

VicRoads

Western Highway Project – Section 2: Beaufort to Ararat Social Impact Assessment Report



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- 2. May only be used for the purpose of informing the Environment Effects Statement and Planning Scheme Amendment for the Western Highway Project (and must not be used for any other purpose); and
- 3. May be provided to the Department of Planning and Community Development for the purpose of public exhibition as part of the Environment Effects Statement and Planning Scheme Amendment for the Western Highway Project.

The services undertaken by GHD in connection with preparing this Report were limited to those specifically detailed in Section '4. Methodology' of this Report.

The opinions, conclusions and any recommendations in this Report are based on assumptions made by GHD when undertaking services and preparing the Report ("Assumptions"), as specified in Section '4. Methodology' and throughout this Report.

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Executive Summary

This report sets out the findings of the Social Impact Assessment (SIA) Technical Study carried out as part of the Environment Effects Statement for the duplication of the Western Highway between Beaufort and Ararat. The report includes a review of existing social conditions; an assessment of community responses to the planning study; a risk assessment and an impact assessment of the options followed by a discussion of potential mitigation measures to minimise adverse impacts and enhance potential social benefits of the project.

The SIA was undertaken in accordance with the Minister for Planning's Final EES Scoping Requirements and the objective of the Environment Effects Statement which was:

▶ To protect residents' well-being and minimise any dislocation of residents or severance of communities, to the extent practicable.

As part of this SIA, a review of previous consultation activities conducted by VicRoads prior to the EES process was undertaken. This review included an analysis of key issues and the determination of social impacts that would require further investigation.

An existing conditions assessment was undertaken and included a review of relevant local and State government social and planning policies, an analysis of the social profile of the study area, a review of community services, facilities and cultural and social values, and a meeting with Council officers to gather information on strategic development objectives and community functioning within the study area.

The SIA team participated in consultation activities including attending the landholder information sessions to speak with landowners and interested community members and conducting individual landholder meetings with people that would be impacted by the Project.

A multi-criteria assessment of alignment options was conducted based on information from the existing conditions assessments. The outcome was the selection of three proposed alignments to take forward to the risk and impact assessment presented in this report. These three alignments are described in Section 6. This report informs the selection of a preferred and alternate alignment from these three alignments for the EES for Section 2. The assessment and selection for the proposed alignments is documented in Chapter 5 of the EES for Section 2, and in the Options Assessment Report (Technical Appendix to the EES).

The SIA process found that community attitudes towards the Project were mixed with concerns raised about potential amenity impacts, including an increase in noise levels and impacts on visual amenity. Concerns were also raised about potential property acquisition, severance of agricultural land and changes in access arrangements to local properties. Buangor Primary School raised particular concerns about amenity impacts that the Project could have on the school and potential changes to school bus routes.

Community members also identified that they thought by-passing Buangor could increase the amenity of the town and that the Project could result in higher levels of safety, particularly with regard to accessing properties.

To identify and assess the potential Social impacts that could arise from the Project, a Risk and Impact Assessment was completed. The Social Impact Assessment was conducted under four categories which

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included relevant indicators to measure the potential social risk. The main potential social risks were considered to be:

Pressures on settlement patterns:

The likelihood of the project leading to an adverse change in settlement patterns is very low. This is because existing planning controls are designed to prevent intensive development in the study area. In addition, there is an opportunity to plan the township of Buangor to take advantage of the improved amenity and reduced traffic.

Changes to the distribution of residents:

It is unlikely that any residents would specifically move away due to the project, apart from the residents of the dwellings that would be acquired. However, it is considered that these households have strong local ties and are likely to stay in the general region. Therefore, while the Project could to lead to a redistribution of some residents, it is likely to have an insignificant effect on total population.

Changes to the demographic characteristics of the study area:

Changes to demographic characteristics are anticipated to be minor and consequently have a low social impact. This is due to the planning controls that will limit development and hence demographic change.

Dislocation for individuals and communities:

A maximum of three dwellings would be acquired as a result of the project. This is a minor social impact compared with other similar transport infrastructure upgrade projects.

Severance and accessibility changes for individuals and communities

There is expected to be some localised impacts on travel times for landowners, particularly the owners with property on both sides of the Highway who require farm machinery to move from one side to another. However, overall benefits for road safety and Highway operations would be provided for general users. Access to community facilities and focal points would not be adversely affected by the project. Access to the community facilities in Buangor may be improved due to significantly reduced through traffic in the town.

Amenity impacts to individuals and communities (during operation)

Under options 1, 2 and 3, there would be an increase in noise levels of 5 db(A) or more at four, three and eight dwellings respectively. This is the level at which a change in noise would be 'clearly noticeable' at the receiver locations. The overall social impact on amenity is classified as Medium Impact, due to the large number of households that would all experience a small change.

Amenity impacts to individuals and communities (during construction)

The main disruptive effect of a major infrastructure project is often experienced at the construction phase by the local community. It is at this point that many of the negative access and amenity effects occur. The potential social impacts of construction include reduced amenity for adjacent residents from construction activities, including: increased traffic noise, dust visual impact.

Valued Places and Spaces

It is considered likely that the project would have a positive social impact on the environs of the key community facilities in Buangor, due to improved amenity and access. The alignments avoid the Cobb and Co Staging Stables and recreation reserve in Buangor. In addition, the alignments avoid the Major Mitchel historical marker and have been designed to minimise impact at the Woodnaggerak homestead



site. There is some potential for social benefit in terms of improved access to these sites. The social impact of access to valued places and social foci is insignificant.

Overall, the social impacts of the Project would be low for all options. However, there are two impacts that are considered to be of moderate social impact. These are: amenity impacts to individuals and communities during the operation and construction of the Project and disruption to access during construction.



1. Introduction

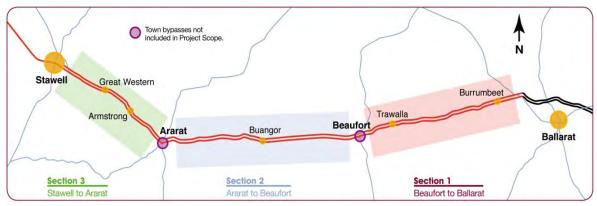
This report sets out the findings of the Social Impact Assessment (SIA) Technical Study carried out as part of the Environment Effects Statement for the duplication of the Western Highway between Beaufort and Ararat. The report includes a review of existing social conditions; an assessment of community responses to the planning study; a risk assessment and an impact assessment of the options followed by a discussion of potential mitigation measures to minimise adverse impacts and enhance potential social benefits of the project.

1.1 Project Background

The Western Highway (A8) is being progressively upgraded as a four-lane divided highway for approximately 110 kilometres (km) between Ballarat and Stawell. As the principal road link between Melbourne and Adelaide, the Western Highway serves interstate trade between Victoria and South Australia and is the key corridor through Victoria's west, supporting farming, grain production, tourism and a range of manufacturing and service activities. Currently, more than 5500 vehicles travel on the highway west of Ballarat each day, including 1500 trucks. The Western Highway Project consists of three stages, illustrated in Figure 1:

- Section 1: Ballarat to Beaufort
- Section 2: Beaufort to Ararat
- Section 3: Ararat to Stawell.

Figure 1: The Western Highway Project



Source: VicRoads

Works on an initial 8 km section between Ballarat and Burrumbeet (Section 1A) commenced in April 2010 and will be completed in 2012. Construction for Section 1B (Burrumbeet to Beaufort-Carngham Road) commenced in early 2012 and is expected to be completed by June 2014. The last 3 km section from Beaufort-Carngham Road to Smiths Lane in Beaufort (Section 1C) commenced in late 2011 and will finish in 2012. Separate Environment Effects Statements (EESs) and Planning Scheme Amendments (PSAs) must be prepared for both Sections 2 and 3. It is expected that Sections 2 and 3 will be completed and opened in stages through to 2016, subject to future funding.

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Section 2 of the Project commences immediately west of the railway crossing (near Old Shirley Road) west of the Beaufort township and extends for a distance of approximately 38 km to Heath Street, Ararat.

Section 3 of the Project commences at Pollards Lane, Ararat and extends for approximately 24 km to Gilchrist Road, Stawell.

The EES will focus on assessment of the proposed ultimate upgrade of the Western Highway between Beaufort and Stawell to a duplicated highway standard complying with the road category 1 (freeway) of VicRoads Access Management Policy (AMP1). The project includes a duplicated road to allow for two lanes in each direction separated by a central median.

The EES has also considered a proposed interim upgrade of the Western Highway to a highway standard complying with the VicRoads Access Management Policy AMP3. When required, the final stage of the project is proposed to be an upgrade to freeway standard complying with AMP1.

The proposed interim stage of the Project (AMP3) will provide upgraded dual carriageways with wide median treatments at key intersections. Ultimately the Western Highway is proposed to be a freeway (AMP1) where key intersections will be grade separated, service roads constructed and there will be no direct access to the highway.

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.

Highway improvements for the three sections between Ballarat and Stawell will involve:

- Constructing two new traffic lanes adjacent to the existing highway, separated by a central median.
- Constructing sections of new four-lane divided highway on a new alignment.

In addition to separating the traffic lanes, highway safety would be improved with sealed road shoulders, safety barriers, protected turning lanes, intersection improvements, and service lanes for local access at some locations.

Town bypasses of Beaufort and Ararat are not included in the current proposals. Beyond Stawell to the Victorian border, ongoing Western Highway improvements would continue with shoulder sealing works, new passing lanes and road surface improvements.

The aims/objectives of this 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; and
 - 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 alignment to allow for possible future bypasses of Beaufort and Ararat.



1.2 Project and Study Areas

1.2.1 Project Area

The project area was defined for the purposes of characterising the existing conditions for the Project, and to consider alignment alternatives. The project area encompasses a corridor extending up to 1,500 metres (m) either side (north and south) of the edge of the road reserve (encompassing the extent of new alignment possibilities).

1.2.2 Study Area

A study area has been defined for the purpose of this social impact assessment which is different to the project area described above. This is because the community of the study area extends well beyond the Western Highway. It includes all of the people that live in proximity to the Western Highway but also people that live on the roads running off the Highway and who rely on it for access. It also includes consideration of the broader regional and State community that use the Highway.

For the purposes of the Social Impact Assessment, the study area includes the populations in the surrounding areas which may be affected by the Project. These are defined as being the Australian Bureau of Statistics (ABS) Census Collection Districts (CCDs) which intersect or border the Western Highway in Section 2 of the Project (Figure 2). Due to the low population density in these areas, the CCD boundaries extend well to the north and south of the area which may be affected by the Project (the project area).

The study area forms part of the following two Local Government Areas:

- Shire of Pyrenees
- Rural City of Ararat.

The Project does not include consideration of bypassing Beaufort and Ararat. For this study it is assumed that these towns are not bypassed.

Populations adjoining the highway to the east of Beaufort and west of Ararat are considered in the social impact assessments for Sections 1 and 3 respectively.



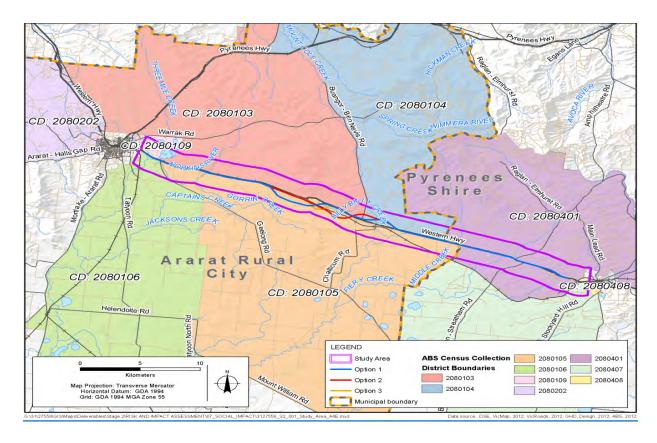


Figure 2: Social Impact Assessment study area

1.3 Proposed Alignment

A multi-criteria assessment of alignment options was conducted based on information from the existing conditions assessments. The outcome was the selection of three proposed alignments to take forward to the risk and impact assessment presented in this report. These three alignments are described in Section 6. This report informs the selection of a preferred and alternate alignment from these three alignments for the EES for Section 2. The assessment and selection for the proposed alignments is documented in Chapter 5 of the EES for Section 2, and in the Options Assessment Paper (Technical Appendix to the EES).

1.4 Project Description

This section sets out a brief summary of the project description. Only those elements which are relevant to the social impact assessment have been included.

The Project provides two lanes in each direction and associated intersection upgrades to improve road safety, and facilitate the efficient movement of traffic. It commences at the railway overpass west of Old Shirley Road, Beaufort and extends for approximately 38 km to Heath Street, Ararat.

There are three proposed alignment options that are being assessed. These share a common alignment from Beaufort to near the Anderson Road intersection, east of Buangor (Ch. 16800), retaining the existing single carriageway footprint, and providing a duplicate carriageway located approximately 15 to



100 m to the north. Thereafter the options differ in their geometry, and whether a duplication or an entirely new dual carriageway is constructed.

The proposed alignments each include a bypass of the township of Buangor and crossing of the Melbourne to Adelaide railway which carries both local and interstate passengers. The alignments also cross six major waterways and 21 minor waterways (tributaries, drainage lines and irrigation channels). Apart from Langi Ghiran State Park and small areas of remnant forest, the surrounding land use is predominately agricultural (grazing and cropping).

The small township of Buangor contains a primary school and sports oval which are currently accessed via local roads from the Western Highway. The proposed alignment would bypass this town and access would be via grade separated interchange facilities.

Other than the Melbourne to Ararat railway, no State significant infrastructure such as major pipelines or powerlines, is located within the study area. An electricity substation exists to the west of Buangor but this would not require relocation.

1.4.1 Proposed Duplication Corridor

Where sections of the proposed alignment utilise the existing carriageway, the existing bi-directional road would be converted to a single direction carriageway, and a new parallel carriageway would be constructed to serve traffic in the opposite direction.

Where the duplication involves construction of two new carriageways a construction corridor of typically 80-110 m would be required, and wider to account for constraints or topography. This width has been allocated in order to achieve the storage requirements of 25 m B Double heavy vehicles at wide median treatments, to achieve an appropriate level of clear zone associated with road side objects and to allow for service roads.

1.4.2 Access Control

Under AMP1 (freeway) conditions, local access to the freeway would be provided via interchanges, connected to the local road network by service roads. The locations of these interchanges are outlined in Table 1.

As the location of the future bypass of Ararat has not been confirmed, and to reduce the impact on significant native vegetation alongside the roadside in this area, VicRoads has decided to only duplicate to AMP3 highway standards in this area. Intersections located in this section that would be to AMP3 standard include:

- Warrayatkin Road
- Airport Access Road; and
- Geelong Road/Green Hill Lake Road.

Service roads are to be provided wherever alternative access to an existing property is not available. Intersections would be designed as shown in Table 1.



Table 1 Alignment Option 1 – Intersections and interchanges (AMP1 – Freeway)

Location	Option 1		Option 2		Option 3	
	Chainage (m)	Location	Chainage (m)	Location	Chainage (m)	Location
Eurambeen Raglan Rd – Streatham Road	4800	Full Diamond Interchange (Local road over)	✓	As per Option 1	√	As per Option 1
Ferntree Gully Road	9700	Grade Separation (Local Road over)	✓	As per Option 1	✓	As per Option 1
Anderson Road	16400	Half Diamond Interchange (Fwy over Local road)	✓	As per Option 1	✓	As per Option 1
Peacock Road	17530	Grade Separation (Fwy over Local road)	17430	As per Option 1	17530	As per Option 1
Buangor-Ben Nevis Road	19480	Half Diamond Interchange (Fwy over Local road)	19350	As per Option 1	19480	Half Diamond Interchange (Freeway over Local road)
Existing Western Highway	22800	Eastbound Entry Ramp	20300	Fwy over existing Western Highway	22200	Eastbound Exit Ramp
Railway Track	23580	Fwy over Railway Track	20660	As per Option 1	23000	As per Option 1
Hillside Road	25100	Half Diamond Interchange (Fwy over Local road)	23840 24600	Westbound Exit Ramp Westbound Entry Ramp	24140 24800	Westbound Exit Ramp Westbound Entry Ramp
Existing Western Highway (Langi Ghiran State Park)	28600	Eastbound Exit Ramp	25180	Eastbound Exit Ramp	25350	Eastbound Exit Ramp
Brady Road- Hillside Road	32200	Underpass for Service Road	✓	As per Option 1	✓	As per Option 1

1.4.3 Staging

The initial duplication of the Western Highway would be to AMP3 highway standards, with most local road and property accesses remaining. At some time in the future, when traffic volumes or other conditions warrant, the highway would be further upgraded to AMP1 freeway standard. Access to the freeway when this occurs, estimated to be at least 20-30 years subsequent to duplication, would be via service roads and grade separated interchange facilities.

