

# Mid-West 2 Corridor Planning Study - Social Impact Assessment



# Mid-West 2 Corridor Planning Study - Social Impact Assessment

Prepared for  
VicRoads

Prepared by

**AECOM Australia Pty Ltd**  
Level 9, 8 Exhibition Street, Melbourne VIC 3000, Australia  
T +61 3 9653 1234 F +61 3 9654 7117 www.aecom.com  
ABN 20 093 846 925

In association with  
Environmental Affairs Pty Ltd

31 January 2012

60239707

AECOM in Australia and New Zealand is certified to the latest version of ISO9001 and ISO14001.

### Quality Information

**Document:** Highway 102/101 Corridor Planning Study - Social Impact Assessment




**ID:** 60751907

**Date:** 11 January 2013

**Prepared by:** Michael Weston, Michael Brinkley and David Anderson

**Reviewed by:** Ben Stiller

### Review History

Revision	Revision Date	Description	Approved	
			Name/Position	Signature
A	21 July 2012	Draft Report	Gene Huxford Technical Director Design + Planning New Brunswick Associated Engineers	
B	12 August 2012	Final Report	Gene Huxford Technical Director Design + Planning New Brunswick Associated Engineers	
C	11 Jan 2013	Final Report - new printed title	Gene Huxford Technical Director Design + Planning New Brunswick Associated Engineers	

## Table of Contents

Executive Summary		i
1.0	Introduction	1
	1.1 Proposed Reservation	1
	1.2 Task Brief	1
	1.3 Purpose of the Social Impact Assessment	1
2.0	Project Methodology	2
	2.1 Background to Social Impact Assessment	2
	2.2 Study Methodology	4
3.0	Project Overview	5
	3.1 Study Area	5
	3.2 Relationship between Echuca and Moama	6
	3.3 Project options	6
4.0	Legislation and Policy	12
	4.1 State Government Legislation and Policy	12
	4.1.1 Transport Integration Act 2010	12
	4.1.2 Planning and Environment Act 1987	13
	4.2 Planning Framework	14
	4.2.1 State Planning Policy Framework	14
	4.3 Local Planning Policy Framework	15
	4.3.1 Municipal Strategic Statement	15
	4.3.2 Clause 22 Local Planning Policies	16
	4.3.3 Clause 40 Overlays	16
	4.4 Local Government Plans and Policies	17
	4.4.1 Campaspe Shire	17
	4.4.2 Arts and Culture Strategic Plan, 2004-2014	19
	4.4.3 Murray Shire	20
5.0	Demographics	22
	5.1 Population Growth	22
	5.2 Age Structure	23
	5.3 Vehicle Ownership per Household	24
	5.4 Method of Travel to Work	25
	5.5 Where do Residents Work	26
	5.6 Employment by Industry	28
	5.7 Demographic Conclusions	29
6.0	Community Facilities and Valued Places	30
	6.1 Existing Facilities and Places	30
	6.1.1 Commercial	30
	6.1.2 Community	32
	6.1.3 Educational	32
	6.1.4 Health	32
	6.1.5 Recreation facilities	32
	6.1.6 Places of Special Interest	34
	6.1.7 Significant Community Events	34
	6.2 Future Plans and Opportunities	35
	6.2.1 Commercial	35
	6.2.2 Community	35
	6.2.3 Education	35
	6.2.4 Health	36
	6.2.5 Recreation	36
	6.2.6 Places of Special Interest	36
7.0	Stakeholder Engagement	37
	7.1 Community Consultation Group Meeting	37
	7.2 Face to Face Meeting Results	38
	7.2.1 Residents	38
	7.2.2 Emergency Services	40

	7.2.3	Community Services	42
	7.2.4	Commercial operators	44
	7.2.5	Sporting and Community Groups	45
7.3		Consultation with Francis Street residents	47
7.4		Victoria Park Survey Results	48
	7.4.1	Frequency of Use	48
	7.4.2	Activities undertaken at Victoria Park	49
	7.4.3	Areas of Victoria Park used	49
	7.4.4	Most Liked aspect of Victoria Park	50
	7.4.5	Suggested improvements for unstructured or informal areas	51
	7.4.6	Landscape features and views of importance	51
	7.4.7	Impact of new bridge on landscape features and views	52
	7.4.8	Mitigation measures	52
	7.5	Stakeholder Engagement Conclusions	53
8.0		Assessment of Social Impacts	54
	8.1	Objective Based Evaluation Model	54
	8.2	Objectives	55
	8.3	Assessment of the Mid-West 2 options	56
	8.3.1	Impacts of options on residents' amenity and well-being	56
	8.3.2	Impacts of options on landscape, open space and recreation values	56
	8.3.3	Impacts of options on access to commercial and community facilities	57
	8.3.4	Impacts of options on effective integration of Echuca and Moama communities	57
	8.3.5	Impacts of options on pedestrian and cycling facilities	58
	8.4	Summary	58
9.0		Key Findings and Recommendations	60
	9.1	Social impacts associated with the introduction of the PAOs	60
	9.2	Social impacts associated with construction activity for the second Murray River crossing	60
	9.3	Social impacts associated with operation of the second Murray River crossing	60
	9.4	Recommended Mitigation Measures	61
10.0		References	63

#### **Appendix A - Municipal Cycling and Walking Plan Maps**

#### **Appendix B - Victoria Park and Environs Master Plan 2010**

#### **Appendix C - Task Brief**

## Executive Summary

AECOM was engaged by VicRoads to undertake a Social Impact Assessment of four alternative alignments for the Mid-West 2 Corridor between the Murray Valley Highway in Echuca (Victoria) and Perricoota Road in Moama (New South Wales). Previous studies have identified that a new crossing between Echuca and Moama is required to meet local traffic demand and to allow for the repair of the existing bridge.

This Social Impact Assessment (SIA) has been undertaken to assess the social impacts of the proposed four alignments within the Mid-West 2 Corridor. The purpose of a SIA is to assess the social impacts of the proposed Mid-West 2 Corridor option upon the community, including residents, community groups, community facilities and places of special interest within the study area.

The two towns of Echuca and Moama are intertwined and linked only by the existing Echuca-Moama Bridge. Echuca provides many of the community, health, recreational, education and commercial activities for both towns and the surrounding region. Moama provides many social, recreation and club based facilities and activities for the same areas.

Demand for movement – vehicular, pedestrian and bicycle – between Echuca and Moama is projected to increase significantly. The combined population of Echuca-Moama is approximately 17,000 and is expected to grow to 27,000 by 2031. The long-term growth corridor for Echuca is to the west, and for Moama it is to the north-west. These growth corridors are well positioned to take advantage of the future road corridor that will link the northern and western areas of Echuca with the central and north-west areas of Moama.

Echuca-Moama is also an important agricultural service and tourism centre. At certain times of the year, these roles place increased pressure on the local road network, often overstressing the capacity of the road and causing traffic impacts well beyond the immediate area of the existing bridge. The proposed road will alleviate traffic pressures on both central Echuca and Moama.

As widely recognised by the local community, the proposed road connection is likely to have many access and mobility benefits for the local and wider communities. It will improve access to community, health, recreation, education, commercial, social and club-based facilities and activities located in both towns.

Closer to the study area, focussed on the Mid-West 2 Corridor, the proposed alignments will have a range of potential positive and negative impacts. Key issues for consideration are the potential impacts on the sports precinct in Victoria Park, the culturally significant sand hill near Reflection Bend, and amenity impacts on residents, the Echuca Holiday Park, Echuca Cemetery, and Victoria Park bushland and the Murray River environs.

AECOM undertook consultation over a period of three days in Echuca and Moama. AECOM met with a range of stakeholders including residents, business and community facility operators, as well as informal and formal users of Victoria Park and the Murray River.

This SIA has evaluated the potential impacts using the Objective Based Evaluation Model (OBEM). This assessment concluded that Options 2A and 2C are preferred. While all options would provide a significant improvement in accessibility to a range of community and commercial facilities and contribute to the further integration of the two towns into one community, Options 2A and 2C perform better than Options 2B and 2D primarily because:

- They are located further away from residential development in the Crofton Street area and the area generally north of Warren Street west of the Campaspe River
- They would not have a direct effect on the formal recreation facilities in Victoria Park – the lawn tennis courts in particular.

Based on responses to a limited survey of park users, all options would have a substantial and potentially adverse effect on the valued landscape and recreation aspects of the bushland area in the north-western sections of Victoria Park.

The difference between the better performing Options 2A and 2C is the inclusion in Option 2C of an additional roundabout at a point on Warren Street, 500 metres east of the junction with the Murray Valley Highway. As the requirement to negotiate two roundabouts rather than one would marginally affect the ease of access for all road users, especially vehicles providing key community services such as emergency services and school buses, Option 2A would be preferred to Option 2C from a social impact perspective.

This assessment also recommends the following measures to mitigate potential impacts:

- Implementation of noise attenuation measures consistent with VicRoads' policy
- Sensitive landscape treatment of the new road through the different sections of Victoria Park
- Reconfiguration of informal walking tracks within bushland and other areas of Victoria Park
- Provision of a pedestrian and cycling on / off ramp on the southern side of the Murray River at Victoria Park
- Mitigation of any direct impacts on the lawn tennis courts in Victoria Park with any proposal for reinstatement to be determined through detailed consultation with relevant stakeholders
- Appropriate junction design at Murray Valley Highway having regard to accessibility requirements of residents to the west of the Murray Valley Highway, especially residents of the Cunningham Downs community
- Upgrading of the surface of Warren Street consistent with its current and future traffic functions and the provision of bicycle lanes
- Further consultation with residents about design treatment for the western section of Francis Street, Moama, including street lighting and landscape proposals

## 1.0 Introduction

The purpose of the Mid-West 2 Corridor Planning Study is to create a second bridge crossing over the Murray River between the state border towns of Echuca (Victoria) and Moama (New South Wales). Road traffic between Echuca and Moama currently uses the historic Echuca-Moama Bridge which was constructed in 1878.

The need for a second river crossing has been identified in response to projected increases in population growth within the region and increased economic activity in local tourism and agriculture sectors.

A Planning Study undertaken by VicRoads and the Roads and Traffic Authority of NSW (RTA) in 2001/2002 investigated a number of alignment options for the crossing, with a Mid-West corridor identified as the most viable option.

In 2011, the Victorian Government nominated the Mid-West 2 alignment as its preferred option for a second river crossing between Echuca and Moama. The Mid-West 2 corridor proposes to link Warren Street, Echuca with the Cobb Highway, Moama along a corridor which runs to the north of Echuca Cemetery, traverses the bushland areas of Victoria Park, and crosses the Murray River downstream of the Echuca Holiday Park and boat ramp.

Traffic modelling has estimated that a second crossing would attract up to 36% of traffic using the existing Moama-Echuca Bridge by 2023. The closest alternative river crossings linking Victoria and New South Wales are located at Barmah, 35 kilometres to the east of the study area, and Koondrok-Barham, located approximately 88 kilometres to the west of the study area.

The objective of this study is to assess the social impacts of the Mid-West 2 alignments on the communities located within the corridors of the western part of Echuca and southern part of Moama.

### 1.1 Proposed Reservation

The reservation proposed to be introduced to the Campaspe Planning Scheme by means of a Public Acquisition Overlay (PAO) will be of sufficient width to accommodate a bridge with a four lane, two way road, however only two lanes (one lane each way) will be initially constructed. In its initial stage the crossing would comprise a two-lane, two-way road and bridge with a bicycle path along either side of the road. The ultimate stage (when required) would comprise two way dual carriageways and bridges.

### 1.2 Task Brief

VicRoads sought a detailed Social Impact Assessment (SIA) for the proposed Mid-West 2 alignments consistent with the Task Brief provided in Appendix C.

### 1.3 Purpose of the Social Impact Assessment

The SIA, together with other specialist studies, will inform consideration of the proposed PAO for the second Murray River crossing in the Campaspe Planning Scheme and the reservation in the Murray Local Environment Plan.



This SIA focuses on the alignment options in Echuca (Victoria), as the alignment in Moama (New South Wales). The alignments in NSW are the same for all options. In undertaking this study, VicRoads requested AECOM to discuss the impacts and benefits of the proposed bridge with both the Echuca and Moama communities. VicRoads also requested AECOM consult with the residents of Francis Street, Moama, to record their views about the proposed reopening of the western end of Francis Street at the Cobb Highway, Moama. Whilst this study included consultation with residents of Francis Street in order to identify their responses to the proposed re-opening of Francis Street, the Francis Street re-opening does not form part of the impact assessment for this study. The policies considered in this report therefore focus on Echuca (Victoria) and not Moama (New South Wales). Engagement occurred with stakeholders from Echuca and Moama.

The objective of the SIA is to assess the social impacts of the proposed Mid-West 2 option upon residents, community groups, community facilities and places of special interest within the study area. In accordance with VicRoads scope for the SIA, the project objectives are:

- *To protect residents' amenity and well-being by minimising dislocation and severance of residents to the extent practicable*
- *To protect existing land uses and the character of landscapes, open space and recreation values to the extent practicable*

The social issues and impacts to be assessed include:

- Implications of the proposed second crossing on future urban development, including both employment and residential development within the study area
- The potential social benefits of the second crossing, including safety improvements and opportunities for amenity improvements
- The implications for local and regional residents and businesses in terms of access to properties and services
- The net community benefit of the second crossing in terms of social sustainability

## 2.0 Project Methodology

### 2.1 Background to Social Impact Assessment

An SIA is a social research tool that is used to review and assess the potential social impact of a planned interaction, such as a policy change, public program or infrastructure development. An SIA is used to review the intended and unintended social consequences, both positive and negative, of planning interventions and any social change processes invoked by those interventions. The International Association of Impact Assessment (IAIA) identified the following social impact variables as a way to conceptualise social impacts.

*Social impacts are changes to one or more of the following:*

- **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 personal and property rights:** *particularly whether people are economically affected, or experience personal disadvantage which may include a violation of their civil liberties*
- **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.<sup>1</sup>*

Transport infrastructure development or change can have a range of social impacts which occur at both the local and regional levels. Upgrading road infrastructure can provide significant social benefits including improved road safety, accessibility and travel time savings. Negative social impacts may include reduced physical amenity and access due to road closures or new roads cutting through neighbourhoods. Psychological impacts may also result, such as those associated with the effects on valued places and loss of friendship networks. Changed road access may also affect the sense of community and place identity if the deeper social values and sentiments of residents are affected. This can lead to a long term change in the community's social capital and social networks.

The following social impacts of transport infrastructure are assessed:

- **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.
- **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.

---

<sup>1</sup> Source: International Association of Impact Assessment, 2003 International Principles for Social Impact Assessment ([www.iaia.org](http://www.iaia.org))

- 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 people's enjoyment of it. They may include changes to their property, the general landscape, the noise environment, and also changes to the amenity of important community facilities.
- Policy context – social and planning policies inform 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 – the expressed preferences and concerns of local people 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.

## **2.2 Study Methodology**

The methodology of the SIA for the Mid-West 2 Corridor Planning Study included:

- Literature review including analysis of State and local policy, past reports and studies (focusing on social policy context)
- Demographic analysis based on data from the 2006 Census of Population and Housing and State Government population projections
- Site visits and documentation of existing conditions, community facilities, services and places of special interest
- Preparation of targeted consultation program, including community consultation group liaison and focus group discussions
- Targeted stakeholder and landowner interviews
- Analysis and interpretation of information gained from the stakeholder consultation
- Assessment of options 2A, 2B, 2C and 2D against the evaluation assessment criteria using the Objective Based Evaluation Model (OBEM)
- Completion of the SIA report
- Presentations to Community Consultative Group.

### 3.0 Project Overview

#### 3.1 Study Area

The proposed Mid-West 2 Corridor is situated in the north-west of Echuca-Moama, twin towns on the shared border of Victoria and New South Wales. The study area for the SIA extends from the intersection of the Murray Valley Highway and Warren Street in Echuca (Vic) to the intersection of Cobb Highway and Perricoota Road in Moama (NSW) (Figure 1).



Figure 1: Study Area

### **3.2 Relationship between Echuca and Moama**

Echuca is located within the Shire of Campaspe and Moama within the Murray Shire. The social and economic roles of the two towns are intertwined. Historically, Echuca has always been the larger of the two towns. The vast majority of employment, education and social services are provided in Echuca. The population of Echuca is three times that of Moama but, in recent years, the population of Moama has been growing at twice the rate of Echuca, albeit from a low population base.

The towns share many facilities and a key consideration for a second crossing over the Murray River is improving access and movement between these two border towns.

The major economic activities for Echuca and Moama are agriculture and tourism. Tourism during peak seasons has a significant impact on the functioning of both towns. During peak tourism seasons and events, the capacity of the local road network in both towns, in the vicinity and beyond the immediate area of the bridge, is overstretched.

