



Banyule
CITY COUNCIL



BANYULE BICYCLE STRATEGY

2010 – 2020

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EXECUTIVE SUMMARY

The development of the ***Banyule Bicycle Strategy 2010-2020*** is an important step towards building a strong network of bicycle routes and facilities for all types of cyclist in Banyule from the recreational cyclist to the commuter cyclist who may commute many kilometres to work.

The Bicycle Strategy details Council's objectives, strategies and actions in relation to improving cycling facilities and access for all.

The following are the key objectives for the Bicycle Strategy. The objectives provide a framework to guide actions by agencies and organisation. The Banyule Bicycle Strategy will be the primary vehicle to describe and prioritise actions to achieve the objectives. The Strategy includes a ten year ***Banyule Bicycle Strategy Action Plan*** to identify prioritised works and other actions.

Objectives

- To plan for increasing transport sustainability in Banyule and minimise the impacts of private vehicles, traffic congestion and pollution on Banyule's environment.
- To provide a safe, continuous, direct and convenient bicycle network and related infrastructure which encourages cycling for journey to work and recreational purposes.
- To promote linkages between cycling and other modes of transport, and between off and on-road bicycle networks.
- To establish and promote the hierarchy of transport modes for access to Activity Centres and other key facilities in Banyule.
- To promote the health and well being benefits of cycling.
- To complete the Principal Bicycle Network in Banyule by 2019.
- To fund planning, design, construction and maintenance of bicycle projects and programs at an adequate level.
- To develop measures to track progress on improving bicycle programs, participation, safety and infrastructure.
- To educate cyclists, pedestrians and motorists about safe operating behaviour.

Network Overview

The existing off-road bicycle network in Banyule is quite extensive and plays a key role in the wider Melbourne network. Banyule comprises a total of 25 kilometres of formal shared paths across an array of major trails, including the Main Yarra, Darebin Creek and Plenty River Creek trails. The Banyule Shared Trail has been a significant addition to the off-road bicycle network in recent times.

Banyule also accommodates 12 kilometres of formal on-road cycle paths, located on both arterial and local roads. VicRoads is responsible for the Principal Bicycle Network (PBN) on the declared road network and is the approval mechanism for PBN treatments on the arterial road network. Council is responsible for the PBN on Council owned roads. The on-road cycle path network is still under developed, particularly in terms of connections to Activity Centres and the off-road network and this will become a priority for Council in the next few years.

Infrastructure Overview

The highest priority bicycle infrastructure needs in Banyule include:

- Completion of the gaps in the off-road shared trails, particularly linking the trails with each other and to the wider Metropolitan Melbourne shared trail network. The off-road shared trails in Banyule are very popular, both with commuter and novice cyclists.
- The on-road Principal Bicycle Network in Banyule is quite under developed with very little connection into the Activity Centres and to the off-road shared trail network. Connection of the on and off-road networks would attract many more people to cycling and improve safety for all users.
- Better supporting infrastructure including providing end-of-trip facilities, better wayfinding, signage, lighting and bicycle parking needs to be reviewed and provided in Banyule.
- The local community through many of the consultation processes have identified the need for a focus on the provision of dedicated bike lanes, better lighting, lowering of speed limits and improvement to surfaces and repair of pot holes.

Education, Promotion and Marketing

Promoting cycling is integral to raising community awareness of cycling, its benefits and improving the perception of cycling in general. This has particular reference to the very low numbers of primary and secondary school students who currently ride to and from school. It is recommended that marketing and education programs be aligned with the TravelSmart program which seeks to reduce reliance on cars and increase the use of more sustainable forms of transport, including cycling.

Bicycle awareness and educational programs targeting all road users that also encourage people to cycle are considered a high priority. It is recommended that Council promote new cycle routes, cycling events and new funding and success stories surrounding increased ridership and at the same time promote the health, economic and environmental benefits of cycling.

Monitoring and Auditing

Monitoring of cycle use is essential to assess whether the implementation of more and improved cycle facilities has increased the number of cycling trips and has changed attitudes in favour of cycling. Council will liaise with Bicycle Victoria, Banyule Bicycle Users Group and local cyclists to enable it to evaluate the coherency, directness and safety of existing routes and to enable monitoring to take place.

Acknowledgement

Banyule City Council would like to acknowledge all those who contributed to the development of this document, by sharing information and their knowledge.

Relationships

The Banyule Bicycle Strategy directly links to the Banyule Integrated Transport Strategy.

1. INTRODUCTION

Cycling is a very effective form of transport and recreation. It is often cheaper and more efficient than other forms of transport, it has good health benefits and is environmentally friendly. Cycling has particular significance in Banyule which has a number of significant off-road recreational trails, in particular, the Yarra River Trail, Darebin Creek Trail and Plenty River Trail; on-road facilities and a geographical location and existing rail infrastructure which supports cycling.

Providing for cyclists is considered an important component of an integrated transport system and to developing a sustainable urban life in the 21st century. In 1996, Banyule produced its first municipal wide cycling strategy¹ - the ***Municipal Bicycle Strategic Statement*** - to help focus attention on making the most of this form of travel. Since then, there has been significant change in our understanding of current and future transport issues including a greater appreciation of sustainable transport choice, efficient and effective travel, climate change, greenhouse emissions and the phenomenon of “peak oil”. As a result, Council commissioned its Engineering Services department to develop a new Banyule Bicycle Strategy in October 2008. In addition, Council appointed Bicycle Victoria through its Super Tuesday Bicycle Counts program and Bike Scope survey to assist with the community consultation process.

The revised Banyule Bicycle Strategy 2010-2020 assesses the current cycling needs and infrastructure within the community in addition to identifying new directions and priorities for future cycling facility provision. It researches and specifies the strategies needed to achieve a consolidated cycling network in accordance with the objectives of the Council's City Plan and the Banyule Integrated Transport Strategy. The Strategy is an overarching document that provides the vision for the Banyule bicycle network for the next ten years and should be read in conjunction with the *Banyule Bicycle Implementation Plan*. It will assist in obtaining Government funding support, setting priorities and ensuring the needs of existing and potential cyclists are met.

1.1 Banyule City Plan

The 2009-2013 City Plan is built around a strong vision for Banyule. This is;

“Banyule, a green, liveable and prosperous city, sustaining a healthy and engaged community.”

In relation to the PLACE: SUSTAINABLE AMENITY AND BUILT ENVIRONMENT objective:

Enable Banyule's buildings, places and spaces to be more sustainable for communities to live, work, shop, move and play locally.

this will be achieved by planning and managing transport interests for the local community for a more sustainable and integrated transport system. Council will focus on:

- Partnering with key agencies to explore and advocate for the expansion, improved access, connectivity and systemic upgrade of the public transport network and road infrastructure improvements.

¹ Banyule City Council, *Municipal Bicycle Strategic Statement*, August 1996

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- Developing, planning and prioritising for improved walking and cycling travel solutions for local destinations.
 - Working in partnership with the community and State Government to deliver safer and more efficient transport links within Banyule and the region.
 - Investigating funding opportunities to support and encourage wider community participation in active transport modes.

1.2 Banyule Integrated Transport Strategy (2003)

Banyule City Council adopted the Banyule Integrated Transport Strategy in July 2003. The aim of the Banyule Integrated Transport Strategy is to guide the provision, use and development of transport facilities for the general community. It incorporates environmental and social objectives while addressing the municipality's transport needs.

Transport demands are forecast to grow in the future due to projected population growth to the north and east of the municipality; population and commercial growth in the principal, main and neighbourhood development of land within the municipality; new transport corridors creating additional travel and employment choices to the south of the municipality; and socio-demographic changes within the municipality.

The main thrust of the Banyule Integrated Transport Strategy is to develop a more sustainable urban form by better integrating transport and landuse planning, reducing the need for private car transport and increasing the use of environmentally sustainable transport. The Banyule Integrated Transport Strategy identifies bicycle travel as a key transport issue. The objective described in the Transport Strategy for cycling is to provide:

"A safe network of bicycle routes which encourage cycling as an alternative to other forms of road transport and as a recreational pursuit."

The Transport Strategy proposes a range of 11 actions relating to the provision of safe and direct network of bicycle routes, improved bicycle access to all key destinations and activity centres, and promotion of cycling. It sets a number of key targets to improve cycling facilities and increase the number of cycling trips in the municipality. These include:

- By 2012, the percentage of all cycling trips in Banyule will increase from 1.5% currently to 6% of all transport trips.
- By 2012, all of the on-road and off-road sections of the Principal Bicycle Network in Banyule will be constructed.
- By 2012, 20 kilometres of on-road bicycle lanes on local streets will be installed.

1.3 North East Integrated Transport Strategy (NEITS) (2007)

In 2007, the Department of Transport released the North East Integrated Transport Study, comprising the municipalities of Banyule, Manningham, Nillumbik and Whittlesea. The purpose of the Study was to create a regional strategy for the development and management of transport and landuse patterns that meet the needs of the region for the next 20 years. The focus is on the regional-scale elements of the transport system.

Specifically, in relation to cycling the Strategy proposes:

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- Implementing new links to resolve identified strategic gaps in the Principal Bicycle Network (PBN).
- Fully implementing the remaining sections of the PBN within the life of the Strategy;
- Identifying opportunities for bicycle lockers and cages to be installed at selected rail stations;
- Developing and improving cycle links to access Activity Centres and rail stations and strategic bus interchanges; and
- Supporting and planning for improved cycling access within Structure Plans.

1.4 Background to the Banyule Bicycle Strategy 2010-2020

In the late 1980's, three former municipalities (Diamond Creek, Eltham, Heidelberg) which now constitute the City of Banyule each developed bicycle studies. The three studies were Councils' "first time" approach to bicycle planning and undertaken during a period when the need for bicycle planning at the local level was becoming more widely recognised. The studies' primary objectives were to identify the cycling population and to define the main commuter routes and potential off road trails.

Following amalgamation of Councils in December 1994, a Municipal Bicycle Strategic Statement² was developed for Banyule based on the previous strategies and the local cycling environment. The Statement sought to encourage and promote bicycle usage, at a time when there were minimal facilities or strategic planning for bicycle travel. In setting the framework for cycling facilities and programs in Banyule, the Statement sought to provide a local plan complementing the cycling initiatives being undertaken throughout the metropolitan area.

The Statement included actions to improve the on-road and off-road bicycle network, as well as infrastructure, maintenance, safety and encouragement actions to make cycling a more integral part of the transport system in Banyule.

The Statement identified 114 actions to achieve a consolidated cycling network, including 86 relating to recommended bicycle routes, 13 to bicycle infrastructure and 15 to behavioural programs. The Statement also detailed thirteen local on road advisory routes (using mainly lightly trafficked roads with some off-road elements) to provide alternative passage to facilities such as shopping centres, community facilities, sports arenas, schools, rail stations and links to off road trails. Each route included standard advisory signs to be provided along the route with a review of bicycle parking facilities at the activity centres along the route.

Achievements from the Statement include:

- A review of all routes on the bicycle network to determine their suitability, with recommendations for amendments to improve safety, continuity, access to facilities, and municipality wide coverage.
- Development of a maintenance program for off-road trails.
- A review of bicycle parking facilities and a lean rail installation program.
- Significant upgrading of trails including the Plenty River and Darebin Creek trails.
- Preparation of a Discover Banyule 'Bicycle Routes, Leisure Facilities and Parklands' colour map.

² Banyule City Council, *Municipal Bicycle Statement*, August 1996

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- Installation of bicycle lanes on sections of the Principal Bicycle Network - Lower Heidelberg Road, Greensborough Highway, St Helena Road.
 - Construction of a shared trail through Creek Bend Reserve and River Gum Walk to offer a viable cycling alternative to Rosanna Road.

A partial review of the Municipal Bicycle Strategic Statement was undertaken in 2000 in advance of the adoption of the Banyule Integrated Transport Strategy in order to address some immediate bicycle issues including local street bicycle routes, bicycle line-marking and the needs of younger cyclists, including BMX facilities.

In 2007, Council developed a Banyule Bicycle Policy which set out Council's overarching vision and policy principles in relation to cycling in the municipality.

The overarching **VISION** of the Bicycle Policy is:

Banyule has safe, convenient and accessible conditions for commuter and recreational cyclists of all ages and abilities. Bicycle on and off road networks provide mobility and links to other transport modes, activity centres, community and recreation hubs, while complementing Banyule's natural environment, community character and overall quality of life. The health and wellbeing benefits of bicycle use will be well recognised.

The **PURPOSE** of the Policy is to:

- Enhance the liveability and environmental quality of communities by improving opportunities for bicycle activities in the urban environment and in parks and reserves.
- Enhance cycling options so that the community, regardless of location or socioeconomic status, can choose cycling as a convenient and comfortable mode of transport.
- Improve and promote the safety of bicycle travel throughout the bicycle on and off road network in Banyule.
- Strengthen the links between Council's on and off road bicycle networks.
- Improve the health of the community by making it easy and convenient to cycle on a regular basis.
- Upgrade Council's off road shared trails to meet the needs and requirements of both recreational and commuter cyclist.
- Recognise Activity Centres as key destinations for cycling trips to enable local economic growth, community health and wellbeing.
- Support a greater proportion of transport trips within and to Activity Centres to be undertaken by cycling.
- Develop and implement a comprehensive Bicycle Strategy for Banyule.

2. STRATEGIC CONTEXT

2.1 Banyule – the place and people

Banyule City Council is an inner northern eastern municipality approximately 12km from the Melbourne Central Business District. Recognised for its open spaces and plentiful parklands along the Yarra and Plenty River valley, the council spans an area of 63 square kilometres from Ivanhoe in the south to Eltham North, and from Heidelberg West to Montmorency in the east.

The City of Banyule is currently undergoing a period of change in relation to its population profile and density; firstly, the average age of residents will continue to increase, and secondly, higher density housing will be facilitated particularly in three specific Activity Centres within the municipality (Ivanhoe, Greensborough & Heidelberg). These changes and the fact the current bicycle strategy was developed and adopted over ten years ago have lead to the Council's need to review and update the strategy.

The characteristics of Banyule residents and their attitudes to travel have a significant influence on cycling needs and demands. The City has a resident population of approximately 114,200 persons (ABS Census 2006), this figure is expected to remain relatively stable over the next 20 years, however, there will be an appreciable change in the age structure of the resident population over the next 20 years. People aged 50 years and older currently represent about 30% of Banyule's population. This group is projected to increase in size to over 40% of Banyule's population by 2031.

Research on the nature of trips, modes and destinations within the municipality has revealed valuable information for bicycle and cycling planning purposes.

- Most vehicle trips are not made to work, but are short trips under 5km, made for purposes such as shopping, social/recreational, or personal business.
- 38% of Banyule residents work locally within the municipality.
- 1.3% of Banyule residents choose cycling as their travel to work transport choice.
- One in twelve households does not own a private car, this increases to one in five households in Heidelberg West, Bellfield and Heidelberg Heights.
- Council's Recreation Strategy has identified that many recreation opportunities are limited to those that can be accessed free of charge and that the provision of parks, playgrounds and bicycle paths is critical in this area.

More detailed information on cycling in the municipality and more generally in metropolitan Melbourne can be found in Chapter 3: The Cycling Environment in Banyule.

2.2 Federal and State Policy

The State Government, and to a lesser extent the Federal Government have important roles to play in the management of Melbourne's transport system and establishing a metropolitan-wide transport framework. Surrounding municipalities also play a role in influencing traffic patterns and movements. Therefore, the policies and initiatives of each level of Government provide an important context for Banyule's Bicycle Strategy. To inform the development of the strategy, it is important to recognise and consider existing policy regarding cycling and ensure that the bicycle strategy aligns with policy direction.

Federal and State policy in relation to cycling support:

- a more sustainable use of energy and natural resources in urban areas through integrated urban and transport planning;
- safe road use for the whole community;
- increased cycling and walking for transport and recreation to enhance the well-being of all Australians;
- more efficient use of existing and future residential and commercial land and infrastructure;

2.1.1 Federal Policies

National Greenhouse Strategy – (1998)³

The National Greenhouse Strategy is the primary mechanism through which Australia's international commitments in relation to greenhouse gas emissions are met and includes a comprehensive approach to tackling greenhouse issues. The Strategy focuses on improving awareness and understanding of greenhouse issues, limiting the growth of greenhouse issues and enhancing greenhouse sink capacity and developing adaptation responses.

Australian National Cycling Strategy 2005 - 2010

The Australian National Cycling Strategy guides and support bicycle related investment across Australia and sets objectives of relevance to the Banyule Bicycle Strategy. The priorities for the Australian National Cycling Strategy are:

- Improving coordination of activities relevant to increased cycling in the Federal, State and Local Governments;
- Including cycling as an essential component in integrated transport and land use planning in all spheres of government;
- Creating infrastructure and facilities that support increased cycling;
- Enabling and encouraging safe cycling;
- Providing leadership and developing partnerships to support and promote cycling in Australia; and
- Developing the skills needed to undertake actions that will increase cycling.

2.1.2 State Policies

Melbourne 2030

The State Government's Metropolitan Strategy '*Melbourne 2030 – planning for sustainable growth*' aims to integrate land use and transport planning around networks of activity centres to create a balanced and workable city. Within the City of Banyule, Greensborough is one of Melbourne's 25 Principal Activity Centres, while Heidelberg and Ivanhoe are Major Activity Centres. Another 14 centres across Banyule have been identified as Neighbourhood Activity Centres.

In achieving better transport links, *Melbourne 2030* proposes to deliver:

- an upgraded public transport network that provides cross-town links and is faster, reliable and efficient;
- better management of the road system;
- reduced emissions from traffic; and
- planning that considers cyclists and pedestrians.

³ Commonwealth of Australia, *National Greenhouse Strategy*, 1998



Melbourne 2030 identifies that active modes, including cycling reduce the growth of motorised travel and improve the health of the community. The Strategy commits to completing the Principal Bicycle Network by 2015 (subject to funding).

Individual initiatives to encourage cycling include:

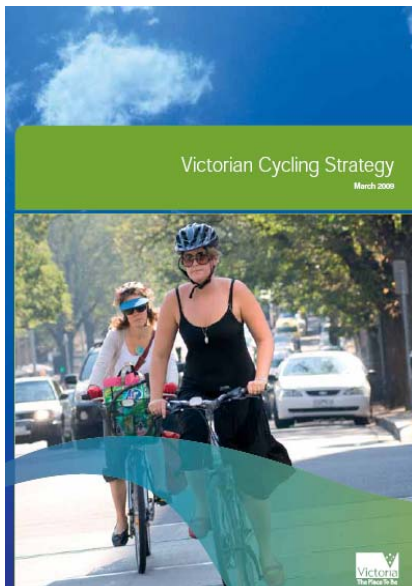
- Continue to develop the Principal Bicycle Network – to be completed (resources permitting) by 2015 – and give priority to sections that link with activity centres;
- Amend planning and/or building controls so that end-of-trip facilities for bicycles are provided in commercial buildings;
- Provide improved facilities, particularly storage, for cyclists at public transport interchanges and rail stations; and
- Develop a bicycle action plan which brings together all elements needed to substantially increase bicycle use.

Victorian Transport Plan

The *Victorian Transport Plan* released in December 2008 represents a generational step-up in transport strategy for Victoria. It provides the largest investment (\$38 billion) in transport in the State's history and provides a sequential plan for major transport investment over the short, medium and longer term to respond to current demands and shape Victoria for future generations. Major initiatives include new and more trains, buses and trams; rail extensions and new rail stations, construction of the missing link in Melbourne's ring road, and development of a Principal Freight Network.

Also included in the Plan is a 'Bike Plan' allocating \$105 million to create new bicycle lanes to encourage more people to cycle safely in inner Melbourne, Central Activity Districts and regional areas plus a public bicycle hire scheme for Melbourne's CBD. To enable the "Bike Plan" to be activated, the State Government launched its Victorian Cycling Strategy in March 2009.

Victorian Cycling Strategy



The Victorian Cycling Strategy released in 2009, aims to increase cycling levels across Victoria and position cycling alongside cars, trains, trams and buses as a viable and attractive transport option. The strategy will deliver a better cycling network, promote a culture of cycling, reduce conflicts between cyclists and other road users, better integrate cycling with public transport and integrate cycling with land use planning.

In particular, priority actions include:

- Significant improvement to the on and off-road cycling network within 10 kilometres of the CBD.
- Completing cycling networks in the Central Activities Districts.
- Developing bicycle facilities as part of major transport projects such as road and rail.
- Travel planning and safe cycling programs in Victorian

Schools.

- A range of promotional and educational campaigns and tools to encourage cycling.

Arrive Alive! - Road Safety Strategy for Victoria 2008 – 2017⁴

Arrive Alive 2008 – 2017 is the Victorian Government's new 10 year road safety strategy. It's designed to keep Victoria at the forefront of Australian and international efforts to reduce road trauma, to deliver further major improvements to our road transport system, and to improve safety for all Victorian road users. Safer cycling is a paramount element of the strategy.

Victorian Trails Strategy 2005 - 2010⁵

Victoria has an extensive network of trails for locals and visitors alike to enjoy. These trails give people great opportunities for the healthy enjoyment of the natural environment and access to scenic play. The Strategy presents a whole of government approach to trail development and promotion. The Strategy ensures that the trail network meets current and future community needs. Research shows that 13% of metropolitan Melbourne trail users are cyclists.

Travel Smart Local Government Grants Program

The Travel Smart Local Government Grants Program is a travel change behaviour program administered by the Department of Transport which offers funding to Councils for community education programs that seek to reduce the number of car trips made and increase sustainable transport use, including walking, cycling and public transport. Banyule has been successful in obtaining funding to initiate travelsmart programs at the Austin Hospital and the Ivanhoe Grammar Schools.

