

2. Project Rationale

The Western Highway Project is being implemented to deliver key benefits to the community, freight industry and the State. These drivers form key aspects of Victorian Government transport policies, as well as the VicRoads operating charter as set out in the *Transport Integration Act 2010*.

When the last of the duplication of the Hume Highway between Melbourne and Sydney is completed, due to be finished in mid 2013 with the completion of the Holbrook Bypass, the Western Highway will be the busiest un-duplicated national highway link in Australia in terms of interstate freight movements (WHAC Committee Report, SKM 2007).

This chapter expands on the key policy documents which define the need for this Project, which are consistent with the drivers for the broader duplication of the Western Highway between Ballarat and Stawell.

2.1 Policy Context

VicRoads is proposing the Project to assist in meeting the objectives of the:

- National Transport Links – Growing Victoria's Economy strategy
- Nation Building Program – Roads to Recovery Melbourne-Adelaide Corridor Strategy
- Melbourne-Adelaide Corridor Strategy – Building Our National Transport Future
- Western Highway M8/A8 Corridor Strategy
- Western Highway Action Committee
- Central Highlands Regional Transport Strategy
- Arrive Alive (Victoria's Road Safety Strategy).

These key strategies are summarised below.

2.1.1 National Transport Links - Growing Victoria's Economy

The National Transport Links - Growing Victoria's Economy strategy was released by the Victorian Government in 2007. This strategy identified opportunities to upgrade the State's transport network under the federal Nation Building Program, for the future growth and prosperity of Victoria and Australia. The strategy proposes to deliver a significant upgrade of Victoria's key transport links on the road, rail and port networks between 2009 and 2014.

The estimated value of the 30 Victorian projects proposed for funding under the Australian Government's Nation Building Program is in the range of \$9.5 – \$11.5 billion in 2007 dollars. The duplication of the Western Highway is a partly funded project under the Nation Building Program on a shared funding arrangement. The Australian

Government have committed \$404 million under the current funding cycle, on the basis that the Victorian Government funds \$101 million within the same time period.

The Nation Building road projects in Victoria will:

- Address capacity constraints in key transport corridors.
- Enhance the efficient operation of Victoria's transport network for industry growth, regional development and export activity.
- Make our roads safer for motorists and deliver significant travel time savings.
- Reduce transport costs.
- Improve the international competitiveness of Australian industries.
- Make our rail system more competitive and efficient for freight companies.
- Provide faster and enhanced connections to our trading ports for the export of Australian manufactured goods and agricultural products.

Duplication of the Western Highway would allow safe overtaking at all times and eliminate traffic queuing. Transit times would decrease, and travel on the highway would be safer and more reliable. The Project would help deliver better efficiency of freight movements between important rural industries and manufacturers in regional areas, and improve safety for motorists.

2.1.2 Nation Building Program – Roads to Recovery, Melbourne – Adelaide Corridor Strategy

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 that together are of critical importance to national and regional economic growth development and connectivity (DoIT, 2012).

The Australian Government is investing \$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 Western Highway Project is funded under the Roads to Recovery Program as part of the Nation Building Program. In the 2012-13 Budget, the Australian 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 Victorian Government and the Australian Government as part of the Nation Building Program – Roads to Recovery.

2.1.3 Melbourne - Adelaide Corridor Strategy – Building Our National Transport Future

A corridor strategy was developed in 2007 by the 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.

The Melbourne–Adelaide Corridor provides a vital link in the freight flows between eastern and central Australia, and serves various regions with a mix of urban and regional communities. The corridor links major agriculture (grain, timber, horticulture and livestock) production areas of western Victoria and the south-east of South Australia to Melbourne, Adelaide and the associated export markets. 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 for the corridor include:

- Optimising the productivity of freight movements including the potential introduction of High 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:

- Manage road traffic issues (safety, amenity) at towns along the corridor including town bypasses, where appropriate.
- Improve safety and level of service of two lane sections of the road including duplication, where appropriate.
- Improve safety of at-grade road/rail crossings.
- Improve sections of the road with poor geometry and alignment.
- Manage fatigue related safety issues and roadside hazards.
- Identify the infrastructure and operational implications associated with the potential introduction of High Productivity Freight Vehicles and take measures to maintain travel time and safety outcomes.

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

The objective of this VicRoads 1999 strategy was to provide a plan for the management and development of the Western Highway in a manner that promotes Victoria's overall development, facilitates interstate trade, business, and tourism and community activities in the west of the State, and urban development in the western region of Melbourne.

Ultimately, the strategy aims for 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 and 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.

2.1.5 Western Highway Action Committee

The Western Highway Action Committee (WHAC) 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 WHAC'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 kilometres per hour (km/h) speed limit.

2.1.6 Central Highlands Regional Transport Strategy

The Central Highlands Regional Transport Strategy is an integrated strategic transport plan for the Central Highlands Region of Victoria, 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 six objectives for the transport system's response to the challenges are:

- 1) Expand transport networks for growing areas.
- 2) Manage amenity impacts of freight.
- 3) Plan for a 'networked region' in transport and land use.
- 4) Provide efficient access to markets for the Region's production.
- 5) Support the needs of visitors to the Region.
- 6) Increase the resilience of the transport system under changing circumstances.

