



Moorabool Hike and Bike Strategy

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Completed by SGL Consulting Group Australia Pty Ltd
Leisure and Tourism Planners



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EXECUTIVE SUMMARY

1.0 Introduction

Walking and cycling are two of the most popular activities undertaken by Australians and this is no different for Moorabool Shire residents and the provision of infrastructure and programs to support these activities significantly contributes to the health and wellbeing of the Moorabool Community.

Moorabool Shire Council sought to develop a Hike and Bike Strategy to gain a better understanding of the hike and bike network needs of the community.

1.1 Purpose of the Strategy

The “Hike and Bike Strategy” provides strategic direction for the planning and development of the recreation and commuter hike and bike network throughout the Shire. The strategy will guide Council in its decision making for the future development; provision; management; maintenance; community education; and marketing of hike and bike networks to support both the recreation and transport needs of Moorabool Shire residents and visitors to the area.

1.2 Objectives

The project objectives were to:

- Develop a strategic plan to guide the future development of Council's hike and bike network.
- Research and identify the needs and expectations of the community using a range of consultative measures.

Identify the network considering categories such as commuter walk, commuter cycle, recreation walk and recreation cycle
- Prioritise further development of the hike and bike path network within the municipality with development of an action list identifying key works and rationale for inclusion.
- Recommend future funding opportunities for proposed improvement works and programs.

It is noted that Council faces significant challenges:

- in providing for an ever expanding population;
- in meeting the increasing expectations about the standard to which paths and trails and associated infrastructure will be provided, and constructed;
- as well as improving the connectivity of paths/trails to key destinations within areas.

(The Hike and Bike Strategy includes recommendations on strategic paths of travel across the Shire that have strategic justification to support the hike and bike network).

1.3 Market Research Consultation

A range of community engagement and consultation was undertaken by SGL in order to identify community perspectives on current issues and priorities in relation to the development



of a Hike and Bike Strategy and network for Moorabool Shire. The consultation completed involved:

- Resident Surveys
- Engagement at the Council's Health and Wellbeing Expo
- Consultation workshop/meeting with Bacchus Marsh and District Trails Advisory Committee
- Public Submissions process including an invitation to all Reserve Committees of Management to identify actions for the development of a Strategy
- Key Stakeholder Consultation

1.4 Future Hike and Bike Strategy Direction

The vision for the Hike and Bike Network in Moorabool is:

“To develop a safe and sustainable hike and bike network that provides for a wide range of users; provides safe local and regional connections between townships; and increases recreation and tourism opportunities within Moorabool Shire”.

The draft strategy outlines a program of capital works and projects to support the growth and utilisation of the Moorabool Hike and Bike Network. Recommendations have been listed and categorised (in section five of the report) as Primary (Shared path network, strategic linkages), Secondary (link destination points off the primary linkages including public transport routes) and Local (creating linkages toward primary network).

It is recommended that priority for development of the hike and bike network be given to linking primary destinations such as schools, larger shopping centres, major parks and reserves, major public transport routes and significant community hubs and/facilities.

It is acknowledged however that all recommendations require prioritisation consistent with Council's Capital Works Evaluation Guidelines to determine the action plan for implementation. Timeframe for delivery will also be driven by funding committed toward these categorised recommendations as part of Council's budget process.

Key recommendations detailed within the strategy are:

Planning and Policy Development

- That all future strategic planning consider the future development and benefit of the hike and bike network.
- That all future planning and implementation consider Council's adopted Infrastructure Design Manual (IDM) that drives the infrastructure standards for the Shire.

Management and Maintenance of the Hike and Bike Network

- Develop a process to ensure all existing and proposed paths (on road and off road) are documented and mapped using Council's GIS system.
- Ensure the budget allocation for maintenance of paths is also increased as new paths are developed.

Pedestrian Network

- Priority for development of the hike and bike network is to be given to linking primary destinations such as schools, larger shopping centres, major parks and reserves, major public transport routes and significant community hubs and/facilities.
- That the Pedestrian Path Priority Criteria outlined in Table 4.1 are used to assist with determining future pedestrian path priorities in the Shire.

Future Trail / Infrastructure Standards and Amenities

- That all future hike and bike strategy development and implementation is implemented consistent with Council's Infrastructure Design Manual to ensure a consistent standard is implemented across the Shire.

Promotion and Marketing

- That Council develop a signage and promotional strategy for the Moorabool Hike and Bike network.
- Ensure a hike and bike network map is available on Council's website and it is updated annually.
- Produce and regularly update a walking and cycling brochure of the available routes within the Moorabool Shire.
- Publicise the hike and bike network through the Bacchus Marsh and District Tourist Information Centre.
- Promote health and wellbeing through the promotion of walking routes using brochures/maps, signage and school and community promotion and events.
- Work in partnership with other organisations such as the neighbourhood houses and community health centres to establish new community-walking groups and sustain existing groups.
- Encourage local schools to establish walking (and potentially riding) school buses.

Emergency Services Telecommunication Authority (ESTA)

- That ESTA signage is installed in all future trail development and along the Werribee and Lerderderg River trails where defining the exact location can be difficult.

