbound and outbound growth rates in traffic crossing the standard VicRoads screenlines are expected to be around 2% p.a. until 2016, and about 1% p.a. beyond 2016.

6.2.3 Rail Load at the CBD Cordon

Figure 21 highlights the forecast growth rates in rail passenger loads at the CBD cordon (by rail group) between the Base year (2008) and 2016, 2016 and 2021 and 2021 and 2031.

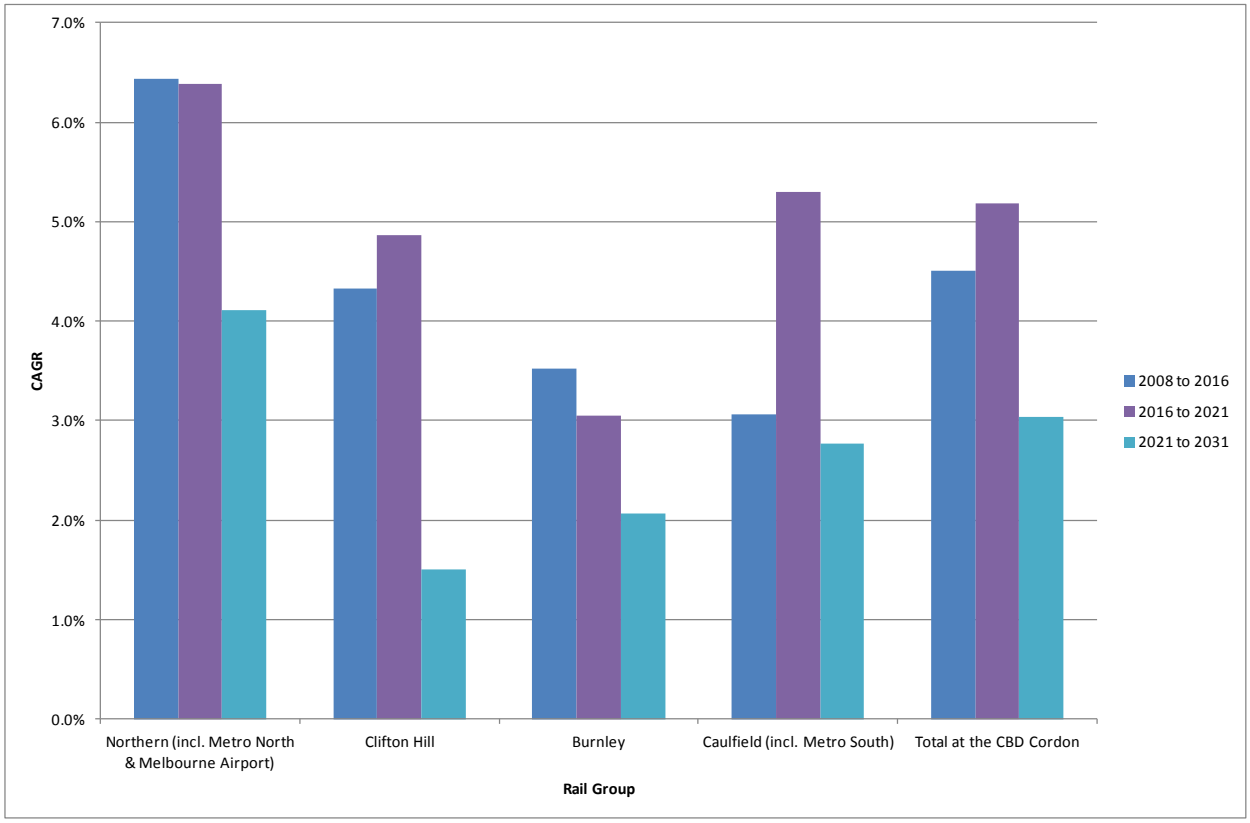


Figure 21 –Rail Passenger Loads at the CBD Cordon by Rail Group (AM Peak)

Figure 21 indicates that the growth in the Northern rail group is expected to remain the fastest growing corridor. The growth rate in total passengers crossing the CBD cordon is greatest between 2016 and 2021 with the introduction of the Melbourne Metro (and the electrification of the Melton line) in 2021.

6.2.4 Boardings by Tram Region

Table 7 highlights the forecast growth rates in tram boardings by tram region (as supplied by PTD) between the Base year (2008) and 2016, 2016 and 2021 and 2021 and 2031.

Tram Region	2008 to 2016	2016 to 2021	2021 to 2031
CBD	3.6%	-1.3%	2.8%
North-West	3.0%	1.9%	2.1%
North	1.3%	2.4%	2.6%
East	2.1%	2.7%	2.2%
South-East	4.1%	0.7%	2.3%
South	6.8%	0.1%	3.1%
Docklands	11.5%	3.5%	10.6%
TOTAL	3.4%	0.3%	2.7%

Table 7 –Growth Rate in Daily Tram Boardings by Tram Region (CAGR)

Table 7 indicates that trams are forecast to grow at 3.4% p.a. between 2008 and 2016, and 2.7% p.a. between 2021 and 2031. The forecast growth rate is almost zero between 2016 and 2021due to the introduction of the Melbourne Metro (and the electrification of the Melton line) in 2021.

6.2.5 Bus Boardings by LGA

Table 8 highlights the forecast growth rates in bus boardings by LGA between the Base year (2008) and 2016, 2016 and 2021 and 2021 and 2031.

LGA	2008 to 2016	2016 to 2021	2021 to 2031
20660:Banyule (C)	4.7%	0.2%	1.5%
20910:Bayside (C)	4.9%	3.3%	1.7%
21110:Boroondara (C)	9.6%	1.9%	1.4%
21180:Brimbank (C)	7.2%	-0.4%	1.8%
21450:Cardinia (S)	13.6%	3.9%	3.4%
21610:Casey (C)	6.5%	3.8%	4.9%
21890:Darebin (C)	4.3%	1.7%	1.9%
22170:Frankston (C)	1.8%	3.6%	1.1%
22310:Glen Eira (C)	6.0%	3.2%	2.1%
22670:Greater Dandenong (C)	3.9%	3.5%	2.4%
23110:Hobsons Bay (C)	5.4%	3.4%	3.4%
23270:Hume (C)	5.5%	4.9%	2.1%
23430:Kingston (C)	5.2%	3.1%	1.8%
23670:Knox (C)	2.9%	1.4%	1.9%
24210:Manningham (C)	5.6%	2.0%	2.3%
24330:Maribyrnong (C)	5.7%	4.0%	2.4%
24410:Maroondah (C)	-0.4%	2.1%	2.2%

24600:Melbourne (C)	8.5%	2.1%	2.3%
24650:Melton (S)	10.9%	3.4%	5.2%
24970:Monash (C)	3.5%	2.3%	2.4%
25060:Moonee Valley (C)	3.8%	3.4%	2.1%
25250:Moreland (C)	3.3%	1.7%	2.8%
25340:Mornington Peninsula (S)	0.4%	2.3%	2.7%
25710:Nillumbik (S)	4.2%	0.2%	1.1%
25900:Port Phillip (C)	9.5%	3.2%	2.8%
26350:Stonnington (C)	7.4%	1.8%	1.7%
26980:Whitehorse (C)	3.3%	2.0%	2.5%
27070:Whittlesea (C)	3.2%	6.1%	4.8%
27260:Wyndham (C)	11.0%	5.4%	3.4%
27350:Yarra (C)	6.1%	3.1%	2.5%
27450:Yarra Ranges (S)	0.7%	2.0%	2.2%
TOTAL	4.9%	2.8%	2.6%

Table 8 –Growth Rate in Daily Bus Boardings by LGA (CAGR)

Table 8 indicates that buses are forecast to grow at 4.9% p.a. between 2008 and 2016, and then 2.8% p.a. between 2016 and 2021 and 206% between 2021 and 2031. The higher growth rates in the initial years are a direct result of the improvements in the bus service plan (especially in the growth areas of Melton and Wyndham) in the 2016 reference case.

Appendix A – Demographic Assumptions Summary (MSD)

Population Summary:					
Statistical Local Area	2006	2011	2016	2021	2031
Banyule (C) - Heidelberg	64,000	67,000	69,000	71,000	75,000
Banyule (C) - North	55,000	58,000	59,000	60,000	64,000
Bayside (C) - Brighton	37,000	40,000	42,000	42,000	44,000
Bayside (C) - South	55,000	58,000	60,000	61,000	63,000
Boroondara (C) - Camberwell N.	45,000	47,000	47,000	48,000	49,000
Boroondara (C) - Camberwell S.	51,000	54,000	56,000	57,000	59,000
Boroondara (C) - Hawthorn	35,000	38,000	40,000	41,000	44,000
Boroondara (C) - Kew	30,000	33,000	34,000	35,000	36,000
Brimbank (C) - Keilor	91,000	93,000	98,000	100,000	103,000
Brimbank (C) - Sunshine	85,000	99,000	107,000	110,000	114,000
Cardinia (S) - North	25,000	25,000	25,000	25,000	26,000
Cardinia (S) - Pakenham	28,000	46,000	68,000	90,000	110,000
Cardinia (S) - South	5,000	6,000	6,000	6,000	6,000
Casey (C) - Berwick	91,000	99,000	105,000	108,000	109,000
Casey (C) - Cranbourne	66,000	90,000	108,000	124,000	163,000
Casey (C) - Hallam	52,000	55,000	62,000	65,000	69,000
Casey (C) - South	14,000	18,000	21,000	31,000	64,000
Darebin (C) - Northcote	48,000	50,000	51,000	53,000	58,000
Darebin (C) - Preston	85,000	93,000	99,000	105,000	115,000
Frankston (C) - East	45,000	53,000	60,000	61,000	63,000
Frankston (C) - West	76,000	79,000	79,000	84,000	90,000
Glen Eira (C) - Caulfield	80,000	86,000	89,000	91,000	97,000
Glen Eira (C) - South	50,000	53,000	54,000	55,000	59,000
Gr. Dandenong (C) - Dandenong	58,000	61,000	66,000	68,000	76,000
Gr. Dandenong (C) Bal	74,000	79,000	82,000	88,000	98,000
Hobsons Bay (C) - Altona	54,000	57,000	57,000	60,000	64,000
Hobsons Bay (C) - Williamstown	31,000	32,000	34,000	34,000	36,000
Hume (C) - Broadmeadows	65,000	65,000	68,000	71,000	72,000
Hume (C) - Craigieburn	56,000	74,000	88,000	98,000	131,000
Hume (C) - Sunbury	33,000	38,000	41,000	49,000	61,000
Kingston (C) - North	93,000	100,000	104,000	109,000	118,000
Kingston (C) - South	47,000	50,000	51,000	53,000	56,000
Knox (C) - North-East	64,000	67,000	67,000	70,000	76,000
Knox (C) - North-West	46,000	47,000	51,000	53,000	56,000
Knox (C) - South	41,000	43,000	43,000	43,000	44,000
Manningham (C) - East	16,000	16,000	16,000	15,000	16,000
Manningham (C) - West	99,000	105,000	108,000	112,000	120,000
Maribyrnong (C)	66,000	74,000	82,000	90,000	106,000
Maroondah (C) - Croydon	60,000	63,000	66,000	68,000	73,000
Maroondah (C) - Ringwood	43,000	45,000	47,000	49,000	53,000
Melbourne (C) - Inner	12,000	21,000	26,000	32,000	39,000
Melbourne (C) - Remainder	49,000	55,000	64,000	78,000	93,000

Population Summary:					
Statistical Local Area	**2006**	**2011**	**2016**	**2021**	**2031**
Melbourne (C) - S'bank-D'lands	14,000	19,000	26,000	28,000	51,000
Melton (S) - East	41,000	60,000	65,000	70,000	78,000
Melton (S) Bal	41,000	53,000	75,000	99,000	148,000
Mitchell (S) - South	1,000	<1,000	4,000	14,000	42,000
Monash (C) - South-West	46,000	49,000	50,000	52,000	57,000
Monash (C) - Waverley East	58,000	61,000	64,000	65,000	68,000
Monash (C) - Waverley West	65,000	69,000	70,000	73,000	76,000
Moonee Valley (C) - Essendon	70,000	74,000	77,000	81,000	84,000
Moonee Valley (C) - West	42,000	44,000	46,000	47,000	49,000
Moreland (C) - Brunswick	43,000	46,000	49,000	51,000	54,000
Moreland (C) - Coburg	50,000	54,000	57,000	60,000	64,000
Moreland (C) - North	49,000	53,000	54,000	57,000	62,000
Mornington P'sula (S) - East	38,000	37,000	38,000	40,000	44,000
Mornington P'sula (S) - South	49,000	64,000	65,000	68,000	73,000
Mornington P'sula (S) - West	54,000	51,000	53,000	56,000	61,000
Nillumbik (S) - South	29,000	29,000	29,000	30,000	32,000
Nillumbik (S) - South-West	24,000	26,000	28,000	29,000	31,000
Nillumbik (S) Bal	9,000	9,000	9,000	9,000	9,000
Port Phillip (C) - St Kilda	53,000	56,000	57,000	59,000	63,000
Port Phillip (C) - West	38,000	42,000	46,000	50,000	57,000
Stonnington (C) - Malvern	47,000	49,000	50,000	51,000	55,000
Stonnington (C) - Prahran	48,000	53,000	57,000	60,000	64,000
Whitehorse (C) - Box Hill	53,000	57,000	59,000	60,000	64,000
Whitehorse (C) - Nunawading E.	46,000	47,000	49,000	49,000	51,000
Whitehorse (C) - Nunawading W.	52,000	53,000	54,000	56,000	58,000
Whittlesea (C) - North	24,000	57,000	90,000	117,000	162,000
Whittlesea (C) - South-East	44,000	48,000	49,000	52,000	54,000
Whittlesea (C) - South-West	61,000	58,000	60,000	66,000	71,000
Wyndham (C) - North	78,000	104,000	126,000	148,000	192,000
Wyndham (C) - South	17,000	35,000	48,000	53,000	58,000
Wyndham (C) - West	22,000	30,000	45,000	61,000	91,000
Yarra (C) - North	47,000	52,000	56,000	61,000	68,000
Yarra (C) - Richmond	26,000	29,000	30,000	32,000	36,000
Yarra Ranges (S) - Central	15,000	16,000	16,000	16,000	16,000
Yarra Ranges (S) - Dandenongs	30,000	31,000	31,000	31,000	30,000
Yarra Ranges (S) - Lilydale	70,000	76,000	80,000	83,000	89,000
Yarra Ranges (S) - North	13,000	13,000	13,000	13,000	13,000
Yarra Ranges (S) - Seville	16,000	14,000	14,000	15,000	15,000
Total MSD	**3,743,000**	**4,150,000**	**4,488,000**	**4,823,000**	**5,454,000**

Employment Summary (Census Night Employment)*					
Statistical Local Area	**2006**	**2011**	**2016**	**2021**	**2031**
Banyule (C) - Heidelberg	27,000	31,000	34,000	39,000	46,000
Banyule (C) - North	12,000	14,000	15,000	16,000	18,000
Bayside (C) - Brighton	11,000	13,000	14,000	16,000	17,000
Bayside (C) - South	15,000	17,000	19,000	22,000	23,000
Boroondara (C) - Camberwell N.	11,000	12,000	14,000	15,000	15,000
Boroondara (C) - Camberwell S.	15,000	17,000	20,000	23,000	26,000
Boroondara (C) - Hawthorn	26,000	29,000	32,000	35,000	39,000
Boroondara (C) - Kew	14,000	16,000	18,000	20,000	24,000
Brimbank (C) - Keilor	21,000	23,000	25,000	26,000	29,000
Brimbank (C) - Sunshine	30,000	33,000	35,000	37,000	41,000
Cardinia (S) - North	4,000	5,000	7,000	8,000	11,000
Cardinia (S) - Pakenham	9,000	11,000	11,000	11,000	11,000
Cardinia (S) - South	2,000	2,000	3,000	4,000	6,000
Casey (C) - Berwick	20,000	23,000	23,000	23,000	26,000
Casey (C) - Cranbourne	11,000	13,000	15,000	17,000	21,000
Casey (C) - Hallam	14,000	15,000	16,000	18,000	21,000
Casey (C) - South	3,000	4,000	5,000	6,000	9,000
Darebin (C) - Northcote	13,000	14,000	14,000	13,000	12,000
Darebin (C) - Preston	32,000	35,000	39,000	43,000	50,000
Frankston (C) - East	5,000	6,000	6,000	6,000	7,000
Frankston (C) - West	32,000	36,000	37,000	39,000	43,000
Glen Eira (C) - Caulfield	21,000	24,000	27,000	31,000	36,000
Glen Eira (C) - South	11,000	13,000	14,000	14,000	14,000
Gr. Dandenong (C) - Dandenong	41,000	44,000	49,000	56,000	64,000
Gr. Dandenong (C) Bal	42,000	44,000	47,000	50,000	54,000
Hobsons Bay (C) - Altona	23,000	24,000	24,000	24,000	23,000
Hobsons Bay (C) - Williamstown	11,000	12,000	13,000	14,000	15,000
Hume (C) - Broadmeadows	41,000	42,000	45,000	48,000	54,000
Hume (C) - Craigieburn	26,000	28,000	29,000	30,000	33,000
Hume (C) - Sunbury	7,000	8,000	10,000	13,000	19,000
Kingston (C) - North	68,000	72,000	77,000	83,000	90,000
Kingston (C) - South	7,000	8,000	8,000	9,000	11,000
Knox (C) - North-East	27,000	29,000	32,000	35,000	39,000
Knox (C) - North-West	18,000	20,000	21,000	22,000	24,000
Knox (C) - South	18,000	20,000	20,000	20,000	20,000
Manningham (C) - East	3,000	3,000	4,000	4,000	4,000
Manningham (C) - West	22,000	25,000	29,000	33,000	39,000
Maribyrnong (C)	32,000	35,000	38,000	42,000	49,000
Maroondah (C) - Croydon	20,000	22,000	23,000	24,000	25,000
Maroondah (C) - Ringwood	21,000	23,000	25,000	27,000	30,000
Melbourne (C) - Inner	166,000	199,000	226,000	244,000	278,000
Melbourne (C) - Remainder	117,000	155,000	172,000	193,000	232,000
Melbourne (C) - S'bank-D'lands	42,000	64,000	69,000	74,000	85,000
Melton (S) - East	4,000	5,000	5,000	5,000	7,000

Employment Summary (Census Night Employment)*					
Statistical Local Area	**2006**	**2011**	**2016**	**2021**	**2031**
Melton (S) Bal	9,000	10,000	12,000	15,000	21,000
Mitchell (S) - South	< 1,000	< 1,000	< 1,000	< 1,000	< 1,000
Monash (C) - South-West	37,000	41,000	46,000	52,000	60,000
Monash (C) - Waverley East	16,000	18,000	19,000	19,000	22,000
Monash (C) - Waverley West	45,000	49,000	52,000	54,000	58,000
Moonee Valley (C) - Essendon	23,000	26,000	29,000	32,000	38,000
Moonee Valley (C) - West	11,000	12,000	12,000	12,000	13,000
Moreland (C) - Brunswick	14,000	14,000	16,000	19,000	22,000
Moreland (C) - Coburg	12,000	14,000	16,000	18,000	22,000
Moreland (C) - North	7,000	8,000	8,000	8,000	8,000
Mornington P'sula (S) - East	14,000	15,000	16,000	16,000	17,000
Mornington P'sula (S) - South	13,000	15,000	16,000	16,000	18,000
Mornington P'sula (S) - West	17,000	19,000	20,000	21,000	23,000
Nillumbik (S) - South	7,000	8,000	9,000	10,000	11,000
Nillumbik (S) - South-West	4,000	5,000	5,000	6,000	6,000
Nillumbik (S) Bal	2,000	2,000	2,000	2,000	2,000
Port Phillip (C) - St Kilda	21,000	24,000	27,000	30,000	35,000
Port Phillip (C) - West	54,000	60,000	65,000	67,000	73,000
Stonnington (C) - Malvern	25,000	28,000	31,000	35,000	40,000
Stonnington (C) - Prahran	24,000	27,000	32,000	38,000	46,000
Whitehorse (C) - Box Hill	29,000	32,000	36,000	39,000	45,000
Whitehorse (C) - Nunawading E.	15,000	17,000	20,000	22,000	26,000
Whitehorse (C) - Nunawading W.	22,000	24,000	26,000	28,000	31,000
Whittlesea (C) - North	6,000	7,000	8,000	9,000	13,000
Whittlesea (C) - South-East	8,000	9,000	12,000	17,000	25,000
Whittlesea (C) - South-West	23,000	25,000	26,000	28,000	32,000
Wyndham (C) - North	37,000	40,000	42,000	45,000	49,000
Wyndham (C) - South	4,000	5,000	10,000	14,000	19,000
Wyndham (C) - West	2,000	2,000	5,000	8,000	13,000
Yarra (C) - North	36,000	39,000	44,000	49,000	59,000
Yarra (C) - Richmond	28,000	30,000	30,000	29,000	30,000
Yarra Ranges (S) - Central	3,000	3,000	4,000	4,000	5,000
Yarra Ranges (S) - Dandenongs	5,000	5,000	6,000	7,000	9,000
Yarra Ranges (S) - Lilydale	22,000	25,000	26,000	27,000	29,000
Yarra Ranges (S) - North	4,000	4,000	4,000	5,000	5,000
Yarra Ranges (S) - Seville	5,000	6,000	6,000	7,000	7,000
Total MSD	**1,719,000**	**1,957,000**	**2,146,000**	**2,341,000**	**2,668,000**

* Based upon reduced employment totals to remove the influence of the Labour Force Survey