Land uses within the wider study area include residential, recreational, commercial and industrial uses. Several 'clusters' located within the study area were identified, including the Crofton Street residential area in Echuca (Cluster 1), Central Echuca (Cluster 2) and Western Moama (Cluster 3). Section 6.0 contains a detailed description of the study area and surrounds. The clusters are shown in Figure 6.

### **3.3 Project options**

Table 1 and Figure 2 to Figure 5 collectively describe and show the four alignment options that were assessed for this Social Impact Assessment. As can be seen in the drawings, the proposed Mid-West 2 Corridor alignments are predominately through recreation reserves.

**Table 1: Description of Alignments**

Segment	Murray Valley Highway to Campaspe	Campaspe to Murray River	Murray River to Cobb Highway
<b>Alignments</b>	<ul style="list-style-type: none"> <li>- Connects to Murray Valley Highway, or</li> <li>- Connects to Warren Street</li> </ul>	<ul style="list-style-type: none"> <li>- Via north-western edge of sand hill and Reflection Bend, or</li> <li>- Via sports precinct and former school</li> </ul>	Same for all alignments
<b>Similarities</b>	<ul style="list-style-type: none"> <li>- Bridges and embankments have been strategically located and designed to provide for movement of pedestrians, vehicles and boats along key routes</li> <li>- The bridge over the Murray River: <ul style="list-style-type: none"> <li>o ~15 metres above the top of the embankment</li> <li>o Sufficient clearance above the 1:100 year flood level for the Emmylou Paddle Steamer</li> </ul> </li> <li>- Majority of bridges and embankments: <ul style="list-style-type: none"> <li>o ~7-8 metres high above the existing ground level</li> <li>o ~4-6 metres clearance above the existing ground level</li> </ul> </li> <li>- Elsewhere, minimum clearance of 1 metre above 1:100 year flood level</li> <li>- Shared bicycle-pedestrian path along length of Corridor</li> </ul>		
<b>Differences</b>	<p><b>Routes:</b> All existing routes maintained except for those listed below, except for Option 2C where Jarman and Nolan Street will be closed.</p> <p><b>Vegetation &amp; Landscape:</b> Option 2C and 2D are through undeveloped private land as opposed to Option 2A and 2B which are through untouched Crown Land.</p> <p><b>Cemetery:</b> Option 2C and 2D pass in close proximity to the cemetery. Option 2A and 2B are located away from the cemetery.</p> <p><b>Warren Street:</b> Between the new Corridor and Campaspe River, the road level of Warren Street will remain below the 1:100 year flood level.</p>	<p><b>Scenic Drive Route:</b> Maintained, except for Option 2A &amp; 2B where the sub-route to the west of the former school will be closed.</p> <p><b>Vegetation &amp; Landscape:</b> Option 2B and 2D through the former school are likely to reduce the impact on vegetation and the natural landscape.</p> <p><b>Reflection Bend:</b> Option 2A and 2C will be visible.</p> <p><b>Sand Hill:</b> Option 2A and 2C will cross the western shoulder of the sand hill. Subject to approvals, pylon(s) may be located adjacent to the sand hill. Option 2B and 2D will cross the eastern shoulder of the sand hill. Approval is in place for a “concrete cap” over a portion of the sand hill.</p> <p><b>Sports Precinct &amp; Former School:</b> Option 2B and 2D will result in the replacement of six tennis courts. The sports precinct is being redeveloped and the replacement courts can be accommodated within the redevelopment. The former school has been closed. Option 2A and 2C will avoid the sports precinct.</p>	<p>Travels through private land.</p> <p><b>Boundary Road:</b> Closed.</p> <p><b>Forbes Street:</b> Closed.</p> <p><b>Perricoota &amp; Francis Street:</b> Opened and signalised.</p> <p><b>Meninya Street intersection:</b> Signalised.</p>



Figure 2: Overview of Alignment 2A



Figure 3: Overview of Alignment 2B





Figure 4: Overview of Alignment 2C



## 4.0 Legislation and Policy

This section provides an overview of relevant State and local policies, strategies and plans as they apply to the Mid-West 2 Corridor in Victoria.

### 4.1 State Government Legislation and Policy

#### 4.1.1 Transport Integration Act 2010

The *Transport Integration Act 2010*, in section 6, establishes the Vision for Transportation in the State of Victoria as aspiring ...*to have an integrated and sustainable transport system that contributes to an inclusive, prosperous and environmentally responsible state.*

This Act requires decision makers to give regard to the promotion of inclusive, prosperous and environmentally responsible transit.

The Act clarifies and defines VicRoads' role in the integrated transport system. It is both a representative of the Crown and bound by the Act. VicRoads is required to provide, operate and maintain a road system consistent with the vision statement and transport system objectives and in collaboration with other transport bodies and public entities. It is a requirement to do this in a manner which supports sustainable Victoria by increasing the share of public transport, walking and cycling trips as a proportion of all transport trips and improving environmental performance and contributing to social wellbeing by providing access to opportunities and liveable communities, and promoting economic prosperity.

The Act requires a range of objectives be considered in the planning, provision, management and use of the transport system. Relevant social and economic objectives for the current study area include:

- Improving access
- Facilitating economic prosperity
- Actively contributing to environmental sustainability
- Effectively integrating transport and land use to facilitate access to social and economic opportunities
- Ensuring that transport infrastructure and services are provided in a timely manner
- Being safe and supporting health and wellbeing

Under the Act, the Assessment of Projects is intended to be undertaken by considering a range of triple bottom line principles taking into account costs and benefits and value for money.

Decision making is intended to be undertaken considering equity between persons regardless of attributes, locational equity, and intergenerational equity. Decisions are intended to be made from the perspective of the user and in order to enhance the experience of the user.

**Relevance to Project**

The planning and construction of the Echuca Bridge will form a small but vital part of a broader land use, housing, connectivity and employment strategy of the State. The Act's objectives and assessment criteria are therefore relevant to the assessment of any social impacts for the Mid-West 2 alignment and broader study area.

Consequently it is necessary for the SIA report to include a consideration of potential social impacts upon residents now and into the future. Where social impacts are identified, appropriate mitigation measures are to be identified.

**4.1.2 Planning and Environment Act 1987**

The *Planning and Environment Act 1987* provides the framework for land-use and development in Victoria. Planning schemes prepared under the provisions of the *Planning and Environment Act 1987* apply to each municipal area in Victoria. Echuca Bridge is located within the Shire of Campaspe. The Campaspe Shire Council is the responsible authority. The relevant Planning Scheme is the Campaspe Planning Scheme.

The objectives of planning are:

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

**Relevance to Project**

The planning and construction of the proposed Echuca Bridge will form a small but vital part of a broader land use, housing, connectivity and employment strategy of the State. The Act's objectives and assessment criteria are therefore relevant to the assessment of any social impacts for the Mid-West 2 alignment and broader study area.

Consequently it is necessary for the SIA report to include a consideration of potential social impacts upon the working, living and recreational environment now and into the future. Where social impacts are identified, appropriate mitigation measures are to be identified.

## 4.2 Planning Framework

### 4.2.1 State Planning Policy Framework

The State Planning Policy Framework (SPPF) is standard throughout each planning scheme in Victoria. The SPPF relates to land use and development and is used to inform planning decisions. The following aspects of the SPPF are relevant to the assessment of social impacts of the Mid-West 2 Corridor option.

#### Clause 11 Settlement

Planning is to anticipate and meet requirements for existing and future communities through provision of zoned and serviced land for housing, employment, recreation and open space, commercial and community facilities and infrastructure. Planning for settlement needs to recognise:

- Health and safety.
- Diversity of choice.
- Economic viability.
- A high standard of urban design and amenity.
- Energy efficiency.
- Prevention of pollution to land, water and air.
- Protection of environmentally sensitive areas and natural resources.
- Accessibility.
- Land use and transport integration.

#### Clause 11.05 – Regional development

The objective of Clause 11.05 is *‘to promote the sustainable growth and development of regional Victoria through a network of settlements identified in the Regional Victoria Settlement Framework Plan’*.

#### Clause 18 – Transport

Clause 18 Transport states that ‘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. Included in Clause 18 is the objective for the Transport system which is *‘to coordinate development of all transport modes to provide a comprehensive transport system’*.

#### Relevance to Project

The Framework Plan identifies Echuca as a ‘regional city’ where ongoing urban development will be supported and directed as a priority. The SPPF supports the ongoing development of Echuca, integration of its land use and transport connections, and the encouragement of sustainable transport options such as walking and cycling.

## **4.3 Local Planning Policy Framework**

The Local Planning Policy Framework (LPPF) sets out the Municipal Strategic Statement and Local Planning Policies that apply to areas covered by the scheme. The following aspects of the LPPF are relevant to the assessment of the social impacts of the Mid-West 2 Corridor option.

### **4.3.1 Municipal Strategic Statement**

#### **Clause 21.03 Vision Statement**

The residents of Campaspe value the lifestyle and opportunities offered to them within the region. The wellbeing and social health of the community is important to the Shire. The community values Echuca as a safe, healthy place to live and work, and for its social networks, support services, and the opportunity for residents to participate in decisions affecting the community, including planned infrastructure.

#### **Clause 21.04 Objectives – Strategies – Implementation**

##### **Clause 21.04-1 Settlement**

This Clause highlights Campaspe Shire's commitment to improving urban environments to encourage community wellbeing and improving the health of residents. Residential areas within the Shire are provided with a range of health, educational, recreational, cultural and entertainment options in order to meet the social needs for all ages and gender groups.

Echuca is the largest centre in the Shire with a population of approximately 12,280. Population projections for the combined Echuca-Moama area are in excess of 20,000 citizens by 2020. Development opportunities and constraints within the Echuca area are identified below:

- Future growth in Echuca will be to the west as land to the east, north, south, south-east and south-west is constrained
- Future residential development in greenfield areas will be at a higher density than that over the past several decades
- Infill developments will be encouraged in existing urban areas
- The Port of Echuca Heritage Precinct and the railway corridor offer significant opportunities for public and private investment. The Heritage Precinct Master Plan and Tourism Investment Strategy are to be used to guide future development in the area.

##### **Clause 21.04-2 Environment**

The catchments of various rivers within the municipality are subject to flooding and floodplains should be recognised and preserved to minimise the deterioration of environmental values. Sound floodplain management in the municipality is the critical means by which the economic, social and environmental risks associated with floodplain use and development can be managed.

Aboriginal and historic heritage assets are vital features of the Shire which are important for the continued economic, social and cultural development of the community. The Port of Echuca is recognised as an anchor tourist attraction in the region, and a number of recognised and all unrecognised Aboriginal places, sites and objects are also protected by State and Commonwealth legislation. This protection applies equally on Crown and freehold land, and does not depend upon completion of any listing or registration process.

#### **Clause 21.04-3 Economic Development**

Agriculture and tourism underpin the Shire's economy. Campaspe lies within one of Australia's most productive and developed agricultural regions. Agriculture is expected to remain the economic driving force of the Shire up to 2020.

Tourism is an economic and employment growth sector for the Shire and is an important aspect of the social, economic and physical make-up of the Shire. Key tourism assets are based on the Murray River and around the Port of Echuca. The estimated annual turnover associated with the tourism industry is \$100 million, with approximately 1500 people employed in the tourism industry.

Planning for growth must ensure that new development is integrated and does not fragment existing commercial centres. Development of commercial and retail activity in highly accessible locations must also consider the effects on traffic, access, fragmentation or elongation of entrances to towns.

The forecast growth of Echuca-Moama will increase demand for an additional road crossing of the Murray River to the north west of the town centre as an extension of the Murray Valley Highway.

#### **4.3.2 Clause 22 Local Planning Policies**

The Heritage Policy (Clause 22.02) identifies "Echuca Central" as a cultural heritage asset of State importance. The Shire of Campaspe aims to retain and enhance the character of the historic port and surrounding township area.

Development proposals are discouraged which impinge upon existing significant view lines towards and from the Port of Echuca area, including the view towards the forested area opposite the wharf, and the view line from the existing Iron Bridge and towards the Port. The aesthetic, historic and environmental values of the Campaspe River and public land to its west is encouraged to be conserved and links between the Campaspe and Murray Rivers are to be encouraged and enhanced. Potential impacts on view lines are being assessed by the Mid-West 2 Corridor Planning Study Visual Impact Assessment.

#### **4.3.3 Clause 40 Overlays**

The Heritage Overlay to the Campaspe Planning Scheme identifies the Red Gum Memorial Archway and a stand of Murray Pine located within Victoria Park.

The Design and Development Overlay requires that proposed upgrades to the highway should improve traffic safety and visual amenity. Landscaping should reflect the change in land use along the entrance of the highway, commencing with a rural landscape character and transitioning to an urban character before entering the industrial/commercial district of Echuca.

### Summary of Local Policy / Relevance to Project

Local policies highlight that:

- The Shire of Campaspe is committed to maintaining and enhancing the social wellbeing of the community and is committed to the process of consultation as an integral part of project evaluation.
- Future development in Echuca will be in the west, as well as in-fill development. The proposed alignments must consider access issues relating to future growth areas.
- The agriculture and tourism industries will continue to grow. Fragmentation and traffic issues must be avoided. The proposed alignment is seen as an opportunity to resolve traffic issues.
- The proposed alignment will need to address potential off-site impacts resulting from constructing a bridge within a floodplain.
- The alignment needs to minimise the impact on significant cultural heritage sites, heritage assets, significant trees and vistas.
- Road upgrades should aim to improve traffic safety and maintain visual amenity.

## 4.4 Local Government Plans and Policies

Relevant plans and policies adopted by the Campaspe and Murray Shires include:

### 4.4.1 Campaspe Shire

#### 4.4.1.1 Campaspe Shire Council Plan, 2009-2013

The Shire of Campaspe Council Plan provides strategic direction for development within the Shire. The Plan recognises that community participation and connectedness are important to Campaspe's citizens. A number of objectives have been proposed to improve the social environment. These are to:

- Build vibrant communities with strong identities
- Build social inclusion, especially for people who are isolated
- Contribute to an efficient social service system with single entry points and clear pathways.

Specific recommendations for achieving these policies that have relevance to this project include:

- Ensuring the viability of community associations and sports clubs
- Identifying and seeking to overcome physical barriers to priority transport connections
- Identifying physical infrastructure needs to support coordinated services.



#### **4.4.1.2 Access and Inclusion Plan, 2010-2013**

The *Access and Inclusion Plan 2010-2013* sets out strategies to improve access to Shire facilities for disabled persons. The plan also aims to improve community inclusiveness through changing community attitudes.

Key actions to improve access to all Council facilities and open spaces include to:

- Ensure that any future planning and development of infrastructure - especially recreation, sporting and playground facilities includes "access for all" principles
- Develop an accessible footpath strategy for creating walking networks linking key town sites with community facilities
- Work with the Road Services Manager and VicRoads to identify safe pedestrian crossing locations for major arterial routes.

#### **4.4.1.3 Echuca Moama Recreation Plan, 2006**

The *Echuca Moama Recreation Plan 2006* was prepared as a joint initiative of the Campaspe Shire Council (Vic) and the Murray Shire Council (NSW). Through the plan, the two Shires aim to improve efficiency and coordination to increase the range and quality of recreational facilities available to their residents. The plan recognises the high value placed on open space, sporting and recreation facilities by residents.

The Plan recommends that both Councils consider the inclusion of both active and passive recreation facilities when assessing future upgrades for larger parks. The Plan projects an increase in passive recreation requirements within the Shire due to forecasted population growth and an ageing population with an increasing preference for passive recreational facilities.

Improved access to recreational offerings is another key objective of the plan, including the recommendation that strong linear links be developed between recreational offerings and those areas within the Shire underprovided with parks and open space. Improving access to natural areas such as Victoria Park and Scenic Drive has also been recommended, however a method for access improvements has not been described in the plan.

#### **4.4.1.4 Campaspe Walking and Cycling Strategy, 2007**

The purpose of the Campaspe Walking and Cycling Strategy is:

*To identify a direction and opportunities for Council for the future provision of walking and cycling paths and trails in the Shire of Campaspe, after consideration of local and regional issues.*

The plan has been developed in response to the Shire of Campaspe's recognition of the health, fitness, and social benefits of walking and cycling. The Plan aims to increase participation in these activities by both residents and visitors to the Shire. The strategy aims to encourage walking and cycling to work, recreational offerings, schools and shops, and as a tourism activity. To support this aim the Shire will promote existing paths and develop new safe and well designed paths.

The existing network of paths includes Scenic Drive in Victoria Park Reserve and along the Campaspe River. The strategy proposes a crossing point over the Murray Valley Highway at Butcher Street to connect to the future urban growth areas in the west of Echuca. Maps of existing and proposed cycling networks are appended (Appendix A).