Recreational / Paths / Tracks / Roads

- That a feasibility study is undertaken to determine the viability and cost of developing the Avenue of Honour Heritage Trail.
- That Council support the further development of tracks and trails along the Werribee River and Lerderderg River by the Parks Victoria.
- That consideration is given to providing shoulders on selected roads between Gordon and Ballan and Ballan Daylesford to encourage and increase cycling safety.
- That where cyclists regularly use secondary roads, signage-alerting motorists to the likely presence of cyclists in the area are considered for installation.

1.5 Funding and Grant Opportunities

The planned growth in Moorabool Shire provides an opportunity to further develop the hike and bike network. Council will prioritise any opportunity for funding consideration through the annual Capital Improvement Program with external grant opportunities also pursued to support the funding model.

Mapping of the following townships is provided within the strategy outlining key hike and bike



network priorities consistent with the principles and objectives of the draft strategy.

- Bacchus Marsh
- Ballan
- Blackwood
- Bungaree
- Dunnstown
- Elaine
- Gordon
- Greendale
- Hopetoun Park
- Lal Lal
- Long Forrest
- Mt Egerton
- Myrniong
- Wallace

Following review of the draft strategy including further community consultation a final strategy document will be prepared.

1 INTRODUCTION

Walking and cycling are two of the most popular activities undertaken by Australians and this is no different for Moorabool Shire residents. The provision of infrastructure and programs to support these activities significantly contributes to the health and wellbeing of the Moorabool Community.

The “Hike and Bike Strategy” provides strategic direction for ongoing planning and development of the hike and bike network throughout the Shire. The strategy will guide Council in its decision making for the future development, provision, management, maintenance, community education and marketing of hike and bike networks to support both the recreation and transport needs of Moorabool Shire residents and visitors to the area.

1.1 PROJECT OBJECTIVES

The project objectives were to:

- Develop a strategic plan to guide the future development of Council’s hike and bike network.
- Research and identify the needs and expectations of the community using a range of consultative measures.
- Identify the network in four main categories:
 - Commuter walk
 - Commuter cycle
 - Recreation walk
 - Recreation cycle
- Prioritise further development of the hike and bike path network within the municipality with development of an action list identifying key works and rationale for inclusion.
- Recommend future funding opportunities for proposed improvement works and programs.

1.2 PROJECT METHODOLOGY

The following methodology was adopted for the preparation of the plan and at the draft report stage, SGL has completed tasks 1 to 11.

- Task 1: Project clarification
- Task 2: Review of previous research and documentation
- Task 3: Council Officer workshop
- Task 4: Meeting with Track and Trails Committee
- Task 5: Stakeholder Interviews
- Task 6: Trails inspection
- Task 7: Resident survey and public submission
- Task 8: Discussion paper
- Task 9: Area Mapping
- Task 10: Strategy development
- Task 11: Draft Strategy Report completed
- Task 12: Public consultation on Draft Strategy Report
- Task 13: Completion of Final “Hike and Bike Strategy Report”

1.3 OVERVIEW OF MOORABOOL SHIRE

The Moorabool Shire's landscape provides an array of living options. Residents can enjoy an urban lifestyle in towns like Bacchus Marsh (45km west of the Melbourne CBD) and Ballan (70km west of the Melbourne CBD) or take advantage of Moorabool's small towns and hamlets, rural open spaces and natural surrounds. A stunning Shire spanning more than 2,110 square kilometres, Moorabool is made up of 64 localities, hamlets and towns. More than 74% of the Shire comprises of water catchments, state forests and national parks. Moorabool boasts breathtaking landscapes, national parks, forests, gorges, mineral springs and tourism attractions. Some of its key attractions include the Wombat State Forest, Brisbane Ranges National Park, Lerderderg State Park, Werribee Gorge State Park and the Bacchus Marsh Avenue of Honour.

Moorabool Shire is positioned along the major road and rail transport corridors between Melbourne and Adelaide. Moorabool's eastern boundary is located just 40km west of Melbourne's CBD and extends westwards to the City of Ballarat municipal boundary. The Shire straddles Victoria's Western Highway and has excellent transport access to Melbourne, Ballarat and Geelong. Bacchus Marsh is equi-distant to Melbourne and Avalon airports and close to the sea ports of Geelong and Melbourne.

1.4 THE BENEFITS OF WALKING AND CYCLING

The development of a "Hike and Bike" Strategy for Moorabool Shire will assist Council in increasing the benefits to residents and area visitors that are gained through their ongoing participation in walking and cycling.

There are many social, environmental and economic benefits associated with walking and cycling that can be realised through the ongoing development of a high use walking and cycling network including:

Social benefits:

- Improved health and wellbeing through participation in physical exercise
- Socially connected neighbourhoods
- Independent and affordable means of travel

Environmental benefits:

- Reduced use of vehicles particularly for short journeys
- Reduced traffic congestion
- Reduced use of fossil fuels
- Improved air quality through less emissions from vehicles

Economic benefits:

- Increased tourism opportunities within the Shire

1.5 PARTICIPATION IN WALKING AND CYCLING

In order to understand the significance of the impact that improved walking and cycling infrastructure can have on people's health and wellbeing it is important to recognise the existing high levels of participation in both activities across Australia.

