



# Bacchus Marsh

## Integrated Transport Strategy

Building Our Transport Future  
December 2015



# Message from the Mayor



Bacchus Marsh is the largest town in Moorabool Shire, and is one of Victoria's fastest growing regional towns. According to the latest Australian Bureau of Statistics figures, the town's resident population grew by 3.1% in the 12 months to July 2014. That means an extra 674 people arriving in Bacchus Marsh each year, or 13 new people each week.

Moorabool Shire Council is planning for the future of Bacchus Marsh by building on the existing transport network to accommodate the needs of a growing population. As the population continues to grow, it will place increasing demands on our transport network with greater numbers of cars on the roads each year.

The *Bacchus Marsh Integrated Transport Strategy: Building Our Transport Future* looks at the challenges faced by the Bacchus Marsh area, and presents actions that will guide future transport planning and development to deliver a sustainable, integrated network with better active transport options for the community. The Strategy strives to deliver a sustainable and integrated transport network where:

- › transport priorities meet the needs of all users and support Council's other social, economic, environmental, and planning policies and actions
- › easy access to the township's key activity areas supports the prosperity of businesses, and allows the community to travel between popular destinations using a range of transport modes
- › increased use of public transport and sustainable transport modes reduces the number of cars travelling on the road
- › freight movements within the heart of the township are reduced to make our roads safer, reduce air and noise pollution, and improve the efficiency of the transport network.

A key challenge to achieving these outcomes includes the significant cost of large roadworks projects required in Bacchus Marsh, and the constrained environment in which they are to be constructed. Moorabool Shire Council will continue to work in partnership with the Victorian Government, businesses and the community to deliver the actions outlined in the Strategy and works towards building a better transport future for Bacchus Marsh.

**Cr. Allan Comrie**

Mayor, Moorabool Shire



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# 1 Executive Summary

## Context

The *Bacchus Marsh Integrated Transport Strategy – Building Our Transport Future* (BMITS) has been prepared with the aim of ensuring that a high standard transport network is developed and maintained and can accommodate the accessibility requirements of the growing community. The BMITS recognises the challenges faced by the Bacchus Marsh area, and identifies a number of principles and actions that may be adopted to guide future transport planning and development.

An integrated approach to transport and land use planning is a positive way to influence the planning and provision of more sustainable transport systems. Integrated transport planning takes into account key issues such as transport system interdependencies, interactions between transport and land use, transport safety, traffic congestion, parking, travel demand management and accessibility.

This integrated transport strategy aims to identify and prioritise a range of transport infrastructure and other improvements to support a sustainable, vibrant and prosperous Bacchus Marsh community. The following sections of this document outline the key challenges regarding active transport, public transport and the road network in Bacchus Marsh. The document identifies proposed actions in each of these areas to allow the current transport network to be used more efficiently and to support sustainable transport modes.

The Bacchus Marsh Integrated Transport Strategy has been prepared with the assistance and input of Moorabool Shire Council, VicRoads and the Department of Economic Development, Jobs, Transport and Resources.

## Priorities

The Implementation Plan (Chapter 10, page 45) includes a suite of projects across the various modes of transport identified within this strategy. The main priorities are listed below.

### Immediately, Bacchus Marsh needs:

- › East facing freeway ramps on Halletts Way to relieve reliance and congestion on the Gisborne Road interchange and Gisborne Road/Grant Street corridor.
- › Construction of a pedestrian/cycle bridge on Halletts Way over the Western Freeway to address a significant safety issues.
- › A planning study for an eastern town bypass and with connection to Geelong Road, Gisborne Road and Western Freeway to set a road alignment.
- › An investigation for capacity improvement opportunities to Gisborne Road and Grant Street including possible additional lanes and intersection upgrades.
- › The delivery of new rail rolling stock on the Ballarat-Melbourne rail corridor.