Banyule Planning Scheme - State Planning Policy 18.03

State Planning Policy includes an objective of integrating bicycle travel with land use and development planning and encouraging cycling as an alternative mode of travel. To achieve that objective it provides that wherever possible, off-road bicycle networks should be planned for in new development and responsible authorities should require that adequate bicycle parking and related facilities to meet demand be provided at education, recreation, shopping and community facilities when issuing planning approvals.

2.3 Local Policy

In addition to Federal and State policies there are also many Council policies and strategies which provide background and guidance for the development of the Bicycle Strategy:

Banyule Planning Scheme - Municipal Strategic Statement⁶

The Banyule Municipal Strategic Statement sets the direction for land use and development in Banyule in relation to nine key elements and nominates objectives, strategies, and methods of implementation in relation to each element. Two of the key elements identified in the MSS are relevant to this Strategy.

- Transport and Accessibility which includes an objective to:
 - *Achieve safe and suitable pedestrian and bicycle access within the municipality,*
To be achieved by:
 - *Encouraging the provision of a safe, linked system of bike and walking trails throughout the municipality as an alternative to vehicular transport*
 - *Encouraging a safe, continuous, direct and convenient local on-road bicycle network.*
- Recreation and Tourism which includes strategies that:

⁴ VicRoads, *Road Safety Strategy for Victoria 2008-2017 Arrive Alive!*, 2008

⁵ Parks Victoria, *Victorian Trails Strategy 2005-2010*

⁶ Banyule City Council, *Municipal Strategic Statement*, 1999

- *Encourage the use and safety of walking and bike paths; and*
- *Encourage the linking of walking and bike paths.*

Road Safety Strategy 2003⁷

The Road Safety Strategy provides a framework and direction for Council, enabling it to work systematically to improve road safety at the local level. It provides a means of focussing the activities of different divisions of council, community and other stakeholders on common road safety goals. One of Road Safety Strategy's main strategic directions relates to bicycle safety.

Environment Strategy 2003 and State of the Environment Report⁸

In relation to resources, waste and pollution a policy aim of the *Environment Policy and Strategy* is "to minimise the impacts of pollution on Banyule's environment." A key action is to "encourage and promote alternatives to reliance on the use of private cars for transport by creating and taking opportunities for the enhancement of public transport, trail networks and infrastructure." Encouraging and promoting cycling as an alternative transport choice supports this action.

Banyule Recreation Strategy 2008⁹

Council's Recreation Strategy establishes priorities in supporting and developing the recreational needs of the local community including encouraging bicycle use and providing and maintaining bicycle recreation infrastructure.

Banyule Public Open Space Strategy 2007¹⁰

The Banyule Public Open Space Strategy provides a strategic framework to help guide Council's decision making in relation to public open space for the next five to ten years. This framework and the recommendations of the Strategy are based on a vision for public open space and a set of key principles, which relate to a wide range of relevant issues from environment protection and enhancement to the development of quality community facilities and infrastructure including bicycle infrastructure, from water efficiencies and recycling to dogs in parks, from linear linkages to regional planning and from equitable distribution of public open space to maximizing resources and the co-ordination of planning and management.

Banyule Health Action Plan 2007¹¹

The Banyule Health Action Plan is one of Council's major strategies to promote and support community well-being. Its vision is *Building a Healthy Community Together*. Cycling forms part of its objective of encouraging and supporting individuals and families to participate in physical and leisure activities, and promoting a safer community.

Banyule Greenhouse Action Strategy 2002¹²

Council's Greenhouse Action Strategy addresses energy use and greenhouse gas production by Council and the community. The Strategy identifies opportunities and makes recommendations for reducing energy use and greenhouse gas production in Council's fleet and in transport within Banyule in general.

Banyule Local Area Traffic Management Strategy 2000¹³

⁷ Banyule City Council, *Road Safety Strategy*, 2003

⁸ Banyule City Council, *Environment Strategy*, 2003

⁸ Banyule City Council, *State of the Environment Report (annual)*

⁹ Banyule City Council, *Recreation Strategy*, 2008

¹⁰ Banyule City Council, *Public Open Space Strategy 2007*

¹¹ Banyule City Council, *Health Action Plan*, 2007

¹² Banyule City Council, *Greenhouse Action Strategy*, 2002

¹³ Banyule City Council, *Local Area Traffic Management Strategy*, 2000

The *Local Area Traffic Management Strategy* provides a framework and direction for Council to address the issue of traffic in the local street network. The overall objectives of the strategy are to:

- reduce the use of local streets by through traffic and reduce traffic speed;
- improve safety in local streets for all road users; and
- improve the amenity of residential areas abutting local streets.

3. THE EXISTING CYCLING ENVIRONMENT IN BANYULE

3.1 Melbourne Trends

Information collated from VicRoads - *Cycling in Melbourne (2004) – Ownership, Use & Demographics 1997-1999*,¹⁴ and 2005 survey data indicates:

- 1 in 2 Melburnians own a bicycle.
- On an average day, 65,000 people ride bicycles, undertaking a total of 180,000 bicycle trips. Cyclists are predominantly male.
- Main commuter routes in Melbourne are used by between 2,000 and 4,000 cyclists per day.
- Cyclist numbers on all trails have increased by an average of 20% over the last year.
- 30% of all journeys to work by car are less than 5km, however just 2% of all trips to work are by bicycle¹⁵.
- 60% of cyclists within Melbourne undertake trips of less than 2km.
- Most Melburnians live within a 10-minute bicycle ride of a railway station.
- 49% of cyclists in Melbourne are aged less than 20 years. Most cyclists in the middle and outer suburbs are under 20 years of age. However, in the central and inner suburbs there is a more even spread between 20 and 40 years of age.
- The number of adult cyclists in Victoria has doubled since 1989 while there has been a steady decline in the number of young teenage cyclists (attributed to helmet legislation).

3.2 Cycling Trends in Banyule

The 2006 census information and information sourced from Bicycle Victoria and VicRoads assists to provide a general overview of what is happening in Banyule.

The latest Bicycle Victoria figures show an average rate of bicycle ownership in Banyule at between 0.40 and 0.45 bicycles per person. This is the same as the Metropolitan Melbourne average of 0.44 bicycles per person. The average number of bicycle trips undertaken in Banyule is between 0.06 and 0.075 trips/person/day equating to some 6,850 to 8,550 bicycle trips undertaken daily. A significant proportion of bicycle trips are undertaken for recreational purposes. The Main Yarra Trail carries over 2,500 cyclists every weekday and more on weekends.

School surveys conducted in 1990¹⁶ show at that time, nearly 14% of all students in the Banyule region travelled to school by bicycle. However, 12 years later, this figure had dramatically fallen to just 1.5% of primary school children cycling to and from school. This has been confirmed by studies carried out by the Walking School Bus Surveys and the Victorian Greenhouse Strategy for Schools project. Individual school policy, parent's attitude and distance are all factors affecting the decision to ride to school. Similarly, the Victorian Activity Travel Survey (VATS) date shows that in 1996, about 2% of all trips were made by bicycles, this has since dropped to 1%.

¹⁴ VicRoads – *Cycling in Melbourne (2004), Ownership, Use & Demographics 1997-1999*

¹⁵ State Bicycle Committee (1996) *Report 1994-1996*

¹⁶ Heidelberg Bicycle Strategy

In 2006, research undertaken for the Banyule Recreation Strategy indicated that cycling was the third most popular recreational activity after walking and visiting parks for adult males, with 8% participation. However, when children were asked to identify their favourite recreational activities, cycling did not feature in the top 4 activities for either sex. Residents rated the quality of Banyule's walking paths and bicycle trails as excellent but thought that Council should be more proactive in developing bike paths.

The Ride to Work 2006 Census Data is presented in Figure 1. This plan shows that persons travelling to work by bicycle is highest (as expected) in the inner suburbs, however, there is still support demand from Banyule residents riding to work. Of note, is the higher incidence of cycling among residents of Yallambie and Watsonia.

3.3 Who cycles in Banyule

There are many factors that influence a person's decision to cycle. Understanding why people choose to cycle and the needs of people who do cycle helps inform planning that best caters for existing users and also attracts more people to cycle more often. Cycling takes many forms and caters for many different abilities, with this comes varying requirements for facilities. There are a number of different types of cyclist, which must be considered when planning a network that caters for all users. In Banyule, these types of cyclist are broadly:

- *Commuter Cyclists* – generally more experienced and prefer the direct road network despite the perception of such roads as being hazardous due to their physical characteristics and high levels of motor traffic. Require space and smooth even surfaces. Acknowledged that off-road cycle paths are not viewed as being conducive to commuter cyclists due to their often discontinuous and circuitous nature.
- *Recreational Cyclists* – vary greatly in age, skill and experience. Generally prefer off road paths and local streets. Require good, dedicated connections between on and off road bike paths and facilities such as shade, shelter, water fountains etc. This category can include BMX and off-road dirt cyclists.
- *School Cyclists* – can be divided between primary and secondary school students. Primary school students generally have immature skills, little knowledge of road rules and can ride on footpaths. Secondary school students have more developed skills and confidence but may be risk-takers.
- *General Cyclists* – ride for a variety of purposes including shopping, community facilities and recreational.

3.4 Cycling facilities in Banyule

When the first municipal cycling studies were undertaken, there were few bicycle facilities in Banyule and no marked on-road bicycle lanes. Since then, there has been a substantial investment in cycling facilities in the municipality. These facilities include:

- Over 17km of on-road marked bicycle lanes along Lower Heidelberg Road, Oriel Road, Kylta Road, Greensborough Highway, Greensborough Bypass, St Helena Road, Karingal Drive and McArthur Road;
- Over 37km of off-road shared trails, including through Creekbend Reserve, Rivergum Reserve and Rosanna parklands.
- Bicycle lockers and leaning posts at all premium rail stations;
- Bicycle racks in all major shopping/activity centre destinations;
- Upgrading of Main Yarra Trail, Darebin Trail and Plenty River Trail;
- Mapping and publication of a TravelSmart Map for Banyule, which includes all cycling, walking and public transport facilities.

There are also a number of signed advisory local on-road bicycle routes in the southern half of the municipality. The majority of these routes are along low traffic volume roads and do not have separate bicycle lanes.

Council is also working closely with VicRoads towards the implementation and completion of the Principal Bicycle Network. There are 12km of on-road PBN in place with a commitment from the State Government for completion in 2015 subject to funding. Additionally, 24km out of 29km of nominated off-road PBN bicycle route has been completed. Recent completions include:

- 3km of off-road shared use trail along the Greensborough Bypass between the Metropolitan Ring Road and Diamond Creek Road, as part of the Greensborough Bypass Upgrade Project; and
- 2km of off-road shared used path along the eastern side of Greensborough Highway between Lower Plenty Road and Yallambie Road, complementing the existing northbound bicycle lane on the western side.

While there is a long way to go on the on-road PBN, the off-road PBN is now 85% complete.

Rail Station and Shopping/Activity Centre bicycle parking facilities



Rail Stations	Leaning Posts	Lockers	Parkiteer Cage
Montmorency	-	-	
Greensborough	-	7	
Watsonia	5	4	
Macleod	5	-	
Rosanna	-	-	
Heidelberg	4	8	Installed Oct 2009
Eaglemont	4		
Ivanhoe	4	8	Due in March 2010
Darebin	4		

3.5 Bicycle Links to adjacent Municipalities

There are six municipalities directly adjacent to the City of Banyule. Existing and proposed bicycle links between Banyule and its adjacent municipalities are detailed below:

City of Boroondara

There is a proposal to introduce an exclusive bicycle and parking lane along Burke Road. The Main Yarra Trail links to Banyule near Burke Road in Kew East. A key proposed link is the off-road link between the Darebin Creek Trail and Willsmere Chandler Park in Kew, which also runs through the City of Yarra. The proposal is for a 3 metre wide path which includes five river crossings including a bridge over the Yarra. Completion of the “missing link” would allow full access between the Darebin Creek Trail, Main Yarra Trail and Capital City Trail.

City of Darebin

Banyule shares a number of on-road bicycle links and the Darebin Creek Trail off-road link with the City of Darebin. Banyule’s proposed local bicycle network routes connect with the City of Darebin across the Darebin Creek at Dougharty Road, Southern Road, Gona Street and Livingstone Street. Recently, with funding from the Department of Transport: LAAP program, a bicycle link has been completed along Joynt Street and Waoira Road between Macleod Rail Station and La Trobe University.

City of Yarra

The key off-road link is the connection of the Darebin Creek Trail to the Main Yarra Trail as described above. Another important on-road link is along Heidelberg Road, sections of this link have been completed along Lower Heidelberg Road, Ivanhoe, and also Heidelberg Road, Alphington, however, the connection is proving difficult due to the carriageway width available on Heidelberg Road.

City of Whittlesea

The key on-road bicycle link connections relate to the currently unconstructed Principal Bicycle Network route to run along Plenty Road connecting South Morang, Mill Park and the RMIT campus to Bundoora and La Trobe University. An important off-road bicycle route lies adjacent to the northern carriageway of the Metropolitan Ring Road.

Shire of Nillumbik

Apart from the off-road bicycle link along the Plenty River, and the recently completed bicycle path alongside the Metropolitan Ring Road, there is a lack of formal on-road bicycle links between the Banyule and the Shire of Nillumbik. Diamond Creek Road is on the Principal Bicycle Network and in time will provide a connection.

City of Manningham

The crossing of the Yarra River remains the most important bicycle issue between the Cities of Banyule and Manningham. The bicycle lanes proposed for Bulleen Road as part of the Victorian Cycling Strategy will enhance bicycle links into Banyule from the Eastern Freeway off-road tracks.

3.6 Opportunities

3.6.1 Local Transport Trends and Demographics

The benefits of bicycle travel are not limited to personal health and fitness. The evidence of the past decade would suggest that encouraging cycling can provide realistic solutions to the

transport issues resulting from a dependence on motorised vehicles and at the same time furnish opportunities to boost the local economy.

Within Banyule, approximately 25% of the local workforce works within the local area, with the second most dominant work place destination being the CBD and surrounds.¹⁷ Analysis of the 2006 ABS Census journey to work data for Banyule indicates that:

- 66% travelled to work by car as either a driver or car passenger;
- 12.3% travelled to work by public transport; of which 10.7% travelled by rail;
- 2.5% travelled to work by walking only;
- 0.9% travelled to work by bicycle.

Table 1 shows car ownership levels for households within Banyule and Melbourne. The major differences between the car ownership of the households in the City of Banyule and the Melbourne Statistical Division were:

- A *larger* percentage of households with 2 vehicles (37.5% compared to 35.0%), and;
- A *smaller* percentage of households with No vehicles (7.5% compared to 9.4%).

The largest changes in the household car ownership in the City of Banyule between 2001 and 2006 was with those who owned:

- 2 vehicles (+311 households);
- 1 vehicle (+302 households);
- 3 vehicles or more (+279 households), and;
- No vehicles (-55 households).

Car ownership (vehicles per household)	City of Banyule						
	2006			2001			Change 2001 to 2006
	number	%	Melbourne Statistical Division %	number	%	Melbourne Statistical Division %	
Enumerated data							
No vehicles	3,258	7.5	9.4	3,313	7.8	9.5	-55
1 vehicle	14,673	33.7	33.5	14,371	34.0	34.7	302
2 vehicles	16,306	37.5	35.0	15,995	37.8	35.3	311
3 vehicles or more	6,748	15.5	14.2	6,469	15.3	13.7	279
Not stated	2,502	5.8	7.8	2,130	5.0	6.7	372
Total	43,487	100.0	100.0	42,278	100.0	100.0	1,209

Travel to work (includes multi-mode journeys)	City of Banyule						
	2006			2001			Change 2001 to 2006
	number	%	Melbourne Statistical Division %	number	%	Melbourne Statistical Division %	
Enumerated data							
Train	5,928	10.7	8.5	5,231	9.6	7.7	697

¹⁷ J.A. Grant & Associates, *Banyule Transport and Economic Profile*, 1996.

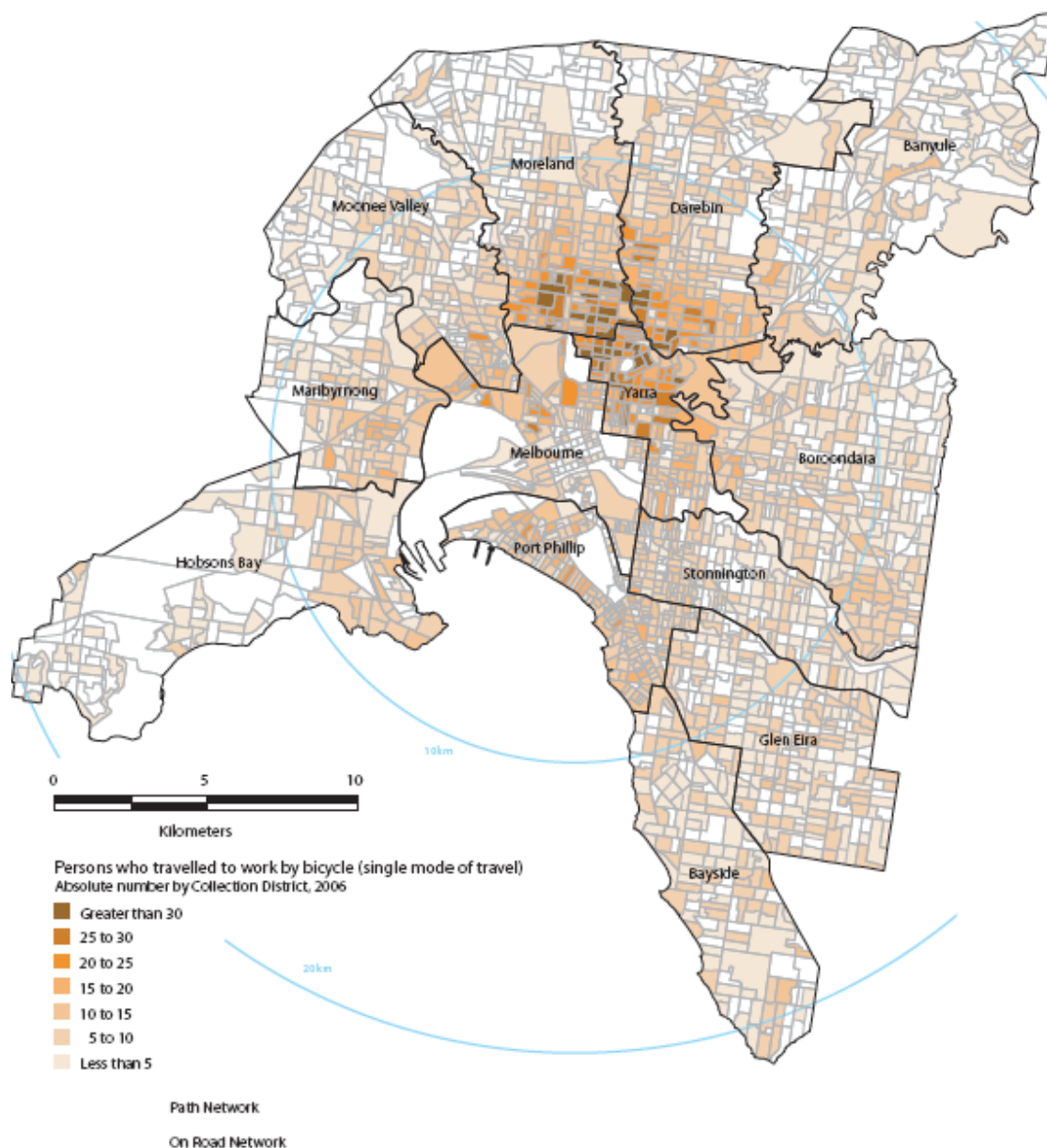
Bus	746	1.3	1.2	716	1.3	1.3	30
Tram or Ferry	100	0.2	2.0	90	0.2	2.0	10
Taxi	81	0.1	0.2	75	0.1	0.2	6
Car - as driver	34,240	61.6	61.1	34,145	62.7	61.7	95
Car - as passenger	2,329	4.2	4.7	2,471	4.5	5.1	-142
Truck	472	0.8	0.9	576	1.1	1.1	-104
Motorbike	306	0.6	0.4	213	0.4	0.4	93
Bicycle	520	0.9	1.1	366	0.7	0.8	154
Walked only	1,365	2.5	3.1	1,187	2.2	2.4	178
Other	379	0.7	0.9	414	0.8	0.8	-35
Worked at home	1,929	3.5	3.7	1,863	3.4	3.9	66
Did not go to work	6,229	11.2	10.1	5,976	11.0	10.2	253
Not stated	1,004	1.8	1.9	1,135	2.1	2.3	-131
Total	55,628	100.0	100.0	54			

There has been a marginal increase in travel to work by bicycle and an 11% increase in the number of public transport trips in the five years between 2001 and 2006. Additionally, the Department of Transport has reported additional 10% increases in rail travel in 2007 and 2008. There is clearly scope to encourage people to seek an alternative means of travel to work and to reduce the dependency on the motor vehicle. The promotion of bicycle travel is one such alternative, given the relatively high proportions of work place destinations within the local area and or within regions covered by public transport links.

While time, cost and environmental issues are relevant in the decision to cycle to work, an increased awareness of personal well being (i.e. fitness, enjoyment and independence) also features. This represents the potential of introducing or “selling” cycling as an “enjoyable” alternative mode of transport whilst at the same time being a positive step in reducing the dependence on motorised vehicular transport.

RIDE TO WORK 2006 CENSUS DATA

Many thanks to the City Of Yarra for providing this study



10km
20km

Persons who travelled to work by bicycle (single mode of travel)
Absolute number by Collection District, 2006

FIGURE 1

The provision of suitably secure and safe facilities for the storing of bicycles and the identification of appropriate, low stress bicycle routes could give cyclists the choice of using the public rail system. Liaison with the Department of Transport, VicTrack and Connex Trains to investigate programs to actively encourage cyclists to utilise the public transport could further contribute to increased patronage of public transport and greater numbers of people choosing to cycle as a means of transport.