Consultation with the community identified other on road cycling networks that are heavily used but are not recognised in this Strategy. Consultation results are discussed in 6.1.2.

#### **4.4.1.5 Victoria Park and Environs Master Plan, 2010**

Victoria Park and its surrounds are the key sporting and recreation precinct for Echuca and Moama residents. Victoria Park is separated into 2 areas:

1. Sports precinct
2. Parkland

The park includes a range of facilities including tennis, football, cricket and netball grounds as well as a boat ramp and water skiing events. Scenic Drive abuts the park and is a natural bushland area used for informal recreation and nature-based activities, picnicking, walking and cycling. The recreation precinct is also home to regional and State based events.

The 2010 Master Plan was prepared in response to planning issues impacting upon the Park. One of these issues was the planning study being undertaken to assess the feasibility of the Mid-West route for the planned second crossing of the Murray River.

The previous alignment proposed a route through the former school on the western edge of the sports precinct and would have resulted in the loss of a portion of Victoria Park on the western side. The Master Plan (Appendix B) proposes new playing fields and tennis courts that interface with the Mid-West 2 Corridor.

The Master Plan is on hold pending the outcome of the Mid-West 2 Corridor Planning Study.

#### **4.4.2 Arts and Culture Strategic Plan, 2004-2014**

The *Arts and Culture Strategic Plan* identifies all art and cultural offerings within the Shire, and proposes options to fill gaps where community needs are not being met. Two major projects proposed in the Plan are the construction of a new visual arts space in Echuca including relocation of the Echuca Library, and an increase in arts activities in the Port of Echuca area including street theatre, a children's museum and youth workshops. This is likely to increase travel demand to and from central Echuca.

### **Campaspe Shire Summary / Relevance to Project**

The Shire of Campaspe local plans and policies highlight:

- The planning for, and location of, the proposed second Murray River crossing needs to have regard to improving social connectedness within the Echuca community and other communities. Regard must also be given to avoiding impacts on physical and community infrastructure.
- The planning for, and provision of, a second Murray River crossing on the western side of both Echuca and Moama will support integrated planning for

### Campaspe Shire Summary / Relevance to Project

recreational and sporting facilities in both communities so that there is improved access to specialised facilities located in Victoria Park, Echuca and the Moama Recreation Reserve respectively.

- The ongoing growth of art and cultural offerings in Echuca-Moama.
- The planning for and location of the approach road to the second Murray River crossing through the western part of Victoria Park will need to have regard to integrating pedestrian and cycle routes through this area.
- The planning for and location of the approach road to the second Murray River crossing through the western part of Victoria Park, and the Bridge itself, will need to have regard to ensuring access for disabled persons.
- Given the adoption of the Mid-West 2 alignment for investigation, many of the concepts in the Victoria Park and Environs Master Plan 2010 are subject to change. However, the issue of appropriately locating and integrating the proposed alignment with the environs of the sports precinct is still relevant to the current study. Consultation with users of Victoria Park is an important element of this SIA.

#### 4.4.3 Murray Shire

The following policies and plans for Moama have been reviewed as they demonstrate the long term vision to encourage urban growth in the north-west of Moama.

##### 4.4.3.1 Murray Shire Strategic Land Use Plan, 2010-2030

The Murray Shire Strategic Land Use Plan sets out the Council's vision for land use planning which is:

*To ensure that the Shire's natural environment is carefully managed and that its natural and built assets are protected from inappropriate rural and urban development that would prejudice the agricultural, heritage and urban attributes of the Shire.*

This Plan describes future projected land uses within the Shire based upon trends such as population, economy and the available supply of rural land. For Moama in particular, high population growth has been noted. Future growth within Moama is expected to occur through residential development in West Moama, as east Moama around the Meninya Street area reaches full capacity.

The Plan also recognises that many community facilities are absent from Moama where they are shared with Echuca, and vice versa. Community facilities of interest include Rich River Golf Club and Moama Bowling Club which are extensively used by residents in both communities. The Moama Recreation Reserve in Perricoota Road is another key community facility, providing facilities for numerous sports.

The Plan identifies the fragmented urban form created in Moama by past haphazard development, which has increased the boundary of the town to become far broader than necessary to accommodate the current population. Future residential development is therefore to be contained within the border of the town to 'fill in the gaps'. Land uses such as rural residential are nominated as not suitable for the centre of town, due to their consumptive characteristics.

The Plan also describes preferred locations for future commercial development. Land surrounding the recently constructed Woolworths Supermarket at the corner of the Cobb Highway and Perricoota Road is likely to become the new commercial focus within Moama, moving away from the main street of Meninya Street. A secondary and smaller commercial centre may be required in Moama's west to meet longer term population growth needs.

Industrial land uses are identified in three Moama locations including to the east near the railway line, to the north along the Cobb Highway and at Hillside Lane on the outskirts of the town. Future industrial land uses are proposed to be located along the Cobb Highway where possible due to its ease of accessibility for vehicles.

#### **4.4.3.2 Moama North West Master Plan, 2009**

The *Moama North West Master Plan* provides the Murray Shire Council with a strategic direction for future use and development of the area, which is predicted to experience rapid growth in the 25 years to 2031. It identifies a range of strategic land use issues affecting the area, and seeks to provide certainty for residents and landholders on the future planning and development of the study area.

This Master Plan proposes a local activity centre at the corner of Martin Road and Twenty Four Lane. This site would act as the primary location for convenience shops, community services, public transport stops and other local services. The plan recommends an increased density of development around the centre as well as the provision of public transport routes and stops.

A key aim of the Master Plan is to create a road hierarchy which is internally and externally connected and allows for local access to open space, schools, community services and activity centres. The Plan notes that the current Murray River crossing at the Cobb Highway is operating beyond its capacity, and supports the future construction of the proposed second crossing.

The Master Plan also proposes an open space network midway between Perricoota Road and Martin Street, creating a pedestrian and cyclist link adjacent to Keily Road and crossing over the Cobb Highway.

### **Murray Shire Summary / Relevance to Project**

The Shire of Murray local plans and policies highlight:

- The future growth of the north-west of Moama and that the proposed second Murray River crossing will improve access between this north west area of Moama and the many community and business facilities and employment opportunities located in central Echuca as well as to the wider region.

## 5.0 Demographics

This section presents an overview of demographic characteristics reviewed for the Mid-West 2 Corridor study area and includes estimated population growth, age structure, and vehicle ownership per household, method of travel to work, where residents work and location and industry of employment. This information provides a basis for the analysis of potential social impacts.

### 5.1 Population Growth

The demographic information presented represents the population growth of each of the subject municipalities between 2001 and 2006. The population information presented is based on the 2006 ABS Census data.

**Table 2: Population growth between 2001 and 2006**

Year	Echuca	Shire of Campaspe	Regional Victoria	Moama	Shire of Murray	Regional NSW
2001	10,953	34,610	1,278,408	3,807	5,923	2,374,424
2006	12,358	36,209	1,339,833	4,639	6,417	2,419,816
5 year population growth	13%	5%	5%	22%	8%	2%

It can be seen in Table 2 that the Shire of Murray showed a greater increase of population than the Shire of Campaspe. In March 2007, the Australian Bureau of Statistics named Murray Shire the fastest growing local Government area in New South Wales for the period 2005 to 2006 ([murray.nsw.gov.au](http://murray.nsw.gov.au)). This growth has been centred on Moama, where the population grew from 3,807 to 4,639 or 22 per cent between 2001 and 2006. Echuca showed more modest growth at 13% increase between 2001 and 2006. In real terms Echuca (increase of 1405 residents) is still growing faster than Moama (increase of 832 residents). The Shire of Campaspe demonstrated a growth rate in line with that of greater Regional Victoria. The Shire of Murray grew at a significantly greater rate (6% more) than the rest of Regional NSW.

#### Comment

Both Echuca and Moama represent centres of higher than average growth within their municipalities and the wider Regional Victoria and Regional New South Wales areas. This represents a need for development of facilities that will service these growing populations and their educational, health, recreational and community needs. Continuing the current situation of sharing assets between the twin towns will help to meet those needs, raising the need for efficient access between them.

The estimated population growth to 2031 has also been included to demonstrate the predicted rate of growth for each of the municipalities, and their main towns of Echuca and Moama. This data is based upon the 2006 ABS Census data.

**Table 3: Population Growth to 2031**

Year	Echuca	Shire of Campaspe	Moama	Shire of Murray
2006	12,358	36,209	4,639	6,417
2031	17,241	44,827	9,520	21,880 – 26,761
25 year population growth	40%	24%	105%	279%

Table 3 shows that the Shire of Murray is predicted to grow significantly within the 25 years to 2031, increasing from 6,417 to up to 26,671. Within the Shire of Murray, Moama is predicted to have a significant share of growth, increasing by 105% to 9,520. Growth in the Shire of Campaspe will be significantly lower, increasing by 24% from 36,209 to 44,827. However growth in Echuca will be higher than that of the greater Campaspe Shire, increasing by 40% from 12,358 to 17,241.

#### Comment

Both municipalities are predicted to experience growth by 2031. The Shire of Murray is predicted to increase by at least 15,463 residents by 2031, with the population of Moama increasing by approximately 4,800. As discussed in 4.4.3, future urban growth within Moama will largely occur to the west of the Cobb Highway, with limited potential for residential development east of the Cobb Highway. Commercial development may shift focus from the main street of Meninya Street, to surround the new supermarket built at the corner of the Cobb Highway and Perricoota Road. A secondary, smaller commercial centre is also predicted to be required in the west of Moama to meet future population needs.

Whilst the growth forecasts are more modest for the Shire of Campaspe, they still represent an extra 8,618 residents within the Shire, of which approximately 4,800 of whom will reside in Echuca. As discussed in section 4.3.1, growth in Echuca will be concentrated in the western area of the town, as well as infill development within established residential areas. Expansions to services such as retail will be concentrated on building up the Echuca CBD, with out of town developments to meet local convenience needs only.

## 5.2 Age Structure

Age structure provides an analysis of the number of people within certain age groups and can indicate the types of services required in local areas. The following age structure for each municipality is based on 2006 ABS Census data. The greater Regional Victoria and Regional NSW areas are included in Table 4 to provide a comparison of the subject municipalities against the general trends for Regional Victoria and Regional NSW.

**Table 4: Age structure of subject municipalities**

Age group (years)	Echuca (%)	Shire of Campaspe (%)	Regional Victoria (%)	Moama (%)	Shire of Murray (%)	Regional NSW (%)
0-14	22	21	20	18	19	20
14-64	61	62	64	60	61	63
65 and over	17	17	16	22	20	16

Table 4 shows that the 14-64 age bracket is the most common bracket in both Campaspe and Murray Shires. Moama has a higher percentage of the population aged over 65 than Echuca. This trend is also repeated when comparing the Shires of Campaspe and Murray, with the Shire of Murray having 3% more of the population aged 65 years or older than Campaspe.

Compared to the greater Regional Victoria and Regional NSW regions, the Shires of Campaspe and Murray both display a higher than average percentage of the population aged over 65. Moama has a 6% higher population share of residents aged 65 and over than the Regional NSW average.

#### Comment

An ageing population places certain pressures on municipalities including increased demand on health and aged care services.

### 5.3 Vehicle Ownership per Household

Table 5 identifies the number of vehicles per household for the subject municipalities. The data has been compiled from Profile.id for each municipality, based upon the 2006 ABS Census Data.

**Table 5: Car Ownership**

No. of vehicles per household	Shire of Campaspe (%)	Regional Victoria (%)	Shire of Murray (%)	Regional NSW (%)
No vehicles	6.4	6.9	5.7	9
1 vehicle	31.0	32.6	35.4	37.3
2 vehicles	37.9	36.6	39.5	33.3
3 or more Vehicles	18.8	17.7	10.4	13.6
Not stated	5.9	6.2	5.1	6.8
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 5 indicates that at least 87.7% of households in the Shire of Campaspe own at least one vehicle or more, with the majority of residents having two vehicles per household. Car ownership rates in the Shire of Campaspe are closely aligned to ownership rates within greater Regional Victoria. At least 89.2% of residents in the Murray Shire own one vehicle or more, which is slightly higher than the Regional NSW percentage of 84.2%. Vehicle ownership rates are similar between the Campaspe and Murray Shires, with both Shires most commonly having two vehicles per household.

### Comment

The high rate of car ownership, particularly with households owning two or more cars within these municipalities, demonstrates the dependence on motor vehicles as a form of transport. A factor that can explain car ownership levels is the accessibility to a public transport service.

#### 5.4 Method of Travel to Work

Method of travel used to get to work provides an understanding of the most common modes of transportation used within each municipality. The data in Table 6 is based on data from the 2006 ABS Census.

**Table 6: Method of Travel to Work**

Mode of Transport (%)	Shire of Campaspe (%)	Regional Victoria (%)	Shire of Murray (%)	Regional NSW (%)
Train	0.1	0.9	0	0.5
Bus	0.3	0.7	0	0.9
Tram or ferry	0	0	0	0
Car – as driver	58.4	62.5	55	59.5
Car – as passenger	4.8	5.5	4.0	7.1
Truck	1.4	1.2	2.0	2.2
Motorbike	1.3	0.6	1.0	0.8
Bicycle	1.9	1.1	1.0	1.0
Walked only	7.1	5.1	8.0	5.3
Taxi/ other	1.2	1.3	2.0	1.7
Worked at home	10.7	7.3	14	7.9
Did not go to work	10.9	11.9	13	12.1
Not stated	2.0	1.9	1.0	1.0
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>



Table 6 shows that travel to work by car – as driver is the most common method of travel to work in both the Campaspe and Murray Shires. The Shire of Campaspe has a higher level of travel to work by motorbike, bicycle and walking, than the rest of regional Victoria. In the Shire of Murray, walking to work is considerably higher (2.7% higher) than the average for Regional NSW.

There was a higher percentage of people working from home in the Shire of Campaspe, at 10.7% compared to the Regional Victoria percentage of 7.3%. Similarly in the Shire of Murray, 14% of residents worked from home compared to the Regional NSW average of 7.9%.

Public transport travels to work statistics are lower than the Regional averages for both the Campaspe and Murray Shires.

#### Comment

These figures indicate that residents favour driving private motor vehicles over the use of public transport or alternative options such as walking and cycling. However, travel to work by sustainable options such as bicycle and walking are higher in both the Murray and Campaspe Shires than the average for Regional Victoria. Working from home was also found to be more common for residents of the Shires of Campaspe and Murray than for the greater Regional Victoria and New South Wales areas.

### 5.5 Where do Residents Work

Table 7, Table 8 and Table 9 demonstrate the work locations of residents in the Campaspe Shire. This data is based on the ABS Census Data 2006.

**Table 7: Employment Locations**

	Number of Employees	Shire of Campaspe (%)
Within the municipality	12,265	76.9
Outside the municipality	2,438	15.3
Work location unknown	1,255	7.9
Total	15,958	100

Table 7 shows that the majority of Campaspe residents work within their own Shire, however 15.3% work outside the Shire. Data on employment locations for Shire of Murray residents was not available.

**Table 8: Work Locations for Shire of Campaspe residents**

<b>Local Government Area</b>	<b>Number of Employees</b>	<b>% of employees</b>
Campaspe	12,265	76.9
Greater Shepparton	976	6.1
Murray	695	4.1
Greater Bendigo	182	1.1
Gannawarra	98	0.6
<b>Other</b>	<b>1,742</b>	<b>10.9</b>
<b>Total</b>	<b>15,958</b>	<b>100</b>

Table 8 shows the top ranking locations of employment for residents of the Shire of Campaspe. The most common area of employment is within the Shire, with Greater Shepparton and the Shire of Murray the next highest providers of employment at 6.1% and 4.1% respectively.

**Table 9: Areas of Residence for Campaspe Shire workers**

<b>Local Government Area</b>	<b>Number of Employees</b>	<b>% of employees</b>
Campaspe	12,265	84.6
Murray	1,091	7.5
Greater Shepparton	478	3.3
Greater Bendigo	289	2.0
Moira	94	0.6
Gannawarra	55	0.4
<b>Other</b>	<b>229</b>	<b>1.6</b>
<b>Total</b>	<b>14,501</b>	<b>100</b>

Table 9 shows the locations of residence of all workers in the Campaspe Shire. The majority of workers in the Shire live locally (84.6%). The Shire of Murray provides the next highest number of workers at 7.5%.

## Comment

These tables demonstrate which Local Government areas are the highest attractors for residents of the subject municipalities. Table 7 shows that the overwhelming majority of residents in the Shire of Campaspe are employed within their own municipality. Table 8 shows that where residents of Campaspe are employed outside their own municipality, they most commonly travel to the Greater Shepparton municipality. The Shire of Murray is another common location of work. Table 9 shows the areas of residence of workers within Campaspe. This table also demonstrates that most Campaspe workers live locally. The Shire of Murray is the second highest provider of employees to the Shire of Campaspe. These employees are likely to travel to work using the current Echuca-Moama bridge, and could benefit from increased accessibility with the construction of a second Murray River crossing.