2015

### By 2021, Bacchus Marsh needs:

- › Construction of an Eastern Town Bypass to cater for expected growth within the township and surrounding areas and to remove freight movements from the town centre.
- › Completion of the Western Link Road (Halletts Way/O’Leary Way) to provide additional north-south capacity though the township and relieve pressure on the Gisborne Road/Grant Street corridor.
- › Implementation of identified capacity improvements to Gisborne Road and Grant Street including possible additional lanes and intersection upgrades.
- › A network of connecting bicycle paths around the town servicing key activity centres.
- › A bus service that provides coverage to all residential areas, stops at key activity centres and matches train timetables.

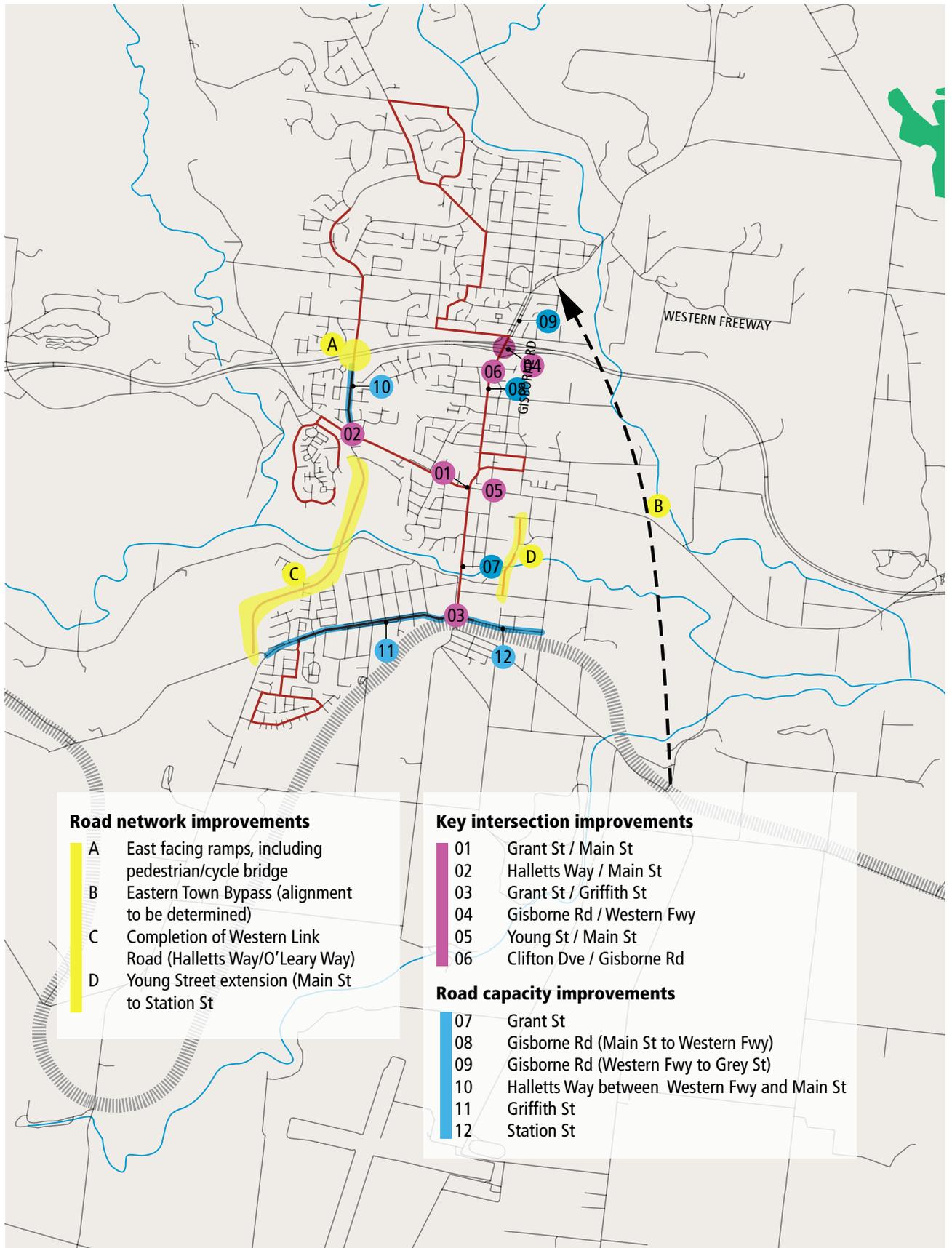
2021

### By 2031, Bacchus Marsh needs:

- › An extension of Young Street (from Main Street to Station Street) incorporating the ‘greenway’ as a means of providing additional north-south capacity within the township and enhanced connectivity between the Bacchus Marsh town centre and Railway Station.
- › Capacity improvements at key intersections within Bacchus Marsh to alleviate projected traffic volumes.
- › Duplication of the Ballarat-Melbourne rail corridor to Bacchus Marsh
- › Capacity improvements to key local roads including Griffith Street, Station Street and Halletts Way between Bacchus Marsh Road and Western Freeway.

2031

## Key actions and priorities



## Key Challenges

- › **Traffic Congestion** which reduces liveability of urban areas and productivity of the economy
- › **Population and Economic Growth** which provides many benefits to the town but also places pressure on the transport network
- › **Missing Links** which force trips through already congested areas. This is evident in the already constrained north-south connection through the township
- › **Social Exclusion** which results from a lack of access to transport due to limited physical mobility, financial constraints, or due to the inadequacy of local transport infrastructure and services.
- › **Existing Narrow Road Reservations** that restrict expansion for capacity improvements and inclusion of bicycle and pedestrian infrastructure.

**Implementation** of major projects identified through the strategy, including the ability to attract major funding in competition with other priority projects throughout Victoria.



## Outcome of Proposed Actions

A number of actions and projects have been identified through the strategy to address the outcomes in the modelling that has been undertaken through the Technical Findings Report. A mode shift from car travel is needed to assist the road network function into the future and the strategy contains actions to help facilitate a mode shift.