It is important to note that the EES would assess only the impacts of the AMP1 freeway standard road except between the Hopkins River and Ararat and near Buangor where AMP3 standard is to be used.

Section 2 would commence in 2013 and would be constructed to Buangor by 2015. Subject to availability of additional funding, Section 2 would be completed in 2015 and Section 3 construction would commence in late 2014 and finish in 2016.



1.4.4 Noise Attenuation

In accordance with the Traffic Noise Reduction Policy (VicRoads, 2005), noise attenuation measures may be recommended to mitigate traffic noise in certain circumstances. Noise impact and mitigation is assessed in the Technical Report "Noise Impact Assessment".

1.4.5 Landscape and Visual

Native vegetation would be removed where necessary for construction purposes. The duplicated highway alignment is subject to continued design development to reduce the impact on existing vegetation.

VicRoads would develop a landscape plan to vegetate the road reserve following construction. The design and species selection would be sympathetic to the existing landscape values of the project area.

Impacts on landscape and visual amenity are assessed in the Landscape and Visual Impact Assessment Report (Technical Appendix N), which also details the proposed management and mitigation measures.

1.4.6 Rest Areas and Truck Stops

VicRoads has produced a Rest Area Route Plan for the Western Highway Project. Indicative locations for rest areas have been proposed between Ararat and Stawell. These are subject to review for suitability with the adopted alignment.

1.4.7 Construction Method

It is anticipated that the Project would be divided into a number of sections or stages. Construction is expected to take around two years for any particular stage, depending on the scope of works in that location.

Construction activities would be guided by the Contractor's Environmental Management System (EMS) and associated Environmental Management Plans (EMPs) in accordance with the requirements of VicRoads Project Environmental Protection Strategy (PEPS) and the contract specifications.



2. EES Scoping Requirements

2.1 EES Objectives

For the social impact assessment aspects of the Western Highway Project, the relevant evaluation objective outlined in the Final EES Scoping Requirements is:

To protect residents' well-being and minimise any dislocation of residents or severance of communities, to the extent practicable.

2.2 EES Scoping Requirements

The EES Scoping Requirements for the social impact assessment aspects are as follows:

- The EES should assess the potential social effects of the project, particularly on nearby residents and surrounding communities. It should include an assessment of:
 - The existing social and community conditions in the vicinity of the project and relevant alternatives, including the settlement pattern, the distribution of residents in the vicinity of the site, and their demographic characteristics, and patterns of community interaction and social foci;
 - Potential effects on local residents and communities during the construction stage;
 - Potential effects on places with particular cultural, recreational or aesthetic values, particularly with regard to significant regional locations;
 - The potential for residents and communities, or parts of communities in the vicinity of the project, to be affected through dislocation, severance of accessibility or reduction of their amenity (in relation to visual amenity, noise other changes to the character of the area) resulting from development of the proposed project or relevant alternatives; and
 - Proposed measures to address potential adverse social effects, having regard to these, the likely residual effects on local residents and communities.



3. Legislation, Policy and Guidelines

This section reviews the relevant social and community legislation and policy for this Project. This includes Commonwealth, State and Local legislation and policy. An overview of the relevant Acts and policies and a brief description of the relevant clauses or elements are provided.

3.1 Commonwealth Government

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is the key Commonwealth legislation governing environmental protection in Australia.

The objectives of the EPBC Act are to:

- Provide for the protection of the environment, especially matters of national environmental significance
- Conserve Australian biodiversity
- Provide a streamlined national environmental assessment and approvals process
- ▶ Enhance the protection and management of important natural and cultural places
- Control the international movement of plants and animals (wildlife), wildlife specimens and products made or derived from wildlife promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources.

The Act notes the principles of ecologically sustainable development which should be applied in all project assessments:

- a) Decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;
- b) If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;
- c) The principle of inter-generational equity -- that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;
- d) The conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;
- e) Improved valuation, pricing and incentive mechanisms should be promoted.

The Act also explicitly makes reference to social considerations in Section 136.

Subdivision B—Considerations for approvals and conditions

136 General considerations

- (1) In deciding whether or not to approve the taking of an action, and what conditions to attach to an approval, the Minister must consider the following, so far as they are not inconsistent with any other requirement of this Subdivision:
 - (a) matters relevant to any matter protected by a provision of Part 3 that the Minister has decided is a controlling provision for the action;
 - (b) economic and social matters.



3.2 State Government

3.2.1 State Legislation

The following Acts are applicable to social considerations:

- Transport Integration Act 2010
- Public Health and Wellbeing Act 2008
- Planning and Environment Act 1987

Transport Integration Act 2010

The Transport Integration Act 2010 (TIA) highlights the need for:

- Social and economic inclusion (Section 8)
- ▶ Economic prosperity (Section 9)
- Integration of transport and land use (Section 11)
- Safety and health and wellbeing (Section 13).

The relevant sections are set out below:

Section 8: Social and economic inclusion

The transport system should provide a means by which persons can access social and economic opportunities to support individual and community wellbeing including by:

- (a) Minimising barriers to access so that so far as is possible the transport system is available to as many persons as wish to use it
- (b) Providing tailored infrastructure, services and support for persons who find it difficult to use the transport system.

Section 9: Economic prosperity

The transport system should facilitate economic prosperity by:

- (a) Enabling efficient and effective access for persons and goods to places of employment, markets and services
- (b) Increasing efficiency through reducing costs and improving timeliness
- (c) Fostering competition by providing access to markets
- (d) Facilitating investment in Victoria
- (e) Supporting financial sustainability.

Section 11: Integration of transport and land use

- (1) The transport system should provide for the effective integration of transport and land use and facilitate access to social and economic opportunities.
- (2) Without limiting the generality of subsection (1), transport and land use should be effectively integrated so as to improve accessibility and transport efficiency with a focus on:
 - (a) Maximising access to residences, employment, markets, services and recreation:
 - (b) Planning and developing the transport system more effectively
 - (c) Reducing the need for private motor vehicle transport and the extent of travel
 - (d) Facilitating better access to, and greater mobility within, local communities.
- (3) Without limiting the generality of subsection (1), the transport system and land use should be aligned, complementary and supportive and ensure that:
 - (a) Transport decisions are made having regard to the current and future impact on land use



- (b) Land use decisions are made having regard for the current and future development and operation of the transport system
- (c) Transport infrastructure and services are provided in a timely manner to support changing land use and associated transport demand.
- (4) Without limiting the generality of subsection (1), the transport system should improve the amenity of communities and minimise impacts of the transport system on adjacent land uses.

Section 13: Safety and health and wellbeing

- (1) The transport system should be safe and support health and wellbeing.
- (2) Without limiting the generality of subsection (1), the transport system should:
 - (a) Seek to continually improve the safety performance of the transport system through:
 - (i) Safe transport infrastructure
 - (ii) Safe forms of transport
 - (iii) Safe transport system user behaviour
 - (b) Avoid and minimise the risk of harm to persons arising from the transport system
 - (c) Promote forms of transport and the use of forms of energy which have the greatest benefit for, and least negative impact on, health and wellbeing.

Public Health and Wellbeing Act 2008

The *Public Health and Wellbeing Act 2008* recognises the State's role in promoting, protecting and reducing inequalities in public health and wellbeing. It promotes collaboration between all levels of Government and industry, business, communities and individuals.

The following objectives in the *Public Health and Wellbeing Act 2008* (Part 2, Section 4) need to be considered in the social impact assessment of the Project:

Part 2, Section 4 Objective

- (1) The Parliament recognises that:
 - (a) the State has a significant role in promoting and protecting the public health and wellbeing of persons in Victoria
 - (b) public health and wellbeing includes the absence of disease, illness, injury, disability or premature death and the collective state of public health and wellbeing
 - (c) public health interventions are one of the ways in which the public health and wellbeing can be improved and inequalities reduced
 - (d) where appropriate, the State has a role in assisting in responses to public health concerns of national and international significance.
- (2) In the context of subsection (1), the objective of this Act is to achieve the highest attainable standard of public health and wellbeing by:
 - protecting public health and preventing disease, illness, injury, disability or premature death
 - (b) promoting conditions in which persons can be healthy
 - (c) reducing inequalities in the state of public health and wellbeing.

The Act also defines the following principles:

Part 2, Section 7 Principle of primacy of prevention

 The prevention of disease, illness, injury, disability or premature death is preferable to remedial measures.

Part 2, Section 10 Principle of collaboration

Public health and wellbeing, in Victoria and at a national and international level, can be enhanced through collaboration between all levels of Government and industry, business, communities and individuals.



Planning and Environment Act 1987

The *Planning and Environment Act 1987* has the objective of securing 'a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria'. It also addresses the protection of public utilities for the benefit of the community. The Act states that the objectives of planning in Victoria are:

- (a) To provide for the fair, orderly, economic and sustainable use, and development of land
- (b) To provide for the protection of natural and man-made resources and the maintenance of ecological processes and genetic diversity
- (c) To secure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria
- (d) To conserve and enhance those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or of special cultural value
- (e) To protect public utilities and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community
- (f) To facilitate development in accordance with the objectives set out in paragraphs (a), (b), (c), (d) and (e)
- (g) To balance the present and future interests of all Victorians.

3.2.2 State Policy

State Government social policy is currently being revised as a result of the change of Government in 2010. Regional Development Victoria has indicated that no dates have been set for when this new policy will be adopted. The key relevant policy is therefore the Central Highlands Regional Strategic Plan. This is the overarching strategic policy for the region including the two municipalities covering the study area and other municipalities.

The Strategic Plan notes that the major attributes of the region include:

- There is sustained population growth throughout the region. Many parts of the region are viewed as a sustainable living alternative to Melbourne and other regions.
- It is located on the east-west transport corridor connecting Melbourne, western Victoria and Adelaide, which is the Western Highway.
- ▶ It has the major concentration of Australia's gold mining heritage.
- Victoria's best developed and integrated regional higher education and training system network.
- Regional Victoria's strongest concentration of IT and computing services and capacity.
- Some of Victoria's most productive soils and quality horticultural growing conditions, which means that rural living should be carefully planned and limited to reduce impact on agriculture but to support existing settlement networks.
- A restructuring and diverse economy embracing new opportunities in such areas as IT, advanced manufacturing, education and tourism.
- Ballarat is Victoria's third largest urban area.

The Strategic Plan considers that the planned upgrade of the Western Highway will strengthen the region's comparative advantage against other regions in the State, as it will strengthen links with the rapidly growing western region of Melbourne.



The Project can contribute to the overall goals of the plan by minimising impacts on agricultural productivity, improving transport access for residents and businesses, enhancing the experiences of tourists and making the Western Highway safer for all road users.

3.2.3 State Strategies

VicRoads has noted (2010) that the project aligns with key government strategic priorities which have social benefits, including reducing travel times and increasing road safety.

It also notes that the project is part of the following strategies:

- Melbourne Adelaide Corridor Strategy Building Our National Transport Future, Department of Transport and Regional Services 2007
- National Transport Links Growing Victoria's Economy, Department of Infrastructure 2007
- Western Highway M8/A8 Corridor Strategy Deer Park to South Australian Border, VicRoads 1999
- Arrive Alive! 2008 2017 Victoria's Road Safety Strategy
- AUSLINK Building our National Transport Future.

These strategies focus on transport related outcomes. However, they have both over-arching and secondary social objectives, including:

- Road safety improvement, which reduces fatalities and injuries caused by travel, and also encourages social connectivity by enabling more people to travel safely
- Enhancing social sustainability of regional areas through economic development which occurs as a result of better connections to national and international markets
- Improving the life and employment opportunities for residents of rural areas, by enabling them to source goods and services more easily and cheaply, and by making it easier for them to travel for education, skills development and work.
- Enhancing safety and amenity for the majority of adjacent residents by improving road standards, reducing queuing and traffic congestion and bypassing residential areas where appropriate.

The objectives of these strategies are built into the project objectives.

3.2.4 State Planning Policy Framework

The State Planning Policy Framework (SPPF) sets out the key planning principles which underpin all land use planning in Victoria. It consists of a series of clauses in every planning scheme in Victoria which set out specific policies for specific areas of planning. The relevant planning schemes for Section 2 of the Project are those for the Pyrenees Shire and the Rural City of Ararat.

Each municipality also has a Local Planning Policy Framework (LPPF). The LPPF sets out the specific strategic planning policies of the municipality. Together, the SPPF and the LPPF provide the strategic planning framework for the assessment of any proposed land use and/or development in Victoria. Where a planning scheme amendment (PSA) or planning permit is required, the project proponent must be able to demonstrate how the Project meets the objectives of the planning scheme. While the planning schemes are focussed on land use planning matters, many of the over-arching policies include a social policy dimension. The following clauses from the framework are relevant in determining the appropriate social objectives for the Project.



Clause 10 Operation of the State Planning Policy Framework

This clause indicates that a key objective of planning in Victoria relevant to this Project is the need to "secure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria" and "to balance the present and future interests of all Victorians". The clause provides justification for the consideration of social outcomes in land use planning.

Clause 11 Settlement

The Settlement Clause requires that planning should respond to the needs of existing and future communities and, as far as practical, contribute towards health and safety, diversity of choice, prevention of pollution to land and water, protection of environmentally sensitive areas and natural resources, and accessibility. *Clause 11.05-4 Regional planning strategies and principles* highlights the need for directing population growth in locations where services and utilities, including social infrastructure, can be provided in the most efficient and sustainable way. The clause also highlights the need for liveable settlements and healthy communities by responding to the needs of the community and providing timely provision of social infrastructure and services.

Clause 16 Housing

This clause states that:

"Planning should provide for housing diversity, and ensure the efficient provision of supporting infrastructure.

New housing should have access to services and be planned for long term sustainability, including walkability to activity centres, public transport, schools and open space.

Planning for housing should include providing land for affordable housing."

Clause 18 Transport

Planning should ensure an integrated and sustainable transport system that provides access to social and economic opportunities, facilitates economic prosperity, contributes to environmental sustainability, coordinates reliable movements of people and goods, and is safe.

Clause 19 Infrastructure

This clause outlines the need for fairer distribution and access to social infrastructure. Gaps and deficiencies in the service provision need to be identified and addressed.

3.3 Local Government Social Policy Context

Section 2 of the Western Highway Project passes through the local government areas of the Shire of Pyrenees and the Rural City of Ararat.

3.3.1 Rural City of Ararat

The Rural City of Ararat has several key policies which set out the preferred direction for the future of the municipality. The following policies were reviewed for this report:

- Council Plan
- Municipal Public Health and Well-being Plan
- Municipal Strategic Statement.



Council Plan

The main social policy statement of the Rural City of Ararat is the *Council Plan* (2009). This plan sets out a series of strategic directions for the community, including:

Our People

We value our people and our community, their sense of place and connectedness and will target our services to meet their needs.

Key Outcomes relevant to the Western Highway SIA:

- A community in which people of all abilities have equal access to facilities, services and activities.
- A community in which people are actively involved in shaping the community to meet its needs.
- A community in which people are better informed about the strengths, opportunities and challenges facing the community.
- A community which encourages a healthy and active lifestyle.
- A community where people can readily access the services they need.
- A community where people can feel safe as they use and enjoy public spaces and facilities.

Our Culture

We will strengthen the underlying community fabric by building upon the culture and heritage which defines our identity.

Key Outcomes relevant to the Western Highway SIA:

- A welcoming and inclusive community.
- An attractive physical landscape.
- A community in which residents are proud to live.
- A community where all people are encouraged to engage with each other and participate in the future of our community.
- A community that values its history and cultural heritage.
- A community in which all people have access to appropriate recreational facilities and services.
- A community that promotes and encourages participation in a diverse range of sporting and recreational activities.

Our Economy

We will enhance our community's prosperity through encouraging sustainable growth.