## 5.6 Employment by Industry

The following information shows the dominant employment industries within the municipalities of Echuca and Moama. This information has been sourced from 2006 ABS census data.

**Table 10: Employment by Industry**

Employment Industry	Shire of Campaspe (%)	Shire of Murray (%)
Agriculture, Forestry and Fishing	16	22.7
Retail	11.4	7.1
Accommodation and Food Services	6.1	9.1
Manufacturing	15.3	14.2
Health and Social Assistance	10.1	2.5
Construction	7.2	13.2
Education and Training	6.3	1.6
Public Administration and Safety	3.7	3.9
Professional, Scientific and Technical Services	3.0	2.1

Table 10 shows that the most common industry of employment in the Shires of Campaspe and Murray is Agriculture, Forestry and Fishing. Other industries with a high representation in both Shires include retail, manufacturing and construction. Health and Social assistance is considerably higher in the Shire of Campaspe than in the Murray Shire, which may be explained by the location of the major regional hospital in Echuca. Retail and Education and Training are also higher in Campaspe, which may represent a higher availability of these types of jobs within the Shire. The Shire of Murray displays higher employment numbers in accommodation and food services, and the construction industry than the Shire of Campaspe. Similarly this may be due to the higher number of these job types available in the Murray Shire, for example at the many caravan parks and motels situated within Moama.

**Comment**

Murray Shire is comprised mainly of rural land, so the fact that Agriculture is the dominant employment industry is not surprising. However with the predicted growth in the shire, rural land may be lost to future urban development which may cause a shift away from the agricultural industries. Similarly in Echuca, agricultural employment may shift to other industries as the town is further developed to meet future predicted growth. Employment by sector may also shift between the two Shires as further employment opportunities are created in more diverse sectors than currently available in each Shire.

**5.7 Demographic Conclusions**

Moama and Echuca are both predicted to experience high population growth rates until 2031. Moama in particular will double its population, with the wider Shire of Murray also experiencing extensive growth. Such rapid growth must be planned for and consequently land will be required for residential use as well as other facilities to support the growing population.

As this growth occurs, land uses within both Shires are likely to change, driving a shift from a predominance of agricultural employment within the Shire to more urban based employment opportunities. Tourism is identified as a key employment field which is predicted to increase within Echuca and Moama in the future.

Currently, around 7% of the Shire of Campaspe's workforce comes from the Shire of Murray. As the population increases, it can be expected that the number of employees seeking work within Echuca will increase, due to its higher concentration of facilities and services. Similarly, higher numbers of Campaspe residents may be attracted to employment opportunities within Moama as the area develops. This cross-border employment movement will result in higher use of the current Murray River Crossing. The second crossing will help to alleviate traffic usage on the existing bridge, and increase accessibility for employees travelling between the twin towns.

Another shift will occur in the age of residents, with an increasingly ageing population predicted. This will have impacts upon community and health service requirements, which will need to be met through development of additional facilities and services and the training of employees to staff these facilities.

The current trend of high car usage may be attributed to the lack of public transport options available to residents. This trend will likely continue unless significant public transport infrastructure is developed within the area. A growing population will result in many extra drivers on the road, further increasing the use of the existing Echuca-Moama Bridge which as mentioned, is already operating above capacity at times.

## 6.0 Community Facilities and Valued Places

The border towns of Echuca and Moama share substantial community infrastructure. Residents commonly reside in one town and work, shop or attend schooling in the other. As the largest town in the Campaspe Shire, Echuca provides services for local, regional and tourism purposes and is an important industrial, community, health, recreational and transportation hub for northern Victoria and southern New South Wales. As many infrastructure elements are shared between the towns of Echuca and Moama, improving access between the two towns is vital in maintaining adequate access for all residents. Specific community infrastructure located within and adjacent to the study area is discussed below.

### 6.1 Existing Facilities and Places

The desktop assessment, site visit and consultation with stakeholders identified the following community facilities and valued places. Figure 6 shows the location of existing activity nodes and individual facilities.

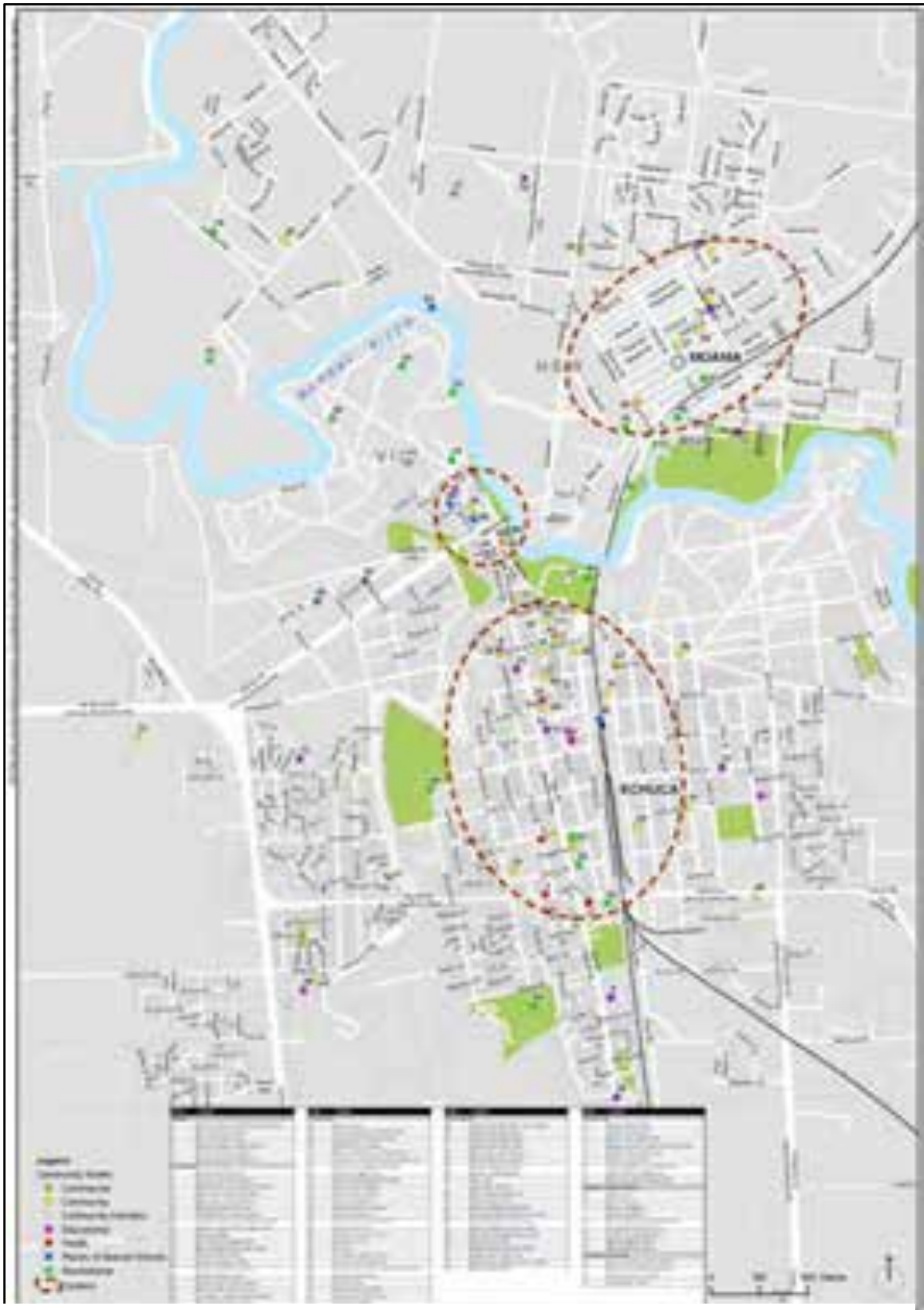
#### 6.1.1 Commercial

Three main retail hubs exist within the Echuca-Moama area. Hare Street is the central business district of Echuca and contains the majority of retail offerings. Restaurants and nighttime entertainment venues are also concentrated in this area, serving residents of both towns and visitors. A smaller retail hub exists at the northern end of High Street including tourist oriented shops due to its proximity to the historic Echuca Port area. Moama's retail hub is located on Meninya Street and contains a number of small retail outlets serving largely local day-to day needs for residents and visitors.

Major supermarkets are located in both Echuca and Moama. Echuca Safeway is located in the central business district and Moama Safeway is located at the corner of Perricoota Road and the Cobb Highway, adjacent to the proposed Mid-West 2 alignment. The proposed second river crossing will improve access to the Moama Safeway supermarket, acting as a likely attractor to some Echuca residents.

Six caravan parks are located within the study area, with most situated on the banks of the Murray River. Echuca Holiday Park in the eastern area of Victoria Park and the Merool on the Murray resort on the northern side of the Murray River are both located within a short distance of the proposed Mid-West 2 alignment. Other caravan parks within the study area use the recreational activities offered by the proximity to the river and river bank areas.

There are several motels located in Moama in close proximity of the proposed Mid-West 2 alignment. These include the Madison Spa Resort, the Sportslander Motel and the River Country Inn. There are no motels or other accommodation facilities located close to the alignment on the Victorian side of the river.



**Figure 6: Community Facilities, Places of Special Interest and Significant Community Activities**

### **6.1.2 Community**

Community facilities within the study area include Senior Citizens clubs, aged care, churches, and RSL and other clubs. Echuca has a well patronised public library which is currently being relocated to new facilities under construction in the Campaspe Shire offices precinct at the corner of Hare and Heygarth Streets. The Paramount Theatre located on High Street serves as both a cinema and live theatre venue for the community. The Moama RSL club in Merool Lane is another popular community facility with a large membership drawn from local residents as well as regular visitors to the Echuca-Moama area.

Police stations are located in both Echuca and Moama, with the Echuca station open 24 hours per day. Echuca has a local fire station whilst a rural fire brigade is located in Moama. An Ambulance Station operated by Ambulances Victoria is located in Echuca well to the south of the study area.

### **6.1.3 Educational**

The Echuca-Moama area contains eight kindergartens and pre-school care facilities. Primary schools are available for local students in both Echuca and Moama, with a total of 7 primary schools – government and non-government – in the area.

Three secondary schools are located within the area which service both Echuca and Moama residents. Residents commonly have a preference for particular secondary schools so it is common for students to reside in one town and attend school in the other town. Echuca College has recently consolidated all facilities onto the site on Butcher Street, leaving the former Echuca High School site at Crofton Street vacant. This site is located within the Mid-West 2 corridor. Bendigo TAFE is the sole tertiary educational institution in the area, located in new facilities in central Echuca and offering TAFE courses.

### **6.1.4 Health**

Echuca Regional Health (ERH), operating from the hospital on Francis Street, Echuca, is the major health provider in the region and employs approximately 600 people. ERH provides a range of services including acute, emergency, primary care, aged care, and community health to an estimated 45,000 people in the Campaspe and Murray Shires. A major \$65 million redevelopment of the hospital is currently underway which will substantially increase bed numbers in new specialised and sub-acute wards and provide a new emergency department and additional car parking

Other health facilities within the study area include two large and one smaller medical centre, and the Njernda Aboriginal Health Clinic in Echuca. As the majority of health services are located in Echuca, maintaining ease of access from Moama to these health facilities is a key issue.

### **6.1.5 Recreation facilities**

The two major concentrations of recreation facilities in the Echuca-Moama area – Victoria Park and Moama Recreation Reserve – is located within to the Mid-West 2 corridor. No other recreation facilities would be affected by this alignment.

## **Victoria Park**

Victoria Park is the largest recreational facility in the study area and provides opportunities for both passive and active recreation. The bushland area reserve to the north-west of the formal sporting facilities occupies a large area enclosed by the south side of the Murray River and the Campaspe River to the west and south. This area is extensively used by residents of all ages for a variety of unstructured recreational pursuits including exercising, dog walking, mountain biking and bird watching. Facilities within the park include a boat ramp, toilet blocks, picnic tables, barbeques and vehicular and informal walking tracks as well as access to various beaches along the Murray River for swimming and fishing

The reserve is also the location of key sporting facilities including a football/cricket oval, 17 grass tennis courts, two netball courts, and a joint-use CFA training track. These facilities are the home to local sporting clubs including the Echuca Lawn Tennis Club, Echuca Football Netball Club, Echuca Junior Football Club and Echuca Cricket Club. The Lawn Tennis Club is separately managed under a Crown land lease and comprises 17 lawn tennis courts. In the eastern section of Victoria Park there are well-developed facilities for fire brigade training and competitions which are used by the Moama Country Fire Association and Echuca Urban Fire Brigade. This includes two training tracks with the longer featuring a subsurface water recycling and pumping system.

The Mid-West 2 alignments are proposed to traverse through Victoria Park. Options 2A and 2B may impact upon some established sporting facilities – in particular six lawn tennis courts - and passive recreational facilities such as picnic areas, walking and cycling tracks. Large tracts of land within the reserve will remain free from direct impacts.

## **Moama Recreation Reserve**

Moama also has a large recreational reserve of over 45 hectares located on the northern side of Perricoota Road. This reserve contains various ovals for football codes, cricket and athletics, netball courts, the only cycling velodrome in the region, a harness racing track, a Botanic Gardens area, the Moama Sports Club and open space. The Moama Recreation Reserve is located approximately 500 metres west of the Mid-West 2 alignments on the northern side of the river, however, it is anticipated that access to the reserve will not be directly impacted by the second crossing.

## **Other recreation facilities**

Both Moama and Echuca also have indoor sporting complexes including indoor basketball courts. Echuca has an indoor swimming pool which can be used year round, whereas the outdoor pool located in Moama has a limited opening season. The two bowls clubs, in Echuca at Ogilvie Avenue and Moama at Shaw Street, are significant attractors of visitors and consequently traffic. Other recreational facilities shared between the two towns include horse racing and harness racing tracks, a public golf course and skate park and the private Rich River Golf Course.



### **6.1.6 Places of Special Interest**

The previous Social Impact Assessment (URS 2009) identified places of special interest nominated by the community during the consultation process for that study. These places included the Murray River, Victoria Park and boat ramp and the Port of Echuca. In addition, other nominated places of interest included the Echuca Historical Society Museum, Echuca Railway station (both located in central Echuca) and Echuca Cemetery.

Echuca Cemetery is a significant attractor of visitors and vehicle traffic with an average of two funerals per week occurring and with corteges of approximately 50 vehicles. Access to the cemetery is via Warren Street which will form the south western termination of the proposed Mid-West 2 alignment. A smaller cemetery is located in Moama at the corner of Boundary Road and Racecourse Lane, close to the proposed alignment.

### **6.1.7 Significant Community Events**

The Echuca Moama area hosts large events that attract significant numbers of tourists to the region including sporting events, music festivals and markets. These events include:

- The Riverboats Music Festival is an annual festival held on the banks of the Murray River at the eastern end of Heygarth Street in central Echuca.
- The Winter Blues festival is a three day event held annually at the Echuca Port area.
- Triathlons are held which circle Echuca and Moama. The frequency of these events is unknown.
- The Southern 80 Water Skiing Race is hosted annually by the Moama Water Sports Club in February. The Victoria Park boat ramp is the finish location for this race and a large number of spectators are attracted to this area during the two days of racing.
- The Echuca Racing Club holds a two day horse racing carnival at the Echuca Racing Club.
- The Echuca Moama Farmers Market is also held fortnightly at Alton Reserve in Echuca.

Of these events, the main spectator area for the Southern 80 water skiing race occurs within the study area.

### Relevance to Project

As discussed above, the towns of Echuca and Moama share a lot of community infrastructure. Maintaining and desirably improving access to these facilities for residents and visitors is a key objective of this project. A second crossing of the Murray River would increase access opportunities for residents and visitors in both border towns to community, educational, recreational facilities and employment locations as well as broader regional access.

A second crossing would also improve access for emergency services vehicles to serve residents of both towns especially during peak holiday and major event periods.

Echuca-Moama is also a significant tourist destination, with large events such as music festivals and water ski racing which attract many visitors to the region. Facilitating access between commercial offerings such as local hotels, entertainment venues and caravan parks, to festival and event sites would also be of benefit to the community and visitors.

## 6.2 Future Plans and Opportunities

The desktop assessment, site visit and consultation with stakeholders identified the following proposed community facilities.

### 6.2.1 Commercial

A local activity centre is proposed for the north-west of Moama on the corner of Martin Road and Twenty Four Lane, well to the west of the Mid-West 2 alignments. The proposal includes public-transport-oriented, higher density development, based around convenience shopping and community services. The Echuca Holiday Park has plans for new luxury cabins, a recreation area and boat and trailer parking for an expansion to the north of the current site. However, the plans may be reconfigured if the Mid-West 2 alignments within the corridor restrict the area available for development.

