2 Project rationale and benefits

Tables

Figures

2.1 INTRODUCTION

This chapter describes the rationale for developing the Mordialloc Bypass (Freeway) (the project), and discusses the key transport challenges for the region and their underlying drivers, the key issues driving the need for the project, how the project aligns with relevant Commonwealth, State and local government policies, and the main predicted benefits of the project.

2.2 OVERVIEW

Melbourne is facing unprecedented growth challenges. Large-scale population growth combined with growing employment clusters is driving increased demand for travel on the road network within the city's southern subregion (Figure 2.1).

To accommodate population growth, support industry investment, assist the creation of new jobs and attract a skilled workforce, there is a need to improve network connectivity and service levels in Melbourne's south-east. The project will play an important role in addressing these needs, including:

- providing a much-needed additional route in Melbourne's south-east (Figure 2.1), easing congestion and improving safety on nearby roads
- improving access to the Dandenong South Employment and Innovation Cluster, the industrial areas in Braeside and Moorabbin, and residential, recreation and other nearby shopping and entertainment precincts
- creating additional road capacity, contributing to a more reliable road network
- increasing efficiency and reducing vehicle operating costs for the freight and the logistics sector and making investment in key employment areas more attractive for business
- reducing the tendency for traffic to use local and low-capacity arterial roads, meaning fewer vehicles would travel through residential areas, especially in the middle south-eastern suburbs
- reducing traffic volumes on Springvale Road, which would improve bus operations and, along with the new shared use (pedestrian and cycling) path, would provide a more balanced transport network solution for the area.

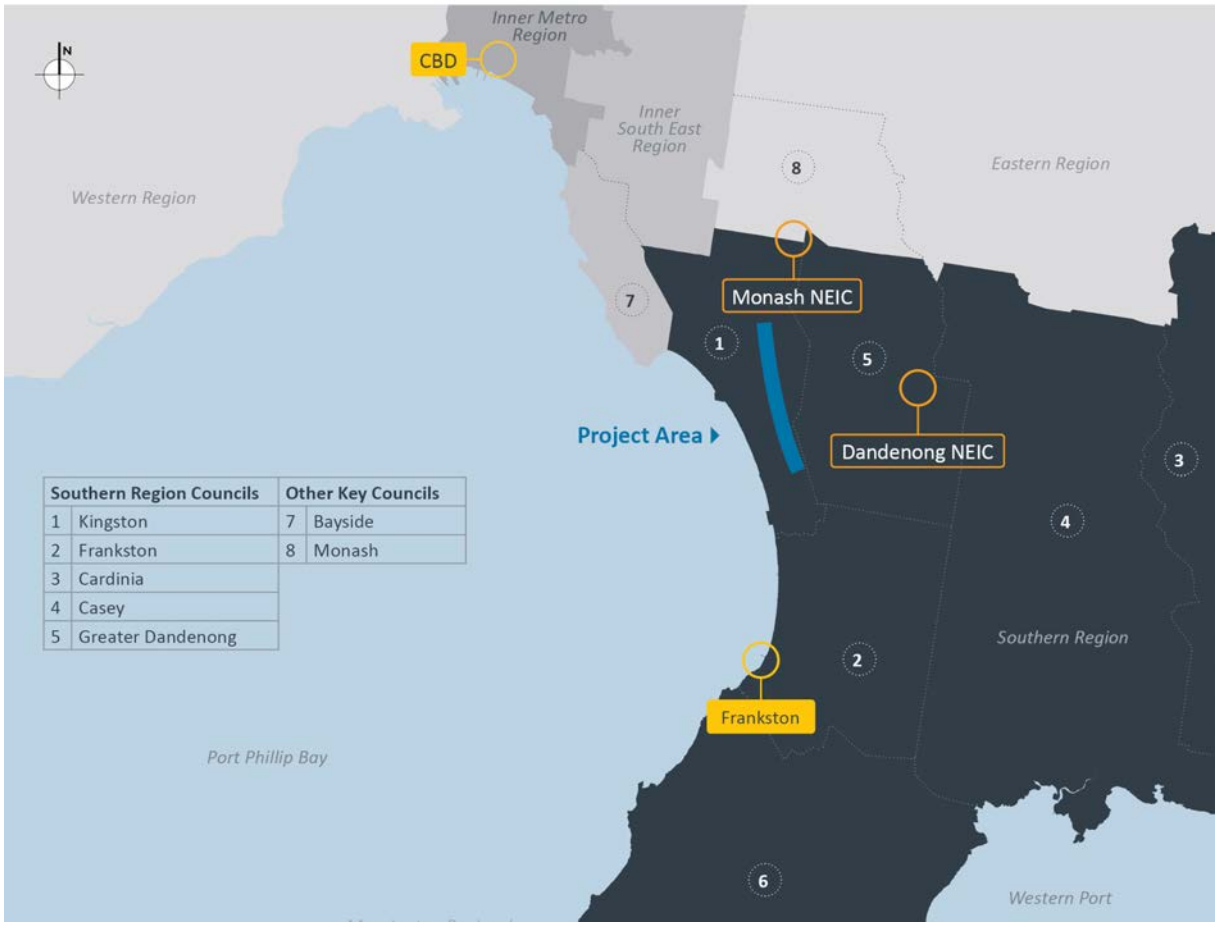


Figure 2.1 Metropolitan Melbourne regions and South Region LGAs with NEICs

2.3 STRATEGIC CONTEXT

2.3.1 The area plays a critical role in supporting Melbourne's growth

Melbourne's southern subregion has long been one of the fastest growing regions of Melbourne. Businesses have come together to form productive economic clusters, and the need for more residential areas has pushed back the urban growth boundary. The existing roads surrounding the project currently serve as the gateway to the city from the Mornington Peninsula. The area can be considered as a "movement corridor" between these heavily populated areas. It provides links between residential areas in the Southern and Bayside suburbs and employment clusters in the central business district (CBD), Monash and Dandenong (Figure 2.2). The corridor also provides road users with access to residential areas, recreation areas and employment and activity centres within the City of Kingston and adjacent municipalities, including the National Employment and Innovation Cluster (NEIC) in the City of Monash.

