regional roads victoria

2 Project rationale and benefits

Authorised by the Victorian Government,
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VICTORIA'S BIG BUILD

VICTORIA State Government

Figures

2.1 Overview

More than 6,000 vehicles travel along the Western Highway west of Ballarat each day, with heavy vehicles making up around 25% of these vehicles. From January 2014 to May 2019 there were over 190 crashes on the Western Highway in Victoria, including nine fatalities. This includes 10 crashes (with two fatalities) within proximity to the Beaufort township.

RRV proposes to bypass Beaufort with a new section of the Western Highway, linking completed sections of the Western Highway duplication to the east and west of Beaufort. The proposed project involved the consideration of alignment options and selection of a preferred bypass alignment.

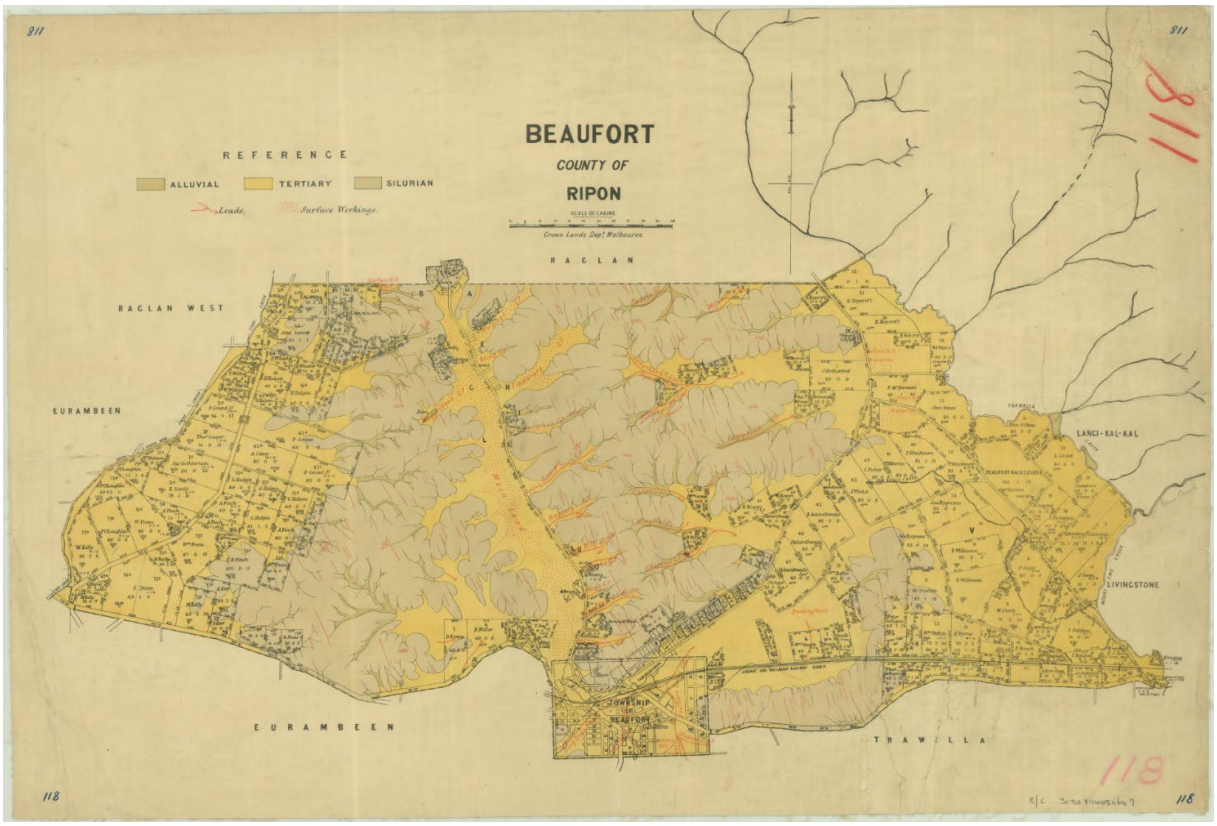
The key drivers for the project are as follows:

- delays on the Western Highway increasing transport costs and reducing competitiveness of primary producers in western Victoria
- high freight traffic through Beaufort substantially diminishes the liveability and tourist potential of the town
- road safety in Beaufort is compromised by the high freight and commuter traffic volumes.