### 6.2.2 Community

A new arts space has been proposed for Echuca, although a location has not been finalised (Shire of Campaspe Arts and Culture Strategic Plan 2004-2014).

### 6.2.3 Education

Moama Anglican Grammar School, located to the north-west of the junction of the Mid-West 2 alignments and the Cobb Highway, has plans to continue expanding as student numbers increase. The Victorian Government has proposed the establishment of a new primary school in western Echuca, merging the Echuca South Primary School, Echuca West Primary School and Echuca Specialist School. The location of this proposed facility is currently unknown.

#### 6.2.4 Health

Echuca Regional Health is currently undertaking a redevelopment of Echuca Hospital including the construction of a tertiary training facility onsite. A new medical and aged care home is planned for Echuca, in response to ongoing growth in current Echuca retirement facilities. The location of this proposed facility is currently unknown.

#### 6.2.5 Recreation

The *Victoria Park & Environs Master Plan* (Appendix B) proposes recreational facilities within Victoria Park including tennis and netball courts, car parking and a covered spectator area. The Crofton Street site of the former Echuca High School which abuts Victoria Park was identified as being a suitable site to incorporate into the Victoria Park reserve, with buildings on the site now having been demolished.

The 2010 Master Plan predates the identification of the Mid-West 2 Corridor. As some of the alignment options would directly affect the western end of the Echuca Lawn Tennis Club as well as informal bushland areas within Victoria Park, it is likely that the Campaspe Shire, in conjunction with VicRoads and relevant stakeholders, will need to update the Master Plan for Victoria Park.

Shared walking and cycling tracks have been proposed throughout Echuca and Moama. The proposed tracks running along Crofton Street in Echuca and the Cobb Highway in Moama fall within the Mid-West 2 alignment area. The Shire of Campaspe plans to create a passive recreation space at the corner of Warren St and Redman St, Echuca.

#### 6.2.6 Places of Special Interest

The establishment of additional arts facilities at the Echuca Port has been proposed, including a children's museum, street theatre and interactive displays. It is unclear whether new buildings will need to be constructed for these purposes.

#### Relevance to Project

Community facilities have been proposed in response to the proposed population growth of Echuca-Moama. A second crossing over the Murray River will facilitate access to these proposed facilities and overcome access issues caused by the current Echuca-Moama bridge. None of the proposed facilities identified fall within the Mid-West 2 alignment.

## 7.0 Stakeholder Engagement

Stakeholder consultation for this project was undertaken using several methods. Project team members visited Echuca to conduct face to face meetings, focus groups, and a survey of Victoria Park users in May 2012. Where stakeholders were unable to attend these meetings, consultation was undertaken by phone. Previous consultation undertaken regarding the proposed bridge alignments also informed this study (URS 2009).

A summary of stakeholders' views regarding the potential benefits and impacts of the Mid-West 2 Corridor are presented below. The consultation summary represents the community concerns and perceptions of the proposed development, it does not necessarily represent the actual impacts associated with the development.

### 7.1 Community Consultation Group Meeting

At the meeting of the Community Consultation Group on 29 February 2012, a presentation was made about the scope of the SIA followed by discussion of likely social issues and nomination of people or organisations to be included in the SIA consultation program.

The key issues raised were:

#### **Desirability of a survey of formal and informal use of Victoria Park**

Campaspe Shire Council suggested that it is important to understand how people use Victoria Park informally because people go all over the place and use a lot of informal paths. It was thought that this unstructured use and character is a key part of the appeal of Victoria Park.

Council indicated that there had been a big increase in cycle/walking paths along the Campaspe River and that there will be a need to integrate tracks with proposed new bridges. With the inclusion of a bike path/track, the new road and bridge will provide new opportunities for new cycle and triathlon events that circle through Moama and Echuca.

#### **Residential growth in the western part of Moama**

There is considerable development to the west of Moama along Perricoota Road. All the traffic from this area will feed into Perricoota Road and then the Cobb Highway. This junction will have traffic lights installed as part of this project.

#### **Integration of Echuca and Moama communities and benefits of having a second river crossing**

The towns of Echuca and Moama are increasingly seen as an integrated community and are on the journey to developing as a significant regional centre like Mildura or Albury-Wodonga. The provision of a new road link and bridge will help to increase this integration process, support the future integration of the two towns into a regional centre and will provide greater community security about crossing the river compared with the current reliance on the existing bridge. It was stated by one of the participants that the vast majority of traffic to be carried on the new link will be local traffic and only a small amount will be genuine bypass traffic.

The new road will slot into this transition from relatively small towns to a *bona fide* regional centre. The uncertainty about the effect of the Murray Darling Basin Plan has created uncertainty in the local community. Questions are being asked about what the community can do to offset the impacts of potential changes in water allocation.

Both Councils are working towards realising the future benefits of an integrated centre. Many developments are under construction such as the new library or planned such as the redeveloped hospital (\$60 million).

## **7.2 Face to Face Meeting Results**

Face to face meetings were undertaken with residents in Echuca and Moama on 3 and 4 May 2012.

### **7.2.1 Residents**

Resident consultation occurred through focus groups for both potentially affected residents in areas in proximity to the alignments, as well as with residents at the Echuca Community for the Aged at Cunningham Downs.

The focus group with potentially affected residents was held at the Campaspe Shire meeting room on 3 May 2012 and was attended by 30 residents of Crofton Street, Homan Street, Redman Street and Nolan Street. Invitations were sent to 341 properties in the above streets and surrounding area, including to permanent residents at the Echuca Holiday Park and Merool on the Murray caravan parks. Following a presentation on the project, a wide ranging discussion took place about the project.

Consultation was undertaken with the management and residents of the Echuca Community for the Aged facility – Cunningham Downs – because some of its residents have special access requirements and it is located close to the proposed roundabout at the intersection of the Murray Valley Highway and Warren Street. The meeting with residents of Cunningham Downs was attended by 40 residents including some who are car drivers and some who use mobility ‘scooters’. The Cunningham Downs community has 79 independent living units, a 92 bed hostel and 14 assisted accommodation units – housing approximately 220 people. Approximately 150 people work at Cunningham Downs and there are many regular visitors to residents so it is a major traffic generator close to the proposed roundabout. Following a recent rezoning of land to the west of the current development, the Cunningham Downs community is forecast to double in size over the next ten years.

A summary of resident consultation is shown in Table 11.

**Table 11: Resident consultation**

<b>Residents</b>	
<b>Issue category</b>	<b>Issues raised</b>
<i>Impacts as perceived by the community</i>	<ul style="list-style-type: none"> <li>- Major social impacts being felt by residents through indecision on this issue</li> <li>- Noise impacts to Echuca Cemetery particularly during funeral services</li> <li>- Noise issues and whether noise study has used appropriate data (night time data, regional locations)</li> <li>- Safety impacts for aged residents using mobility scooters to travel into Echuca town centre</li> <li>- Concern about potential destruction of wetland area at Murray Valley Highway (Options 2A and 2B)</li> <li>- Two roundabouts will increase traffic noise from acceleration/deceleration (Options 2C and 2D)</li> <li>- May result in extra traffic through the historic Port precinct to reach the new bridge</li> <li>- Turning safely from Warren Street into residential side streets may be affected by extra traffic on Warren Street</li> <li>- Loss of pedestrian safety for accessing Safeway in Moama</li> <li>- Construction impacts at the intersection of Cobb Highway and Perricoota Road, Moama which already experiences heavy congestion</li> <li>- Loss of sand hill which has cultural heritage significance</li> <li>- Loss of Murray Pines (Option 2B)</li> <li>- Loss of tennis courts in Victoria Park (Option 2B)</li> <li>- Potential flooding issues</li> <li>- Impact on amenity of homes (Option 2D)</li> <li>- As Echuca Holiday Park is a major source of revenue for Council, impacts to that business may have flow on effects</li> </ul>
<i>Benefits as perceived by the community</i>	<ul style="list-style-type: none"> <li>- Better access between Echuca and Moama</li> <li>- Option 2A and 2B would keep traffic off Warren Street and out of town centre</li> <li>- Cemetery environs would be less impacted by Option 2A than by other alignments</li> <li>- Option 2A would have less impact to embankments and better flood management</li> </ul>

<b>Residents</b>	
<b>Issue category</b>	<b>Issues raised</b>
<i>Mitigation opportunities identified by the community</i>	<ul style="list-style-type: none"> <li>- Reduce speed limit on new bridge</li> <li>- Reduce 30m buffer zone, so more trees are available to obscure views of the road</li> <li>- Perspex walls/ noise barriers along connecting road and bridge</li> <li>- Tree planting along connecting road</li> <li>- Connecting bike track to the Victoria Park sports centre</li> <li>- Integration of embankment with pedestrian paths so don't have to walk scooters around</li> <li>- Better pedestrian tracks in Victoria Park</li> <li>- Provide turning lanes from Warren Street to new connector road</li> <li>- Alternative alignment proposed for junction of Echuca-Serpentine Road as part of the large roundabout at the Murray Valley Highway.</li> <li>- Install footpaths to Echuca - Serpentine Road and elsewhere to accommodate scooters used by residents of Cunningham Downs</li> </ul>
<i>Community's general option preferences</i>	Preference for Option 2A

### 7.2.2 Emergency Services

Emergency service providers consulted were Ambulance Service of Victoria, State Emergency Services (Victoria), NSW Rural Fire Service and NSW Police.

Most Victorian emergency services operating within Echuca offer a supporting role to similar services operating in Moama (NSW) and vice versa. All emergency service providers indicated that a new (second) bridge will provide an alternative route for movement of emergency vehicles between the two towns and will be particularly useful during large events such as the Southern 80 water ski race. No adverse impacts on the operation of emergency services were identified during this consultation.

Table 12 shows a summary of the Emergency Services consultation.

Table 12: Emergency services consultation

<b>Emergency Services</b>	
<b>Issue Category</b>	<b>Issues Raised</b>
<i>Impacts as perceived by emergency services</i>	<ul style="list-style-type: none"> <li>- Access to the Moama Fire Station (located on the east side of Cobb Highway north of Perricoota Road) may be affected, particularly turning left out of the station</li> <li>- Increased traffic on Cobb Highway may affect safe access to Woolworths Moama</li> <li>- May create a physical and/or psychological barrier in Moama between the two sides of the Cobb Highway, particularly as urban development continues to occur in the western area of Moama</li> <li>- Concerns about hydrology changes increasing flooding events/impacts</li> <li>- Potential impacts to cultural heritage in Victoria Park</li> <li>- Increasing truck traffic into Moama</li> <li>- Many incidents occur in Victoria Park, consequently access for emergency services must be maintained at all times</li> <li>- The condition on Warren Street is poor and will degrade further</li> <li>- Potential for incidents on/under bridge including self-harm, jumping into water.</li> </ul>
<i>Benefits as perceived by emergency services</i>	<ul style="list-style-type: none"> <li>- Second bridge will ease traffic congestion on existing bridge</li> <li>- New bridge will reduce through traffic on Meninya Street, Moama</li> <li>- Will provide a link along Nicholas Drive to Moama Grammar School</li> <li>- Bicycle link along Boundary Road/ Meninya Street to west of Cobb Highway</li> <li>- The new connecting road will provide a fuel/fire break to Victoria Park from the north, protecting the urban area of Echuca and private property during bush fire events from that direction. An alignment closer to the town is seen as a better position from which to defend against fire (although there have been no instances of fire in this area).</li> <li>- New bridge will provide better access from Moama to Bendigo and Melbourne when required</li> </ul>
<i>Mitigation opportunities identified by emergency services</i>	<ul style="list-style-type: none"> <li>- Upgrade Warren Street to improve road surface</li> </ul>



<b>Emergency Services</b>	
<i>Emergency services general option preferences</i>	Emergency services consulted showed a preference for Options 2A and 2B, with Option 2A preferred over Option 2B. A preference was expressed for one roundabout to ensure less confusion and improved safety for drivers.

### 7.2.3 Community Services

Invitations for consultation were extended to Njernda Aboriginal Health Clinic, Yorta Yorta Nation Aboriginal Corporation, St Lukes Anglicare, Echuca Community for the Aged, Moama Grammar School, St Joseph's College, Echuca College, Campaspe TAFE/BRIT, Echuca Cemetery Committee of Management, and Echuca Regional Hospital.

Representatives of community services consulted overwhelmingly considered Echuca Moama as one community rather than two separate towns. All services consulted stated that they served residents from both Echuca and Moama.

Educational institutions serve students from both Echuca, Moama and beyond and consequently, are a driver of cross-river travel by walking, cycling, public transport usage and parent drop-off.

Some educational institutions in Echuca and Moama use Victoria Park extensively and have students travelling to the Park during school hours. Heavy traffic exists during peak periods such as school start and finish times, and occurs close to Victoria Park, around Dickson Street, Crofton Street and Butcher Street. School buses service all schools and some use the south western end of Crofton Street as a turning circle and interchange area.

Echuca Regional Health is a significant employment generator for the region and thus a driver of cross river traffic.

Cultural heritage issues identified include alignment positions close to the sand hill, however regular events and activities involving indigenous persons should not be affected by the proposed bridge.

Echuca Cemetery attracts heavy traffic during funeral services between 1 and 5 times weekly, with impacts limited mainly to Warren Street. The Cemetery is currently close to capacity in terms of availability of burial spaces, with plans to construct a new cemetery in a location to the west of town yet to be confirmed.

Table 13 shows the results of community services consultation.

**Table 13: Community services consultation**

<b>Community Services</b>	
<b>Issue category</b>	<b>Issues raised</b>
<i>Impacts as perceived by community services</i>	<ul style="list-style-type: none"> <li>- Potential impact to cultural heritage site at the sand hill, Victoria Park</li> <li>- Schools that use Victoria Park expressed concern about the loss of recreational and passive spaces and potential to limit expansion of facilities at Victoria Park used by school students, particularly from Options 2B and 2D</li> <li>- Safety concerns for students where traffic may increase, particularly for pedestrians and cyclists. Murray Valley Highway crossing at Butcher Street nominated as a key safety concern particularly for students of Echuca Secondary College</li> <li>- Traffic impacts for Cemetery access and stress to Cemetery visitors through noise impacts from new connector road particularly during services</li> <li>- Impact on route to the junction of the Murray and Campaspe Rivers</li> <li>- Potential flooding impacts to Victoria Park</li> </ul>
<i>Benefits as perceived by community services</i>	<ul style="list-style-type: none"> <li>- New bridge may relieve congestion caused by school traffic</li> <li>- Will improve bus exchange and travel times to and from schools</li> <li>- Second access good for school operation, as incidents on existing bridge affect schools operations</li> <li>- Single roundabout options were also preferred by some education institutions due to ease of access for school buses.</li> </ul>
<i>Mitigation opportunities identified by community services</i>	<ul style="list-style-type: none"> <li>- Bicycle and pedestrian link from new connector road to near Caravan Park in Victoria Park which would serve three schools – St Joseph's, St Mary's, Echuca College</li> <li>- Provide a proper bicycle path along Warren Street to link to the Campaspe River bike path</li> </ul>
<i>Community services general option preferences</i>	<ul style="list-style-type: none"> <li>- Preference was expressed for Option 2A as it is perceived to have less effect on the cultural heritage values of the sand hill.</li> <li>- Alignments 2A and 2B were nominated due to lesser impact on cemetery access</li> <li>- Educational institutions generally preferred option 2A, which will allow for both continued use of Victoria Park amenities and provide ease of access by school buses.</li> </ul>

#### 7.2.4 Commercial operators

Consultation was undertaken with operators of selected commercial operations that may be affected by the Mid-West 2 Corridor alignments. Commercial operations consulted were Madison Spa, River Country Inn, Echuca Holiday Park, Echuca Boat & Canoe Hire, Emmylou Paddlesteamer, Hero Paddlesteamer, and the Moama RSL.

Operators of commercial enterprises consulted in Echuca and Moama share the view of being one community rather than two separate towns. The proposed bridge is seen as a potential positive for local businesses especially in Moama where access will be facilitated by the new bridge because of the location of the northern termination of the new road relative to the Moama town centre and commercial operations to the north and west of the town centre. Commercial operators also stressed the interdependence of businesses in the area and the potential for flow-on effects where particular businesses may be negatively impacted.

Understanding operational requirements of businesses using the river environs was a key objective of this consultation. Table 14 outlines key concerns and benefits raised by commercial operators consulted.