The works proposed as part of the Western Highway Project have been integrated into the Central Highlands Regional Transport Strategy.

2.1.7 Arrive Alive! 2008 - 2017 Victoria's Road Safety Strategy

The Arrive Alive strategy has the objective of reducing the incidence and severity of road crashes on Victorian roads by 30% by 2017. The Western Highway between Ballarat and Stawell has had a total of 68 casualty crashes within a five year period.

The duplication of the Western Highway between Ararat and Stawell would result in:

- Improved safety at intersections between local roads and the Western Highway.
- Continuous overtaking opportunities to allow faster freight traffic to safely overtake slower tourist traffic.
- Improved road safety to 'M' standard.
- Improved rest areas for all vehicles.

These works are predicted to significantly reduce the number of crashes on the Western Highway within the Project area, and assist in reaching the target of reducing the incidence and severity of road crashes by 30%, by 2017.

2.2 Project Objectives

As the principal road link between Melbourne and Adelaide, the Western Highway serves interstate trade between Victoria and South Australia and is the key transport corridor through Victoria's west, supporting farming, grain production, regional tourism and a range of manufacturing and service activities. Currently, more than 5,500 vehicles travel the Western Highway between Ballarat and Stawell each day, which includes 1,500 trucks.

The duplicated highway would improve road safety, reduce travel times and costs, and assist road freight efficiency for goods and produce transported to and from South Australia and central and western Victoria. VicRoads' specified objectives for the implementation of the Project are to:

- Provide safer conditions for all road users by:
 - Reducing the incidence of head-on and run-off-road crashes
 - Improving safety at intersections
 - Improving safety of access to adjoining properties
- Improve efficiency of freight by designing for High Productivity Freight Vehicles.
- Provide adequate and improved rest areas.
- Locate the duplicated alignment to allow for possible future bypasses of Beaufort and Ararat.

2.2.1 Road Safety

The current configuration of the Western Highway between Beaufort and Stawell is a two lane, single carriageway highway. The configuration of the highway has remained unchanged for almost a century in some locations. The demand on the highway has significantly increased, especially in recent times, which means that the current highway is not meeting the required level of service which is resulting in a high crash rate.

Section 3, between Ararat and Stawell, has a crash history of 4.24 crashes per 100 million vehicle km travelled. There have been no fatalities recorded on this section within the last five years (VicRoads Crash Statistics, 2007-2011).

There are several aspects of the current highway configuration, which are key problem areas as outlined below.

2.2.1.1. Few overtaking opportunities

The highway has few overtaking opportunities, which are contributing to the problem of increasing travel times. The limited overtaking opportunities mean that some drivers may take risks overtaking slower vehicles. This factor is one of the reasons for the high crash rate on the Western Highway.

2.2.1.2. Property access safety

Many of the properties that front the Western Highway have their access directly onto the Western Highway. This was not a problem when the traffic volumes on the Western Highway were a lot lower, but the current and projected future traffic volumes mean that this access is proving to be a hazard. The main risk occurs when a driver tries to turn either left or right into the property, which can result in a crash with an oncoming vehicle.

2.2.1.3. Poor road geometry

The origins of the Western Highway date back to the 1850s, when it was a track used for people to walk or ride between the various gold fields. The alignment has remained mostly unchanged over time, with some upgrades over time bringing it up to the configuration it is today. The progressive upgrading of sections of the highway over time has led to poor road geometry in some sections. The poor road geometry can make driving the highway more challenging and, in some cases, can lead to run off road or head on crashes.

2.2.1.4. Lack of rest break areas

There are currently some rest areas available for motorists to take a break along the highway, but most of them are no more than gravel pullover areas, and only some have facilities such as toilets. The current rest areas are not inviting for people travelling and, too often, the driver may choose to continue on their journey rather than take a break. Consequently, through road safety research, VicRoads has developed a Rest Area Guideline which describes the minimum spacing for various rest stops, and additional stops would be constructed as part of the Project. The Western Highway Project Rest Area Route Plan details the specific stops for the Project. The location of rest break areas has been detailed in Chapter 9 (Traffic and Transport) and Chapter 18 (Social).

Mapping of the fatigue related crashes to identify any cluster of crash locations and any trends is shown in Figure 2-1.