The role of the transport system in this context has been to facilitate movements between economic centres and residential areas across the city. Strategic movement corridors play a critical role in transporting large volumes of people and freight to and from destinations around the city.

Figure 2.2 Existing strategic traffic flows on arterial roads

Many of the roads within this corridor have not been designed to cater for the current demand, causing congestion and travel time delays for residents and businesses, constraining the development of key economic centres, and reducing amenity and liveability in residential areas. Increased demand is placing additional pressure on already congested freeways, including Mornington Peninsula Freeway, South Gippsland Freeway, and Monash Freeway. These pressures are also being felt along Nepean Highway, Springvale Road, Lower Dandenong Road and the newly completed Dingley Bypass. If the increase in travel demand is not catered for, congestion in the movement corridor will worsen and hamper growth in Melbourne's southern subregion.

2.3.2 Growth in travel demand is revealing connectivity and congestion issues

In Melbourne's south-eastern suburbs, high population growth and the strengthening of significant economic centres is already creating considerable travel demand. Established municipalities such as Greater Dandenong and Kingston, as well as the Casey-Cardinia growth corridor, are experiencing strong growth in both population and employment, with significantly more growth expected over the next 20 years. According to the Kingston Planning Scheme (2018), the population is expected to grow from 135,000 to 151,000 by 2021, whilst the Greater Dandenong Planning Scheme (2018) identifies that the population is expected to rise by 22 percent from 147,000 to 179,000 over the 10 years to 2024. This growth will increase "pressure on the transport networks, infrastructure, services and public open space" (*Greater Dandenong Planning Scheme*).

In Melbourne's south-east, increasing demand on the road network is placing additional pressure on already congested freeways, including EastLink, South Gippsland Freeway and the Monash Freeway. These pressures are also manifesting along the Mornington Peninsula Freeway, the Nepean Highway, Springvale Road, Lower Dandenong Road-Cheltenham Road and the newly completed Dingley Bypass (*Feasibility Study for the Mordialloc Bypass Summary Study Report,* VicRoads 2014).

Network connectivity and congestion issues are particularly pronounced in the residential and employment areas of Aspendale Gardens, The Waterways and Braeside, where the Mornington Peninsula Freeway currently terminates, causing queues and delays on the surrounding network. The high levels of congestion and vehicle movement conflicts are reducing the amenity of residential neighbourhoods as well as accessibility for freight movements between the industrial precincts in Moorabbin, Braeside, Dandenong South, and Monash. These effects, and the impacts on those affected, will worsen as growth continues.

Freight

The Mornington Peninsula Freeway is part of the principal road freight network, distributing freight to and from local and inter-regional destinations. The Mornington Peninsula Freeway is predicted to become the southern freight corridor, taking care of the State's freight demand over the next 30 years. Demand is anticipated to grow at an average rate of 2.6 percent per annum for metropolitan Melbourne and 1.5 percent per annum for regional Victoria. The VicRoads B-Double Network (heavy vehicles) identifies that all arterial and local roads in the Woodlands and Redwood Gardens industrial estates are approved for B-double vehicles and form key local industrial areas for freight highlighting the importance of the local freight connections (Figure 2.3).

Figure 2.3 Gazetted B-Double network for heavy vehicles and location of local industrial estates

2.3.3 Current and proposed transport improvement projects in the southern region

It is acknowledged that several transport schemes are currently in progress or proposed in Melbourne and specifically in proximity to the project in the southern region. As shown on Figure 2.4 the key transport infrastructure projects in the region include the Frankston Line Level Crossing Removals (LXRs) in particular Edithvale and Bonbeach and specifically the Caulfield to Dandenong LXRs and the Monash Freeway upgrade. The nearest LXR projects have been considered in the Environment Effects Statement (EES) as cumulative schemes, whilst the transport modelling has included all committed transport schemes which may interact with the project (see Chapter 8: *Traffic and transport*, Section 8.6.6).