Appendix B – Future Road Network for Modelling Purposes

ID	Period Ending	Description
	2011	
		Major Projects
1		Craigieburn Bypass (2 lanes in each direction)
2		Docklands Hwy, Grade Separation - (Footscray Rd) Rail West Of Citylink
3		E14, New Link, Somerton Rd to Craigieburn Rd (2 lanes undivided) - Aitkin Bvd
4		EastLink
5		Hume Freeway, Full interchange at Donnybrook Rd
6		M1 Project (Widening & Management System))
7		Pakenham Bypass
8		Tullamarine/Calder Freeway Interchange
9		Western Freeway, Deer Park Bypass (2 lanes in each direction)
10		Western Freeway, Leakes Road interchange
		Arterial Road Improvements
11		Anderson Street, Duplication - Cobden Cr to Lilydale-Monbulk Rd
12		Berwick-Cranbourne Rd, Duplication - Greaves Road to Pound Road
13		Berwick-Cranbourne Rd, Duplication - Pound Rd to Thompsons Rd
14		Boardwalk Bvd, new link - Dunnings Rd to Sneydes Rd (4 lanes divided)
15		Boundary Rd, Duplication - Fitzgerald Rd to Raymond Rd
16		Burwood Highway, third lane widening - Mountain Hwy to Stud Rd
17		Canterbury Rd, Duplication & Widening - Bayswater Rd to Dorset Rd (widen 4 lanes undivided to 6 lanes divided)
18		Cheltenham Rd, Third Lane Widening - Springvale Rd to Chandler Rd
19		Cranbourne-Frankston Rd, Duplication - Scott St to Hall Rd
20		Cranbourne-Frankston Rd, Duplication - Warrandyte Rd to Centre Rd
21		Cranbourne-Frankston Rd, Duplication - Centre Rd to Western Port Hwy
22		Cranbourne-Frankston Rd, Duplication - Western Port Hwy to Hall Rd
23		Dandenong Southern Bypass (Dingley Reservation), new link - Perry Rd to South Gippsland Hwy (4 lanes divided)(SEITA)
24		Derrimut Road, Duplication - Hogans Rd to Sayers Rd
25		Ferntree Gully Rd, Third Lane Widening - Cootamundra Dve to Jells Rd
26		Ferntree Gully Rd, Third Lane Widening - Jells Rd to Stud Rd
27		Fitzgerald Rd, Duplication - Dohertys Rd to Leakes Rd
28		George St Overpass
29		Greens Road , duplication - Perry Rd to Hammond Rd (SEITA)
30		Greensborough Hwy (Plenty Road Bridge Upgrade), Widening to 4 lanes, Plenty River to Diamond Ck Rd
31		Hallam Rd, Duplication - Hallam Bypass to James Cook Dve
32		Kelletts Rd, Duplication - Taylors Lne to Napoleon Rd
33		Kings Rd, Duplication - Melton Hwy to Taylors Rd
34		Leakes Rd, Construction - Derrimut Rd to Fitzgerald Rd (2 lanes undivided)
35		Linsell Bvd, New link - Narre Warren-Cranbourne Rd to Berwick-Cranbourne Rd (2 lanes undivided)
36		Macedon Street Bridge, Duplication - Evans St to Horne St
37		Mickleham Rd, Duplication - Barrymore Rd to Somerton Rd
38		Mickleham Road, Duplication - Alanbrae Terrace to Barrymore Road
39		Middleborough Rd, Rail grade separation
40		Moorooduc Hwy, Widening - Towerhill Rd to Frankston - Flinders Rd (widen to 6 lanes)
41		Narre Warren-Cranbourne Rd, Duplication - Centre Rd to Pound Rd
42		Palmers Road, South Link - Dunnings Road to Princes Fwy (incl ramps)(4 lanes divided)
43		Palmers Road, South Link - Princes Fwy to Sayers Rd (incl connection to Palmers)(4 lanes divided)
44		Plenty Rd, Duplication - Centenary Dve to McDonalds Rd
45		Plenty Rd, Duplication - Gordons Rd to Wilton Vale Rd
46		Plenty Rd, Duplication - McDonalds Rd to Gordons Rd
47		Plenty Rd, Widen to 6 lanes - MRR to McKimmies Rd
48		Plummer Street, Extension (New Link)/Widening - Graham St to Todd Rd (2 lanes undivided)
49		Somerton Road, Duplication - Hume Hwy to West of Rail Crossing
50		South Road Extension, new link - Warrigal Hwy to Old Dandenong Rd (2 lanes undivided) (Old Dandenong Rd truncated)
51		Taylors Rd, Rail Underpass - Sydenham Rd to East Esplanade (4 lanes divided)
52		Thompsons Rd, Duplication - Mornington Peninsula Freeway to Dandenong-Frankston Rd
53		Thompsons Rd, Duplication - South Gippsland Hwy to Narre Warren - Cranbourne Rd
54		Thompsons Rd, Widening - Western Port Hwy to Evans Rd (2 lanes undivided)
55		Thompsons Rd, Widening - Manningham Rd to Foote St (2 lanes undivided)
56		Vineyard Rd Duplication - Mitchells Lane to Calder Freeway
57		Wellington Rd, Duplication - Taylors Lane to Napoleon Rd
58		Wellington Rd, Third lane widening - Springvale Rd to Stud Rd
59		Western Port Hwy, Duplication - Cranbourne-Frankston Rd to North Rd
60		Yarra Glen Truck Bypass - Healesville Yarra Glen Rd to Melba Hwy (2 lanes undivided)
166		Grieve Pde, Duplication - Kororoit Ck Rd to North of Pinnacle Rd
180		Tarneit Rd, Duplication - Heaths Rd to Hogans Rd
	2021	
		Major Projects
61		Calder Fwy, Interchanges - Sunshine Av (1/2 diamond, westerly oriented), Kings Rd (full diamond + Kings Rd, Duplication), & Calder Park Drive (full diamond), 4 lane Calder-Melton
62		Calder Fwy, Widen to 6 lanes, Keilor Park Dve to Melton Hwy
63		Dingley Arterial - South Gippsland Hwy to South Gippsland Fwy
64		Dingley Arterial East (Springvale Rd to Perry Rd) (4 lanes divided)
65		Dingley Arterial West (Springvale Bypass to Warrigal Rd) (4 lanes divided) (includes duplication of South Rd Ext)
66		E6, New Link - Findon Rd to Bridge Inn Rd (4 lanes divided to Harvest Home Rd, 2 lanes north of Harvest Home Rd)
67		E6, New Link - Metropolitan Ring Rd to Findon Rd (4 lanes divided)
68		Frankston Bypass - Northern Link (4 lanes divided EastLink to Dandenong-Frankston Rd)
69		Maroondah Highway Deviation at Lilydale (4 lanes divided)
~~70~~	-	~~Metropolitan Freeway Management System~~
71		Northern Arterial Route, New Link - Reynolds Rd to Maroondah Hwy (4 lanes divided)
161		Frankston Bypass, 4 lanes divided - Dandenong-Frankston Rd to Moorooduc Hwy (south of Sages Rd)
X		M80 upgrade, 3 lanes + auxillary lanes between interchanges
184		Geelong Bypass 1, 2, & 3
X		Truck Action Plan
		Arterial Road Improvements
72		Bayswater Rd, Upgrade to 4 Lanes - Canterbury Rd to Mt Dandenong Rd

ID	Period Ending	Description
73		Berwick-Cranbourne Rd, Duplication - High St to Kangan Rd
74		Berwick-Cranbourne Rd, Duplication - Ballarto Rd to South Gippsland Hwy (Clyde - Five Ways Road) + Five Ways Road b/w Ballarto Rd to Berwick-Cranbourne Rd
75		Berwick-Cranbourne Rd, Duplication - Thompsons Rd to Pattersons
76		Boronia Rd, Third Lane Widening - Mountain Hwy to Stud Rd
77		Bridge Inn Rd, Duplication - E6 to Plenty Rd
78		Bridge Inn Rd, Duplication - Plenty Rd to Yan Yean Rd
79		Buckley St, Intersection Works - Sunshine Rd to Hyde St
80		Burwood Hwy, Third Lane Widening - Scoresby Rd to Ferntree Gully Rd
81		C21 North South Boulevard - Princes Fwy to Grices Rd
82		Calder Park Dr, Duplication - Calder Fwy to Melton Hwy
83		Calder Park Dr, Duplication - Melton Hwy to Taylors Rd
84		Calder Park Dr/Westwood Dr, Road Extension - Western Hwy to Taylors Rd (4 lanes divided)
85		Canterbury Rd, Road Widening 4 Lanes to 6 Lanes Divided - Dorset Rd to Liverpool Rd
86		Canterbury Rd, Third Lane Widening - Liverpool Rd to Mount Dandenong Rd
87		Cardinia Rd, Duplication - Princes Hwy to Pakenham Bypass
88		Cheltenham Rd, New Link - Hammond Rd to Stud Rd (4 lanes divided)
89		Childs Rd, Duplication - Bowman Dr to Proposed E6
90		Childs Road, duplication and extension - High St to Edgars Rd
91		Craigieburn Rd Duplication - Hanson Rd to Windrock Av
92		Dohertys Rd, Duplication - Cherry Lne to Grieve Pde
93		Dohertys Rd, Duplication - Hume Rd to Cherry La
94		Dunnings Rd, Duplication - Pt Cook Rd to Palmers Rd
95		Edgars Rd, Duplication - Cooper St to O'Herns Rd
96		Edgars Rd, New Link, 4 lanes, O'Herns Rd to Craigieburn Road East
97		Edgars Rd, New Link, Cooper St to O'Herns Rd (2 lanes undivided)
98		Edgars Road Extension, Childs Rd to Cooper St (4 lanes divided)
99		Epping Rd, Duplication - Memorial Av to Findon Rd
100		Evans Rd, Duplication - South Gippsland Hwy to Hall Rd
101		Ferntree Gully Rd, Third Lane Widening - Stud Rd to Scoresby Rd
102		Ferntree Gully Rd, Widening 4 to 6 Lanes Divided - Scoresby Rd to Burwood Hwy
103		Findon Rd, New Link & Widening to 4 Lanes - Civic Dve to Plenty Rd (4 lanes divided)
104		Findon Road, Plenty Rd to Gorge Rd (4 lanes divided)
105		Fitzgerald Rd, Duplication - Swann Dr to Middle Rd
106		Forsyth Rd, Duplication and extension, 4 lanes divided - Industrial Ave to Sayers Rd
107		Forsyth Road, Duplication - K-Mart Entrance to Wallace Ave
108		Glasscocks Rd, Dandenong Valley Hwy to South Gippsland Hwy (2 lanes undivided)
109		Glasscocks Rd, Duplication - Dandenong Valley Hwy to South Gippsland Hwy
110		Glasscocks Rd, Duplication - South Gippsland Hwy to Berwick-Cranbourne Rd
111		Glasscocks Rd, South Gippsland Hwy to Berwick-Cranbourne Rd (2 lanes undivided)
112		Gourlay Rd, Duplication - Taylors Rd to Melton Hwy
113		Governor Rd, Duplication - Boundary Rd to Springvale Rd
114		Grices Rd Extension, Soldiers Rd to Thompsons Rd Extension (2 lanes undivided)
115		Grices Rd, Berwick-Cranbourne Rd to Soldiers Rd (2 lanes undivided)
116		Hall Rd, - McCormicks Rd to Evans Rd
117		Hallam North Rd, Duplication - Heatherton Rd to James Cook Dve
118		Hallam Rd, Duplication - Princes Hwy to Pound Rd
119		Hallam Rd, Duplication - Fordholm Rd to South Gippsland Hwy
120		Hallam Rd, Duplication - Pound Rd to Fordholm Rd
121		Heatherton Rd, Duplication - Hallam North Rd to Belgrave-Hallam Rd
122		Heaths Rd, Duplication - Ballan Rd to Rowes Rd
123		Heaths Rd, Duplication & Bridge Widening - Shaws Rd to Greaves St
124		High Street Rd, Duplication - Mowbray Dve to Burwood Hwy
125		Koo Wee Rup Bypass (2 lane undivided)
126		Kororoit Creek Rd, Duplication - Grieve Pde to Millers Rd
127		Lathams Rd/Rutherford Rd, Duplication - Frankston Fwy to Dandenong Frankston Rd
128		Linsell Blvd, 4 lanes undivided
~~129~~	-	~~Metropolitan Ring Road, Duplication & Widening - Plenty Rd to Greensborough Hwy (6 lanes divided)~~
~~130~~	-	~~Metropolitan Ring Road, Third Lane Widening - Edgars Rd to Plenty Rd~~
131		Narre Warren - Cranbourne Rd, Duplication - Thompsons Rd to South Gippsland Hwy
132		Narre Warren North Rd, Duplication - Ernst Wanke Rd to Heatherton Rd
133		Narre Warren-Cranbourne Rd, Duplication - Pound Rd to Thompsons Rd
134		New Link, Bangholme Rd to Remington Dve (via Colemans and Taylors Rds) (4 lanes divided)
135		O'Herns Rd, Carriageway Upgrade - Epping Rd to Craigieburn Bypass (2 lanes undivided)
136		Palmers Rd, Duplication - Leakes Rd to Boundary Rd
137		Palmers Rd, Road Widening - Sayers Rd to Leakes Rd (4 lanes divided)
138		Plenty Rd, Duplication - Wilton Vale Rd to Masons Rd
139		Pound Rd, Remington Drive (New Link)
140		Pound Rd, Sth Gippsland Fwy to Sth Gippsland Hwy (widening)
141		Pound Rd/Greaves Rd/O'Shea Rd route, Duplication - Hallam South Rd to Princes Fwy
142		Reynolds Rd, Duplication - Springvale Rd to Tindalls Rd Donvale
143		Riddell Rd, Duplication - Racecourse Rd to Elizabeth St
144		Robinsons Rd/Westwood Dve, Duplication - Boundary Rd to Western Hwy
145		Springvale Rd, Duplication - Mitcham Rd to Reynolds Rd
146		Station Rd/Mt Derrimut Rd, Duplication - Boundary Rd to Deer Park Bypass
147		Station Rd/Mt Derrimut Rd, Duplication - Windsor Blvd to Tilburn Rd
148		Taylors Rd, Duplication - Gourley Rd to Calder Park Dve
149		Taylors Rd, Duplication - Kings Rd to Kurung Dr
150		Taylors Rd, Duplication - Kurung Dr to Calder Park Dr
151		Thompsons Rd Extension, New link - Berwick-Cranbourne Rd to Officer South Rd
152		Thompsons Rd, Duplication - Western Port Hwy to Evans Rd
153		Thompsons Rd, Duplication - Dandenong Valley Hwy to Western Port Hwy
154		Thompsons Rd, Duplication - Evans Rd to South Gippsland Hwy
155		Thompsons Rd, Duplication - Narre Warren - Cranbourne Rd to Berwick-Cranbourne Rd
156		Wedge Rd, New link - Taylors Rd to Evans Rd (2 lanes undivided)
157		Wellington Rd, Duplication - Lysterfield Rd to Belgrave-Hallam Rd
158		Western Port Hwy, Realignment - Frankston-Flinders Rd to Graydens Rd (4 lanes divided)
159		Western Port Hwy, Widen to 6 lanes - South Gippsland Hwy to Thompsons Rd
160		Western Port Hwy Duplication - North Rd to Baxter Tooradin Rd
	2031	
		Major Projects
162		St Albans Bypass, 4 lanes divided - Station Rd to St Albans Rd

ID	Period Ending	Description
		Arterial Road Improvements
163		Dorset Rd Extension (Duplication)
164		E14, New Link - Metropolitan Ring Rd to Somerton Rd (4 lane divided)
165		Findon Rd, Duplication - Epping Rd to Glendale Av
167		Healesville - Koo-Wee-Rup Rd, Duplication - Ballarto Rd to Manks Rd
168		Healesville - Koo-Wee-Rup Rd, Duplication - Hall Rd to Ballarto Rd
169		Healesville - Koo-Wee-Rup Rd, Duplication - Pakenham Bypass to Hall Rd
170		Healesville - Koo-Wee-Rup Rd, Manks Rd to South Gippsland Hwy
171		Kelletts Rd, Duplication - Napoleon Rd to Wellington Rd
172		Leakes Rd, Duplication - Derrimut Rd to Fitzgerald Rd
173		Lysterfield Rd Duplication - Napolean to Wellington
174		McGregor Rd, Duplication - Princes Hwy to Pakenham Bypass
175		Melton Hwy, Duplication - The Regency to Ryans Lne
176		Napolean Rd Duplication - Kelletts to Lysterfield
177		Officer South Rd, Duplication (incl westerly oriented ramps) - Princes Hwy to Pakenham Bypass
178		O'Herns Rd, Widening to 6 lanes - Craigieburn Bypass to Edgars Rd (including O'Herns Rd interchange)
179		Sunbury Rd Duplication - Tullamarine Airport to Powlett St
181		Wellington Rd, Duplication - Napoleon Rd to Kelletts Rd
182		Westall Rd Extension (PHE to Monash Fwy, 4 lane divided)
183		Yan Yean Rd, Duplication - Kurrak Rd to Diamond Ck Rd

Source: Economics & Transport Modelling Branch of the Policy & Communications Division, Department of Transport, file name - Future Road Network for Modelling Purposes.xls, 25/08/2010 and reconfirmed for use on 28/04/2011

Note: includes minor modifications from the original file

Appendix C – Public Transport Service Plans

RAIL

Figure 22 – Train Service Plan -2016 Reference Case on Page 39

Figure 23 – Train Service Plan -2021 Reference Case on Page 40

Figure 24 – Train Service Plan -2026 Reference Case on Page 41

Figure 25 – Train Service Plan -2031 Reference Case on Page 42

TRAM

Figure 26 – Tram Service Plan -2016/21 Reference Case on Page 43

Figure 27 – Tram Service Plan -2026/31 Reference Case on Page 44

BUS

Figure 28 – Bus Category -2021 & 2031 Reference Case on Page 56

Group	Origin-Destination	Loop Direction	Stopping pattern	AM Peak 1 hour Services (tph)	AM Peak 1 hour Headway (min)	AM Peak 2hour Services (no.)	AM Peak 2hour Headway (min)	Inter Peak 1 hour Services (tph)	Inter Peak 1 hour Headway (min)	PM Peak 1 hour Services (tph)	PM Peak 1 hour Headway (min)	PM Peak 2hour Services (no.)	PM Peak 2hour Headway (min)	Off-Peak (Evening) 1 hour Services (tph)	Off-Peak (Evening) 1 hour Headway (min)	Av. Veh Capacity	Design Guide	Crush Load	Seating
CLIFTON HILL GROUP	South Morang to City Loop	Clockwise	All stations	7	8.6	12	10.0	4	15.0	6	10.0	12	10.0	4	15.0	800	900	1250	500
	City Loop to South Morang	Clockwise	All stations	6	10.0	12	10.0	4	15.0	7	8.6	12	10.0	4	15.0				
	Hurstbridge to City Loop	Clockwise	Express Macleod-Heidelberg-Ivanhoe-Fairfield-Clifton Hill	2	30.0	4	30.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Hurstbridge	Clockwise	Express Clifton Hill-Fairfield-Ivanhoe-Heidelberg-Macleod	0	0.0	0	0.0	0	0.0	2	30.0	4	30.0	0	0.0				
	Hurstbridge to City Loop	Clockwise	All stations	0	0.0	0	0.0	2	30.0	0	0.0	0	0.0	2	30.0				
	City Loop to Hurstbridge	Clockwise	All stations	0	0.0	0	0.0	2	30.0	0	0.0	0	0.0	2	30.0				
	Eltham to City Loop	Clockwise	All stations	4	15.0	7	17.1	2	30.0	0	0.0	0	0.0	2	30.0				
	City Loop to Eltham	Clockwise	All stations	0	0.0	0	0.0	2	30.0	4	15.0	7	17.1	2	30.0				
	Greensborough to City Loop	Clockwise	All stations	3	20.0	5	24.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Greensborough	Clockwise	All stations	0	0.0	0	0.0	0	0.0	3	20.0	5	24.0	0	0.0				
BURNLEY GROUP	Belgrave to City Loop	Anticlockwise	Express Blackburn-Box Hill-Camberwell-Glenferrie-Richmond	4	15.0	8	15.0	0	0.0	0	0.0	0	0.0	0	0.0	800	900	1250	500
	City Loop to Belgrave	Anticlockwise	Express Richmond-Glenferrie-Camberwell-Box Hill- Blackburn	0	0.0	0	0.0	0	0.0	4	15.0	8	15.0	0	0.0				
	Belgrave to City Loop	Anticlockwise	All Stations	0	0.0	0	0.0	3	20.0	3	20.0	6	20.0	3	20.0				
	City Loop to Belgrave	Anticlockwise	All Stations	3	20.0	6	20.0	3	20.0	0	0.0	0	0.0	3	20.0				
	Upper Ferntree Gully to City Loop	Anticlockwise	Express Blackburn-Box Hill-Camberwell-Glenferrie-Richmond	2	30.0	4	30.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Upper Ferntree Gully	Anticlockwise	Express Richmond-Glenferrie-Camberwell-Box Hill- Blackburn	0	0.0	0	0.0	0	0.0	2	30.0	4	30.0	0	0.0				
	Lilydale to City Loop	Anticlockwise	Express Blackburn-Box Hill-Camberwell-Glenferrie-Richmond	4	15.0	8	15.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Lilydale	Anticlockwise	Express Richmond-Glenferrie-Camberwell-Box Hill- Blackburn	0	0.0	0	0.0	0	0.0	4	15.0	8	15.0	0	0.0				
	Lilydale to City Loop	Anticlockwise	All Stations	0	0.0	0	0.0	3	20.0	3	20.0	6	20.0	3	20.0				
	City Loop to Lilydale	Anticlockwise	All Stations	3	20.0	6	20.0	3	20.0	0	0.0	0	0.0	3	20.0				
	Moorooduark to City Loop	Anticlockwise	Express Blackburn-Box Hill-Camberwell-Glenferrie-Richmond	3	20.0	4	30.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Moorooduark	Anticlockwise	Express Richmond-Glenferrie-Camberwell-Box Hill- Blackburn	0	0.0	0	0.0	0	0.0	3	20.0	4	30.0	0	0.0				
	Glen Waverley to Flinders Street	Direct	All Stations	7	8.6	12	10.0	6	10.0	6	10.0	12	10.0	6	10.0				
	Flinders Street to Glen Waverley	Direct	All Stations	6	10.0	12	10.0	6	10.0	7	8.6	12	10.0	6	10.0				
	Blackburn to City Loop	Anticlockwise	All Stations	5	12.0	8	15.0	0	0.0	3	20.0	6	20.0	0	0.0				
	City Loop to Blackburn	Anticlockwise	All Stations	3	20.0	6	20.0	0	0.0	5	12.0	8	15.0	0	0.0				
	Alamein to City Loop	Anticlockwise	All Stations	3	20.0	6	20.0	0	0.0	3	20.0	6	20.0	0	0.0				
	City Loop to Alamein	Anticlockwise	All Stations	3	20.0	6	20.0	0	0.0	3	20.0	6	20.0	0	0.0				
	Alamein to Camberwell	Direct	All Stations	0	0.0	0	0.0	4	15.0	0	0.0	0	0.0	4	15.0				
	Camberwell to Alamein	Direct	All Stations	0	0.0	0	0.0	4	15.0	0	0.0	0	0.0	4	15.0				
CAULFIELD LOOP	Pakenham to City Loop	Anticlockwise	Oakleigh-Caulfield-South Yarra	8	7.5	16	7.5	0	0.0	0	0.0	0.0	0.0	0	0.0	800	900	1250	500
	City Loop to Pakenham	Anticlockwise	South Yarra-Caulfield-Oakleigh	0	0.0	0	0.0	0	0.0	8	7.5	16.0	7.5	0	0.0				
	Pakenham to City Loop	Anticlockwise	All Stations	0	0.0	0	0.0	3	20.0	3	20.0	6.0	20.0	3	20.0				
	City Loop to Pakenham	Anticlockwise	All Stations	3	20.0	6	20.0	3	20.0	0	0.0	0.0	0.0	3	20.0				
	Cranbourne to City Loop	Anticlockwise	Caulfield-South Yarra	4	15.0	8	15.0	0	0.0	0	0.0	0.0	0.0	0	0.0				
	City Loop to Cranbourne	Anticlockwise	South Yarra-Caulfield	0	0.0	0	0.0	0	0.0	4	15.0	8.0	15.0	0	0.0				
	Cranbourne to City Loop	Anticlockwise	All Stations	0	0.0	0	0.0	3	20.0	3	20.0	6.0	20.0	3	20.0				
	City Loop to Cranbourne	Anticlockwise	All Stations	3	20.0	6	20.0	3	20.0	0	0.0	0.0	0.0	3	20.0				
	Dandenong to City Loop	Anticlockwise	Caulfield-South Yarra	4	15.0	8	15.0	0	0.0	0	0.0	0.0	0.0	0	0.0				
	City Loop to Dandenong	Anticlockwise	South Yarra-Caulfield	0	0.0	0	0.0	0	0.0	4	15.0	8.0	15.0	0	0.0				
NORTHERN GROUP	Sunbury to City Loop	Clockwise	Sunshine-Footscray	5	12.0	8	15.0	3	20.0	3	20.0	6.0	20.0	3	20.0	800	900	1250	500
	City Loop to Sunbury	Clockwise	Footscray-Sunshine	3	20.0	6	20.0	3	20.0	5	12.0	8.0	15.0	3	20.0				
	Watergardens to City Loop	Clockwise	All stations	8	7.5	12	10.0	3	20.0	3	20.0	6.0	20.0	3	20.0				
	City Loop to Watergardens	Clockwise	All stations	3	20.0	6	20.0	3	20.0	8	7.5	12.0	10.0	3	20.0				
	Craigieburn to City Loop	Clockwise	All stations	5	12.0	10	12.0	6	10.0	6	10.0	6.0	20.0	6	10.0				
	City Loop to Craigieburn	Clockwise	All stations	6	10.0	6	20.0	6	10.0	5	12.0	10.0	12.0	6	10.0				
	Craigieburn to Flinders Street	Direct	All stations	6	10.0	10	12.0	0	0.0	0	0.0	0	0.0	0	0.0				
	Flinders Street to Craigieburn	Direct	All stations	0	0.0	0	0.0	0	0.0	6	10.0	10.0	12.0	0	0.0				
	Upfield to City Loop	Clockwise	All stations	4	15.0	8	15.0	4	15.0	4	15.0	8.0	15.0	4	15.0				
	City Loop to Upfield	Clockwise	All stations	4	15.0	8	15.0	4	15.0	4	15.0	8.0	15.0	4	15.0				
CROSS CITY GROUP	Werribee to Frankston	Direct via Flinders St	Laverton-Newport-Footscray-North Melbourne	8	7.5	12	10.0	3	20.0	0	0.0	0.0	0.0	3	20.0	800	900	1250	500
	Frankston to Werribee	Direct via Flinders St	North Melbourne-Footscray-Newport-Laverton	0	0.0	0	0.0	3	20.0	8	7.5	12.0	10.0	3	20.0				
	Williamstown to Mordialloc	Direct via Flinders St	All stations	3	20.0	6	20.0	3	20.0	0	0.0	0.0	0.0	3	20.0				
	Mordialloc to Williamstown	Direct via Flinders St	All stations	0	0.0	0	0.0	3	20.0	3	20.0	6.0	20.0	3	20.0				
	Laverton to Frankston	Direct via Flinders St	All stations	3	20.0	6	20.0	3	20.0	0	0.0	0.0	0.0	3	20.0				
	Frankston to Laverton	Direct via Flinders St	All stations	0	0.0	0	0.0	3	20.0	3	20.0	6.0	20.0	3	20.0				
	Sandringham to Flinders Street	Direct via Flinders St	All stations	8	7.5	15	8.0	6	10.0	8	7.5	15.0	8.0	6	10.0				
	Flinders Street to Sandringham	Direct via Flinders St	All stations	8	7.5	15	8.0	6	10.0	8	7.5	15.0	8.0	6	10.0				
	Frankston to Werribee	Direct via Flinders St	Cheltenham-Caulfield	4	15.0	8	15.0	3	20.0	0	0.0	0.0	0.0	3	20.0				
	Werribee to Frankston	Direct via Flinders St	Caulfield-Cheltenham	0	0.0	0	0.0	0	0.0	4	15.0	8.0	15.0	0	0.0				
	Frankston to Williamstown	Direct via Flinders St	Cheltenham-Caulfield	3	20.0	6	20.0	0	0.0	0	0.0	0.0	0.0	0	0.0				
	Williamstown to Frankston	Direct via Flinders St	Caulfield-Cheltenham	0	0.0	0	0.0	0	0.0	3	20.0	6.0	20.0	0	0.0				
	Frankston to North Melbourne	Direct via Flinders St	Malvern-South Yarra	3	20.0	6	20.0	0	0.0	0	0.0	0.0	0.0	0	0.0				
	North Melbourne to Frankston	Direct via Flinders St	South Yarra-Malvern	0	0.0	0	0.0	0	0.0	3	20.0	6.0	20.0	0	0.0				
	Mordialloc to Laverton	Direct via Flinders St	Malvern-South Yarra	4	15.0	8	15.0	0	0.0	0	0.0	0.0	0.0	0	0.0				
	Laverton to Mordialloc	Direct via Flinders St	South Yarra-Malvern	0	0.0	0	0.0	0	0.0	4	15.0	8.0	15.0	0	0.0				
V/LINE	Marshall to Southern Cross	via RRL	All stations to Geelong, express to Lara, Little River, WyndhamVale, Tarneit, Footscray (setdown)	4	15.0	6.0	20.0	2	30.0	2	30.0	4.0	30.0	2	30.0	910	910	910	750
	Southern Cross to Marshall	via RRL	Footscray (pickup), Tarneit, Wyndham Vale, Little River, Lara, express to Geelong, then all stations	2	30.0	4.0	30.0	2	30.0	4	15.0	6.0	20.0	2	30.0				
	Geelong to Southern Cross	via RRL	All stations to Lara, then express to Footscray (setdown)	4	15.0	6.0	20.0	2	30.0	2	30.0	4.0	30.0	2	30.0	910	910	910	750
	Southern Cross to Geelong	via RRL	Footscray (pickup), express to Lara, then all stations	2	30.0	4.0	30.0	2	30.0	4	15.0	6.0	20.0	2	30.0				
	Warrnambool to Southern Cross	via RRL	Sherwood Park, Camperdown, Colac, Birregurra, Winchelsea, Geelong, Footscray (set down)	0	0.0	1.0	120.0	0	180.0	0	180.0	1.0	120.0	0	180.0	370	370	370	370
	Southern Cross to Warrnambool	via RRL	Footscray (pick up), Geelong, Winchelsea, Birregurra, Colac, Camperdown, Sherwood Park	0	0.0	1.0	120.0	0	180.0	0	180.0	1.0	120.0	0	180.0				
	Ballarat to Southern Cross	via RRL	All stations to Bacchus Marsh; Melton, then express to Footscray (setdown)	2	30.0	4.0	30.0	2	30.0	2	30.0	4.0	30.0	2	30.0	564	564	564	444
	Southern Cross to Ballarat	via RRL	Footscray (pickup), express to Melton, Bacchus Marsh, then all stations	2	30.0	4.0	30.0	2	30.0	2	30.0	4.0	30.0	2	30.0				
	Melton to Southern Cross	via RRL	All stations to Sunshine (setdown), Footscray (set down)	3	4.0	4.0	30.0	1	60.0	2	30.0	4.0	30.0	1	60.0	571	571	571	431
	Southern Cross to Melton	via RRL	Footscray (pickup) Sunshine (pickup), then all stations	2	30.0	4.0	30.0	1	60.0	3	20.0	4.0	30.0	1	60.0				
	Ararat to Southern Cross	via RRL	Beaufort, Wendouree, Ballarat, Ballan, Bacchus Marsh, Melton (set down), Footscray (set down)	0	0.0	1.0	120.0	0	180.0	0	180.0	1.0	120.0	0	180.0	222	222	222	222
	Southern Cross to Ararat	via RRL	Footscray (pick up), Melton (pick up), Bacchus Marsh, Ballan, Ballarat, Wendouree, Beaufort	0	0.0	1.0	120.0	0	180.0	0	180.0	1.0	120.0	0	180.0				
	Maryborough to Southern Cross	via RRL	Talbot, Clunes, Creswick, Ballarat, Ballan, Bacchus Marsh, Melton (set down), Footscray (set down)	0	0.0	1.0	120.0	0	180.0	0	180.0	1.0	120.0	0	180.0	222	222	222	222
	Southern Cross to Maryborough	via RRL	Footscray (pick up), Melton (pick up), Bacchus Marsh, Ballan, Ballarat, Creswick, Clunes, Talbot	0	0.0	1.0	120.0	0	180.0	0	180.0	1.0	120.0	0	180.0				
	Kyneton to Southern Cross	via RRL	All stations from Kyneton to Sunbury (set down), Footscray (set down)	1	60.0	1.0	120.0	1	60.0	1	60.0	2.0	60.0	1	60.0	564	564	564	444
	Southern Cross to Kyneton	via RRL	Footscray (pickup), Sunbury (pick up) then all stations	1	60.0	2.0	60.0	1	60.0	1	60.0	1.0	120.0	1	60.0				
	Bendigo to Southern Cross	via RRL	All stations to Kyneton, Gisborne, Footscray (setdown)	2	30.0	3.0	40.0	1	60.0	1	60.0	2.0	60.0	1	60.0	564	564	564	444
	Southern Cross to Bendigo	via RRL	Footscray (pickup), Gisborne, Kyneton, then all stations	1	60.0	2.0	60.0	1	60.0	2	30.0	3.0	40.0	1	60.0				
	Echuca to Southern Cross	via RRL	Rochester, Elmore, Bendigo, All stations to Kyneton, Gisborne, Footscray (setdown)	0	0.0	1.0	120.0	0	180.0	0	180.0	1.0	120.0	0	180.0	222	222	222	222
	Southern Cross to Echuca	via RRL	Footscray (pickup), Gisborne, Kyneton, then all stations to Bendigo, Elmore, Rochester	0	0.0	1.0	120.0	0	180.0	0	180.0	1.0	120.0	0	180.0				
	Swan Hill to Southern Cross	via RRL	Kerang, Pyramid, Dingee, Eaglehawke, Bendigo, Castlemaine, Kyneton, Woodend, Gisborne, Sunbury (set down),	0	0.0	1.0	120.0	0	180.0	0	180.0	1.0	120.0	0	180.0	282	282	282	282
	Southern Cross to Swan Hill	via RRL	Sunbury (pick up), Gisborne, Woodend, Kyneton, Castlemaine, Bendigo, Eaglehawke, Dingee, Pyramid, Kerang	0	0.0	1.0	120.0	0	180.0	0	180.0	1.0	120.0	0	180.0				
	Seymour to Southern Cross	Direct	All stations to Craigieburn (set down) then express to Southern Cross	2	30.0	3.0	40.0	1	60.0	1	60.0	2.0	60.0	1	60.0	420	420	420	370
	Southern Cross to Seymour	Direct	Express to Craigieburn (pickup) then all stations	1	60.0	2.0	60.0	1	60.0	2	30.0	3.0	40.0	1	60.0				
	Albury to Southern Cross	Direct	Wodonga, Chiltern, Springhurst, Wangaratta, Benalla, Violet Town, Euroa, Avenel, Seymour, Broadmeadows (Set down)	0	0.0	1.0	120.0	0	180.0	0	180.0	1.0	120.0	0	180.0	370	370	370	370
	Southern Cross to Albury	Direct	Broadmeadows (pick up), Seymour, Avenel, Euroa, Violet Town, Benalla, Wangaratta, Springhurst, Chiltern, Wodonga	0	0.0	1.0	120.0	0	180.0	0	180.0	1.0	120.0	0	180.0				
	Shepparton to Southern Cross	Direct	Mooroopna, Murchison East, Nagambie, Seymour, Broadmeadows (set down),	0	0.0	1.0	120.0	0	180.0	0	180.0	1.0	120.0	0	180.0	282	282	282	282
	Southern Cross to Shepparton	Direct	Broadmeadows (pick up), Seymour, Nagambie, Murchison East, Mooroopna	0	0.0	1.0	120.0	0	180.0	0	180.0	1.0	120.0	0	180.0				
	Traralgon to Flinders Street	Direct	All stations to Pakenham (set down), Dandenong (setdown) then express to Flinders Street	2	30.0	3.0	40.0	1	60.0	1	60.0	2.0	60.0	1	60.0	564	564	564	444
	Flinders St to Traralgon	Direct	Express to Dandenong (pickup), express to Pakenham (pickup), then all stations	1	60.0	2.0	60.0	1	60.0	2	30.0	3.0	40.0	1	60.0				
	Bairnsdale to Southern Cross	Direct	Stanford, Sale, Rosedale, Traralgon, Morwell, Moe, Trafalgar, Yarragon, Warragul, Drouin, Garfield, Pakenham (set down), Dandenong (set down), Flinders St (set down)	0	0.0	1.0	120.0	0	180.0	0	180.0	1.0	120.0	0	180.0	370	370	370	370
	Southern Cross to Bairnsdale	Direct	Flinders St (pick up), Dandenong (pick up), Pakenham (pick up), Garfield, Drouin, Warragul, Yarragon, Trafalgar, Moe, Morwell, Traralgon, Rosedale, Sale, Stanford	0	0.0	1.0	120.0	0	180.0	0	180.0	1.0	120.0	0	180.0				
STONY POINT LINE	Stony Point to Frankston	-	Stopping all stations	2	30.0	3.0	40.0	1	60.0	2	30.0	3.0	40.0	1	60.0	327	327	327	267
	Frankston to Stony Point	-	Stopping all stations	2	30.0	3.0	40.0	1	60.0	2	30.0	3.0	40.0	1	60.0				