The **Exercise, Recreation and Sport Survey (ERASS)** is a national survey undertaken by the Australian Sports Commission which collects information on the frequency, duration, nature and type of physical activities participated in for exercise, recreation or sport by persons aged 15 years and over. The survey was conducted quarterly in 2010 with an annual total of 21,603 respondents across Australia.

The top ten physical activities in 2010 in terms of total participation rate were **walking**, aerobics/fitness, swimming, **cycling**, running, golf, tennis, bushwalking, outdoor football and netball.

An estimated 6.3 million persons or 35.9 per cent of the country's population participated at least once in walking for exercise, recreation or sport in 2010.

Over the last ten years participation in running, outdoor football, **cycling** and **walking** increased, although walking, running and **cycling** showed greater fluctuation over the period as can be seen in the results in the Table 1.1 below.

Table 1.1 shows participation levels by males and females in Victoria. This table clearly shows that walking is the most popular activity for both sexes with participation by 46.1 per cent of females compared to 26.8 per cent of males.

**Table 1.1
Top Ten Physical Activities Victoria**

Male		Female	
Activity	Total Participation Rate %	Activity	Total Participation Rate %
Walking	26.8	Walking	46.1
Aerobics/fitness	19.4	Aerobics/fitness	29.8
Cycling	16.9	Swimming	14.4
Running	14.9	Running	10.5
Swimming	12.6	Cycling	8.6
Golf	12.2	Yoga	7.4
Australian rules football	10.2	Netball	6.7
Tennis	7.4	Tennis	6.2
Basketball	6.7	Bushwalking	4.2
Cricket (outdoor)	6.6	Dancing	3.5

1.5.1 Relevant Findings from the National Cycling Participation Survey 2011

The National Cycling Participation Survey records the participation levels in cycling and key trends.

1. National Trends

- In a typical week around 18 per cent of Australians ride a bicycle for transport and recreation.
- More than 3.6 million people ride for recreation, leisure or sport.
- More than 1.2 million people make at least one transport journey by bicycle each week. This includes trips to school, university, work, shops and to visit friends and family.
- The Northern Territory, ACT and Western Australia have cycling participation rates significantly higher than the national average. Victoria is forth highest with 19.4 per cent of the population riding in a typical week.
- Children have the highest levels of cycling participation:
 - With nearly 50% of all 2 to 4 year olds
 - With nearly 75% of all 5 to 9 year olds, and
 - With nearly 33% of all 10 to 17 year olds ride a bicycle in a typical week.
- Men and boys (22%) are more likely to ride a bicycle than women and girls (13%) in a typical week.
- The gender participation difference is smallest for children under 10 years of age.

All States and territories have seen a dramatic decrease in participation in these activities in adulthood. This is especially marked in people aged 40 and over.

2. Victorian Trends

- Victorian cycling participation is similar to the Australian average.
- Around 19 per cent of Victorian residents ride in a typical week, increasing to 29 per cent in a month and 42 per cent over a year.
- Cycling participation is significantly higher amongst residents of regional Victoria than in metropolitan Melbourne.
- About half of all children aged under 10 ride each week, decreasing to 9 per cent of those aged 40 and over.
- Victoria is the only jurisdiction in Australia where the participation rate of females is higher than males in any age group.
- In Victoria more girls than boys aged under 10, ride a bicycle each week.
- In older age groups the gender balance returns to average. Overall about 23 per cent of males and 16 per cent of females ride in a typical week. The lowest rate of participation is by older women with 6 per cent of women aged 40 and over cycling in a typical week.
- Metropolitan Melbourne has a high proportion of people who cycle for transport (45% of people who cycle in a typical week). About 367,000 people cycle for transport on at least one occasion a week in Victoria.
- Just under two thirds of households in Victoria have access to a bicycle.

1.6 KEY ORGANISATIONS THAT SUPPORT CYCLING

The following section summarises a range of key organisations that currently provide services or support to cyclists and who impact on cycling participation.

1.6.1 Cycling Victoria

Cycling Victoria (CV) is the peak governing body for both organised competitive, and recreational, cycling within Victoria, Australia.

CV has 8,000 members and 18,000 participants in CV programs and strives to improve participation in cycling by coordinating a range of development programs for junior and adult cyclists through the delivery of the Austcycle program throughout Victoria.

Membership has grown by 15 per cent over the last three years and more than tripled from the three years previously.

CV works with cyclists on three levels.

- **Competitive:** Coordinates the competitive disciplines of road and track cycling at a club and State level.
- **Recreational:** Provides options for recreational cyclists including the provision of insurance coverage, and providing a calendar of recreational events.
- **Development:** Coordinates Coaching & Officials Courses, junior development camps, school clinics, plus Come N Try road and track cycling days.

1.6.2 AustCycle

AustCycle is Australia's only national cycling accreditation program, which provides high quality education and training to community members to encourage them to get on their bikes and ride. Whether for commuting purposes, for leisure or travel, AustCycle trains people of all ages and backgrounds to incorporate cycling into their lifestyle in order to stay active and healthy.

1.6.3 Bicycle Network Victoria

Bicycle Network Victoria (BNV), is a charity that promotes the health of the community by "More People Cycling More Often". Of the 50,000 members of BNV, **1,100** are from Moorabool indicating a high level of interest in cycling.