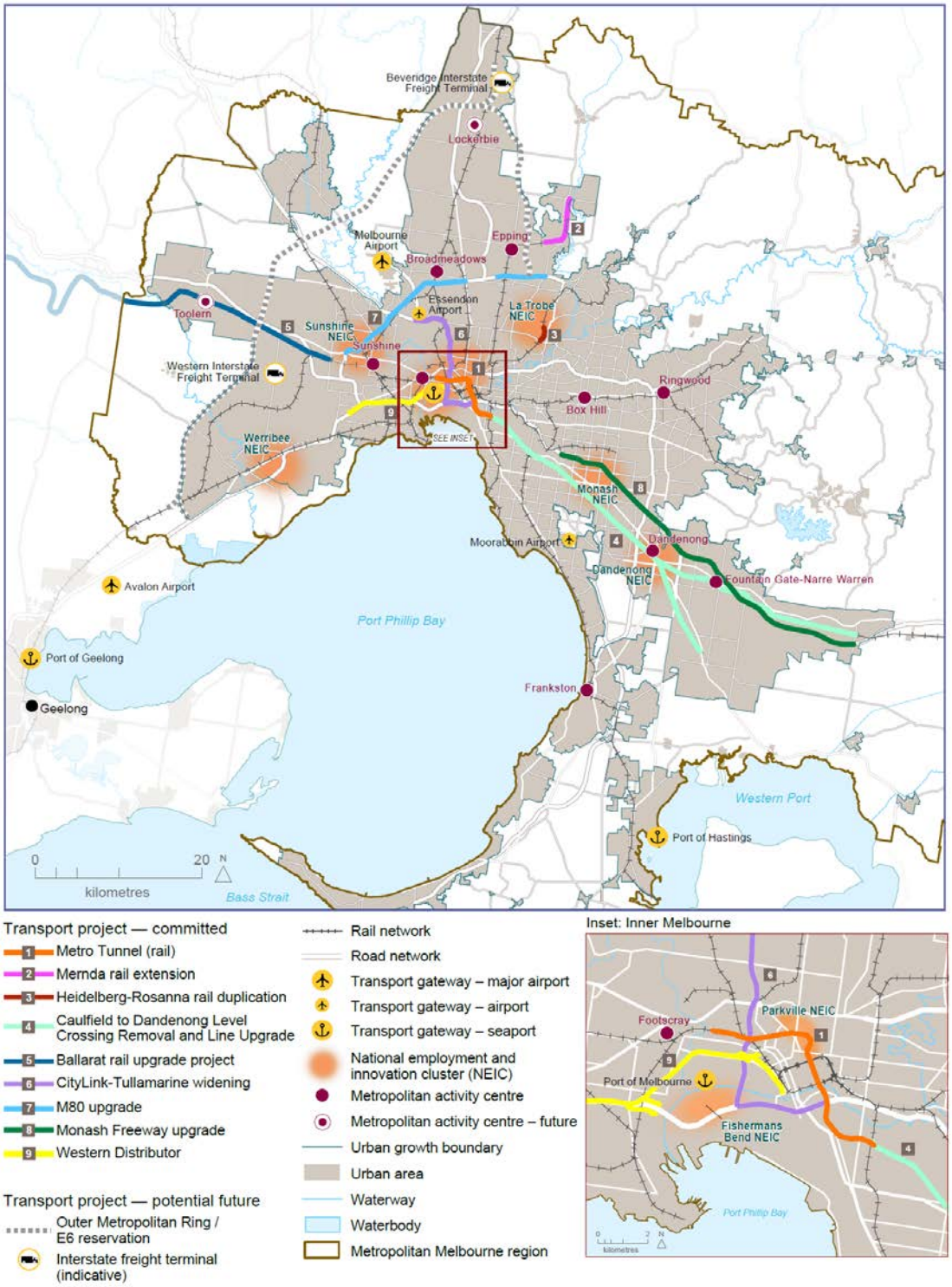


Figure 2.4 Committed and potential improvements to transport infrastructure (Plan Melbourne 2017–2050)

2.4 PROJECT DRIVERS

The current configuration of the transport network restricts vehicle movements, creating costly delays and increasing crash risks

The configuration of the road network immediately north of the Mornington Peninsula Freeway is struggling to cater for a competing set of mobility demands, which is creating barriers to the movement of people and goods in Melbourne's south-east. The northern end of the Mornington Peninsula Freeway transitions into arterial roads that are catering for longer commuter movements between the south-eastern suburbs and the CBD and NEICs, and local movements accessing residential areas and amenities in the immediate vicinity.

With no major north–south and east–west road links to assist travel through these middle south-eastern suburbs, arterial roads such as Wells/Boundary Road and Springvale Road are forced to provide access between the southern region, the central city, and employment centres in Monash and Dandenong, supporting freight, public transport and private vehicle movements. Heavy congestion is consequently experienced on key arterial routes through the local area, particularly for the dominant northbound and westbound travel directions in the AM peak (7am to 9am) and southbound and eastbound travel in the PM peak (4pm to 6pm; Figure 2.5).

Figure 2.5 Existing road capacity for the PM peak on the local road network around the project, 2016

Demand for both local and regional movements has led to high-levels of traffic congestion, which has contributed to increased travel times and poor reliability for road users and reduced network resilience. High traffic levels at key arterials and intersections combined with inefficient road configurations gives rise to risk-taking behaviours by road users and increases safety risks for motorists, pedestrians and cyclists.

In the five years from July 2012 to June 2017, there were 176 crashes (VicRoads, 2016) recorded on roads around the project, of which 62 (35 percent) resulted in a fatality or serious injuries. The most frequent crash types were rear-end collisions, and right turns against through traffic, which indicate heavy congestion and start-stop traffic.

Analysis of crash rates found that the risk of crashes on the road network around the project is higher than the outer metropolitan and overall metropolitan road averages (see Table 2.1).

Table 2.1 Comparison of crash risk by location between 2009 and 2013

Location	Crash risk per 100 million vehicle km travelled
Melbourne – Outer	11.95
Melbourne – All	13.88
Road network adjacent to project corridor	15.36

Source: VicRoads 2016

Traffic modelling shows that if the project did not proceed, the following outcomes would be expected:

- Significant traffic delays in the surrounding network during morning and evening peak times
  - Traffic modelling shows an average increase of 7% in AM peak travel times and 11% increase in PM peak travel time within the local area, and average speeds along the north–south route reducing to 37km/hr.
- Increased congestion (and associated safety issues) along Wells Road, Boundary Road, Nepean Highway, White Street, Springvale Road, Lower Dandenong Road and Governor Road
  - For the five-year period between July 2012 and June 2017, of the 176 crashes, 115 are directly related to congestion. As congestion increases, there are likely to be more accidents due to frustration and aggressive driving.
- Freight movement delays and increased freight and general traffic on local roads
  - Traffic modelling has shown a large increase in truck numbers on all northwest–southeast road links in the region, with increasing congestion on the Monash Freeway and Eastlink, and truck movements diverted onto the secondary arterial roads, worsening delays and decreasing productivity.