Figure 22 – Train Service Plan -2016 Reference Case

Group	Origin-Destination	Loop Direction	Stopping pattern	AM Peak				Inter Peak		PM Peak				Off-Peak (Evening)		Av. Veh Capacity	Design Guide	Crush Load	Seating
				1 hour		2hour		1 hour		1 hour		2hour		1 hour					
				Services (tph)	Headway (min)	Services (no.)	Headway (min)	Services (tph)	Headway (min)	Services (tph)	Headway (min)	Services (no.)	Headway (min)	Services (tph)	Headway (min)				
CLIFTON HILL GROUP (Based on old 2021 Ref Case)	South Morang to City Loop	Clockwise	All stations	11	5.5	20	6.0	6	10.0	6	10.0	12	10.0	6	10.0	800	900	1250	500
	City Loop to South Morang	Clockwise	All stations	6	10.0	12	10.0	6	10.0	11	5.5	20	6.0	6	10.0				
	Hurstbridge to City Loop	Clockwise	Macleod-Heidelberg-Ivanhoe-Darebin-Fairfield-Westgarth-Clifton Hill	3	20.0	5	24.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Hurstbridge	Clockwise	Clifton Hill-Westgarth-Fairfield-Darebin-Ivanhoe-Heidelberg-Macleod	0	0.0	0	0.0	3	20.0	3	20.0	5	24.0	3	20.0				
	Hurstbridge to City Loop	Clockwise	All stations	0	0.0	0	0.0	3	20.0	3	20.0	6	20.0	3	20.0				
	City Loop to Hurstbridge	Clockwise	All stations	3	20.0	6	20.0	0	0.0	0	0.0	0	0.0	0	0.0				
	Eltham to City Loop	Clockwise	Macleod-Heidelberg-Ivanhoe-Darebin-Fairfield-Westgarth-Clifton Hill	3	20.0	6	20.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Eltham	Clockwise	Clifton Hill-Westgarth-Fairfield-Darebin-Ivanhoe-Heidelberg-Macleod	0	0.0	0	0.0	0	0.0	3	20.0	6	20.0	0	0.0				
	Eltham to City Loop	Clockwise	All stations	0	0.0	0	0.0	3	20.0	3	20.0	6	20.0	3	20.0				
	City Loop to Eltham	Clockwise	All stations	3	20.0	6	20.0	3	20.0	0	0.0	0	0.0	3	20.0				
	Macleod to City Loop	Clockwise	Macleod-Rosanna-Eaglemont-Ivanhoe-Alphington-Dennis-Clifton Hill	5	12.0	10	12.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Macleod	Clockwise	Clifton Hill-Dennis-Alphington-Ivanhoe-Eaglemont-Rosanna-Macleod	0	0.0	0	0.0	0	0.0	5	12.0	10	12.0	0	0.0				
BURNLEY GROUP (Based on old 2021 Ref Case)	Belgrave to City Loop	Anticlockwise	Blackburn-Box Hill-Camberwell-Glenferrie-Richmond	4	15.0	8	15.0	0	0.0	0	0.0	0	0.0	0	0.0	800	900	1250	500
	City Loop to Belgrave	Anticlockwise	Richmond-Glenferrie-Camberwell-Box Hill- Blackburn	0	0.0	0	0.0	0	0.0	4	15.0	8	15.0	0	0.0				
	Belgrave to City Loop	Anticlockwise	All Stations	0	0.0	0	0.0	3	20.0	3	20.0	6	20.0	3	20.0				
	City Loop to Belgrave	Anticlockwise	All Stations	3	20.0	6	20.0	3	20.0	0	0.0	0	0.0	3	20.0				
	Upper Ferntree Gully to City Loop	Anticlockwise	Blackburn-Box Hill-Camberwell-Glenferrie-Richmond	3	20.0	4	30.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Upper Ferntree Gully	Anticlockwise	Richmond-Glenferrie-Camberwell-Box Hill- Blackburn	0	0.0	0	0.0	0	0.0	3	20.0	4	30.0	0	0.0				
	Lilydale to City Loop	Anticlockwise	Blackburn-Box Hill-Camberwell-Glenferrie-Richmond	4	15.0	8	15.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Lilydale	Anticlockwise	Richmond-Glenferrie-Camberwell-Box Hill- Blackburn	0	0.0	0	0.0	0	0.0	4	15.0	8	15.0	0	0.0				
	Lilydale to City Loop	Anticlockwise	All Stations	0	0.0	0	0.0	3	20.0	3	20.0	6	20.0	3	20.0				
	City Loop to Lilydale	Anticlockwise	All Stations	3	20.0	6	20.0	3	20.0	0	0.0	0	0.0	3	20.0				
	Mooroobark to City Loop	Anticlockwise	Blackburn-Box Hill-Camberwell-Glenferrie-Richmond	4	15.0	4	30.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Mooroobark	Anticlockwise	Richmond-Glenferrie-Camberwell-Box Hill- Blackburn	0	0.0	0	0.0	0	0.0	4	15.0	4	30.0	0	0.0				
	Blackburn to City Loop	Anticlockwise	All Stations	6	10.0	8	15.0	0	0.0	3	20.0	6	20.0	0	0.0				
	City Loop to Blackburn	Anticlockwise	All Stations	3	20.0	6	20.0	0	0.0	6	10.0	8	15.0	0	0.0				
	Glen Waverley to Flinders Street	Direct	All Stations	8	7.5	14	8.6	6	10.0	3	20.0	6	20.0	6	10.0				
	Flinders Street to Glen Waverley	Direct	All Stations	3	20.0	6	20.0	6	10.0	8	7.5	14	8.6	6	10.0				
	Alamein to City Loop	Anticlockwise	All Stations	3	20.0	6	20.0	0	0.0	3	20.0	6	20.0	0	0.0				
	City Loop to Alamein	Anticlockwise	All Stations	3	20.0	6	20.0	0	0.0	3	20.0	6	20.0	0	0.0				
	Alamein to Camberwell	Direct	All Stations	0	0.0	0	0.0	3	20.0	0	0.0	0	0.0	3	20.0				
	Camberwell to Alamein	Direct	All Stations	0	0.0	0	0.0	3	20.0	0	0.0	0	0.0	3	20.0				
3 SUNSHINE - DANDENONG METRO (Based on 2026 Ref Case)	Sunbury to Cranbourne East	Metro Tunnel	All stations (express Domain to Malvern)	8	7.5	16	7.5	4	15.0	8	7.5	16	7.5	4	15.0	800	900	1250	500
	Cranbourne East to Sunbury	Metro Tunnel	All stations (express Malvern to Domain)	8	7.5	16	7.5	4	15.0	8	7.5	16	7.5	4	15.0				
	Melton to Pakenham East	Metro Tunnel	All station (express Domain to Malvern)	8	7.5	16	7.5	4	15.0	8	7.5	16	7.5	4	15.0				
	Pakenham East to Melton	Metro Tunnel	All stations (express Malvern to Domain)	8	7.5	16	7.5	4	15.0	8	7.5	16	7.5	4	15.0				
	Watergardens to Westall	Metro Tunnel	All stations (express Domain to Malvern)	4	15.0	8	15.0	0	0.0	4	15.0	8	15.0	0	0.0				
	Westall to Watergardens	Metro Tunnel	All stations (express Malvern to Domain)	4	15.0	8	15.0	0	0.0	4	15.0	8	15.0	0	0.0				
	Rockbank to Pakenham East	Metro Tunnel	All stations (express Domain to Malvern)	4	15.0	8	15.0	0	0.0	4	15.0	8	15.0	0	0.0				
	Pakenham East to Rockbank	Metro Tunnel	All stations (express Malvern to Domain)	4	15.0	8	15.0	0	0.0	4	15.0	8	15.0	0	0.0				
CROSS CITY GROUP (Based on DRC 2021 Full MM Build Scenario)	Werribee to Sandringham	Via SXS and FSS	Express Laverton to Newport via Direct Route, then to Sandringham	12	5.0	21	5.7	3	20.0	12	5.0	21	5.7	3	20.0	800	900	1250	500
	Sandringham to Werribee	Via SXS and FSS	Express Newport to Laverton, to Werribee via Direct Route	8	7.5	16	7.5	3	20.0	8	7.5	16	7.5	3	20.0				
	Laverton to South Yarra	Via SXS and FSS	All stations to South Yarra via Altona	3	20.0	6	20.0	3	20.0	3	20.0	6	20.0	3	20.0				
	South Yarra to Laverton	Via SXS and FSS	All stations to Laverton via Altona	3	20.0	6	20.0	3	20.0	3	20.0	6	20.0	3	20.0				
	Williamstown to South Yarra	Via SXS and FSS	All stations to South Yarra	3	20.0	6	20.0	0	0.0	3	20.0	6	20.0	0	0.0				
	South Yarra to Williamstown	Via SXS and FSS	All stations to Williamstown	3	20.0	6	20.0	0	0.0	3	20.0	6	20.0	0	0.0				
	Williamstown to Newport	NA	All stations off peak shuttle service	0	0.0	0	0.0	3	20.0	0	0.0	0	0.0	3	20.0				
	Newport to Williamstown	NA	All stations off peak shuttle service	0	0.0	0	0.0	3	20.0	0	0.0	0	0.0	3	20.0				
NORTHERN LOOP LINE (Based on DRC 2021 Full MM Build Scenario)	Craigieburn to City Loop	Clockwise	All stations	11	5.5	20	6.0	6	10.0	11	5.5	20	6.0	6	10.0	800	900	1250	500
	City Loop to Craigieburn	Clockwise	All stations	11	5.5	20	6.0	6	10.0	11	5.5	20	6.0	6	10.0				
	Essendon to City Loop	Clockwise	All stations	5	12.0	7	17.1	0	0.0	5	12.0	7	17.1	0	0.0				
	City Loop to Essendon	Clockwise	All stations	5	12.0	7	17.1	0	0.0	5	12.0	7	17.1	0	0.0				
	Upfield to City Loop	Clockwise	All stations	6	10.0	10	12.0	6	10.0	6	10.0	10	12.0	6	10.0				
	City Loop to Upfield	Clockwise	All stations	6	10.0	10	12.0	6	10.0	6	10.0	10	12.0	6	10.0				
FRANKSTON LOOP LINE (Based on DRC 2021 Full MM Build Scenario)	Frankston to City Loop	Anti-Clockwise	Express Cheltenham to Caulfield, Malvern to South Yarra	7	8.6	12	10.0	3	20.0	7	8.6	12	10.0	3	20.0	800	900	1250	500
	City Loop to Frankston	Anti-Clockwise	Express South Yarra to Malvern, Caulfield to Cheltenham	7	8.6	12	10.0	3	20.0	7	8.6	12	10.0	3	20.0				
	Frankston to City Loop	Anti-Clockwise	All stations	4	15.0	6	20.0	3	20.0	4	15.0	6	20.0	3	20.0				
	City Loop to Frankston	Anti-Clockwise	All stations	4	15.0	6	20.0	3	20.0	4	15.0	6	20.0	3	20.0				
	Mordialloc to North Melbourne	via SXS & FSS	All stations	1	60.0	2	60.0	0	0.0	0	0.0	0	0.0	0	0.0				
	North Melbourne to Mordialloc	via SXS & FSS	All stations	0	0.0	0	0.0	0	0.0	1	60.0	2	60.0	0	0.0				
	Carrum to City Loop	Anti-Clockwise	All stations	3	20.0	3	40.0	0	0.0	3	20.0	3	40.0	0	0.0				
	City Loop to Carrum	Anti-Clockwise	All stations	3	20.0	3	40.0	0	0.0	3	20.0	3	40.0	0	0.0				
V/LINE	Marshall to Southern Cross	via RRL	All stations to Geelong, express to Lara, Little River, Wyndham Vale, Tarneit, Footscray (setdown)	4	15.0	6	20.0	1	60.0	2	30.0	4	30.0	1	60.0	910	910	910	750
	Southern Cross to Marshall	via RRL	Footscray (pickup), Tarneit, Wyndham Vale, Little River, Lara, express to Geelong, then all stations	2	30.0	4	30.0	1.0	60.0	4.0	15.0	6.0	20.0	1.0	60.0				
	Geelong to Southern Cross	via RRL	All stations to Lara, then express to Footscray (setdown)	4	15.0	6	20.0	1.0	60.0	2.0	30.0	4.0	30.0	1.0	60.0	910	910	910	750
	Southern Cross to Geelong	via RRL	Footscray (pickup), express to Lara, then all stations	2	30.0	4	30.0	1.0	60.0	4.0	15.0	6.0	20.0	1.0	60.0				
	Warrnambool to Southern Cross	via RRL	Sherwood Park, Camperdown, Colac, Birregurra, Winchelsea, Geelong, Footscray (set down)	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1.0	120.0	0.3	180.0	370	370	370	370
	Southern Cross to Warrnambool	via RRL	Footscray (pick up), Geelong, Winchelsea, Birregurra, Colac, Camperdown, Sherwood Park	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1.0	120.0	0.3	180.0				
	Ballarat to Southern Cross	via RRL	All stations to Bacchus Marsh, Melton (set down) then express to Sunshine (setdown), Footscray (setdown)	4	15.0	4	30.0	2.0	30.0	2.0	30.0	2.0	60.0	2.0	30.0	910	910	910	750
	Southern Cross to Ballarat	via RRL	Footscray (pickup), Sunshine (pickup), express to Melton (pick up), Bacchus Marsh, then all stations	2	30.0	2	60.0	2.0	30.0	4.0	15.0	4.0	30.0	2.0	30.0				
	Ararat to Southern Cross	via RRL	Beaufort, Wendouree, Ballarat, Ballan, Bacchus Marsh, Melton (set down), Footscray (set down)	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1.0	120.0	0.3	180.0	222	222	222	222
	Southern Cross to Ararat	via RRL	Footscray (pick up), Melton (pick up), Bacchus Marsh, Ballan, Ballarat, Wendouree, Beaufort	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1.0	120.0	0.3	180.0				
	Maryborough to Southern Cross	via RRL	Talbot, Clunes, Creswick, Ballarat, Ballan, Bacchus Marsh, Melton (set down), Footscray (set down)	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1.0	120.0	0.3	180.0	222	222	222	222
	Southern Cross to Maryborough	via RRL	Footscray (pick up), Melton (pick up), Bacchus Marsh, Ballan, Ballarat, Creswick, Clunes, Talbot	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1.0	120.0	0.3	180.0				
	Kyneton to Southern Cross	via RRL	All stations from Kyneton to Sunbury (setdown), Footscray (set down)	2	30.0	3	40.0	1.0	60.0	1.0	60.0	2.0	60.0	1.0	60.0	564	564	564	444
	Southern Cross to Kyneton	via RRL	Footscray (pickup), Sunbury (pickup), all stations to Kyneton	1	60.0	2	60.0	1.0	60.0	2.0	30.0	3.0	40.0	1.0	60.0				
	Bendigo to Southern Cross	via RRL	All stations to Kyneton-Gisborne, Footscray (setdown)	2	30.0	2	60.0	2.0	30.0	2.0	30.0	2.0	60.0	2.0	30.0	564	564	564	444
	Southern Cross to Bendigo	via RRL	Footscray (pickup), Gisborne-Kyneton, then all stations	1	60.0	2	60.0	2.0	30.0	2.0	30.0	2.0	60.0	2.0	30.0				
	Echuca to Southern Cross	via RRL	Rochester, Elmore, Bendigo, All stations to Kyneton, Gisborne, Footscray (setdown)	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1.0	120.0	0.3	180.0	222	222	222	222
	Southern Cross to Echuca	via RRL	Footscray (pickup), Gisborne, Kyneton, then all stations to Bendigo, Elmore, Rochester	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1.0	120.0	0.3	180.0				
	Swan Hill to Southern Cross	via RRL	Kerang, Pyramid, Dingee, Eaglehawke, Bendigo, Castlemaine, Kyneton, Woodend, Gisborne, Sunbury (set down),	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1.0	120.0	0.3	180.0	282	282	282	282
	Southern Cross to Swan Hill	via RRL	Sunbury (pick up), Gisborne, Woodend, Kyneton, Castlemaine, Bendigo, Eaglehawke, Dingee, Pyramid, Kerang	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1.0	120.0	0.3	180.0				
	Seymour to Southern Cross	-	All stations to Craigieburn (set down), then express to Southern Cross	2.0	30.0	4	30.0	1.0	60.0	1.0	60.0	2.0	60.0	1.0	60.0	564	564	564	444
	Southern Cross to Seymour	-	Express to Craigieburn (pickup), then all stations	1.0	60.0	2	60.0	1.0	60.0	2.0	30.0	4.0	30.0	1.0	60.0				
	Albury to Southern Cross	Standard Gauge Line	Wodonga, Chiltern, Springhurst, Wangaratta, Benalla, Violet Town, Euroa, Avenal, Seymour, Broadmeadows (Set down)	0.0	0.0	1	120.0	0.3	180.0	0.3	180.0	1.0	120.0	0.3	180.0	370	370	370	370
	Southern Cross to Albury	Standard Gauge Line	Broadmeadows (pick up), Seymour, Avenal, Euroa, Violet Town, Benalla, Wangaratta, Springhurst, Chiltern, Wodonga	0.0	0.0	1	120.0	0.3	180.0	0.3	180.0	1.0	120.0	0.3	180.0				
	Shepparton to Southern Cross	-	Moorooopna, Murchison East, Nagambie, Seymour, Broadmeadows (set down),	0.0	0.0	1	120.0	0.3	180.0	0.3	180.0	1.0	120.0	0.3	180.0	282	282	282	282
	Southern Cross to Shepparton	-	Broadmeadows (pick up), Seymour, Nagambie, Murhison East, Moorooopna	0.0	0.0	1	120.0	0.3	180.0	0.3	180.0	1.0	120.0	0.3	180.0				
	Traralgon to Flinders Street	-	All stations to Pakenham (setdown), Dandenong (setdown) then express to Flinders Street	2.0	30.0	3	40.0	1.0	60.0	1.0	60.0	1.0	120.0	1.0	60.0	564	564	564	444
	Flinders St to Traralgon	-	Express to Dandenong (pickup), express to Pakenham (pickup) and then all stations	1.0	60.0	1	120.0	1.0	60.0	2.0	30.0	3.0	40.0	1.0	60.0				
	Bairnsdale to Southern Cross	-	Stafford, Sale, Rosedale, Traralgon, Morwell, Moe, Trafalgar, Yarragon, Warragul, Drouin, Garfield, Pakenham (set down), Dandenong (set down), Flinders St (set down)	0.0	0.0	1	120.0	0.3	180.0	0.3	180.0	1.0	120.0	0.3	180.0	370	370	370	370
	Southern Cross to Bairnsdale	-	Flinders St (pick up), Dandenong (pick up), Pakenham (pick up), Garfield, Drouin, Warragul, Yarragon, Trafalgar, Moe, Morwell, Traralgon, Rosedale, Sale, Stafford	0.0	0.0	1	120.0	0.3	180.0	0.3	180.0	1.0	120.0	0.3	180.0				
AVALON SHUTTLE (old 2021)	Avalon to Little River	-	Avalon - Little River	2	30.0	4	30.0	2	30.0	2	30.0	4	30.0	2	30.0	327	327	327	267
	Little River to Avalon	-	Little River - Avalon	2	30.0	4	30.0	2	30.0	2	30.0	4	30.0	2	30.0				
STONY POINT LINE (old 2021)	Stony Point to Frankston	-	Stopping all stations	2	30.0	4	30.0	1	60.0	2	30.0	4	30.0	1	60.0	327	327	327	267
	Frankston to Stony Point	-	Stopping all stations	2	30.0	4	30.0	1	60.0	2	30.0	4	30.0	1	60.0				