BNV aims to achieve an increase in the number of people riding each week by 1,000,000 people by 2019 through the use of the following strategies:

1. Improving the riding environment through better facilities and legislation.
2. Delivering large-scale, measurable, cost-effective behaviour change programs.
3. Managing a range of rider services that reach out to potential riders and support novice and established riders.
4. Running major events.

1.6.4 Victoria Walks

Victoria Walks is a walking health promotion charity, managed by an independent voluntary board with a mission to have more people walking every day. Their vision is for vibrant, supportive and strong neighbourhoods and communities where people can and choose to walk wherever possible.

Victoria Walks is a voting member of the International Federation of Pedestrians (IFP) which is the umbrella organization for national pedestrian advocacy groups, and is a signatory of the International Charter for Walking. Victoria Walks has been invited onto a number of key Government advisory committees and reference groups relevant to creating walkable communities and increasing the health of Victorians.

1.6.5 The Heart Foundation

The Heart Foundation is a charity that is dedicated to saving lives by making a difference to the heart health of all Australians. The Heart Foundation help to fund vital research, develop guidelines for health professionals, support patient care and help Australians to live healthier lifestyles. They support and work with all levels of government, health organisations, the media and community groups to implement policies and programs that improve the heart health of all Australians and promote an active lifestyle. The Heart Foundation supports local governments that change neighbourhoods to create healthier communities. Introducing cycle ways, upgrading walking paths and promoting walking groups are just a few of examples of recent initiatives they have supported. They promote the need for communities to have access to a network of connected, direct and easy active travel routes which are safe, comfortable, attractive and well-maintained, linking homes, shops, schools, parks, public transport interchanges, green spaces and other important destinations.

1.7 REVIEW OF PREVIOUS RELEVANT RESEARCH

The following plans and policies have supported or identified the need to increase the level of walking and cycling opportunities within the municipality.

- Moorabool Shire Council Plan 2013-2017
- Moorabool Shire Public Health and Well Being Plan 2013
- Moorabool Strategic Bicycle Plan 2001
- Bacchus Marsh District –Trails Master Plan 2004-2005
- Positive Ageing Strategy 2008
- Municipal Early Years Plan 2006-2009
- Front SEEAT (Social Employment Education Access Transport) Strategic Plan 2011-2013
- Planning Checklist for Cycling
- Moorabool Shire Recreation and Open Space Plan 2007 (currently being reviewed)
- Moorabool 2041 Urban and Rural Policies
- Bacchus Marsh Activity Centre Structure Plan
- Gordon Structure Plan
- Ballan Structure Plan

A synopsis of each policy and plan above and its relevance to the Hike and Bike Strategy can be found in Appendix 5. Whilst all of the above documents informed the strategy, a synopsis of the most relevant report appears below.

1.7.1 Moorabool Shire Recreation and Open Space Strategy 2007

This strategy helped identify that Council's recreation resources in the past focussed primarily on more traditional sporting activities and less on unstructured recreation such as walking,



bike riding, and sporting activities that are not undertaken within a club or competition framework. The following recommendations are relevant to the Hike and Bike Strategy.

Recommendation 2.5

- Promote the establishment of walking groups.

Recommendation 3.3

- Develop a Signage Policy for recreation and open space areas.

Recommendation 5.9

- Prepare an integrated Footpath and Trail Strategy that forms part of the Asset Management Plans for pathways.
- Implement the Bacchus Marsh and District Trails Master Plan (2004-2005) with input from the Bacchus Marsh and District Trails Advisory Committee.

This strategy is currently being reviewed and new strategy will support the outcomes of this Hike and Bike Strategy.

1.7.2 Moorabool 2041

Moorabool 2041 (M2041) is a Moorabool Shire Council adopted framework which at its heart seeks to provide a vision for the type of community Moorabool Shire will be in 2041. To do so, M2041 is to facilitate an outcome that both allows for growth and keeps the community connectedness, character and sense of place so valued by our current residents.

It has two core elements, a rural growth strategy which seeks to develop a strategy for each of the smaller settlements across the Shire, including Ballan. Where possible, scope to asset share and cluster community services is a priority but there is also an imperative to foster resilient communities, encourage growth, service offer and provide a sustainable base for these towns.

The urban growth strategy is focused on Bacchus Marsh (including Darley and Maddingley), the commercial and settlement centre of the Shire with over 15,000 residents (2011 census) and expected to almost double by 2036. Given the growth expected, planning and managing the pressures of growth in a proactive manner is necessary so that a sustainable environment where people can live, work, access retail, social and recreational services and be involved and connected. The strategy looks at what our future population will be and what employment, services and infrastructure will be required to meet their needs so that Council can identify what growth options will meet these needs in a sustainable and cost effective manner.

M2041 is an identified project in Council's Council Plan 2013-2017.