The level of service indicators below provide an overview of the conditions experienced.

Level of Service	Definition
	Conditions are general clear or stable, with little or no restriction
	Conditions are approaching unstable flow with temporary restrictions causing delays
	Forced flow conditions and stoppages for long periods

### Existing conditions

The service levels on our current road network have been represented in the map below.



## By 2021

A number of road network options were assessed during the modelling phase to assist in identifying improvements to the network.

### A 'do nothing' approach

The expected service levels by 2021 under a do nothing scenario have been represented below.



Road	By 2021	Road	By 2021
Bacchus Marsh Road (west of Gisborne Road)		Gisborne Road (south of Western Freeway)	
Station Street, Maddingley		Bacchus Marsh Road (west of O'Hagan Place)	
Bacchus Marsh-Gisborne Road (north of Holts Lane)		Main Street (east of Graham Street)	
Grant Street, Maddingley		Bacchus Marsh Road (east of Woolpack Road)	
Halletts Way (north of Bacchus Marsh Road)		Griffith Street, Maddingley	

## Improvements to the road network

Modelling undertaken through the strategy identified a number of improvements to the network to improve the projected level of service in 2021. These assumptions include:

### By 2021:

- › Completion of the Clifton Drive extension (connection to Halletts Way)
- › Completion of the Western Link Road (Halletts Way/O’Leary Way)
- › Completion of east facing ramps on Halletts Way
- › Implementation of capacity improvements to Gisborne Road and Grant Street
- › Completion of the eastern town bypass

Based on the assumptions above and noting the timing of these projects may be earlier or later than anticipated, there is an improved level of service that has been represented in the table below. Again, a mode shift from car travel is needed to assist the road network function into the future.



Road	By 2021	Road	By 2021
Bacchus Marsh Road (west of Gisborne Road)		Gisborne Road (south of Western Freeway)	
Station Street, Maddingley		Bacchus Marsh Road (west of O’Hagan Place)	
Bacchus Marsh-Gisborne Road (north of Holts Lane)		Main Street (east of Graham Street)	
Grant Street, Maddingley		Bacchus Marsh Road (east of Woolpack Road)	
Halletts Way (north of Bacchus Marsh Road)		Griffith Street, Maddingley	

# By 2031

## A 'do nothing' approach

The expected service levels by 2031 under a do nothing scenario have been represented below.