Figure 23 – Train Service Plan -2021 Reference Case

Group	Origin-Destination	Loop Direction	Stopping pattern	AM Peak				Inter Peak		PM Peak				Off-Peak (Evening)		Av. Veh Capacity	Design Guide	Crush Load	Seating
				1 hour		2hour		1 hour		1 hour		2hour		1 hour					
				Services (tph)	Headway (min)	Services (no.)	Headway (min)	Services (tph)	Headway (min)	Services (tph)	Headway (min)	Services (no.)	Headway (min)	Services (tph)	Headway (min)				
1 CLIFTON HILL GROUP	South Morang to City Loop	Clockwise	All stations	9	6.7	18	6.7	6	10.0	6	10.0	12	10.0	6	10.0	800	900	1250	500
	City Loop to South Morang	Clockwise	All stations	6	10.0	12	10.0	6	10.0	9	6.7	18	6.7	6	10.0				
	Reservoir to City Loop	Clockwise	All stations	3	20.0	6	20.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Reservoir	Clockwise	All stations	0	0.0	0	0.0	0	0.0	3	20.0	6	20.0	0	0.0				
	Macleod to City Loop	Clockwise	Macleod-Rosanna-Eaglemont-Ivanhoe-Alphington-Dennis-Clifton Hill, then all stations	6	10.0	12	10.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Macleod	Clockwise	Clifton Hill-Dennis-Alphington-Ivanhoe-Eaglemont-Rosanna-Macleod	0	0.0	0	0.0	0	0.0	6	10.0	12	10.0	0	0.0				
	Elsham to City Loop	Clockwise	Macleod-Heidelberg-Ivanhoe-Darebin-Fairfield-Westgarth-Clifton Hill, then all stations	3	20.0	6	20.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Elsham	Clockwise	Clifton Hill-Westgarth-Fairfield-Darebin-Ivanhoe-Heidelberg-Macleod, then all stations	0	0.0	0	0.0	0	0.0	3	20.0	6	20.0	0	0.0				
	Hurstbridge to City Loop	Clockwise	Macleod-Heidelberg-Ivanhoe-Darebin-Fairfield-Westgarth-Clifton Hill, then all stations	3	20.0	6	20.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Hurstbridge	Clockwise	Clifton Hill-Westgarth-Fairfield-Darebin-Ivanhoe-Heidelberg-Macleod, then all stations	0	0.0	0	0.0	0	0.0	3	20.0	6	20.0	0	0.0				
	Elsham to City Loop	Clockwise	All stations	0	0.0	0	0.0	3	20.0	3	20.0	6	20.0	3	20.0				
	City Loop to Elsham	Clockwise	All stations	3	20.0	6	20.0	3	20.0	0	0.0	0	0.0	3	20.0				
	Hurstbridge to City Loop	Clockwise	All stations	0	0.0	0	0.0	3	20.0	3	20.0	6	20.0	3	20.0				
	City Loop to Hurstbridge	Clockwise	All stations	3	20.0	6	20.0	3	20.0	0	0.0	0	0.0	3	20.0				
2 RINGWOOD LOOP METRO	Lilydale to City Loop	Anticlockwise	Box Hill-Camberwell-Glenferrie-Burnley-Richmond	10	6.0	20	6.0	6	10.0	6	10.0	12	10.0	6	10.0	800	900	1250	500
	City Loop to Lilydale	Anticlockwise	Richmond-Burnley-Glenferrie-Camberwell-Box Hill	6	10.0	12	10.0	6	10.0	10	6.0	20	6.0	6	10.0				
	Belgrave to City Loop	Anticlockwise	Box Hill-Camberwell-Glenferrie-Burnley-Richmond	4	15.0	8	15.0	3	20.0	3	20.0	6	20.0	3	20.0				
	City Loop to Belgrave	Anticlockwise	Richmond-Burnley-Glenferrie-Camberwell-Box Hill	3	20.0	6	20.0	3	20.0	4	15.0	8	15.0	3	20.0				
	Upper Ferntree Gully to City Loop	Anticlockwise	Box Hill-Camberwell-Glenferrie-Burnley-Richmond	3	20.0	6	20.0	3	20.0	3	20.0	6	20.0	3	20.0				
	City Loop to Upper Ferntree Gully	Anticlockwise	Richmond-Burnley-Glenferrie-Camberwell-Box Hill	3	20.0	6	20.0	3	20.0	3	20.0	6	20.0	3	20.0				
	Ringwood to City Loop	Anticlockwise	Box Hill-Camberwell-Glenferrie-Burnley-Richmond	4	15.0	8	15.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Ringwood	Anticlockwise	Richmond-Burnley-Glenferrie-Camberwell-Box Hill	0	0.0	0	0.0	0	0.0	4	15.0	8	15.0	0	0.0				
3 SUNSHINE - DANDENONG METRO	Sunbury to Cranbourne East	Metro Tunnel	All stations (express Domain to Malvern)	8	7.5	16	7.5	4	15.0	8	7.5	16	7.5	4	15.0	800	900	1250	500
	Cranbourne East to Sunbury	Metro Tunnel	All stations (express Malvern to Domain)	8	7.5	16	7.5	4	15.0	8	7.5	16	7.5	4	15.0				
	Melton to Pakenham East	Metro Tunnel	All station (express Domain to Malvern)	8	7.5	16	7.5	4	15.0	8	7.5	16	7.5	4	15.0				
	Pakenham East to Melton	Metro Tunnel	All stations (express Malvern to Domain)	8	7.5	16	7.5	4	15.0	8	7.5	16	7.5	4	15.0				
	Watergardens to Westall	Metro Tunnel	All stations (express Domain to Malvern)	4	15.0	8	15.0	0	0.0	4	15.0	8	15.0	0	0.0				
	Westall to Watergardens	Metro Tunnel	All stations (express Malvern to Domain)	4	15.0	8	15.0	0	0.0	4	15.0	8	15.0	0	0.0				
	Rockbank to Pakenham East	Metro Tunnel	All station (express Domain to Malvern)	4	15.0	8	15.0	0	0.0	4	15.0	8	15.0	0	0.0				
	Pakenham East to Rockbank	Metro Tunnel	All stations (express Malvern to Domain)	4	15.0	8	15.0	0	0.0	4	15.0	8	15.0	0	0.0				
4 CROSS CITY METRO	Upfield to Sandringham	Direct	All Stations	10	6.0	20	6.0	6	10.0	10	6.0	20	6.0	6	10.0	800	900	1250	500
	Sandringham to Upfield	Direct	All Stations	10	6.0	20	6.0	6	10.0	10	6.0	20	6.0	6	10.0				
5 NEWPORT - BURNLEY METRO	Wyndham Vale to Glen Waverley	Direct	Laverton-Newport	12	5.0	24	5.0	6	10.0	12	5.0	24	5.0	6	10.0	800	900	1250	500
	Glen Waverley to Wyndham Vale	Direct	Newport-Laverton	12	5.0	24	5.0	6	10.0	12	5.0	24	5.0	6	10.0				
	Laverton to Box Hill	Direct	All Stations	6	10.0	12	10.0	6	10.0	6	10.0	12	10.0	6	10.0				
	Box Hill to Laverton	Direct	All Stations	6	10.0	12	10.0	6	10.0	6	10.0	12	10.0	6	10.0				
	Williamstown to Alamein	Direct	All Stations	6	10.0	12	10.0	0	0.0	6	10.0	12	10.0	0	0.0				
	Alamein to Williamstown	Direct	All Stations	6	10.0	12	10.0	0	0.0	6	10.0	12	10.0	0	0.0				
	Laverton to Newport	Shuttle	All Stations	0	0.0	0	0.0	6	10.0	0	0.0	0	0.0	6	10.0				
	Newport to Laverton	Shuttle	All Stations	0	0.0	0	0.0	6	10.0	0	0.0	0	0.0	6	10.0				
	Williamstown to Box Hill	Direct	All Stations	0	0.0	0	0.0	6	10.0	0	0.0	0	0.0	6	10.0				
	Box Hill to Williamstown	Direct	All Stations	0	0.0	0	0.0	6	10.0	0	0.0	0	0.0	6	10.0				
	Alamein to Camberwell	Shuttle	All Stations	0	0.0	0	0.0	6	10.0	0	0.0	0	0.0	6	10.0				
	Camberwell to Alamein	Shuttle	All Stations	0	0.0	0	0.0	6	10.0	0	0.0	0	0.0	6	10.0				
6 CRAIGIEBURN-BAXTER METRO	Baxter to Craigieburn	Direct	Mordialloc-Cheltenham-Caulfield-Malvern-South Yarra (via Parliament, Melb Central, Flagstaff)	10	6.0	20	6.0	0	0.0	0	0.0	0	0.0	0	0.0	800	900	1250	500
	Craigieburn to Baxter	Direct	South Yarra-Malvern-Caulfield-Cheltenham-Mordialloc (via Flagstaff, Melb Central, Parliament)	0	0.0	0	0.0	0	0.0	10	6.0	20	6.0	0	0.0				
	Baxter to Craigieburn	Direct	Malvern-South Yarra (via Parliament, Melb Central, Flagstaff)	0	0.0	0	0.0	0	0.0	10	6.0	20	6.0	0	0.0				
	Craigieburn to Baxter	Direct	South Yarra-Malvern (via Flagstaff, Melb Central, Parliament)	10	6.0	20	6.0	0	0.0	0	0.0	0	0.0	0	0.0				
	Baxter to Craigieburn	Direct	All stations (via Parliament, Melb Central, Flagstaff)	0	0.0	0	0.0	6	10.0	0	0.0	0	0.0	6	10.0				
	Craigieburn to Baxter	Direct	All stations (via Flagstaff, Melb Central, Parliament)	0	0.0	0	0.0	6	10.0	0	0.0	0	0.0	6	10.0				
	Carnum to Craigieburn	Direct	All stations (via Parliament, Melb Central, Flagstaff)	5.5	10.9	11	10.9	0	0.0	5.5	10.9	11	10.9	0	0.0				
	Craigieburn to Carnum	Direct	All stations (via Flagstaff, Melb Central, Parliament)	5.5	10.9	11	10.9	0	0.0	5.5	10.9	11	10.9	0	0.0				
	Mordialloc to Essendon	Direct	All stations (via Parliament, Melb Central, Flagstaff)	5.5	10.9	11	10.9	0	0.0	5.5	10.9	11	10.9	0	0.0				
	Essendon to Mordialloc	Direct	All stations (via Flagstaff, Melb Central, Parliament)	5.5	10.9	11	10.9	0	0.0	5.5	10.9	11	10.9	0	0.0				
VILINE	Marshall to Southern Cross	via RRL	All stations to Geelong, express to Lara, Little River, Black Forest, Footscray (setdown)	4	15.0	6	20.0	1	60.0	2	30.0	4	30.0	1	60.0	910	910	910	750
	Southern Cross to Marshall	via RRL	Footscray (pickup), Black Forest, Little River, Lara, express to Geelong, then all stations	2	30.0	4	30.0	1	60.0	4	15.0	6	20.0	1	60.0				
	Geelong to Southern Cross	via RRL	All stations to Lara, then express to Footscray (setdown)	4	15.0	6	20.0	1	60.0	2	30.0	4	30.0	1	60.0	910	910	910	750
	Southern Cross to Geelong	via RRL	Footscray (pickup), express to Lara, then all stations	2	30.0	4	30.0	1	60.0	4	15.0	6	20.0	1	60.0				
	Black Forest to Southern Cross	via RRL	All stations to Truganina, Footscray (setdown)	4	15.0	8	15.0	2	30.0	4	15.0	8	15.0	2	30.0	910	910	910	750
	Southern Cross to Black Forest	via RRL	Footscray (pickup), Truganina, then all stations	4	15.0	8	15.0	2	30.0	4	15.0	8	15.0	2	30.0				
	Warrambool to Southern Cross	via RRL	Sherwood Park, Camperdown, Colac, Birregurra, Winchelsea, Geelong, Footscray (set down)	0	0.0	1	120.0	0.3	180.0	0.33333	180.0	1	120.0	0.3	180.0	370	370	370	370
	Southern Cross to Warrambool	via RRL	Footscray (pick up), Geelong, Winchelsea, Birregurra, Colac, Camperdown, Sherwood Park	0	0.0	1	120.0	0.3	180.0	0.33333	180.0	1	120.0	0.3	180.0				
	Ballarat to Southern Cross	via RRL	All stations to Bacchus Marsh, Melton (set down) then express to Sunshine (setdown), Footscray (setdown)	4	15.0	6	20.0	2	30.0	2	30.0	4	30.0	2	30.0	564	564	564	444
	Southern Cross to Ballarat	via RRL	Footscray (pickup), Sunshine (pickup), express to Melton (pick up), Bacchus Marsh, then all stations	2	30.0	4	30.0	2	30.0	4	15.0	6	20.0	2	30.0				
	Ararat to Southern Cross	via RRL	Beaufort, Wendouree, Ballarat, Ballan, Bacchus Marsh, Melton (set down), Footscray (set down)	0	0.0	1	120.0	0.3	180.0	0.33333	180.0	1	120.0	0.3	180.0	222	22	222	222
	Southern Cross to Ararat	via RRL	Footscray (pick up), Melton (pick up), Bacchus Marsh, Ballan, Ballarat, Wendouree, Beaufort	0	0.0	1	120.0	0.3	180.0	0.33333	180.0	1	120.0	0.3	180.0				
	Maryborough to Southern Cross	via RRL	Talbot, Clunes, Creswick, Ballarat, Ballan, Bacchus Marsh, Melton (set down), Footscray (set down)	0	0.0	1	120.0	0.3	180.0	0.33333	180.0	1	120.0	0.3	180.0	222	222	222	222
	Southern Cross to Maryborough	via RRL	Footscray (pick up), Melton (pick up), Bacchus Marsh, Ballan, Ballarat, Creswick, Clunes, Talbot	0	0.0	1	120.0	0.3	180.0	0.33333	180.0	1	120.0	0.3	180.0				
	Kyneton to Southern Cross	via RRL	All stations from Kyneton to Sunbury (set down), Footscray (set down)	2	30.0	3	40.0	1	60.0	1	60.0	2	60.0	1	60.0	564	564	564	444
	Southern Cross to Kyneton	via RRL	Footscray (pickup), Sunbury (pickup), All stations to Kyneton	1	60.0	2	60.0	1	60.0	2	30.0	3	40.0	1	60.0				
	Bendigo to Southern Cross	via RRL	All stations to Kyneton, Gisborne, Footscray (setdown)	2	30.0	3	40.0	2	30.0	2	30.0	3	40.0	2	30.0	564	564	564	444
	Southern Cross to Bendigo	via RRL	Footscray (pickup), Gisborne, Kyneton, then all stations	2	30.0	3	40.0	2	30.0	2	30.0	3	40.0	2	30.0				
	Echuca to Southern Cross	via RRL	Rochester, Elmore, Bendigo, All stations to Kyneton, Gisborne, Footscray (setdown)	0	0.0	1	120.0	0.3	180.0	0.33333	180.0	1	120.0	0.3	180.0	222	222	222	222
	Southern Cross to Echuca	via RRL	Footscray (pickup), Gisborne, Kyneton, then all stations to Bendigo, Elmore, Rochester	0	0.0	1	120.0	0.3	180.0	0.33333	180.0	1	120.0	0.3	180.0				
	Swan Hill to Southern Cross	via RRL	Kerang, Pyramid, Dingee, Eaglehawke, Bendigo, Castlemaine, Kyneton, Woodend, Gisborne, Sunbury (set down),	0	0.0	1	120.0	0.3	180.0	0.33333	180.0	1	120.0	0.3	180.0	222	222	222	222
	Southern Cross to Swan Hill	via RRL	Sunbury (pick up), Gisborne, Woodend, Kyneton, Castlemaine, Bendigo, Eaglehawke, Dingee, Pyramid, Kerang	0	0.0	1	120.0	0.3	180.0	0.33333	180.0	1	120.0	0.3	180.0				
	Seymour to Southern Cross	-	All stations to Craigieburn (set down) then express to Southern Cross	2	30.0	4	30.0	1	60.0	1	60.0	2	60.0	1	60.0	564	564	564	444
	Southern Cross to Seymour	-	Express to Craigieburn (pickup), then all stations	1	60.0	2	60.0	1	60.0	2	30.0	4	30.0	1	60.0				
	Albury to Southern Cross	Standard Gauge Line	Wodonga, Chiltern, Springhurst, Wangaratta, Benalla, Violet Town, Euroa, Avenal, Seymour, Broadmeadows (Set down)	1	60.0	2	60.0	0.3	180.0	1	60.0	1	120.0	0.3	180.0	370			
	Southern Cross to Albury	Standard Gauge Line	Broadmeadows (pick up), Seymour, Avenal, Euroa, Violet Town, Benalla, Wangaratta, Springhurst, Chiltern, Wodonga	1	60.0	2	60.0	0.3	180.0	1	60.0	1	120.0	0.3	180.0				
	Shepparton to Southern Cross	-	Mooroopna, Murchison East, Nagambie, Seymour, Broadmeadows (set down),	1	60.0	2	60.0	0.5	120.0	1	60.0	2	60.0	0.5	120.0	282	282	282	282
	Southern Cross to Shepparton	-	Broadmeadows (pick up), Seymour, Nagambie, Murhison East, Mooroopna	1	60.0	2	60.0	0.5	120.0	1	60.0	2	60.0	0.5	120.0				
	Traralgon to Flinders Street	-	All stations to Pakenham (setdown), Dandenong (setdown) then express to Flinders Street	2	30.0	4	30.0	1	60.0	1	60.0	2	60.0	1	60.0	564	564	564	444
	Flinders St to Traralgon	-	Express to Dandenong (pickup), express to Pakenham (pickup) and then all stations	1	60.0	2	60.0	1	60.0	2	30.0	4	30.0	1	60.0				
	Bairnsdale to Southern Cross	-	Stafford, Sale, Rosedale, Traralgon, Morwell, Moe, Trafalgar, Yarragon, Warragul, Drouin, Garfield, Pakenham (set down), Dandenong (set down), Flinders St (set down)	0	0.0	1	120.0	0.3	180.0	0.33333	180.0	1	120.0	0.3	180.0	370	370	370	370
	Southern Cross to Bairnsdale	-	Flinders St (pick up), Dandenong (pick up), Pakenham (pick up), Garfield, Drouin, Warragul, Yarragon, Trafalgar, Moe, Morwell, Traralgon, Rosedale, Sale, Stafford	0	0.0	1	120.0	0.3	180.0	0.33333	180.0	1	120.0	0.3	180.0				
AVALON SHUTTLE	Avalon to Little River	-	Avalon - Little River	2	30.0	4	30.0	2	30.0	2	30.0	4	30.0	2	30.0	327	327	327	267
	Little River to Avalon	-	Little River - Avalon	2	30.0	4	30.0	2	30.0	2	30.0	4	30.0	2	30.0				
STONY POINT LINE	Stony Point to Frankston	-	Stopping all stations	2	30.0	4	30.0	1	60.0	2	30.0	4	30.0	1	60.0	327	327	327	267
	Frankston to Stony Point	-	Stopping all stations	2	30.0	4	30.0	1	60.0	2	30.0	4	30.0	1	60.0				