2 OVERVIEW OF CONSULTATION

A range of community engagement and consultation was undertaken by SGL in order to identify community perspectives on current issues and priorities in relation to the development of a Hike and Bike Strategy and network for Moorabool Shire. The consultation completed involved:

- Resident Surveys
- Engagement at the Council's Health and Wellbeing Expo
- Consultation workshop/meeting with Bacchus Marsh and District Trails Advisory Committee
- Public Submissions process including an invitation to all Reserve Committees of Management to identify actions for the development of a Strategy
- Key Stakeholder Consultation
- Draft Strategy public exhibition engagement process for 10 week period

2.1 RESIDENT SURVEY KEY FINDINGS SUMMARY

A "Hike and Bike Resident Survey" was made available to the community via Council's online engagement portal - "Have Your Say" on 5 November 2012 through to 7 December 2013. The aim of the survey was to gain community feedback that would assist in the development of the draft Moorabool Hike and Bike Strategy.

At the completion of the survey period, 138 people visited the site a total of 201 times.

Full analysis of the survey is included in Appendix 1 of this report. Below is a summary of the key findings from the survey results.

2.1.1 Residents Survey Key Findings Summary

- Of the survey respondents (58.6%) were female and (41.4%) were male.
- The majority of respondents were in the 21-50 years age group with 58.6 per cent of respondents fitting into this age cohort. The next main group were the 51-65 years
- The highest priority action for council to encourage walking and cycling was to provide safe paths/track to primary destinations such as shopping areas and community facilities (66.7% supported) followed by the need for improved signage for existing routes.
- The greatest barrier to walking and cycling was identified as the lack of tracks/path by 65.5 per cent of respondents followed by 55.2 per cent who consider there is no safe route to where they want to go.
- A total 56 per cent of respondents think that recreational paths should be funded ahead of commuter routes.
- Half of the respondents (50%) walk for fitness, (41.7%) for recreation/fun; and (8.3%) of respondents walk to commute to school/work.

Within the general comments received, many residents identified specific actions/routes, which Council could take to improve walking and cycling opportunities in Moorabool.

Where possible these have informed the identification of specific actions for each township for consideration by Council.

2.2 HEALTH AND WELLBEING EXPO

Moorabool Shire Council ran a Health and Wellbeing Expo on 10th November in 2012. As part of the expo, a series of consultation methods were used to obtain residents thoughts in regard to health and wellbeing. One of the opportunities available to residents was to place their ideas in a “Wish box.”

The key theme to emerge from the wish box was the desire of residents for better facilities, opportunities and connections for walking and cycling. The feedback supported the need to increase and improve infrastructure, planning and information for walking and cycling in Moorabool.

2.3 BACCHUS MARSH AND DISTRICT TRACKS AND TRAILS COMMITTEE (BMDTAC)

The consultant and Council officers attended a meeting with the BMDTAC to identify key issues and priority projects for the ongoing development of a trail network in the Bacchus Marsh and District Area.

Listed in Appendix 2 is a table outlining the key priorities for the BMTAC as at 2009. It should be noted that Priority 3 and 6 have been completed since this list was formed.

Appendix 3 lists a number of main trail routes which BMDTAC have proposed for linking key areas within Bacchus Marsh with the aim being to identify the key routes to link the various residential areas with the town centre, schools and recreational reserves. Further consultation has been conducted with the BMDTAC in regard to specific routes suggested and are covered in the action plans in section five.

2.3.1 Key Issues Identified by BMDTAC

The key issues identified by the BMDTAC group as main barriers to walking/cycling in the Bacchus Marsh and District Areas were:

- A lack of safe cycle link running north south through Bacchus Marsh.
- The pedestrian Refuge near the outdoor swimming pool in the middle of Grant Street needs to be made more permanent.
- Extension of the existing path along Griffith Street to connect with Halletts Way
- Connection between Comets Way to Halletts Way to Links Road
- Crossing Taverner Street from Boyde Close
- Connecting Maddingley Park to Bennet Street.
- Connecting Greenway from Bacchus Marsh Activity Centre
- Lack of safe and accessible crossing to provide a circuit path within Peppertree Park
- Pedestrian access to the Avenue of Honour.

2.4 GREAT DIVIDING TRAIL COMMITTEE

The Great Dividing Trail Committee has identified a trail through Moorabool with the recommended pathways also being identified through the BMDTAC proposed routes. This trail is regionally significant and effective signage needs to be maintained to facilitate use of the trail.

2.5 GENERAL COMMUNITY CONSULTATION

Community groups and residents were invited to contact the project consultant directly regarding the development of the Hike and Bike Strategy. All Recreation Reserve Committees across the Shire were invited to contribute information and ideas to the development of the Hike and Bike Strategy. The following contributions and comments were received.

2.5.1 Myrning Recreation Reserve Committee of Management

- The community is interested in developing a track from the Recreation Reserve to the School.
- The establishment of a bike club for Moorabool would also be of interest.
- Bacchus Marsh could be promoted as a bike friendly town.

2.5.2 Elaine Recreation Reserve Committee of Management

- A path is required from the Recreation Reserve to the CFA building along Midland Hwy.

2.5.3 Wallace Recreation Reserve Committee of Management

- Actions from the Reserve Master Plan should be incorporated into the Hike and Bike Strategy.