Travel demand from future land use growth will exceed network capacity and increase the severity of delays

NEICs in Monash and Dandenong and the associated activity centres, commercial, health, education, research and industrial precincts are amongst the most important employment generators in metropolitan Melbourne. The Monash and Dandenong clusters attract significant commuter flows, from many origins within Metropolitan Melbourne. A significant proportion of these trips originate in the City of Kingston.

Over the next 20 years, significant growth in travel demand is expected along the movement corridor due to increasing commuter and business movements between the suburbs in the southern region and the CBD, Monash, and Dandenong employment clusters. Significant growth in traffic is expected on the Monash Freeway, Mornington Peninsula Freeway, Nepean Highway and South Road, with vehicle movements 'leaking' into secondary arterial and local roads as the primary arterials and freeways become congested.

In addition to this, there are ongoing pressures for industrial operations to relocate to cheaper land in the outer suburbs to make way for denser residential areas closer to established activity centres. These forces are expected to underpin growth of the Southern Industrial Precinct, which includes parts of Bangholme, Cranbourne West, Dandenong, Dandenong South, Hallam, Keysborough, Lynbrook and Noble Park, and drive up demand for freight movements along the corridor.

Limited network connectivity constrains the development of employment and population centres

Providing efficient travel between places of residence and employment, while protecting local amenity, is essential to creating a prosperous and sustainable city. In the absence of efficient north–south and east–west road connections, investment in critical employment and economic centres will decrease.

Travel delays, caused by increasing travel demand on an inefficient network, limit people's access to employment opportunities, and reduce the capacity of NEICs to access labour markets and attract new businesses.

Congestion also reduces local accessibility and amenity, and hence liveability in existing and future residential areas in Melbourne's southern region. Access to recreational, commercial, and educational resources is hampered and frustration levels are increased.

Over the next 20 years, travel demand is forecast to grow in the south-east. Commuter and business movements are forecast to increase between Melbourne's CBD, Monash and Dandenong employment clusters, and suburbs in the south-east. Therefore, traffic is forecast to increase on the major roads — the Monash Freeway, Mornington Peninsula Freeway, Nepean Highway and South Road — with overflow into secondary arterial and local roads as congestion worsens.

More businesses are relocating their industrial operations to the south-eastern suburbs, such as Bangholme, Cranbourne West, Dandenong, Dandenong South, Hallam, Keysborough, Lynbrook and Noble Park, to take advantage of lower property and land prices. As a result, freight movement in the area is predicted to increase.

Should these challenges persist and the project not go ahead, social and economic impacts are expected to occur including worsening community and local industry satisfaction, decreasing access to employment, education, and services, and a decline of road safety. Specific impacts are expected to include:

- Traffic on local and arterial roads is modelled to increase, which will further worsen traffic flow in the area affecting the amenity value and accessibility to local services.
- Public transport (via buses) is expected to be negatively affected with 17–25% of stops recording a 'late' status.
- Road safety will deteriorate further, with traffic volumes continuing to increase on the congested road network.

In addition, impacts on Melbourne's economy would be expected by diminishing the competitiveness of industries and reducing productivity, and by making Melbourne's southern region a less attractive place to live and invest.

2.5 POLICY CONTEXT

The project has been designed and developed by MRPA to support and contribute to achieving the objectives of applicable legislation and relevant federal, state and regional policies, including:

- *Australian Infrastructure Plan 2016*
- *Transport Integration Act 2010* (TI Act)
- *Planning Policy Framework* (PPF)
- *Victorian Infrastructure Plan*
- *Victoria — The Freight State*
- *Towards Zero 2016–2020 Road Safety Strategy and Plan*
- *Plan Melbourne 2017–2050*
- *Local Planning Policy Framework* (LPPF) in the Kingston and Greater Dandenong Planning Schemes
- *City of Kingston Cycling and Walking Plan 2008.*

A full list of applicable legislation, policy and guidance is provided in Chapter 3: *Legislative framework and approval requirements* and in each technical chapter of the EES as relevant.

2.5.1 National Policy Context

Australian Infrastructure Plan 2016

Infrastructure Australia released the Australian Infrastructure Plan on 17 February 2016. The plan sets out the infrastructure challenges and opportunities Australia faces over the next 15 years and identifies four aspirations:

- productive cities, productive regions
- efficient infrastructure markets
- sustainable and equitable infrastructure
- better decisions and better delivery.

The project supports the aspirations of this plan by improving the efficiency of Australia's infrastructure and supporting productivity growth.

2.5.2 Victorian Policy Context

Transport Integration Act 2010

The *Transport Integration Act 2010* (Vic) (TI Act) is Victoria's principal transport statute. It seeks to achieve Government policy objectives through coordination between all levels of government and the private sector. The purpose of the TI Act is to create a framework for the provision of an integrated and sustainable transport system in Victoria consistent with the Act's vision statement. It does this through six transport system objectives and seven decision-making principles as outlined below.

The six transport system objectives outlined in the TI Act include:

- social and economic inclusion
- economic prosperity
- environmental sustainability
- integration of transport and land use
- efficiency, coordination and reliability
- safety, health and wellbeing.

The seven decision-making principles of the TI Act are:

- integrated decision making
- triple-bottom-line assessment
- equity
- transport-system-user perspective
- precautionary principle
- stakeholder engagement and community participation
- transparency.

The business case for the project was developed and endorsed within this policy framework, implementing the requirements of the TI Act. The project will improve access to markets, help to keep transport costs down, improve access to jobs and education, assist to satisfy user expectations, and reduce travel times to access people, places and goods.

The Minister for Planning will consider the objectives and decision-making principles of the TI Act and determine the weight to be given to each of them when deciding whether to approve the planning scheme amendment for this project.

Plan Melbourne 2017–2050

Plan Melbourne is the Victorian Government's metropolitan planning strategy that guides the city's growth to 2050. It seeks to integrate long-term land use, infrastructure and transport planning policy to meet Melbourne's future population, housing and employment needs, and to identify the necessary infrastructure, services and major projects to meet these needs.