**Table 14: Commercial consultation**

<b>Commercial</b>	
<b>Issue category</b>	<b>Issues raised</b>
<i>Impacts as perceived by commercial operators</i>	<ul style="list-style-type: none"> <li>- Noise impacts from traffic on businesses which value peace and quiet (e.g. motels/hotels)</li> <li>- Flooding impacts as a result of embankment fill. As Moama businesses are built on the 1:100 flood line level changes in hydrology could have an impact</li> <li>- Loss of access to some local Moama streets</li> <li>- Potential impacts upon permanent and semi-permanent residents in holiday parks located close to the alignment</li> <li>- Changes to the amenity of Victoria Park and consequently the attractiveness of Echuca as a tourism destination</li> <li>- Amenity impacts in particular to river users</li> <li>- Potential loss of business due to noise impacts</li> <li>- Visual impact of the bridge from within Echuca Holiday Park</li> <li>- Any impacts to Echuca Holiday Park will affect boat and canoe hire, where the majority of customers come from</li> </ul>
<i>Benefits as perceived by commercial operators</i>	<ul style="list-style-type: none"> <li>- Improved access to some businesses, in particular in Moama</li> <li>- Will facilitate better access to services including schools</li> <li>- Will address problems with reliance on one bridge (i.e. congestion at Easter)</li> <li>- Improve emergency services access</li> </ul>

<b>Commercial</b>	
<b>Issue category</b>	<b>Issues raised</b>
	<ul style="list-style-type: none"> <li>- Height of bridge provides for passage of large paddlesteamers (except in 1:100 year flood, however paddlesteamer are unlikely to operate during such events).</li> </ul>
<i>Mitigation opportunities identified by commercial operators</i>	<ul style="list-style-type: none"> <li>- Noise attenuation methods including sound walls, double glazing</li> <li>- Alignments with fewer roundabouts will reduce traffic noise especially from trucks</li> <li>- Movement of alignment to the west away from affected Moama business (Madison Spa)</li> <li>- Need for a u-turn at Perricoota Road, which will facilitate local access to Moama streets</li> <li>- Redesign of holiday parks to move 'permanent / long term' residents away from road alignment</li> <li>- Flood insurance for businesses</li> </ul>
<i>Commercial operators general option preferences</i>	The majority of businesses nominated options 2A and 2B, due to the lesser impacts to Victoria Park's amenity. 2C was nominated by one business (Boat and canoe hire).

### 7.2.5 Sporting and Community Groups

Sporting clubs consulted were Echuca Lawn Tennis Club, Football/Netball Club, Junior Football Club, Cricket Club, and Echuca and Moama Cycling Club.

Sporting clubs in the area enjoy membership from residents of both Echuca and Moama. As with other surveyed groups, Echuca Moama is seen as one united community, however comment was made that support for the bridge may be higher in Moama than Echuca.

Sporting clubs predominately use facilities within Victoria Park and the surrounding streets, with the Cycling and Triathlon Club using a wider area of the town for cycling activities. In particular, the Cycling Club sees around 40 cyclists using High Street, Warren Street and the Murray Valley Highway daily, however this does occur in the early morning when traffic is limited.

Results of the consultation are summarised in Table 15.

**Table 15: Sporting and community group consultation**

<b>Sporting and Community Groups</b>	
<b>Issue category</b>	<b>Issues raised</b>
<i>Impacts as perceived by sporting groups</i>	<ul style="list-style-type: none"> <li>- Loss of the following facilities used by clubs:               <ul style="list-style-type: none"> <li>• 2B/2D will remove a running track and sub-route of Scenic Drive up to the sand hill which will need reinstatement</li> <li>• 2B/2D will affect the tennis courts – one of the last lawn tennis clubs left in Victoria, a historic asset which also has high amenity through its bushland setting</li> <li>• Cricket pitch</li> </ul> </li> <li>- Funding and upgrades to facilities have been stalled until a decision is made, which is affecting club operation</li> <li>- Former Echuca High School land at Victoria Park will not be released until a decision is made</li> <li>- Increased traffic on Warren Street is of concern to cyclists as it has 80km/h speed limit with no road shoulders</li> <li>- Significant financial impacts to tennis club if courts are out of action during construction, including income from regular court hire, annual tournament and Easter usage</li> <li>- Noise and visual impacts during matches including fumes, truck noise, reflection from vehicles</li> <li>- Loss of club memberships if facilities are out of use for extended periods</li> </ul>
<i>Benefits as perceived by sporting groups</i>	<ul style="list-style-type: none"> <li>- New roundabout at junction of Warren Street and Murray Valley Highway will fix safety issues for cyclists</li> <li>- Provides alternative route to cycling velodrome in the Moama Recreation Reserve</li> <li>- Better access to Victoria Park from Moama</li> </ul>
<i>Mitigation opportunities identified by sporting groups</i>	<ul style="list-style-type: none"> <li>- Need to ensure 'like for like' in replacement of assets</li> <li>- Need for cycle lane on Warren Street as per that on High Street</li> <li>- Widen Warren Street and add turning lanes</li> <li>- Ensure good line of sight for traffic coming into right hand lane from roundabout</li> <li>- Sound barriers in Victoria Park</li> </ul>
<i>Sporting groups general</i>	There was some division in the sporting clubs consulted about the preferred option. Options 2A and 2C were nominated due to the lesser impact on the tennis courts, whereas Option 2B was

<b>Sporting and Community Groups</b>	
<b>Issue category</b>	<b>Issues raised</b>
<i>option preferences</i>	<p>nominated provided Scenic Park sub-routes are reinstated post construction. Options 2B and 2D received nominations due to the lesser impact on the river environs and amenity at reflection bend and for paddlesteamers. Options 2A and 2B were nominated due to having one roundabout, which is preferred by cyclists over an alignment having two roundabouts.</p> <p>As summarised by one party, the bigger issue is that the lack of decision regarding an alignment is preventing the resolution and interpretation of the Master Plan. The sooner the route is decided and the impacts quantified, the sooner aspects of the sports precinct can be redeveloped.</p>

### **7.3 Consultation with Francis Street residents**

At VicRoads request, AECOM met with Francis Street residents to listen, record and provide feedback about residents' views regarding the proposed reopening of Francis Street. The section below is a summary of residents' views. These views do not have a bearing on the alignment options for the Mid-West 2 Corridor as Francis Street is located outside of the impact assessment study area. As discussed in Section 1.3, the purpose of speaking to residents was to understand community views about the proposed re-opening of Francis Street and not to inform the selection of alignment 2A, 2B, 2C and 2D.

As part of the planning for the second river crossing along the Mid-West 2 alignment, it is proposed to reopen the western end of Francis Street in Moama east of Cobb Highway at its junction with Perricoota Road. This section of Francis Street, which is within a residential area of Moama, has been closed for many years and the western end of it has effectively been integrated into the local open space on the northern side. The reopened street would be 'load limited' at Cobb Highway to restrict heavy vehicle traffic traversing the residential area.

A letter was sent to 12 residents<sup>2</sup> of Francis Street west of its intersection with Lawson Drive (the section that is currently effectively a cul-de-sac by virtue of the closure at the Cobb Highway) seeking the opportunity for AECOM to meet with residents to discuss the proposed re-opening of this section of Francis Street to through traffic. AECOM met with residents of 10 Francis street properties in or near their homes on the afternoon of Friday, 4 May 2012. The key issues raised in these consultations are presented in Table 16.

Residents' opinions were varied, but the majority of residents met with were generally not in favour of the proposed reopening. Residents wanted further consultation about options for the proposed reopening of Francis Street including use of Nicholson Street which is identified as a heavy vehicle route.

<sup>2</sup> Whilst undertaking the consultation it was discovered that 54 Francis Street have been subdivided into multiple units, of which only one resident was home at the time of the consultation.

**Table 16: Issues raised by Francis Street residents**

<b>Francis Street residents</b>	
<b>Issue category</b>	<b>Issues raised</b>
<i>Impacts as perceived by the community</i>	<ul style="list-style-type: none"> <li>- Amount of through traffic that would travel through residential area</li> <li>- Impacts on safety with lots of children walking to school, older people using scooters to access the Safeway supermarket and people dropping off or picking up very young children at the child care centre on corner of Lawson Drive</li> <li>- Loss of ability for children to play on nature strip and road because of very low levels of local/resident traffic in this section of Francis Street</li> <li>- Adverse effect on property values</li> <li>- Additional noise from traffic stopping at, and accelerating from, traffic signals at Cobb Highway and Perricoota Road</li> <li>- Intoxicated people travelling home from the clubs will use Francis Street to avoid police on Meninya Street</li> </ul>
<i>Benefits as perceived by the community</i>	<ul style="list-style-type: none"> <li>- Residents did not identify benefits of reopening the intersection</li> </ul>
<i>Mitigation opportunities identified by the community</i>	<ul style="list-style-type: none"> <li>- Have Francis Street one way westwards at Cobb Highway</li> <li>- Construct footpaths and street lighting</li> </ul>

## 7.4 Victoria Park Survey Results

Face to face surveys were conducted with visitors at various locations within Victoria Park on the afternoon/evening of Friday 4 May and between 8:30 and 10:30am on Saturday, 5 May 2012. These times were chosen in order to capture users of the park at a busy time. A total of 34 surveys were conducted. Respondents were shown a map of the four options located within the Mid-West 2 corridor for the proposed second crossing. People surveyed included those arriving to Victoria Park by foot, bicycle, car and houseboat.

Answers to each question are presented below. As some forms did not contain responses to all questions, totals listed in the table below may not always equal 34.

### 7.4.1 Frequency of Use

This question dealt with the frequency of which users visit Victoria Park. Table 17 shows that the majority of users surveyed were frequent users of the park, with most visiting daily or several days per week.

**Table 17: Frequency of use**

<b>Response</b>	<b>Number</b>
Daily	11
Several days per week	12
Weekly	6
Fortnightly or longer	4
<b>Total</b>	<b>33</b>

#### **7.4.2 Activities undertaken at Victoria Park**

This question examined the activities undertaken at Victoria Park by surveyed users. Multiple uses could be nominated by respondents.

Table 18 shows that walking with or without a dog was the most common activity undertaken at Victoria Park. Other popular uses included running with or without a dog and launching a boat. Activities nominated by users under 'other' included canoeing, houseboat use, sports, swimming and driving.

**Table 18: Common park activities**

<b>Response</b>	<b>Number</b>
Walking / walking the dog	19
Running / with dog	15
Cycling	7
Launching a boat	11
BBQ/ Picnic	9
Other	8
<b>Total</b>	<b>69</b>

#### **7.4.3 Areas of Victoria Park used**

This question related to the areas of Victoria Park that are used by visitors. Multiple uses could be nominated by respondents.

Table 19 shows that Scenic Drive is the most commonly used area of Victoria Park by surveyed visitors. The majority of people used 'All of Scenic Drive'. Other key areas are tracks through the central area of Victoria Park, and the boat ramp and car park along the Murray River.



**Table 19: Use of park areas**

<b>Response</b>	<b>Number</b>
Scenic Drive – along Murray River	16
Scenic Drive – along Campaspe River	4
All of Scenic Drive	20
Tracks through the Park	10
Boat ramp and car park	11
Other	1
<b>Total</b>	<b>62</b>

#### **7.4.4 Most Liked aspect of Victoria Park**

Question 4 asked respondents what they most like about Victoria Park. Multiple uses could be nominated by respondents.

Many respondents nominated multiple answers to this question, with the majority of respondents valuing the peace and quiet of Victoria Park, at 29 responses. Each of the other options nominated on the question form also proved popular, receiving between 15 and 20 responses. Many respondents also nominated other reasons for liking the park, which included:

- Ability to have dog off leash
- Wildlife (including birds and platypus)
- Use for sports including fishing and swimming
- Facility for landing a boat
- Proximity to town and ease of access by bike or walking
- Provision of entertainment for youths
- Cleanliness and lack of rubbish
- A popular attraction to show visitors
- Parking

**Table 20: Most liked about the park**

<b>Response</b>	<b>Number</b>
Walking / running / cycling tracks	20
Riverside environs	19
Peace and quiet	29
Landscape quality	15
Other	7
<b>Total</b>	<b>90</b>

#### 7.4.5 Suggested improvements for unstructured or informal areas

Question 5 examined suggested improvements for the unstructured and informal recreation areas of Victoria Park. Multiple suggestions could be nominated by respondents. Responses to this question were varied (see Table 21), with many respondents nominating 'other' to list a variety of suggested improvements to the park including:

- Improvements to the Scenic Drive track including fixing ruts, improving blind corners and making Scenic Drive one-way
- Provision of extra facilities, including BBQs, toilets, lighting, a cage for outrigger canoe storage, and parking for houseboat users
- Park maintenance issues, including the clearing of dead vegetation and removal of rubbish particularly after park events
- Improvements to boat safety (method not specified).

Other responses to this question included more and better defined tracks and more seating and picnic areas. Seven respondents believed nothing should be changed and they like the park as it is.

**Table 21: Suggested improvements**

<b>Response</b>	<b>Number</b>
Nothing – like it as it is	7
More / better defined tracks (in addition to Scenic Drive)	11
More / better signage	4
More seats / picnic areas	9
Other	13
<b>Total</b>	<b>44</b>

#### 7.4.6 Landscape features and views of importance

This question asked respondents to nominate existing landscape features and views of importance that are located within or adjacent to the proposed bridge corridors. A total of 28 responses to this question were received, which included:

- Natural bushland and collective amenity of whole area
- Tree canopy/ trees upstream from proposed bridge
- Aboriginal canoe tree and burial sites
- River views
- Views of Southern 80 water ski race from key vantage points (including race finish line)
- Victoria Park boat ramp
- Sandhill and nearby greenery
- Reflection Bend and junction with the Campaspe River
- Existing walking tracks and off lead areas for dogs

- Sports grounds including tennis courts
- Botanical features and kangaroo habitat near the Campaspe River.

Respondents also nominated that there were no features and views of importance.

#### **7.4.7 Impact of new bridge on landscape features and views**

Question 7 asked respondents how they believed the Bridge would impact upon the landscape features and views nominated in Question 6. A total of 30 responses to this question were received including:

- Increased traffic and associated noise impacts
- Disruption to wildlife and habitats
- Loss of or disruption to recreational precinct and other uses including organised sports, swimming and camping
- Loss of visual amenity including river views
- Loss of trees and vegetation
- Loss of historic value
- Severance of the park
- Descriptive feedback including devastating, negative and sad impacts

Respondents nominated that there would be no impact, or impacts would not exist if the bridge is constructed using pylons.

#### **7.4.8 Mitigation measures**

Question 8 asked respondents to nominate mitigation options for the impacts nominated in Question 7. Suggested mitigation measures from the 24 responses included:

- Bridge design, including ensuring it blends in with the surroundings and is not too high or thick
- Vegetation buffers between the road and bridge and the park
- Replanting of any lost vegetation
- Alternative bridge routes, hugging the fringe of town or putting the bridge elsewhere (location not nominated)
- Avoiding impact to valued recreational areas. Areas nominated included the netball courts, tennis courts, boat ramp, Scenic Drive and dog off-leash areas
- Management of erosion issues
- Avoiding severance of the park
- Ensuring access to the river and town is not affected
- Provision of facilities including toilets and BBQs, and lighting of the bridge for security reasons
- Ensuring the community is involved in planning

- Raising the bridge on structure from Moama to the Warren Street junction with Murray Valley Highway
- Option-specific feedback, including a preference for Option 2B or 2D

Other comments included the need for quick action in selecting an option, the fact that the bridge is desperately needed, and that although impacts may occur, the building of the bridge is of higher importance.

## **7.5 Stakeholder Engagement Conclusions**

A wide range of issues was raised during the consultation for this SIA, including issues and concerns about other (non-social) impacts of the proposed second crossing of the Murray River. These included traffic noise, flooding and visual impacts.

The individuals and organisations consulted with generally supported the concept of a second crossing of the Murray River. A sense of fatigue about the length of time taken to identify and confirm a preferred route was also observed.

Given the location of the Mid-West 2 options, there were concerns expressed about the impacts on Victoria Park, including the formal recreation facilities within the Park.

There was a preference expressed for the options (2A and 2B) which include one roundabout at the western end of the alignment, rather than options 2C and 2D which propose two roundabouts.

Views were expressed about the potential height and design of the bridge over the Murray River.

Residents of the western end of Francis Street, Moama (which is proposed to be reopened to traffic) are generally not supportive about the prospect and the anticipated adverse impacts on amenity and pedestrian safety.

## 8.0 Assessment of Social Impacts

### 8.1 Objective Based Evaluation Model

The Objective Based Evaluation Model (OBEM) has been used to assess how well the Mid-West 2 options for the second crossing of the Murray River perform against each of the assessment criteria. In accordance with the OBEM process, the performance of the Mid-West 2 options against the assessment criteria will be evaluated as indicated in Table 22.