2.5.4 Bacchus Marsh Tourism Association - Avenue of Honour Heritage Trail

- There is strong interest in developing a Heritage Trail, which includes the Avenue of Honour and other areas of historic interest.
- This project involves developing a 3.5 kilometre accessible walking trail that links Bacchus Marsh township with the full length of the Avenue of Honour, through to Moon Reserve, then across the highway via a pedestrian overpass (would need to be constructed) with the trail then continuing to Hopetoun Cemetery and Ta Pinu.
- This project was submitted for funding under Council's Community Development Fund 2011/2012 and was supported for further scoping of the feasibility of the concept.
- The project would benefit local residents who have expressed interest in recreational and tourism trails as well as increasing tourism product to attract people to visit.

2.5.5 Ballan Resident 1 – Telephone Consultation

- "There are no safe riding or running tracks in Ballan. As a triathlete, I have to run on the road to ensure a consistent and connected surface."
- "A number of existing tracks are in disrepair and are not safe e.g. the track near the Werribee River is not long enough and is in disrepair."
- "It would be beneficial if signs were erected on roads frequented by cyclists to encourage motorists to be aware of cyclists in the area. Suggested roads include, Ballarat to Gordon, Ballan to Gordon, Anakie Road to Daylesford Road."

The trails referenced above were damaged by flood at the time of this consultation and works undertaken to address since that time.

2.5.6 Ballan Resident 2 – via email



- “When are we going to get some decent walking tracks? We have Caledonian Park, which is beautiful but completely impractical as it is not possible to do a complete circuit.”
- “One can only walk so far and then you have to turn and come back the same way, as it is not possible to cross the river.”
- “It seems crazy that we live in a beautiful area but we cannot take advantage of it. We have very limited resources to exercise and stay healthy - no gym, a pool that is only open in summer, no walking tracks.”

3 KEY ISSUES AND OPPORTUNITIES

This section identifies the key issues raised from the range of research and consultation processes in the development of the draft Hike and Bike Strategy for Moorabool Shire Council.

3.1 KEY ISSUES

The work to date has identified the following key issues:

1. There are many streets within the townships of Bacchus Marsh, Ballan and surrounds without footpaths partly due to non-linked housing developments, which in the past have not been required to provide footpaths.
2. Lack of continuity and connection with footpaths within townships.
3. The current lack of connection between new housing developments and the town centres of Bacchus Marsh and Ballan.
4. The lack of a safe north/south cycling route in Bacchus Marsh Township.
5. No safe crossing point under the Western Highway as the underpass is currently locked at night.
6. Maintenance of existing tracks.
7. Lack of signage for existing tracks.
8. Limited awareness by the community of existing tracks.
9. Limited/no lighting along some existing paths.
10. Limited shoulders on roads connecting townships making cycling hazardous.
11. Lack of signage on roads used by cyclists between townships e.g. Ballan to Gordon.
12. Limited financial capacity of Council to develop and maintain new paths and trails throughout the Shire.

3.1.1 Options to Address North South Access through Bacchus Marsh

There are three options raised for consideration to improve the north south trail access through Bacchus Marsh

1. Widening of Gisborne Road to ensure development of a designated continuous bike lane along Gisborne Road which is likely to require widening of the road (Gisborne Road is the responsibility of Vic Roads). Although bike lanes are already provided, feedback from users suggest they're inadequate and not wide enough.
2. Development of pedestrian and cycle paths and pedestrian freeway crossing along Halletts Way. It should be noted this freeway crossing is a VicRoads responsibility.



3. Development of a pathway along the Irrigation Channel and easement between Werribee River and Lerderderg River. (Note: Southern Rural Water owns this land)

Through the consultation phase, residents identified the development of a pedestrian bridge adjacent to the existing bridge on Halletts Way would increase accessibility at this location. This pedestrian crossing as previously mentioned is a responsibility of VicRoads.

The continuation of Halletts Way connecting the north of Bacchus Marsh with the South has been identified in the Bacchus Marsh Structure Plan. It is anticipated to be between five and ten years before this is completed, with developer contributions and Council funding this project.

The future development of the Halletts Way overpass would also significantly reduce the current dependency on Gisborne Road as the key access point into Bacchus Marsh

The development of a pathway along the Irrigation Channel and easement land area between Werribee River and Lerderderg River was identified by BMDTAC and has been further explored through this project via discussions with Council Officers and Southern Rural Water. The following email response was received from Edward Smith, Manager Water Supply West following a discussion in relation to the possibility of developing a shared pathway along the irrigation supply channels:

"The irrigation supply channels are currently fenced off for public safety reasons. Therefore we would not wish to see walking or cycling tracks alongside the channel. However we are looking into reconfiguring the irrigation district, which may mean we would pipe that section of the supply system. If this was to occur the channel easement could be used for such purposes. However, early indications are that this would cost in the region of \$10m to \$15m, which would be unviable to fund from our customer base, without some external funding.

In addition to the cost to develop the channel there is also concern regarding the safety of this route as sections of the channel have no casual surveillance as residential properties back fences face the channel".

It is understood that the Board of Southern Rural Water has expressed interest in the proposal.

Of the three options, Option 2, which is the development of Halletts Way, as the primary north south link across Bacchus Marsh appears to be the most viable and achievable with required works already identified within a local planning context. In addition accessing developer contribution funds for this purpose will reduce the full financial cost from Council. Any action that will speed up the delivery of this critical link should be considered a priority.