Road	By 2031	Road	By 2031
Bacchus Marsh Road (west of Gisborne Road)		Gisborne Road (south of Western Freeway)	
Station Street, Maddingley		Bacchus Marsh Road (west of O'Hagan Place)	
Bacchus Marsh-Gisborne Road (north of Holts Lane)		Main Street (east of Graham Street)	
Grant Street, Maddingley		Bacchus Marsh Road (east of Woolpack Road)	
Halletts Way (north of Bacchus Marsh Road)		Griffith Street, Maddingley	

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Modelling undertaken through the strategy identified a number of improvements to the network to improve the projected level of service in 2031. These assumptions include the 2021 projects, and the :

### By 2021:

- › Completion of the Clifton Drive extension (connection to Halletts Way)
- › Completion of the Western Link Road (Halletts Way/O’Leary Way)
- › Completion of east facing ramps on Halletts Way
- › Implementation of capacity improvements to Gisborne Road and Grant Street
- › Completion of the eastern town bypass

### By 2031:

- › Completion of the Young Street extension (from Main Street to Station Street)

The project level of service has been represented below.



Road	By 2031	Road	By 2031
Bacchus Marsh Road (west of Gisborne Road)		Gisborne Road (south of Western Freeway)	
Station Street, Maddingley		Bacchus Marsh Road (west of O’Hagan Place)	
Bacchus Marsh-Gisborne Road (north of Holts Lane)		Main Street (east of Graham Street)	
Grant Street, Maddingley		Bacchus Marsh Road (east of Woolpack Road)	
Halletts Way (north of Bacchus Marsh Road)		Griffith Street, Maddingley	

# By 2041

## A 'do nothing' approach

The expected service levels by 2041 under a do nothing scenario have been represented below.



Road	By 2041	Road	By 2041
Bacchus Marsh Road (west of Gisborne Road)		Gisborne Road (south of Western Freeway)	
Station Street, Maddingley		Bacchus Marsh Road (west of O'Hagan Place)	
Bacchus Marsh-Gisborne Road (north of Holts Lane)		Main Street (east of Graham Street)	
Grant Street, Maddingley		Bacchus Marsh Road (east of Woolpack Road)	
Halletts Way (north of Bacchus Marsh Road)		Griffith Street, Maddingley	

## Improvements to the road network

Modelling undertaken through the strategy identified a number of improvements to the network to improve the projected level of service in 2041. These assumptions include the 2021 projects, and the :