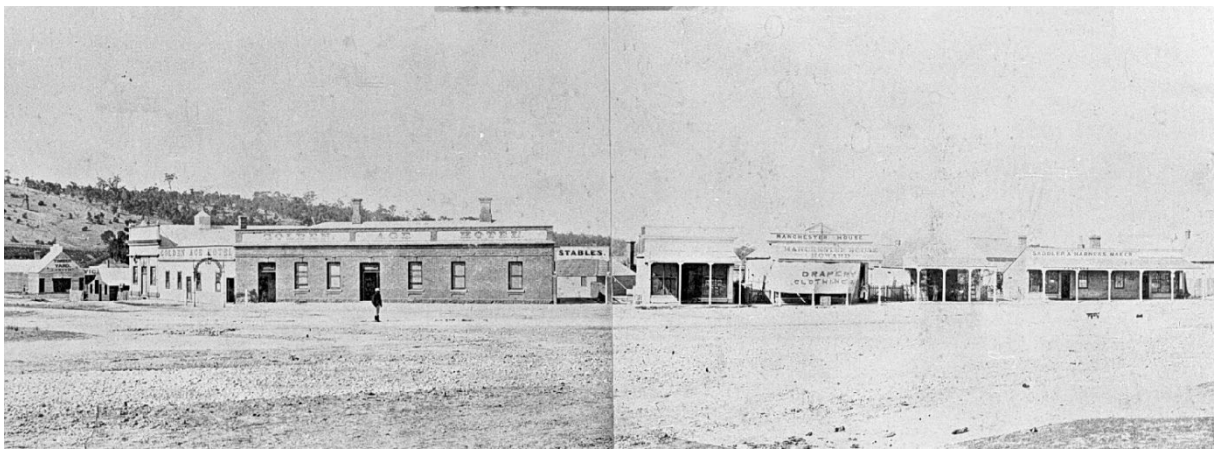
2.2 History of the Western Highway

The road between Ballarat and Stawell was constructed during the gold rush in the 1850s. The current Western Highway largely follows the same route to when it was first constructed.

The gold rush in Beaufort, formerly referred to as Fiery Creek, began with the discovery of gold at Yam Holes Creek in 1854. The Ripon Shire was established in 1863, following the creation of a road district (an early form of local government) in 1861. Beaufort was established as the administrative centre of the Shire, with the Western Highway passing through the township (Figure 2.1 and Figure 2.2).



Source: Maps Collection, State Library of Victoria



Source: Museums Victoria Collections

2.3 Western Highway upgrades

RRV is progressively duplicating and upgrading the Western Highway between Ballarat and Stawell to provide a safer and more efficient four-lane divided route. In addition to separating the traffic lanes, highway safety will be improved with sealed road shoulders, safety barriers, protected turning lanes, intersection improvements and service lanes for local access at specific locations.

The Western Highway duplication and upgrade is being completed in three main stages: Ballarat to Beaufort; Beaufort to Ararat; and Ararat to Stawell (Figure 2.3). Infrastructure upgrades, such as those on the Western Highway, are an important part of road safety improvements in western Victoria.

2.3.1 Ballarat to Beaufort

The duplication of the Western Highway between Ballarat and Beaufort from two to four lanes was completed and opened in March 2015.

The construction of the four-lane divided highway included constructing new traffic lanes, upgrading sections of existing highway and a new highway bypass south of the Trawalla township. Key design elements included a 177 m-long bridge over Mount Emu Creek and Trawalla Road, a full interchange at Ballarat-Burrumbeet Road and intersection upgrades along the length of this section of the highway.

2.3.2 Beaufort to Ararat

The 15 km duplication from two lanes to a four-lane divided carriageway between Buangor and Beaufort was completed in April 2016.