**Table 22 Objective Based Evaluation Model**

Rating	Defined values	Colour
Very Well	Best practice strong level of compliance with State and local social planning policy, major positive impact	Dark Green
Well	Improved practice, good policy compliance with State and local social planning policy, positive impact	Light Green
Moderately Well	Partial policy compliance with State and local social planning policy, no distinct positive or negative impact.	Yellow
Poor	Policy non-compliance with State and local social planning policy, and negative impact	Orange
Very Poor	Major policy non-compliance with State and local social planning policy, and major negative impact	Red

## 8.2 Objectives

The objectives and sub objectives adopted for the SIA of the Mid-West 2 Corridor options, together with the relevant assessment criteria, are set out in Table 23.

**Table 23: Project objectives and assessment criteria**

Objectives	Sub-objectives	Assessment criteria
To protect residents amenity and well-being by minimising dislocation and severance of residents to the extent practicable.	Reduce residents concern about amenity impacts such as noise, visual impact or changes to local traffic patterns	Location and nature of residents' concerns
	Avoid or reduce severance of community land uses	Number and nature of community land uses severed by option
To protect existing land uses and the character of landscapes, open space and recreation values to the extent practicable.	Avoid or reduce direct impacts on formal recreation facilities	Number and nature of formal recreation facilities affected by option
	Avoid or reduce direct impacts on informal recreation facilities	Number and nature of informal recreation facilities affected by option
To facilitate access to social and economic opportunities to support individual and community well-being.	To provide enhanced access to commercial and community facilities	Location and nature of improved access to commercial and community facilities
To provide for effective integration of transport and land use and facilitate access to social and economic opportunities.	To assist effective integration of the communities of Echuca and Moama and regional areas	Degree of improvement in integration of local communities
To provide a safe transport system that supports health and well-being.	To provide opportunities for enhanced pedestrians and cycling facilities	Length and nature of additional and/or improved pedestrian and cycle facilities

### 8.3 Assessment of the Mid-West 2 options

#### 8.3.1 Impacts of options on residents' amenity and well-being

Options 2A and 2C, which cross the northern side of the sand hill (and which is of cultural heritage significance), are likely to have a lower level of adverse impacts (noise and visual impact) on residents' amenity and well-being because of the somewhat greater distance from the closest residential development in Crofton Street.

At the western end, options 2A and 2C are likely to have similar low levels of impact on the closest residential development in Jarman, Hansen, Nolan and Homan Streets as Options 2B and 2D.

Community land uses that would be severed by all options include informal tracks through the bushland areas of Victoria Park, as well as the integrity of the reserve which is currently a very large bushland area with no major man made intrusions. It is assumed that the more formal and heavily used Scenic Drive along the southern bank of the Murray River would remain *in situ* and, once construction of the bridge is completed, its connectivity would be unaffected.

For these reasons, in relation to the location and nature of residents' concerns, Options 2A and 2C have been rated **very well** and Options 2B and 2D have been rated **well**. In relation to the number and nature of community land uses severed, all options have been rated **poor**.

Assessment Criteria	Rating			
	Option 2A	Option 2B	Option 2C	Option 2D
Location and nature of residents' concerns	Very well	Well	Very well	Well
Number and nature of community land uses severed by option	Poor	Poor	Poor	Poor

It is noted that the SIA has not reviewed the Noise and Visual Impact Assessments and therefore cannot substantiate or qualify whether potential noise and visual impacts are real or perceived. In the absence of this information it has been assumed that the perceptions of potential impacts are real. If the noise analysis shows no or marginal impact, then the ratings for 2B and 2D would increase from **well** to **very well**.

#### 8.3.2 Impacts of options on landscape, open space and recreation values

In relation to the number and nature of formal recreation facilities directly affected, Options 2B and 2D will require the relocation of six lawn tennis courts at the western end of the 17 lawn tennis courts located in the more formal sporting precinct of Victoria Park north of Crofton Street. Sporting groups consider that the amenity of the main oval in Victoria Park may be adversely affected for activities such as cricket because of the potential intrusion of noise during cricket matches.

As a result of the traversal of the bushland area of Victoria Park by a new road on either embankment or structures, all options will intrude on these areas of Victoria Park and reduce the natural and recreational values of this well-used and highly valued recreation resource for local residents and visitors.

For these reasons, Options 2A and 2C have been rated **very well** in relation to the number and nature of formal recreation facilities affected and Options 2B and 2D have been rated **poor** because of the potential direct impact on the lawn tennis courts.

In relation to the number and nature of informal recreation facilities affected, all options have been rated **poor** because of the impact on the bushland areas of Victoria Park.

Assessment Criteria	Rating			
	Option 2A	Option 2B	Option 2C	Option 2D
Number and nature of formal recreation facilities affected by option	Very well	Poor	Very well	Poor
Number and nature of informal recreation facilities affected by option	Poor	Poor	Poor	Poor

### 8.3.3 Impacts of options on access to commercial and community facilities

All options would provide a similar potential level of improvement in the location and nature of improved access to commercial and community facilities because of the overall improvement in accessibility and reliability of physical connection that would be provided by the second river crossing. This improvement in access would work for facilities located particularly in the western parts of both Echuca and Moama as well as in the respective town centres. A particular improvement in accessibility would probably be experienced by the extensive and integrated school bus network which serves primary and secondary schools in both towns.

For these reasons, all options have been rated **very well**.

Assessment Criteria	Rating			
	Option 2A	Option 2B	Option 2C	Option 2D
Location and nature of improved access to commercial and community facilities	Very well	Very well	Very well	Very well

### 8.3.4 Impacts of options on effective integration of Echuca and Moama communities

All options would provide a similar potential level of improvement in the integration of the two towns of Echuca and Moama because of the overall improvement in accessibility and reliability of physical connection that would be provided by the second river crossing. All categories of traffic – vehicular, cycle and pedestrian – would benefit from this improved accessibility.



For these reasons, all options have been rated **very well**.

Assessment Criteria	Rating			
	Option 2A	Option 2B	Option 2C	Option 2D
Degree of improvement in integration of local communities	Very well	Very well	Very well	Very well

### 8.3.5 Impacts of options on pedestrian and cycling facilities

It is intended that the road reserve would provide for a continuous combined pedestrian and cycle path from the western end over the main bridge over the Murray River to the junctions with Boundary Street and Perricoota Road/Cobb Highway in Moama. There would be a marginal difference between the options.

All options have been rated **very well**.

Assessment Criteria	Rating			
	Option 2A	Option 2B	Option 2C	Option 2D
Length and nature of additional and/or improved pedestrian and cycle facilities	Very well	Very well	Very Well	Very Well

## 8.4 Summary

Table 24 provides a summary of the overall performance of all options for the second crossing of the Murray River against the social impact assessment criteria.

While all options would provide a significant improvement in accessibility to a range of community and commercial facilities and contribute to the integrations of the two communities, Options 2A and 2C perform better than Options 2B and 2D primarily because they are located further away from residential development in the Crofton Street area and generally north of Warren Street west of the Campaspe River and because they would not have a direct effect on the formal recreation facilities in Victoria Park – the lawn tennis courts in particular.

All options would have a substantial effect on the valued landscape and recreation aspects of the bushland area in the north-western sections of Victoria Park.

The difference between the better performing Options 2A and 2C is the inclusion of an additional roundabout at a point on Warren Street some 500 metres east of the junction with Murray Valley Highway and, as a result, the requirement for traffic using the new river crossing to negotiate two roundabouts rather than one. As the requirement to negotiate two roundabouts rather than one would marginally affect the ease of access for all road users especially as vehicles providing key community services such as emergency services and school buses, from a social impact perspective, Option 2A would be preferred to Option 2C.

**Table 24 Overall assessment of options**

Assessment Criteria	Rating			
	Option 2A	Option 2B	Option 2C	Option 2D
Location and nature of residents' concerns	Very well	Well	Very well	Well
Number and nature of community land uses severed by option	Poor	Poor	Poor	Poor
Number and nature of formal recreation facilities affected by option	Very well	Poor	Very well	Poor
Number and nature of informal recreation facilities affected by option	Poor	Poor	Poor	Poor
Impacts of options on access to commercial and community facilities	Very well	Very well	Very well	Very well
Degree of improvement in integration of local communities	Very well	Very well	Very well	Very well
Length and nature of additional and/or improved pedestrian and cycle facilities	Very well	Very well	Very well	Very well
<b>Overall Rating</b>	<b>Very well</b>	<b>Well</b>	<b>Very well</b>	<b>Well</b>

## 9.0 Key Findings and Recommendations

### 9.1 Social impacts associated with the introduction of the PAOs

The key social impact associated with the introduction of the Public Acquisition Overlay into the Campaspe Planning Scheme would be the reduction in and / or elimination of uncertainty for potentially affected property owners and the overall communities of both Echuca and Moama as a result of a defined route for a second crossing being given statutory effect.

### 9.2 Social impacts associated with construction activity for the second Murray River crossing

As there is no commitment to the construction of the second Murray River crossing at this stage, it is not possible to be definitive about the likely social impacts of this project. However, based on experience with other major road construction projects in regional areas, there are a number of social impacts that may occur, namely:

- Interruption to the recreational use of areas in Victoria Park, especially the tracks in the bushland area and along the river banks
- Localised impacts on the otherwise peaceful amenity of the riverine environs and other areas in Victoria Park as a result of normal construction activities – particularly localised noise and dust generation
- Depending on the size and source of the construction workforce, localised pressure on some short term accommodation facilities in Echuca and Moama
- Localised delays to traffic movements
- Localised impacts on residential amenity through construction noise and potentially generation of dust during earthworks
- Local employment and training opportunities
- Socio-economic benefits resulting from local investment.

It is likely that all construction impacts could be appropriately managed through well-developed techniques such as on-going community consultation and the preparation of a comprehensive Construction Environmental Management Plan.

### 9.3 Social impacts associated with operation of the second Murray River crossing

The residual social impacts of the operation of the second Murray River crossing would depend on the implementation of mitigation measures during the design and construction phases, but are likely to include:

- The permanent introduction of a major man-made element through the values bushland areas of Victoria Park
- Adverse changes in the local visual amenity of that part of Moama where the new road joins the Cobb Highway
- Adverse changes in the amenity of the residential area at the western end of Francis Street.

However, the second crossing of the Murray River would provide very significant social benefits to the increasingly integrated community of Echuca and Moama as well as the wider regional areas through substantial improvements in accessibility to a wide range of community facilities and services and the psychological advantage of not having to rely on just one local river crossing in the face of continued population and traffic growth.

#### 9.4 Recommended Mitigation Measures

The following mitigation measures in Table 25 are recommended to lessen the impacts of the second Murray River crossing.

**Table 25 Mitigation measures**

Recommended Mitigation Measure	Intended Outcome
Implementation of noise attenuation measures if required consistent with VicRoads' policy in the vicinity of Echuca Cemetery, Victoria Park formal sports facilities, Reflection Bend and accommodation facilities in Moama	Protection of the amenity of sensitive and other community uses in the vicinity of the second river crossing
Comprehensive and visually and environmentally appropriate landscape treatment of the new road through the different sections of Victoria Park	Landscape integration of the new road into the Victoria Park landscape to maintain community value of and enhance community use of informal areas of the reserve
Reconfigure informal walking tracks within bushland and other areas of Victoria Park	Maintenance and/or reinstatement of existing or improved connectivity within bushland areas of Victoria Park
Provision of pedestrian and cycling on/off ramp on the southern side of Murray River at Victoria Park	To provide enhanced pedestrian and cycle connectivity between the western areas of Echuca and Moama
Mitigation of any direct impacts on lawn tennis courts in Victoria Park with any proposal for reinstatement to be determined through detailed consultation with relevant stakeholders	Maintenance and/or equivalent reinstatement of existing lawn tennis facilities and surrounding bushland ambiance
Appropriate junction design at Murray Valley Highway having regard to accessibility requirements of residents to the west of the Murray Valley Highway especially residents of the Cunningham Downs community	Provision of clear and safe access for aged residents of Cunningham Downs community using 'scooters' to access Echuca town centre, community facilities and urban areas east of Murray Valley Highway either at the proposed roundabout or by clear links to traffic signals at Butcher Street

<b>Recommended Mitigation Measure</b>	<b>Intended Outcome</b>
Upgrade Warren Street consistent with its current and future traffic functions to ensure road safety for all road users	To ensure safe conditions for all categories of road users along Warren Street given its likely enhanced usage and status in the road hierarchy once second crossing is completed
Further consultation with residents about design treatment for the western section of Francis Street, Moama including street lighting and landscape proposals	Streetscape treatment of western end of Francis Street consistent with residential area

## 10.0 References

Shire of Campaspe. 2010. *Victoria Park & Environs Master Plan*. Prepared by Simon Leisure Consulting

StratCorp Consulting. 2006. *Echuca Moama Recreation Plan* Prepared for Campaspe Shire Council and Murray Shire Council

URS. 2009. *Detailed Social Impact Study for the Second Murray River Crossing at Echuca-Moama - Final Report* Prepared for VicRoads

VicRoads and the Roads and Traffic Authority of NSW. 2002. *Planning Study*

## **Appendix A - Municipal Cycling and Walking Plan Maps**

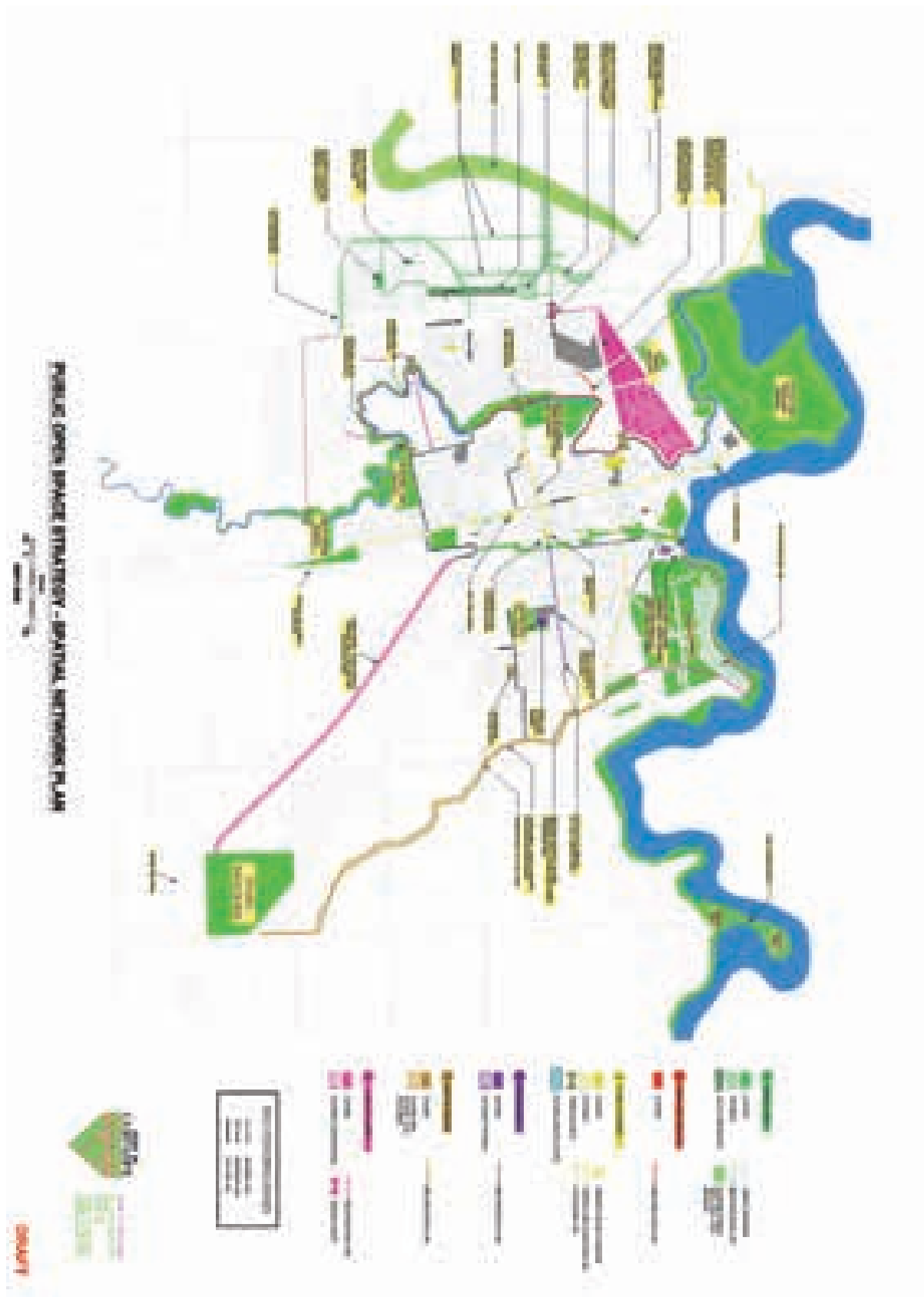


**MUNICIPAL WALKING & CYCLING STRATEGY - 2007**  
 Prepared by  
 City of Campaspe



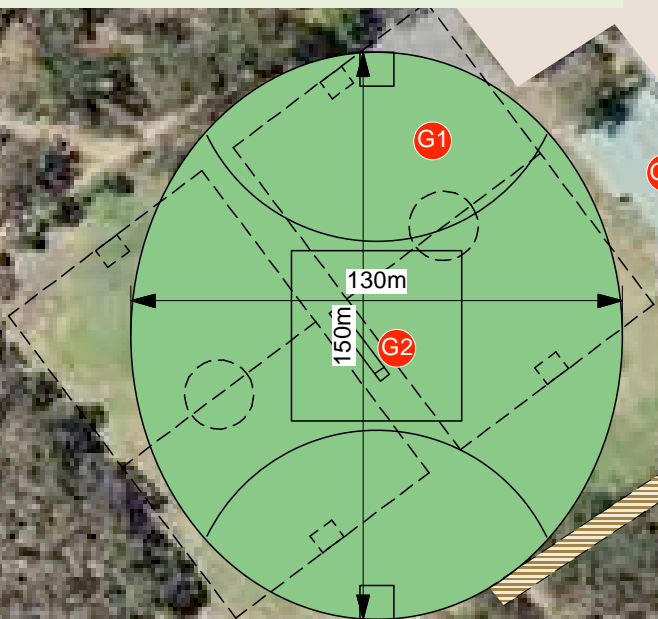


## 2.0 Echuca Spatial Network Plan



## **Appendix B - Victoria Park and Environs Master Plan 2010**

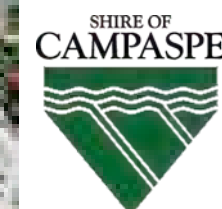
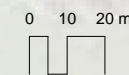
- A Echuca Lawn Tennis Club**
- A1 Six existing courts to be lost to new road.
- A2 Nine new grass courts to replace courts lost to road alignment and proposed new multi-use courts.
- A3 Two new dual-use hard courts for netball and tennis (floodlit).
- A4 Two new tennis hard courts (floodlit).
- A5 Player and spectator access to courts and shelters.
  