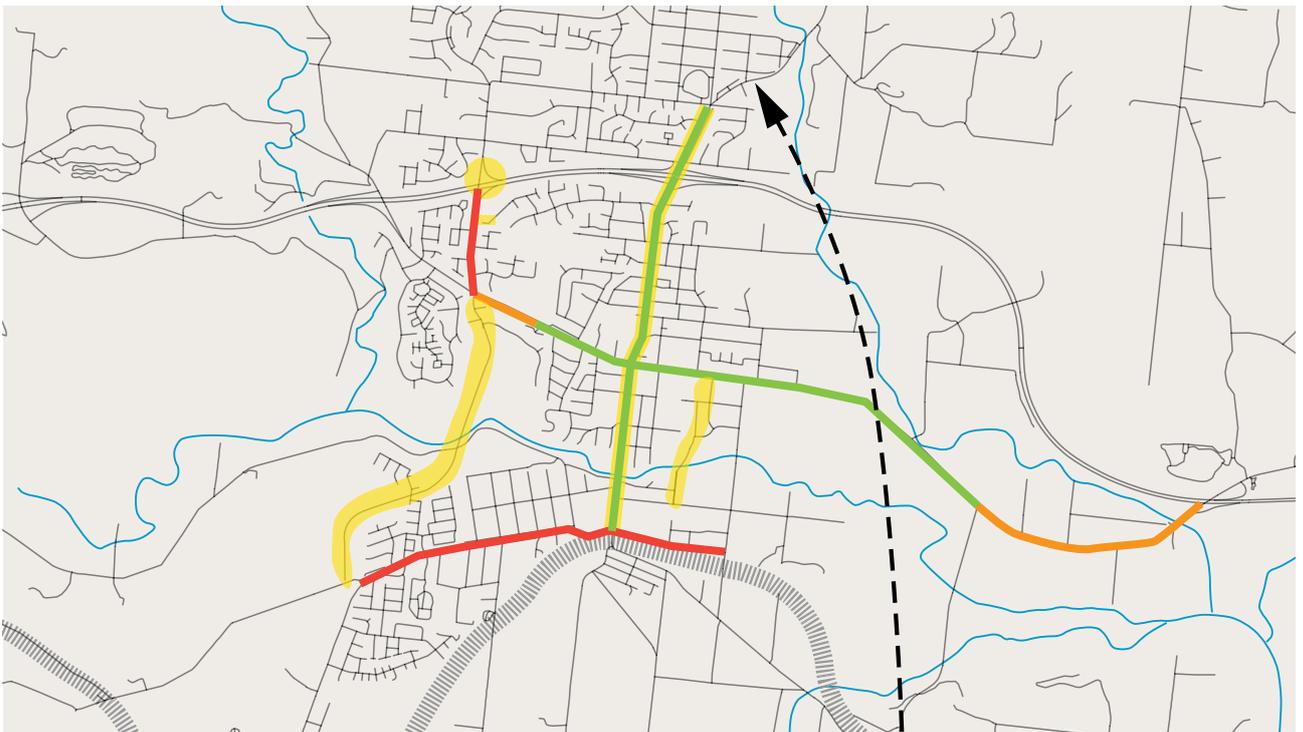
### By 2021:

- › Completion of the Clifton Drive extension (connection to Halletts Way)
- › Completion of the Western Link Road (Halletts Way/O’Leary Way)
- › Completion of east facing ramps on Halletts Way
- › Implementation of capacity improvements to Gisborne Road and Grant Street
- › Completion of the eastern town bypass

### By 2031:

- › Completion of the Young Street extension (from Main Street to Station Street)

The project level of service has been represented below.



Road	By 2021	Road	By 2041
Bacchus Marsh Road (west of Gisborne Road)		Gisborne Road (south of Western Freeway)	
Station Street, Maddingley		Bacchus Marsh Road (west of O’Hagan Place)	
Bacchus Marsh-Gisborne Road (north of Holts Lane)		Main Street (east of Graham Street)	
Grant Street, Maddingley		Bacchus Marsh Road (east of Woolpack Road)	
Halletts Way (north of Bacchus Marsh Road)		Griffith Street, Maddingley	

# 2 Introduction

## Purpose

The BMITS will guide Moorabool Shire Council to enable the holistic future planning of the transport network. The document will also provide VicRoads with evidence based information to inform the development of the arterial road network within and around Bacchus Marsh.

There is a high level of car dependency in Bacchus Marsh and an integrated transport system that provides our community with a variety of transport options to get to work, school, shops, recreation facilities and community facilities is critical when planning for future growth. Vehicle movements are likely to grow as Bacchus Marsh grows, however we can provide options to give people choice.

The Strategy considers all modes, their roles, and the upgrades required to ensure that the transport network, as a whole, will be capable of accommodating the existing and future demand associated with expected population growth of Bacchus Marsh and facilitate sustainable transport modes. The key focus areas include:



### Active Transport

- › Walking
- › Cycling



### Public Transport

- › Bus
- › Rail

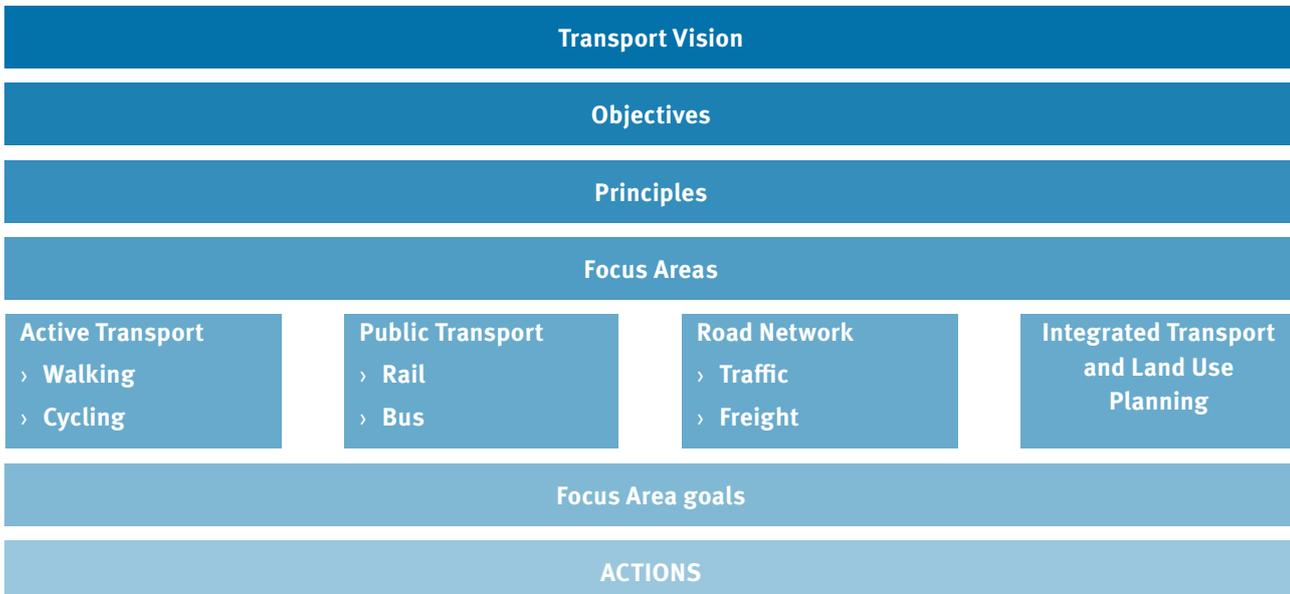


### Road Network

- › Traffic
- › Freight



### Integrated Transport and Land Use Planning



## Study Area

The study area for the BMITS encompasses the urban areas of Bacchus Marsh, Darley and Maddingley, together with the rural hinterland. The Strategy also considers transport links to key external destinations. The study area is depicted in the map below.

The Strategy will enable Moorabool Shire Council to investigate and implement changes to the network to ensure it is being proactive rather than reactive in responding to population growth.

### Map of study area



## Background

Bacchus Marsh is a growing community with a current population of 22,854, and is expected to grow to 39,994 by 2041. The transport network in Bacchus Marsh is already under significant strain, and at times struggles to cope with the level of traffic generated by the growing community. A number of gaps are also present in the public transport, cyclist and pedestrian networks throughout the township adding to the reliance on private vehicle trips.

The transport network is a key challenge facing population growth in Bacchus Marsh and as such, future planning for the area will need to consider and address existing constraints within the network to ensure that the future development of Bacchus Marsh can be sustained. The future planning of the transport network will need to consider not only existing populations and developments, but future growth projections for the wider area.

In developing the ITS, Council recognises the importance of shifting to a more *integrated* and *sustainable* transport system. Like other peri-urban towns, Bacchus Marsh is facing a future of change and our transport system must be flexible and resilient enough to adapt. While all transport modes are of importance, the ITS will need to ensure that sustainable transport is a key focus for Council, in line with Council's mission to deliver valued outcomes that improve community wellbeing.

The Strategy builds on the findings of the Technical Findings Report completed in 2015 which identifies existing constraints within the transport network and potential opportunities for improvement moving forward. The strategic modelling undertaken has been based on the land use growth projections as identified in the map on page 17. The study identifies a number of required improvements needed to improve the level of service for residents and businesses in the township today and into the future.