Key Outcomes relevant to the Western Highway SIA:

- Vibrant, active and viable industries within the area.
- Attracting new businesses and residents whilst continuing to support those that are already here.
- Pro-active response to a changing economic and business environment.
- Environmentally responsible economic development.
- Increased diversity in the local industry and businesses.
- A community that recognises tourism as a key to economic prosperity.
- Infrastructure in place to support a positive experience by people who visit the area.

Our Environment

We value our natural and built environment and want to manage, enhance and protect it, now and for future generations.

Key Outcomes relevant to the Western Highway SIA:

- A balanced approach to land use development to meet existing and future growth.
- Preservation and enhancement of our natural and built environments.
- Protection of the natural environment.



- Promotion of bio diversity.
- Reduction of the impact of weeds and pest animals.

Our Organisation Our Council is open, fair and honest, engaging with the community to provide leadership and supporting our community through efficient and effective service provision.

Municipal Public Health and Well-being Plan

Further objectives around access to transport are set out in the *Municipal Public Health and Well-being Plan* (MPHWP) dated 2009-2013. The over-arching objective is to improve social connectedness. The Plan notes that people are most commonly connected to family, schools, work and different types of community groups, clubs and organisations. Social inclusion is a key determinant of mental health and wellbeing. Transport connections and accessibility play an important role in developing and maintaining social connections. This issue is therefore important to assess in a SIA.

The transport-related objectives in the MPHWP are focussed on public transport. They are to achieve:

- Increased usage and utilisation of public transport
- Improved public transport services for the municipality.

As the Western Highway is a major public transport route, this objective is directly relevant to the current Project.

Municipal Strategic Statement

The Ararat Municipal Strategic Statement (MSS) is part of the Ararat Planning Scheme. The MSS establishes the strategic planning framework for the municipality and how it supports and implements the SPPF. Some of the key messages from the MSS that are relevant to the SIA, include:

- The municipality is heavily dependent on road transport as its primary means of transport and travel. The Western Highway through Ararat is a principal road, linking state capital cities and is designated as a National Highway. Land use planning should take full account of this National Highway when development occurs in its vicinity.
- It is important that future developments do not detract from the natural settings that attract people to the municipality.
- The rural and natural landscapes surrounding the Grampians National Park, Langi Ghiran State Park, Black Range and the Mount Buangor State Park are important assets. ... Protection of these landscapes is important to tourism and the environment.
- There is the need to ensure that high quality agricultural land is suitably identified and protected throughout the municipality ... There is the need to ensure that lot sizes adequately meet traditional farming needs and provide for sustainable and viable pursuits.

Specific objectives in the MSS which related to the current Project are to:

- Develop and promote the Western Highway Logistics Hub as the preferred location for industries requiring access and exposure to the highway, heavy vehicle activities, warehousing and transport businesses
- Recognise Barkly Street and the Western Highway as important approaches into and corridors through Ararat and where tourist based activities should be encouraged.



The primacy of Ararat as the major residential, service and business centre in the municipality is recognised.

Other Policies

Other social policies which were reviewed for the SIA are:

- Buangor Community Action Plan 2006-2009. See Section 5.1.1 on Page 30, where this Plan is discussed in more detail.
- Disability Access and Inclusion Plan 2005-2006 (these objectives are also in the Council Plan).

3.3.2 Pyrenees Shire

The key policies of the Pyrenees Shire which set out the preferred direction for the future of the municipality which were reviewed for this report are the:

- Council Plan
- Municipal Public Health and Well-being Plan
- Municipal Strategic Statement.

Council Plan

The 2009-2013 Council Plan describes the goals and aspirations of the Council, specifically what the council believes is important to the residents of the Pyrenees Shire, and what it hopes to achieve in the near future.

The plan states that the Council proposes to focus on the following areas:

- Road infrastructure
- Community infrastructure
- Community wellbeing
- Growth and employment development
- Governance and community leadership
- Organisational development
- The environment.

Road safety is noted as being a specific area for further work, including development of a Road Safety Strategy. The overall objective is to "To maintain a safe and effective road system that caters for all road users within the Shire".

The Council also aims to "enhance the quality of life of residents by building connected, active and resilient communities." Development of good road networks which enable rural residents to easily get to community services and activities would help to achieve this goal.

Municipal Strategic Statement

The MSS for Pyrenees Shire (included in the Pyrenees Planning Scheme) notes that the majority of nonurban land in the Shire is used for dry land pastoral and agricultural purposes. A continuation of these uses should be encouraged, consistent with responsible land management practices. This includes



discouraging non-agricultural land uses in these areas and maintaining lot sizes which are viable for agriculture.

Objectives to protect environmentally sensitive rural areas include:

- To preserve hill-scapes and ridgelines, and other key topographic features.
- To ensure that any use or development incorporates measures that protect and/or improve the condition of the natural resources.
- To maintain existing native vegetation and to encourage revegetation of cleared areas in order to reduce the potential for sheet and gully erosion and other adverse environmental impacts.
- To ensure that opportunities for rural residential development continue to be provided in intrinsically attractive areas on the periphery of existing townships and settlements
- To prevent rural residential development from occurring in productive farming areas or areas possessing significant environmental hazards and constraints.
- ▶ To make efficient and effective use of roads and other public infrastructure, and to minimise the demand for public sector expenditure on the development and maintenance of new public infrastructure and services.

The MSS notes that Beaufort has several strengths and opportunities including:

- An excellent range of community services and facilities and excellent accessibility via the Western Highway to Ballarat and Melbourne.
- A potential to accommodate more substantial residential development, ranging from conventional sized lots in the town itself, to low-density and rural residential lots on the periphery.
- A potential to accommodate further retail and related community facilities within the existing commercial precinct, together with an opportunity to increase its role as a highway service centre now that the Western Highway by-passes Ballarat.
- Scope within the industrial zoned areas for further industrial development.
- Sewerage and water supply systems which have the capacity to service substantial urban development.

Strategies to encourage sustainable development of Beaufort include:

- To encourage highway service facilities to locate within the town itself with the appropriate location for these facilities being along both sides of the Western Highway to the west of the central area.
- To retain the rural character and the amenity of the Western Highway on the eastern approach to the township by introduction of development controls to control the location of housing on the high ground (ridgeline) to the north of the Highway.

Municipal Health and Wellbeing Plan

The *Municipal Health and Wellbeing Plan* (2009) includes several key points about the characteristics of the Pyrenees Shire community, such as:



- The Pyrenees has a SEIFA¹ of 944, which ranks it as number 5 in level of disadvantage among the 79 municipalities in Victoria.
- There is a relatively low level of workforce participation amongst adults. This may be due to a higher proportion of persons aged 55 years and over.
- The level of post-secondary education is relatively low compared with the State average.
- A quarter of all residents in the Shire have reported experiencing transport limitations, compared with the Victorian average of a fifth.
- There is a relatively low level of crimes against the person in the Pyrenees Shire.
- Mobile telephone and broadband internet connections are below the standard of metropolitan equivalents.

The following social policies developed by the Pyrenees Shire have also been reviewed for the SIA:

- ▶ Access and Inclusion Plan 2010 2013
- Beaufort and Avoca Industrial Land Strategy 2005
- Beaufort Structure Plan 2005
- Growth and Development Strategy 2010-2014
- Municipal Early Years Plan 2008-2011
- ▶ Recreation Strategy 2010-2020.

Most of these policies provide useful background to develop our understanding of the over-arching social development goals at the municipal level, but do not include anything specific to the study area for this Project.



Figure 3: Cobb and Co Staging Stables in Buangor

The Socio-Economic Indexes for Areas (SEIFA) is a measure of relative advantage and disadvantage based on several different socio-economic indicators derived from Census data.



4. Methods

4.1 Background to SIA

SIA is a social research tool used to review and assess the potential social impact of a planned intervention such as a policy change, public program or infrastructure development. It covers the intended and unintended social consequences, both positive and negative, of any social change processes invoked by those interventions, as explained by the International Association of Impact Assessment (IAIA, 2003).

The goal of impact assessment is to bring about a more ecologically, socio-culturally and economically sustainable and equitable environment. Impact assessment, therefore, promotes community development and empowerment, builds capacity, and develops social capital (social networks and trust). The focus of concern in SIA is a proactive stance to development and better development outcomes, not just the identification or amelioration of negative or unintended outcomes. Assisting communities and other stakeholders to identify development goals, and ensuring that positive outcomes are maximised, can be more important than minimising harm from negative impacts. SIA contributes to the process of adaptive management of policies, programs, plans and projects, and therefore needs to inform the design and operation of the planned intervention.

The following categories have been identified by the IAIA as a way to conceptualise social impacts:

- People's way of life: that is how they live, work, play and interact with one another on a day-to-day basis
- ▶ Their culture: that is, their shared beliefs, customs, values and language or dialect
- ▶ Their community: its cohesion, stability, character, services and facilities
- Their political systems: the extent to which people are able to participate in decisions that affect their lives, the level of democratisation that is taking place, and the resources provided for this purpose
- Their environment: the quality of the air and water people use; the availability and quality of the food they eat; the level of hazard or risk; dust and noise they are exposed to; the adequacy of sanitation; their physical safety; and their access to and control over resources
- Their health and wellbeing: health is a state of complete physical, mental, social and spiritual wellbeing and not merely the absence of disease or infirmity
- Their fears and aspirations: their perceptions about their safety, their fears about the future of their community, and their aspirations for their future and the future of their children.

4.2 Impact of Transport Infrastructure

New and up-graded roads, bridges, tunnels and bypasses can bring significant social benefits to regional communities, in terms of improved accessibility, better amenity in the local area and travel time savings for residents, travellers and transport operators. However, they can also have negative social impacts at the more local level. These can include the more obvious physical effects of local road closures or new roads cutting through farmland or neighbourhoods as well as psychological impacts such as those associated with effects on valued places or loss of friendship networks.



The long term social change processes triggered by road development can also have both positive and negative outcomes. This means that the needs of the community at both the local and regional levels must be balanced to ensure that the route development minimises any social disruption and maximises the social benefits.

4.3 Assessment Framework

During the course of several transport-focussed SIAs, Akin Planning and other social researchers have developed the following concepts to assess the social impacts of transport infrastructure:

- Severance occurs when people's ability to move around their local and regional area is reduced. Severance effects occur when local roads are cut off; connector roads are changed or suffer increased traffic movements; or when public transport routes are changed.
- Access benefits may occur when travelling times are reduced; there is easier access to community services and facilities, and when people have more transport choices available to them.
- Individual mobility relates to the transport choices that people have available to them and the decisions that affect the mode of travel they use for different trips.
- Dislocation effects occur primarily at the household and individual level. They include property disruption or acquisition, or people leaving an area due to significant changes to the valued features of their local environment.
- Amenity impacts are specific impacts on the attractiveness of a given area and the enjoyment of it. They may include changes to property, the general landscape, the noise environment, and also changes to the amenity of important community facilities.
- Policy context stems from the social and planning policies set out in State and local government policy. It informs the understanding of aspirations for future development of an area. Any infrastructure development proposal should be assessed in terms of how it contributes to social development goals.
- Community context is the expressed preferences and concerns of local peoples, which need to be considered in planning for infrastructure development. This includes their preferences for transport modes and access arrangements, concerns about amenity and other impacts and concerns about environmental impacts. The social issues analysis is a mechanism for incorporating community feedback into the assessment of options.

These general social impact categories have been matched to the EES scoping requirements to ensure that all social issues are addressed in the impact assessment.

4.4 Cumulative Impact Assessment

Assessing the social impacts of projects to upgrade existing transport infrastructure requires assessing the cumulative impact of the development. That is, a road exists and already creates a social impact (generally in the area of amenity). It is known that the impact of that road would change over time, as the type and volume of traffic changes over time. For example, trucks have grown larger and larger over the decades, and the number of trucks travelling on regional highways has also increased over time. This has led to a change in the mix of traffic on these roads, which has had the side effect of creating negative amenity impacts for the residents of houses adjacent to these roads. In many cases these houses were



built in times when the road carried a small amount of low impact traffic, and hence may have been constructed much closer to the road than may seem prudent today.

When assessing a road upgrade or duplication project, we need to differentiate between:

- 1. The existing social impacts which have occurred over time due to changes in traffic composition for example increased noise levels, difficulty in accessing adjacent properties.
- 2. Changes that will occur whether the road is upgraded or not, specifically increased traffic volumes which will occur independently of the project due to general population growth.
- 3. The changes which are specifically caused by the project, which are usually the physical changes such as road widening and realignment, and access changes for local residents.

Points one and two are effectively the 'base case' or 'do nothing' scenario against which the project is assessed (Figure 4).

This makes a road widening or duplication project quite distinct to planning for a new road. In that circumstance, a new social impact is introduced into an area where it did not previously exist, which is considered to be a greater social impact than upgrading of existing infrastructure (Section 4.6).

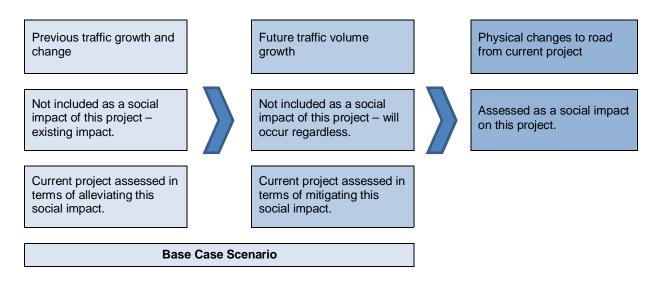


Figure 4: Cumulative Social Impact

4.5 Assessing the Scale of Impacts

The impact of a project would be experienced differently by the affected parties depending on a wide variety of factors, including the scale of impact, their resilience to cope with change and the differential impact. It would be very difficult to rank how each individual or household is impacted by a project in comparison with other affected parties, as this would be contentious and intrusive for the people involved. However, the magnitude of different types of impacts is generally known. Table 2 indicates the magnitude of the different types of social impacts likely to be experienced by individuals or households as a result of a transport infrastructure project. The table shows that such a project does not just affect the adjacent landowners. Other members of the community would also be affected in various ways.



Table 2 Scale of impact for individual households

Highest	Property acquisition and household relocation. The level of impact depends on whether the household can obtain an appropriate substitute property within the local area, or whether they have to move away altogether. The loss of a household is also a significant community level impact.				
Second highest	To remain in a dwelling located within 250 metres of the centreline of a new road. The level of impact depends on the topography and design of the road, the impact on access to the property and whether there has been any property acquisition. There is also a different impact in rural and residential areas. In rural areas the ability to mitigate visual and noise impacts may be low, whereas in a residential area many houses within this zone may not be in sight of the road.				
Third highest impact	To remain in a dwelling located between 250 metres and 500 metres of the centreline of a new road. Again, the level of impact would depend on whether the dwelling is in a rural or residential area, the topography and any access changes.				
General Community Impact	Where there are changes to general community functioning as a result of impacts at the household level, for example residents moving away as a result of property acquisition.				

4.6 Comparison of Impacts

The impact of a transport infrastructure project would vary depending on the degree of change it introduces into a community. In assessing the magnitude and severity of the social impact of a specific proposal, it is important to understand that the amount of change is a key driver of impacts. Projects which introduce less primary change have a lower impact than those which cause considerable change – whether to the landscape, transport networks or community functioning. Table 3 categorises the degree of change that transport infrastructure projects may cause, and the significance of this in terms of social impact.

When assessing the social impact of a transport proposal, it is assumed that duplicating or upgrading an existing road would have a lower social impact than developing a new road in a new alignment, as shown in Table 3.



Table 3 Scale of impact of different road transport infrastructure developments

Option and rating	Reason for rating			
More effective use of existing infrastructure with minimal change	This provides maximum utilisation of existing infrastructure while having the lowest severance and dislocation impacts.			
Road in Tunnel	It is assumed that this would have a lower social impact than options entailing road widening and property acquisition, as it would 'bury' the severance, noise and amenity impacts.			
Upgrade of existing road	This option is assumed to have a lower severance impact than a new road and makes use of existing community assets. However; high amenity and dislocation impacts are possible as dwellings may be in very close proximity to the existing road.			
Development of a preserved corridor	Constructing in a preserved corridor which introduces noise, light and air quality impacts into an area without existing roads; however these should be mitigated by planning expectations that this impact would occur at some point.			
New transport infrastructure in a totally new alignment	Constructing in a new corridor which introduces noise, light and air quality impacts unmitigated by planning expectation. New infrastructure has the highest severance and dislocation impacts of all options because it is unexpected and has not been planned for.			