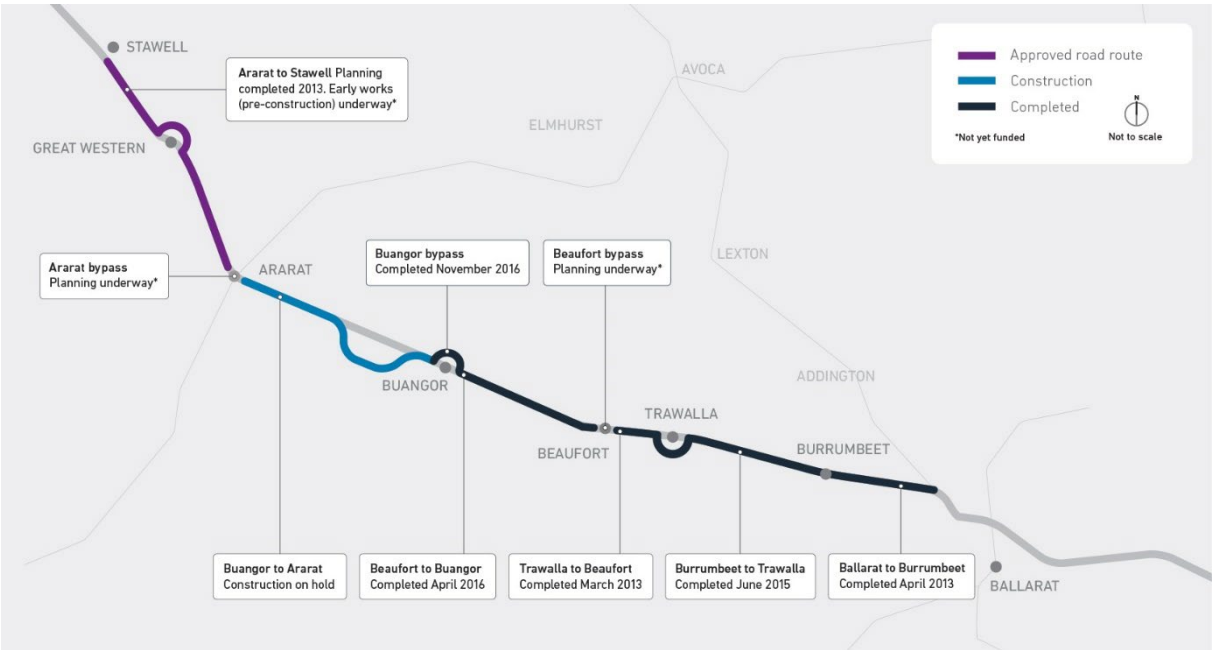
Works on the 12.5 km section between Buangor and Ararat include an upgrade to two lanes in each direction, with additional turning lanes, a new bridge over the Melbourne-Ararat railway line, two new bridges over the Hopkins River and an interchange at Hillside Road, with entry and exit ramps.

Works were due to commence in 2018, however, design changes were made to the alignment in February 2019 to retain additional trees. Construction commenced in October 2019 with the establishment of site compounds, environmental 'no go zones', tree removal, major earthworks and pavement construction. MRPV are continuing to work closely with Djab Wurrung Traditional Owners in delivering the project.

2.3.3 Ararat to Stawell

Pre-construction activities for the duplication of the Western Highway between Ararat, west of Pollards Lane and Stawell, east of Gilchrist Road has commenced. The EES and Planning Scheme Amendment process was approved by the Minister for Planning on 31 October 2014.

While funding is yet to be allocated for the construction of this section of the highway, pre-construction work, including surveys and concept designs, are being undertaken as part of the design refinement process before construction can commence.



Source: *Major Road Projects Victoria website: https://roadprojects.vic.gov.au/projects/western-highway*

2.4 Policy context

The project responds to a number of Commonwealth, State and regional strategic transport-related policies. In particular, the project would assist in meeting the objectives of:

Commonwealth policies

- *National Road Safety Strategy 2011-2020* (Australian Transport Council 2011) – updated strategy anticipated in 2021
- *Nation Building Program – Roads to Recovery* (Department of Infrastructure, Regional Development and Cities)
- *National Freight and Supply Chain Strategy* (Transport and Infrastructure Council 2019)
- *Melbourne-Adelaide Corridor Strategy* (Department of Transport and Regional Services 2007).

State policies

- *Delivering the Goods – Victorian Freight Plan* (Transport for Victoria, Department of Economic Development, Jobs, Transport and Resources 2018)
- *Victoria's 30-year Infrastructure Strategy* (Infrastructure Victoria 2016) – updated strategy to be presented to the Victorian Government in mid-2021
- *Western Highway M8/A8 Corridor Strategy* (Roads Corporation 2000)
- *Victorian Road Safety Strategy 2021–2030* (Department of Transport).

Local policies

- *Central Highlands Regional Transport Strategy* (Central Highlands Councils 2014)
- *Central Highlands Regional Growth Plan* (Victorian Government 2014)
- Pyrenees Shire Council *Beaufort Township Framework Plan* (under development).

These key policies are summarised in Sections 2.4.1, 2.4.2 and 2.4.3 below.