Figure 24 – Train Service Plan -2026 Reference Case

Group	Origin-Destination	Loop Direction	Stopping pattern	AM Peak 1 hour Services (tph)	AM Peak 1 hour Headway (min)	AM Peak 2hour Services (no.)	AM Peak 2hour Headway (min)	Inter Peak 1 hour Services (tph)	Inter Peak 1 hour Headway (min)	PM Peak 1 hour Services (tph)	PM Peak 1 hour Headway (min)	PM Peak 2hour Services (no.)	PM Peak 2hour Headway (min)	Off-Peak 1 hour Services (tph)	Off-Peak 1 hour Headway (min)	Av. Veh Capacity	Design Guide	Crush Load	Seating
CLIFTON HILL LOOP METRO	South Morang to City Loop	Clockwise	All stations	10	6.0	20	6.0	6	10.0	6	10.0	12	10.0	6	10.0	800	900	1250	500
	City Loop to South Morang	Clockwise	All stations	6	10.0	12	10.0	6	10.0	10	6.0	20	6.0	6	10.0				
	Reservoir to City Loop	Clockwise	All stations	3	20.0	6	20.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Reservoir	Clockwise	All stations	0	0.0	0	0.0	0	0.0	3	20.0	6	20.0	0	0.0				
	Macleod to City Loop	Clockwise	Macleod-Rosanna-Eaglemont-Ivanhoe-Alphington-Dennis-Clifton Hill, then all stations	7	8.6	14	8.6	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Macleod	Clockwise	Clifton Hill-Dennis-Alphington-Ivanhoe-Eaglemont-Rosanna-Macleod, then all stations	0	0.0	0	0.0	0	0.0	7	8.6	14	8.6	0	0.0				
	Eltham to City Loop	Clockwise	Macleod-Heidelberg-Ivanhoe-Darebin-Fairfield-Westgarth-Clifton Hill, then all stations	4	15.0	8	15.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Eltham	Clockwise	Clifton Hill-Westgarth-Fairfield-Darebin-Ivanhoe-Heidelberg-Macleod, then all stations	0	0.0	0	0.0	0	0.0	4	15.0	8	15.0	0	0.0				
	Hurstbridge to City Loop	Clockwise	Macleod-Heidelberg-Ivanhoe-Darebin-Fairfield-Westgarth-Clifton Hill, then all stations	3	20.0	6	20.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Hurstbridge	Clockwise	Clifton Hill-Westgarth-Fairfield-Darebin-Ivanhoe-Heidelberg-Macleod, then all stations	0	0.0	0	0.0	0	0.0	3	20.0	6	20.0	0	0.0				
	Eltham to City Loop	Clockwise	All stations	0	0.0	0	0.0	3	20.0	3	20.0	6	20.0	3	20.0				
	City Loop to Eltham	Clockwise	All stations	3	20.0	6	20.0	3	20.0	0	0.0	0	0.0	3	20.0				
	Hurstbridge to City Loop	Clockwise	All stations	0	0.0	0	0.0	3	20.0	3	20.0	6	20.0	3	20.0				
	City Loop to Hurstbridge	Clockwise	All stations	3	20.0	6	20.0	3	20.0	0	0.0	0	0.0	3	20.0				
RINGWOOD LOOP METRO	Lilydale to City Loop	Anticlockwise	Box Hill-Camberwell-Glenferrie-Burnley-Richmond	10	6.0	20	6.0	6	10.0	6	10.0	12	10.0	6	10.0	800	900	1250	500
	City Loop to Lilydale	Anticlockwise	Richmond-Burnley-Glenferrie-Camberwell-Box Hill	6	10.0	12	10.0	6	10.0	10	6.0	20	6.0	6	10.0				
	Belgrave to City Loop	Anticlockwise	Box Hill-Camberwell-Glenferrie-Burnley-Richmond	4	15.0	8	15.0	3	20.0	3	20.0	6	20.0	3	20.0				
	City Loop to Belgrave	Anticlockwise	Richmond-Burnley-Glenferrie-Camberwell-Box Hill	3	20.0	6	20.0	3	20.0	4	15.0	8	15.0	3	20.0				
	Upper Ferntree Gully to City Loop	Anticlockwise	Box Hill-Camberwell-Glenferrie-Burnley-Richmond	3	20.0	6	20.0	3	20.0	3	20.0	6	20.0	3	20.0				
	City Loop to Upper Ferntree Gully	Anticlockwise	Richmond-Burnley-Glenferrie-Camberwell-Box Hill	3	20.0	6	20.0	3	20.0	3	20.0	6	20.0	3	20.0				
	Ringwood to City Loop	Anticlockwise	Box Hill-Camberwell-Glenferrie-Burnley-Richmond	4	15.0	8	15.0	0	0.0	0	0.0	0	0.0	0	0.0				
	City Loop to Ringwood	Anticlockwise	Richmond-Burnley-Glenferrie-Camberwell-Box Hill	0	0.0	0	0.0	0	0.0	4	15.0	8	15.0	0	0.0				
SUNSHINE - DANDENONG METRO	Sunbury to Cranbourne East	Metro tunnel	All stations (express Domain to Malvern)	8	7.5	16	7.5	6	10.0	8	7.5	16	7.5	6	10.0	1590	1590	2302	660
	Cranbourne East to Sunbury	Metro tunnel	All stations (express Malvern to Domain)	8	7.5	16	7.5	6	10.0	8	7.5	16	7.5	6	10.0				
	Melton to Pakenham East	Metro tunnel	All station (express Domain to Malvern)	8	7.5	16	7.5	6	10.0	8	7.5	16	7.5	6	10.0				
	Pakenham East to Melton	Metro tunnel	All stations (express Malvern to Domain)	8	7.5	16	7.5	6	10.0	8	7.5	16	7.5	6	10.0				
	Watergardens to Westall	Metro tunnel	All station (express Domain to Malvern)	4	15.0	8	15.0	0	0.0	4	15.0	8	15.0	0	0.0				
	Westall to Watergardens	Metro tunnel	All stations (express Malvern to Domain)	4	15.0	8	15.0	0	0.0	4	15.0	8	15.0	0	0.0				
	Rockbank to Pakenham East	Metro tunnel	All stations (express Domain to Malvern)	4	15.0	8	15.0	0	0.0	4	15.0	8	15.0	0	0.0				
	Pakenham East to Rockbank	Metro tunnel	All stations (express Malvern to Domain)	4	15.0	8	15.0	0	0.0	4	15.0	8	15.0	0	0.0				
CROSS-CITY METRO	Airport to South Yarra	Direct	North Melbourne-Southern Cross-Flinders Street-Richmond	12	5.0	24	5.0	6	10.0	12	5.0	24	5.0	6	10.0	800	900	1250	500
	South Yarra to Airport	Direct	Richmond-Flinders Street-Southern Cross-North Melbourne	12	5.0	24	5.0	6	10.0	12	5.0	24	5.0	6	10.0				
	Donnybrook to Sandringham	Direct	All stations (via Upfield)	6	10.0	12	10.0	6	10.0	6	10.0	12	10.0	6	10.0				
	Sandringham to Donnybrook	Direct	All stations (via Upfield)	6	10.0	12	10.0	6	10.0	6	10.0	12	10.0	6	10.0				
	Upfield to Sandringham	Direct	All stations	6	10.0	12	10.0	0	0.0	6	10.0	12	10.0	0	0.0				
	Sandringham to Upfield	Direct	All stations	6	10.0	12	10.0	0	0.0	6	10.0	12	10.0	0	0.0				
NEWPORT - BURNLEY METRO	Wyndham Vale to Glen Waverley	Direct	Laverton-Newport	12	5.0	24	5.0	6	10.0	12	5.0	24	5.0	6	10.0	800	900	1250	500
	Glen Waverley to Wyndham Vale	Direct	Newport-Laverton	12	5.0	24	5.0	6	10.0	12	5.0	24	5.0	6	10.0				
	Laverton to Box Hill	Direct	All stations	6	10.0	12	10.0	6	10.0	6	10.0	12	10.0	6	10.0				
	Box Hill to Laverton	Direct	All stations	6	10.0	12	10.0	6	10.0	6	10.0	12	10.0	6	10.0				
	Williamstown to Alamein	Direct	All stations	6	10.0	12	10.0	0	0.0	6	10.0	12	10.0	0	0.0				
	Alamein to Williamstown	Direct	All stations	6	10.0	12	10.0	0	0.0	6	10.0	12	10.0	0	0.0				
	Laverton to Newport	Shuttle	All stations	0	0.0	0	0.0	6	10.0	0	0.0	0	0.0	6	10.0				
	Newport to Laverton	Shuttle	All stations	0	0.0	0	0.0	6	10.0	0	0.0	0	0.0	6	10.0				
	Williamstown to Box Hill	Direct	All stations	0	0.0	0	0.0	6	10.0	0	0.0	0	0.0	6	10.0				
	Box Hill to Williamstown	Direct	All stations	0	0.0	0	0.0	6	10.0	0	0.0	0	0.0	6	10.0				
	Alamein to Camberwell	Shuttle	All stations	0	0.0	0	0.0	6	10.0	0	0.0	0	0.0	6	10.0				
	Camberwell to Alamein	Shuttle	All stations	0	0.0	0	0.0	6	10.0	0	0.0	0	0.0	6	10.0				
CRAIGIEBURN - BAXTER METRO	Baxter to Craigieburn	Direct	Moorabbin-Cheltenham-Caulfield-Malvern-South Yarra (via Parliament, Melb Central, Flagstaff)	10	6.0	20	6.0	0	0.0	0	0.0	0	0.0	0	0.0	800	900	1250	500
	Craigieburn to Baxter	Direct	South Yarra-Malvern-Caulfield-Cheltenham-Moorabbin (via Flagstaff, Melb Central, Parliament)	0	0.0	0	0.0	0	0.0	10	6.0	20	6.0	0	0.0				
	Baxter to Craigieburn	Direct	Malvern-South Yarra (via Parliament, Melb Central, Flagstaff)	0	0.0	0	0.0	0	0.0	10	6.0	20	6.0	0	0.0				
	Craigieburn to Baxter	Direct	South Yarra-Malvern (via Flagstaff, Melb Central, Parliament)	10	6.0	20	6.0	0	0.0	0	0.0	0	0.0	0	0.0				
	Frankston to Craigieburn	Direct	All stations (via Parliament, Melb Central, Flagstaff)	5.5	10.9	11	10.9	0	0.0	5.5	10.9	11	10.9	0	0.0				
	Craigieburn to Frankston	Direct	All stations (via Flagstaff, Melb Central, Parliament)	5.5	10.9	11	10.9	0	0.0	5.5	10.9	11	10.9	0	0.0				
	Moorabbin to Essendon	Direct	All stations (via Parliament, Melb Central, Flagstaff)	5.5	10.9	11	10.9	0	0.0	5.5	10.9	11	10.9	0	0.0				
	Essendon to Moorabbin	Direct	All stations (via Flagstaff, Melb Central, Parliament)	5.5	10.9	11	10.9	0	0.0	5.5	10.9	11	10.9	0	0.0				
	Baxter to Craigieburn	Direct	All stations (via Parliament, Melb Central, Flagstaff)	0	0.0	0	0.0	6	10.0	0	0.0	0	0.0	6	10.0				
	Craigieburn to Baxter	Direct	All stations (via Flagstaff, Melb Central, Parliament)	0	0.0	0	0.0	6	10.0	0	0.0	0	0.0	6	10.0				
V/LINE	Marshall to Southern Cross	via RRL	All stations to Geelong, express to Lara, Little River, WyndhamVale, Tarneit, Footscray (setdown)	4	15.0	8	15.0	1	60.0	2	30.0	4	30.0	1	60.0	910	910	910	750
	Southern Cross to Marshall	via RRL	Footscray (pickup), Tarneit, Wyndham Vale, Little River, Lara, express to Geelong, then all stations	2	30.0	4	30.0	1	60.0	4	15.0	8	15.0	1	60.0				
	Geelong to Southern Cross	via RRL	All stations to Lara, then express to Footscray (setdown)	4	15.0	8	15.0	1	60.0	2	30.0	4	30.0	1	60.0	910	910	910	750
	Southern Cross to Geelong	via RRL	Footscray (pickup), express to Lara, then all stations	2	30.0	4	30.0	1	60.0	4	15.0	8	15.0	1	60.0				
	Black Forest to Southern Cross	via RRL	All stations to Footscray (set down)	8	7.5	12	10.0	2	30.0	4	15.0	8	15.0	2	30.0	910	910	910	750
	Southern Cross to Black Forest	via RRL	Footscray (pickup), then all stations	4	15.0	8	15.0	2	30.0	8	7.5	12	10.0	2	30.0				
	Warrnambool to Southern Cross	via RRL	Sherwood Park, Camperdown, Colac, Birregurra, Winchelsea, Geelong, Footscray (set down)	0	0.0	1	120.0	0.5	120.0	0.5	120.0	1	120.0	0.5	120.0	370	370	370	370
	Southern Cross to Warrnambool	via RRL	Footscray (pick up), Geelong, Winchelsea, Birregurra, Colac, Camperdown, Sherwood Park	0	0.0	1	120.0	0.5	120.0	0.5	120.0	1	120.0	0.5	120.0				
	Ballarat to Southern Cross	via RRL	All stations to Bacchus Marsh, Melton (set down) then express to Sunshine (setdown), Footscray (setdown)	4	15.0	8	15.0	2	30.0	2	30.0	4	30.0	2	30.0	564	564	564	444
	Southern Cross to Ballarat	via RRL	Footscray (pickup), Sunshine (pickup), express to Melton (pick up), Bacchus Marsh, then all stations	2	30.0	4	30.0	2	30.0	4	15.0	8	15.0	2	30.0				
	Ararat to Southern Cross	via RRL	Beaufort, Wendouree, Ballarat, Ballan, Bacchus Marsh, Melton (set down), Footscray (set down)	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1	120.0	0.3	180.0	222	222	222	222
	Southern Cross to Ararat	via RRL	Footscray (pick up), Melton (pick up), Bacchus Marsh, Ballan, Ballarat, Wendouree, Beaufort	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1	120.0	0.3	180.0				
	Maryborough to Southern Cross	via RRL	Talbot, Clunes, Creswick, Ballarat, Ballan, Bacchus Marsh, Melton (set down), Footscray (set down)	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1	120.0	0.3	180.0	222	222	222	222
	Southern Cross to Maryborough	via RRL	Footscray (pick up), Melton (pick up), Bacchus Marsh, Ballan, Ballarat, Creswick, Clunes, Talbot	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1	120.0	0.3	180.0				
	Kyneton to Southern Cross	via RRL	All stations from Kyneton to Sunbury (setdown), Footscray (set down)	2	30.0	4	30.0	1	60.0	1	60.0	2	60.0	1	60.0	564	564	564	444
	Southern Cross to Kyneton	via RRL	Footscray (pickup), Sunbury (pickup), all stations to Kyneton	1	60.0	2	60.0	1	60.0	2	30.0	4	30.0	1	60.0				
	Bendigo to Southern Cross	via RRL	All stations to Kyneton-Gisborne, Footscray (setdown)	2	30.0	4	30.0	2	30.0	2	30.0	4	30.0	2	30.0	564	564	564	444
	Southern Cross to Bendigo	via RRL	Footscray (pickup), Gisborne-Kyneton, then all stations	2	30.0	4	30.0	2	30.0	2	30.0	4	30.0	2	30.0				
	Echuca to Southern Cross	via RRL	Rochester, Elmore, Bendigo, All stations to Kyneton-Gisborne, Footscray (setdown)	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1	120.0	0.3	180.0	222	222	222	222
	Southern Cross to Echuca	via RRL	Footscray (pickup), Gisborne-Kyneton, then all stations to Bendigo, Elmore, Rochester	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1	120.0	0.3	180.0				
	Swan Hill to Southern Cross	via RRL	Korong, Pyramid, Dingee, Eaglehawke, Bendigo, Castlemaine, Kyneton, Woodend, Gisborne, Sunbury (set down),	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1	120.0	0.3	180.0	282	282	282	282
	Southern Cross to Swan Hill	via RRL	Sunbury (pick up), Gisborne, Woodend, Kyneton, Castlemaine, Bendigo, Eaglehawke, Dingee, Pyramid, Korong	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1	120.0	0.3	180.0				
	Seymour to Southern Cross	-	All stations to Craigieburn (set down) then express to Southern Cross	2	30.0	4	30.0	1	60.0	1	60.0	2	60.0	1	60.0	564	564	564	444
	Southern Cross to Seymour	-	Express to Craigieburn (pickup), then all stations	1	60.0	2	60.0	1	60.0	2	30.0	4	30.0	1	60.0				
	Albury to Southern Cross	Standard Gauge Line	Wodonga, Chiltern, Springhurst, Wangaratta, Benalla, Violet Town, Euroa, Avenal, Seymour, Broadmeadows (Set down)	1	60.0	2	60.0	0.3	180.0	1	60.0	1	120.0	0.3	180.0	370	370	370	370
	Southern Cross to Albury	Standard Gauge Line	Broadmeadows (pick up), Seymour, Avenal, Euroa, Violet Town, Benalla, Wangaratta, Springhurst, Chiltern, Wodonga	1	60.0	2	60.0	0.3	180.0	1	60.0	1	120.0	0.3	180.0				
	Shepparton to Southern Cross	-	Mooroopna, Murchison East, Nagambie, Seymour, Broadmeadows (set down),	1	60.0	2	60.0	0.5	120.0	1	60.0	2	60.0	0.5	120.0	282	282	282	282
	Southern Cross to Shepparton	-	Broadmeadows (pick up), Seymour, Nagambie, Murchison East, Mooroopna	1	60.0	2	60.0	0.5	120.0	1	60.0	2	60.0	0.5	120.0				
	Traralgon to Flinders Street	-	All stations to Pakenham (setdown), Dandenong (setdown) then express to Flinders Street	2	30.0	4	30.0	1	60.0	1	60.0	2	60.0	1	60.0	564	564	564	444
	Flinders St to Traralgon	-	Express to Dandenong (pickup), express to Pakenham (pickup) and then all stations	1	60.0	2	60.0	1	60.0	2	30.0	4	30.0	1	60.0				
	Bairnsdale to Southern Cross	-	Stratford, Sale, Rosedale, Traralgon, Morwell, Moe, Trafalgar, Yarragon, Warragul, Drouin, Garfield, Pakenham (set down), Dandenong (set down), Flinders St (set down)	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1	120.0	0.3	180.0	370	370	370	370
	Southern Cross to Bairnsdale	-	Flinders St (pick up), Dandenong (pick up), Pakenham (pick up), Garfield, Drouin, Warragul, Yarragon, Trafalgar, Moe, Morwell, Traralgon, Rosedale, Sale, Stratford	0	0.0	1	120.0	0.3	180.0	0.3	180.0	1	120.0	0.3	180.0				
AVALON SHUTTLE	Avalon to Little River	-	Avalon - Little River	2	30.0	4	30.0	2	30.0	2	30.0	4	30.0	2	30.0	327	327	327	267
	Little River to Avalon	-	Little River - Avalon	2	30.0	4	30.0	2	30.0	2	30.0	4	30.0	2	30.0				
STONY POINT LINE	Stony Point to Frankston	-	Stopping all stations	2	30.0	4	30.0	1	60.0	2	30.0	4	30.0	1	60.0	327	327	327	267
	Frankston to Stony Point	-	Stopping all stations	2	30.0	4	30.0	1	60.0	2	30.0	4	30.0	1	60.0				

Figure 25 – Train Service Plan -2031 Reference Case

Parent Route	Route Id	Direction	Line From	Line To	LineVia	AM Peak 1 hour		Interpeak 1 hour		PM Peak 1 hour		Off Peak (Evening) 1 hour		Vehicle Capacity Information 1 hour		
						Frequency	Headway	Frequency	Headway	Frequency	Headway	Frequency	Headway	Av. Vehicle Capacity (Load Standard)	Av. Vehicle Crush Load	Seating
						(tph)	(min)	(tph)	(min)	(tph)	(min)	(tph)	(min)	(pax)	(pax)	(pax)
1	1	D	South Melbourne Beach	Melbourne University	Swanston St	6.0	10	6.0	10	6.0	10	6.0	10	70	125	38
		U	Melbourne University	South Melbourne Beach	Swanston St	6.0	10	6.0	10	6.0	10	6.0	10	70	125	38
3	3	D	East Malvern	Melbourne University	Swanston St	6.0	10	6.0	10	6.0	10	6.0	10	70	125	38
		U	Melbourne University	East Malvern	Swanston St	6.0	10	6.0	10	6.0	10	6.0	10	70	125	38
5	5	D	Malvern	Footscray Road (E-Gate)	Spencer St	7.5	8	5.0	12	7.5	8	5.0	12	70	125	38
		U	Footscray Road (E-Gate)	Malvern	Spencer St	7.5	8	5.0	12	7.5	8	5.0	12	70	125	38
6	6	D	Glen Iris	Melbourne University	Swanston St	7.0	9	7.0	9	7.0	9	7.0	9	90	168	36
		U	Melbourne University	Glen Iris	Swanston St	7.0	9	7.0	9	7.0	9	7.0	9	90	168	36
11	11	D	Victoria Harbour	West Preston	Collins St	10.0	6	10.0	6	10.0	6	10.0	6	150	260	64
		U	West Preston	Victoria Harbour	Collins St	10.0	6	10.0	6	10.0	6	10.0	6	150	260	64
12	12	D	St Kilda	Hoddle Street	La Trobe St	6.0	10	6.0	10	6.0	10	6.0	10	70	125	38
		U	Hoddle Street	St Kilda	La Trobe St	6.0	10	6.0	10	6.0	10	6.0	10	70	125	38
16	16	D	Caulfield Station via Luna Park	Melbourne University	St Kilda Beach	6.0	10	6.0	10	6.0	10	6.0	10	78	142	37
		U	Melbourne University	Caulfield Station via Luna Park	St Kilda Beach	6.0	10	6.0	10	6.0	10	6.0	10	78	142	37
19	19	D	City (Elizabeth Street)	North Coburg	Elizabeth St	12.0	5	12.0	5	12.0	5	12.0	5	130	260	64
		U	North Coburg	City (Elizabeth Street)	Elizabeth St	12.0	5	12.0	5	12.0	5	12.0	5	130	260	64
24	24	D	La Trobe Street West End	North Balwyn	La Trobe St	0.0	0	0.0	0	3.0	20	0.0	0	65	117	40
		U	North Balwyn	La Trobe Street West End	La Trobe St	3.0	20	0.0	0	0.0	0	0.0	0	65	117	40
City Shuttle	30D	D	Footscray Road (E-Gate)	St Vincents Plaza	La Trobe St	6.0	10	6.0	10	6.0	10	6.0	10	75	150	46
		U	St Vincents Plaza	Footscray Road (E-Gate)	La Trobe St	6.0	10	6.0	10	6.0	10	6.0	10	75	150	46
City Circle Tourist	35	CCW	City Circle Services (Anticlockwise)	City Circle Services (Anticlockwise)		0.0	0	6.0	10	6.0	10	6.0	10	75	150	46
		CW	City Circle Services (Clockwise)	City Circle Services (Clockwise)		0.0	0	6.0	10	6.0	10	6.0	10	75	150	46
48	48	D	Victoria Harbour Docklands	North Balwyn	Collins St	10.0	6	6.0	10	10.0	6	6.0	10	78	139	40
		U	North Balwyn	Victoria Harbour Docklands	Collins St	10.0	6	6.0	10	10.0	6	6.0	10	78	139	40
55	55	D	Toorak	West Coburg	William St	12.0	5	12.0	5	12.0	5	12.0	5	89	156	38
		U	West Coburg	Toorak	William St	12.0	5	12.0	5	12.0	5	12.0	5	89	156	38
57	57	D	City (Elizabeth Street)	West Maribyrnong	Elizabeth St	12.0	5	8.6	7	12.0	5	8.6	7	70	125	38
		U	West Maribyrnong	City (Elizabeth Street)	Elizabeth St	12.0	5	8.6	7	12.0	5	8.6	7	70	125	38
59	59	D	City (Elizabeth Street)	Airport West	Elizabeth St	12.0	5	10.0	6	12.0	5	10.0	6	120	200	40
		U	Airport West	City (Elizabeth Street)	Elizabeth St	12.0	5	10.0	6	12.0	5	10.0	6	120	200	40
64	64	D	Malvern Station	East Coburg	Swanston St	6.0	10	6.0	10	6.0	10	6.0	10	86	148	40
		U	East Coburg	Malvern Station	Swanston St	6.0	10	6.0	10	6.0	10	6.0	10	86	148	40
67	67	D	Carnegie	Moreland	Swanston St	6.0	10	6.0	10	6.0	10	6.0	10	79	138	39
		U	Moreland	Carnegie	Swanston St	6.0	10	6.0	10	6.0	10	6.0	10	79	138	39
68	68	D	Kew	East Brighton	Glenferrie Rd	6.0	10	6.0	10	6.0	10	6.0	10	70	125	38
		U	East Brighton	Kew	Glenferrie Rd	6.0	10	6.0	10	6.0	10	6.0	10	70	125	38
70	70	D	Waterfront City Docklands	Wattle Park	Flinders St	10.0	6	7.5	8	10.0	6	7.5	8	65	117	40
		U	Wattle Park	Waterfront City Docklands	Flinders St	10.0	6	7.5	8	10.0	6	7.5	8	65	117	40
72	72	D	Gardiner Station	Melbourne University	Swanston St	7.0	9	7.0	9	7.0	9	7.0	9	80	147	37
		U	Melbourne University	Gardiner Station	Swanston St	7.0	9	7.0	9	7.0	9	7.0	9	80	147	37
73	73	D	Camberwell	Gardiner Station	Burke Rd	6.0	10	6.0	10	6.0	10	6.0	10	70	125	38
		U	Gardiner Station	Camberwell	Burke Rd	6.0	10	6.0	10	6.0	10	6.0	10	70	125	38
75	75	D	Footscray Road (E-Gate)	Vermont South	Flinders St	8.0	8	8.0	7	8.0	8	8.0	7	120	200	40
		U	Vermont South	Footscray Road (E-Gate)	Flinders St	8.0	8	8.0	7	8.0	8	8.0	7	120	200	40
78	78	D	Prahran	North Richmond	Chapel St	6.0	10	6.0	10	6.0	10	6.0	10	74	144	44
		U	North Richmond	Prahran	Chapel St	6.0	10	6.0	10	6.0	10	6.0	10	74	144	44
82	82	D	Moonee Ponds	Footscray		5.0	12	5.0	12	5.0	12	5.0	12	70	125	38
		U	Footscray	Moonee Ponds		5.0	12	5.0	12	5.0	12	5.0	12	70	125	38
86	86	D	Waterfront City Docklands	Bundoora RMIT	Bourke St	12.0	5	10.0	6	12.0	5	10.0	6	120	200	40
		U	Bundoora RMIT	Waterfront City Docklands	Bourke St	12.0	5	10.0	6	12.0	5	10.0	6	120	200	40
96	96	D	St Kilda Beach	East Brunswick	Bourke St	12.0	5	10.0	6	12.0	5	10.0	6	150	260	64
		U	East Brunswick	St Kilda Beach	Bourke St	12.0	5	10.0	6	12.0	5	10.0	6	150	260	64
109	109	D	Port Melbourne	Box Hill	Collins St	11.0	5	10.0	6	11.0	5	10.0	6	110	197	40
		U	Box Hill	Port Melbourne	Collins St	11.0	5	10.0	6	11.0	5	10.0	6	110	197	40