4.7 SIA Methodology

4.7.1 Existing Conditions Phase

The methodology for compiling the existing conditions report included the following research activities:

Review Previous Consultation Activities

The SIA team undertook a review of the records of previous consultation activities undertaken by VicRoads, including a briefing by VicRoads engineers and planners. This review included an analysis of key issues; determination of social impacts that would require further investigation; a gap analysis in terms of whether there is sufficient information for the SIA analysis; and a discussion with VicRoads to review the consultation program.

Develop Interview Program

The SIA team developed a list of key stakeholders for interview, based on the review of the previous consultation.

Existing Conditions Assessment

This assessment included the following tasks:

- A review of local and State government social and planning policy relevant to the study area. The purpose of this review was to identify any strategic development objectives which should be considered in the options assessment process.
- A brief analysis of the social profile of the study area, which included a review of Census data and Council information, including a review of available 2011 data to confirm no changing trends. The purpose of this task was to profile the local community and identify the scale of impact in terms of population and affected vulnerable groups.



- A review of community services and facilities. The purpose of this task was to identify the key 'attractors' for local movements within and around the study area. This aimed to identify key local access routes and hence which local roads are most important to the local community.
- A review of cultural and social values based on the records from the previous research and existing information on the community of the study area (for example from Council reports and policies).
- A meeting with Council officers to gather information on strategic development objectives and community functioning within the study area.

Participation in Consultation Activities

The SIA team participated in consultation activities. This included:

- Attending the landowner information sessions organised by VicRoads.
- Working with the VicRoads community engagement team to develop feedback forms which could be used to inform the SIA, as well as VicRoads.

4.7.2 Participation in VicRoads Engagement Activities

Prior to the EES being announced, VicRoads undertook community consultation to inform the local community about the project. This is summarised in this section:

- ▶ Initial public information session discussion of issues and constraints
 - Ararat 7th December 2009
 - Buangor 8th December 2009
- Public meeting to display draft alignment options
 - Buangor 30th June 2010
- Direct engagement with landowners on-going once draft alignment options were available.

During the course of the EES investigations, VicRoads held Information Displays in two phases as follows:

- ▶ First phase July 2011:
 - Wednesday 13th 4.00 pm 7.00 pm Cobb & Co Stables Buangor
 - Thursday 14th 4.00 pm 7.00 pm Great Western Town Hall
 - Saturday 16th 9.00 am 12.00 pm Beaufort Community Centre
 - Tuesday 19th 4.00pm 7.00 pm Ararat College
- Second Phase November 2011
 - Wednesday 9th 4.00 pm to 7.00 pm at Great Western Public Hall
 - Thursday 10th 4.00 pm to 7.00 pm at Cobb & Co Stables Buangor
 - Tuesday 15th 4.00 pm to 7.00 pm at Beaufort Community Centre
 - Wednesday 16th 4.00 pm to 7.00 pm at Ararat College.
- Options Assessment Phase May 2012
 - Tuesday 1st May 4.00 pm to 7.00 pm at Cobb & Co Stables Buangor.



The SIA team attended as many of these sessions as possible. During the course of the sessions the SIA team members spoke with many landowners and interested community members, including informal discussions and private interviews.

4.7.3 Impact Assessment

The impact assessment phase included the following activities. Some of these were specific to the SIA and some were undertaken as part of the overall EES investigations and analysis.

- Rapid Assessment of Options to Select a Short list for Further Assessment
 - Participated in the rapid assessment of initial long list of options
 - Provided input to the qualitative assessment criteria.
- Risk Assessment
 - Development of a register of potential social risks of the project
 - Participation in the risk assessment workshop.
- Assess shortlisted alignment options:
 - Assisted the project management team with selection of a preferred alignment.
 - Determined the existing conditions for social factors the no change scenario against which the base against which other route option were compared.
 - Participated in the options assessment workshop.
- Assessment of the preferred alignment:
 - Stakeholder interviews with Councils, landowners and key community informants to develop a clear understanding of community networks, activities, valued places and community attitudes towards the project
 - Development of social assessment criteria and assessment of the options against evaluation objectives
 - Reporting on the findings of the SIA investigations and assessment of the preferred alignment.

4.8 Assumptions and Limitations

The analysis of existing conditions is chiefly based on secondary data sources such as Council policies and reports, Census data and Department of Planning and Community Development (DPCD) statistics. The information supplied in this section is based on the assumption that publically available information and secondary data about the study area is correct.

The demographic analysis is based on 2006 Census data, which may be somewhat out of date. A Census was held in August 2011; however the data would not be available until June 2012. As the population in the study area is relatively stable, it can be assumed that the demographic profile should be a reasonably accurate reflection of the current population.



4.9 Impact and Risk Assessment

The detailed impact assessment documented in this report addresses the potential impacts of the construction and operation of the proposed alignments of Section 2 of the Project. The alignments assessed are a culmination of progressive refinement of the design and consideration of potential impacts.

The Existing Conditions section of this report covers an area encompassing the long list of alignment options considered for the Project. Potential impacts of each option in the long list of alignments were considered in Phase 1 of the options assessment process, and were used to reduce the initial long list to a short list of alignment options.

The potential impacts of each option in the short list of alignment options were considered in more detail in Phase 2 of the option assessment process. Three proposed alignments were selected for further detailed assessment in the EES. The impacts of the proposed alignments, together with potential mitigation measures, were considered in detail through the environmental risk assessment process. The outcomes of the risk assessment process were used to finalise the proposed alignments assessed in the EES.

The proposed alignments assessed in this report are the outcome of progressive refinement through each phase of the options assessment process. The proposed alignments were also refined following the initial consideration of the environmental risk assessment.

The alignment options assessment process is described in in the 'Western Highway Project Section 2 Alignment Options Assessment Report' (July 2011). The environmental risk assessment methodology and complete risk register for all specialist disciplines is presented in 'Western Highway Project Section 2 EES Environmental Risk Assessment' (February 2012) report.

Extracts from the environmental risk register are provided in this report and the identified impacts of the preferred proposed alignments are considered in detail in the following sections.

This section identifies and describes social impact cause and effect pathways associated with the construction and operation of the Western Highway. The risk assessment is presented in Table 12 below.

4.9.1 Impact Pathways and Risk Ratings

The following impact assessment methodology was used to determine the social impact pathways and risk ratings for the Project:

- 1. Determine the impact pathway (how the Project impacts on a given social value or issue).
- 2. Describe the consequences of the impact pathway.
- 3. Determine the maximum credible 'consequence level' associated with the impact.
- 4. Table 6 provides guidance criteria for assigning the level of consequence. The method for defining these criteria is described in Section 4.9.2.
- 5. Determine the likelihood of the consequence occurring to the level assigned in step 3. Likelihood descriptors are provided in Table 4 below; and



6. Use the Consequence Level and Likelihood Level in the Risk Matrix in Table 5 to determine the risk rating.

Table 4 Likelihood Guide

Descriptor	Explanation
Almost Certain	The event is expected to occur in most circumstances
Likely	The event will probably occur in most circumstances
Possible	The event could occur
Unlikely	The event could occur but not expected
Rare	The event may occur only in exceptional circumstances

Table 5 Risk Matrix

Likelihood	Consequence Level					
Likeiiiiood	Insignificant	Minor	Moderate	Major	Catastrophic	
Almost Certain	Low	Medium	High	Extreme	Extreme	
Likely	Low	Medium	High	High	Extreme	
Possible	Negligible	Low	Medium	High	High	
Unlikely	Negligible	Low	Medium	Medium	High	
Rare	Negligible	Negligible	Low	Medium	Medium	

4.9.2 Consequence Criteria

Consequence criteria (Table 6) range on a scale of magnitude from "insignificant" to "catastrophic". Magnitude was considered a function of the size of the impact: the spatial area affected and expected recovery time of the environmental system. Consequence criteria descriptions indicating a minimal size impact over a local area, and with a recovery time potential within the range of normal variability were considered to be at the insignificant end of the scale. Conversely, catastrophic consequence criteria describe scenarios involving a very high magnitude event, affecting a State-wide area, or requiring over a decade to reach functional recovery.



Table 6 Social Impacts Consequence Table

Potential Impact	Insignificant	Minor	Moderate	Major	Catastrophic
Displacement of residents	No displacement of residents created by Project	Displacement of one or two households	Displacement of three to six households	Displacement of households significantly affects a local area	Displacement of households significantly affects a number of local areas
Displacement of businesses	No displacement of businesses by Project	Displacement of businesses with social or economic impacts on a small number of individuals	Displacement of businesses with significant social or economic impacts on part of a local area	Displacement of businesses significantly affects a local area	Displacement of businesses significantly affects a number of local areas
Severance of residents or businesses	No severance of local movement patterns created by Project	Severance of local movement patterns for less than 10 residents or businesses	Severance of local movement patterns of 10 to 20 residents or businesses	Severance of movement patterns significantly affects a local area	Severance of movement patterns significantly affects a number of local areas
Impacts on community facilities and public open space	No noticeable effects created by Project	Effects on facilities with social or economic impacts on a small number of individuals	Effects on facilities with social or economic impacts on a local area	Effects on facilities with significant social or economic impacts on a local area	Effects on facilities with significant social or economic impacts on a number of local areas
Impacts on amenity	No detrimental impacts on amenity	Detrimental impacts on amenity affect a small number of households	Detrimental impacts on amenity affect a local area	Detrimental impacts on amenity significantly affect a local area	Detrimental impacts on amenity significantly affect a number of local areas

^{*} It is important to note that the consequence levels for different categories of impact listed in the Consequence Table are not comparable between categories and should only be considered for a particular category in isolation. For example, a catastrophic consequence for residential amenity cannot be directly compared to a catastrophic consequence for health and safety.



5. Existing Conditions

This section sets out an analysis of the existing conditions in the study area. The different towns are reviewed in terms of the role and function in the hierarchy of towns within the region. This assessment was undertaken to develop an understanding of key social attractors and likely movement patterns around the study area. A review of the demographic structure of the community of the study area has also been undertaken.

The existing conditions section includes all of the communities within both Sections 2 and 3 of the Western Highway Project (i.e. between Beaufort and Ararat, and Ararat and Stawell respectively). This is because there is significant overlap between the areas in terms of social function. It is more than likely that members of the community within Section 2 visit parts of Section 3 and vice versa. It is also assumed that residents of both sections would visit all three major towns within the study area. It is also likely that they all regularly visit Ballarat, which is outside of the current study area but is the major regional centre.

5.1 Local Communities

The only township within Section 2 of the Western Highway Project area is the hamlet of Buangor. However, the study area starts on the outskirts of Beaufort, and ends on the outskirts of Ararat. The balance of the study area passes through agricultural land. Most of the agriculture is broad-acre grazing or cropping, with some tree plantations. The area also has scattered rural residential properties.

5.1.1 Buangor

Buangor is located on the Western Highway near the Billy Billy Creek, around midway between Beaufort and Ararat. It is approximately 45 minutes west of Ballarat and it is part of the Rural City of Ararat (see Figure 2).

The township of Buangor includes the following community facilities:

- A Primary School, with an enrolment of 15 students in 2012 (approximately 22 in 2013). The school has had enrolments as large as 56 students in previous years and draws its catchment from Ballyrogen, Middle Creek, Raglan, Ferntree Falls, Wurruk and Buangor
- Shebas Hotel (now closed) and Off The Beaten Track Wine & Art Gallery
- V-Line Bus Stop
- A community sports precinct, which is the home of the historic Cobb and Co Changing Station, now used for functions and gatherings, a sports pavilion, tennis courts and the recently upgraded sports oval, which was constructed on land donated by a local landowner.

According to the Buangor Community Action Plan, there are approximately 40 houses within the township of Buangor and a further 178 properties in the outlying district. The economy of the region around Buangor is dominated by farming industries, including wool, cattle, cropping, hay and vineyards. In more recent years, the timber industry has established plantations in the area.

Active volunteer community groups include:

- CFA
- Landcare



- Primary School Council
- ▶ Sports Committees: teams in Senior and Junior Cricket, Tennis, junior Basketball and Soccer. The sporting groups are affiliated with the Ararat and District sporting associations.

Places of local social value include:

- Buangor Avenue of Honour (commemorates the fallen of WW1)
- Cobb and Co Changing Station
- Challicum Hills Wind Farm
- Vineyards cellar door sales
- Mount Cole State Forest
- Mount Buangor State Park
- Langi Ghiran State Park
- Woodnaggerak Homestead (east of Buangor on the Western Highway). This privately owned homestead is within the locality of the former Middle Creek Primary School, Church and various other facilities were previously located. This site is highly valued by many members of the local community. While it is not formally heritage-listed, it is seen to be a site of considerable local social significance.

The *Buangor Community Action Plan* indicates that the local community wishes to achieve a sustainable township. Their key objectives are to provide:

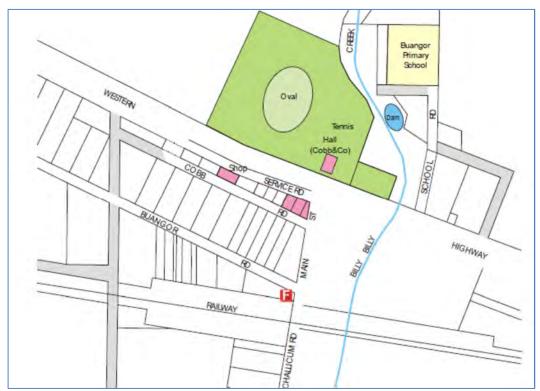
- A central meeting place for functions and town activities
- Improvements to existing infrastructure
- Opportunities to attract funding from external sources to improve Buangor's sustainability
- Improved services to encourage tourists and residents to the area.

VicRoads held a public display of options for the duplication of the Western Highway in Buangor on the 13th July 2011 and of the short-listed options on May 1st 2012. Attendees at the displays noted the strong community character of Buangor. While the town is very small, the community includes the surrounding farming areas, and many of these families have been resident in the area for multiple generations. The local community has a strong attachment to the Cobb and Co building, and they have invested considerable resources in restoring the building and developing the site for community use. Council planning officers indicated that there is unlikely to be extensive growth in Buangor in the short to medium term – this is due to slow growth in the municipality overall, and limited demand for growth in Buangor specifically. There is vacant land zoned for residential purposes within the town. Council would be unlikely to expand the town boundaries into farming land. This means that the township of Buangor would remain contained within its current boundaries for at least the medium term.





Figure 5: Community Facilities in Buangor



Source: Buangor Community Action Plan 2006-2009

Figure 6: Buangor Township





Figure 7: Buangor Primary School

5.1.2 Beaufort

Beaufort is located on the Western Highway midway between Ararat and Ballarat. It is in the Pyrenees Shire local government area. Beaufort had a population of 1,044 in 2006². The town lost population in the period 1981-2001, but this trend was reversed between 2001 and 2006, when the population grew by nearly 6%.

Beaufort is the principal town in the Pyrenees Shire. It is an historic town and was originally settled during the period of the gold rushes of the 1850s. The Beaufort Structure Plan notes that the historical core precinct of the town contributes to its continued growth and development.

The town's highway location is seen to have been an important factor in the development of the town and for future employment prospects. Beaufort is considered to be an established rural service centre which offers a wide range of services and facilities to both local inhabitants and to the surrounding hinterland population. Facilities include a supermarket, chemist, newsagency and various retail stores, food services outlets and hotels. It is also seen as a service base for local and regional industry. Beaufort is seen to have good prospects for slow but sustainable growth, based on business investment trends and changing lifestyle trends within the broader region.

The railway line and highway are noted as having a severance impact in Beaufort, separating the town into 'north' and 'south', and Council has advocated the bypassing of Beaufort to reduce this impact and improve safety and amenity within the town. The Regional Office of VicRoads is currently developing options for bypassing the town.

Since 1998, Beaufort has hosted an all-ages, five-day music and arts festival called Rainbow Serpent Festival. In the Pyrenees Shire Growth & Development Strategy it was estimated that this event attracts 12,000 visitors each year. There is also a monthly market in Beaufort, as well as other events which aim to showcase the region's wineries.

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² Source: DPCD 'Towns in Time' data sheet for Beaufort [http://www.dpcd.vic.gov.au].