2.4.1 Commonwealth policies

National Road Safety Strategy 2011–2020

The *National Road Safety Strategy 2011–2020*, released by the Australian Transport Council in May 2011, sets a national target for all governments to reduce fatalities and injuries resulting from road crashes by at least 30% by 2020.

National Road Safety Strategy 2021–2030

The *National Road Safety Strategy 2021–2030* is currently being developed by the Commonwealth Government Office of Road Safety, which will replace the 2011–2020 Strategy. The new Strategy is expected to be finalised in 2021, and will include a set of targets and priorities to improve road safety in Australia with the long-term goal of zero road fatalities and injuries.

National Road Safety Action Plan 2018–2020

The *National Road Safety Action Plan 2018–2020*, which supports the *National Road Safety Strategy 2011–2020*, was endorsed by the Transport and Infrastructure Council in May 2018 and outlines nine Priority Actions to be prioritised by governments from 2018 to 2020. These actions include targeting infrastructure funding towards safety-focused initiatives to reduce trauma on regional roads, and seek to address road safety for all road users, including pedestrians and cyclists.

Nation Building Program – Roads to Recovery

The Commonwealth Government invested $36 billion in road and rail infrastructure across the National Land Transport Network through the Nation Building Program over the six-year period from 2008/9 to 2013/14.

The National Land Transport Network is a single integrated network of land transport linkages of strategic national importance, which is funded by Commonwealth, State and Territory Governments. The National Land Transport Network is based on national and inter-regional transport corridors, including connections through urban areas, links to ports and airports, rail, road and intermodal connections (e.g. bus to train connections) that together are of critical importance to national and regional economic growth development and connectivity (Department of Infrastructure and Transport 2012).

The Western Highway Project is funded under the Roads to Recovery Program as part of the Nation Building Program. In the 2012–13 Budget, the Commonwealth Government announced that it would provide a further $1.75 billion to extend the Roads to Recovery Program for five years from 2014/15 to 2018/19.

To date $505 million has been committed for the Western Highway Project by the State Government and the Commonwealth Government as part of the Nation Building Program – Roads to Recovery.

National Freight and Supply Chain Strategy

The *National Freight and Supply Chain Strategy* (Transport and Infrastructure Council 2019) outlines a national approach over the next 20 years for freight systems and supply chains to contribute to a strong economy in Australia through achieving various goals, including improved transport efficiency and international competitiveness, safe and sustainable operations, and innovative solutions to meet freight demand. These goals are to be achieved through targeted infrastructure investment and enabling improved supply chain efficiency.

A key action of the Strategy is to provide regional and remote Australia with infrastructure capable of connecting regions and communities to major gateways through land links, regional airports or coastal shipping. The project is consistent with this Strategy as it seeks to improve road freight efficiency between Melbourne and Adelaide, improving connections between the capital cities and regional areas.

Melbourne-Adelaide Corridor Strategy

The *Melbourne-Adelaide Corridor Strategy* was developed in 2007 by the former Commonwealth Department of Transport and Regional Services for transport infrastructure from Melbourne to Adelaide, to provide guidance to decision-makers and project proponents formulating network initiatives over the next 20–25 years.

The Melbourne–Adelaide corridor provides a vital link in the freight flows between eastern and central Australia. It serves various regions with a mix of urban and regional communities, small towns and regional centres. The corridor links major agriculture (grain, timber, horticulture and livestock) production areas of western Victoria and the south-east South Australia to domestic and export markets in Melbourne and Adelaide. The main challenges and strategic priorities for the corridor relate to its ongoing safety, efficiency, productivity, capacity and reliability.

Some of the challenges that have been identified in the Strategy include:

- optimising the productivity of freight movements including the potential introduction of higher productivity freight vehicles (larger than standard B-Doubles)
- managing and improving the safety of at-grade level crossings given the expected rise in both road and rail traffic volumes
- improving the safety of local and direct property access to the corridor
- planning for and providing land reservations for town bypasses, duplication and connection to new major links serving the growing metropolitan urban areas, where appropriate.

Short term priorities include:

- managing road traffic issues (safety, amenity) in towns along the corridor including town bypasses where appropriate
- improving safety and level of service of two lane sections of the road including duplication where appropriate
- improving safety of at-grade road/rail crossings
- improving sections of the road with poor geometry and alignment
- managing fatigue related safety issues and roadside hazards
- identifying infrastructure and operational implications associated with the potential introduction of higher productivity vehicles and take measures to maintain travel time and safety outcomes.