3.6.2 Activity Centres

Melbourne 2030 identified over one hundred Principal and Major Activity Centres across Melbourne. Activity Centres are designated areas located along the Principal Public Transport Network within which business, shopping, working and leisure facilities are concentrated. By concentrating development within Activity Centres in highly accessible locations, Melbourne 2030 seeks to make it easier to access services by public transport, walking and cycling.

Melbourne 2030 identifies 4 Activity Centres in Banyule, these are:

- Greensborough (Principal);
- Heidelberg (Major);
- Heidelberg Medical (Specialised); and
- Ivanhoe (Major).

There are also a further 14 local Neighbourhood Activity Centres identified within Banyule, with the largest of these being Watsonia, Ivanhoe East, Rosanna, Montmorency, Macleod and The Mall. Council has developed or is developing Structure Plans for each Activity Centre. Encouraging and providing for cycling to and within these Activity Centres is a key policy of each Structure Plan. A bicycle plan has been produced for the Greensborough Principal Activity Centre. A hierarchy of transport modes will support local economic growth by maximising people movement through streets in a pedestrian friendly environment to support a growing retail, office, and other business sectors that provide local jobs. This hierarchy is represented by the following.

Travel Mode	Priority
Pedestrians	Highest
Public Transport	↑ ↓
Bicycles	
Taxis	
Service Vehicles	
Private Vehicles	Lowest

3.6.3 Tourism

Banyule is well poised to capitalise on the outstanding river systems that run through the municipality. Through improvements to the cycling environment along the river trails (in particular linking the Yarra River Trail to the Plenty River and Darebin Creek trails) there is scope to boost the local economy through tourism and recreational initiatives.

Tourism Victoria's Tourist Development Plan for Melbourne Riverlands¹⁸ has as a priority the enhancement of linkages and trails to grow tourism in the region:

¹⁸ Tourism Victoria, *Tourist Development Plan for Melbourne Riverlands*, 1997

- The linking of Melbourne Riverlands with the State-wide signage strategy undertaken by Tourism Victoria and VicRoads, for the development and funding of a multiple tier signage strategy for the State, and
- The development of Yarra River trails, and linkages across the river, in conjunction with Parks Victoria, with the view to moving visitors to the area off established feeder routes, to explore other areas and thereby extend their visit and expenditure.

Actively encouraging people to utilise Banyule's cycling assets is mutually beneficial in terms of increasing awareness of cycling as both a recreational and transport vehicle while at the same time providing an opportunity for local business to tap into a growing commercial market.

Targeting markets such as cycling to a tourist attraction linked to social activities (by promoting the link between the bicycle networks and Banyule's historic, natural and built assets) could create an opportunity to entice people into the local area and contribute to the local economy.

3.6.4 Climate Change and Environment Concerns

Knowledge of environment, climate change, greenhouse emissions and peak oil issues and consequences has increased considerably in the last few years. This knowledge combined with a desire by many residents to make a positive contribution to their local environment has resulted in greater uptake in cycling and a need for improved cycling routes and facilities throughout the municipality.

3.7 Constraints

3.7.1 Social Attitudes and Behaviour

It is important to examine the attitudes and behaviour towards cycling and cyclists, in order to better understand why many people do not ride bikes and what might make them take the first step towards using a bike for their journeys. It is through the recognition of these attitudes and behaviour traits that changes must be instigated.

- ❑ **Cycling in Childhood** - Cycling tends to be associated by many with childhood and as a child's activity.
- ❑ **Teenage Attitudes** - Because cycling has been associated with childhood it tends to be given up in teenage years. Many teenagers see cycling as 'boring' or 'too much effort' or that leaving the bicycle behind is the 'next stage of growing up'.
- ❑ **Beyond Teenage** - For some people, the status aspects continue beyond teenage and the car becomes a symbol of newly acquired earning power. For others, practical decisions enter into whether the bike is the most pertinent form of transport; the length of the journey, the type of job, the carriage of children or luggage.
- ❑ **The Non-cyclists' image of cyclists** – Whilst research shows that people have difficulty in describing a typical motorist or pedestrian, they have more definite views on the typical cyclist. Most cyclists are thought to be either children, university students, cycling or keep fit fanatics, people who are too poor to afford to buy a car or pay for public transport.
- ❑ **The cyclists' image of cyclists** - Research shows that cyclists generally see themselves as a minority group and to some; this gives them elevated status as a road user or simply, a sense of achievement or style in being a cyclist. They often feel that non-cyclists regard them as unusual or even eccentric.

-
- **The cyclists' image of drivers** - Many cyclists are indignant about motorists, and while cycling, they regard drivers as a potential threat and danger to their personal safety. For some, mostly male cyclists, the perception is that most drivers are incompetent, impatient, or ignorant. They drive too close and treat the cyclist as if they don't exist. This is often expressed in aggressive cycling, to show a demand to be given road space.

3.7.2 Road Safety

Perception of poor road safety is a significant deterrent to cycling. Cyclists are particularly vulnerable as road users with research indicating that a significant number of injuries are not reported. The major injury sustained by a bicyclist involved in a fatal road crash is to the head.

Studies have revealed that the foremost factor which deters people from either taking up cycling or cycling more frequently, is the fear of crashes with motor vehicles. This fear is further accentuated by the attitudes of many drivers towards all other road users. Despite the increase in cycling participation there remains a perception that riding a bicycle is a dangerous activity, particularly cycling on main roads.

The bicycle casualty crashes were identified using VicRoads CRASHSTATS database and refer to crashes occurring on roads or pathways that are reported to the Police and resulted in a fatality or a personal injury. Many crashes particularly of a minor nature are not reported to the Police so the incidence of crashes is much higher than reported. Analysis of the bicycle accident data for the City of Banyule demonstrates an increase in the number of bicycle accidents over the past five years to June 2007, which may be partly due to an increase in cyclists. In the five-year period to June 2007, 84 bicycle crashes were recorded compared to 74 bicycle crashes in the previous five years 1997-2002.¹⁹ No fatalities were recorded in the latest 5-year period. Whilst the overall number of bicycle crashes (causing an injury) has increased, the ratio of serious to less serious injuries has decreased to 32% serious/68% non-serious, compared to the previous 5 years of 45%/55%.

Five year Bicycle Accident Summary for Banyule

	Accident Count	Percentage
Fatal	0	0.0%
Serious Injury	27	32.5%
Other Injury	56	67.5%
Total	83	100.0%

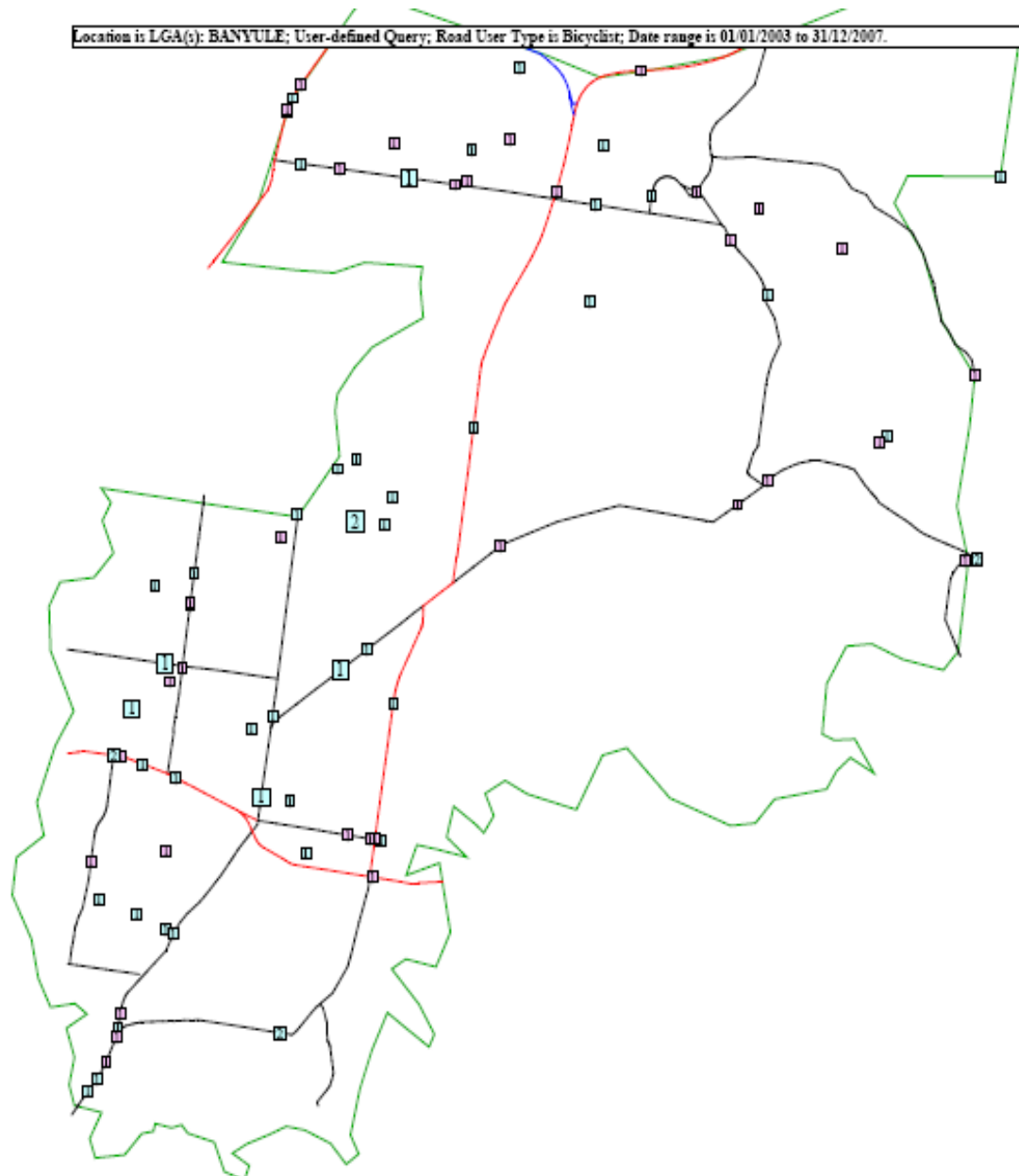
Cyclists account for 6% of all road crash victims on Banyule's roads. 22% of all injuries are in the 4 to 17 age group with the highest rates in the 12 to 17 age group. All the injuries sustained in this 4 to 17 year old age group, bar one, involved male cyclists. Interestingly, the percentage of accidents involving young cyclists has halved compared to the previous five years.

Bicycle accidents are generally spread evenly throughout the municipality, with minor concentrations around Waiora Road and on local roads in Heidelberg West and Heidelberg Heights. Clusters of accidents also occurred along Burgundy Street in the vicinity of Upper Heidelberg Road, along Waterdale Road in the vicinity of Dougharty Road, and in the area surrounding Grimshaw Street and Plenty Road. The majority of accidents occurred on arterial roads. The analysis of the CrashStats indicated that 58% occurred at intersections and 42% occurred at mid-block locations.

¹⁹ VicRoads *Crashstats Data*, 2008

Interestingly, no intersections have been identified as bicycle crash blackspots with a minimum of three bicycle crashes per intersection in the last five years to 31 December 2007. Two bicycle crashes per intersection were recorded at the following four sites:

- ❑ Intersection of Jacka Street and Ruthwen Street, Macleod West
- ❑ Intersection of Main Street and Fitzsimons Lane, Lower Plenty
- ❑ Intersection of Bell Street and Oriel Road, Heidelberg West
- ❑ Intersection of Lower Heidelberg Road and Wilfred Road, Ivanhoe



3.7.3 Standard of Off-Road Trails

Banyule has an off-road bicycle network consisting of approximately 38km of shared trails, a majority of which is on land owned and managed by Council. The standard of trails on Banyule's network varies considerably, as does the type of surface material used in various sections. There are some sections of the network, particularly those completed in more recent years e.g.; the Banyule Shared Trail and the section of the Plenty River Trail through the Heidelberg Golf Club, which meet the standards specified by AustRoads. However at the other end of the spectrum there are substantial sections of the network, which fall well short of the minimum standards, particularly sections of the Plenty River Trail which was built prior to the establishment of Banyule. At the time these trails were built, standards were very different. Standards and community expectations are now much higher.

The Banyule shared trails network is made up of trails constructed of the following materials:

Asphalt 32.8%

Concrete 15.8%

Lilydale Toppings/Granitic Sand 51.3%

Surface type continues to be a point of debate within the community. Many walkers and joggers prefer a granitic sand type surface as it is less likely to cause impact, or jarring injuries. However cyclists, particularly the growing numbers of commuter cyclists using the shared trails network, prefer a sealed surface. Council in recent years has adopted the general practice of constructing new sections of shared trail in coloured reinforced concrete.

In addition to the inadequate standard of some sections of the trail network, there are also maintenance issues that will need to be addressed. Due to substantially increased usage of shared trails, particularly by cyclists, maintenance standards need to also be substantially improved.

It is important that Banyule develops and applies a standard of off-road trail which is widely accepted. Currently AustRoads has a set of standards for off-roads shared trails which is widely accepted as the current standard. Basically, the AustRoads standards recommend a smooth sealed surface with a minimum width of 2.5 metres, with centre line. The preferred sealed surface is concrete as it is less prone to tree root damage and generally has a much longer low maintenance life than asphalt. In order to achieve this basic standard throughout the Banyule's section of the network it will cost over \$1.7 million. However, there may be sections of the network which are more heavily used, particularly the Main Yarra Trail, where Council would be wise to increase the trail width 3 metres, or possibly even 3.5 metres to allow for greater usage. Council has already taken this approach on the Banyule Shared Trail, between Banksia Street and Lower Plenty Road, where, in conjunction with VicRoads it has constructed a 3 metre wide concrete trail.

3.7.4 Sharing road space and off-road paths with cyclists

The off-road bicycle trail network in Banyule comprises extensive routes linking the municipality's parks and reserves, leisure facilities, railway stations, shopping centres and other points of interest. The trails are shared with pedestrians and can be used by all members of the community including walkers, wheelchair users, skaters and runners/joggers. It has been clear during recent consultation processes that the community is divided over sharing trails and having cycle trails in some local parks, with many opposing shared trails on the basis of reduced

amenity, perception of speeding cyclists, conflict between pedestrians and cyclists and environmental concerns.

Careful consideration needs to be given to all proposed bicycle route and facilities, to ensure that they:

- fit in with the local environment and community,
- result in minimal damage to or loss of vegetation,
- composed of suitable and satisfactory surface material,
- designed to minimize conflict with pedestrians and enhance accessibility, and
- users are educated on the appropriate way to use shared trails.

3.8 Funding/Resources

3.8.1 Local Funding

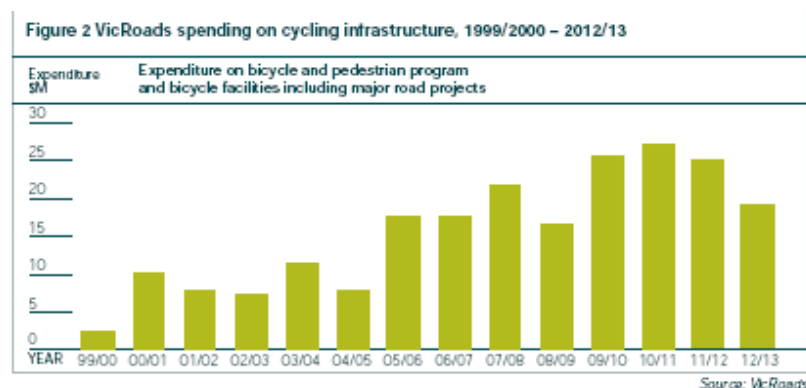
Over \$1 million funding has been committed through Council's New Works and Services Program in the last three years for the provision of bicycle paths and facilities to improve cycling in the municipality. This funding has been used for a variety of bicycle projects including local on-road bicycle development, bicycle path maintenance, shared trails. Funding is also sourced within existing Council budgets affording an opportunity to provide more cycling infrastructure i.e. providing bicycle lanes when a length of road is due for upgrading/renewal of linemarking. There are also opportunities with new works or redevelopment to incorporate shared footpaths and bicycle facilities to encourage and facilitate the cyclists.

3.8.2 State Funding

The State Government through VicRoads provides funding for bicycle facilities in metropolitan Melbourne and in regional cities and towns. These funds are being used to upgrade and complete strategic sections of the PBN in metropolitan Melbourne and Priority Bicycle Routes in regional cities and towns.

VicRoads spent approximately \$13.68 million on bicycle projects in 2007/08 to add about 46.3 km of new bicycle facilities to existing networks. This is divided between the Bicycle Facilities Program and spending as part of major road projects. On urban freeways, where cyclists are usually prohibited, VicRoads often provides high standard off-road paths within the road reservation i.e. along the Eastern Freeway, Northern Ring Road.

VicRoads Bicycle Facilities Program has a \$5.5 million budget for bicycle projects in 2007/08, divided between metropolitan Melbourne (\$4.1m) and regional Victoria (\$1.4m). Banyule attracted \$900,000 which funded Stages 1 and 2 of the Greensborough Highway off-road shared path.



The Department of Transport through its TravelSMART office also provides funding for various programs to encourage people to choose sustainable travel alternatives such as cycling, walking or catching public transport and reducing dependency on the car for workplaces, schools and local communities. In 2006, the TravelSmart office in conjunction with Council produced a sustainable transport access map for Banyule depicting all public transport, walking and cycling routes and alternatives to private car transport. Additionally, funding has been provided for various TravelSmart programs...TravelSmart Communities at the Austin and Mercy Hospitals and TravelSmart Schools at the Ivanhoe Girls Grammar School/Ivanhoe Grammar School. In 2008, funding was allocated for a bicycle path and associated facilities between Macleod Rail Station and La Trobe University. The project was completed in April 2009 providing a bicycle link for up to 20,000 students, staff and the local community.

Council received \$40,000 from Sustainability Victoria for the construction of the **Bike Shed at Malahang Reserve**. The funds will contribute to an energy and environmentally efficient building. The bicycle shed was constructed and launched in October 2009.

4. COMMUNICATION AND CONSULTATION

Banyule engaged in an extensive consultation process to attract as varied a community and stakeholder response as possible. Council wanted to hear from the whole community which includes all categories of cyclists, commuter, recreational, occasional including those residents who did not cycle.

The consultation process involved the following elements:

- Council Officer Meetings
- Community consultation through The Banner newsletter (Council's bimonthly hand delivered newsletter to its residents)
- Community consultation through the ride to work day breakfast held at Rosanna in October 2008.
- Analysis of consultation held with stakeholders as part of the Recreation Strategy.
- Wider community and stakeholder consultation through BikeScope undertaken by Bicycle Victoria.
- Bicycle Victoria and Banyule Bicycle Users Group.

This section provides an overview of the consultation and a summary of the key issues and findings of all discussions.

4.1 Council Officer Discussions

Inter-departmental meetings involving a number of Council officers have been undertaken as part of the information gathering exercise to inform the Bicycle Strategy. The following Council department's views are represented:

- ❑ Parks and Gardens
- ❑ Leisure and Cultural Services
- ❑ Environmental Planning
- ❑ Youth and Community Planning
- ❑ Strategic Planning
- ❑ Engineering Services.

Meetings with various departments highlighted a range of issues that are summarised below:

On-Road Issues

- ❑ Completing the Principal Bicycle Network (PBN) in a timely manner;
- ❑ Bicycle connections and links to Activity Centres;
- ❑ General good connectivity between the PBN and local community facilities such as leisure facilities, sportsgrounds, schools etc;
- ❑ Advocacy to generate more State Government funding towards cycling links and facilities.

Off-Road Issues

- ❑ Need for good connectivity with on-road network;
- ❑ Connection of the Main Yarra Trail and Darebin Creek Trail;
- ❑ Upgrading surface and path width of off-road trails;
- ❑ Separation of pedestrians and cyclists;

-
- ❑ Improved off-road facilities for youth i.e. BMX tracks.

General

- ❑ Need for improved bicycle lockers/cages at all railway stations.
- ❑ Better education for car drivers, cyclists and pedestrians.

4.2 Community Consultation - The Banner Newsletter

In October 2008, Council sought community input to guide the development of the Bicycle Strategy. A short questionnaire was placed in The Banner (a bimonthly newsletter delivered to all Banyule homes) requesting interested residents to have their say on the developing Banyule Bicycle Strategy. Over 100 submissions were received from a wide range of suburbs within Banyule. The following questions were asked:

1. *What issues or challenges do you think need to be addressed in planning for the future of cycling in Banyule?*

Issues and Challenges raised centred around the following theme (in order):

- ❑ Safety Concerns
- ❑ Access and Connection Issues
- ❑ On-road issues
- ❑ Off-road trails
- ❑ Leadership/Advocacy
- ❑ Education and Promotion
- ❑ Maintenance
- ❑ Bicycles and Public Transport
- ❑ Bicycle Parking

Safety Concerns

Make roads and cyclists safer. (3)

Separation of cyclists from traffic on busy roads. (2)

The danger cyclists (all ages) pose to pedestrians by riding on footpaths in a fast, inconsiderate and haphazard manner (5)

Lack of bike lanes on road and inability to get safely to those roads which have lanes.

Cyclists not using bells when passing pedestrians and walkers. (2)

Irresponsible cyclists riding too aggressively on shared bike-footpaths. (2)

Cyclists riding through red lights

Safety for cyclists crossing main roads.

Bicycle lanes that disappear at intersections and roundabouts are dangerous. (2)

Mixing of road/cars and bike traffic.

Making the surface of bike trails safer i.e. reduce skidding (2)

Awareness of cyclists by drivers.

Good manners of all cyclists.

Increased traffic on shared bicycle paths.

Safe bicycle lanes for commuters and families.

Traffic Volumes (2)

Access/Connection Issues

Provide paths that provide access to work and major roads. (2)

Continuity of cycle routes and linking of routes.