The township of Beaufort includes the following community facilities:

- Beaufort Primary School, which has an enrolment of approximately 140 students
- Beaufort and Skipton Health Service. The Beaufort Campus, located just off the Western Highway on Havelock Street provides:
 - Ten acute beds, 15 nursing home beds 12 hostel beds and an emergency department
 - A full-time GP clinic and a full range of Allied Health services
 - District Nursing, Meals on Wheels and Social Work services.

Places of local social value include:

- Beaufort Band Rotunda
- Beaufort Heritage Walk
- Beaufort Lake (including camping facilities and a caravan park)
- Mount Cole State Forest
- Ripon War Memorial and Park
- ▶ Sporting facilities: 18-hole golf course, bowling greens, tennis and squash courts, cricket and football ovals, basketball and netball courts and a public swimming pool.

5.1.3 Ararat

The city of Ararat is the administrative centre of the municipality of the Rural City of Ararat. In 2006 the population was 7,169 (ABS Census). Ararat is a major regional service centre for higher level services such as health and education.

Educational facilities in Ararat include:

- Primary schools: Ararat Primary; Ararat West Primary; Ararat North Primary and St Mary's Catholic Primary School
- Secondary schools: Ararat Community College and Marian College (Catholic high school)
- Regional campuses of the University of Ballarat and Northern Melbourne Institute of TAFE.

Health facilities in Ararat include:

- Ararat & District Hospital (established in 1850), managed by the East Grampians Health Service. The Service provides in-patient and acute hospital services, allied health services, aged care residential services and community services for the residents of the municipality of Ararat.
- Ararat Medical Centre provides general practice medical services to the Ararat community.

Ararat has a broad range of retail services for comparison shopping, while Beaufort has a more limited range. In general the local communities would most often shop at the town they live closest to for convenience items; however it is apparent that they would visit other towns within the region for specific services or to shop at specific stores. This suggests that access to both major towns in the region – Ararat and Ballarat – is important. During the public information sessions and household interviews respondents noted that Ballarat is a key provider of services and a major shopping destination for residents of the study area.



Places of local and regional social value in Ararat include:

- Ararat Regional Art Gallery and the Ararat Performing Arts Centre, both housed in the former Town Hall
- ▶ The Gum San Chinese Heritage Centre, which is focussed on the history of immigrant miners on the goldfields in the mid-1800s
- Former Aradale Mental Hospital (now a TAFE campus), but also open for guided tours
- ▶ The J Ward Museum, which explains the early history of the goldfield times and the incarceration of the criminally insane. The Museum is visited by approximately 10,000 people per annum
- Green Hill Lake on the western outskirts of Ararat. Green Hill Lake is a popular recreational attraction for the local community and it has extensive camping and caravanning facilities, making it a destination for travellers
- ▶ Langi Ghiran State Park this falls within the boundary of the Ararat municipality, but is managed by Parks Victoria.

Sporting activities and regular festivals in Ararat include:

- Aradale Golf Club on Grano Street
- Ararat Eagles Football Club Lexton Plains Football League
- Ararat Football Club Wimmera Football League
- Ararat Harness Racing Club has a racetrack in the town
- Ararat Motorcycle Club Motocross events up to state level
- Ararat Rats Wimmera Netball Association
- Association Football (soccer) Ararat and Grampians YMCA school competition from years 8-12.
- Chalambar Golf Club on Golf Links Road
- Golden Gateway Festival (run since 1958)
- Jailhouse Rock Festival (A retro 1950s themed festival running since 1994)
- Wimmera Racing Club (five race meetings a year at Ararat including the Ararat Cup meeting in November

Ararat is a regional transport hub, providing road, rail and bus access.

Ararat is the location of HM Ararat Prison, which provides accommodation for prisoners with low to medium security protection requirements, including a high proportion of sex offenders (50 per cent) and protection or special needs prisoners (50 per cent)³. The prison currently has a capacity of 382 prisoners; however the prison is being expanded to accommodate a new wing containing 350 more beds. Prisoners come from all over the State of Victoria.

³ Source: [http://www.justice.vic.gov.au]



Green Hill Lake

Early in 2012, Ararat Rural City Council initiated a planning process for Green Hill Lake, which will include development of a master plan, business plan and management plan. Their aim is to ensure that the best use and management of the lake is available to the community of Ararat Rural City, and visitors to the region. This process will include wide ranging community consultation regarding the management of Green Hill Lake, engaging local community members and user groups at the Lake.

Langi Ghiran State Park

Langi Ghiran State Park provides a variety of facilities for visitors, including picnic and camping grounds, walking tracks, a lookout, information centre and parking. The Langi Ghiran Reservoir, which provides supplementary water supply for Ararat, is located within the Park. The Management Plan for the Park notes:

Langi Ghiran State Park protects significant natural areas ...and has an important Aboriginal art site. The Park has been less disturbed than other reserved areas in the region and offers good opportunities for recreation in a semi-remote setting. (DNRE 1996)

When the Management Plan was completed in 1996, visitation to the Park was estimated at 5,600 annually. Most visitors picnic at the Langi Ghiran Picnic Area or at the Reservoir. Bushwalking is very popular. The aim of the Plan is to encourage low-impact use of the Park while protecting its natural condition, including the water catchments and sites of natural and cultural significance.

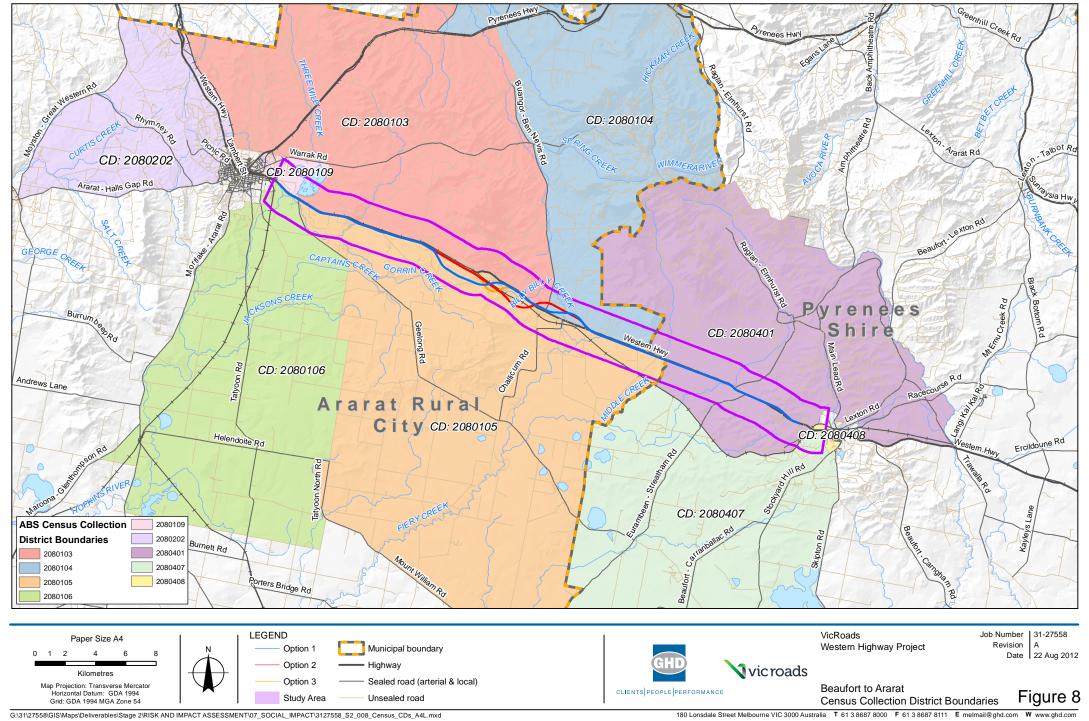
5.2 Demographic Analysis

5.2.1 Study Area

Figure 8 shows the Census Collection Districts (CCDs) in the study area. For the purposes of this analysis, the following areas have been assessed:

- Section 2 Ararat to Beaufort
 - 2080103
 - 2080104
 - 2080105
 - 2080106
 - 2080401

These areas have been compared against the municipalities and the major towns in the study area, which are Ararat and Beaufort.





5.2.2 Analysis

Table 7 shows the basic population characteristics for the CCDs which encompass the study area. The table shows that rural areas throughout the study area have a relatively similar age profile. This is little different to the general age profile across the municipalities. The main characteristic of the rural areas is that they tend to have a slightly higher proportion of mature adults.

There was a very small population of 19 indigenous persons in the study area in 2006. However other indigenous persons living in the towns may have a connection to places within the study area. The number of overseas-born residents is very low. This indicates that the population within the study area is culturally homogenous.

The population in the study area is very stable. In most areas around two-thirds of the population have lived at the same address for more than five years. This indicates a highly connected community with strong social linkages.

Table 7 Population Characteristics (2006)

Indicator	Section 2	Beaufort	Ararat	Ararat RC	Pyrenees
Total persons	1,459	1,075	7,170	11,256	6,558
Age groups:					
0-4 years	5%	4%	6%	5%	5%
5-14 years	13%	11%	13%	13%	13%
15-19 years	6%	6%	6%	6%	6%
20-24 years	3%	3%	5%	4%	3%
25-34 years	8%	7%	11%	10%	9%
35-44 years	13%	12%	14%	13%	13%
45-54 years	18%	13%	14%	15%	16%
55-64 years	19%	18%	13%	14%	17%
65-74 years	11%	11%	9%	10%	10%
75-84 years	4%	11%	8%	7%	6%
85 years and over	1%	5%	2%	2%	2%
Birthplace:					
Australia	1,249	894	6,330	9,949	5,546
Elsewhere ^(a)	114	84	496	783	572
Indigenous persons: Total	19	5	46	82	35
Migration:					
Lived at same address 5 years ago ^(b)	71%	65%	63%	67%	66%
Lived at different address 5 years ago ^(b)	29%	35%	37%	33%	34%

⁽a) Comprises all other places

The 2011 Census data is not yet available at the smallest geographic areas, but it is available at the local government level. In 2011 the population of the Rural City of Ararat was 11,183, which is a very small drop over the five years from 2006. The population in the Pyrenees Shire in 2011 was 6,669, which is a slight increase over the 2006 population. This indicates that the population of the area has been quite

⁽b) Excludes persons less than 5 years of age.



stable. It is therefore considered unlikely that there would be any substantial change in the demographic characteristics of the community of the study area.

Table 8 shows the labour force profile for the various levels in the study area. There is little difference between rural areas and township areas in terms of labour force characteristics. There is a relatively low level of persons with high levels of qualifications in the study area. This is indicative of the low level of advanced and technical professions required in the regional economy. The high level of certificate level qualifications is indicative of trades and service workers.

Table 8 Labour Force Characteristics

Indicator	Section 2	Beaufort	Ararat	Ararat RC	Pyrenees
Persons aged 15 years and over	1,219	907	5,816	9,155	5,353
Labour force status(a):					
Employed, worked full-time (b)	59%	54%	56%	59%	58%
Employed, worked part-time	30%	31%	30%	29%	28%
Employed, away from work (c)	4%	6%	6%	6%	6%
Unemployed, looking for work	6%	8%	7%	6%	8%
Total labour force	730	393	2923	5003	2745
Not in the labour force	421	451	2664	3785	2333
Non-school qualifications (a):					
Postgraduate Degree	0%	1%	1%	1%	1%
Grad Dip and Grad Certificate	2%	1%	1%	1%	1%
Bachelor Degree	7%	3%	4%	6%	6%
Advanced Diploma and Diploma	8%	4%	5%	6%	5%
Certificate Level	17%	14%	16%	17%	17%

5.2.3 Summary

The study area for the Western Highway Project (Section 2) is largely agricultural. The age profile is slightly older than average across the municipalities, but in general the residents of the rural areas are not significantly different in character to the urban communities of the municipalities. There is also a mix of lifestyle residents, particularly in proximity to the towns. There is no planning or demographic impetus for the area between Beaufort and Ararat to become more heavily settled. There is limited likelihood that Buangor would expand significantly in size. This indicates that the demographic profile of the study area is likely to remain similar in character into the future.



5.3 Community Attitudes towards the Project

5.3.1 Source of Data

Information on community attitudes towards the project has been collected in a variety of ways, including:

- Review of correspondence between VicRoads and local land owners and other stakeholders
- Discussions with VicRoads personnel regarding their interactions with landowners
- Review of feedback forms from the two rounds of community information sessions conducted during the course of the EES studies
- Participation in VicRoads community information sessions
- Interviews with a sample of affected landowners
- Interviews with local government representatives.

In many instances the written feedback is in response to specific options which had been presented for comment. Feedback based on options which are no longer being considered has not been included in this report, although it provided input to the risk assessment and options assessment phases of the project.

5.3.2 Summary of Community Attitudes

Community attitudes have been summarised under a series of themes which were derived from the EES Assessment requirements for social issues (See Section 2.2).

Social and community conditions

Some respondents noted that once Buangor is bypassed there may be more opportunity for the town to grow, based on improved internal connectivity and amenity. While this may be true, it should be noted that Council representatives indicated that there is no strategic planning justification for Buangor to grow beyond current zone provisions.

Options which severed many small farming properties were seen to potentially have a negative impact as the productive capacity of the farms may be reduced. It was noted that any loss of land from a small property has a proportionately greater impact than if it was severed from a large property.

Potential effects on local residents and communities during the construction stage

Some of the options which have been considered during the planning study have potentially affected dams on farming and lifestyle properties. The affected property owners have raised concerns about this, including how and where these dams would be reinstated, and whether they would have reliable water supplies compared with existing dams.

Potential effects on places with cultural, recreational or aesthetic values

Several respondents noted that the area has high landscape values, with spectacular views across to the mountains.

Woodnaggerak Homestead is considered to have significance for the local community. This is based on the social history of the area – there used to be a primary school and church in the locality, which some local people attended as children.



There are several historic bridges and culverts in the region, such as a bluestone crossing on Dip Road, which should be protected.

Representatives of Mount Cole Wineworks noted that bypassing the town may affect access to the *Off The Beaten Track Wine & Art Gallery*, their cellar door, which is located in Buangor. It was noted that Buangor has facilities in the Buangor Park which can be used by visitors to break their journey. It was noted that the Art Gallery/Cellar Door at Buangor could be seen as the start of the Grampians Wine Region, and that losing access to it could affect the tourist experience for winery buffs.

Buangor Primary School

The Buangor Primary School has written to VicRoads on several occasions to provide their perspective on the options for the Project. The lead SIA specialist also met with the School Principal on the 1st May 2012 to review the short-listed options with him.

The Buangor Primary School community raised concerns regarding the impacts of some options on the amenity of the school environs, particularly with regard to noise pollution.

The school community values the views from the school out to bushland and they were keen to preserve these. The School Council Secretary noted in correspondence (01SEP10):

"Buangor Primary School ... has an environmental setting which is unsurpassed in this region. Nestled in a lovely cul-de-sac, Billi Billi [sic] Creek lies to one side of the school and lush farmland lies to the other. The school's spectacular rear aspect is to the stunning mountains of Mount Cole and Mount Buangor ... There is a special ... atmosphere created by being in such a peaceful, harmonious setting."

In correspondence, the School Council Secretary noted that the school community did not want the new alignment to be too close to the school (11NOV10). They raised concerns regarding the safety of children attending the school if they have a major road only metres away. This was further reinforced in discussion with the Principal, who noted concerns regarding the proximity of the options to the school and the potential noise impacts which may affect the tranquil amenity of the school. The potential visual impact was also discussed. The school community are keen to see the visual impact of the school reduced as much as possible, either through siting or through landscaping mitigation.

Issues to consider in planning for the construction period include:

- ▶ Maintaining school bus routes, which traverse some of the rural roads which may be affected by construction activities this would be part of the traffic management plan
- Managing the curiosity of the school children so that they are not tempted to 'visit' the construction site. This could be achieved by VicRoads and the construction company engaging with the school community and providing educational opportunities for the children to learn about the major construction project.

Potential for dislocation, severance of accessibility or reduction of residential amenity (in relation to visual amenity, noise other changes to the character of the area)

Access into Beaufort for some properties on the western side of the town is an issue. Concerns were expressed regarding access roads and turning points.