One of the key challenges identified in Plan Melbourne is "keeping up with the growing transport needs of the city" (pg. 9), with congestion and overcrowding an issue on the road network, particularly at peak times. Direction 3.1 of Plan Melbourne recognises that improved road networks and effective public transport connections are needed to support growth in capacity.

A key outcome of the Plan is that "Melbourne has an integrated transport system that connects people to jobs and services and goods to market" (Outcome 3). To achieve this outcome, the Plan includes the following directions:

- transform Melbourne's transport system to support a productive city (Direction 3.1)
- improve transport in Melbourne's outer suburbs (Direction 3.2)
- improve local travel options to support 20-minute neighbourhoods (Direction 3.3)
- improve freight efficiency and increase the capacity of gateways while protecting urban amenity (Direction 3.4).

Additionally, Plan Melbourne aims for "a productive city that attracts investment, supports innovation and creates jobs" (Outcome 1). This outcome has associated policies to improve arterial road connections across Melbourne, particularly roads in growth areas and outer suburbs (Policy 3.2.1), which positions the project as a priority project for Melbourne.

Direction 3.3 relates to reducing travel times to better connect neighbourhoods to key destinations across the city, including creating pedestrian, cycle and public transport options as an alternative to the private car. The project helps to support this through both a reduction in travel time along this key movement corridor and in providing a shared-use path and bus priority lanes to encourage alternative transport options.

The project will directly address key challenges and contribute towards objectives within Plan Melbourne through provision of a more efficient road network with improved travel time from the outer suburbs in the southeast to the city, whilst improving connectivity and accessibility to the area surrounding the project enabling opportunities for economic growth and investment for future development.

PRINCIPAL PUBLIC TRANSPORT NETWORK

The Principal Public Transport Network is a key component of Plan Melbourne and is reflected within planning schemes across the state. It is a land use planning tool that supports integrated land use and transport planning by providing certainty to planners, developers and the community around locations where there is, or would be, high-quality public transport.

In alignment with the Principal Public Transport Network objectives, the project would enable better bus connections to serve existing communities. Removing traffic from local streets and improving connections to activity centres would enable bus services to be improved, providing residents with better access to alternative transport options.

PRINCIPAL FREIGHT NETWORK

Plan Melbourne also contains policies relating to freight which are relevant to the project including:

- improving the existing freight network to provide an efficient and effective network to support growing areas including the NEIC
- avoiding negative impacts of freight movements on urban amenity.

Mornington Peninsula Freeway and the study area arterial roads are part of the existing principal road freight network, distributing freight to and from local and inter-regional destinations. Mornington Peninsula Freeway is predicted to become the southern freight corridor facilitating the State's freight demand over the next 30 years. Demand is anticipated to grow at an average rate of 2.6 percent per annum for Metropolitan Melbourne with the Woodlands, Redwood Gardens Estates and Kingston Industrial Precinct being key local industrial areas for freight.

The project will direct more freight onto the new bypass and reduce the volume of heavy vehicles on local roads, thereby improving local amenity value and reducing local road congestion.

Principal Bicycle Network/VicRoads Smart Roads Network Operating Plan

The project corridor is nominated in SmartRoads as a Future Preferred Traffic Route and part of the Principal Bicycle Network. The VicRoads Principal Bicycle Network of proposed and existing bicycle routes has extensive coverage through the local study area and includes routes nominated for all arterial roads except Old Dandenong Road. Of note, the Mordialloc Bypass (Freeway) corridor is nominated as part of the Principal Bicycle Network, with connections further north to Heatherton Road.

SmartRoads is an approach developed by VicRoads to manage competing interests for limited road space by prioritising road use by different transport modes at specific times of the day. Priority movements are assigned to arterial roads across the network forming the SmartRoads Network Operating Plan.

Cycling into the Future 2013/23 is also a strategy to position Victoria as Australia's most bicycle friendly State. Six directions in this strategy will build on our understanding of cycling and the types of trips Victorians make by bike, will help us to increase these trips in the future and encourage more people to consider cycling.

The project will adhere to the SmartRoads plan and meet the Cycling into the Future directions by providing upgrades and new links in the Strategic Cycling Corridor. It will further provide an extensive and integrated shared use path facility and improve safety by significantly reducing general and heavy vehicle traffic volumes on the surrounding road network and providing well designed underpasses considerate of pedestrian and cycle needs and safety.

Planning Policy Framework (PPF)

The PPF seeks to ensure planning decisions in Victoria are consistent with, and supported by, the objectives of planning in Victoria as set out in Section 4 of the *Planning and Environment Act 1987* (P&E Act). The PPF sets out Victorian State policy to be considered by planning authorities and sets the overall context for spatial planning and decision making for Victoria.

The project would assist in achieving the objectives of PPF Clause 18 (Transport) by:

- developing integrated and accessible transport networks to connect people to jobs and service and goods to market
- improve transport links that strengthen the connections to Melbourne and adjoining regions
- develop freight links to assist to maintain Victoria's position as the nation's premier logistics centre
- encouraging active modes of travel by including a shared cycling and pedestrian path in the project.

The project also meets the requirements of other PPF clauses as described below.

- Clause 11 (Settlement): The project integrates the land use, improving community access to jobs, services and markets.
- Clause 12 (Environmental and Landscape Values): The project is designed to minimise and offset potential impacts on native vegetation.
- Clause 13 (Environmental Risks): The project is designed to protect the area from flood hazard by maintaining natural flood carrying capacities, preserving flood storage functions, and protecting floodplain areas of environmental significance.
- Clause 15 (Built Environment and Heritage): The project is designed to avoid the administration building and chlorine store's built fabric associated with the Braeside Park Precinct. There are no other registered historical heritage sites identified on the Victorian Heritage Register, Victorian Heritage Inventory or Heritage Overlays of the relevant local planning schemes within the study area. A Cultural Heritage Management Plan (CHMP) is being prepared to ensure Indigenous heritage values are protected.