2.4.2 State policies

Delivering the Goods – Victorian Freight Plan

Delivering the Goods – Victorian Freight Plan 2018 (Transport for Victoria, Department of Economic Development, Jobs, Transport and Resources) builds on the former freight plans *Freight Futures* (2008) and *Victoria: The Freight State* (2013), and identifies future challenges and opportunities for freight and logistics businesses.

The Plan identifies that freight volumes in Regional Victoria are predicted to increase from around 40 million tonnes per year in 2014 to 70 million tons per year in 2051. To achieve an efficient, safe and sustainable freight and logistics system, key objectives identified include improvements to freight movement efficiency, better connections for Victorian businesses to their markets, and provision of sufficient future capacity.

One of the priority areas identified in the Plan is to manage existing and proposed freight corridors. The project would meet the objectives of this Plan.

Victoria's 30-year Infrastructure Strategy

Victoria's 30-year Infrastructure Strategy (Infrastructure Victoria 2016), which is currently being updated, is a state-wide strategy that outlines the pipeline of initiatives to be delivered over the next 30 years in Victoria. The Infrastructure Strategy identifies the need to address infrastructure demands and challenges, to improve the efficiency of freight supply chains and improve access for people living in regional and rural areas to jobs and services.

A recommendation of the Infrastructure Strategy is to improve the productivity of Victoria's freight transportation network. The Infrastructure Strategy recommends the establishment of a process for prioritising regional highway upgrades that will increase productivity and safety for road users, including highway duplications, road widenings and town bypasses. The proposed project will bypass the township of Beaufort, which will improve the efficiency of freight transport along the Western Highway.

An updated draft Infrastructure Strategy was released in December 2020 by Infrastructure Victoria for community consultation. The consultation period ended on 26 February 2021, with the final Infrastructure Strategy to be presented to the State Government in mid-2021.

Western Highway M8/A8 Corridor Strategy - Deer Park to South Australian Border

VicRoads developed the Western Highway M8/A8 Corridor Strategy in 1999, with the objectives to:

- provide a plan for the management and development of the Western Highway in a manner that promotes Victoria's overall development
- facilitate interstate trade, business, and tourism and community activities in the west of the State
- facilitate urban development in the western region of Melbourne.

Ultimately, the strategy aims to lead the Western Highway Corridor to be developed to the following standards:

- full freeway standard ('M' road) between the Western Ring Road, Melbourne and the Sunraysia Highway, Ballarat and divided carriageways ('M' road) between Ballarat and Stawell
- a single carriageway highway with overtaking lanes ('A' road) from Stawell to the South Australian border.

'M' roads provide the primary road links that sustain economic and regional development. They connect Melbourne with other capital cities and major provincial centres, and they link major centres of production and manufacturing with Victoria's export terminals. They provide a consistent high standard of driving conditions with divided carriageways, four traffic lanes, sealed shoulders, and with delineation and line marking that are easily visible in all weather conditions. The project will provide a link in this strategy through the construction of a new 'M' road between Melbourne and Stawell.

Victorian Road Safety Strategy 2021–2030

The *Victorian Road Safety Strategy 2021–2030*, developed by the Road Safety Partners of Victoria (Department of Transport, Department of Health and Human Services, Department of Justice and Community Safety, Transport Accident Commission and Victoria Police), is the State road safety strategy aimed at creating a safer road environment. The Strategy commits the State Government to initially halve road deaths and progressively reduce serious injury by 2030, ultimately eliminating death and serious injury from roads by 2050. The Strategy will be delivered via a series of short-term action plans over the life of the Strategy, which may include measures such as policy, innovation and technology, infrastructure improvements, public information campaigns, education programs, enforcement and other mechanisms available to government.

The project is predicted to improve the safety of road users and pedestrians within the Beaufort township and reduce the number of crashes on the Western Highway within the project area (as defined in EES Chapter 4: *Project description*).

2.4.3 Local policies

Central Highlands Regional Transport Strategy

The *Central Highlands Regional Transport Strategy* (December 2014) is an integrated strategic transport plan for the Central Highlands Region of Victoria. The Strategy was developed by the eight councils comprising the region and released in 2011. The Central Highlands Region is facing a number of policy challenges, including:

- responding to population and employment change
- addressing the ageing population in rural areas
- managing the development of freight transport
- responding to the changing cost of transport
- developing the service economy.

The Strategy proposes to address these challenges in the following ways:

- expand transport networks for growing areas
- manage amenity impacts of freight
- plan for a 'networked region' in transport and land use
- provide efficient access to markets for the Region's production
- support the needs of visitors to the Region
- increase the resilience of the transport system under changing circumstances.