Several respondents noted the social and environmental values of Buangor. Residents of the town consider it to be a sanctuary where they can enjoy an undisturbed rural lifestyle. They noted the



importance of the mature red gum trees and other native flora. Residents were concerned to ensure minimal disturbance of trees and landscape values in this locality.

Some respondents noted that bypassing Buangor could provide amenity benefits for the town, depending upon the final design. It was suggested that bypassing the town would make it "a beautiful hamlet".

Options which went to the south of Buangor were disliked by the local community. Respondents felt that these options would have a greater severance impact on the community of Buangor, which extends to the south of the actual township. They also felt that it would have a greater impact on the serenity of the community. It was noted that access to the community facilities would also be affected if the highway was realigned to the south of the town. Options which went to the north of the town generally had greater community support.

Current conditions on the highway are considered unsafe by some respondents, particular with regard to turning into properties or side roads from the highway. It was also noted that some bridges are not wide enough and can be unsafe when passing by oversized loads. The opportunity to widen or duplicate bridges to improve safety was noted by several respondents.

Several respondents noted that there was high amenity at their dwellings, including low noise levels and high landscape values. Where options deviated from the current road, residents raised concerns regarding negative impacts on their amenity. Various correspondents discussed the relative merits of retaining trees and bushland or protecting houses from noise, and they generally placed greater weight on preventing noise levels from increasing near houses.

Some farmers were concerned about how duplicating the highway would affect their farming operations. Issues that were raised included the impact of property acquisition; effects on moving stock and machinery around the district; impact on succession planning; impact on planned sales and lease arrangements; and how infrastructure such as dams and fences would be reinstated. Farmers were also concerned about land severance and how this may affect their operations and land value. Generally they were accepting of options which required a strip off the front of properties but not of options which cut through paddocks and sever parcels of land.

Options which sever many small farming properties were seen to potentially have a negative impact as the productive capacity of the affected farms may be reduced. It was noted that any loss of land from a small property has a proportionately greater impact than if it was severed from a large property

Proposed measures to address potential adverse social effects

Representatives of Buangor Primary School suggested that the new alignment be designed to stay as far away from the School as possible, to minimise negative amenity impacts such as increased traffic noise.



6. Impact Assessment

6.1 Introduction

The impact assessment has been carried out under several over-arching headings. Each impact assessment category relates back to the EES Scoping Guidelines (Section 2.2), the general SIA indicators described in Section 4.3 and the risk pathways assessed in Appendix A. Table 9 shows these links.

Table 9 Impact Assessment Indicators

EES Scoping Requirements	SIA categories	Risk Number	Impact pathway	Impact Assessment Heading
The existing social and community conditions in the vicinity of the project and relevant alternatives, including the settlement pattern, the distribution of	Community context Policy context	S1	The Project may lead to changes to the existing social and community conditions by creating pressures for the settlement pattern to change.	Section 6.2 Current social and community conditions
residents in the vicinity of the site, and their demographic characteristics, and patterns of community interaction and social foci.		S2/3	The Project may lead to changes to the existing social and community conditions by changing the distribution of residents in the vicinity of the Highway.	
		S4	The Project may change the existing social and community conditions by creating change processes which affect the demographic characteristics of the Study Area.	
Potential effects on local residents and communities during the construction stage.	Amenity impacts Dislocation Individual mobility	S6	The Project may affect local residents and communities during the construction stage.	Section 6.4 Construction Stage Impacts
Potential effects on places with particular cultural, recreational or aesthetic values, particularly with regard to significant regional locations.	Community context Dislocation Access benefits	S5	The Project and changes to access arrangements may lead to changes to the existing social and community conditions by changing patterns of community interaction and use of social foci.	Section 6.5 Valued Places and Spaces
		S7	The Project may lead to effects on places with particular cultural, recreational or aesthetic values, particularly with regard to significant regional locations.	
The potential for residents and communities, or parts of communities in	Severance Amenity impacts	S9	The Project may create a risk of dislocation for individuals and communities.	Section 6.3 Individual and
the vicinity of the project, to be affected through dislocation, severance of accessibility or reduction of their	Dislocation Individual mobility	S10	The Project may create a risk of severance and accessibility changes for individuals and communities	Community Impacts
amenity (in relation to visual amenity, noise other changes to the character of the area) resulting from development of the proposed project or relevant alternatives.		S11/12/13	The Project may create risks of reduction of amenity (in relation to visual amenity, noise other changes to the character of the area) to individuals and communities.	
Proposed measures to address potential adverse social effects, having regard to these, the likely residual effects on local residents and communities.	Policy context			Mitigation See sub-section in each impact assessment category.



Each impact category has been assessed as follows:

- Existing conditions
- Potential effects of the project
- Potential social impacts of the project including social risks
- Benefits and opportunities
- Mitigation measures (construction and operation)
- Overall Assessment of Impact by option (where relevant).

6.2 Current Social and Community Conditions

6.2.1 Existing conditions

The only township within Section 2 of the Western Highway Project area is the hamlet of Buangor. However, the study area starts on the outskirts of Beaufort, and ends on the outskirts of Ararat. The balance of the study area passes through predominantly agricultural land. Most of the agriculture is broad-acre grazing or cropping, with some tree plantations. The area also has scattered rural residential properties and includes some land reserved for protection of flora and fauna.

The local community is relatively homogenous. It consists of a mixture of farming families and rural lifestyle residents. The age profile is slightly older than the average for Victoria. The population is stable, with many families having owned land in the area for multiple generations.

Population growth is low and the social composition of the community is stable. There is limited pressure for further development.

6.2.2 Pressures on settlement patterns

Potential effects of the project

The Project may lead to changes to the existing social and community conditions by creating pressures for the settlement pattern to change. This is most likely to occur if existing properties are broken up into smaller parcels which are unviable as farms, as there could then be pressure for these properties to be rezoned for rural residential purposes.

The project may lead to accelerated growth of Buangor. Currently Buangor has very limited growth potential, but improving amenity and safety in the town by removing through traffic may increase demand for properties in this locality. This possibility is off-set by planning scheme provisions which do not encourage increased residential development in the area outside of the Township Zone.

Potential social impacts of the project

There is a risk that some rural properties may be severed to a size that is smaller than 40 hectares, which would mean the owners may not obtain a planning approval to build a house. This risk has also been assessed in the Planning and Land Use Impact Assessment Report (Risk PLU3-5). The recommended control is to consolidate small parcels of land with adjacent larger farms. However, if this does not happen, there is a possibility that these parcels may be re-zoned for rural living purposes. This could lead to slightly higher population density near the Highway. The number of parcels of land affected



is 13 for Option 1, 12 for Option 2 and 9 for Option 3⁴. This is a minor difference which would not affect the option selection.

Medium to long terms changes to population structure are not generally considered to be an adverse social impact. Given the low population in the study area, it is possible that change generated by the project would be within the range of normal variation anyway.

The likelihood of the project leading to an adverse change in settlement patterns is very low. This is because existing planning controls are designed to prevent intensive development in the study area. As noted in Section 5.1.1, Council does not encourage development in Buangor as it has limited infrastructure and services. Planning controls are therefore likely to minimise the potential impetus to population growth generated by the Project, unless the revocation of Ministerial Direction No. 6 affects planning controls in the area.

Benefits and opportunities

There is an opportunity to plan the township of Buangor to take advantage of the improved amenity and reduced traffic.

Mitigation measures (construction and operation)

No mitigation during construction other than measures listed in other impact assessment reports is required.

Change to settlement patterns is a long-term potential outcome of the project. The appropriate control is the planning scheme and zoning controls.

Council could also consider updating the *Buangor Community Action Plan*, which would enable the local community to reflect on the implications of the project and plan appropriate local responses.

Overall Assessment of Impact

There is no significant difference between the options with regards to the impact under this indicator.

The likelihood of change occurring is almost certain.

The social impact of this change is predicted to be very low.

The residential impact of the project on settlement patterns is assessed as being a Minor Impact.

6.2.3 Changes to the distribution of residents

Potential effects of the project

The existing community is in a very low spatial-density distribution and mostly in long-established dwellings. It is unlikely that any residents would specifically move away due to the project, apart from the residents of the dwellings that would be acquired:

- Option 1: property ID 1317, 1438 and 1498
- Option 2: property ID 1316, 1317 and 1257
- Option 3: property ID 1317, 1438 and 1498

It is highly unlikely that the Project would lead to significant urban development in Section 2.

⁴ Source: Planning and Land Use Impact Assessment Report – Risk Assessment



It is likely that any future development would be planned to take account of the location of the Project, and this may affect the distribution of residents in the long term.

Potential social impacts of the project

The key social impact for this indicator is the loss of population from the acquisition of dwellings. The number of dwellings proposed to be acquired is documented in Section 6.3.1. Of the maximum of three households that are proposed to be acquired, the SIA team or VicRoads have met with two. It is considered that these households have strong local ties and are likely to stay in the general region, if not in the actual study area. This means that while the Project is likely to lead to a redistribution of residents, it is likely to have a negligible effect on total population, if assessed at the LGA scale.

Benefits and opportunities

There is not predicted to be any specific benefits that can be realised in terms of distribution of residents as a result of the Project. However, in the long term, residents would have certainty about the location and potential impact of the road, and would be able to plan new dwellings accordingly.

Mitigation measures (construction and operation)

There are no mitigation measures required under this assessment indicator.

Overall Assessment of Impact

There is no difference between the options in terms of the level and type of impact.

The likelihood of change occurring is almost certain.

The social impact of this change is predicted to be very low.

The impact of the project on the distribution of residents is assessed as being a Minor Impact.

6.2.4 Changes to the demographic characteristics of the Study Area

Potential effects of the project

The Project could lead to increased demand for properties from people seeking a rural lifestyle, due to decreased travel times from major centres. If this led to population change it would change the demographic characteristics of the community. Based on planning policies to protect agricultural land for farming, this may be seen as an undesirable change.

The project may also lead to demographic change if new people move into the area as a result of properties being severed and later converted for rural residential purposes.

It is expected that changes to demographic characteristics would be incremental and it is highly unlikely that it would lead to changes which would be considered to be significantly negative by the local community. They would only occur as properties were sold and new people moved to the area. It is likely that this would be seen as part of normal change processes.

Some members of the local community expressed a desire for more development in the area, especially around Buangor. This suggests that a small increase in population may be welcomed by the existing community.



Potential social impacts of the project

Changes to demographic characteristics are predicted to be small and consequently have a low social impact. This is due to the planning controls that would limit development and hence demographic change. Any new people who move to the area are likely to have similar socio-economic characteristics to the existing population. This is based on conversations with people who have moved into the study area previously. This would also minimise any adverse social impacts.

Benefits and opportunities

Some people may benefit if new properties become available in the area for rural residential purposes.

There are no specific benefits or opportunities which need to be managed in terms of this assessment indicator.

Mitigation measures (construction and operation)

No mitigation during construction is required.

Change to demographic characteristics is a long-term potential outcome of the project. The appropriate control is the planning scheme and zoning controls.

Council could also consider updating the *Buangor Community Action Plan*, which would enable the local community to reflect on the implications of the project and plan appropriate local responses.

Overall Assessment of Impact

There is no difference between the options with regards to the impact under this indicator.

The likelihood of change occurring is almost certain.

The social impact of this change is predicted to be insignificant.

The impact of the project on demographic characteristics is assessed as being an Insignificant Impact.

6.3 Individual and Community Impacts

6.3.1 Dislocation for individuals and communities

Potential effects of the project

The Project is not anticipated to cause any community level dislocation. This is because there is no widescale loss of residents or severance from the Project.

Individual and household dislocation occurs as a result of property acquisition, as discussed in Section 4.5.

VicRoads has indicated that the following dwellings would be acquired under each option:

- Option 1:
 - Property ID 1317 (Ch. 14500)
 - Property ID 1438 (Ch. 19600)
 - Property ID 1498 (Ch. 24200)



Option 2

- Property ID 1317 (Ch. 14500)
- Property ID 1316 (Ch. 19200)
- Option 3
 - Property ID 1317 (Ch. 14500)
 - Property ID 1438 (Ch. 19600)
 - Property ID 1498 (Ch. 24200)

Therefore, three dwellings would be acquired and demolished under Option 1 and Option 3 and two dwellings would be acquired and demolished under Option 2.

Potential social impacts of the project

The dislocation impact of this project is at a household, rather than a community, level.

A maximum of three dwellings would be acquired in Section 2 as a result of the project. Two of these dwellings are owner-occupied and one is rented. This is a low social impact compared with other similar transport infrastructure upgrade projects.

The reason that one of the dwellings is to be acquired under Option 1 and Option 3 (currently rented) is because the landowner preferred that particular alignment, as it has a lower property severance effect than Option 2. This indicates that the landowner has chosen the trade-off between a higher impact on the dwelling against a lower impact on the productive capacity of the farm.

One dwelling which is to be acquired under Option 2 only is owned by a family who have indicated that they would prefer to have their property acquired rather than live near the realigned Highway. They have indicated a preference to relocate rather than remain in a location which they feel would be considerably changed for the worse by the realignment of the Highway.

Benefits and opportunities

The key opportunity under this indicator is to reduce the dislocation impact as much as possible through good property acquisition processes. VicRoads should aim to achieve best practice in their dealings with the local community and their management of the administrative, legal and financial aspects of the acquisition process.

Mitigation measures (construction and operation)

The planning process to date has been thorough in minimising the number of properties to be acquired as much as possible. The alignment options which had a larger dislocative impact have not been short-listed. It is unlikely that this impact could be mitigated any further, without then either affecting other households or negatively affecting farm viability. It is recognised that the planning process has involved trade-offs between different types of social impact in some locations.

The impacts of property acquisition would be managed in accordance with the *Land Acquisition and Property Compensation Act 1986*.

Where properties are severed to an unworkable size, VicRoads should work with landowners and Council to determine appropriate solutions. It may be possible for Council to give special consideration in its application of planning scheme provisions in some circumstances.



Overall Assessment of Impact

The likelihood of a negative impact from dwelling acquisition would involve two households under Option 1 and Option 3 and three households under Option 2.

The impact of Option 1 and Option 3 on social dislocation is assessed as being a Minor Impact.

The impact of Option 2 on social dislocation is assessed as being a Moderate Impact.

6.3.2 Severance and accessibility changes for individuals and communities

The assessment of severance and accessibility changes is based on the analysis contained in the Traffic and Transport Impact Assessment Report. A full description of the expected changes is contained in that report and a summary is included in Section 1.3 of this report.

Potential effects of the project

Most existing access ways would be changed by the project, particularly at some future time when the highway is upgraded to Freeway standard. Under the Freeway standard, existing access points from properties on to the highway would be removed. Some side roads may have restricted access and egress.

In Buangor, the existing highway would be downgraded to a local road in the proposed initial duplicated highway (AMP 3 standard road). Some residents would have to travel longer distances to access some properties from the new road.

Road Network Impacts

The intersections which are proposed to be upgraded to have a wide median treatment in the initial duplicated highway (AMP 3 standard road) include:

- Eurambeen-Raglan Road Eurambeen-Streatham Road. Access to Crockers Lane is also via this intersection
- Ferntree Gully Road Goulds Lane
- Peacocks Road
- ▶ Hillside Extension Road
- Langi Ghiran Picnic Ground Road
- Hillside Road (West) and Brady Road
- Warrayatkin Road.

Roads which are proposed to have access to the upgraded Western Highway via a wide median treatment and service road connections are:

- Martins Lane
- McKinnon Lane
- Black Raglan Road.

Within the vicinity of the Buangor bypass a number of intersecting side roads would have direct access to the Highway removed. Access to these roads would be provided through connections to the Peacocks Road wide median treatment intersection via a service road or along the exiting Highway. This access arrangement is likely to increase travel time for users, however the Traffic and Transport Impact



Assessment (T&TIA) has stated that this is expected to be acceptable. The intersecting side roads with direct access removed include:

- Anderson Road
- Buangor-Ben Nevis Road
- Yerrabbin Road
- Main Street
- Gravel Route Road.

Intersecting side roads without a wide median treatment or alternative access arrangements, and properties which currently have direct access onto the Western Highway, are proposed to be restricted to the 'left-in' and 'left-out' access in the initial duplicated highway (AMP 3 standard) arrangement. This is anticipated to increase the travel time for one direction of travel as vehicles would be required to travel along the Highway until the nearest wide median intersection treatment or median break. The roads with proposed 'left-In' and 'left-out' access include:

- Stars Road
- Aherns Road
- Middle Creek Road
- Waldrons Road
- Mile Post Lane
- Dobie Road
- Aerodrome Link
- Geelong Road
- Green Hill Lake Road.