- B Reinstatement of Sports Field (135m x 110m)**
- B1 Install a synthetic hard wicket.
- B2 Remove existing netball court and reinstate to grass.
- B3 Install four new permanent cricket practice nets.
- B4 Small extension to existing shed for cricket store.
- B5 Relocate the Henry Hopwood Memorial.
  
- C CFA Training and Events Area**
- C1 Junior training track reconfigured to allow for spectator berm.
- C2 Proposed low-level spectator berm.
- C3 Existing public toilets retained and upgraded.
- C4 Remove pine trees in senescence and remove existing road.
  
- D New Pavilion and Community Facility**
- D1 Spectator shelters
  
- E Redevelop Grandstand and Ground Floor Amenities**
- E1 Covered spectator area attached to the Grandstand building.
  
- F Main Oval**
- Resurface the playing field and install a new turf wicket table, install a retractable soft netting fence along the northern boundary, and upgrade the flood lighting to 300 lux.
- F1 Remove vehicle access and install a low-level grass spectator berm.
- F2 Retain existing Boral Bar shed and public toilets until proposed new Pavilion and Community Facility is developed.
- F3 Retain and develop existing playground.
- F4 Remove road pavement and reinstate with grass, paths and trees.
- F5 Remove storage shed.
  
- G Redevelop former Echuca College Site**
- G1 Upgrade oval by over sowing, upgrading the irrigation system and re-orientating to achieve a larger playing area to accommodate an oval of 150m x 130m and/or two senior soccer fields 100m x 65m each.
- G2 Install a synthetic hard wicket.
- G3 Advocate for the retention of the existing indoor stadium and upgrade amenities to service future user groups.
- G4 Potential to remove unused buildings and consider using the area as a new venue for the Echuca Riding for the Disabled Group, Echuca Pony Club or Lawn Bowling facilities.
- G5 Pedestrian access to oval.
  
- H Traffic Management**
- H1 Extend the car parking and vehicle access off Crofton St (96 spaces).
- H2 Roundabouts to improve traffic flow.
- H3 New car park (6 spaces) and access for emergency and service vehicles to the reserve facilities.
- H4 Relocate the perimeter fence northwards to enable angle parking outside ground on Crofton Street (58 spaces).
- H5 Remove cricket practice wickets and use area for overflow car parking (up to 200 car parks).
- H6 Vehicle access into Scenic Drive.
- H7 New car park to service oval and indoor stadium (27 spaces).



# MASTER PLAN FOR VICTORIA PARK & ENVRIONS

(with proposed Echuca-Moama Mid West river crossing)

January 2010



Leisure Consulting

## **Appendix C - Task Brief**

# THE ASSIGNMENT



## THE ASSIGNMENT

### SOCIAL IMPACT TASK BRIEF – ECHUCA BRIDGE PLANNING STUDY

#### 1. PURPOSE OF THIS ASSIGNMENT

The purpose of this study is to undertake a detailed social impact study for 4 alignment route options for the Second Murray River Crossing at Echuca-Moama Planning Study. Refer to figure 1 for the location of the study area and figure 2 for details of the alignment options.

#### 2. BACKGROUND

##### 2.1 Project Details

The existing bridge was built in 1878, and in 1989 a rail bridge was built parallel to the historic bridge. The Murray River crossing provides an important link for local traffic between Echuca and Southern New South Wales. This is the only crossing in the Echuca-Moama area, the nearest alternative bridge is at Barmah.

Agricultural production is the major economic activity at Echuca-Moama, involving both dry land and irrigated farming, with milk and rice being significant contributors to total agricultural production. Tourism is also a significant contributor to the economy of the area, with the historic Port of Echuca, river-based activities and recreation being the main attractions.

There are three major highways that intersect at Echuca-Moama; the Northern Highway and the Murray Valley Highway in Victoria, and the Cobb Highway in New South Wales. These highways are all significant transport routes. The existing bridge structure is narrow with one lane in each direction and has little capacity to cater for the long term traffic needs of the region.

The existing bridge is unable to provide a suitable level of service for the increasing volume of traffic in the area. Population growth, accompanied by growth in business, tourism, jobs and personal travel, all combine to indicate significant future ongoing growth in travel across the river at Echuca-Moama. The existing bridge has operational limitations in that traffic flow over the bridge is often delayed during peak tourist periods, and when wide loads or agricultural machinery need to cross the river and the traffic has to be stopped because of the narrow width of the bridge. Over dimensional vehicles are prohibited from crossing the bridge during morning, lunch and evening peak periods. This is inconvenient and costly for business operations. The existing bridge also requires extensive rehabilitation which would result in partial closure of the bridge, while work is being carried out. The second Murray River crossing will act as an alternative access between Echuca and Moama and provide relief for congestion on the existing bridge.

2.2 Planning study area description



Figure 1: Echuca Bridge Mid-West 2 study area



Figure 2: Concept design alignment options for investigation.

**2.3 Summary of previous consultation**

VicRoads has had preliminary discussions with DPCD and Campaspe Shire in relation to this study.

**2.4 Other information**

- Previous report for Social Impact Assessment;
- An aerial photograph showing the corridor and potential options will be provided;
- The above information should be drawn upon to undertake this work as appropriate.

**3. ASSIGNMENT**

**1 Methodology**

Conduct the Assignment in accordance with the methodology submitted to and approved by VicRoads (using Schedule 32), prior to the commencement of the works.

**2 Meetings**

The Provider shall attend all meetings, as instructed by the Superintendent.

Meeting	Location	Duration	Date
Study inception meeting	VicRoads Office Camberwell	1hr	To be determined
Draft report feedback meeting	VicRoads Office Camberwell	1hr	To be determined

NB. This clause is not intended to refer to or include any meetings the Provider may have with other stakeholders during the course of undertaking the assignment.

Where the Superintendent directs the Provider to attend additional meetings, payment for additional meetings shall be in accordance with the rates submitted in Schedule 2, Rates for Variation.

#### Panel Hearing

The Provider shall also attend any Planning Panel Hearing sessions as required by the Superintendent. It is expected that the Provider will be required to attend the Panel Hearings for one day. If required, the Provider shall represent VicRoads as an expert witness at any Planning Panel Hearing. This will involve, where appropriate, the preparation and presentation of verbal and written evidence (in the form of an Expert Witness Statement) to the Panel on the investigation as carried out. This will also include responding to relevant submissions received from the Public. The cost for the Provider to represent VicRoads as an expert witness at the panel hearing is to be itemised in the lump sum price.

### 3 Information to be Provided by the Superintendent to the Provider

The Superintendent will provide copies of previous relevant reports and other relevant information they hold to the Provider at the commencement of the Agreement. Where requested by the Superintendent, these documents are to be returned to the Superintendent at the completion of the project.

The Superintendent will provide plans showing the proposed study area and alignment route(s).

#### 3.4 Access to Properties

##### *In Victoria*

VicRoads may provide details of property owners, where available. VicRoads may also arrange access to private properties, or may inform the Provider where access is not available or of any known special requirements for access.

The Provider shall contact Neville Hallam of VicRoads Northern Region on (03) 5434 5038 prior to arranging access to private property. If the provider desires to enter any land beyond the road reserve boundary contact shall be made with VicRoads first.

Entry on public land or private property for the purpose of carrying out site inspections is only permitted after the Provider has contacted and received permission from the appropriate authorities or land owners. The provider must provide reasonable advance notice to the authority or land owner before entering public land or private property.

A letter of introduction will be provided by VicRoads to the Provider to be presented to property owners during the field surveys.

##### *In New South Wales*

If access is required in NSW the RTA will issue a certification to enter (as required by the Roads Act). The RTA will then contact any owners and acquaint them with the nature and extent of activities if requested and advise the contractor of approval for access.

The Superintendent will arrange, as far as possible, access to private property, or will inform the Provider where access is not available or of any known special requirements for access.

Entry on council land or private land for the purpose of carrying out site inspections is only permitted after the Provider has contacted and received permission from the appropriate authorities or landowners. The Provider must inform the authority, or landowner, as to the time and date of when the survey will be carried out.



### 3.5 Permits

The Provider is responsible for obtaining all necessary permits for undertaking the investigations required under this Agreement and for ensuring that all work is carried out in accordance with any such permits.

## 4 Detailed Task Descriptions

### 4.1 Desktop Assessment

#### Task 1 Review government policy and legislation

Identify and summarise the potential social implications of relevant Commonwealth, State and Local Government policies and legislation for the proposed project.

#### Task 2 Identify facilities and services

Identify community, educational, health, commercial, recreational and other facilities and services used by people in the area near to the route options and identify the catchments for these facilities and services and how people currently access them. It should be noted that separate Business and Tourism and Agricultural studies will identify potential economic impacts. Activities and access patterns of, and facilities and services used by, vulnerable groups such as the aged, are to be given particular attention. Key areas and facilities to be avoided should also be identified.

#### Task 3 Identify places of special interest

Identify, places of special interest, attraction and value to the community, and sites that may be perceived as community "icons" and provide an assessment of their importance to the community.

#### Task 4 Identify significant community activities

Identify other community activities and values that may need to be considered in planning for this project (for example community gatherings like markets, festivals and recreational activities) and provide an assessment of their importance to the community.

#### Task 5 Provide a demographic profile

Provide a demographic profile of the study area including reference to groups of people who may have special access needs that may be affected by this proposed project. The profile shall include sufficient data to provide an analysis of the cohesiveness of the community in the area the route options pass through. It shall also provide comparisons of the area the route options pass through, with the region and with Victoria as a whole.

#### Task 6 Identify access patterns

Identify pedestrian, motor vehicle, bicycle and other access patterns that may be affected by the proposed project and identify local access and community linkages that need to be maintained.

### 4.2 Detailed Assessment

#### Task 1 Develop interview program

Develop an interview program of an appropriate sample of people and interested parties, taking into account the varied occupations, interests, needs and life styles of the people that could be impacted by proposals for the Second Murray River Crossing at Echuca-Moama Planning Study. The interview program will include people from within or immediately adjacent to the study area, people remote from the study area and major land use or industry stakeholders. The superintendent's agreement to the sample size is to be obtained prior to conducting the interviews.

## Task 2 Conduct interviews

A list of people and organisations to be interviewed, and the questions to be asked and the method of interviewing (e.g. one on one, focus groups etc.), will be developed by the Provider and approved by VicRoads Superintendent before any consultation commences. The identity and privacy of individual residents and families is to be respected in the reporting of interview results.

## Task 3 Conduct field investigation

Conduct a detailed field investigation of the route options to identify the potential social impacts that could be associated with each route option. It would be also appropriate to identify from the traffic study, the changed in travel patterns and how these might have social impacts or benefits.

## Task 4 Conduct detailed assessment of social impacts

For each route option, assess the potential social impacts on:

- residents
- community facilities
- special interest attractions and their importance to the community
- current access patterns, and
- different groups within the community.

## Task 5 Report

A report covering the outputs from the tasks listed above, including;

- any constraints and major concerns with the proposed route options from a social perspective,
- suggested modifications to the proposed route options from a social perspective, and
- the identification of measures to mitigate the impacts of each proposed route option.

The structure and format of the report are further detailed in Section 3.5.1

## Task 6 Attendance at Panel Hearing

Preparation for and attendance at Planning Panel under the Planning and Environment Act, to include the following:

- The Provider team must include an experienced witness, with a suitable level of experience who could present findings at a Planning Panel Hearing. VicRoads must agree to the person proposed to take on this role and that person must be actively involved in the study;
- Prepare a written submission (expert witness statement) and presentation on the social aspects of the project. The expert witness statement will also take account of all matters arising from any earlier Directions Hearing;
- Submit the expert witness statement and presentation for review by VicRoads and its legal adviser and revise as agreed;
- Attend one day of the Panel Hearing as requested by VicRoads;
- Provide a written and oral submission to the Panel on the project's social issues and impacts, the performance against social objectives and on the submissions received during and after the exhibition period;
- Be prepared to respond objectively to cross-examination during the Panel Hearing and to provide succinct answers to any questions from the Panel members
- Review the submissions on social matters that are made during the Panel Hearing itself, and provide advice to VicRoads and its legal adviser on how a suitable response may be presented in VicRoads' closing statement.

If this item proves unnecessary, then the contract price will be adjusted by the amount shown in Schedule 1.

## 5 Assessment of options

VicRoads is using an Objective Based Evaluation Matrix (OBEM) to help assess the performance of each of the route options. VicRoads will collate the assessments of all specialist consultants

into an evaluation matrix, which will be used to facilitate discussion with the community and in formal statutory processes to seek environmental and planning approvals.

The relevant project objectives to this assignment include:

- to protect residents amenity and well-being by minimising dislocation and severance of residents to the extent practicable;
- to protect existing land uses and the character of landscapes, open space and recreation values to the extent practicable.

The provider shall also provide an assessment of the four alignment options with respect to the relevant objectives of the Transport Integration Act which include:

- Facilitate access to social and economic opportunities to support individual and community well-being.
- Provide for effective integration of transport and land use and facilitate access to social and economic opportunities.
- Provide a safe transport system that supports health and well being.

At the start of the Assignment the Provider shall propose “Sub-objectives” for each “Project Objective”. These “Sub-objectives” will generally be derived from legislation, national, State and local policy and planning schemes.

The Provider shall also propose the “Assessment Criteria” to be used for each “Sub-objective” and nominate the verifiable data which would be used to support the assessments. For example, a flora and fauna consultant might nominate “hectares of habitat to be removed” to support an assessment of a sub-objective dealing with impacts on certain endangered species.

Hold Point: VicRoads will reach agreement with the Provider on the relevant “Project Objective(s)”, the “Sub-objectives” and their related “Assessment Criteria” to be used for this Assignment.

The Provider shall then provide an assessment of the extent to which the existing route and each proposed route option meets each nominated project objective. The Provider shall use the sub-objectives, assessment criteria and also provide verifiable data to support this assessment. The assessment shall be in the form of an answer to the question “How well does the proposal meet each nominated project objective?” To ensure consistency, the following scale should be used:

Rating	Defined Values	Colour
Very Well	Best practice, strong level of compliance, major positive impact	Green
Well	Improved practice, good policy compliance, positive impact	Light Green
Moderately Well	Partial policy compliance, no distinct positive or negative impact	Yellow
Poor	Policy non-compliance and negative impact	Orange
Very Poor	Major policy non-compliance and major negative impact	Red

**Consideration of proposed mitigations**

Where the Provider has recommended measures to mitigate the impacts of each proposed route option, the Provider shall provide two assessments:

- with the proposed mitigation
- without the proposed mitigation