The project is consistent with the Central Highlands Regional Transport Strategy.

Central Highlands Regional Growth Plan

The *Central Highlands Regional Growth Plan* (Victorian Government 2014) provides land use planning guidance in the Central Highlands for the next thirty years. This plan is one of eight growth plans for regional Victoria and, together with *Plan Melbourne: 2017-2050* (Plan Melbourne), provides a broad direction for the use and development of land. The regional growth plans and Plan Melbourne have been aligned to develop Victoria's urban settlements as a 'state of cities' network.

The vision for the Central Highlands is to create a 'productive, sustainable and liveable region for its people'. This vision is to be realised by working alongside Plan Melbourne, aiming to facilitate the development of urban settlements so they can accommodate a larger proportion of the state's growth. Integrated planning policy will support decision making by local councils and aim to guide planning work across the Central Highlands Region.

Regional infrastructure, including transport networks, play a key role in economic growth and overall liveability of the Central Highlands Region. Transport in this region is heavily centred around the Western Highway, as it is a key link between Melbourne, Ballarat, Ararat and Adelaide. The upgrading and expanding of this crucial highway is vital for meeting the directions and goals of this Growth Plan.

Beaufort Township Framework Plan

The Pyrenees Shire Council is currently preparing the *Beaufort Township Framework Plan* as part of a suite of plans for the Pyrenees Futures project. Feedback from the community will be considered by Council in finalising the Plan for adoption following the selection of a preferred alignment for the project.

On completion, this Plan will identify valued township characteristics and traits to inform directions for future planning to address land use, urban design and the function of the Beaufort town centre, aimed at bringing more life to the town centre and helping make the town bypass-ready. This Plan will be incorporated into the Pyrenees Planning Scheme.

Tonne-kilometres

Tonne-kilometres is a way of measuring the volume of freight transported over a distance.

Tonne-kilometres is calculated as the total load carried (tonnes) by each freight vehicle, multiplied by the distance travelled (km).

2.5 Project need

2.5.1 Transport

Travel efficiency

The Western Highway currently supports approximately 6,000 vehicles a day travelling west of Ballarat, passing through the township of Beaufort. A wide range of vehicle types utilise this route, ranging from standard personal vehicles, caravans and trailers associated with tourist traffic to commercial vehicles including B double trucks, and farm machinery. Around 25% of the traffic on the Western Highway is comprised of heavy commercial vehicles.

The number of vehicles on the highway is increasing, and there is an increasing problem of queuing behind slow moving vehicles. The increased queuing is leading to escalating travel times in the region of seven minutes over the last 10 years between Ballarat and Stawell (VicRoads Travel Time Surveys 2001 & 2011). This extended travel time is impacting on the operating cost and reducing travel time reliability for the freight industry and other users of the highway.

The overall functionality of the current Western Highway is affected by the township of Beaufort and the associated speed restrictions, intersections and the vehicle/pedestrian interface. The project would assist with improving the functionality of the highway, as well as user experience and the amenity and safety of the Beaufort township.

The town of Beaufort reduces the overall efficiency of this important corridor. The narrowing of road corridor and the increase interaction with other road users means speeds need to be reduced accordingly. Equally important is the acknowledgement of residents that live in these towns having to tolerate the frequent passage of heavy vehicles. These freight vehicles are not only a risk to resident safety but are also a constant source of noise and vehicle emissions.

Township amenity

Commercial and residential property in Beaufort is largely concentrated around the Western Highway (Neill Street). The impact of heavy vehicle traffic is therefore felt by a large number of the Beaufort community. In addition, the levels of noise along with air pollution emitted by vehicles impact on the environment of Beaufort residents. Many properties within Beaufort experience unacceptable noise levels from heavy vehicle traffic. This results from a combination of braking, acceleration/deceleration, gear changing, loose loads, and occasional poorly maintained vehicles.

Freight transport

In 2015, using data collected from its culvert weigh in motion (culweigh) site based in Beaufort, VicRoads were able to calculate the average yearly tonnage of vehicles along the Western Highway passing through Beaufort. This exercise revealed that 39 million tonnes of freight passed through this location. The historical data collected at the culweigh site indicated an annual increase of 1% growth in heavy vehicle numbers.

A series of travel time surveys have shown that the operation of the Neill Street and Lawrence Street traffic signals can add anywhere between 20–50 second travel time variability through this section of the Western Highway.