Woodnaggerak Road would have access to the Western Highway removed, however access would be provided via Middle Creek Road as the two roads intersect south of the Western Highway. Although not ideal, given the expected low volumes the impacts are predicted to be manageable in the Traffic and Transport Impact Assessment Report.

Pope Road and Colonial Road are proposed to have slightly different access arrangements to the upgraded Highway for each alignment option. These are:

Option 1 and Option 3

- ▶ Pope Road has a 'left-in' and 'left-out' access directly onto the upgraded Western Highway.
- Colonial Road accesses the upgraded Western Highway via the existing Highway which is not utilised as part of the upgrade. The existing Highway connects to the upgraded Western Highway directly for the eastbound movements, while westbound movements can access the upgraded Western Highway via the wide median treatment at Hillside Road.

Option 2

Pope Road and Colonial Road access the upgraded Western Highway via the existing Highway which is not utilised as part of the upgrade. The existing Highway connects to the upgraded Western



Highway directly for the eastbound movements, while westbound movements can access the upgrade Western Highway via the wide median treatment at Hillside Road.

Direct Property Accesses

Existing direct property accesses to Western Highway would be maintained, however the majority would be restricted to be 'left-in' and 'left-out' under the initial duplicated highway (AMP 3 standard) arrangement. To access those properties from the opposing direction, to the permitted access, vehicles would be required to travel to the nearest wide median treatment or median break and complete a 'U-Turn'.

Due to the 'left-in' and 'left-out' access restriction to the Highway in the initial duplicated highway (AMP 3 standard) arrangement, property owners and visitors may need to travel slightly longer distances than is currently the case to reach their desired destination. The effect may be an increased travel time for those road users with the actual extent depending on the destination of travel. Based on the typical distances of travel for the project area, the Traffic and Transport Impact Assessment Report states that this increase in travel time is not considered to be an unreasonable change in order to achieve desired road safety benefits.

Potential social impacts of the project

There is expected to be some localised impacts on travel times for landowners, particularly the owners with property on both sides of the Highway who require farm machinery to move from one side to another. However, overall benefits for road safety and Highway operations would be provided for general users.

Many of the local community members who participated in the community engagement or provided feedback commented that they felt unsafe driving on the existing road. Comments included feeling unsafe with heavy vehicle traffic or being unable to enter or exit side roads or properties safely. It is anticipated that the majority of the community would accept slightly longer travel distances as there would be a trade-off of:

- Potentially reduced travel times due to the improved road conditions;
- Safer driving conditions; and
- Safer access to and from side roads and properties.

Access to community facilities and focal points would not be adversely affected by the project. Access to the community facilities in Buangor may be improved due to reduced through traffic. In particular, pedestrian and cyclist access to the school may be improved.

The proposed changes to access are unlikely to negatively impact on bus routes to the Buangor Primary School. While existing routes may change if access arrangements constrain right-turn movements, there are multiple alternative routes. Any impact needs to be assessed in the context of regular changes to school bus routes which occur anyway, depending on school enrolments.

Any psychological severance impact would be minimal, as changes to existing access pathways are minimal.

Benefits and opportunities

It may become safer for children to walk or ride between dwellings in Buangor and community facilities such as the Primary School and the sports facilities. This would be due to decreased traffic volumes



through the town, particularly of heavy vehicles. This would be considered to be a social benefit, due to social health concerns regarding declining childhood activity levels.

Service roads are required for a Freeway Standard road and have been included in the project developed for initial assessment in the EES to maintain all property access. Construction of these service roads would improve access for landowners and reduce the uncertainty of future impacts.

Mitigation measures (construction and operation)

The mitigation measures proposed to minimise the impact of construction are detailed in the Traffic and Transport Assessment Report. These measures address all potential social impacts of construction.

A mitigation measure suggested by the representative of Ararat Rural City Council at the TRG Meeting No. 8 is development of a new boulevard entrance to Buangor in conjunction with the community. This could be planned as part of the process of updating the Buangor Community Action Plan, as suggested in Section 6.2.4.

VicRoads should continue to liaise with landowners regarding access arrangements, to ensure that driveways and access points are located appropriately.

VicRoads should ensure that the Buangor Primary School is provided with a copy of the proposed access arrangements, so that the school can plan future school bus routes accordingly.

Overall Assessment of Impact

There would be a negligible impact on movement patterns for the broader community of the study area.

There would be a minor impact on access for landowners adjacent to the Highway.

The impact would be certain to occur if the project proceeds, however the severity of impact is off-set by other travel benefits.

The impact of the project on severance and accessibility is assessed as being a Minor Impact.

6.3.3 Amenity impacts to individuals and communities

Potential effects of the project

Amenity can be elusive to categorise. When referring to a location, it is usually defined as those characteristics that make it an attractive and agreeable place to be. These characteristics could include the quality of the landscape (urban or rural), the quality of the architecture, the local noise environment (not just the level of noise, but also what is generating the noise – bird song can be just as loud as traffic noise, but is less likely to be perceived negatively) and the lighting environment at night. It may also include air quality, including odours, dust and pollution.

Amenity effects of the Project may come from the following key elements:

- Changes to the road alignment or creation of service roads introducing transport infrastructure to new locations, or aligning it closer to houses than existing.
- Increased traffic noise, if it affects the quality of life of residents living adjacent to the Highway.
- Light from traffic at night, if the road is designed in such a way that lights shine directly on to dwellings.



- Changes to the pleasantness of a household's surroundings for example, by road realignment, tree clearing or changes to the quality of the landscape.
- ▶ Changes to the air quality for example an increase in unpleasant odours.

Potential social impacts of the project

The potential impact of changes to the noise environment is measured in the Acoustic Impact Assessment Report. The SIA relies on changes to the noise environment as a proxy for changes to residential amenity. It is assumed that any household which has a significant change to the noise environment would also have a significant negative amenity impact.

Table 10 shows the number of properties where there would be a change in the noise environment. The table shows the difference in noise levels between 2011 (existing conditions) and 2025. It is important to understand that some degree of change to the existing noise environment would have occurred for many properties regardless of whether the road was duplicated or not, due to increased traffic volumes, as shown in Figure 4 on Page 22.

Table 10 Comparison of Changes to the Noise Environment between 2011 and 2025

Ohaman laval	Option 1	Option 2	Option 3
Change level	Number	Number	Number
Houses where noise levels would be reduced.	35	37	21
Houses where noise level would be increased	82	80	98
Houses with no difference from existing	4	4	1
Houses with a 5 dB(A) or more difference from existing	4	3	8
Acquired Houses	2	3	3

Source: Noise and Vibration Impact Assessment, GHD, 2012

The acoustic modelling has included 124 dwellings which would remain after the Project is completed. Of those dwellings, some would have reduced noise levels, some would have no change and some would have a small increase in noise.

Under Option 1, Option 2 and Option 3, there would be an increase in noise levels of 5 db(A) or more at four, three and eight dwellings respectively. This is the level at which a change in noise would be 'clearly noticeable' at the receiver locations. These dwellings may be eligible for noise mitigation as per VicRoads Traffic Noise Reduction Policy (2005). Refer to Section 3.2.2 of the Noise and Vibration Impact Assessment Report (GHD, 2012) for more information on this policy

The Landscape and Visual Impact Assessment report (LVIA) states that there would be dwellings with an existing outlook to the Highway may have their views changed due to vegetation clearance. This is assessed as a low social impact. The LVIA report details the landscaping options available to mitigate the impact.

The LVIA report states that there would be dwellings without a current outlook to the Highway that may have an outlook which includes the duplicated Highway in the future. This is assessed as a minor impact. The report indicates that landscaping may mitigate the impact somewhat, but the changed outlook would be permanent.



The LVIA report also states that there would be a change to the look of the Buangor township approach and the outlook from the Buangor Primary School although this is considered to be an insignificant visual impact from the Buangor town centre and a moderate visual impact from the Primary School. The changed conditions in entering Buangor could be mitigated through landscaping. Community feedback has included options to improve the landscaping and amenity of the road to encourage more development of the town. Refer to the Landscape and Visual Report for mitigation options.

The Buangor school community have expressed considerable concern over the potential impact of the project on the amenity of the school environs. Their issues have included the risk of increased noise levels and the changed landscape. It was noted that the school is in a relatively isolated and rural setting, which is greatly valued by the whole school community. It would be appropriate to pay particular care to mitigation opportunities in the vicinity of the school, in order to minimise negative impacts in this location.

As outlined in the Air Quality Assessment Report, the Project would be required to adhere to air quality standards mandated by the Environment Protection Authority. It is therefore assumed that there would be no negative impact on air quality in the Project study area.

Benefits and opportunities

Table 10 indicates that many residents would actually experience a reduction in current noise levels as a result of the project. Option would deliver the greatest benefit in this regard, followed by Option 1 and then Option 3.

Opportunities to further minimise the amenity impacts of the project may be achieved by high quality landscape design and implementation. Local involvement could be obtained through involving the school community in tree planting days.

Mitigation measures (construction and operation)

Mitigation options to reduce or improve landscape impacts are set out in the Landscape and Visual Impact Assessment report (LVIA). Appropriate tree planting should minimise any negative impacts around the Buangor Primary School by reducing views to the new road.

Mitigation measures to minimise noise impacts are contained in VicRoads noise policy and may include installation of noise barriers to reduce noise to properties adversely affected by a new highway alignment.

Overall Assessment of Impact

The likelihood of this impact is certain, and it would affect a high proportion of the households within the study area: however; these effects are balanced towards either beneficial or negligible effects on amenity. Part of the increase in noise in some locations would occur independently of the project due to increased traffic volumes.

The overall social impact on amenity is classified as **Moderate Impact**, due to the large number of households that would all experience a small change.

6.4 Construction Stage Impacts

Potential effects of the project

The main disruptive effect of a major infrastructure project is often experienced at the construction phase by the local community. It is at this point that many of the negative access and amenity effects occur.



Disruption may continue for months or even years. With a road construction project, there are three areas of impact:

- The presence of the construction workforce, which includes the following aspects:
 - o Presence of a temporary workforce (most likely to be resident in Beaufort and Ararat)
 - Movement of the workforce to and from work sites during the day
 - Location of facilities for the workforce, including site offices, amenities blocks and car parks
- When construction is occurring directly out the front of a dwelling or farming property, with noise, dust and access impacts; and
- When driving along the Highway is affected by road closures, detours, lane closures and reduced speed limits.

The workforce directly employed on the project is estimated to be no more than 200, and is more likely to be between 50-100 people at any given time. The workforce is likely to include local people as well as people who are only in the area to work on the project. A proportion of the workforce is likely to move directly from construction of Section 1 to construction of Section 2 of the Project, depending on project timing.

In general, most members of the community would accept the temporary inconvenience of construction activities, with the understanding that it would provide them with a future benefit. The level of acceptance varies depending on the level of perceived future personal benefit. In the case of the Western Highway Project, most adjacent landowners would see themselves as direct beneficiaries of the project, in reduced travel times if nothing else. This is likely to lead to a greater acceptance of construction impacts, as long as the community has confidence that VicRoads and their contractors are managing the construction appropriately and effectively.

Potential social impacts of the project

The potential social impacts of construction include:

- Disruption from the presence of the construction workforce most likely to be caused by their movements to and from construction sites
- Reduced amenity for adjacent residents from construction activities, including: increased traffic noise, dust visual impact; and
- Property access interruptions during construction.

Locations along the project route where this may occur are those where construction activities are carried out in close proximity to dwellings, or where they disrupt access. The sites of highest sensitivity are Woodnaggerak and Buangor.

As there is a wide variety of accommodation options in Ararat and Beaufort, it is considered unlikely that the presence of the temporary construction workforce would adversely affect accommodation availability in either of these towns.

Benefits and opportunities

There are no specific social benefits or opportunities for this indicator, apart from those which flow on from the economic stimulus caused by the presence of the construction workforce.



Mitigation measures (construction and operation)

The social impacts of construction would be managed through the controls included in VicRoads construction contract conditions and the additional measures recommended in the noise, air and traffic impact assessment reports. In addition, the construction contractor should be required to locate site office and lay-down areas away from sensitive locations.

VicRoads would require the construction contractor to develop and implement a Construction Environmental Management Plan (CEMP) for the Project. VicRoads standard environmental protection measures and some additional Project specific controls would be incorporated into the Environmental Management Framework for the Project. VicRoads would require the construction contractor to incorporate all of these measures into the CEMP.

VicRoads could consider working with the contractor to engage with the students of Buangor Primary School to provide educational opportunities for the school students to learn about major project construction and environmental management. This would also have the benefit of educating the children about safety around work sites and would provide a public relations opportunity for the contractor.

VicRoads could also consider requiring the construction contractor to ensure that their workforce adheres to an appropriate code of conduct. This would specifically relate to any temporary workers and would aim to prevent conflict with the local community.

Overall Assessment of Impact

The level of disruption is likely to be high for an extended duration. For this reason, the social impact is assessed as a **Moderate Impact**.

This is not considered to be a longer term negative impact, rather it is an acknowledgement that many people would be affected by construction, however this is offset by the future benefit that they would receive when it is completed.

6.5 Valued Places and Spaces

6.5.1 Existing Conditions

There are several locations in the Project area which have cultural value: the Major Mitchell Cairn historical marker, the Woodnaggerak homestead and surrounds; Green Hill Lake, Langi Ghiran State Park and the Cobb and Co building in Buangor.

The main location for community interaction is Buangor. Social facilities include the Sports ground, Cobb and Co building and the primary school. The former hotel is now closed. These facilities serve the surrounding rural community as well as the hamlet.

Langi Ghiran State Park is located north of the Western Highway. The current access is unobtrusive. Facilities are provided for low key, low impact recreational uses.

Another location for community interaction is Green Hill Lake on the outskirts of Ararat, at the western end of Section 2 of the Project. Green Hill Lake is a popular recreational attraction for the local community and it has extensive camping and caravanning facilities, also making it a destination for travellers.



6.5.2 Patterns of community interaction and use of social foci

Potential effects of the project

It is unlikely that either option for the Project in this locality would have a negative effect on access to, and use of, valued community facilities. It is more likely that removing through traffic through the town of Buangor would be seen as a social benefit from the project.

The Project would provide enhanced access to Langi Ghiran State Park, via a wide median intersection in the initial project and a modified diamond interchange in the longer term (Freeway standard).

Potential social impacts of the project

It is considered that the project would have a positive social impact on the environs of the key community facilities in Buangor, due to improved amenity and access. The community is also likely to consider the design of the Project near Woodnaggerak as protecting their local heritage, and hence would view this as a benefit of the project. This is based on concern about previous options which potentially encroached on the Woodnaggerak homestead.

Limited change is proposed to the Highway near Green Hill Lake. This means that there would be limited access impact or benefit from the Project at that location.

The enhanced access to Langi Ghiran State Park would need further consideration by Parks Victoria and the Department of Sustainability and Environment (DSE). At present the Management Plan is based on maintaining low impact uses while preserving the natural condition of the vegetation communities. If significantly more visitors are attracted to the Park due to its increased visibility, this may have a negative impact on its environmental and cultural values, if not properly managed.

Benefits and opportunities

At present, the access into Green Hill Lake is limited, and may be considered awkward by people towing caravans or boat trailers. There is an opportunity to provide a new right-turn slip lane for vehicles entering Green Hill Lake from the east. If overall access to Green Hill Lake is enhanced, this would be a significant social benefit of the project, as the Lake is socially important to the whole community of Ararat and surrounds, as well as travellers.

Mitigation measures (construction and operation)

Consultation with Council and the local community has been undertaken during the planning for the Project to determine access requirements.

Buangor: VicRoads could maximise the social benefit in this location by re-designing the road through Buangor as a local road which provides good access to the local community facilities. Council could be involved in this process. Safe access to the sports facilities and the primary school by children should be encouraged.

Woodnaggerak: the control in this locality for VicRoads is to avoid any impact on the areas where previous community facilities were located. Council may choose to undertake a heritage listing for the site which more fully documents the social history of the locality and its importance to the local community.