Figure 26 – Tram Service Plan -2016/21 Reference Case

Parent Route	Route Id	Direction	Line From	Line To	LineVia	AM Peak 1 hour		Interpeak 1 hour		PM Peak 1 hour		Off Peak (Evening) 1 hour		Vehicle Capacity Information 1 hour		
						Frequency	Headway	Frequency	Headway	Frequency	Headway	Frequency	Headway	Av. Vehicle Capacity (Load Standard)	Av. Vehicle Crush Load	Seating
						(tph)	(min)	(tph)	(min)	(tph)	(min)	(tph)	(min)	(pax)	(pax)	(pax)
1	1	D	South Melbourne Beach	Melbourne University	Swanston St	12.0	5	6.0	10	12.0	5	6.0	10	120	200	40
		U	Melbourne University	South Melbourne Beach	Swanston St	12.0	5	6.0	10	12.0	5	6.0	10	120	200	40
3	3	D	East Malvern	Melbourne University	Swanston St	6.0	10	6.0	10	6.0	10	6.0	10	117	195	40
		U	Melbourne University	East Malvern	Swanston St	6.0	10	6.0	10	6.0	10	6.0	10	117	195	40
5	5	D	Malvern	Footscray Road (E-Gate)	Spencer St	12.0	5	6.0	10	12.0	5	6.0	10	133	234	56
		U	Footscray Road (E-Gate)	Malvern	Spencer St	12.0	5	6.0	10	12.0	5	6.0	10	133	234	56
6	6	D	Glen Iris	Melbourne University	Swanston St	12.0	5	7.5	8	12.0	5	7.5	8	133	234	56
		U	Melbourne University	Glen Iris	Swanston St	12.0	5	7.5	8	12.0	5	7.5	8	133	234	56
11	11	D	Fishermans Bend	West Preston	Collins St	12.0	5	10.0	6	12.0	5	10.0	6	150	260	64
		U	West Preston	Fishermans Bend	Collins St	12.0	5	10.0	6	12.0	5	10.0	6	150	260	64
12	12	D	St Kilda	Hoddle Street	La Trobe St	12.0	5	6.0	10	12.0	5	6.0	10	120	200	40
		U	Hoddle Street	St Kilda	La Trobe St	12.0	5	6.0	10	12.0	5	6.0	10	120	200	40
16	16	D	Caulfield Station via Luna Park	Melbourne University	St Kilda Beach	6.0	10	6.0	10	6.0	10	6.0	10	150	260	64
		U	Melbourne University	Caulfield Station via Luna Park	St Kilda Beach	6.0	10	6.0	10	6.0	10	6.0	10	150	260	64
19	19	D	City (Elizabeth Street)	North Coburg	Elizabeth St	12.0	5	12.0	5	12.0	5	12.0	5	130	260	64
		U	North Coburg	City (Elizabeth Street)	Elizabeth St	12.0	5	12.0	5	12.0	5	12.0	5	130	260	64
24	24	D	La Trobe Street West End	North Balwyn	La Trobe St	0.0	0	0.0	0	3.0	20	0.0	0	70	125	38
		U	North Balwyn	La Trobe Street West End	La Trobe St	3.0	20	0.0	0	0.0	0	0.0	0	70	125	38
City Shuttle	30D	D	Footscray Road (E-Gate)	St Vincents Plaza	La Trobe St	6.0	10	6.0	10	6.0	10	6.0	10	70	125	38
		U	St Vincents Plaza	Footscray Road (E-Gate)	La Trobe St	6.0	10	6.0	10	6.0	10	6.0	10	70	125	38
City Circle Tourist	35	CCW	City Circle Services (Anticlockwise)	City Circle Services (Anticlockwise)		0.0	0	6.0	10	6.0	0	6.0	10	75	150	46
		CW	City Circle Services (Clockwise)	City Circle Services (Clockwise)		0.0	0	6.0	10	6.0	0	6.0	10	75	150	46
48	48	D	Fishermans Bend	North Balwyn	Collins St	12.0	5	6.0	10	12.0	5	6.0	10	78	139	40
		U	North Balwyn	Fishermans Bend	Collins St	12.0	5	6.0	10	12.0	5	6.0	10	78	139	40
55	55	D	Toorak	West Coburg	William St	12.0	5	12.0	5	12.0	5	12.0	5	133	225	50
		U	West Coburg	Toorak	William St	12.0	5	12.0	5	12.0	5	12.0	5	133	225	50
57	57	D	City (Elizabeth Street)	West Maribyrnong (Defence Site)	Elizabeth St	12.0	5	8.6	7	12.0	5	8.6	7	120	200	40
		U	West Maribyrnong (Defence Site)	City (Elizabeth Street)	Elizabeth St	12.0	5	8.6	7	12.0	5	8.6	7	120	200	40
59	59	D	City (Elizabeth Street)	Airport West	Elizabeth St	12.0	5	10.0	6	12.0	5	10.0	6	147	254	62
		U	Airport West	City (Elizabeth Street)	Elizabeth St	12.0	5	10.0	6	12.0	5	10.0	6	147	254	62
64	64	D	Malvern Station	East Coburg	Swanston St	6.0	10	6.0	10	6.0	10	6.0	10	117	195	40
		U	East Coburg	Malvern Station	Swanston St	6.0	10	6.0	10	6.0	10	6.0	10	117	195	40
67	67	D	Carnegie	Moreland	Swanston St	6.0	10	6.0	10	6.0	10	6.0	10	117	195	40
		U	Moreland	Carnegie	Swanston St	6.0	10	6.0	10	6.0	10	6.0	10	117	195	40
68	68	D	Kew	East Brighton	Glenferrie Rd	6.0	10	6.0	10	6.0	10	6.0	10	70	125	38
		U	East Brighton	Kew	Glenferrie Rd	6.0	10	6.0	10	6.0	10	6.0	10	70	125	38
70	70	D	Waterfront City Docklands	Wattle Park	Flinders St	12.0	5	7.5	8	12.0	5	7.5	8	65	117	40
		U	Wattle Park	Waterfront City Docklands	Flinders St	12.0	5	7.5	8	12.0	5	7.5	8	65	117	40
72	72	D	Gardiner Station	Melbourne University	Swanston St	12.0	5	7.5	8	12.0	5	7.5	8	133	234	56
		U	Melbourne University	Gardiner Station	Swanston St	12.0	5	7.5	8	12.0	5	7.5	8	133	234	56
73	73	D	Camberwell	Gardiner Station	Burke Rd	6.0	10	6.0	10	6.0	10	6.0	10	70	125	38
		U	Gardiner Station	Camberwell	Burke Rd	6.0	10	6.0	10	6.0	10	6.0	10	70	125	38
75	75	D	Footscray Road (E-Gate)	Vermont South	Flinders St	12.0	5	8.6	7	12.0	5	8.6	7	120	200	40
		U	Vermont South	Footscray Road (E-Gate)	Flinders St	12.0	5	8.6	7	12.0	5	8.6	7	120	200	40
78	78	D	Prahran	North Richmond	Chapel St	6.0	10	6.0	10	6.0	10	6.0	10	65	117	40
		U	North Richmond	Prahran	Chapel St	6.0	10	6.0	10	6.0	10	6.0	10	65	117	40
82	82	D	Moonee Ponds	Footscray		6.0	10	6.0	10	6.0	10	6.0	10	65	117	40
		U	Footscray	Moonee Ponds		6.0	10	6.0	10	6.0	10	6.0	10	65	117	40
86	86	D	Waterfront City Docklands	Bundoora RMIT	Bourke St	12.0	5	10.0	6	12.0	5	10.0	6	150	260	64
		U	Bundoora RMIT	Waterfront City Docklands	Bourke St	12.0	5	10.0	6	12.0	5	10.0	6	150	260	64
96	96	D	St Kilda Beach	East Brunswick	Bourke St	12.0	5	10.0	6	12.0	5	10.0	6	150	260	64
		U	East Brunswick	St Kilda Beach	Bourke St	12.0	5	10.0	6	12.0	5	10.0	6	150	260	64
109	109	D	Port Melbourne	Box Hill	Collins St	12.0	5	10.0	6	12.0	5	10.0	6	110	197	40
		U	Box Hill	Port Melbourne	Collins St	12.0	5	10.0	6	12.0	5	10.0	6	110	197	40

Figure 27 – Tram Service Plan -2026/31 Reference Case

Bus Category -2021 & 2031 Reference Case

Route Number	Description	DOT Bus Category (2021)	DOT Bus Category (2031)
C1042	South Morang RS - Mernda	Coverage	Coverage
C1042	Mernda - South Morang RS	Coverage	Coverage
C1054	Werribee RS - Riverwalk Estate	Coverage	Coverage
C1054	Riverwalk Estate - Werribee RS	Coverage	Coverage
C1056	Williams Landing RS (via Tarneit RS) - Werribee RS	Coverage	Coverage
C1056	Werribee RS - Williams Landing RS (via Tarneit RS)	Coverage	Coverage
C1056	Williams Landing RS - Werribee RS (via Tarneit RS)	Coverage	Coverage
C1058	Williams Landing RS - Point Cook	Coverage	Coverage
C1058	Point Cook - Williams Landing RS	Coverage	Coverage
C1065	Sydenham RS - Deer Park RS	Coverage	Coverage
C1065	Deer Park RS - Sydenham RS	Coverage	Coverage
C1069	Sydenham RS - Caroline Springs (via Taylors Hill West)	Coverage	Coverage
C1069	Caroline Springs (via Taylors Hill West) - Sydenham RS	Coverage	Coverage
C1070	Melton - Melton RS via Brookfield	Coverage	Coverage
C1070	Melton RS - Melton via Brookfield	Coverage	Coverage
C1070	Melton via Brookfield - Melton RS	Coverage	Coverage
C1073	Toolern RS - West Melton (via Melton RS)	Coverage	Coverage
C1073	West Melton (via Melton RS) - Toolern RS	Coverage	Coverage
C1074	Cranbourne RS - Beaconsfield RS (via Cranbourne North PSP draft)	Coverage	Coverage
C1074	Beaconsfield RS - Cranbourne RS (via Cranbourne North PSP draft)	Coverage	Coverage
C1074	Cranbourne RS (via Cranbourne North PSP draft - Beaconsfield RS	Coverage	Coverage
C1075	Clyde RS - Berwick RS (via Clyde North PSP)	Coverage	Coverage
C1075	Berwick RS - Clyde RS (via Clyde North PSP)	Coverage	Coverage
C1075	Clyde RS (via Clyde North PSP) - Berwick RS	Coverage	Coverage
C1076	Cranbourne RS - Casey Central SC	Coverage	Coverage
C1076	Casey Central SC - Cranbourne RS	Coverage	Coverage
C1077	Cranbourne RS - Clyde RS	Coverage	Coverage
C1077	Clyde RS - Cranbourne RS	Coverage	Coverage
C1078	Cranbourne RS - Clyde North (via Clyde RS)	Coverage	Coverage
C1078	Clyde North (via Clyde RS) - Cranbourne RS	Coverage	Coverage
C1079	Officer RS Loop - Pakenham RS	Coverage	Coverage
C1079	Officer RS Loop - Pakenham RS	Coverage	Coverage
C1079	Officer RS - Pakenham RS Loop	Coverage	Coverage
C1081	Mount Cottrell (via Wyndham ValE) - Mambourin	Coverage	Coverage
C1081	Mambourin - Mount Cottrell (via Wyndham ValE)	Coverage	Coverage
C1081	Mount Cottrell - Mambourin (via Wyndham ValE)	Coverage	Coverage
C1082	Wyndham Vale Loop - Mambourin	Coverage	Coverage
C1082	Mambourin - Wyndham Vale Loop	Coverage	Coverage
C1082	Wyndham Vale - Mambourin Loop	Coverage	Coverage
C1083	Werribee RS - Wyndham Vale (via Mambourin)	Does Not Exist	Coverage
C1083	Wyndham Vale - Werribee RS (via Mambourin)	Does Not Exist	Coverage
C1084	Wyndham Vale (via Greaves St) - Werribee RS	Coverage	Coverage
C1084	Werribee RS - Wyndham Vale (via Greaves St)	Coverage	Coverage
C1084	Wyndham Vale - Werribee RS (via Greaves St)	Coverage	Coverage
C1085	Tarneit RS - Truganina	Does Not Exist	Coverage
C1085	Truganina - Tarneit RS	Does Not Exist	Coverage
C1086	Sunshine RS - Tarneit West	Coverage	Coverage
C1086	Tarneit West - Sunshine RS	Coverage	Coverage
C1086	Tarneit West - Sunshine RS	Coverage	Coverage
C1087	Wyndham Vale RS - Tarneit RS	Does Not Exist	Coverage
C1087	Tarneit RS - Wyndham Vale RS	Does Not Exist	Coverage
C1088	Altona RS (via Leakes Rd) - Tarneit	Coverage	Coverage
C1088	Tarneit - Altona RS (via Leakes Rd)	Coverage	Coverage
C1088	Werribee RS - Wyndham Vale (via Greaves St)	Coverage	Coverage
C1088	Wyndham Vale - Werribee RS (via Greaves St)	Coverage	Coverage
C1090	Wyndham Vale SC - Tarneit	Does Not Exist	Coverage
C1090	Tarneit - Wyndham Vale SC	Does Not Exist	Coverage
C1091	Sunbury RS - Sunbury North	Coverage	Coverage
C1091	Sunbury North - Sunbury RS	Coverage	Coverage
C1092	Sunbury RS - Diggers Rest RS	Coverage	Coverage
C1092	Diggers Rest RS - Sunbury RS	Coverage	Coverage
C1093	Sunbury RS (via Sunbury East & South) - Sunbury North	Coverage	Coverage
C1093	Sunbury North - Sunbury RS (via Sunbury East & South)	Coverage	Coverage
C1093	Sunbury RS - Sunbury North (via Sunbury East & South)	Coverage	Coverage
C1094	Sunbury North (via Goonawarra) - Sunbury RS	Coverage	Coverage
C1094	Sunbury RS - Sunbury North (via Goonawarra)	Coverage	Coverage
C1094	Sunbury North - Sunbury RS (via Sunbury East & South)	Coverage	Coverage
C1094	Sunbury RS - Sunbury North (via Sunbury East & South)	Coverage	Coverage
C1096	Mernda - Doreen Loop ACW	Coverage	Coverage
C1096	Mernda - Doreen Loop CW	Coverage	Coverage
C1096	Mernda - Doreen Loop	Coverage	Coverage
C1096	Doreen - Mernda Loop	Coverage	Coverage
C1097	Kalkallo - Mickleham	Does Not Exist	Coverage

Route Number	Description	DOT Bus Category (2021)	DOT Bus Category (2031)
C1097	Mickleham - Kalkallo	Does Not Exist	Coverage
C1098	Epping RS - Epping North & Aurora Loop - ACW	Coverage	Coverage
C1098	Epping RS - Epping North & Aurora Loop - CW	Coverage	Coverage
C1098	Epping RS - Epping North & Aurora Loop	Coverage	Coverage
C1098	Epping North & Aurora - Epping RS Loop	Coverage	Coverage
C1099	Donnybrook Loop (via Woodstock)	Does Not Exist	Coverage
C1099	Donnybrook Loop (via Woodstock)	Does Not Exist	Coverage
C1102	Caroline Springs Town Centre - Caroline Springs RS (via Rockbank)	Does Not Exist	Coverage
C1102	Caroline Springs RS - Caroline Springs Town Centre (via Rockbank)	Does Not Exist	Coverage
C1103	Tarneit RS - Plumpton	Does Not Exist	Coverage
C1103	Plumpton - Tarneit RS	Does Not Exist	Coverage
C1104	Caroline Springs - Toolern RS (via Rockbank RS)	Coverage	Coverage
C1104	Toolern RS - Caroline Springs (via Rockbank RS)	Coverage	Coverage
C1112	Donnybrook - Donnybrook North (via Donnybrook)	Does Not Exist	Coverage
C1112	Donnybrook North - Donnybrook (via Donnybrook)	Does Not Exist	Coverage
C1113	Craigieburn Loop (via Mickleham) - CW	Coverage	Coverage
C1113	Craigieburn Loop (via Mickleham) - ACW	Coverage	Coverage
C1113	Craigieburn Loop (via Mickleham)	Coverage	Coverage
C1113	Craigieburn Loop (via Mickleham)	Coverage	Coverage
C1115	Roxburgh Park - Craigieburn	Coverage	Coverage
C1115	Craigieburn - Roxburgh Park	Coverage	Coverage
C1116	Craigieburn RS - Broadmeadows RS (via Greenvale)	Does Not Exist	Coverage
C1116	Broadmeadows RS - Craigieburn RS (via Greenvale)	Does Not Exist	Coverage
C1117	Sydenham RS - Plumpton Loop (via Taylors Hill)	Coverage	Coverage
C1117	Plumpton - Sydenham RS Loop (via Taylors Hill)	Coverage	Coverage
C1118	Rockbank RS - Rockbank West (via Plumpton)	Does Not Exist	Coverage
C1118	Rockbank West - Rockbank RS (via Plumpton)	Does Not Exist	Coverage
C1119	Rockbank RS - Plumpton (via Leades Rd)	Does Not Exist	Coverage
C1119	Plumpton - Rockbank RS (via Leades Rd)	Does Not Exist	Coverage
C1120	Toolern RS - Toolern East RS (via Northern Toolern)	Does Not Exist	Coverage
C1120	Toolern East RS - Toolern RS (via Northern Toolern)	Does Not Exist	Coverage
C1121	Toolern RS - Toolern East RS (via Southern Toolern)	Coverage	Coverage
C1121	Toolern East RS - Toolern RS (via Southern Toolern)	Coverage	Coverage
C1127	Clyde Southern Loop - SB	Coverage	Coverage
C1127	Clyde Southern Loop - NB	Coverage	Coverage
C1127	Clyde Southern Loop	Coverage	Coverage
C1127	Clyde Southern Loop	Coverage	Coverage
LD003	Broadmeadows - Mickelham Rd	Does Not Exist	Direct
LD003	Mickelham Rd - Broadmeadows	Does Not Exist	Direct
LD004	Melton - Sydenham via Melton Highway	Does Not Exist	Direct
LD004	Sydenham - Melton via Melton Highway	Does Not Exist	Direct
LD021	Cranbourne - Clyde RS	Direct	Direct
LD021	Clyde RS - Cranbourne	Direct	Direct
LD068	Pakenham RS - Officer RS	Direct	Direct
LD068	Officer RS - Pakenham RS	Direct	Direct
LD070	Beaconsfield RS - Cranbourne RS	Does Not Exist	Direct
LD070	Cranbourne RS - Beaconsfield RS	Does Not Exist	Direct
LD078	Werribee - Wyndham Vale	Direct	Direct
LD078	Wyndham Vale - Werribee	Direct	Direct
LD080	Hoppers Crossing RS - Tarneit	Direct	Direct
LD080	Tarneit - Hoppers Crossing RS	Direct	Direct
LD082	Botanic Loop - ACW	Direct	Direct
LD082	Botanic Loop - CW	Direct	Direct
LD082	Botanic Loop	Direct	Direct
LD082	Botanic Loop	Direct	Direct
LD084	Beaconsfield RS - Officer RS	Direct	Direct
LD084	Officer RS - Beaconsfield RS	Direct	Direct
LD085	Pakenham RS - Officer RS	Direct	Direct
LD085	Officer RS - Pakenham RS	Direct	Direct
LD096	Wollert - Epping Plaza SC (via Epping Rd)	Direct	Direct
LD096	Epping Plaza SC - Wollert (via Epping Rd)	Direct	Direct
LD096	Wollert - Epping Plaza SC (via Epping Rd)	Direct	Direct
LD106	Mernda - Craigieburn RS	Direct	Direct
LD106	Craigieburn RS - Mernda	Direct	Direct
LD107	Pakenham Loop - ACW	Direct	Direct
LD107	Pakenham Loop - CW	Direct	Direct
LD107	Pakenham Loop	Direct	Direct
LD107	Pakenham Loop	Direct	Direct
LD109	Cranbourne West - Dandenong	Does Not Exist	Direct
LD109	Dandenong - Cranbourne West	Does Not Exist	Direct
LD122	Werribee RS - Hoppers Crossing RS (via Tarneit North)	Does Not Exist	Direct
LD122	Hoppers Crossing RS - Werribee RS (via Tarneit North)	Does Not Exist	Direct
LD123	Sydenham RS - Caroline Springs RS (via Plumpton & Eastern Rockbank)	Direct	Direct
LD123	Caroline Springs RS - Sydenham RS (via Plumpton & Eastern Rockbank)	Direct	Direct
LD124	Rockbank - Toolern Loop (via Mt Cottrell and Plumpton)	Does Not Exist	Direct

Route Number	Description	DOT Bus Category (2021)	DOT Bus Category (2031)
LD124	Rockbank - Toolern Loop (via Mt Cottrell and Plumpton)	Does Not Exist	Direct
LD13	Epping - Mickelham	Direct	Direct
LD13	Mickelham - Epping	Direct	Direct
LD131	Rockbank RS - Toolern RS	Does Not Exist	Direct
LD131	Toolern RS - Rockbank RS	Does Not Exist	Direct
LD132	Toolern - Melton Loop - ACW	Direct	Direct
LD132	Toolern - Melton Loop - CW	Direct	Direct
LD132	Toolern - Melton Loop	Direct	Direct
LD132	Toolern - Melton Loop	Direct	Direct
LD141	Merinda Park RS - Cranbourne West	Direct	Direct
LD141	Cranbourne West - Merinda Park RS	Direct	Direct
LD23	Officer RS - Cranbourne West (via Merinda Park RS)	Direct	Direct
LD23	Cranbourne West - Officer RS (via Merinda Park RS)	Direct	Direct
LD544	Roxburgh Park RS - Craigieburn	Direct	Direct
LD544	Craigieburn - Roxburgh Park RS	Direct	Direct
LD572	Epping RS - Doreen	Does Not Exist	Direct
LD572	Doreen - Epping RS	Does Not Exist	Direct
LD795	Cranbourne RS - Clyde	Direct	Direct
LD795	Clyde - Cranbourne RS	Direct	Direct
LD841	Cranbourne - Fountain Gate SC	Direct	Direct
LD841	Fountain Gate SC - Cranbourne	Direct	Direct
SM052	Epping - Craigieburn	SmartBus	SmartBus
SM052	Craigieburn - Epping	SmartBus	SmartBus
SM054	Cranbourne - Officer	Direct	SmartBus
SM054	Officer - Cranbourne	Direct	SmartBus
SM11	Beveridge - Broadmeadows	SmartBus	SmartBus
SM11	Broadmeadows - Beveridge	SmartBus	SmartBus
SM130	Melton Stn - Plumpton	Does Not Exist	SmartBus
SM130	Plumpton - Melton Stn	Does Not Exist	SmartBus
SM15	Werribee - Richmond	Does Not Exist	SmartBus
SM15	Richmond - Werribee	Does Not Exist	SmartBus
SM16	Sewells Road Stn - Williams Landing Stn	SmartBus	SmartBus
SM16	Williams Landing Stn - Sewells Road Stn	SmartBus	SmartBus
SM18	Officer - Dandenong	SmartBus	SmartBus
SM18	Dandenong - Officer	SmartBus	SmartBus
SM19	Berwick - Cranbourne	Direct	SmartBus
SM19	Cranbourne - Berwick	Direct	SmartBus
SM20	Beaconsfield - Clyde	Direct	Direct
SM20	Clyde - Beaconsfield	Direct	Direct
SM24	St Albans RS - Rockbank RS	SmartBus	SmartBus
SM24	Rockbank RS - St Albans RS	SmartBus	SmartBus
SM25	Werribee Employment Precinct - Sydenham	SmartBus	SmartBus
SM25	Sydenham - Werribee Employment Precinct	SmartBus	SmartBus
SM6	Melton - Sydenham (via Northern Toolern)	SmartBus	SmartBus
SM6	Sydenham - Melton (via Northern Toolern)	SmartBus	SmartBus
SM7	Werribee - Rockbank	SmartBus	SmartBus
SM7	Rockbank - Werribee	SmartBus	SmartBus
SM9	Sunbury - North Sunbury	Direct	Direct
SM9	North Sunbury - Sunbury	Direct	Direct
SM-902e	Airport - Werribee	SmartBus	SmartBus
SM-902e	Werribee - Airport	SmartBus	SmartBus
tb01in	Telebus Chirnside Park to Lilydale Station	Telebus	Telebus
tb01in_1	Chirnside Park to Lilydale Station	Telebus	Telebus
tb01out	Telebus Lilydale Station to Chirnside Park	Telebus	Telebus
tb01out_1	Lilydale Station to Chirnside Park	Telebus	Telebus
tb02in	Telebus Chirnside Park to Mooroolbark Station	Telebus	Telebus
tb02in_1	Chirnside Park to Mooroolbark Station	Telebus	Telebus
tb02in_2	Mooroolbark to Mooroolbark Station	Telebus	Telebus
tb02out	Telebus Mooroolbark Station to Chirnside Park	Telebus	Telebus
tb02out	Telebus Mooroolbark Station to Chirnside Park	Telebus	Telebus
tb02out_1	Mooroolbark Station to Chirnside Park	Telebus	Telebus
tb03in	Telebus Chirnside Park to Mooroolbark Station	Telebus	Telebus
tb03in	Telebus Chirnside Park to Mooroolbark Station	Telebus	Telebus
tb03in	Telebus Chirnside Park to Mooroolbark Station	Telebus	Telebus
tb03in	Telebus Chirnside Park to Mooroolbark Station	Telebus	Telebus
tb03in_1	Mooroolbark to Mooroolbark Station	Telebus	Telebus
tb03out	Telebus Mooroolbark Station to Chirnside Park	Telebus	Telebus
tb03out	Telebus Mooroolbark Station to Chirnside Park	Telebus	Telebus
tb03out_1	Mooroolbark Station to Mooroolbark	Telebus	Telebus
tb04in	Telebus Croydon Station to Mooroolbark Station	Telebus	Telebus
tb04in	Telebus Croydon Station to Mooroolbark Station	Telebus	Telebus
tb04in_1	Croydon Station to Mooroolbark	Telebus	Telebus
tb04in_2	Telebus Croydon Station to Mooroolbark Station - v	Telebus	Telebus
tb04out	Telebus Mooroolbark Station to Croydon Station	Telebus	Telebus
tb04out	Telebus Mooroolbark Station to Croydon Station	Telebus	Telebus