Victorian Infrastructure Plan

In October 2017, the Victorian Government published the Victorian Infrastructure Plan, prepared in response to Infrastructure Victoria's *30 Year Infrastructure Strategy*. The plan recommends a program of upgrades to the arterial road network, focusing on congested roads in outer metropolitan areas over five to fifteen years.

The project has been identified by the Victorian State Government as a strategic response for addressing network inefficiencies and improving safety in the south-eastern suburbs under this program, with $375 million allocated from the 2017/18 and 2018/19 State budgets.

Delivering the Goods – Victorian Freight Plan (2018)

Delivering the Goods – Victorian Freight Plan is the Victorian Government's plan for freight movement in Victoria. It establishes a series of short, medium and long-term priorities to support the Victorian freight and logistics system through a predicted increase from 360 million tonnes in 2014 to nearly 900 million tonnes in 2051.

The freight plan outlines the initiatives for the next five years to improve how Victorian goods are moved to the local, interstate and overseas markets. While providing a long-term plan to guide investment in the freight network and strengthen Victoria's freight position.

The plan acknowledges that population and economic growth would continue, and that Victoria's freight is expected to triple between now and 2051. The project would represent a logical expansion of high productivity freight vehicle networks. Appendix A: *Transport impact assessment* details how the project will reduce freight vehicles on the local road network by diverting them onto the new bypass and therefore improving amenity effects on local communities and the environment.

Towards Zero 2016–2020 Road Safety Strategy and Plan

Towards Zero is a five-year plan to improve road safety in Victoria through a range of mechanisms including: safety barriers and edge lines on high-speed rural roads; more motorcycle friendly road barriers, public education, and dedicated pedestrian and cycling paths. Towards Zero includes an action plan to map how Victorian road safety partners (VicRoads, Victoria Police, the Department of Justice and the Transport Accident Commission) would work towards a 20 percent reduction in road deaths and 15 percent reduction in serious injuries on the road.

The strategy outlines methods to make Victorians safer on the roads, including:

- improving rural roads by installing barriers, tactile centre lines, and motorcycle-friendly road barriers
- incorporating dedicated cycling and pedestrian paths
- using technology to make cars, roads and driving safer
- removing through traffic from neighbouring arterial and local roads.

Safety principles outlined in Towards Zero have been applied to the project's planning, design, construction and operation phases. Appendix A: *Transport impact assessment* provides detail on the safety improvements provided by the project including dedicated shared paths, improved intersection design and barrier provision.

Climate Change Act 2010

The *Climate Change Act* sets the legislative foundation to manage climate change risks and drive Victoria's transition to net zero emissions by 2050. The Act embeds a 2050 net zero emissions target and provides for the setting of five-yearly interim greenhouse gas emissions reduction targets, climate change strategies, and adaptation action plans to ensure the 2050 target is achieved.

Greenhouse gas emission modelling indicates the project will have a positive impact as the increase in average speed of traffic on the road network and reduced congestion will improve the efficiency of fuel consumption of road users.

2.5.3 Local Policy context

Local Planning Policy Framework (PPF)

Planning schemes establish policies for how land can be used, providing decision-making frameworks for land use planning. The planning scheme policies of the City of Kingston and City of Greater Dandenong that relate to the project are outlined below. The majority of the land in the project area is covered by a Public Acquisition Overlay (PAO) designated for road purposes between the Dingley Bypass and Springvale Road (see Chapter 9: *Land use and planning* for more details.

Relevant Kingston Planning Scheme policies

- Clause 21.03 (Land use challenges for the new millennium): The project would improve the arterial road network and remove vehicles from local streets.
- Clause 21.09 (Environment, Wetlands and Waterways): Project design has considered the environment including wetlands and waterways. The alignment extends through Land Subject to Inundation Overlays and Urban Floodway Zones. The two water catchment areas that the project passes through, Braeside West and Mordialloc Creek Wetlands, contribute runoff to the larger Mordialloc Creek drainage system.
- Clause 21.12 (Transport, Movement and Access): The project would improve freight networks, increase connections to and between arterial roads, and direct traffic away from local roads.

Relevant Greater Dandenong Planning Scheme policies

- Clause 21.03 (A Vision for Greater Dandenong): The project would improve the transport network and connections across south-eastern Melbourne.
- Clause 21.06 (Open Space and Natural Environment): Project design has considered the significant open spaces, including wetlands, surrounding the alignment.
- Clause 21.07 (Infrastructure and Transportation): The project would improve the arterial road network, removing heavy vehicles from local streets.

City of Kingston Cycling and Walking Plan, 2008

A strategic walking and cycling plan was developed by the City of Kingston in August 2008 with the aim of providing a quality network to enhance access to local activity hubs, integrating policy and practice to facilitate walking and cycling, effectively coordinating the Plan implementation, provision of end of trip facilities, improved safety for users, improved maintenance of facilities and effective encouragement of cycling and walking.