Figure 2.4 shows the movement of road freight (by volume) across the national road network. For the year ending 31 October 2014, the proportion of tonne-kilometres travelled by articulated (load carrying vehicles) and rigid trucks (vehicles over 3.5 tonnes Gross Vehicle Mass) in Victoria was 20.2% (39,612 million). Interstate freight movements from Victoria for this period were 16,862 million tonne-kilometres (Australian Bureau of Statistics 2014).

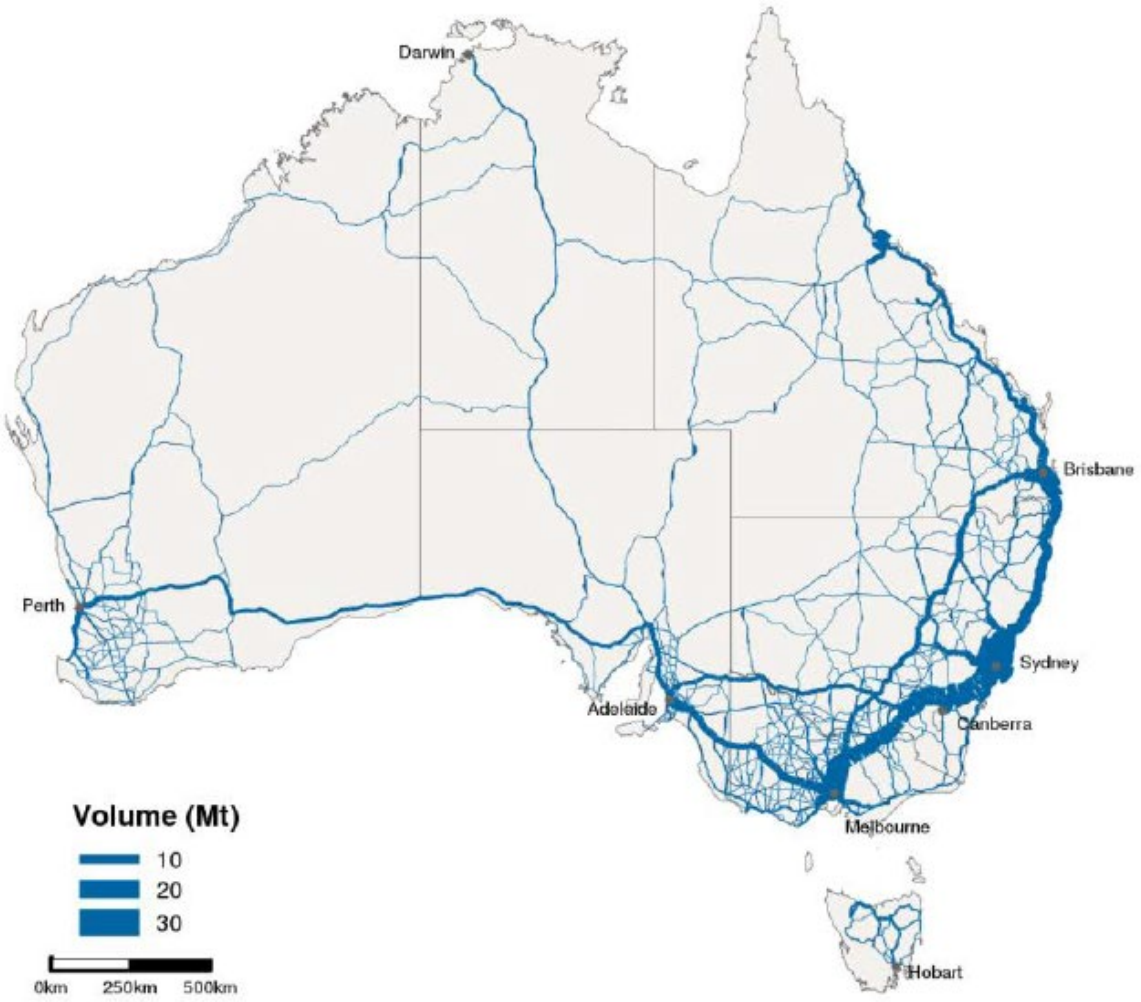
Regional advocacy

The Western Highway Action Committee was formed in early 2000, with members from local councils located along the Western Highway Corridor from outer Melbourne to the South Australian border.

The Western Highway Action Committee's vision for the Western Highway is that over the short- to medium-term it will:

- have a reduced accident/fatality rate
- provide an efficient route for freight transport throughout the corridor
- provide communities throughout the corridor with a safe and effective connection.