Avoid the sudden stop of a bicycle path veering into car traffic i.e. Oriel Road.
Expand the bicycle path system and close up gaps currently present.
Ensure bicycle links between Major Activity Centres and connect all community facilities to the network (2).
Provide better east-west links.
Connect current bicycle tracks to Main Yarra Trail.
Consider a commuter bicycle path link between Manningham Rd and the Main Yarra Trail.

On-Road Bicycle Issues

Ensure there are bicycle lanes on all busy roads.
Provide a safe non-main road cycling route from Macleod through Heidelberg and Ivanhoe to Alphington.
Bicycle lanes need to be added or marked more clearly on arterial roads.
Provide a better network of preferred bicycle routes through Banyule, particularly in the northern half.
Dual use of footpaths for pedestrians and cyclists.
Traffic Volumes.

Off-Road Trails

The increased popularity of cycling particularly people commuting regularly to work and recreational cyclists using the Main Yarra Trail.
Issues around pedestrians, dog walkers and cyclists using the same path.
Trail markings should be clearer.
Links between existing trails.
Defining tracks for walkers and riders especially along the Yarra - especially linking the Darebin Creek to the Main Yarra Trail.
Better all weather commuting bike paths for residents of Banyule
Get rid of Lilydale toppings on bicycle paths and seal all paths for safety reasons. (5)

Leadership/Advocacy

Increased leadership by Council on the need for and construction of commuters and leisure bicycle paths.
Develop a Council Policy and Strategy which will work.
Use Bicycle User Groups as a major contact point for cycling in the city.
Make bicycle funding a priority.
Greater thought should be given to cycling infrastructure during early planning stages of project development.

Education and Promotion

Organise a cycling expo to promote cycling in Banyule.
Create a cycling bus on the Main Yarra Trail.
Cyclist education: Shift away from car mentality and safe cyclist travel (2).
Publish a map of cycle and walking paths in the City. (2)
Address driver ignorance and arrogance.
Address lack of respect of road laws by cyclists.

Maintenance

Address surface issues on the bicycle paths.
Development and maintenance of Main Yarra Trail single track for mountain bike riders.
Road surfaces need to be free of potholes.

Dedicated bike paths need upgrading to eliminate dangers such as steep sections with loose surfaces and which become muddy in winter
Cleaner Roads (stones, broken glass etc)

Bicycles and Public Transport

Innovate links between bicycles and public transport.
More bicycle paths with connections to train stations
Integration of cycling within the public transport system.

Bicycle Parking

Provide better bicycle storage at shops, activity centres and rail stations. (4)
Work with the State Government to build bicycle sheds.
Secure storage of bicycles at shopping centres.

2. *What ideas do you have for addressing these issues or challenges?*

Safety

Spot checking and enforcement of cyclists using bells when required along trails.
Separate signed tracks for walkers and cyclists.
Enforcement of safe areas at intersections.
Safety Signs.
Use green road surfacing to make bike lanes more visible.
Safety island for crossing Lower Heidelberg Road between Banksia and Maltravers Roads.
Policing and issuing fines, education of cyclists to conduct themselves in a safe manner i.e. a bell to let pedestrians know that they are whizzing up behind them and lights at night so that they can be seen.(3)
No parking zones around schools so safer to walk/cycle.
Have some safe bicycle practice areas dotted around the suburb.
Work with other local Councils and State Government to gradually reduce speed limits to 40kph.
Require all cyclists above 14 years of age to be registered and pass an exam on road laws

Access/Connections

Create better bicycle paths along Freeways – to provide a flat and easy ride to work.
Complete the link from Watsonia Station along the power lines to the Plenty River Trail at Lower Plenty.
Create links between the Simpson Barracks and Grimshaw Street linking to the Metropolitan Ring Road and Plenty River Trails. (3)
Connect the Darebin Creek Trail through Bundoora Park, and connect to the Main Yarra Trail. (4)
Create a route via Rosanna Parklands to Cape Street, Yarra Street, Hawdon Street, Banksia Street (off road) to Studley Road then to the City of Darebin.
Construct a bicycle track along The Boulevard south from the Banksia St/Dora St intersection. (3)
Create a bicycle link through Seymour Road to Bonds Lane. Add more bike lanes i.e. Mountain View Road and Sherbourne Road.
Provide improved access between Eltham and Greensborough. (2)
Provide signage from the Bypass Rd trail (Civic Drive) across to Mountain View Road.
Make all main roads more accessible for cyclists by installing on-road bike lanes and banning parallel parking in shopping strips.

On-Road bicycle infrastructure

Continue bicycle lanes through intersections. (2)
Provide Copenhagen-style bike lanes (2)
Provide marked bicycle lanes on major roads. (7)
Have the bicycle lane in the centre of the road.
Dedicated road areas for bicycles only.
Provide bicycle friendly crossing points at major intersections and around shopping centres. .
Provide improved infrastructure - secure parking in/around shopping precincts, safer riding surfaces, clearer line markings, better access from paths to roads, more bicycle boxes at intersections.

Off-Road Trails

Concrete the Main Yarra Trail in an environmentally friendly colour, similar to the Banyule Trail especially in areas prone to gully erosion.(4)
Shared trail from the corner of Greensborough Road and Elder Street in the powerline easement to Plenty River Trail is blocked by residents being permitted to fence off easement as their property. Re-establish the easement through the blocked off section of the easement.
Upgrade all unsealed bicycle paths, improve maintenance and signage, especially the Main Yarra Trail which is unsafe. (2)
Create a wide, paved bicycle route along the Hurstbridge rail line.
Keep dedicated bicycle lanes off-road.
Trails should be sealed with bitumen or concrete. Where trails splits use a colour coded painted line.
Improve existing trails...many are very rough i.e. Darebin Trail.
Have some shaded bicycle stops with water and air available.

Leadership/Advocacy

Meet and consult with community groups including Banyule BUG, walking groups and wheelchair groups for their ideas. (3)
Lobby State Government to provide more cycle tracks throughout Melbourne.
Improve community engagement to ensure community support for bicycle paths.

Education/Promotion

Annual mail out to residents of bicycle routes along with information emphasising health etc.
Increase driver awareness of bicycles through advertising. (2)
Education for cyclists that pedestrians/walkers are entitled to use the path safely.
Making people aware of cyclists particularly at roundabouts.
Encouragement of children cycling.
Run a media campaign with other Councils to promote safe roads for all users.
Take part in annual Bicycle Victoria cycling study campaigns.
Use Banyule Discovery Days to encourage the community to explore the shared trail network.

Funding

Increase funding and gather statistics on bicycle travel to plan a network of arterial "bicycle lanes"
Allocate more Council funding. (3)

Bicycles and Public Transport

Bicycle racks on buses, improved bike lock up facilities at train stations.
Connex to have a train carriage with no seats for bicycles and riders to stand.
Lack of secure storage at railway stations is a strong disincentive to riding.
Work with State Government, Connex and bus companies to improve public transport.

Bicycle Parking

Provide undercover bicycle storage and CCTV security with some bicycle lockers for regular commuters, bicycle racks on buses, trams and trains. (2)

Multi-level carparking could include cages for bicycle.

More bike parking bays in shopping centres (including strip shopping centres). (2)

3. *If you could make one bicycle route/facility improvement in Banyule – what would it be?*

Safety

Provide a safe link to the bicycle trails from Heidelberg hospitals and rail station.

Resurface gravel and rough areas. .

Install speed humps to slow riders.

Improve cycling visibility of the Plenty River path. It is poorly surfaced, wooden slatted bridges are slippery and dangerous, too narrow in sections, no line markings north of Lower Plenty Road, poor signage, too many twisty blind corners, no barriers beside steep embankments.

Off-road trails needs to be smoothed out and the larger rocks removed for easier riding.

On-Road Bicycle Infrastructure

Improve bicycle links from Bolton Street across to Rosehill Road.

Provide a bike lane from Macleod Station to La Trobe University.

Provide a continuous link on Bell Street between the bike lanes on Oriel Road (north and south).

Provide a crossing of Beverley Road at Warringal Park.

Provide bicycle lanes to get cyclists off the footpaths altogether.

Provide a Greensborough to Eltham bike link.

Provide bicycle routes along main road to all schools and La Trobe University.

Provide bicycle routes to all stations in Council area.

Change Rosanna Road to a single Bicycle Lane, single Car Lane.

Introduction of a new bike lane at the Plenty Road exit/on ramp to the Western Ring Road.

Construct a bicycle track on the unmade section of The Boulevard through Ivanhoe.

Create bike lanes along Upper Heidelberg Road and Heidelberg Road for city commuters.

Provide a bicycle route from Lower Plenty Road through green space to Station Road, to avoid dangerous road route to Cape Street and the Main Yarra Trail.

Dedicated merging lane for cyclists crossing Waterdale Road at Altona Street.

Provide a bicycle track from Watsonia (which does not include Greensborough Road) to Ivanhoe. Family friendly with playgrounds along the way.

Develop a route via Seymour Road, Henty Road, Cleveland Ave, Bonds Rd connecting with the Main Yarra Trail.

Off-Road Trails

Link Trails and connect to retail precincts and public transport hubs.

Link the last stage of the Darebin Creek Trail to the Main Yarra Trail. (3)

Link Lower Plenty Trail to Yarra Trail along Plenty River.

Continue the Plenty River track under the Greensborough Bypass and into South Morang. (2)

Improve Plenty River Trail south of the bridge by Heidelberg Golf Course. It is very steep and difficult with loose gravel.

Improve the Main Yarra Trail from Heidelberg to Lower Plenty. Lilydale toppings are not acceptable. Granitic Sand or a combination of Lilydale toppings covered with Granitic Sand would be much better. (3)

Re-route the Main Yarra Trail around The Greenery to eliminate the steep path under Manningham Bridge.

Enable all tracks to join without having to mix with motorists.

Eradication of Lilydale toppings from bike tracks and sealing same appropriately.

More off-road paths and less on road routes.

Parking

Provide secure cycling parking at rail stations particularly at Montmorency and Watsonia Station (2).

Funding

Any commuting paths for cyclists should be funded principally through the State Government but proposals need to come from local councils.

4.3 Ride to Work day breakfast

On 15th October 2008, over 35 cyclists from all areas of Council as well cyclists passing through Rosanna on their way to work at the Austin Hospital and La Trobe University participated in a Ride to Work Day 2008 community breakfast. The breakfast was hosted by Council and held at the Rosanna offices. Cyclists who cycled from as far away as Kensington and Mulgrave joined in with over 100,000 cyclists nationally to participate in the annual Ride to Work day. The Banyule Bicycle Users Group was on hand to give some valuable cycling tips and to advise on some great rides in Banyule. Cyclists on the day raised the following bicycle issues:

- ❑ The new Banyule Trail is proving very popular with families and young cyclists cycling for the first time. Could all bicycle tracks in Banyule be brought up to this standard.
- ❑ Better bicycle connections (particularly off-road) are needed between the Cities of Manningham and Banyule.
- ❑ Off-road bicycle tracks need to be concreted.
- ❑ Better cycling facilities are needed between Macleod and La Trobe University.



4.4 Recreation Strategy and Policy 2008 - 2013

Council recently developed a new five year Recreation Strategy and Policy 2008 - 2013. A series of residents forums conducted in December 2007 produced a number of issues in relation to cycling – these are summarised below:

Bicycle Issues/Gaps:

- ❑ Council should be more proactive in developing bicycle tracks – on and off-road.
- ❑ More seats, shade and shelter are needed along cycling/walking tracks, particularly the popular tracks.
- ❑ Cyclists should be encouraged to use bicycle tracks rather than clogging up roads.

Council focus in the next 10 years should be on:

- ❑ Endeavour to connect bicycle tracks where feasible.
- ❑ Ensure all bicycle facilities are disability accessible.
- ❑ Provide more bicycle lanes on public roads.
- ❑ Ensure easily accessible high grade surfaces.

4.5 Super Tuesday Bicycle Counts

The Super Tuesday count is a bicycle commuter count conducted simultaneously across a number of municipalities. It aims to answer two questions:

- How many riders are there?
- Which routes are riders using?

The project aims to establish a reliable annual benchmark for bicycle commuting to allow those providing bicycle riding facilities to base their judgement on accurate and up to date information. On 17 March 2009, Bicycle Victoria conducted cyclist counts across metropolitan Melbourne, including Banyule.

Cyclists were counted passing 26 sites between the hours of 7am and 9am, throughout Banyule. The following table indicates the count sites in Banyule and the number of cyclists counted at each location.

COUNT SITES IN BANYULE, 2009

Location (Melway Reference)	Legs	Cyclists AM Total
Western Ring Road Trail at end of Macorna Street (10 E10)	2	20
St Helena Road north, Karingal Drive and St Helena Road (21 D1)	3	11
Greensborough Road and Grimshaw Street (20 F2)	4	8
The Circuit and Grimshaw Street (20 J2)	4	10
McNamara Street at Macleod Station, Macleod Parade and Joynt Street (20 A8)	4	31
Waioara Road and Ruthven Street (19 K9)	4	40
Main Rd and Plenty River Trail access path (20 K9)	3	17
Erskine Road and Greensborough Road (20 D9)	3	24
Plenty River Trail - west side of old historic bridge (20 K9)	3	5
Darebin Creek Trail junction near footbridge - west end of Dougharty Road (19 E10)	3	44
Waterdale Road and Dougharty Road (19 G10)	4	31
Banyule Trail and Banyule Road (20 D12)	4	49
Plenty River Trail and Main Yarra Trail junction (32 G2)	3	30
Main Yarra Trail at Plymouth Street (32 E3)	4	43
Main Yarra Trail/Ruffey Creek Trail junction at footbridge near Odyssey House (33 B3)	3	35
Oriel Road and Banksia Street (31 E4)	4	89
Rosanna Road and Burgundy Street (32 B4)	4	49
Upper Heidelberg Road and Banksia Street (31 J4)	4	41
Main Yarra Trail near Yarra Street and Dora Street (32 B5)	3	69
Main Yarra Trail at Yarra Flats access road (32 C6)	4	66
Donaldson Creek Path and Livingstone Street (31 E7)	4	48
Della Torre Crescent and Abercorn Avenue (31 C8)	2	63
Intersection Upper & Lower Heidelberg Road (31 E9)	3	103
Lower Heidelberg Road, Hartlands Road, Warnecliffe Road and McArthur Road (31 K9)	4	23
Heidelberg Road and The Boulevard (31 D10)	3	141
Koonung Creek Trail footbridge south side and Main Yarra Trail (31 K11)	3	160

Not surprisingly, the majority of bicycle movements are heading south-west towards Melbourne's central business district (CBD), which correlates with 2006 Census data which shows that 33% of Banyule riding residents are heading for the City of Melbourne, 28% to a destination within Banyule, 11% to Darebin and 6% to the City of Yarra.

The busiest location was at the Yarra Trail/Koonung Creek Trail footbridge with a total number of riders of 160 between 7am and 9am. Of this figure, 79 riders were travelling south on the Main Yarra Trail, from Banyule across the footbridge near Burke Road North. The busiest on-road location was the intersection of Heidelberg Road and The Boulevard, with a total of 141 riders. Of these, 96 riders were heading south-west towards the CBD. Heidelberg Road forms the main commuter corridor towards the CBD and riders funnel into this corridor from other minor routes such as The Boulevard.

An alternative and significant, though less busy route through Banyule for commuters comprises the Donaldson Creek path to the west of the main Heidelberg Road corridor. This flow takes riders towards and across the Darebin Creek and into Aphington and Fairfield.

4.6 Bikescope

An extensive cycling survey called "Bike Scope" was undertaken by Bicycle Victoria on behalf of Council in May 2009. The "BikeScope" survey specifically targeted local cyclists in Banyule and 736 survey responses were received.

75% of cyclists who completed the survey were male with a 25% female response rate and 42% of survey respondents were aged 35 to 49. Over 50% of respondents cycled more than 50km a week and had a good knowledge of cycling conditions in Banyule and throughout adjoining neighbouring municipalities. The majority of cyclists rode for recreation/social, health/fitness and commuting purposes. The preference was for off-road bicycle tracks but most respondents would ride on-road if there was no alternative.

Amongst many findings, the survey found that the top five cycling destinations in Banyule are:

1. Main Yarra Trail / Banyule Flats
2. Darebin Creek Bike Path/Darebin Parklands
3. Ivanhoe Activity Centre
4. Banyule Flats/Banyule Wetlands
5. Heidelberg Activity Centre/Burgundy Street.

The most popular on-road routes with Banyule are ranked as follows:

1. Heidelberg Road (incorporating Upper and Lower)
2. Greensborough Road
3. Lower Plenty/Main Road
4. The Boulevard, Ivanhoe
5. Oriel Road

When asked to nominate those roads most in need of improvement, the following roads topped the survey responses.

Arterial/Main Roads

1. Heidelberg Road (incorporating Upper and Lower)
2. Lower Plenty/Main road.

-
3. Rosanna Road
 4. Greensborough Road/Highway
 5. Banksia Street

Local Roads (unranked)

- Beverley Road
- Cape Street
- Ellesmere Parade
- Para Road
- The Boulevard

4.7 What would improve cycling?

Research undertaken by the Cycling Promotion Fund and the Bicycle Federation of Australia indicate that there are nine key mechanisms to improve cycling in this country.

- Slower traffic speeds (e.g. 40kms per hour) and traffic calming: this is the most effective way to increase real and perceived safety for people riding bicycles.
- Separating cars and bicycles with bike lanes or dedicated cycling paths that are clearly signposted and marked.
- Connecting bicycle lanes with good intersections treatments, including “bicycle streets” where bicycles have right of way.
- Seamless connections between cycle ways and public transport.
- End of trip facilities (for example, secure bicycle storage, showers and change rooms)
- Extensive driver educations to raise motorist’s awareness of cyclist’s use of the roads and relevant road rules.
- Improving cyclists’ knowledge, skills and safe behaviour.
- Traffic regulations and enforcement that heavily favour pedestrians and cyclists.
- Restrictions on motor vehicles use, including limited parking.

4.8 Communication



The City of Banyule provides TravelSmart maps through its customer service units and external outlets such as libraries, schools and bicycle shops. These maps are a joint initiative with the State Government and provide details of on-road and off-road cycling routes, information about cycling rules and safety, location of cycle shops as well as a full range of information on sustainable transport options available in Banyule i.e. public transport facilities and pedestrian facilities.

Information on cycling is also available on Council's website.

5. REGIONAL AND LOCAL BICYCLE NETWORK DEVELOPMENT

The Banyule Bicycle Strategy sets the framework for cycling facilities and programs in Banyule. The local plan needs to complement the cycling initiatives being undertaken throughout the metropolitan area. Only with State and local governments working in unison can there be the necessary coordinated approach to the issues facing cycling and cyclists.

5.1 Victorian Bicycle Network

VicRoads, Councils, Parks Victoria and the Department of Sustainability and Environment (DSE) have identified routes across the State that are to be developed for cyclists.

These routes have been categorised according to the primary role that they perform for cyclists and the responsibilities of the agencies/organisations that construct and maintain them. Depending upon the primary function that the route performs and the types of cyclists that are most likely to use the route, each route has been regarded as either an arterial bicycle route, a local bicycle route or a recreational bicycle route.

The Victorian Bicycle Network (VBN) is to provide a network of statewide, integrated bicycle routes. The VBN is made up of four components:

- The Principal Bicycle Network (PBN);
- The Metropolitan Trail Network (MTN);
- The Municipal Bicycle Network; and
- Rail Trails

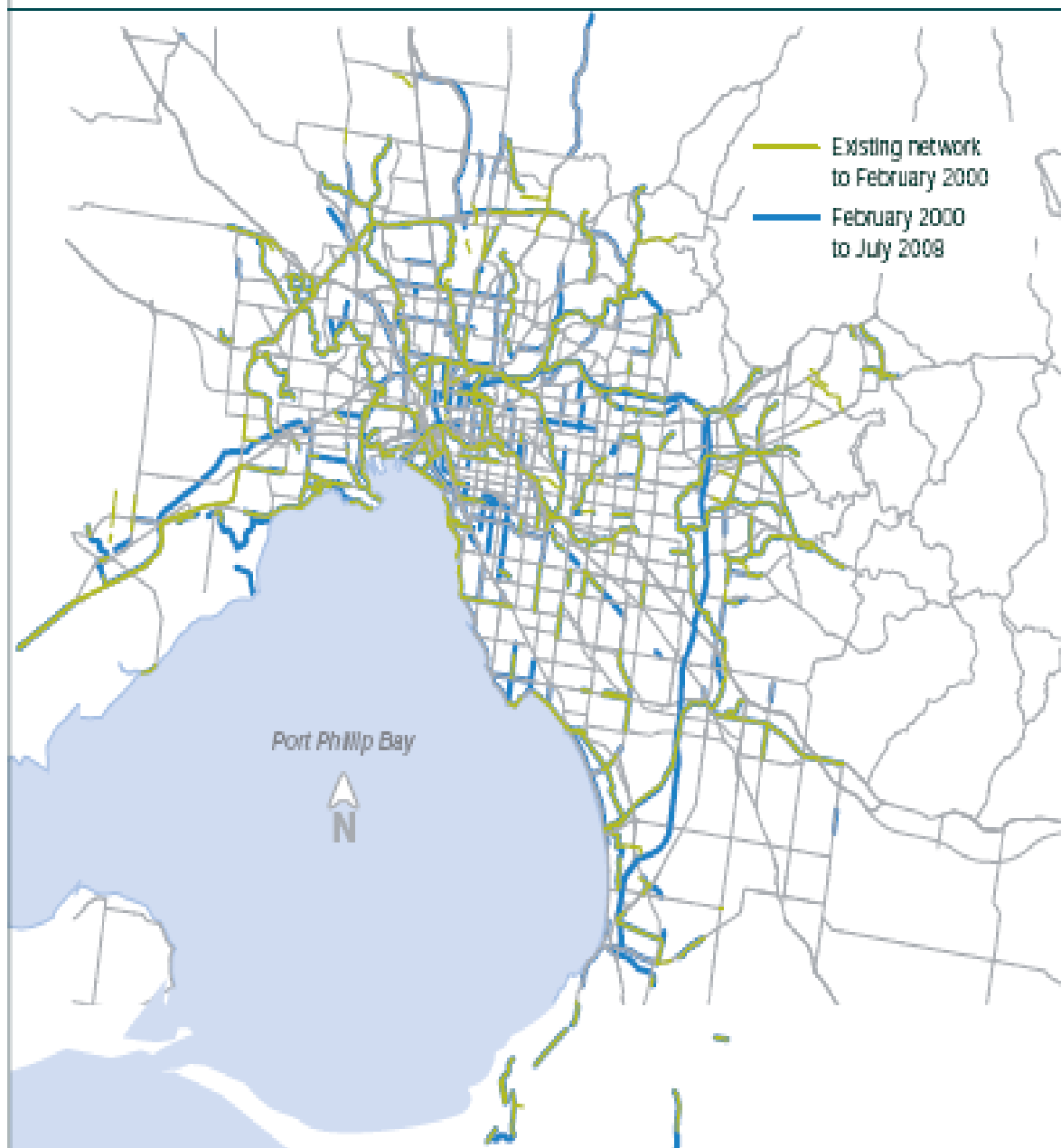
5.1.1 Principal Bicycle Network

In the early 1990's, a Principal Bicycle Network (PBN) for metropolitan Melbourne was developed as part of the Victorian Bicycle Strategy, generally providing a network of priority bicycle routes on a maximum 1.5 kilometre grid. The PBN is a planned network of approximately 3,500 kilometres of bicycle routes throughout Melbourne, 1,250 kilometres of off-road paths and 2,250 kilometres of on-road facilities on the declared main road network. Currently, the network is approximately 35% complete. The government's estimated cost of completing the PBN is \$140 million. Currently, the emphasis is on completing the PBN within 10km of the CBD and then extending the PBN onwards around Activity Centre Destinations, to middle and outer suburbs.