Route Number	Description	DOT Bus Category (2021)	DOT Bus Category (2031)
tb04out_1	Mooroolbark to Croydon Station	Telebus	Telebus
tb07in	Telebus Stud Park to Ferntree Gully Station	Telebus	Telebus
tb07out	Telebus Stud Park to Stud Park	Telebus	Telebus
tb07out_2	Telebus Ferntree Gully Station to Stud Park	Telebus	Telebus
tb08in	Telebus Stud Park to Stud Park	Telebus	Telebus
tb08in_2	Telebus Stud Park to Ferntree Gully Station	Telebus	Telebus
tb08out	Telebus Ferntree Gully Station to Stud Park	Telebus	Telebus
tb09	Telebus Stud Park to Stud Park	Telebus	Telebus
LD-531	Craigieburn RS - Craigieburn	Direct	Direct
LD-531	Craigieburn - Craigieburn RS	Direct	Direct
200in	Bulleen to City (Lonsdale St)	Direct	Direct
200out	City (Lonsdale St) to Bulleen	Direct	Direct
201in	Doncaster Shoppingtown to City (Lonsdale Street)	Direct	Direct
201out	City (Lonsdale Street) to Doncaster Shoppingtown	Direct	Direct
202in	Box Hill Bus Station to East Kew Junction	Direct	Direct
202out	East Kew Junction to Box Hill Bus Station	Direct	Direct
203in	Bulleen to City (Lonsdale St)	Direct	Direct
203out	City (Lonsdale St) to Bulleen	Direct	Direct
205in	Doncaster Shoppingtown to Melbourne University	Commuter	Commuter
205out	Melbourne University to Doncaster Shoppingtown	Commuter	Commuter
207in	Donvale to City (Lonsdale St)	SmartBus	SmartBus
207out	City (Lonsdale St) to Donvale	SmartBus	SmartBus
215	Highpoint SC - Caroline Springs	SmartBus	SmartBus
215	Caroline Springs - Highpoint SC	SmartBus	SmartBus
216in	Brighton Beach to Caroline Springs	SmartBus	SmartBus
216out	Caroline Springs to Brighton Beach	SmartBus	SmartBus
219in	Gardenvale to Sunshine Park	Direct	Direct
219out	Sunshine Park to Gardenvale	Direct	Direct
220in	Gardenvale to Sunshine	Direct	Direct
220out	Sunshine to Gardenvale	Direct	Direct
223in	Highpoint SC to Yarraville	Coverage	Coverage
223out	Yarraville to Highpoint SC	Coverage	Coverage
232in	Altona North to Queen Victoria Market	Direct	Direct
232out	Queen Victoria Market to Altona North	Direct	Direct
235in	Fishermans Bend to City	Direct	Direct
235out	City to Fishermans Bend	Direct	Direct
237in	Fishermans Bend to City	Direct	Direct
237out	City to Fishermans Bend	Direct	Direct
238in	Port Melbourne to City	SmartBus	SmartBus
238out	City to Port Melbourne	SmartBus	SmartBus
246in	Clifton Hill/La Trobe University to Elsternwick	SmartBus	SmartBus
246out	Elsternwick to Clifton Hill/La Trobe University	SmartBus	SmartBus
250in	La Trobe University to Garden City	Direct	Direct
250out	Garden City to La Trobe University	Direct	Direct
251in	Northland SC to Garden City	SmartBus	SmartBus
251out	Garden City to Northland SC	SmartBus	SmartBus
253in	Carlton North to Garden City	Direct	Direct
253out	Garden City to Carlton North	Direct	Direct
270in	Ringwood to Box Hill	Coverage	Coverage
270out	Box Hill to Ringwood	Coverage	Coverage
271in	Ringwood to Box Hill	Coverage	Coverage
271out	Box Hill to Ringwood	Coverage	Coverage
273in	The Pines SC to Nunawading	Direct	Direct
273out	Nunawading to The Pines SC	Direct	Direct
279in	Doncaster Shoppingtown to Box Hill	Coverage	Coverage
279out	Box Hill to Doncaster Shoppingtown	Coverage	Coverage
280	Manningham Loop	Coverage	Coverage
282	Manningham Mover	Coverage	Coverage
284in	Doncaster Shoppingtown to Box Hill	Coverage	Coverage
284out	Box Hill to Doncaster Shoppingtown	Coverage	Coverage
285in	Doncaster Shoppingtown to Camberwell SC	Hybrid	Hybrid
285out	Camberwell SC to Doncaster Shoppingtown	Hybrid	Hybrid
286in	The Pines to Box Hill	Coverage	Coverage
286out	Box Hill to The Pines	Coverage	Coverage
293in	Greensborough to Box Hill	Direct	Direct
293out	Box Hill to Greensborough	Direct	Direct
295in	The Pines SC to Box Hill	Coverage	Coverage
295out	Box Hill to The Pines SC	Coverage	Coverage
302in	Box Hill to City (Queens Street)	Direct	Direct
302out	City (Queens Street) to Box Hill	Direct	Direct
303in	Mitcham to City (Queen Street)	Commuter	Commuter
303out	City (Queen Street) to Mitcham	Commuter	Commuter
305in	Deep Creek to City (Spencer/Lonsdale Sts)	Direct	Direct
305out	City (Spencer/Lonsdale Sts) to Deep Creek	Direct	Direct
309in	Bus Donvale to City (Queen Street) - Does not oper	Direct	Direct

Route Number	Description	DOT Bus Category (2021)	DOT Bus Category (2031)
309out	Bus City (Queen Street) to Donvale - Does not oper	Direct	Direct
313in	Templestowe to City (Russell Street)	Commuter	Commuter
313out	City (Russell Street) to Templestowe	Commuter	Commuter
315in	Bus Box Hill to City (Russell Street)	Commuter	Commuter
315out	Bus City (Russell Street) to Box Hill	Commuter	Commuter
318in	Deep Creek to City	Commuter	Commuter
318out	City to The Deep Creek	Commuter	Commuter
340in	La Trobe University to City (Flinders St)	Direct	Direct
340out	City (Flinders St) to La Trobe University	Direct	Direct
350in	La Trobe University to City (Flinders St)	Commuter	Commuter
350out	City (Flinders St) to La Trobe University	Commuter	Commuter
366in	Bus Croydon to Ringwood	Coverage	Coverage
366out	Bus Ringwood Ringwood Station to Croydon	Coverage	Coverage
367in	Bus Croydon to Ringwood	Coverage	Coverage
367out	Bus Ringwood to Croydon	Coverage	Coverage
400in	Laverton to Sunshine	SmartBus	SmartBus
400out	Sunshine to Laverton	SmartBus	SmartBus
401in	North Melbourne Station to University of Melbourne	Special	Special
401out	University of Melbourne to North Melbourne Station	Special	Special
402in	Footscray to East Melbourne	Direct	Direct
402out	East Melbourne to Footscray	Direct	Direct
404in	Moonee Ponds to Footscray	Hybrid	Hybrid
404out	Footscray to Moonee Ponds	Hybrid	Hybrid
406in	Keilor East to Footscray	SmartBus	SmartBus
406out	Footscray to Keilor East	SmartBus	SmartBus
407in	Avondale Heights to Highpoint Shopping Centre	Coverage	Coverage
407out	Higpoint Shopping Centre to Avondale Heights	Coverage	Coverage
408in	Highpoint Shopping Centre to St Albans	Hybrid	Hybrid
408out	St Albans to Highpoint Shopping Centre	Hybrid	Hybrid
409in	Highpoint SC to Yarraville	Coverage	Coverage
409out	Yarraville to Highpoint SC	Coverage	Coverage
410in	Sunshine Station to Footscray	Hybrid	Hybrid
410out	Footscray to Sunshine Station	Hybrid	Hybrid
411in	Laverton Station to Footscray	Hybrid	Hybrid
411out	Footscray to Laverton Station	Hybrid	Hybrid
412in	Laverton Station to Footscray	Hybrid	Hybrid
412out	Footscray to Laverton Station	Hybrid	Hybrid
413in	Werribee Plaza to Laverton Station	Coverage	Coverage
413out	Laverton Station to Werribee Plaza	Coverage	Coverage
414in	Footscray to Aircraft	Direct	Direct
414out	Aircraft to Footscray	Direct	Direct
415in	Laverton to Williamstown	Hybrid	Hybrid
415out	Williamstown to Laverton	Hybrid	Hybrid
416in	Point Cook to Aircraft Railway Station	Direct	Direct
416out	Aircraft Railway Station to Point Cook	Direct	Direct
418in	Caroline Springs to St Albans	Hybrid	Hybrid
418out	St Albans to Caroline Springs	Hybrid	Hybrid
419in	Watergardens to St Albans	Hybrid	Hybrid
419out	St Albans to Watergardens	Hybrid	Hybrid
421in	Watergardens Station to St Albans Station	Coverage	Coverage
421out	St Albans Station to Watergardens Station	Coverage	Coverage
422in	Bus Dalahey to St.Albans	Coverage	Coverage
422out	Bus St.Albans to Dalahey	Coverage	Coverage
423in	Brimbank Shopping Centre to St Albans	Coverage	Coverage
423out	St Albans to Brimbank Shopping Centre	Coverage	Coverage
424in	Brimbank Shopping Centre to St Albans	Coverage	Coverage
424out	St Albans to Brimbank Shopping Centre	Coverage	Coverage
425in	Watergardens to St Albans	Hybrid	Hybrid
425out	St Albans to Watergardens	Hybrid	Hybrid
431in	Kingsville to Yarraville	Coverage	Coverage
431out	Yarraville to Kingsville	Coverage	Coverage
432in	Yarraville to Newport	Coverage	Coverage
432out	Newport to Yarraville	Coverage	Coverage
436in	Werribee Station to Hoppers Crossing Station	Coverage	Coverage
436out	Hoppers Crossing Station to Werribee Station	Coverage	Coverage
437in	Werribee to Hoppers Crossing	Coverage	Coverage
437out	Hoppers Crossing to Werribee	Coverage	Coverage
438in	Wyndham Vale to Werribee	Coverage	Coverage
438out	Werribee to Wyndham Vale	Coverage	Coverage
439in	Werribee South to Werribee Station - via Werribee	InterTown	InterTown
439out	Werribee Station to Werribee South - via Werribee	InterTown	InterTown
440in	Werribee Station to Werribee Station	Coverage	Coverage
440out	Werribee Station to Werribee Station	Coverage	Coverage
441in	Westleigh Gardens to Werribee Station (by Synnot	Coverage	Coverage
441out	Werribee Station (by Synnot Street) to Westleigh G	Coverage	Coverage

Route Number	Description	DOT Bus Category (2021)	DOT Bus Category (2031)
442in	The Grange to Hoppers Crossing	Coverage	Coverage
442out	Hoppers Crossing to The Grange	Coverage	Coverage
443in	South Ring Road to Werribee	Coverage	Coverage
443out	Werribee to South Ring Road	Coverage	Coverage
444in	Hoppers Crossing Station to Hoppers Crossing Stati	Coverage	Coverage
444out	Hoppers Crossing Station to Hoppers Crossing Stati	Coverage	Coverage
445in	Werribee to Hoppers Crossing	Coverage	Coverage
445out	Hoppers Crossing to Werribee	Coverage	Coverage
446	Hoppers Crossing to Laverton	SmartBus	SmartBus
446	Laverton to Hoppers Crossing	SmartBus	SmartBus
451in	Deer Park North to Sunshine	Coverage	Coverage
451out	Sunshine to Deer Park North	Coverage	Coverage
454in	Sunshine to Sunshine West	Coverage	Coverage
454out	Sunshine West to Sunshine	Coverage	Coverage
456in	Sunshine to Melton	InterTown	InterTown
456out	Melton to Sunshine	InterTown	InterTown
457in	Melton to Melton RS	Coverage	Coverage
457out	Melton RS to Melton	Coverage	Coverage
458in	Kurunjang to Melton RS	Coverage	Coverage
458out	Melton RS to Kurunjang	Coverage	Coverage
459in	Arnolds Creek to Melton RS	Coverage	Coverage
459out	Melton RS to Arnolds Creek	Coverage	Coverage
460in	Caroline Springs to Watergardens	Hybrid	Hybrid
460out	Watergardens to Caroline Springs	Hybrid	Hybrid
461in	Taylors Hill to Watergarden Station	Coverage	Coverage
461out	Watergardens Station to Taylors Hill	Coverage	Coverage
465in	Keilor Park to Essendon	Direct	Direct
465out	Essendon to Keilor Park	Direct	Direct
467in	Moonee Ponds Railway Station to Aberfeldie	Coverage	Coverage
467out	Aberfeldie to Moonee Ponds RS	Coverage	Coverage
468in	Essendon to Highpoint SC	SmartBus	SmartBus
468out	Highpoint SC to Essendon	SmartBus	SmartBus
471in	Sunshine to Williamstown	Hybrid	Hybrid
471out	Williamstown to Sunshine	Hybrid	Hybrid
472in	Williamstown to Moonee Ponds	SmartBus	SmartBus
472out	Moonee Ponds to Williamstown	SmartBus	SmartBus
475in	Keilor East to Moonee Ponds	Coverage	Coverage
475out	Moonee Ponds to Keilor East	Coverage	Coverage
476in	Moonee Ponds to Hillside	Hybrid	Hybrid
476out	Hillside to Moonee Ponds	Hybrid	Hybrid
477in	Broadmeadows to Moonee Ponds	Hybrid	Hybrid
477out	Moonee Ponds to Broadmeadows	Hybrid	Hybrid
478in	Melbourne Airport to Moonee Ponds	SmartBus	SmartBus
478out	Moonee Ponds to Melbourne Airport	SmartBus	SmartBus
479in	Sunbury to Moonee Ponds	InterTown	InterTown
479out	Flinders St & Moonee Ponds to Sunbury	InterTown	InterTown
481in	Mount Lion to Sunbury Railway Station	Coverage	Coverage
481out	Sunbury Railway Station to Mount Lion	Coverage	Coverage
483in	Moonee Ponds to Sunbury	InterTown	InterTown
483out	Sunbury to Moonee Ponds	InterTown	InterTown
484in	Roxburgh Park SC to Broadmeadows	Coverage	Coverage
484out	Broadmeadows to Roxburgh Park	Coverage	Coverage
485in	Wilsons Lane to Sunbury Railway Station	Coverage	Coverage
485out	Sunbury Railway Station to Wilsons Lane	Coverage	Coverage
486in	Rolling Meadows to Sunbury Railway Station	Coverage	Coverage
486out	Sunbury Railway Station to Rolling Meadows	Coverage	Coverage
487in	Killara Heights to Sunbury Railway Station	Coverage	Coverage
487out	Sunbury Railway Station to Killara Heights	Coverage	Coverage
488in	Victoria University to Sunbury Station	Coverage	Coverage
488out	Sunbury Station to Victoria University	Coverage	Coverage
490in	Gowanbrae to Airport West	Coverage	Coverage
490out	Airport West to Gowanbrae	Coverage	Coverage
500in	Broadmeadows to Sunbury	InterTown	InterTown
500out	Sunbury to Broadmeadows - via Melbourne Airport	InterTown	InterTown
501in	Niddrie to Moonee Ponds	Coverage	Coverage
501out	Moonee Ponds to Niddrie	Coverage	Coverage
503in	Essendon to East Brunswick	Hybrid	Hybrid
503out	East Brunswick to Essendon	Hybrid	Hybrid
504in	Clifton Hill to Moonee Ponds	Hybrid	Hybrid
504out	Moonee Ponds to Clifton Hill	Hybrid	Hybrid
506in	Moonee Ponds to Westgarth	SmartBus	SmartBus
506out	Westgarth to Moonee Ponds	SmartBus	SmartBus
508in	Alphington to Moonee Ponds	Direct	Direct
508out	Moonee Ponds to Alphington	Direct	Direct
509in	West Brunswick to Sydney Road	Coverage	Coverage

Route Number	Description	DOT Bus Category (2021)	DOT Bus Category (2031)
509out	Sydney Road to West Brunswick	Coverage	Coverage
510in	Ivanhoe to Essendon	SmartBus	SmartBus
510out	Essendon to Ivanhoe	SmartBus	SmartBus
512in	Strathmore to East Coburg - via Winifred St Ward G	Coverage	Coverage
512out	East Coburg to Strathmore - via Hillview Av Ward G	Coverage	Coverage
513in	Eltham to Glenroy - via Greensborough	Hybrid	Hybrid
513out	Glenroy to Eltham - via Greensborough	Hybrid	Hybrid
517in	St Helena to Northland Shopping Centre	Coverage	Coverage
517out	Northland Shopping Centre to St Helena	Coverage	Coverage
518in	St Helena West to Greensborough	Coverage	Coverage
518out	Greensborough to St Helena West	Coverage	Coverage
520in	Doreen to Greensborough	Direct	Direct
520out	Greensborough to Doreen	Direct	Direct
525in	West Reservoir to Coburg	Coverage	Coverage
525out	Coburg to West Reservoir	Coverage	Coverage
526in	Coburg to West Preston	Coverage	Coverage
526out	West Preston to Coburg	Coverage	Coverage
527in	Gowrie to Northland SC	Direct	Direct
527out	Northland SC to Gowrie	Direct	Direct
528in	Craigieburn Stn Loop Bus via Craigieburn Town Cent	Coverage	Coverage
528out	Craigieburn Stn Loop Bus via Craigieburn Town Cent	Coverage	Coverage
529in	Craigieburn Town Centre to Craigieburn Stn via Mic	Direct	Direct
529out	Craigieburn Stn to Craigieburn Town Centre via Mic	Direct	Direct
530in	Coburg to Cambellfield - via Queens Pde (Fawkner)	Coverage	Coverage
530out	Camberfield to Coburg - via Queens Pde (Fawkner)	Coverage	Coverage
531in	North Coburg to Upfield	Direct	Direct
531out	Upfield to North Coburg	Direct	Direct
532in	Craigieburn to Broadmeadows	Direct	Direct
532out	Broadmeadows to Craigieburn	Direct	Direct
533in	Craigieburn Town Centre to Craigieburn Stn	Coverage	Coverage
533out	Craigieburn Stn to Craigieburn Town Centre	Coverage	Coverage
534in	Coburg to Glenroy	Coverage	Coverage
534out	Glenroy to Coburg	Coverage	Coverage
536in	Gowrie to Glenroy - via Evell St (Glenroy)	Coverage	Coverage
536out	Glenroy to Gowrie - via Evell St (Glenroy)	Coverage	Coverage
538in	Broadmeadows to Somerset Estate	Coverage	Coverage
538out	Somerset Estate to Broadmeadows	Coverage	Coverage
540in	Upfield to Broadmeadows	Coverage	Coverage
540out	Broadmeadows to Upfield	Coverage	Coverage
541in	Broadmeadows Stn to Roxburgh Park Stn via Coolaroo	Coverage	Coverage
541out	Roxburgh Park Stn to Broadmeadows Stn via Coolaroo	Coverage	Coverage
542in	Broadmeadows Stn to Oak Park Stn	Coverage	Coverage
542out	Oak Park Stn to Broadmeadows Stn	Coverage	Coverage
543in	Craigieburn Stn to Broadmeadows Stn via Coolaroo a	Coverage	Coverage
543out	Broadmeadows Stn to Craigieburn Stn via Coolaroo a	Coverage	Coverage
544in	Broadmeadows Stn to Craigieburn Stn via Coolaroo a	Direct	Direct
544out	Craigieburn Stn to Broadmeadows Stn via Coolaroo a	Direct	Direct
546in	Queen Victoria Market to Heidelberg	Direct	Direct
546out	Heidelberg to Queen Victoria Market	Direct	Direct
547in	Craigieburn Stn to Roxburgh Park Stn via Greenvale	Coverage	Coverage
547out	Roxburgh Park Stn to Craigieburn Stn via Greenvale	Coverage	Coverage
548in	Kew to La Trobe University - via Springthorpe Bvd	SmartBus	SmartBus
548out	La Trobe University to Kew - via Main Dr and Sprin	SmartBus	SmartBus
549in	Northland SC to Ivanhoe	Coverage	Coverage
549out	Ivanhoe to Northland SC	Coverage	Coverage
550in	Northland SC to La Trobe University	Coverage	Coverage
550out	La Trobe University to Northland SC	Coverage	Coverage
551in	La Trobe University to Heidelberg	Coverage	Coverage
551out	Heidelberg to La Trobe University	Coverage	Coverage
552in	North East Reservoir to Northcote Plaza	Coverage	Coverage
552out	Northcote Plaza to North East Reservoir	Coverage	Coverage
553in	West Preston to Reservoir	Coverage	Coverage
553out	Preston to West Preston	Coverage	Coverage
554	Thomastown to Lalor Loop	Coverage	Coverage
555in	Northland SC to Epping Plaza SC	Direct	Direct
555out	Epping Plaza SC to Northland SC	Direct	Direct
556in	Epping Plaza SC to Northland SC	Direct	Direct
556out	Northland SC to Epping Plaza SC	Direct	Direct
557	Thomastown to Thomastown	Coverage	Coverage
558in	North West Reservoir to Reservoir Railway Station	Coverage	Coverage
558out	Reservoir to North West Reservoir - Operates clock	Coverage	Coverage
559	Bus Thomastown Railway Station to Thomastown Railw	Coverage	Coverage
561in	Macleod to Reservoir	SmartBus	SmartBus
561out	Reservoir to Macleod	SmartBus	SmartBus
562in	Greensborough to Humevale	InterTown	SmartBus