Further investigation of the viability of other north south links including the irrigation channel is recommended as this is considered a high priority to be evaluated..

4 MOORABOOL HIKE AND BIKE STRATEGIC DIRECTIONS

This section outlines the recommended future vision, principles and objectives of the draft Moorabool Hike and Bike Strategy as well as proposed development guidelines, standards and notional program of works to be undertaken, across the municipality, to improve the opportunities for walking and cycling in Moorabool Shire Council.

4.1 MOORABOOL HIKE AND BIKE STRATEGY VISION

The vision for the Hike and Bike Network in Moorabool is:

“To develop a safe and sustainable hike and bike network that provides for a wide range of users; provides safe local and regional connections between townships; and increases recreation and tourism opportunities within Moorabool Shire”.

4.2 STRATEGY PRINCIPLES

The following principles have been developed to direct the Moorabool Hike and Bike Strategy:

1. The provision of a Hike and Bike Network will provide increased walking and cycling opportunities that will support social interaction, enhance safety and reduce reliance on cars.
2. Tracks and trails provide active recreation opportunities to increase the health and wellbeing of the community.
3. Tracks and trails connect key community destinations such as schools, shopping centres, parks, reserves and other local places of interest to connect people to the town
4. A hike and bike network will be developed within key towns across Moorabool to foster effective access through the towns, connecting key access ways and community facility infrastructure. This will include the connection of key missing linkages to facilitate a more efficient network.

4.3 STRATEGY OBJECTIVES

- To effectively guide the future development of Council's hike and bike network for recreational and commuter walking and cycling.
- To increase the physical activity levels of Moorabool residents through the provision of tracks and trails to primary community destinations such as schools, shopping centres, parks and reserves, medical practices, and natural attractions.
- Provide track and trails that are safe and include passive surveillance wherever possible.
- Increase the connectivity of existing tracks and trails throughout the Shire to enhance the usability and effectiveness of the network.
- Prioritise network development opportunities to maximise the benefits of investment to the community and to support future funding opportunities and applications.

4.4 MOORABOOL PLANNING SCHEME GUIDING DOCUMENTS

All approved Council precinct structure plans and Council policies must be considered in the development of the future hike and bike network. Relevant details have been summarised from these documents and can be found listed in Appendix 4 of this document.

Key Recommendation

All Precinct Structure Plans and Council Policies will be considered, in the development of the Hike and Bike Network.

4.5 MANAGEMENT AND MAINTENANCE OF THE HIKE AND BIKE NETWORK

Council has spent considerable time updating data on existing paths within Council's GIS system to develop a robust database that includes the condition of each path and trail and provides Council with a clear picture on path upgrade and provision requirements.

Alongside the ongoing process of maintaining effective records is the need to ensure the budget allocation for maintenance and inspection of paths is also increased in line with new paths and trails being developed. This will ensure safety and provision standards are maintained over the expanded trails network.

Key Recommendations

- Ensure all existing and proposed paths (on road and off road) are documented and mapped using Council's GIS system.
- Ensure the process for altering the status of paths (e.g. proposed to complete) is undertaken including referral to the Asset Register.
- Ensure the budget allocation for maintenance of paths is also increased as new paths are developed.

4.6 PEDESTRIAN PATH NETWORK

Recommendations for development of the hike and bike network will consider linking primary destinations such as schools, larger shopping centres, major parks and reserves, major public transport routes and significant community hubs and/facilities to increase connectivity and promote health and wellbeing lifestyle opportunities.

Whilst a complete pedestrian path network is desirable, given the financial constraints faced by Council, the criteria outlined below can be used to determine future recommendations within this strategy. Prioritisation of these recommendations will then occur in accordance with the Capital Works Evaluation Guidelines 2012.

**Table 4.1
Pedestrian Path Recommendation Guiding Principles**

Criteria	Description
Proximity to Primary Destination	Paths/sections of paths in close proximity to a primary destination.
Expected Use	Paths likely to serve higher numbers of pedestrians
Community Safety	Pedestrian safety is critical. Issues impacting on safety

Criteria	Description
	include speed limit of adjacent traffic, and traffic volume.
Community Demand	Where there is demonstrated community demand for the route.
Cost/benefit	construction of missing links and shorter sections of path, as the completion of these will encourage walking.
Complexity of Works	The type of terrain will impact the constructions and ongoing lifecycle costs, consideration to those paths that address significant public safety concerns.

Key Recommendation
<ul style="list-style-type: none"> That the guiding principles outlined in Table 4.1 above are used to assist with determining future pedestrian path recommendations identified in this strategy across the Shire. All recommendations will be then evaluated as per Councils Capital Works Evaluation Guidelines 2012.

4.7 FUTURE TRAIL/INFRASTRUCTURE STANDARDS AND AMENITIES

According to Austroads: "The purpose of a bicycle network is to enable cyclists of a wide range of abilities and experience to move safely and conveniently to chosen destinations via suitable desire lines. The basis of a bicycle network is the road network, augmented by special on-road facilities together with dedicated infrastructure such as off-road paths, and footpaths where permitted, and may include public transport"¹.