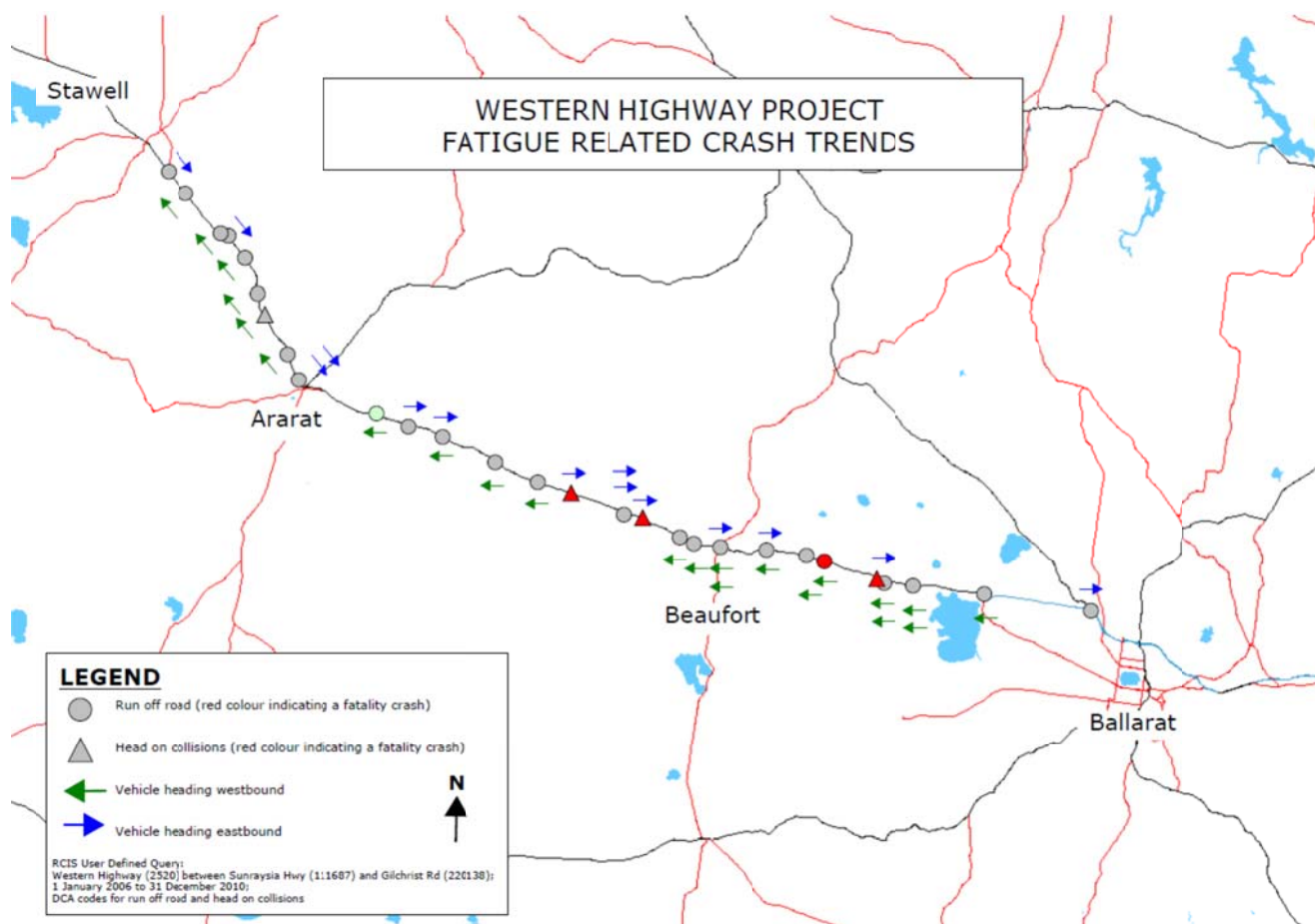


Figure 2-1 Fatigue related crash trends

2.2.2 Transport and Freight Efficiency

Over the past 20 years, the total traffic volumes along the Ballarat to Stawell section of the Western Highway have increased by approximately 47%. The proportion of heavy vehicles has increased by 12% over the same period. The traffic volume between Ararat and Stawell is around 5,500 vehicles per day, with 33% being commercial vehicles.

The Western Highway is currently supporting a large variety of vehicle types, ranging from tourist traffic (the 74km section of the Western Highway between Beaufort and Stawell also forms part of the Goldfields Touring Route) and commuter traffic to large B-Double trucks, and even some farm machinery. The number of vehicles on the highway is also increasing, which means that there is an increasing problem of queuing behind slow moving vehicles. The increased queuing is leading to an extended travel time between Ballarat and Stawell. 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 combination of the rise in overall traffic volume and the increase in heavy vehicles means that the

time it takes to travel between Ballarat and Stawell has also increased by approximately 7 minutes over the past 10 years. Currently, it takes approximately 1 hour and 25 minutes to travel between Ballarat and Stawell, compared to the 1 hour and 18 minutes it took 10 years ago (VicRoads Travel Time Surveys, 2011 & 2001).

The freight industry is sharing the cost of the additional 210 hours per day gained over the past 10 years to move freight between Ballarat and Stawell. The additional cost to the freight industry will continue to rise without this problem being rectified. Another factor that has contributed to the rise in the travel time is the reduction of the speed limit in various locations of the Western Highway as a measure to improve road safety.

Completing the duplication of the highway between Ballarat and Stawell would improve freight efficiency, enhance safety and amenity, and deliver major benefits to industries that depend upon the highway for access to resources, and domestic and export markets.



Military Bypass Road and Western Highway Intersection looking north