Route Number	Description	DOT Bus Category (2021)	DOT Bus Category (2031)
562out	Humevale to Greensborough	InterTown	SmartBus
563in	Greensborough to Northland Shopping Centre	Hybrid	Hybrid
563out	Northland Shopping Centre to Greensborough	Hybrid	Hybrid
564in	Northern Hospital/Epping to RMIT Bundoora	Coverage	Coverage
564out	RMIT Bundoora to Northern Hospital/Epping	Coverage	Coverage
566in	Lalor to Northland Shopping Centre	Coverage	Coverage
566out	Northland Shopping Centre to Lalor	Coverage	Coverage
567in	Northcote to Regent Station (Reservoir)	Coverage	Coverage
567out	Regent Station to Northcote	Coverage	Coverage
570in	Thomastown to Bundoora RMIT	Coverage	Coverage
570out	Bundoora RMIT to Thomastown	Coverage	Coverage
571in	Roxburgh Park to South Morang	Coverage	Coverage
571out	South Morang to Roxburgh Park	Coverage	Coverage
572in	Doreen to RMIT Bundoora	Coverage	Coverage
572out	RMIT Bundoora to Doreen	Coverage	Coverage
575in	Thomastown to Epping	Coverage	Coverage
575out	Epping to Thomastown	Coverage	Coverage
577in	Epping Plaza SC to Mill Park Lakes	Coverage	Coverage
577out	Mill Park Lakes to Epping Plaza SC	Coverage	Coverage
578in	Warrandyte to Eltham Station - via Warrandyte Hig	InterTown	InterTown
578out	Eltham Station to Warrandyte High School	InterTown	InterTown
579in	Warrandyte to Eltham High School - via Eltham Coll	InterTown	InterTown
579out	Eltham Station to Warrandyte High School	InterTown	InterTown
580in	Diamond Creek to Eltham	Coverage	Coverage
580out	Eltham to Diamond Creek	Coverage	Coverage
582in	Nyora Road to Eltham Station	Coverage	Coverage
582out	Eltham Station to Nyora Road	Coverage	Coverage
600in	Southland SC to St Kilda Station	Hybrid	Hybrid
600out	St Kilda Station to Southland SC	Hybrid	Hybrid
605in	Gardenvale to City	Direct	Direct
605out	City to Gardenvale	Direct	Direct
606in	Port Melbourne to St Kilda	Direct	Direct
606out	St Kilda to Port Melbourne	Direct	Direct
609in	Kew to Fairfield - via Royal Talbot	Coverage	Coverage
609out	Fairfield to Kew - via Royal Talbot	Coverage	Coverage
612in	Chadstone SC to Box Hill	Hybrid	Hybrid
612out	Box Hill to Chadstone SC	Hybrid	Hybrid
623in	Glen Waverley to St. Kilda	Direct	Direct
623out	St. Kilda to Glen Waverley	Direct	Direct
624in	Oakleigh to Kew	SmartBus	SmartBus
624out	Kew to Oakleigh	SmartBus	SmartBus
627in	Elsternwick to Brighton East	Coverage	Coverage
627out	Brighton East to Elsternwick	Coverage	Coverage
630in	Monash University to Elwood	SmartBus	SmartBus
630out	Elwood to Monash University	SmartBus	SmartBus
631in	Waverley Gardens to Southland	Hybrid	Hybrid
631out	Southland to Waverley Gardens	Hybrid	Hybrid
663in	Belgrave to Lilydale	InterTown	InterTown
663out	Lilydale to Belgrave	InterTown	InterTown
664in	Chirnside Park SC to Knox City SC	Hybrid	Hybrid
664out	Knox City SC to Chirnside Park SC	Hybrid	Hybrid
670in	Ringwood to Lilydale	Direct	Direct
670out	Lilydale to Ringwood	Direct	Direct
671in	Chirnside Park SC to Croydon RS	Coverage	Coverage
671out	Croydon RS to Chirnside Park SC	Coverage	Coverage
672in	Croydon RS to Chirnside Park SC	InterTown	InterTown
672out	Chirnside Park SC to Croydon RS	InterTown	InterTown
673	Lilydale to Lillydale Lakes	Coverage	Coverage
675in	Mooroolbark to Chirnside Park SC	Coverage	Coverage
675out	Chirnside Park SC to Mooroolbark	Coverage	Coverage
676	Lilydale Station to Lilydale Station	InterTown	InterTown
677in	Lilydale Station to Chirnside Park Shopping Centre	Coverage	Coverage
677out	Chirnside Park Shopping Centre to Lilydale Station	Coverage	Coverage
679in	Chirnside Park SC to Ringwood RS	Hybrid	Hybrid
679out	Ringwood RS to Chirnside Park SC	Hybrid	Hybrid
680in	Mooroolbark to Lilydale	Coverage	Coverage
680out	Lilydale to Mooroolbark	Coverage	Coverage
681	Knox City SC (Clockwise) to Knox City SC - via Row	Coverage	Coverage
682	Knox City SC (Anti-Clockwise) to Knox City SC	Coverage	Coverage
683in	Warburton to Chirnside Park SC	InterTown	InterTown
683out	Chirnside Park SC to Warburton	InterTown	InterTown
684in	Melbourne to Eildon	InterTown	InterTown
684out	Eildon to Melbourne	InterTown	InterTown
685in	Lilydale Station to Healesville	InterTown	InterTown
685out	Healesville to Lilydale	InterTown	InterTown

Route Number	Description	DOT Bus Category (2021)	DOT Bus Category (2031)
686in	Badger Creek to Healesville - via Healesville Prim	Coverage	Coverage
686out	Healesville to Badger Creek	Coverage	Coverage
687in	Healesville to Chum Creek	Coverage	Coverage
687out	Chum Creek to Healesville	Coverage	Coverage
688i	Olinda to Croydon - via Ridge Rd (Mt Dandenong)	InterTown	InterTown
688o	Croydon to Olinda - via Ridge Rd (Mt Dandenong)	InterTown	InterTown
689in	Montrose to Croydon	Coverage	Coverage
689out	Croydon to Montrose	Coverage	Coverage
690in	Boronia to Croydon	Coverage	Coverage
690out	Croydon to Boronia	Coverage	Coverage
691in	Bayswater to Waverley Gardens SC	SmartBus	SmartBus
691out	Waverley Gardens SC to Bayswater	SmartBus	SmartBus
692in	Yarra Junction to Healesville - via Launching Plac	InterTown	InterTown
692out	Healesville to Yarra Junction - via Woori Yallock	InterTown	InterTown
693in	Oakleigh to Belgrave - via Monash University Halls	Direct	Direct
693out	Belgrave to Oakleigh - via Monash University Halls	Direct	Direct
694in	Belgrave to Mt Dandenong	InterTown	InterTown
694out	Mt Dandenong to Belgrave	InterTown	InterTown
695in	Fountain Gate Shopping Centre to Belgrave - via Ge	InterTown	InterTown
695out	Belgrave to Fountain Gate Shopping Centre - via Ge	InterTown	InterTown
697in	Belgrave to Belgrave South - via Belgrave Heights	Coverage	Coverage
697out	Belgrave South to Belgrave - via Belgrave Heights	Coverage	Coverage
698in	Mt Dandenong to Upper Ferntree Gully	Coverage	Coverage
698out	Upper Ferntree Gully to Mt Dandenong	Coverage	Coverage
699in	Belgrave to Upwey - via Grey St	Coverage	Coverage
699out	Upwey to Belgrave - via Grey St	Coverage	Coverage
701in	Bentleigh to Oakleigh - via Moorleigh Community Vi	Coverage	Coverage
701out	Oakleigh to Bentleigh - via Moorleigh Community Vi	Coverage	Coverage
703in	Blackburn to Middle Brighton	SmartBus	SmartBus
703out	Middle Brighton to Blackburn	SmartBus	SmartBus
704in	Clayton to Oakleigh	Coverage	Coverage
704out	Oakleigh to Clayton	Coverage	Coverage
705in	Springvale to Mordialloc	Hybrid	Hybrid
705out	Mordialloc to Springvale	Hybrid	Hybrid
706in	Chelsea to Mordialloc	Hybrid	Hybrid
706out	Mordialloc to Chelsea	Hybrid	Hybrid
708in	Carrum to Hampton	Hybrid	Hybrid
708out	Hampton to Carrum	Hybrid	Hybrid
732in	Upper Ferntree Gully to Box Hill	SmartBus	SmartBus
732out	Box Hill to Upper Ferntree Gully	SmartBus	SmartBus
733in	Box Hill to Oakleigh	Direct	Direct
733out	Oakleigh to Box Hill	Direct	Direct
734in	Glen Waverley to Glen Iris	Direct	Direct
734out	Glen Iris to Glen Waverley	Direct	Direct
735in	Burwood East to Box Hill	Coverage	Coverage
735out	Box Hill to Burwood East	Coverage	Coverage
736in	Blackburn to Mitcham	Coverage	Coverage
736out	Mitcham to Blackburn	Coverage	Coverage
737in	Monash University to Croydon - via Terama Cres (Ba	SmartBus	SmartBus
737out	Croydon to Monash University - via Terama Cres (Ba	SmartBus	SmartBus
738in	Knox City to Mitcham	Coverage	Coverage
738out	Mitcham to Knox City	Coverage	Coverage
740in	Vermont East to Mitcham	Coverage	Coverage
740out	Mitcham to Vermont East	Coverage	Coverage
742in	Chadstone to Eastland - via Monash University (Nor	Hybrid	Hybrid
742out	Eastland to Chadstone - via Monash University (Nor	Hybrid	Hybrid
745a	Knox City SC to Bayswater Station	Coverage	Coverage
745b	Bayswater Station to Boronia Station	Coverage	Coverage
745c	Bayswater Station to Wantirna Primary School via Victoria Rd and Sasses Av (Bays	Coverage	Coverage
753in	Bayswater to Glen Waverley	Hybrid	Hybrid
753out	Glen Waverley to Bayswater	Hybrid	Hybrid
754in	Glen Waverley to Rowville	Coverage	Coverage
754out	Rowville to Glen Waverley	Coverage	Coverage
755in	Knox City SC to Bayswater - Does not operate via T	Coverage	Coverage
755out	Bayswater to Knox City SC - Does not operate via T	Coverage	Coverage
757in	Scoresby to Knox City	Coverage	Coverage
757out	Knox City to Scoresby	Coverage	Coverage
758in	Knoxfield to Knox City	Coverage	Coverage
758out	Knox City to Knoxfield	Coverage	Coverage
765in	Box Hill to Mitcham	Coverage	Coverage
765out	Mitcham to Box Hill	Coverage	Coverage
766in	Box Hill to Burwood	Coverage	Coverage
766out	Burwood to Box Hill	Coverage	Coverage
767in	Box Hill to Southland	Direct	Direct
767out	Southland to Box Hill	Direct	Direct

Route Number	Description	DOT Bus Category (2021)	DOT Bus Category (2031)
770in	Karingal Hub to Frankston	Coverage	Coverage
770out	Frankston to Karingal Hub	Coverage	Coverage
771in	Langwarrin to Frankston	Coverage	Coverage
771out	Frankston to Langwarrin	Coverage	Coverage
772in	Eliza Heights to Frankston Railway Station	Coverage	Coverage
772out	Frankston Railway Station to Eliza Heights	Coverage	Coverage
773in	Frankston to South Frankston	Coverage	Coverage
773out	Frankston South to Frankston	Coverage	Coverage
774in	Delacombe Park to Frankston Station	Coverage	Coverage
774out	Frankston Station to Delacombe Park	Coverage	Coverage
775in	Frankston to Lakewood	Coverage	Coverage
775out	Lakewood to Frankston	Coverage	Coverage
776in	Pearcedale to Frankston	InterTown	InterTown
776out	Frankston to Pearcedale	InterTown	InterTown
777in	Karingal Hub SC to McClelland Drive	Coverage	Coverage
777out	McClelland Drive to Karingal Hub SC	Coverage	Coverage
778in	Carrum Downs to Kananook Station	Coverage	Coverage
778out	Kananook Station to Carrum Downs	Coverage	Coverage
779in	Belvedere to Frankston	Coverage	Coverage
779out	Frankston to Belvedere	Coverage	Coverage
780in	Carrum to Frankston Station	Hybrid	Hybrid
780out	Frankston Station to Carrum	Hybrid	Hybrid
781in	Mt Martha to Frankston	Hybrid	Hybrid
781out	Frankston to Mt Martha	Hybrid	Hybrid
782in	Flinders to Frankston	InterTown	InterTown
782out	Frankston to Flinders	InterTown	InterTown
783in	Hastings to Frankston	InterTown	InterTown
783out	Frankston to Hastings	InterTown	InterTown
784in	Osbourne to Frankston	Coverage	Coverage
784out	Frankston to Osbourne	Coverage	Coverage
785in	Mornington East to Frankston	Coverage	Coverage
785out	Frankston to Mornington East	Coverage	Coverage
788in	Portsea to Frankston - via Bus operates via Mt Eli	Direct	SmartBus
788out	Frankston to Portsea	Direct	SmartBus
789in	Cranbourne to Frankston	Coverage	Coverage
789out	Frankston to Cranbourne	Coverage	Coverage
790in	Cranbourne to Frankston	Hybrid	Hybrid
790out	Frankston to Cranbourne	Hybrid	Hybrid
791in	Cranbourne to Frankston	SmartBus	SmartBus
791out	Frankston to Cranbourne	SmartBus	SmartBus
795in	Warneet to Cranbourne - via Blind Bight and Toorad	InterTown	InterTown
795out	Cranbourne to Warneet - via Devon Meadows Tooradin	InterTown	InterTown
796in	Clyde to Cranbourne	InterTown	InterTown
796out	Cranbourne to Clyde	InterTown	InterTown
797	Cranbourne Town Service to Cranbourne Town Service	Coverage	Coverage
799in	Cranbourne North to Cranbourne	Coverage	Coverage
799out	Cranbourne to Cranbourne North	Coverage	Coverage
800in	Chadstone to Dandenong - via Springvale Botanical	Direct	Direct
800out	Dandenong to Chadstone - via Springvale Botanical	Direct	Direct
802in	Chadstone to Dandenong Station	Hybrid	Hybrid
802out	Dandenong Station to Chadstone	Hybrid	Hybrid
804in	Chadstone to Dandenong	Hybrid	Hybrid
804out	Dandenong to Chadstone	Hybrid	Hybrid
811in	Brighton to Dandenong	Hybrid	Hybrid
811out	Dandenong to Brighton	Hybrid	Hybrid
812in	Brighton to Dandenong	Hybrid	Hybrid
812out	Dandenong to Brighton	Hybrid	Hybrid
813in	Mulgrave to Dandenong	Coverage	Coverage
813out	Dandenong to Mulgrave	Coverage	Coverage
814in	Springvale South to Dandenong	Hybrid	Hybrid
814out	Dandenong to Springvale South	Hybrid	Hybrid
815in	Noble Park to Dandenong	Coverage	Coverage
815out	Dandenong to Noble Park	Coverage	Coverage
821in	Clayton to Southland	Coverage	Coverage
821out	Southland to Clayton	Coverage	Coverage
822in	Sandringham to Chadstone	SmartBus	SmartBus
822out	Chadstone to Sandringham	SmartBus	SmartBus
823in	Southland to North Brighton	Direct	Direct
823out	North Brighton to Southland	Direct	Direct
824in	Keysborough to Moorabbin	Hybrid	Hybrid
824out	Moorabbin to Keysborough	Hybrid	Hybrid
825in	Southland to Moorabbin	Hybrid	Hybrid
825out	Moorabbin to Southland	Hybrid	Hybrid
828in	Berwick to Hampton	SmartBus	SmartBus
828out	Hampton to Berwick	SmartBus	SmartBus

Route Number	Description	DOT Bus Category (2021)	DOT Bus Category (2031)
832in	Carrum Downs to Frankston	Coverage	Coverage
832out	Frankston to Carrum Downs	Coverage	Coverage
833in	Carrum Downs to Frankston	Coverage	Coverage
833out	Frankston to Carrum Downs	Coverage	Coverage
835in	Fountain Gate SC to Berwick Market Place	Hybrid	Hybrid
835out	Berwick Market Place to Fountain Gate SC	Hybrid	Hybrid
836in	Berwick to Berwick Stn	Coverage	Coverage
836out	Berwick Stn to Berwick	Coverage	Coverage
837in	Cardinia Road Stn to Berwick Market Place	Coverage	Coverage
837out	Berwick Market Place to Cardinia Road Stn	Coverage	Coverage
838in	Emerald to Fountain Gate SC	InterTown	InterTown
838out	Fountain Gate SC to Emerald	InterTown	InterTown
839in	North Berwick to Berwick Stn	Coverage	Coverage
839out	Berwick Stn to North Berwick	Coverage	Coverage
841in	Cranbourne to Narre Warren North	SmartBus	SmartBus
841out	Narre Warren North to Cranbourne	SmartBus	SmartBus
842in	Endeavour Hills SC to Fountain Gate SC	Hybrid	Hybrid
842out	Fountain Gate SC to Endeavour Hills SC	Hybrid	Hybrid
843i	Mossgiel Park (Shetland St) to Dandenong	Coverage	Coverage
843o	Dandenong to Mossgiel Park (Shetland St)	Coverage	Coverage
844in	Doveton to Dandenong	Coverage	Coverage
844out	Dandenong to Doveton	Coverage	Coverage
845in	Endeavour Hills to Dandenong	Coverage	Coverage
845out	Dandenong to Endeavour Hills	Coverage	Coverage
848in	Brandon Park SC to Dandenong	Coverage	Coverage
848out	Dandenong to Brandon Park SC	Coverage	Coverage
849in	Mossgiel Park (Reema Bvd) to Dandenong	Coverage	Coverage
849out	Dandenong to Mossgiel Park (Reema Bvd)	Coverage	Coverage
850in	Glen Waverley to Dandenong	Direct	Direct
850out	Dandenong to Glen Waverley	Direct	Direct
857in	Chelsea to Dandenong	Direct	Direct
857out	Dandenong to Chelsea	Direct	Direct
861in	Endeavour Hills to Dandenong	Coverage	Coverage
861out	Dandenong to Endeavour Hills	Coverage	Coverage
862in	Chadstone to Dandenong	Hybrid	Hybrid
862out	Dandenong to Chadstone	Hybrid	Hybrid
885in	Springvale to Glen Waverley	Hybrid	Hybrid
885out	Glen Waverley to Springvale	Hybrid	Hybrid
892in	Narre Warren South to Dandenong	Hybrid	Hybrid
892out	Dandenong to Narre Warren South	Hybrid	Hybrid
893in	Cranbourne to Dandenong	Hybrid	Hybrid
893out	Dandenong to Cranbourne	Hybrid	Hybrid
894in	Casey Central to Fountain Gate SC	Coverage	Coverage
894out	Fountain Gate SC to Casey Central	Coverage	Coverage
895in	Lynbrook Stn to Fountain Gate SC	Coverage	Coverage
895out	Fountain Gate SC to Lynbrook Stn	Coverage	Coverage
896inloop	Cranbourne East to Cranbourne Railway Station	Coverage	Coverage
896outloop	Cranbourne East to Cranbourne Railway Station	Coverage	Coverage
897in	Cranbourne to Central Parkway	Coverage	Coverage
897out	Central Parkway to Cranbourne	Coverage	Coverage
900in	Stud Park Shopping Centre to Caulfield	SmartBus	SmartBus
900out	Caulfield to Stud Park Shopping Centre	SmartBus	SmartBus
901in	Frankston to Melbourne Airport	SmartBus	SmartBus
901out	Melbourne Airport to Frankston	SmartBus	SmartBus
902in	Chelsea to Werribee	SmartBus	SmartBus
902out	Werribee to Chelsea	SmartBus	SmartBus
903in	Mordialloc Shopping Centre to Altona	SmartBus	SmartBus
903out	Altona Station to Mordialloc Shopping Centre	SmartBus	SmartBus
905in	The Pines SC to City (Spencer/Lonsdale Sts)	SmartBus	SmartBus
905out	City (Spencer/Lonsdale Sts) to The Pines SC	SmartBus	SmartBus
906in	Warrandyte Bridge to City (Spencer St)	SmartBus	SmartBus
906out	City (Spencer St) to Warrandyte Bridge	SmartBus	SmartBus
907in	Mitcham to City (Spencer St)	SmartBus	SmartBus
907out	City (Spencer St) to Mitcham	SmartBus	SmartBus
908in	The Pines Shopping Centre to City (Spencer St)	SmartBus	SmartBus
908out	City (Spencer St) to The Pines Shopping Centre	SmartBus	SmartBus
922in	Southland SC to St Kilda Station	Hybrid	Hybrid
922out	St Kilda Station to Southland SC	Hybrid	Hybrid
923in	Southland SC to St Kilda Station	Hybrid	Hybrid
923out	St Kilda Station to Southland SC	Hybrid	Hybrid
926in	Fountain Gate Shopping Centre to Pakenham Station	Direct	SmartBus
926out	Pakenham Station to Fountain Gate Shopping Centre	Direct	SmartBus
927in	Pakenham North to Pakenham	Coverage	Coverage
927out	Pakenham to Pakenham North	Coverage	Coverage
928in	Pakenham South to Pakenham North	Coverage	Coverage

Route Number	Description	DOT Bus Category (2021)	DOT Bus Category (2031)
928out	Pakenham North to Pakenham South	Coverage	Coverage
929in	Army Road to Pakenham	Coverage	Coverage
929out	Pakenham to Army Road	Coverage	Coverage

Figure 28 – Bus Category -2021 & 2031 Reference Case

Appendix D – Previous Model Results - Forecast Growth Rates

Key Performance Indicators – Model Wide	2008 to 2021	2021 to 2031
PRIVATE VEHICLE STATISTICS (Daily)		
Car Trips	1.6%	1.3%
Car KMs	2.1%	1.4%
Person Car Hours	2.3%	1.8%
TOTAL PT STATISTICS (Daily)		
Total PT Trips	3.3%	3.0%
Total PT Boardings	3.7%	3.3%
Interchanges	4.6%	3.9%
Mode Share (Mech. Trips)	1.4%	1.4%
PT MODAL STATISTICS		
Daily Boardings By PT Mode (incl. interchanges)		
Suburban Rail	4.3%	3.7%
Suburban Tram	2.4%	2.7%
Suburban Bus	4.0%	2.5%
Regional Rail	3.6%	6.3%
Regional Bus	1.8%	1.9%
AM Boardings By PT Mode (incl. interchanges)		
Suburban Rail	4.0%	3.3%
Suburban Tram	2.5%	2.6%
Suburban Bus	3.6%	2.4%
Regional Rail	3.2%	7.6%
Regional Bus	1.8%	2.0%

Table 9 –Growth Rate in Model Wide Key Performance Indicators (CAGR) - Previous Model Results

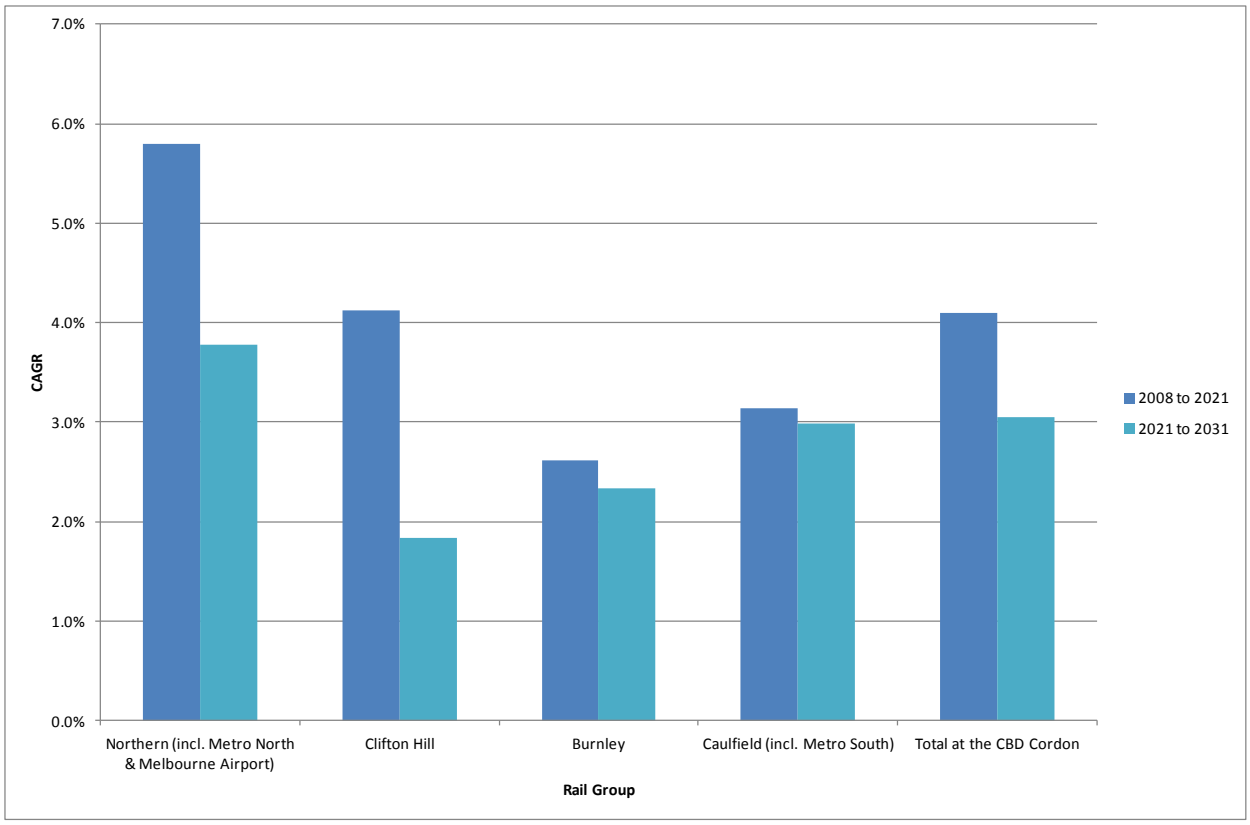


Figure 29 –Rail Passenger Loads at the CBD Cordon by Rail Group (AM Peak) - Previous Model Results