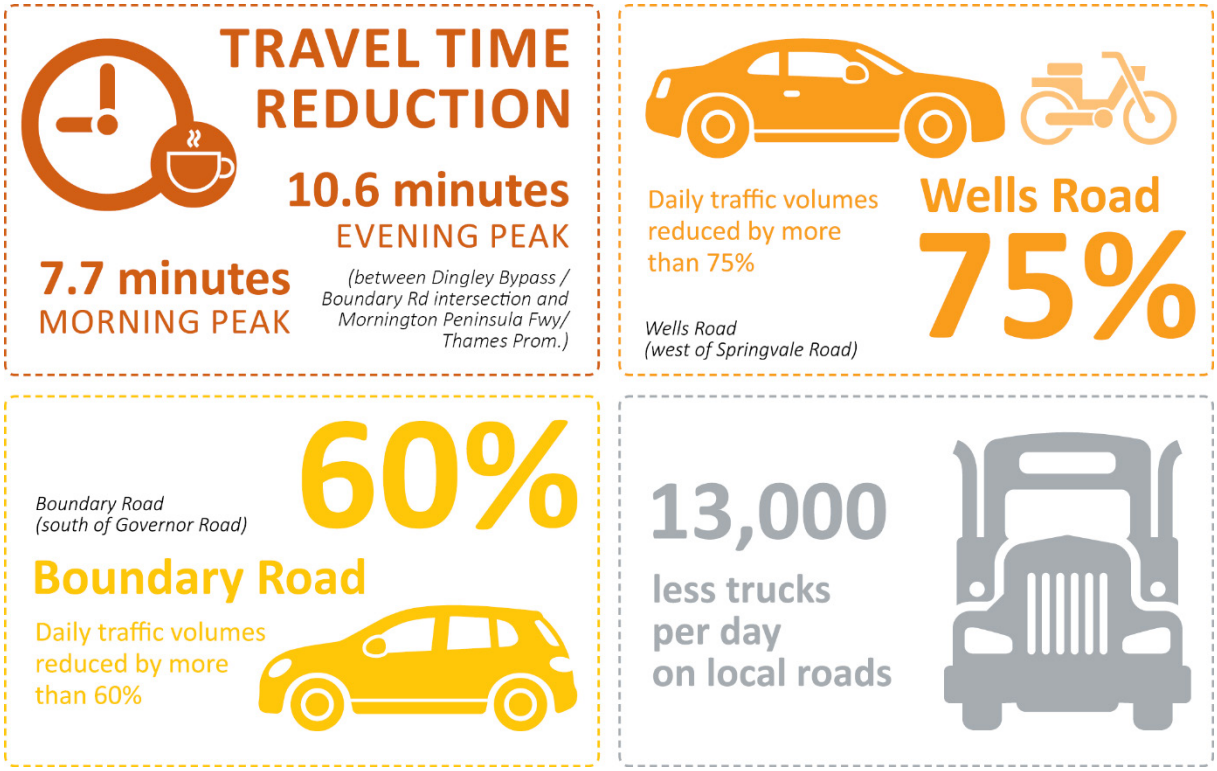
2.6 BENEFITS

The project will provide a number of benefits to the State, and businesses and communities in Melbourne's south-eastern suburbs. Addressing the configuration and capacity problems identified in the area will improve productivity, liveability, and economic development in the south-east as well as the wider metropolitan area.

2.6.1 Improved transport network efficiency

The project will improve east–west and north–south connectivity and capacity reducing delays at existing intersections and providing a high level of service for all vehicles using the road network. Traffic modelling has shown that the project will significantly reduce forecast traffic demand on the local road network including Wells Road, Westall Road, Boundary Road, Springvale Road and the Nepean Highway.

For commuters, a reduction in travel time variability and delays will reduce time spent on unproductive travel and allow more time to be spent at home with family. For the freight and logistics sectors, it will improve productivity by reducing vehicle operating costs and unexpected delays that result in lost efficiency. Travel times on key origin/destination routes are expected to be cut by up to 7.7 minutes in the morning peak and 10.6 minutes in the evening peak. Reduced traffic and congestion on existing arterial roads would improve connectivity and provide better times for local vehicle and public transport users. A significant reduction in daily traffic volume will be experienced on surrounding roads, including a 70–75% reduction along Wells Road (west of Springvale Road) and approximately 60% reduction along Boundary Road (south of Governor Road). Additionally, the anticipated daily volume of the proposed Old Dandenong Road truncation under the arterial road configuration, is expected to be significantly reduced.



With the enhanced travel mobility and serviceability, the project is expected to attract more than 75,000 total vehicles a day which includes 13,000 heavy vehicle trips relieving the pressure from key parallel routes, reducing the volume of heavy vehicles on local roads and improving the local environment for the community.

The project will significantly improve safety by reducing the risk of collisions through the reduction of traffic volumes and by providing a higher standard of road design. The project has been designed with a road safety barrier and a continuous median separation which reduces the likelihood of run-off road and head on crashes. The proposed road design combined with a reduction in congestion will improve travel conditions and reduce risk-taking behaviours by drivers.

2.6.2 Improved amenity and attractiveness of the area as places to live and work

More efficient links will reduce the reliance on local and low capacity arterial roads as key movement routes. This will improve amenity in the middle south-eastern suburbs by reducing the number of vehicles moving through residential areas.

Benefits for residents and businesses include less traffic (particularly less heavy vehicles) near residential areas, improved air quality, reduced noise pollution, and safer and less congested arterial roads, improving the attractiveness of the area as a place to live and work.

The improved access and connectivity through the area would support urban growth in the region by providing better access to existing and future employment and activity centres. Residents of the south east would benefit from improved access to educational institutions, health and community facilities, and local shops. Better connectivity will enable future improvements to existing bus services and provision of new services, providing residents with increased accessibility to alternative transport options.

Improved connectivity and facilities for cycle and pedestrian networks will provide the community with alternative transport options and more active-lifestyle opportunities, while the new road configuration and intersection design features, including barriers to separate oncoming traffic, will improve safety for both vehicle drivers, cyclists and pedestrians. More than 8km of shared use path will be provided alongside the project to promote active transport travel in the north–south direction and will form part of the Principle Bicycle Network. Elevated road structures and new crossing facilities are proposed to maintain the permeability across the freeway, improve pedestrian and cyclist safety and provide access to existing and future shared use paths.