The PBN is essentially a visionary approach to cycle planning and provides a network of arterial and some local routes, where cycling is encouraged and facilities will be provided to encourage and protect cyclists. Its primary purpose is to serve commuter cyclists and cycling for transport.

VicRoads is responsible for the development of the network, although a cooperative approach from all local and state authorities is required to successfully implement the network. The State Government through Melbourne 2030 has committed to completing the Principal Bicycle Network by 2015 (subject to funding).

Figure 3 Bicycle network 2000–2008



Source: WcRoads Spatial Information Services. SIS Job Number 26228, March 2009.

The on-road links through Banyule generally correlate to the arterial road network and involve appropriate engineering measures to facilitate the safer sharing of road space. The key off-road actions of the PBN within Banyule include linking the Main Yarra Trail and the Plenty River Trail and connecting the Darebin Creek Trail to the Main Yarra Trail. An updated version of the PBN

incorporating any new bicycle infrastructure or route changes is provided by VicRoads on an annual basis, and available on the VicRoads website www.vicroads.vic.gov.au.

5.1.2 Metropolitan Trail Network

The Metropolitan Trail Network (MTN) is a network of recreational bicycle routes in metropolitan Melbourne. Parks Victoria has the primary responsibility for managing the implementation of bicycle facilities on the MTN. Bicycle facilities on the MTN can also be implemented by local Councils and by VicRoads.

While the primary function of the MTN is to provide for recreational cyclists, there are a number of routes that are popular with commuter cyclists as well. These routes can serve an arterial cycling function. The MTN is also integrated with the Principal Bicycle Network. The majority of routes on the MTN are off-road, but there are a number of short sections of on-road routes that link sections of off-road paths. Funding for bicycle facilities on the MTN is managed by Parks Victoria through the Parks Victoria Grants Program.

5.1.3 Municipal Bicycle Network

This network is also referred to as the Local Bicycle Network. It is a local network of road reserve and off-road trails that provide local links to the PBN, providing access to local destinations such as activity centres, schools and community centres. Local routes tend to be on quieter roads and through local parks and reserves. These routes are managed and implemented by the relevant municipal council. Most bicycle paths in Banyule connect with paths in neighbouring municipalities to form a connected cohesive bicycle network. Council is active in communicating with neighbouring municipalities as they prepare and review cycling strategies. Council is also active in working to ensure a coordinated approach to routes and facilities across the municipal boundaries.



5.2 Bicycle Route Development

Bicycle planning needs to identify the infrastructure, facilities and programs needed to satisfy the existing cyclists and at the same time encourage new cyclists. The provision and promotion of

suitable bicycle routes is the first step in this process. The river systems that flow through the City provide an excellent opportunity for recreational/commuter bicycle paths. The Main Yarra Trail which in part, runs through Banyule is Victoria's premier off road trail.

While the off road routes may not provide a direct link, the lack of traffic and improved environment can provide a preferable commuting cycling route. There are cyclists who choose the quickest and most direct route and in many instances this is going to involve the use of arterial roads. The perceived advantages of arterial roads include: good continuity and connectivity; higher quality road surface; direct access to activity centres; and facilities such as traffic signals to assist crossing at major intersections. Nonetheless, the cyclist generally has to trade off the foregoing advantages against increased stress from fast and/or heavy motorised traffic.

5.2.1 Principal Bicycle Network

The VicRoads Principal Bicycle Network (PBN) generally correlates with the arterial road network through the City of Banyule and proposes appropriate engineering measures along these routes to enhance the safe integration of cyclists with other road transport.

The State Government's Victorian Cycling Strategy released in March 2009 aims to encourage cycling, complimenting the Victorian Transport Plan and its \$115 million commitment to improving cycling infrastructure. One of the key directions of the Victorian Cycling Strategy is to build cycling networks that connect communities, and as part of this strategic direction, it was determined that the Principal Bicycle Network (PBN) be reviewed. VicRoads is currently undertaking the review.

The new PBN will be destination based, with all routes focussed on and connected to significant and relevant destinations across metropolitan Melbourne. These destinations will include Central Activity Districts as primary destinations as well as a selection of relevant Principal Activity Centres and Specialist Activity Centres.

Bicycle networks will be designed for each catchment that relates to:

- The population density of the catchment;
- Strength of the attraction of the destination;
- Distances that people are prepared to ride (from 3km/15mins to 15km/45mins);
- Maximise directness, separation and priority for cyclists, particularly at intersections;
- Will make use of not just arterial roads, but local roads, rail alignments, utility reservations, parks, creeks and river reservations.

The new PBN is divided into two strands – 1. A Preferred (priority routes) PBN and 2. A Secondary (access and support routes) PBN. The revised Banyule Principal Bicycle Network can be found overleaf. A feature of the new PBN is a designated preferred PBN route along the Hurstbridge Rail Corridor from Ivanhoe Rail Station to Watsonia Rail Station.

In February 2009, the Victorian Cycling Strategy stated its priority actions as:

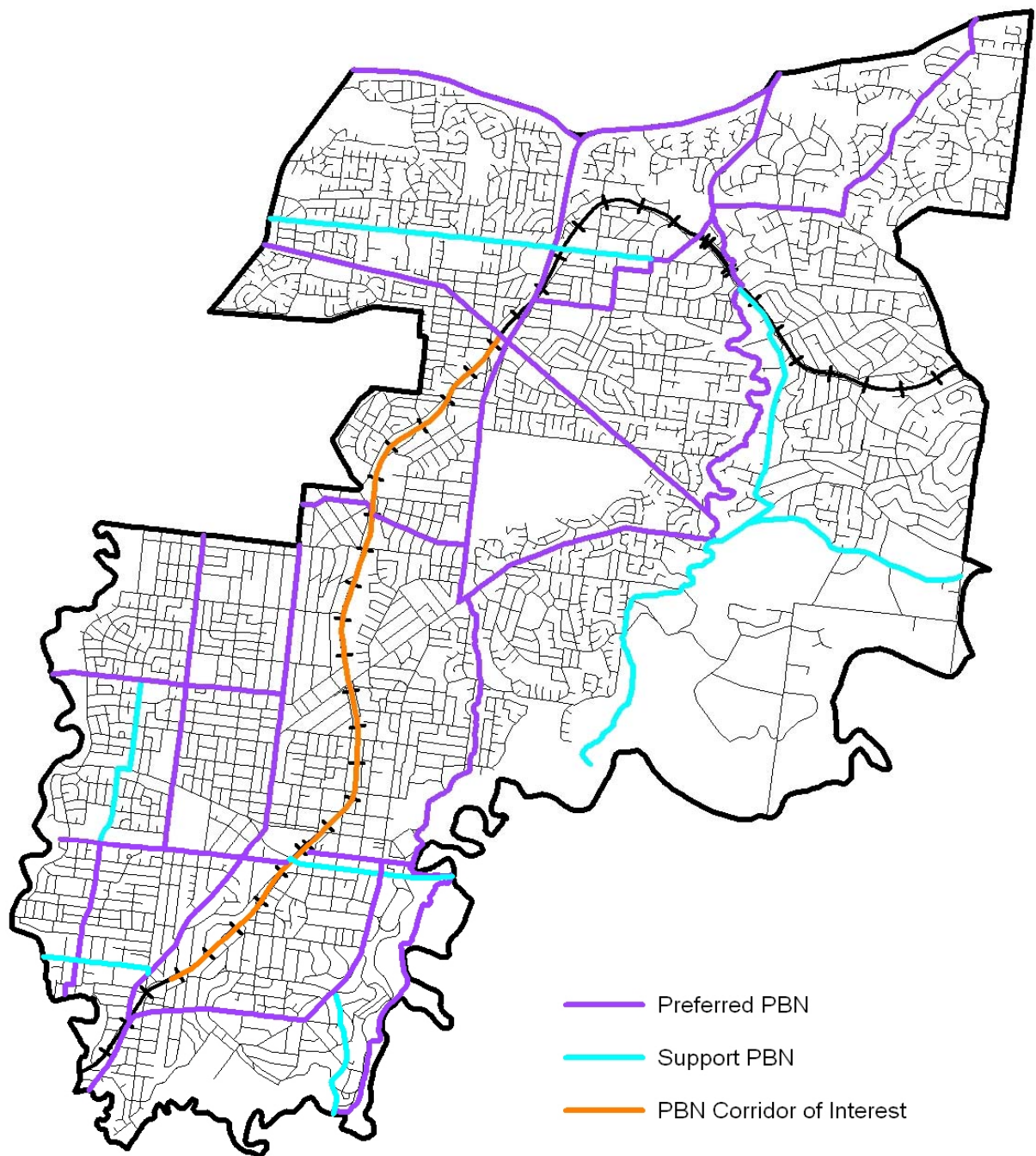
- Significant improvement on the on and off-road cycling network within 10 kilometres of the CBD; and
- Developing bicycle facilities as part of major transport projects such as road and rail.

This has an impact on Banyule as just a small portion of the municipality is within 10 kilometres of the CBD and the State Government will be concentrating funding on inner city municipalities. However, expedient funding may now be available for bicycle routes along Heidelberg Road, Upper Heidelberg Road, Livingstone Street and a connection from Lower Heidelberg Road to the Banyule Shared Trail. Funding may also become available in connection with a redeveloped multi-modal transport hub at Greensborough.

Council's priority for the Principal Bicycle Network remains the completion of a north-south link from Greensborough Bypass, along Greensborough Highway, Banyule Shared Trail, Lower Heidelberg Road and Heidelberg Road.

Action	Priority
Complete the north-south Principal Bicycle Network link from Greensborough Bypass, along Greensborough Highway, the Banyule Shared Trail, Lower Heidelberg Road and Heidelberg Road.	High
Investigate an alternative on-road Principal Bicycle Network link along The Boulevard in East Ivanhoe, as an alternative to the heavily trafficked and narrow Lower Heidelberg Road.	High
Advocate for expedient funding and construction for those designated Principal Bicycle Network routes within Banyule which lie within 10 kilometres of the CBD.	High
Ensure that all Principal Bicycle Network bicycle routes are of an appropriate standard for commuting cyclists and they offer connections into the local bicycle network and to significant local community facilities.	Medium
Ensure the completion and upgrading of the off-road Principal Bicycle Network within the next five years.	Medium

BANYULE BICYCLE STRATEGY - PRINCIPAL BICYCLE NETWORK (PBN)



5.2.2 Local Bicycle Network

Many cyclists seek an alternative to the more direct but highly trafficked arterial roads. The following local on-road advisory routes have been reviewed as part of this Strategy to provide alternative routes to facilities such as shopping centres, community facilities, schools, and links to the off road trails. Each of the local routes connects with the PBN at some point along its route. Additionally, the majority of the routes connect with each other to form continual cycling routes in the municipality. A summary and description of each nominated route together with actions required is listed below.

The existence of advisory on road routes does not imply that cyclists should only use the suggested roads. Many other roads throughout Banyule carry low volumes of traffic and are also suitable for cyclists. Similarly, cyclists using the suggested routes need to be aware that they are travelling on the road system and exercise the same degree of caution as if travelling on any road.

Banyule's Public Open Space Strategy identifies Bundoora and Watsonia as the two precincts most in need of improved corridor and trail strategies to enable safe and accessible cycle transport between schools, the rail station, community and open space facilities. Local on-road routes would help to address this deficit.

LBN 1 - Watsonia to East Ivanhoe Local Bicycle Route

Route Summary

This route provides a local street network linking Watsonia Railway Station, Macleod Railway Station, Macleod Park, Rosanna Shopping Centre & Railway Station, Heidelberg Activity Centre, Eaglemont Railway Station, East Ivanhoe Neighbourhood Activity Centre and Ivanhoe Railway Station. The route links with the Yallambie to Banyule Local Bicycle Route and variations to the route lead to the Yarra River Trail and Ivanhoe Public Golf Course.

Route Description

This route begins at Watsonia Railway Station and follows Richards Avenue, Powley Parade, Somers Avenue, Birdwood Avenue to Macleod Park. A shared footway leads to the pavilion. A general purpose track runs through Rosanna Parklands. The route then follows Turnham Avenue, Station Road and Grove Road to Cape Street, leading to the Heidelberg Activity Centre.

Continuing south, the route crosses Burgundy Street, then travels along Yarra Street to Mount Street and the Heidelberg Railway Station. At Mount Street, use the traffic signals to cross Banksia Street. Continue along the south side of Banksia Street (old street alignment) to directly meet Studley Road, Odenwald Road, Alandale Road, Locksley Road to link with Lower Heidelberg Road/The Boulevard. The route follows The Boulevard to join the Main Yarra Trail near Ivanhoe Public Golf Course. Connections can also be made to Eaglemont Rail Station via Alandale Road. Remaining on Studley Road, cyclists will find easy bicycle lane access to Ivanhoe.



Action	Priority
Provide bicycle parking facilities in Chelsworth Park to encourage walking around Wilson Reserve.	Medium
Design and construct appropriate cycle crossing facilities at the intersection of Yarra Street/Rosanna Road and Yarra Street/Dora Street. In the short term, declare a shared footpath on the north side of Banksia Street between Cape Street and Dora Street to assist bicycle movements.	Medium
Provide standardised advisory signs along the route.	High

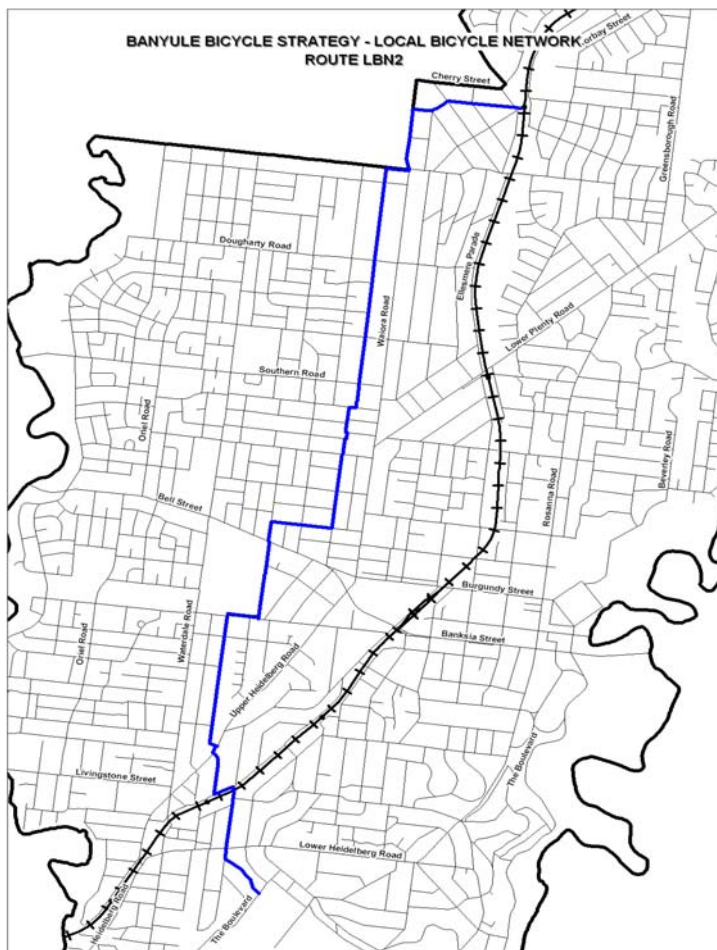
LBN 2 - Macleod to Ivanhoe Local Bicycle Route

Route Summary

This route follows the local road network to serve Macleod Railway Station, LaTrobe Secondary College, LaTrobe University, Austin Repatriation Medical Campus, Heidelberg Activity Centre and the Ivanhoe Activity Centre. Variations to the route lead to the Darebin Creek Trail or Chelsworth Park and Wilson Reserve. The route joins the Watsonia to East Ivanhoe Route (LBN 1) at Macleod Railway Station and Ivanhoe Railway Station, which provides the link with the Main Yarra Trail.

Route Description

This route begins at Macleod railway station then follows the Macleod to La Trobe University bicycle link along Joynt Street and Waiora Road to the Ruthven Street intersection. Joynt Street provides a link to LaTrobe University via Forensic Drive. The route then follows Orr Street to Porter Road to Southern Road. Continuing south, the route follows Porter Road, Lloyd Street, Dresden Street, Montgomery Street and Edwin Street to Bell Street (use existing pedestrian crossing at Bell Street). The route continues along Edwin Street to Banksia Street and St Elmo Road leading to the Ivanhoe Shopping Centre. Use existing pedestrian signals to cross Upper Heidelberg Road. The route then follows Noel Street, Norman Street, Marshall Street and Gilbert Road to Chelsworth Park. Chelsworth Park is connected to the Main Yarra Trail via the trail through Ivanhoe Golf Course.



Action	Priority
Construct a shared footway from the intersection of Ruthven Street and Waiora Road parallel to Orr Street (between Orr Street and Kingsbury Drive).	Medium
Declare shared footways on the west side of Upper Heidelberg Road from St Elmo Road to the existing crossing and on the east side from the crossing to Noel Street.	High
Provide standardised advisory signs along the route.	High

LBN 3 - Heidelberg West to Fairfield Local Bicycle Route

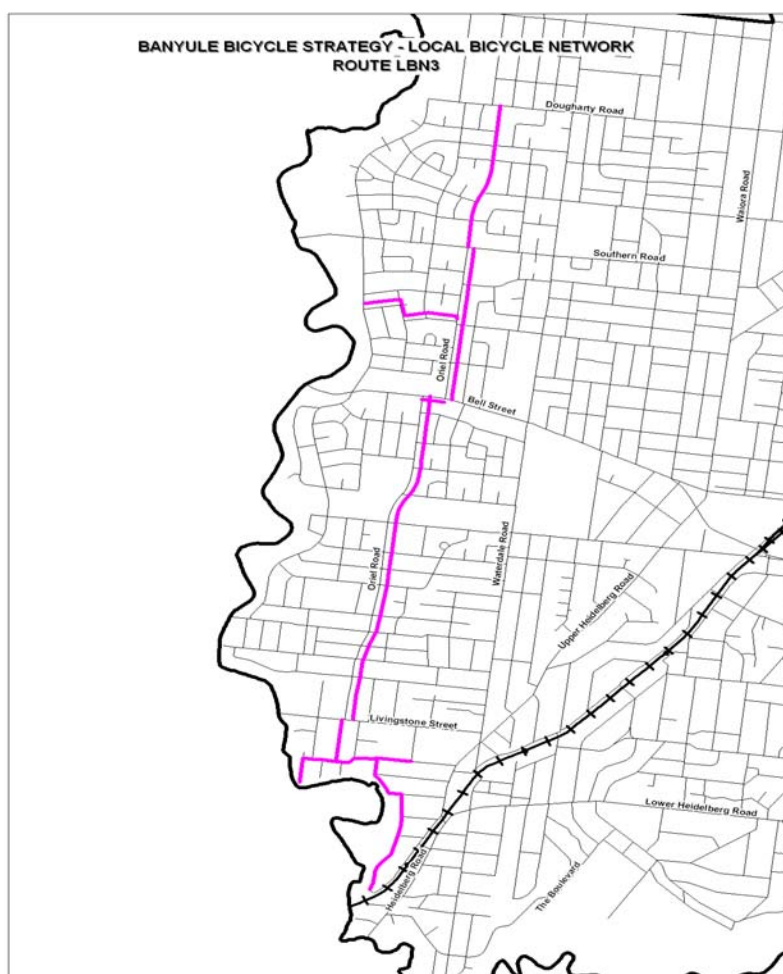
Route Summary

This route follows the local road network and the Donaldson Creek Trail to link St Pius X School, NMIT, The Bell Street Mall, Banyule Council's Operations Depot, Austin Repatriation Medical Campus, Donaldson Creek, Mary Immaculate School, Darebin Parklands, Rockbeare Park and Darebin Railway Station. Dougharty Road provides a link to the Macleod to Ivanhoe Route at Bamfield Road and access to LaTrobe University.