Over the long-term it is expected that the Western Highway will be of sufficient standard between Melbourne and the South Australian border to allow for a 100–110 km per hour speed limit.



Source: *Bureau of Infrastructure, Transport and Regional Economics (2014), sourced from Australian Bureau of Statistics (2002) and Bureau of Infrastructure, Transport and Regional Economics estimates*

2.5.2 Safety of road users

Currently, the Western Highway passes through the centre of the township of Beaufort, and is the last township stop on the Highway before metropolitan Melbourne. Within Beaufort, the Western Highway is reduced to a 60 km per hour speed limit, two-lane single carriageway, comprising of Neill Street and Ararat Road. The Western Highway passes a number of residences and small businesses.

Essential services are located either side of the Western Highway (Neill Street). Pedestrians regularly need to cross the Western Highway for services such as education, health, community facilities and transport (train station). There is only one controlled crossing location in Beaufort, being the signalised intersection of Lawrence Street and Neill Street. Although these pedestrian signals are frequently used, the movement of pedestrians within the shopping precinct often occurs at other, non-designated crossing points along the length of the street, posing significant risk to pedestrians. There are no dedicated on-road bike lanes or bicycle facilities within the Neill Street precinct.

The presence of larger vehicles within the narrow confines of Neill Street, and the interaction of these vehicles with cyclists and pedestrians, is a safety concern to the community. These large trucks utilising the existing road environment discourages the community from shopping or undertaking business transactions in Neill Street.

2.6 Project benefits

2.6.1 Transport network efficiency

Minimisation of travel delays on the Western Highway and reduction in travel time variability provides efficiencies to the freight industry and improved confidence. This allows businesses to get their goods to market quicker, as well as assist interstate travel. The project also contributes to improved operation of the Beaufort road network and making it more available to other road user groups.

Further discussion on the benefits to the transport network from the project is provided within EES Chapter 8: *Traffic and transport*.

2.6.2 Improved access and safety

The elimination and/or significant reduction in possible traffic conflicts minimises the risk of serious crashes between road users. Improved access and traffic flow reduce the level of risk-taking behaviour. Consistent with RRV's objectives for the project, the project is intended to improve road safety through reduced traffic volumes through the Beaufort township, resulting in reduced traffic and pedestrian interaction. The project is also intended to improve access to markets and the competitiveness of local industries.

Further discussion on the benefits to access and safety resulting from the project is provided within EES Chapter 8: *Traffic and transport*.

2.6.3 Improved amenity

The project will reduce traffic noise and improve the amenity, attractiveness and safety of the commercial and residential precincts adjacent to the Western Highway by significantly reducing the number of larger trucks. The reduction in traffic, in combination with the implementation of amenity improvement mitigations, will further enhance these amenity improvements making the Neill Street precinct a more pleasant and less threatening environment to walk, park, shop and socialise. The improved amenity in the Beaufort township will create the potential for leveraging these benefits to broaden the township appeal to visitors and potential residents.

Further discussion on the amenity benefits of the project is provided within EES Chapter 14: *Amenity*.

2.6.4 Social benefits

The construction of the project is expected to enhance the social amenity of Beaufort by improving pedestrian access to community facilities and improving safety in the town centre and major activity areas as a result of the reduction in the amount of freight and through traffic travelling along the main street.

Further discussion on the social benefits of the project is provided within EES Chapter 12: *Social effects*.

2.6.5 Economic benefits

Agriculture is the highest contributor to the region's economy. The services sector is also important within the region, as are the sectors of tourism and manufacturing. Sheep, beef cattle and grain farming account for 19% of total employment in the Pyrenees Shire.

Commercial activities within the local area are primarily focussed around agriculture, and timber plantations and processing. Improved freight movement and efficiency is expected to provide a commercial advantage to these local industries and the local economy.

In the long-term, improvements to the township's environment associated with the reduction in through-traffic when bypassed has the potential to result in an uplift in revenues for business in Beaufort, above what would occur under a no bypass scenario.

Further discussion on the economic benefits of the project is provided within EES Chapter 13: *Land use and economics*.

Further discussion on adverse environmental impacts is discussed throughout Chapters 8 to 16 and will be managed through the implementation of the measures defined in Chapter 17: *Environmental management framework*. The approved Environmental Management Framework will outline the accountabilities and requirements for the management of environmental impacts of the project during the planning, construction and operation of the project.