The cumulative effect of these benefits will be improved quality of life and better connection with services and goods for those living in the south-east, fostering a more cohesive community. Further details of the cumulative impacts of the project are provided in Chapter 21: *Cumulative impacts* and the social impact assessment for the project is provided in Chapter 19: *Social effects*.

2.6.3 Increased business and industry attractiveness

Improving east–west and north–south connectivity and addressing the capacity constraints will improve accessibility between NEICs, industrial areas and residential areas in the south-east. The NEICs in Monash and Dandenong and the associated activity centres, commercial, health, education, research and industrial precincts are among the most important employment generators in Melbourne. They attract large numbers of commuters from all over Melbourne, especially from the City of Kingston.

A faster, less congested and more reliable road network would alleviate the existing transport issues that can slow the development of employment areas and limit residential growth and house prices in the area. It would also reduce barriers to investment in key employment areas and reduce travel-related business costs for the freight industry, in particular providing greater accessibility and travel times to the Port of Hastings, Moorabbin Airport and the metropolitan activity centres in the south east. The project also has the potential to provide greater exposure of passing trade to local businesses adjacent to the project, increasing local economic activity.

Based on the economic assessment undertaken for the project, the project will provide a favourable return on investment and finds the best balance between increased cost of building a freeway over an arterial, and providing benefits similar to a six-lane freeway. Further information on the economic benefits of the project are provided in Chapter 20: *Economic effects*.

2.7 ACHIEVING THE PROJECT OBJECTIVES

MRPA's objectives for the project and how they have been met are outlined in Table 2.2.

Table 2.2 Project objectives and benefits

Objective	Benefit
Improve the safety, efficiency and functionality of the road network	The project will significantly improve safety by reducing the risk of collisions through the redistribution of traffic resulting in reduced volumes on local roads and by providing a higher standard of road design. The project would provide benefits in the form of travel time savings and relieving pressure on the existing roads within the vicinity of the project. A significant reduction in daily traffic volume will be experienced on surrounding roads, including a 70–75 percent reduction along Wells Road (west of Springvale Road) and approximately 60 percent reduction along Boundary Road (south of Governor Road). Improved transport network efficiencies resulting in vehicle operating cost savings, 1600 fewer hours spent in traffic every day and up to a 35 percent reduction in traffic along Springvale Road and Wells Road.
Improve transport connectivity, which would help the freight and the logistics sector by improving efficiency and vehicle operating costs	The project will improve movement along the Mornington Peninsula Freeway corridor and result in travel time saving costs for road users of up to $64 million for road users per year.
Improve amenity by reducing the reliance on local and low-capacity arterial roads as key movement routes through the middle south-eastern suburbs	The project will enhance public safety and amenity by improving traffic flow and driving conditions which will reduce the frequency and severity of crashes. It is expected that 2500 fewer vehicle kilometres will be travelled by cars and trucks on residential streets every day. Crash risks are significantly reduced by the project which is largely attributed to the proposed grade separated interchanges and road safety barrier system. More than 70 percent of crashes along Springvale Road and Wells Road – Boundary Road occurred at intersections over the past five years. The enhanced travel mobility and serviceability provided by the project, is expected to see the bypass attract significant volumes from adjacent routes and carry more than 75,000 total vehicles a day, including 13,000 heavy vehicle trips. This will result in a quieter amenity for neighbourhoods and lower vehicle emissions in residential streets.
Reduce delays at intersections	The project will improve east-west and north-south connectivity and capacity reducing delays at existing intersections and providing a high level of service for all vehicles using the road network. Traffic modelling has shown that the project will result in a significant reduction in forecast demand with the project, on the local road network including Wells Road, Westall Road, Boundary Road, Springvale Road and the Nepean Highway.
Facilitate public transport improvements	Reduced traffic and congestion on existing arterial roads would improve connectivity and provide better times for public transport users, in particular for accessibility to the nearby NEICs and activity centres. Public transport would be promoted with the project through bus priority measures.

Objective	Benefit
Provide better access to economic and activity centres like shopping centres and business districts	The project will help support the future growth of major land use developments and employment clusters in the project area including Moorabbin Airport and the Monash NEIC by enhancing access equity and providing better network connections. Travel time is expected to reduce by more than five percent in the south-eastern suburbs situated within 10 to 20 kilometres range from the Monash NEIC.
Reduce travel time variability and delays for commuters	Travel times on key origin/destination routes are expected to improve by up to 7.9 minutes in the morning peak and 10.6 minutes in the evening peak.
Protect, and where possible enhance, natural and cultural values during the planning, construction and operation of the project	Potential impacts on natural and cultural values will be managed throughout the construction period through the implementation of an Environmental Management Framework that includes an environmental management system and a construction environmental management plan. The project also includes environmental performance requirements which define the environmental outcomes to be achieved during the planning, construction and operation of the project.
Support sustainable communities and land development during the planning, construction and operation of project	Construction impacts will be managed through the implementation of a series of mitigation measures to minimise any potential impacts on communities. During operation of the project, residents and businesses will experience less traffic (particularly less heavy vehicles) near residential areas, improved air quality, reduced noise pollution, and safer and less congested arterial roads, improving the attractiveness of the area as a place to live and work.
Achieve value for money for Victoria	This project presents opportunities to create benefits for the movement corridor connecting the Mornington Peninsula and the southern and bayside suburbs to the central city and the NEIC in Monash and Dandenong. By improving transport network efficiency, the project will improve the amenity and attractiveness of the southern region as a place to live and work and increasing economic development. This project enhances the amenity, social value and economic activity along the movement corridor and provides benefits through increased land and property values and sustainable employment opportunities.
Secure timely delivery of the project.	Construction of the project is proposed to begin in mid-2019, with the completed bypass open to road users in late 2021.