Route Description

The route commences at the intersection of Dougharty Road and Oriel Road and follows Oriel Road to Altona Street. A number of variations to the route along Pacific Drive, Catalina Street, Redwood Street and Gona Street allow access to the Darebin Creek Trail. The route then continues along a bicycle lane marked route in Oriel Road to Livingstone Street. From Livingstone Street, the route follows Miles Street, Della Torre Crescent, Abercorn Avenue and

across the footbridge into Fairfield. A variation to the route follows Kenilworth Parade to Wynstay Crescent, Waverley Avenue, Rockbeare Grove (access path to Darebin Parklands), Salisbury Avenue (Darebin Railway Station) to Upper Heidelberg Road.



Action	Priority
Provide standardised advisory signs along the route.	Medium

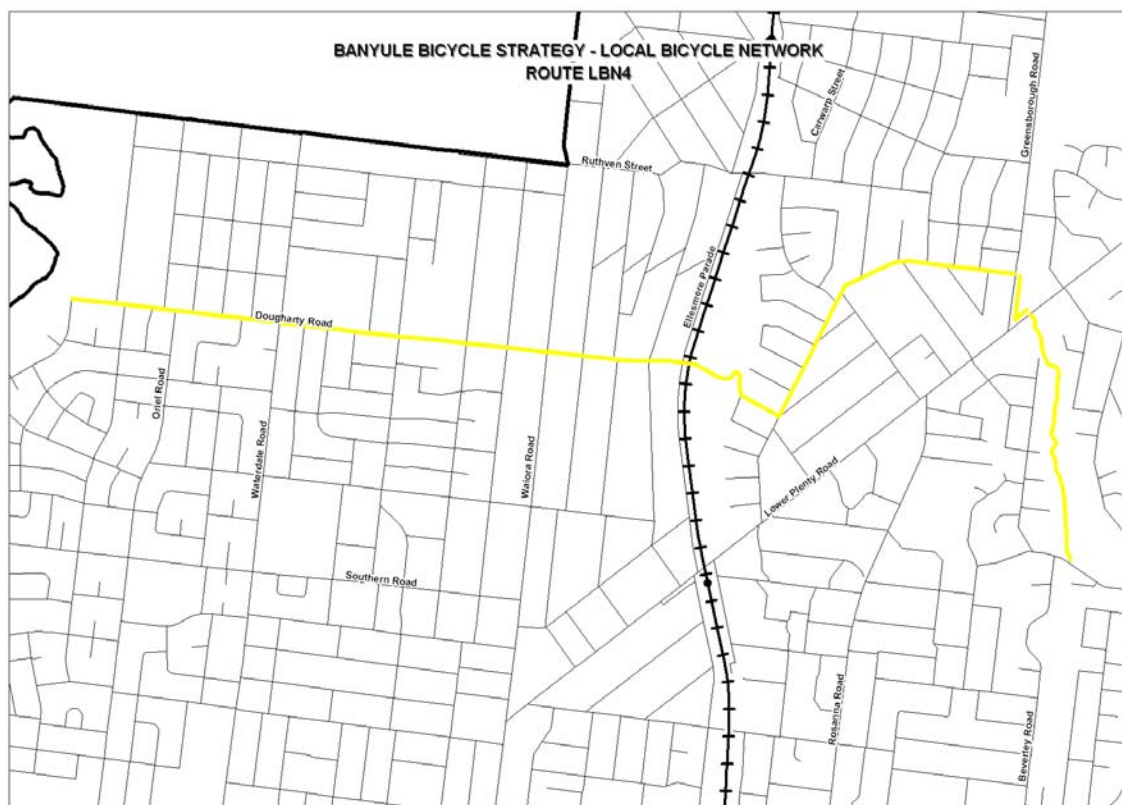
LBN 4 - Heidelberg West to Viewbank Local Bicycle Route

Route Summary

This route provides an east west link to serve Rosanna Primary School, Rosanna Parklands and Rosanna Golf Links Primary School. The route intersects the Watsonia to Ivanhoe East Route (LBN 1) at Rosanna Parklands and joins the Yallambie to Heidelberg route (LBN 6) at Banyule Road.

Route Description

The route starts at the Darebin Creek bike path at Dougharty Road and follows Dougharty Road to Waiora Road. The route then follows Davies Street to Ellesmere Parade and along the existing general purpose tracks through Rosanna Parklands to Von Nida Crescent. The route continues along Von Nida Crescent, Finlayson Street to Greensborough Highway and Lower Plenty Road, crosses at the traffic signals and continues along the footpath. The route then follows the Banyule Shared Trail to Banyule Road where it meets the Yallambie to Banyule Route.



Action	Priority
Provide bicycle/parking lanes in Dougharty Road from its intersection with Waiora Road to Darebin Creek.	Medium
Declare a shared footway on the north side of Lower Plenty Rd between Silk Street and the traffic signals and on the south side between the traffic signals	High

and the path to the Banyule Shared Trail.	
Provide standardised advisory signs along the route.	High

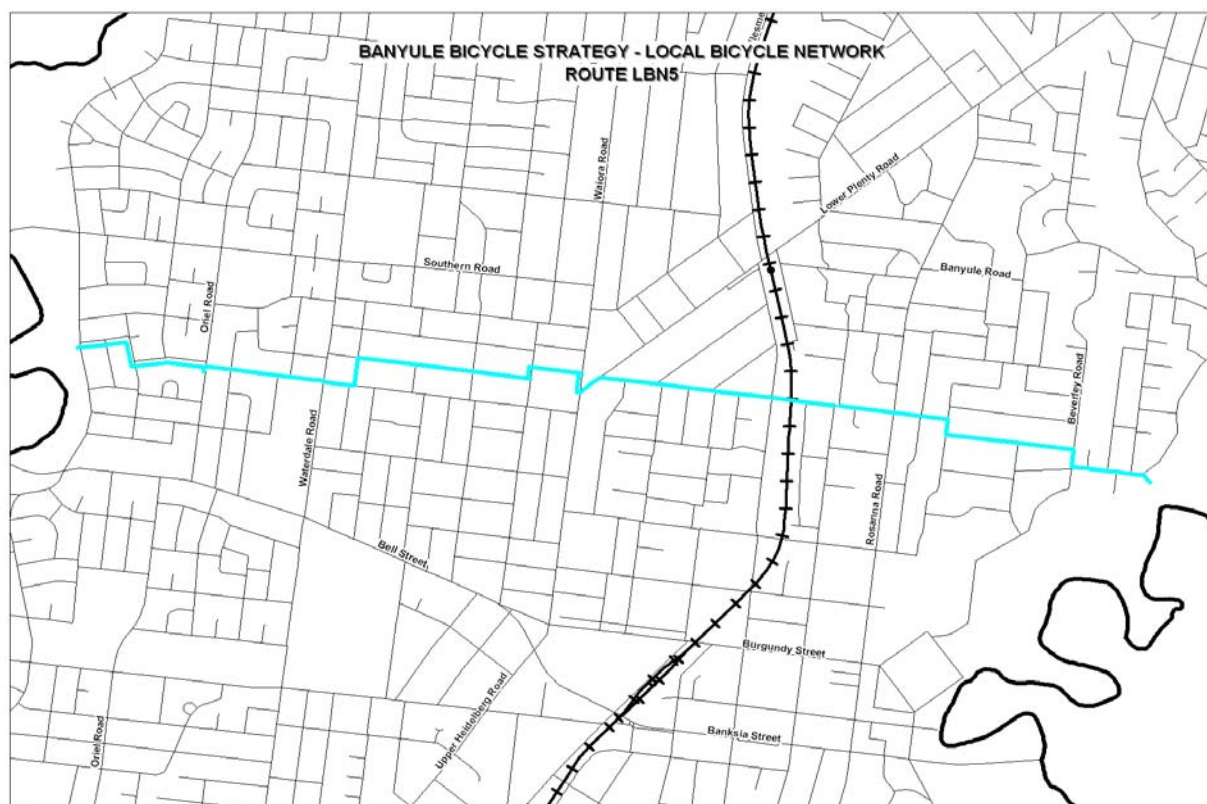
LBN 5 - Heidelberg West to Banyule Local Bicycle Route

Route Summary

This route provides an east west link through Banyule to link the Darebin Creek and Main Yarra Trails. The route serves Haig Street Primary School, NMIT and St Pius X School. The route links with the Heidelberg West to Fairfield route (LBN 3), the Yallambie to Heidelberg route (LBN 6) and the Macleod to Ivanhoe route (LBN 2).

Route Description

The route commences at the Darebin Creek bike path at Gona Street and follows Mulberry Parade, Redwood Street and Altona Street to Waterdale Road to cross at the existing traffic signals. East of Waterdale Road the route follows Altona Street, then into Law Street, Haig Street, Dresden Street, Churchill Street to Upper Heidelberg Road. Utilizing a shared footway along the west side of Waiora Road and crossing at the traffic signals, the route then follows St James Road to the railway crossing. The route continues across the railway and follows St James Road to Rosanna Road. East of Rosanna Road the route follows St James Road, Hodgson Street, Anderson Street, Beverley Road, Buckingham Drive to Plymouth Street where it joins the Main Yarra Trail and the Banyule Shared Trail.



Action	Priority
Install warning signs advising motorists of cyclists crossing at Liberty Parade/Gona Street.	High
Declare a shared footway on the south side of Lower Plenty Road from St James Road to the traffic signals, to cross Lower Plenty Road and Upper Heidelberg Road.	High
Declare a shared footway on the west side of Waiora Road north to Churchill Street.	High
Provide standardised advisory signs along the route.	High
Install warning signs and improved lighting at the rail crossing across the Hurstbridge rail line.	High

LBN 6 - Yallambie to Heidelberg Local Bicycle Route

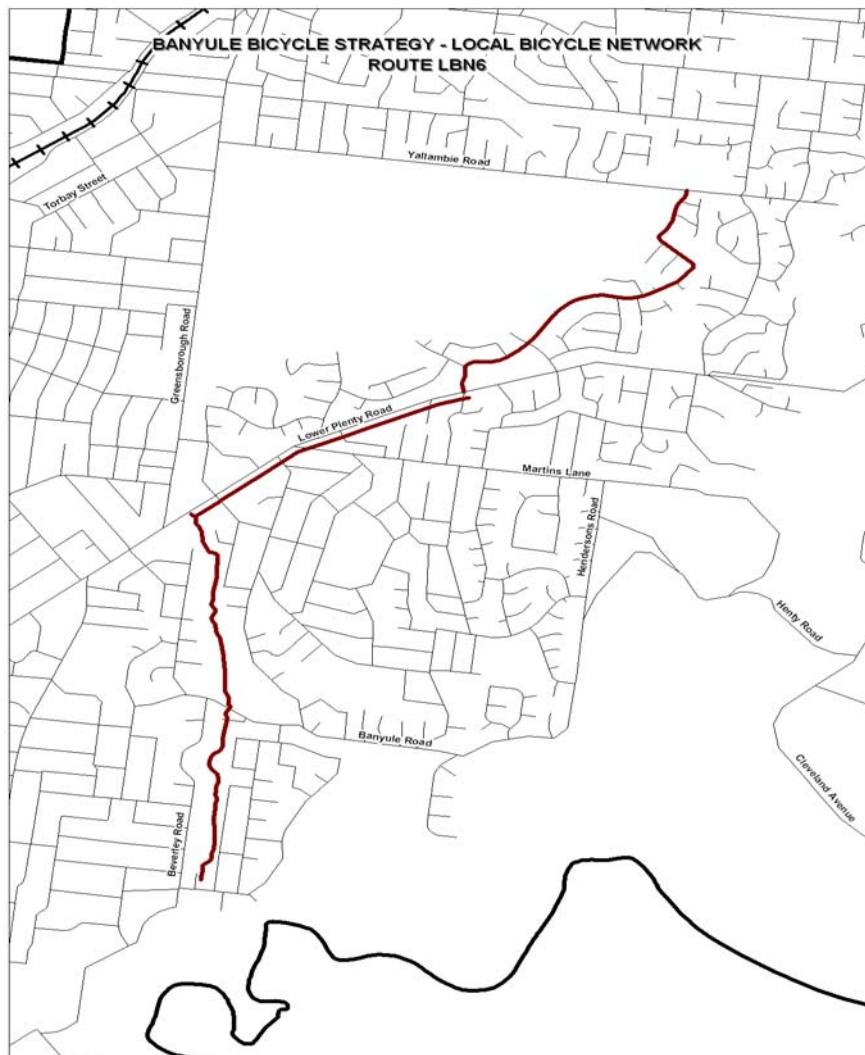
Route Summary

This route follows both the on-road local street network and off-road trails to link Streeton Primary School, Viewbank Primary School, Banyule Primary School, Banyule Flats Reserve, Banyule Tennis Club and Heidelberg Primary School. The route joins the Main Yarra Trail at Plymouth Street.

Route Description

Starting at Streeton Primary School, the route continues along The Grange, Davies Place, Silver Wattle Street and Arthur Streeton Drive to Lower Plenty Road. The route crosses Lower Plenty Road at the traffic signals and a branch follows Grantham Road to Viewbank Primary School.

The main route continues along Lower Plenty Road and continues south along the Banyule Shared Trail to Banyule Road and thence to Buckingham Drive. A branch of the route continues east to Plymouth Street and links with the Main Yarra Trail. The route continues via LBN1 and LBN5 to join Cape Street and thence to Heidelberg Activity Centre.



Action	Priority
Investigate opportunities to continue the existing shared path along the transmission line to link with the Plenty River Trail.	Medium
Declare a shared footpath along the southern side of Lower Plenty Road between its intersections with Martins Lane and the Banyule Shared Trail.	High
Provide standardised advisory signs along the route.	High

LBN 7 - Bundoora to Yallambie Local Bicycle Route

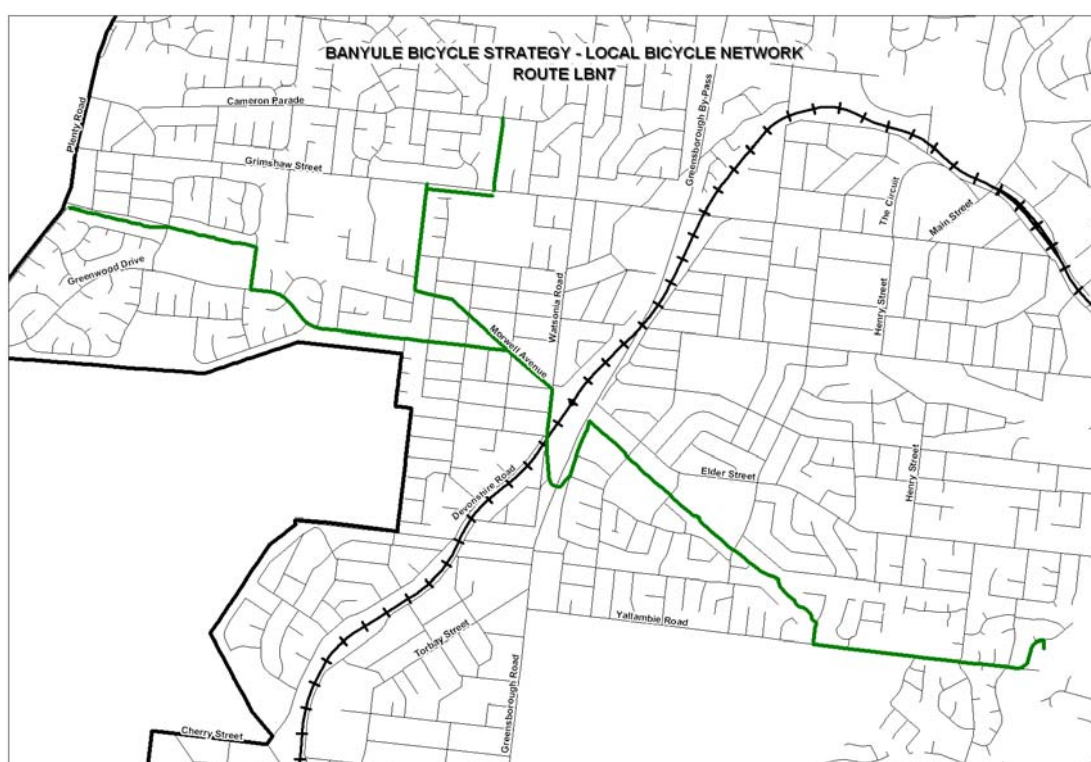
Route Summary

This route provides a mainly off-road east west link through the municipality serving Greenwood Primary School, Watsonia Railway Station and Watsonia Shopping Centre, Watsonia North Primary School, Loyola College, Watsonia Primary School and Streeton Primary School.

Route Description

The route follows the existing cycling path from Plenty Road to Dilkara Avenue, then proceeds south along Dilkara Avenue to Greenwood Drive to the transmission line at Morwell Avenue where it will follow a new path alongside the transmission line to Watsonia Railway Station. From Watsonia Station, the route follows Watsonia Road to the Greensborough Highway intersection.

East of the Greensborough Highway, the route follows the existing cycle path to Delta Road. It will then follow a new cycle path under the transmission line to Wendover Place. The route continues south along Wendover Place to Yallambie Road, then along Yallambie Road to Kuridan Court where it joins the Plenty River Trail. A variation to the route branches north at Morwell Avenue to Gleeson Drive and Grimshaw Street. North of Grimshaw Street the route follows Sharpes Road to link with the Greensborough to Bundoora Route.



Action	Priority
Declare a shared footway from Watsonia Road to the Watsonia Railway Station bridge and through the carpark to the Greensborough Highway traffic signals at Elder Street.	High
Investigate the construction of a shared footway link through Loyola College.	Medium
Declare a shared footway along the south side of Grimshaw Street from Gleeson Drive to the crossing and along the north side from the crossing to Sharpes Road.	High
Provide standardised advisory signs along the route.	High

LBN 8 - Montmorency to Watsonia Local Bicycle Route

Route Summary

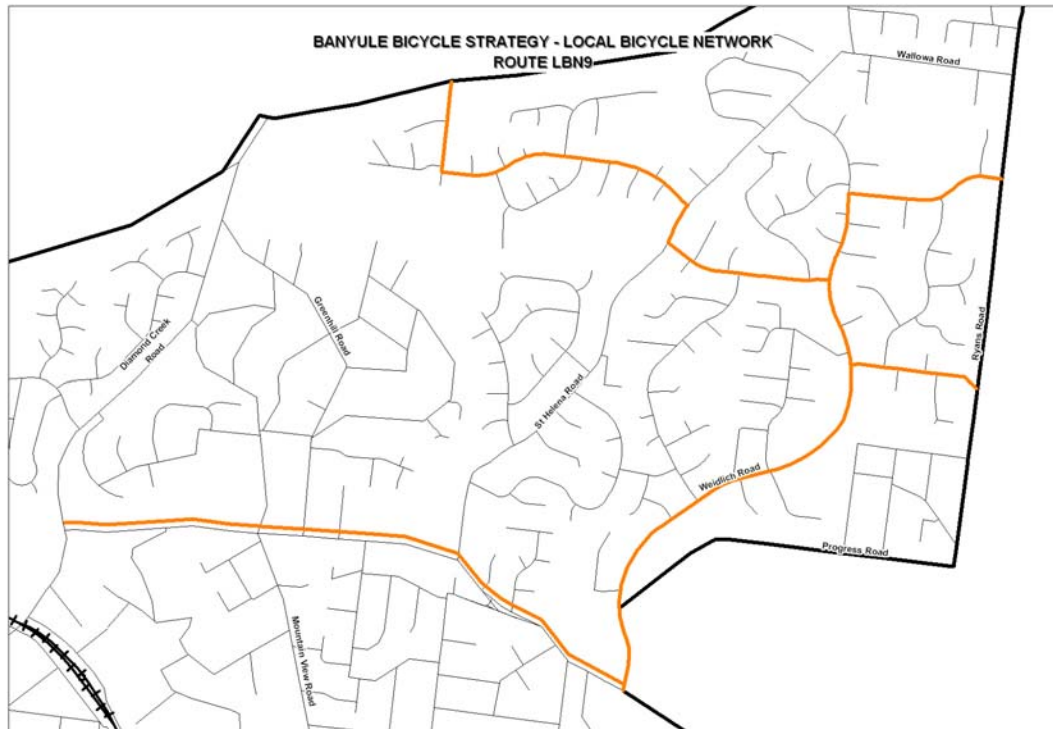
This route is to provide an off-road and local street network to link Montmorency Railway Station and Shopping Centre, Montmorency Primary School, Montmorency Park, Watsonia Heights Primary School, Greensborough Secondary College, and Watsonia Railway Station. .

Route Description

The route commences at Montmorency Railway Station and follows Were St and Rattray Road to Para Road. West of Para Road the route continues through Montmorency Park, Elder Street, Henry Street, Cam Street, Sainsbury Ave and Nepean Street to the footbridge over Greensborough Highway. The route follows Nell Street West, Ibbottson Street and Watsonia Road to Watsonia Station where it links with the Bundoora to Yallambie Route and the Watsonia to Ivanhoe East Route.

The northern bicycle link to St Helena Road commences at Montmorency Station and continues north via Kelvin Avenue, Baldwin Avenue and Mountain View Road. This northern bicycle link is continued to the Greensborough Bypass Trail by crossing St Helena at the traffic signals and continuing along Willis Street, Carnon Street and Greenhill Road. The eastern bicycle link to Bolton Street continues from Were Street to Rattray Road, Reichelt Avenue and Grand Boulevard. There is also opportunity on this route to make a connection between Mountain View Road and Nell Street. From Mountain View Road travel along River Street to Bannerman Street and Rand Street, cross the bridge on the Plenty River and follow the railway south along Poulter Avenue to join the Plenty River Trail under the railway bridge, and then immediately travel northwest along the laneway that connects to Paterson Crescent and thence to Nell Street. Arrangements would be needed to allow cyclists to travel east-bound on Paterson Crescent.

reserve. A variation to the route continues along the recently constructed bicycle lane along St Helena Road to Karingal Drive to link up with Sherbourne Road and Eltham.