Parks Victoria and DSE could consider updating the Management Plan for Langi Ghiran State Park to take into account the changed access arrangements. If it is preferred to keep visitation low, Parks



Victoria would need to liaise with VicRoads to ensure unobtrusive signage and other options to discourage visitation.

Overall Assessment of Impact

There is no negative social impact in terms of reduced access to valued places and social foci.

There is some potential for social benefit in terms of improved access to these sites.

The social impact of access to valued places and social foci is assessed as Insignificant Impact.

6.5.3 Effects on valued places

Potential effects of the project

The recreation reserve in Buangor has recreational value. Both options would avoid the Cobb and Co building and the recreation reserve. There is a slight risk that the amenity in that location may be affected by the changed noise environment. However, it is more likely that the community would perceive the reduction of traffic on the existing highway as being of benefit, and the two effects would counter-balance each other.

Woodnaggerak Homestead is seen as an important locality amongst the local community: there used to be a primary school, church and other community facilities in the vicinity. While these facilities are now gone, Woodnaggerak is still seen as an important to the identity of the local community. Any negative impact on this locality may be seen as a negative outcome by the local community.

Potential social impacts of the project

It is considered that the project would have a positive social impact on the environs of the key community facilities in Buangor, due to improved amenity and access. The alignments avoid the Cobb and Co changing station and recreation reserve in Buangor.

The alignments avoid the Major Mitchel Cairn historical marker.

The project has been designed to minimise impact at the Woodnaggerak homestead site. The community is likely to consider the design of the Project near Woodnaggerak as protecting their local heritage, and hence would view this as a benefit of the project. This is based on concern about previous options which potentially encroached on the homestead.

Limited change is proposed to the Highway near Green Hill Lake. This means that there would be limited impact or benefit from the Project at that location.

The enhanced access to Langi Ghiran State Park would require further consideration by Parks Victoria and DSE. At present the Management Plan is based on maintaining low impact uses while preserving the natural condition of the vegetation communities. If significantly more visitors are attracted to the Park due to its increased visibility, this may have a negative impact on its environmental and cultural values, if not properly managed.

Benefits and opportunities

The revised Project design has taken into consideration the previous identification of the benefit of improving the amenity of key community sites in Buangor.



The existing highway could be redeveloped to make the environment around the Cobb and Co building and recreation reserve more attractive and hence enhance the amenity, if possible.

VicRoads could consult with Ararat Rural City Council regarding the development of the Master Plan for Green Hill Lake, to determine what opportunities there are to improve access and safety at this location.

Mitigation measures (construction and operation)

The new alignment should be designed to minimise noise impacts at the recreation reserve in Buangor.

Further consideration of the impact of the project on Langi Ghiran State Park is required.

Overall Assessment of Impact

There is no negative social impact in terms of effect on valued places.

There is some potential for social benefit in terms of improved access to these sites and improved amenity of the sites in Buangor.

The social impact on valued places is assessed as an Insignificant Impact.



7. Conclusion

The Project has been designed so as to avoid or minimise impacts on individuals and communities wherever possible. The Scoping Requirement of the Social Impact Assessment was:

To protect residents' well-being and minimise any dislocation of residents or severance of communities, to the extent practicable.

An existing conditions assessment was undertaken and included a review of relevant local and State government social and planning policies, an analysis of the social profile of the study area, a review of community services, facilities and cultural and social values, and a meeting with Council officers to gather information on strategic development objectives and community functioning within the study area.

The SIA team participated in consultation activities including attending the landholder information sessions to speak with landowners and interested community members and conducting individual landholder meetings with people that would be impacted by the Project.

The SIA process found that community attitudes towards the Project were mixed with concerns raised about potential amenity impacts, including an increase in noise levels and impacts on visual amenity. Concerns were also raised about potential property acquisition, severance of agricultural land and changes in access arrangements to local properties. Buangor Primary School raised particular concerns about amenity impacts that the Project could have on the school and potential changes to school bus routes.

Community members also identified that they thought by-passing Buangor could increase the amenity of the town and that the Project could result in higher levels of safety, particularly with regard to accessing properties.

The Risk and Impact Assessment was undertaken to identify and assess the potential social impacts that could arise from the Project. This was conducted under four categories which include relevant indicators to measure the potential social impacts. The assessment is summarised in the Table 11.

Table 11 Summary of Social Impact Assessment

EES Requirement	Indicator	Impact Assessment
	Pressures on settlement patterns	Minor Impact.
Existing social and community conditions	Changes to the distribution of residents	Minor Impact.
	Changes to the demographic characteristics of the Study Area	Insignificant Impact.
	Dislocation for individuals and communities	Minor Impact
Individual and Community Impacts	Severance and accessibility changes for individuals and communities	Minor Impact.
	Amenity impacts to individuals and communities	Moderate Impact
Construction Stage Impacts	Amenity impacts to individuals and communities Disruptions to access	Moderate Impact
Valued Places and	Patterns of community interaction and use of social foci	Insignificant Impact.
Spaces	Effects on valued places	Insignificant Impact.



Overall, the social impacts of the Project would be low for Option 1, Option 2 and Option 3. However, there are two impacts that are considered to be of moderate social impact. These are: amenity impacts to individuals and communities during the operation and construction of the Project and disruption to access during construction.



8. References

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VicRoads 2010 Project Options Assessment Report: Western Highway Project – Duplication Beaufort to Ararat VicRoads Ballarat



Appendix A Risk Assessment



Table 12 Social Risk Assessment

Risk		Option		Impact pathway	Description of consequences	Planned Controls to	ln	itial Ris	ks	Controls Recommended to	Resi	idual R	isks
No.	1	2	3			Manage Risk	Consequence	Likelihood	Risk Rating	Reduce Risk	Consequence	Likelihood	Risk Rating
S1	X	X	X	The Project may lead to changes to the existing social and community conditions by creating pressures for the settlement pattern to change.	There are two locations where dwellings are clustered: at Woodnaggerak and Buangor. The project is unlikely to affect any change on this settlement pattern, particularly since it mostly follows the existing alignment. However, it may encourage the long-term growth potential for Buangor to grow as a town. Currently it has very limited growth potential, but improving amenity and safety in the town by removing through traffic may increase demand for properties in this locality. This possibility is off-set by planning scheme provisions which do not encourage increased residential development in the area.	This is controlled by the local planning scheme.	Insignificant	Possible	Negligible	Council may need to consider the implications of the project for their strategic planning processes.	Insignificant	Unlikely	Negligible
S2	X		X	The Project may lead to changes to the existing social and community conditions by changing the distribution of residents in the vicinity of the Highway.	The existing community is very low-density and mostly in long-established dwellings. It is unlikely that any residents would specifically move away due to the project, apart from the residents of two dwellings (Ch. 14500 and Ch. 24200) that would be acquired (Option 1). The project may influence future decisions on locations of dwellings, however this is unlikely to have an adverse outcome.	This is controlled by the local planning scheme.	Minor	Possible	Low	-	Minor	Possible	Low



Risk		Option		Impact pathway	Description of consequences	Planned Controls to	In	itial Ris	ks	Controls Recommended to	Res	idual R	isks
No.	1	2	3			Manage Risk	Consequence	Likelihood	Risk Rating	Reduce Risk	Consequence	Likelihood	Risk Rating
S3		X		The Project may lead to changes to the existing social and community conditions by changing the distribution of residents in the vicinity of the Highway.	The existing community is very low-density and mostly in long-established dwellings. It is unlikely that any residents would specifically move away due to the project. The project may influence future decisions on locations of dwellings, however this is unlikely to have an adverse outcome.	This is controlled by the local planning scheme.	Minor	Possible	Low		Minor	Possible	Low
S4	Х	Х	Х	The Project may change the existing social and community conditions by creating change processes which affect the demographic characteristics of the Study Area.	The Project could lead to increased demand for properties from people seeking a rural lifestyle, due to decreased travel times from major centres. If this led to population change it would change the demographic characteristics of the community. Based on planning policies to protect agricultural land for farming, this would be seen as an undesirable change.	This is a long-term potential outcome of the project. The appropriate control is the planning scheme.	Insignificant	Possible	Negligible	No additional control is necessary for VicRoads.	Insignificant	Unlikely	Negligible
S5	Х	X	Х	The Project and changes to access arrangements may lead to changes to the existing social and community conditions by changing patterns of community interaction and use of social foci.	The main location for community interaction is Buangor. Social foci include the Sports ground, Cobb and Co building, the primary school and the hotel. These facilities serve the surrounding rural community as well as the hamlet. It is unlikely that either option for the Project in this locality would have a negative impact on access to, and use of, these facilities. It is more likely that removing through traffic through the town would be seen as a social benefit from the project. Woodnaggerak Homestead is seen as an important locality amongst the local community: there used to be a primary	Consultation with Council and the local community has been undertaken during the planning for this project to determine access requirements.	Insignificant	Possible	Negligible	Buangor: VicRoads could maximise the social benefit in this location by re-designing the road through Buangor as a local road which provides good access to the local community facilities. Council could be involved in this process. Safe access to the sports facilities and the primary school by children should be encouraged.	Insignificant	Rare	Negligible



Risk		Option		Impact pathway	Description of consequences	Planned Controls to	In	itial Ris	ks	Controls Recommended to	Res	idual R	isks
No.	1	2	3			Manage Risk	Consequence	Likelihood	Risk Rating	Reduce Risk	Consequence	Likelihood	Risk Rating
					school, church and other community facilities in that locality. While these facilities are now gone, Woodnaggerak is still seen as an important to the identity of the local community. Any negative impact on this locality may be seen as a negative outcome by the local community.								
S6	X	X	X	The Project may affect local residents and communities during the construction stage.	Reduced amenity for adjacent residents from construction activities, including: increased traffic noise, visual impact, and property access interruptions during construction. There are several locations along the project route where this may occur. The sites of highest sensitivity are Woodnaggerak and Buangor.	Construction Management controls described in VicRoads Contract Shell DC1 document. This includes relevant Air Quality, Geology (Contamination), Noise, and Traffic controls described in Risks A1, G2, G5, N3, T1. The CEMP would have protocols for liaising with adjacent land owners, to keep them fully informed about construction activities in their area, and any potential disruption to their access and amenity.	Minor	Almost Certain	Medium	-	Minor	Almost Certain	Medium



Risk		Option		Impact pathway	Description of consequences	Planned Controls to	In	itial Ris	ks	Controls Recommended to	Res	idual R	isks
No.	1	2	3			Manage Risk	Consequence	Likelihood	Risk Rating	Reduce Risk	Consequence	Likelihood	Risk Rating
S7	X	X	X	The Project may lead to effects on places with particular cultural, recreational or aesthetic values, particularly with regard to significant regional locations.	There are three locations in Section 2 which have cultural value: the Major Mitchell historical marker, the Woodnaggerak homestead and surrounds and the Cobb and Co building in Buangor. The recreation reserve in Buangor has recreational value. Of these, the two sites which face some risk are the Major Mitchell marker (see the heritage report) and Woodnaggerak. Both options would avoid the Cobb and Co building and the recreation reserve. Option 1 offers more scope for extension of the recreation reserve than Option 2. There is a slight risk that the amenity in that location may be affected by the changed noise environment. However, it is more likely that the community would perceive the reduction of traffic on the existing highway as being of benefit, and the two effects would counter-balance each other.	The project is being designed to minimise impact at the Woodnaggerak homestead site. The alignments avoid the Major Mitchel historical marker and the Cobb and Co building.	Minor	Unlikely	Low	Woodnaggerak: the control in this locality for VicRoads is to avoid any impact on the areas where previous community facilities were located. Council may choose to undertake a heritage listing for the Woodnaggerak site where sites are identified which more fully documents the social history of the locality and its importance to the local community. The existing highway could be redeveloped to make the environment around the Cobb and Co building and recreation reserve more attractive and hence enhance the amenity if possible. The new alignment should be designed to minimise noise impacts at the recreation reserve.	Insignificant	Unlikely	Negligible
S8	Х	Х	Х	The Project may create a risk of dislocation for individuals and communities.	Two dwellings would be acquired and demolished in Option 1 (Property ID 1317 (Ch. 14500) and Property ID 1438 (Ch. 24200)) and three dwellings would be acquired and demolished in Option 2	The impacts of property acquisition would be managed in accordance with the Land Acquisition and Compensation Act.	Minor	Almost Certain	Medium	There does not appear to be any way to reduce the number of dwellings which would need to be acquired. Where properties are severed	Minor	Almost Certain	Medium



Risk		Option		Impact pathway	Description of consequences	Planned Controls to	Initial Risks		ks	Controls Recommended to	Resi	idual R	isks
No.	1	2	3			Manage Risk	Consequence	Likelihood	Risk Rating	Reduce Risk	Consequence	Likelihood	Risk Rating
					(Property ID 1316 (Ch. 19200), Property ID 1317 (Ch. 14500), Property ID 1498 (Ch. 24200)). Some other properties risk being severed to a size that is smaller than 40 hectares, which would mean the owners may not obtain a planning approval to build a house. This risk links back to S1 and the risk of change to settlement patterns.					to an unworkable size, VicRoads should work with landowners and Council to determine appropriate solutions. It may be possible for Council to give special consideration in its application of planning scheme provisions in some circumstances.			
S9	X	X	X	The Project may create a risk of severance and accessibility changes for individuals and communities	Most existing access ways would be changed by the project, particularly in the areas where the highway is upgraded to Freeway standard. Existing access points on to the highway would be removed. Some side roads may have restricted access and egress. In Buangor, the existing highway would become downgraded to a local road. Longer distances would be required to access some properties from the new road. Access to community facilities and focal points would not be adversely affected by the project. Any psychological severance would depend on the changes to local connectivity, which are expected to be minor if not better.	Service roads are required for a Freeway Standard road and have been included in the project developed for initial assessment in the EES to maintain all property access.	Minor	Likely	Medium	It may be appropriate to redesign the existing highway through Buangor to a local access road, however that is not part of the current design. Good access to Buangor should be maintained.	Minor	Possible	Low
s10	X	Х	Х	The Project may create risks of reduction of amenity (in relation to visual amenity, noise	One dwelling at Cha. 10700 would have a new service road close to the front of the dwelling.		Minor	Likely	Medium		Minor	Likely	Medium



Risk		Option		Impact pathway	Description of consequences	Planned Controls to	ln	itial Ris	ks	Controls Recommended to	Resi	dual R	isks
No.	1	2	ഗ			Manage Risk	Consequence	Likelihood	Risk Rating	Reduce Risk	Consequence	Likelihood	Risk Rating
				other changes to the character of the area) to individuals and communities.									
s11		X		The Project may create risks of reduction of amenity (in relation to visual amenity, noise other changes to the character of the area) to individuals and communities.	One house would have a new freeway and access ramps relatively close (On Buangor-Ben Nevis Road at Chainage 19100). This would be a significant negative impact for the owners of this dwelling, especially as the project would be constructed on a high embankment, which would block views and leave the residents feeling isolated from the rest of Buangor. One dwelling at Hillside Extension Road (Ch. 24500) would be 'islanded' by new road. This would be a significantly negative outcome, especially since the roads would all be built up around the house. This may leave the residents feeling 'surrounded' and isolated.		Minor	Likely	Medium	The control is option selection and detailed design. Acquisition of the properties in question could also be considered. Selection of Option 1 would prevent these impacts from occurring. If Option 2 is selected, the detailed design should aim to minimise the long-term negative impact at these locations. Otherwise, consideration could be given to acquiring these properties in total, so that the owners can relocate, depending on their preference.	Minor	Possible	Low



Risk		Option		Impact pathway	Description of consequences	Planned Controls to	In	itial Ris	ks	Controls Recommended to	Resi	idual R	isks
No.	1	2	3			Manage Risk	Consequence	Likelihood	Risk Rating	Reduce Risk	Consequence	Likelihood	Risk Rating
s12			Х	The Project may create risks of reduction of amenity (in relation to visual amenity, noise other changes to the character of the area) to individuals and communities.	One dwelling at Hillside Extension Road (Ch. 24500) would be very close to the new road. This would be a negative outcome in terms of amenity at that location.		Minor	Likely	Medium	Selection of Option 1 would prevent these impacts from occurring. If Option 2 is selected, the detailed design should aim to minimise the long-term negative impact at these locations. Otherwise, consideration could be given to acquiring these properties in total, so that the owners can relocate, depending on their preference.	Minor	Possible	Low



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