Action	Priority
Coordinate links across the municipal boundary to Nillumbik.	Medium
Provide standardised advisory signs along the route.	High

LBN 10 - Greensborough to Bundoora Local Bicycle Route

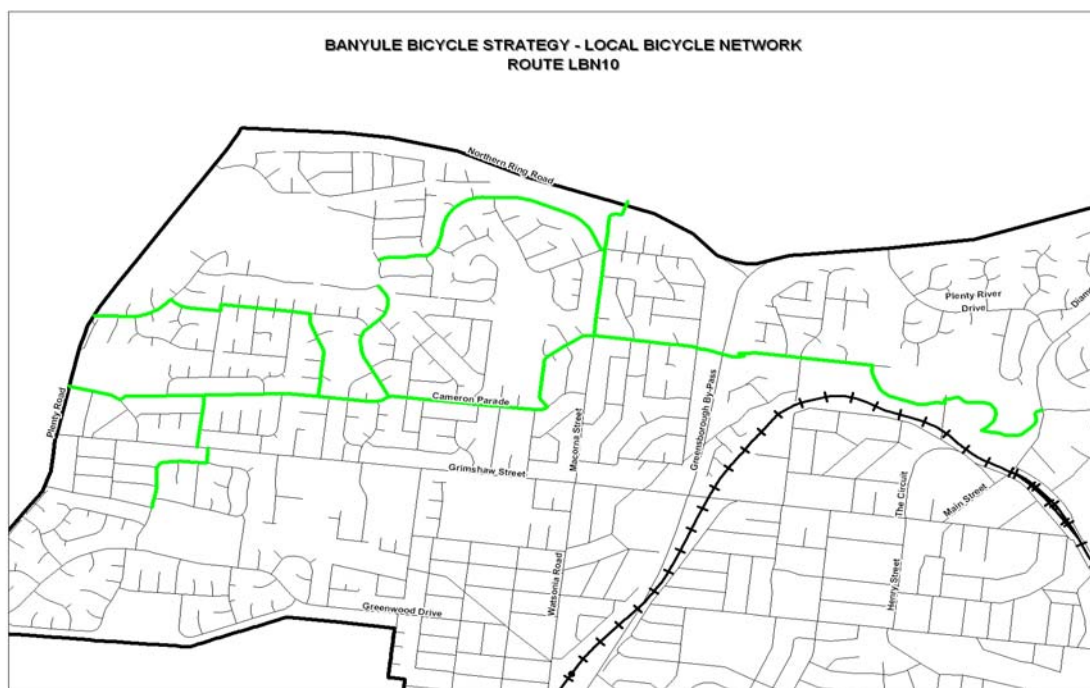
Route Summary

This route runs through the northern part of the municipality and links the Greensborough Principal Activity Centre, Greensborough Primary School, Greensborough Park, Whatmough Park, Kalparrin Gardens, Binnak Park, Parade College and the Maroondah Aqueduct Trail. The route joins the LBN 7 route at Sharpes Road and Noorong Avenue and the Greensborough to Diamond Creek route (LBN 9) at the intersection of St Helena Road and Main Street.

Route Description

The route commences at the existing trail at the intersection of St Helena Road and Main Street. The route follows the existing path to Yando Street under the Greensborough Highway to link with Hakea Street. From Hakea Street the route follows Grant Street, Cameron Parade and Oxford Drive to Grimshaw Street. South of Grimshaw Street the route follows Balaka Place, Noorong Avenue and Wallara Crescent to meet the Bundoora to Yallambie Route (and to Plenty Road). Alternatively, the route heads north along Macorna Street to the overpass on the Metropolitan Ring Road and thence to the shared trail running along the northside of the Ring Road. On Macorna Street the route branches off at Edmund Rice Parade to Chappell Drive. A north-south link along Jacqueline Road provides a link to Parade College and Cameron Parade.

From Oxford Drive, the bicycle route can also continue west along Cameron Parade and Bent Street to the PBN at Plenty Road. There are a number of roundabout along Cameron Parade and Bent Street, an alternative route could utilise The Rameo, David Crescent, Shelley Avenue and Milton Parade to connect with the shared path on the east side of Plenty Road.



Action	Priority
Declare a shared footway on Grimshaw Street from Oxford Drive to the traffic signals and from the traffic signals to Balaka Place.	High
Investigate link along Maroondah Aqueduct at Chappell Drive. Land is in private ownership and any future development should include provision of bicycle link to Plenty Road.	Medium
Provide standardised advisory signs along the route.	High
Ensure that the bicycle link along the east side of Greensborough Highway to the subway under the highway is maintained.	High

LBN 11 – Plenty River Trail to Main Yarra Trail Local Bicycle Route

Route Summary

This route provides a scenic link from the Plenty River to the Main Yarra Trail. The route joins the Yallambie to Heidelberg route at the intersection of Martins Lane and Lower Plenty Road.

Route Description

The route commences at the Martins Lane and Lower Plenty Road intersection and follows Martins Lane, Seymour Road, Banyule Road, Henty Road, Cleveland Avenue and Bonds Road connecting to the Main Yarra Trail. The route avoids the many steep grades in the surrounding area and also provides a link to Westerfolds Park.



ORT 1 Darebin Creek Trail

Route Description

The path runs along the Darebin Creek from Bundoora Park to the Hurstbridge rail line adjacent to Darebin Rail Station. It provides an off-road recreational and commuter bicycle and pedestrian trail serving the communities of Banyule and Darebin and allows for cross-municipality bicycle and pedestrian movement at various points along the trail. It also provides northern links to La Trobe University.

However, the overall perception of the trail is that it is isolated, unsafe, not up to appropriate trail standards and it currently does not provide a link to the Main Yarra Trail. The short-term intention is to extend the Darebin Creek bike trail via a 1.8 kilometre three metre wide path involving five river crossings including a bridge over the Yarra. This would then solve “the missing link” in Melbourne’s bike trail network.

Action	Priority
Extend the trail from the railway bridge to Heidelberg Road and construct a cradle bridge under Heidelberg Road bridge.	High
Construct a link through Sparks Reserve to link with The Boulevard and the Main Yarra Trail.	Medium
Liaise and negotiate with the Cities of Yarra and Darebin to facilitate the link to the Main Yarra Trail in accordance with the Principal Bicycle Network.	Medium
Reconstruct a 4km portion of trail between Banksia Street and Dougharty Road with a 3 metre concrete path.	Medium
Mark the whole trail with centre line marking and bicycle stencils to facilitate the safe sharing between cyclists and pedestrians.	High
Ensure all physical fixtures along the trail are fitted with appropriate reflector material to permit visibility in low light.	Medium
Provide standardised advisory signage along the trail.	High

Install appropriate community facilities at key locations along the trail including seating, shelters, drinking fountains, picnic tables, barbeques, toilets and playgrounds with a priority on providing drinking fountains and shelters.	High
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ORT 2 Main Yarra Trail

Route Description

This is Melbourne's premier bicycle trail running along the Yarra River through the north-eastern suburbs from Eltham to the City. It forms an integral part of Melbourne's bicycle trail network linking up with the Merri Creek Trail, the Capital City Trail and Outer Circle/Anniversary Trail.

As discussed previously, there are plans to extend the Darebin Creek Trail to connect with the Main Yarra Trail at Fairfield. The path runs through the municipality from Fitzsimons Lane to the river crossing near Burke Road North. It comprises 1.6km of sealed path and 8.9km of unsealed path. The unsealed sections of the path are unpopular with mainly commuter cyclists and there is a demand to seal all unsealed trail sections. Recently, access has been provided through Burke Road North Reserve including realignment, widening and sealing of the trail.

Of particular concern, is that the section of the Main Yarra Trail from the Banyule Shared Trail past The Greenery has not received maintenance in recent years. The Main Yarra Trail to the north of Warringal Park to the Plenty River bridge suffers from the same poor surface conditions as the southern section and should also be sealed.

Action	Priority
Liaise with Parks Victoria to upgrade the section of trail subject to flooding where it passes under the Banksia Street bridge.	High
Liaise with Parks Victoria to investigate realigning the trail to the north of "The Greenery" at Banksia Street. In the short term provide warning signs to both cyclists and motorists at the crossing point.	High
In the short term, declare a shared footway on the north side of Banksia Street from the end of the Banyule Shared Trail east to the road bridge.	High
Construct a footbridge across the river at Banksia Park and Warringal Parklands.	High
Liaise with Manningham City Council to investigate constructing a link between Viewbank Park and Birrarung Park.	High
Reconstruct the entire length of the unsealed Main Yarra Trail within Banyule with a 3.0 metre concrete trail.	High
Explore the creation of a more direct bicycle route in the Banyule Flats area.	Medium
Explore the potential to create a bridge link between the Main Yarra Trail in Yarra Flats and Bulleen Park.	Medium
Provide standardised advisory signage along the trail.	High
Ensure all physical fixtures along the trail are fitted with appropriate reflector material to permit visibility in low light.	Medium
Install appropriate community facilities at key locations along the trail including seating, shelters, drinking fountains, picnic tables, barbeques, toilets and playgrounds with a priority on providing drinking fountains and shelters.	High

ORT 3 Plenty River Trail

Route Description

This path follows the Plenty River from the Greensborough Bypass to the intersection with Lower Plenty Road. In recent years, much work has been undertaken on the trail to ensure that it is of satisfactory cycling standard and that it connects with the Main Yarra trail. These works included:

- completing the section south of Banyule Road connecting to the Main Yarra Trail;
- restoring the historic Old Lower Plenty Road bridge;
- constructing the section of the Plenty River Trail through the Heidelberg Golf Club.

In 2009, a realignment and extension of the Plenty River Trail from Partingtons Flats to Greensborough Bypass was undertaken.

Action	Priority
Upgrade those sections of the path which do not conform to minimum standards for bicycle travel. Upgrade the section of trail between Lower Plenty Road and Willinda Park to a 3 metre wide reinforced concrete path and realign sections of the trail which are currently indirect.	High
Construct the remaining one kilometre section of trail from Partingtons Flat to the Greensborough Bypass.	High
Provide standardised advisory signage along the trail.	High
Ensure all physical fixtures along the trail are fitted with appropriate reflector material to permit visibility in low light.	Medium
Install appropriate community facilities at key locations along the trail including seating, shelters, drinking fountains, picnic tables, barbeques, toilets and playgrounds with a priority on providing drinking fountains and shelters.	High

ORT 4 Banyule Shared Trail

Route Description

This recently completed path follows the creeks in Creekbend Reserve and River Gum Walk, then along Beverley Road and provides an excellent off-road path from Lower Plenty Road to Banksia Street. The path is of an excellent standard and is very popular with beginning and starter cyclists.

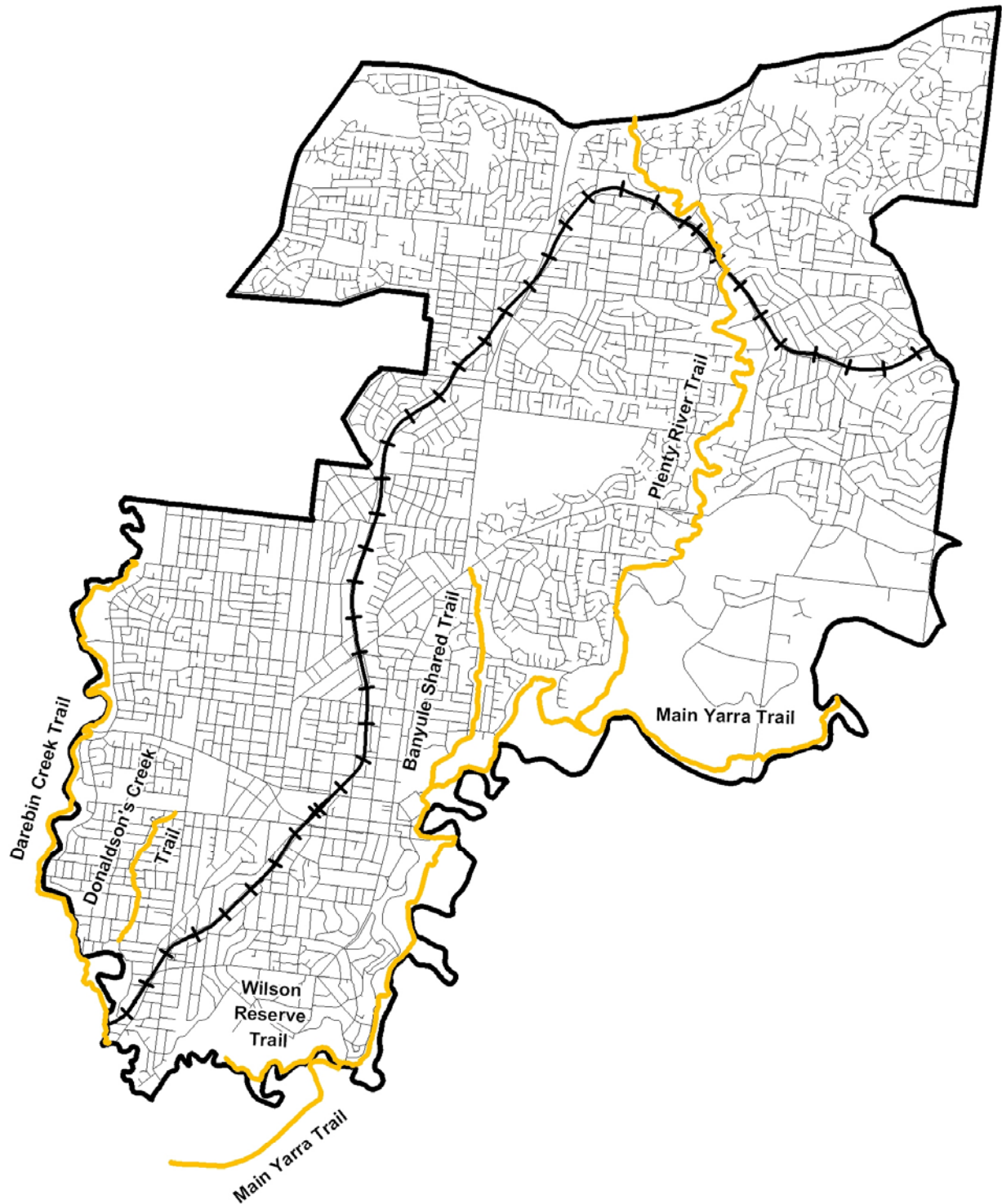
Action	Priority
Work with Parks Victoria and VicRoads in identifying the most appropriate options for continuing the Banyule Trail south of Banksia Street.	Medium
Work with VicRoads in order to determine the most appropriate options for continuing the Banyule Shared Trail north of Yallambie Road.	Medium
Improve location signage including the signing of major milestones and destinations such as Buckingham Drive, Banyule Road and Lower Plenty Road.	Medium
Investigate and develop a plan for the installation of emergency markers along the route.	Medium

ORT 5 Rosanna - Macleod General Purpose Track**Route Description**

This recently completed path provides an off-road path from Rosanna Village utilizing general purpose paths through Rosanna Parklands to Macleod. The path again is popular with both walkers and cyclists as an exercise path.

Action	Priority
Construct an off road bicycle track from Chapman Street to Macleod Park, the Macleod shops, schools and Macleod Rail Station, as recommended by the Masterplan for the Rosanna Parklands and Macleod Park.	Medium

BANYULE BICYCLE STRATEGY - OFF ROAD TRAILS (ORTS)



6. INFRASTRUCTURE FACILITIES

6.1 Arterial Roads

It has been documented that commuter cyclists, in particular, prefer to use arterial road routes and will continue to do so regardless of whether an advisory route has been provided. The on road advisory routes endeavour to provide cyclists with an alternative to Banyule's main roads. However, in recognition of the relatively high usage patterns by commuters, to encourage more people to see cycling as a viable transport option and to provide a safer on road environment for all cyclists, appropriate treatment needs to be applied to the arterial roads.

There are a variety of engineering methods to safely facilitate cyclists on the arterial road network and to promote the safe sharing of road space amongst users, including:

- line marking;
- indenting car parking ;
- widening kerb side lanes;
- narrowing median strips;
- restricting parking;
- maintaining the road surface;
- treating left turn slip lanes; and
- providing a refuge at intersections via the use of bicycle lanes or advanced stop lines.

In many cases the actual design measures will be constrained by the existing nature of the infrastructure. However, innovative means of achieving a compromise between all users (including motorised traffic, cyclists and pedestrians) should be investigated to achieve a balanced response to distributing available road space.

In developing the Principal Bicycle Network (PBN) which is generally constructed on the arterial road system, VicRoads noted that past construction of bicycle facilities often occurred in isolation and on an adhoc basis. The purpose of the PBN is to develop an integrated network of major bicycle corridors and to identify strategic links necessary to complete the network.

Action	Priority
Council to liaise closely with VicRoads to ensure that arterial routes through the municipality are upgraded so as to facilitate safe cycling as part of the Principal Bicycle Network.	High
Prepare a prioritised implementation list of Principal Bicycle Network routes in Banyule and submit funding applications to VicRoads on an annual basis to progress the Principal Bicycle Network in Banyule and to ensure that the on-road PBN is completed by 2015.	High
As works are undertaken, give attention to cyclist's requirements in accordance with the Guide to Traffic Engineering Practice - Bicycles, Part 14 (1999) and VicRoads Cycle Notes: design of bicycle facilities for engineers and planners.	Ongoing

6.2 Local Road Facilities

The on-road local advisory routes have been identified to provide a lower stress alternative to the arterial road network. These routes cater for journeys to school, recreation facilities, shops, railway stations and recreational trails.

The nature of local roads (relatively lower traffic speeds and volumes) is such that enables the maximum integration of bicycles and motorised transport within the road network. The principal action required for these routes is adequate signage to indicate the direction of the route (and links within the network) while at the same time providing a warning to motorists.

It has been noted previously that it is unrealistic to assume that all cycling travel will occur on the local advisory network. Rather, all roads within the municipality are potential bicycle routes and all local traffic measures need to reflect the specific requirements of cyclists. In particular, traffic measures that result in “squeeze points” forcing cyclists and motorists to compete for limited road space, should be avoided or provision made for cyclists to travel through such structures. Council’s Local Area Traffic Management Strategy²⁰ gives more information on suitable traffic management techniques.

The design of speed humps should allow for the passage of cyclists. Roundabouts are an effective means of managing motorised traffic but due to the speed and size differential can lead to potential conflict between motorists and cyclists. Each structure needs to be assessed in terms of cyclist safety and include cyclist warning signs. Sightlines should not be inhibited by design or the use of vegetation.

In order to maximise accessibility and mobility of cyclists, exceptions should be made for cyclists at road closures (using appropriate signage and or separate paths); restricted left turn intersections (“bicycle excepted” signage); and one way streets (contra flow lanes to be delineated). All road surfaces should be smooth and clear of debris to permit cyclists a comfortable ride without necessitating reactionary manoeuvres to avoid obstacles. It needs to be noted that many road irregularities which may not be noticeable in a motor vehicle can prove to be a hazard for cyclists.

Action	Priority
When constructing local bicycle routes – give priority to those routes which connect with and to Activity Centres.	High
When developing local area traffic plans and traffic works consider the local cycling network and the requirements of cyclists in accordance with the Guide to Traffic Engineering Practice - Bicycles, Part 14 and VicRoads:Cycle Notes.	High
When identifying any on road action required to improve the safety of cyclists on the City’s roads, appropriate measures shall be undertaken in accordance with the Guide to Traffic Engineering Practice - Bicycles, Part 14 and VicRoads:Cycle Notes.	High
On all new road schemes, carry out bicycle audits to ensure that positive measures for cycling are introduced into all new road improvement and construction and ensure that new road design is not detrimental to cyclists.	High

6.3 Off-Road Trails

A significant off road bicycle network has been initiated throughout Banyule, with many of the trails following the river systems. There is, however, a deal of inconsistency with regard to the width and surface treatment of the paths. It has been recommended that the existing paths be extended/linked and upgraded to provide a coordinated off road network. The construction of trails needs to conform to the minimum requirements specified in the Austroads *Guide to Traffic Engineering Practice - Bicycles, Part 14*. The surface must be useable in all weather conditions.

²⁰ Banyule City Council, *Local Area Traffic Management Strategy*, Feb 2000

Path composition in Banyule tends to be either asphalt, concrete, lilydale toppings or granular sand with each case assessed on its merits in terms of the preferred material. There is much debate over the use of lilydale toppings/granular sands for shared trails. On the one hand there is concern from cyclists that the surface is not consistent and that particular grades of sand deteriorate the running gear of the bicycle. It is not as satisfactory for cycling as a sealed surface. On the other hand, the sealing of the pathway on the river flats has been strongly opposed by environmental groups. Many walkers and joggers prefer a granitic sand type surface as it is less likely to cause impact, or jarring injuries. Of note, the Main Yarra Trail is bitumen or concrete in construction, except within Banyule, where it is composed largely of granitic sand. However, Council in recent years has adopted the general practice of constructing new sections of shared trail in coloured concrete.

Interestingly, based on their experience and research, Melbourne Water recommends a concrete surface for all paths, on the basis that a concrete surface is usually more durable and often avoids pavement heaving associated with bitumen, or surface erosion associated with granitic sand paths which typically have less than optimal site drainage. The only variance in Melbourne Water's preference for concrete surfaces is that for paths adjacent to water mains, Melbourne Water prefers the path surface to be crushed gravel or similar.

Trail development will support the Continuous Accessible Paths of Travel (CAPT) concept to provide access to people of all abilities. Where concrete is used, it will also support broader use of the network for wheelchairs, prams and other recreational pursuits including inline skating. There is little justification for paths to be declared as cycle routes only and as such trails/paths in Banyule should be declared and sign posted as shared footways where appropriate. Adequate design, signing and sharing arrangements need to be in place to promote safe sharing of facilities.

Action	Priority
Council's preference for off-road trails will be shared paths constructed of concrete, unless there is a very strong environmental reason that concrete should not be used.	High
Liaise with VicRoads, Parks Victoria and neighbouring Councils to implement the off-road sections of the Principal Bicycle Network, in particular the linking of the Yarra River Trail to the Darebin Creek Trail and the Plenty River Trail, and to the Western Ring Road Bicycle Trail.	High
Ensure that the design of trail facilities is of a high standard in line with the high profile of the off-road trails.	High
Develop and implement a program to upgrade the existing sub-standard off road trails.	High
Where off-road trails attract a high level of use, consider increasing the width of the trail from 2.5 metres to 3 metres or greater, and also where appropriate, consider separation of pedestrians and cyclists.	Medium

6.4 Maintenance

As with any asset, a comprehensive and coordinated maintenance program is required to ensure the continuance of the cycling network. In particular, the off-road trails require regular inspections to identify deficiencies in the path surface and to ensure vegetation does not cause potential problems through overhanging or blocking sight lines.

Equally, the maintenance of roads within the municipality should consider cyclists needs vis a vis clearing debris from the path of bicycle traffic and ensuring street side vegetation does not protrude onto the road reserve. Council will ensure that priority is given to the maintenance and repair of cycle routes and of channels, gullies and the edge of those carriageways used by cyclists on routes where cycling is to be actively encouraged and where no alternative off-carriageway cycle route has been provided. Council will also ensure that only bicycle safe grates are installed in roadways and in gutters at the edge of roadways. There is also a need to maintain linemarking on a regular basis. Many of the bicycle network maintenance issues can be addressed through existing Council programs with minimal increase in work load or expenditure.

Action	Priority
Develop and implement a maintenance program for the upkeep of the local bicycle on-road and off-road network.	High
Consider cyclist needs when undertaking regular maintenance works in the municipality.	Ongoing
When road pavement maintenance falls due, simultaneous improvements for safe cycling should be included where appropriate including: <ul style="list-style-type: none"> • Provision of kerbside lanes by linemarking adjustments. • Provision of signs to support cycling facilities. • Installation of bicycle-safe grates. • Elimination of 'squeeze points' ie points in the roadway where the lane widths are too narrow for cyclists to ride safely adjacent to vehicles. 	Ongoing

6.5 Bicycle Parking

Bicycle parking facilities must be close to the destination of the cyclist, secure and ideally in sight of the public. As the value of bicycles can be very high, cyclists will only leave their bikes where they can be seen in order to reduce the potential for theft and vandalism. Where possible, parking rails should be located where there is some shelter from the weather.

The Australian Standard on bicycle parking (AS2890.3) states that the minimum acceptable standard for bicycle parking is the inverted U-type rail. This is now in place throughout the metropolitan area and many rails have been installed in Banyule's shopping and commercial areas.

In order to encourage cycling as an alternative transport mode, Council will continue to provide parking facilities at public places and encourage the private sector and educational establishments to provide suitable bicycle storage facilities. To facilitate bicycle travel as part of multi modal transport trips (and in turn to encourage this means of travel), adequate, secure parking facilities should be provided at all rail stations. The preferred standard is the parkiteer cage system which provides greater security (particularly at unstaffed stations) for longer term parking. Parkiteer cages hold 25 bikes securely in a cage designed to Bicycle Victoria requirements and operated by Bicycle Victoria. The Parkiteer system increases commuter parking availability at stations as well as encouraging more people to use bikes to ride to the station. A Parkiteer cage has recently been installed at Heidelberg Rail Station with another to be installed at Ivanhoe Rail Station in the near future.



Parkiteer Bicycle Cage

Action	Priority
Devise an implementation plan to replace all older style bicycle racks with the preferred lean rail.	Medium
Review the bicycle parking arrangements and usage at each railway station, in particular the lack of bicycle parking at Rosanna and Montmorency Rail Stations. Ensure that each railway station has adequate bicycle parking to cater for existing users and encourage more bicycle use.	High
Advocate for the construction of parkiteer bicycle cages at all rail stations in Banyule, continuing with Ivanhoe, Watsonia and Montmorency Rail Stations.	High

6.6 End of Trip Cycling Facilities

Amenities important to cyclists include showers, toilets and drinking facilities, as well as bicycle enclosures and bicycle lockers which are seen as more secure than bicycle parking rails. People commuting to work mainly seek off-street parking. The current trend is for the needs of commuter cyclists to be met by their employers, although many cyclists say that what is provided is wholly inadequate for current and future cyclists. In October 2004, the Victorian Minister for Planning established the Australian Standard for bicycle parking facilities as an incorporated document. The amendment encourages cycling as a preferred mode of transport and establishes consistent statewide provisions for bicycle parking and associated shower and change facilities. The clause requires that any new use must not commence or the floor area of an existing use must not be increased until the required bicycle facilities and associated signage has been provided on the land.

Action	Priority
Ensure all Council customer service and community facilities have adequate end of trip cycling facilities.	High
Devise a promotion and implementation plan to map and encourage the provision of end of trip cycling facilities at all large employers in Banyule.	Medium
Investigate the possibility of employers sharing end of trip cycle facilities.	High

6.7 Signage

Directional Signs

The success of the local route network hinges on the provision of guide signs for cyclists. Generally such signs should indicate route direction and provide useful information on relevant destinations. A directional signage system should also be designed so that it is applicable to pedestrians as well. The route signage can be supplemented by less specific in-fill signs indicating changes in direction.

Signage needs to be applied consistently across the municipality and be of a standard used throughout the metropolitan area. The existing signs which comply with this standard should be maintained and be supplemented where appropriate with additional signage (i.e. where routes have been varied or where deficiencies in sign frequency have been identified). In recognition of the specific environs and the signage programs that have been initiated, additional guide signs along the river trails should match the existing wooden signs utilised.

A project group, convened by Parks Victoria is currently looking at improvements to the bicycle signage system

Warning Signs

The provision of guide signs throughout the local networks should generally suffice in terms of warning motorists of the presence of cyclists. In specified locations (particularly where it has been deemed necessary on main roads and at roundabouts) standard warning signs (Sign No. W6-7) complying with the Australian Standard AS1742.9. Where an off-road path crosses a road, the warning signs should be used in conjunction with the two way arrow sign (Sign No. W8-23).

Regulatory Signs

The local route network has identified the need for shared footways to provide a safe cycling link. The shared footways must be identified at the beginning and end point. Where the shared footway is an off-road trail, the signs should be placed at appropriate intervals to reinforce its status.

Emergency Markers

The State Telecommunications Authority (000) has a system of number emergency markers for helping to identify the exact location of injured parties when an accident occurs in an isolated situation or in a location where a street address is not applicable. Many sections of off-road trails in Banyule are not identifiable by a street address and therefore without emergency markers, emergency services would have great difficulty in identifying a precise location in the event of an accident. Therefore, Banyule's four off-road trails should have emergency markers installed.

Action	Priority
Develop a uniform cycle directional sign for Banyule which gives information on distance, destinations and places of interest.	High
Ensure that all cycle routes are uniformly sign posted and install warning signs at specified locations.	Medium
Review the signage along all old City of Heidelberg bicycle routes and arrange for additional signage where required.	High

Install signage setting out a standard code of behaviour for trail users on all off-road trails in Banyule.	Medium
Install directional signs indicating the location/direction of community facilities and destinations at appropriate locations along shared trails.	Medium
Install emergency markers along Banyule's four major off-road trails.	Medium

6.8 BMX and Mountain Bike facilities

BMX riding is a recreational activity which has been popular in the community since the early 1980's. The level of popularity has fluctuated during that time. Over the past few years, it has again become popular with young people, particularly for young males between the ages of 12 and 18.

In 1998 Council initiated the Votes of Teenagers Encouraged in Society (VOTES) project. This project included a thorough consultation process with over 5,000 young people through secondary schools in Banyule. One component of VOTES was recognition of the need for more skateboarding and BMX facilities. This, combined with the increased incidence of 'unauthorised' dirt BMX jumps in Council reserves, led to a review of Council's position regarding these facilities. In 1999, Council developed a process to provide approval for a number of dirt BMX jumps and skateboard facilities based on a set of conditions of use. The establishment of these facilities would be undertaken in accordance with Planning Scheme requirements. A management plan is being developed for each facility, which addresses the specific management issues, maintenance requirements and conditions of use to ensure that processes for responsible use, monitoring and maintenance are stipulated and followed.

Mountain biking is also increasing in popularity in Banyule and in recent years an informal but heavily used, alternative Main Yarra Trail for mountain bikes has evolved.

In 2007, Council reconstructed its original skate site in Malahang Reserve in West Heidelberg. A second facility exists behind the Eaglemont tennis club, East Ivanhoe. Council opened a third facility at Gabonia Avenue Reserve in Greensborough in February 2004.

Action	Priority
Identify, develop and implement a program for more formal BMX and skateboard tracks/parks with an emphasis on suburbs with a high percentage of youth.	High
Council liaise with local residents and BMX riders to implement any possible BMX tracks in local areas.	High
Council to monitor the uptake of mountain biking and develop appropriate infrastructure for mountain bikers.	High

7. BEHAVIOURAL PROGRAMS

Chapters 5 and 6 have identified the engineering measures required to facilitate a consolidated bicycle network throughout the municipality. In developing and implementing the bicycle strategy for Banyule, both engineering and behavioural actions are being considered. This approach to bicycle planning is well established and encompasses the following elements:

Engineering:	Construction of facilities to provide a safer cycling environment.
Education:	Programs targeting all road and trail users to promote the safe sharing of physical resources.
Enforcement:	Directed at all road users to ensure safer integration of motor vehicles and bicycles on the road.
Encouragement:	Create greater community and government awareness of the benefits of cycling.
Environment:	Recognising the environmental benefits of cycling and ensuring off road cycling trails are suitably located to enhance the existing natural environment.
Evaluation:	Measuring the performance of cycling programs to ensure they are in keeping with the dynamics of demand.

Many of the specific educational and enforcement programs are undertaken by external organisations such as: The Department of Education, Bicycle Victoria, VicRoads, Victoria Police, RoadSafe and individual schools. However, the Council has a positive role to play in motivating and coordinating such strategies as well as monitoring the patronage and upkeep of the physical facilities.

7.1 Education

Public education has been identified as the most effective way to promote improved cyclist behaviour and overall community attitudes to cycling. The lead agencies in educating cyclists and the public include:

- VicRoads: through media advertising, promotions and publications.
- DoT/TravelSmart Office: an innovative project aimed at encouraging people to choose sustainable travel alternatives such as cycling, walking or catching public transport, and reducing their dependency on the car.
- VicRoads; Victoria Police, RoadSafe, Department of Education via bicycle education programs at schools and teaching institutions and enforcement of road rules.
- Bicycle Victoria via leading and organising bicycle surveys, rides, promotion and advocacy.
- Victorian Bicycle Advisory Committee, Bicycle Victoria and local bicycle retail shops through the promotion of bicycle issues and skills training.

Local Councils have a key role to play in terms of community liaison and information and in developing local initiatives to complement the wider education programs. At the local level, the process of education ranges from the cyclist and motorist to those involved in the planning and provision of engineering works.

Cyclists are perhaps the most obvious group to target in any educational program, including the teaching of safety skills and road rules. Many schools run bicycle education programs and while this should be encouraged; it also needs to be recognised that many cyclists are adults who can also benefit from such training. VicRoads provides a number of programs aimed at promoting safe cycling, including Bike Ed, Bike Ed trailers, and the Bike Ed Challenge. The VicRoads Bike Ed program is designed for children aged 9 to 13 years to develop the skills they require for safe and independent riding on roads and paths. Fully equipped Bike Ed trailers are available through VicRoads regions to support schools and community groups in delivering the program. Instructor training is provided by the Department of Education and Early Childhood Development (DEECD) for teachers and community members. Many children under 9 years of age ride bicycle independently and to/from school. Parents of younger children have requested bicycle education programs for children aged less than 9 years. Ride to School days which are currently run as a once a year event should be encouraged more and there is scope for this program to be run once a month over the summer term.

The safety and perception of cyclists is compromised by those who disobey or do not know the road rules. If more bicycles are to be integrated safely on to the road network, cyclists need to be provided with the necessary information and road rules duly enforced. Educational programs should also target off-road cyclist and pedestrian behaviour. In most cases, the off-road trails are shared facilities with pedestrians. Educational material coupled with the appropriate infrastructure (signs, line marking etc) is required to promote the safe and cooperative sharing of the facilities provided.

The motorist should also be included in educational programs to foster a sense of sharing the road space with cyclists. In particular, the opening of car doors, squeezing past cyclists without changing lanes, crowding cyclists on roundabouts and left hand turn manoeuvres should be highlighted as areas of concern. Council can participate in the educational process through promotional displays, educational pamphlets to accompany information on bicycle routes, erecting appropriate warning signs and supporting the initiatives and distributing the information published by organisations such as VicRoads and Bicycle Victoria.

Action	Priority
Encourage the training of bicycle skills through the school education programs i.e. Bike Ed for upper years in primary schools and Cycle On for students in secondary education and initiate an adult training program in consultation with community groups.	High
Advocate with VicRoads/DEET for some form of early bicycle skills training for children aged 6 to 8 years old.	Medium
Advocate with DEET/Bicycle Victoria for monthly Ride2School days to be held during the summer months.	High
Prepare educational material targeting cyclists, pedestrians and motorists to be published in conjunction with information about the bicycle network emphasising the safe sharing of resources.	High
Work with the Department of Transport:TravelSmart department to introduce TravelSmart programs to large workplaces and local communities/schools in the municipality with an emphasis on the cycling component of the program.	High
Distribute relevant information published by organisations such as Department of Transport:TravelSmart, VicRoads, Victorian Bicycle Advisory Committee and Bicycle Victoria.	Ongoing
Develop and implement Travel Access plans for Council's new CoLab	Medium

centre at Greensborough Principal Activity Centre.	
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7.2 Enforcement

Victoria Police is responsible for enforcing road rules. Council supports the active enforcement of road legislation for all road users. Council has a direct enforcement role where bicycle parking facilities are provided. Council officers will enforce the use of the facilities so that bicycles are not left in a dangerous manner on the footpaths.

While bicycle security awareness is increasing (and therefore cyclists tend to securely park their bicycle), there is still a propensity for some cyclists (particularly among the younger riders) to leave their vehicles directly outside the place of visit regardless of where the parking facilities are located.

Action	Priority
Liaise with Victoria Police with the view of having regular bicycle patrols along the off road trails.	Medium
Work with Victoria Police in ensuring cyclists observe the road rules particularly at road intersections.	Medium
Initiate programs to ensure the correct parking of bicycles at commercial centres.	Medium

7.3 Encouragement and Promotion

The provision of a safe and efficient bicycle network coupled with adequate bicycle facilities is a major step towards encouraging cycling as a viable alternative to other forms of transport and as a recreational resource.

The physical facilities should be supported with suitable promotional material to make people aware of their existence. There is also a unique opportunity to link promotional material with other recreation programs, tourism initiatives and the promotion of special areas such as heritage areas. Council can tap into the existing cycling network and liaise closely with local user groups, bicycle retailers, the Victorian Bicycle Advisory Committee and Bicycle Victoria in devising specific promotional events and activities.



The Melways has a one page map (Map 592) which identifies on-road and off-road bicycle facilities in the Melbourne metropolitan area. The map allows cyclists plan their routes across town. It is the first step in getting all the on-road bike lanes shown on the map pages in Melway. The Melway already shows most off-road paths in Melbourne on the map pages.

Surveys undertaken as part of Council's Public Open Space Strategy show that 88% of young consider places to ride bicycles as very important and when asked to nominate their preferred new facilities – the development of specific facilities for teenagers i.e. skate ramps ranked highest, followed by more bicycle/walk paths. Additionally, the bicycle represents one of the only transport modes for younger people to travel longer distances quickly and at very low cost around their neighbourhoods. To actively encourage youth to socialise and engage within their local community, Council needs to actively provide and promote bicycle facilities and encourage younger cyclists.

Council recently hosted the Mayors on Bikes 2009 ride with over 30 Councillors, MPs and representatives from Parks Victoria, Commissioners Office enjoying a 10km bicycle ride from Federation Square along the Main Yarra Trail to the Fairfield Boathouse.

Action	Priority
Maximise opportunities to promote and organise cycling activities within the municipality i.e. events such as Ride to Work day, Ride to School day, Bicycle Safety Month in October.	Ongoing
Support and encourage the Banyule Bicycle Users Group and other cycling organisations active within Banyule.	Ongoing
Incorporate bicycle education and encouragement initiatives into local community events and festivals.	Ongoing
Incorporate cycling initiatives within the broader tourism and recreation programs developed within Council.	Ongoing
Continue to support and encourage Council staff cycling initiatives.	High

7.4 Environment

Banyule benefits from areas of outstanding environmental integrity. The development of the trails along the river systems has demonstrated that, not only can the physical infrastructure complement the natural environment but also provide the opportunity for people to access and enjoy such areas.

It is evident that there is a general increase in the awareness of health and environmental issues and the promotion of bicycle usage is consistent with this ideology. Moreover, it is possible to capitalise on the natural environment within Banyule in so far as providing an incentive for cyclists to “go somewhere”.

However, the bicycle trails need to be managed in such a way that do not intrude upon or denigrate the natural assets. So as to ensure the continuance of the mutually beneficial association of cycling and environmental awareness, the physical infrastructure (including paths, signs etc) should be of suitable design to enhance the environs in which they are located.

Action	Priority
Promote the environmental and health benefits of cycling and link to initiatives to encourage new cyclists into the local area.	Ongoing
Ensure that off-road trail development and improvements are undertaken in context with the local environment.	Ongoing

7.5 Evaluation

It has been noted that to effectively evaluate the performance measures of the cycling initiatives and to judge the changing nature of the cycling environment, information is required in terms of who is cycling, why, how and when. Equally, it is important to understand the factors inhibiting people from cycling.

The cycling environment is dynamic. Improvements to the physical environment, changing community attitudes and personal circumstances will influence the changing factors vis a vis bicycle usage patterns. In preparing work programs, setting performance measures and monitoring the implementation of this statement, it will be necessary to undertake further data collection exercises.

Action	Priority
Prepare annual State of Implementation reports to measure the performance of the bicycle strategy and to guide future bicycle actions programs.	Ongoing
Establish a Bicycle Advisory Committee meeting quarterly to exchange ideas and advice, and to provide a conduit to the community.	Medium
Council to consider appointing a part-time Bicycle Officer with wide-ranging cyclist knowledge and interest, to assist in undertaking the actions outlined in this Strategy.	High
Liaise with the Victoria Bicycle Advisory Committee and Bicycle Victoria in developing data collection and analysis programs that can be utilised on a broader metropolitan scale.	High
Undertake research to establish the changing factors influencing people's decisions to cycle and or not to cycle.	Medium

8. BANYULE BICYCLE STRATEGY ACTION PLAN

The Banyule Bicycle Strategy provides the strategy mechanism to achieve a coordinated approach to cycling issues within the municipality.

The successful implementation of the strategy will require:

- commitment of the necessary resources to undertake the engineering measures and to initiate the behavioural strategies;
- a strategic approach to physical works and funding applications;
- ongoing review of the bicycle implementation plan in relation to the strategy objectives; and
- a coordinated approach to cycling issues within the Council.

8.1 Timing

In order that the bicycle implementation plan can be incorporated within the Council's new works and services program, the actions have been prioritised in accordance with the following scale:

- HIGH Address within the next 2 years.
- MEDIUM Address in the near future within 5 years.
- LOW Actions that do not compromise establishing a safe and effective network be undertaken when funding allows.
- ONGOING Actions forming the basis of maintenance, evaluation and/or recurring programs.

8.2 Funding

Many of the actions required to facilitate a safe and effective cycling environment do not pose a significant additional cost to the Council. The timing and funding of specific projects should be determined through the preparation of works programs, which, to be effectual, need to be linked to tangible performance measures and the New Works and Services budget.

In addition to seeking working partnerships with neighbouring Councils, there are further funding opportunities available from the state government i.e. TravelSmart, Australian Greenhouse Office funding to offset the cost of initiating cycling programs.

8.3 Monitoring

Monitoring of cycle use is essential to assess whether the implementation of more and improved cycle facilities has increased the number of cycling trips and has changed attitudes in favour of cycling. Council will liaise with Bicycle Victoria, Banyule Bicycle Users Group and local cyclists to enable it to evaluate the coherency, directness and safety of existing routes and to enable monitoring to take place.

REFERENCES

- Aust roads (1999), Guide to Traffic Engineering Practice - Bicycles, Part 14.
- Australian Bicycle Council (2006), Australian Cycling – The National Strategy 2006-2011
- Bicycle Victoria (2009), BikeScope and Website information
- Banyule City Council (1997), Municipal Bicycle Strategic Statement
- Banyule City Council (1999), Management Plan for East Ivanhoe BMX & Skate Park
- Banyule City Council (2000), Local Area Traffic Management Strategy
- Banyule City Council (2007), Banyule Health Action Plan
- Banyule City Council (2008), Banyule Recreation Strategy
- Banyule City Council (2002), Greenhouse Action Strategy
- Banyule City Council (2003), Banyule Integrated Transport Strategy
- Banyule City Council (2003), Banyule Road Safety Strategy
- Banyule City Council (2007), Banyule Public Open Space Strategy
- Banyule City Council (2008), Heidelberg Structure Plan
- Department of Transport (2008), Victorian Transport Plan
- Department of Transport (2009), Victorian Cycling Strategy
- Melbourne Water (2009), Shared Pathways Guidelines
- Parks Victoria (2009), Website Information
- VicRoads (2004), Cycling in Melbourne – Ownership, Use & Demographics
- VicRoads (2002), Cycle Notes - Bicycle design information for Engineers & Planners.
- VicRoads (2008), Arrive Alive! Road Safety Strategy