VicRoads have developed a series of documents called "CycleNotes" which specify the design standards for bicycle facilities. These standards should be read in conjunction with Austroads Guide to Traffic Engineering Practice Part 14 – Bicycles and Australian Standard 1742.9 Manual of Uniform Traffic Control Devices Part 9 – Bicycle Facilities). These standards should be used in the development of all future cycling infrastructure in Moorabool.

The Bicycle Network Victoria website provides a wealth of cycling related information and planning documentation including "Cycle Notes" in relation to a range of planning and infrastructure topics.

The Municipal Bike Network produced by VicRoads in 2005 for Bacchus Marsh shows existing on road and off road routes though Bacchus Marsh.

Identified off road priorities yet to be constructed include:

- Station Street from the end of the railway Station to Fisker Street
- Fisker Street from Station Street to Taverner Street

Identified on road priorities yet to be constructed include:

- Main Street from Grant Street to the Avenue of Honour
- Gisborne Road from Grey Street to Albert Street

The following advice has been taken from the Bicycle Network Victoria Website.

"Paths for cyclists can be shared with people walking (shared paths) or bicycle only paths. Paths need to be built wide enough to cater for the current and future number of users. The accepted minimum width for shared paths is 2.5m, with paths expecting commuter traffic at

¹ Austroads 2011



least 3.0m wide. Paths with heavy commuter and recreational traffic should be at least 3.5m wide or provide separate paths for cycling and walking.”²

4.7.1 Footpath Standards

Many of the existing footpaths in Moorabool are considered narrow and at times compromise access standards. It is planned that all future footpaths will be constructed to a specified standard outlined in Council's adopted Infrastructure Design Manual. This includes a minimum width identified for shared paths. The IDM is available to guide footpath infrastructure provided by land and subdivision developers in growth areas of Moorabool.

4.7.2 Supporting Infrastructure/Amenities

It is recognised that a lack of support infrastructure will impact on the level and type of use a path even if it is well located and should therefore attract high use. If a path goes through an area with no lighting or inadequate lighting such as Maddingley Park for example—potential use will be reduced.

Given the important link between the Bacchus Marsh Railway Station and the Green Link, adequate lighting of Maddingley Park may significantly increase the number of residents prepared to walk along this route at night. If paths lack seating for older residents or if there is a lack of shade for example, the expected level of use may diminish.

Cyclists require adequate bicycle parking at end destinations as well as access to water and toilet facilities for example. The provision of support infrastructure can have a major impact on the level of use of paths and trails.

Key Recommendations	
•	That the Austroads and the VicRoads CycleNotes standards are adhered to in the provision of bicycle infrastructure.
•	That Council ensures that the Infrastructure Design Manual is utilised to drive provision standards for paths and associated infrastructure.

4.8 SIGNAGE

Lack of adequate signage was identified as a barrier to participation in walking and cycling by 31 per cent of survey respondents and 60 per cent identified improved signage as a way Council could encourage increased participation in cycling and walking.

Signage will help to guide people using existing paths and bike lanes and also help guide people where marked cycle routes are not provided. Directional signage should allow people to find their way without reference to a map.

Regular cyclists principally use the commuter network, whilst occasional visitors as well as regular walkers and cyclists use the recreation network.

A signage strategy along the various recreation paths needs to be developed by Council and will encompass the following aspects:

- Signs be provided at intersections with other trails and identify intersecting trails;

² Bicycle Network Victoria

- Signs indicate direction and distance to major destination/facility nearby (e.g. retail centre, sports ground, recreation reserve) as well as a major destination and distance signage to public toilets and drinking water
- An emergency marker system, and
- A consistent Style of signage.³

The current AustRoads guide (2009) do not cover signage and navigation of cycle networks in detail. Vic Roads provides advice on directional signage in CycleNotes No. 11 while shared path behavioural signage is covered in CycleNotes No. 10. The CycleNotes give guidance on the types of signage to use when paths intersect with other paths, access paths and with roads.

4.8.1 Emergency Services Telecommunications Authority (ESTA)

The commitment to the provision of ESTA signage along Moorabool Shires Hike and Bike network would increase safety. The Emergency Services Telecommunications Authority (ESTA) is rolling out a program of emergency signage in public open spaces, such as parks, and walking and riding trails. The Program will help ESTA respond more quickly to emergency incidents that don't occur near an easily identifiable street address.

Emergency Markers have been installed at many of Victoria's public open spaces such as parks, walking and cycling tracks, and rail trails, where defining the exact location is difficult and could be used in the trails along the Werribee and Lerderderg Rivers. Emergency markers are used to clearly identify the location of the emergency when a caller calls Triple Zero. The alphanumeric identifier is linked to ESTA's computer aided dispatch system and specifies relevant location, GPS coordinates, road access route or navigational data for the expedient dispatch of emergency services.

Key Recommendations	
•	That Council develop a signage strategy for the Moorabool Hike and Bike network.
•	That Council adhere to the relevant sections of the Vic Roads CycleNotes numbers 10 and 11 when developing signage for the hike and bike network.
•	That ESTA signage is installed in all future trail development and along the Werribee and Lerderderg River trails where defining the exact location can be difficult.

4.9 RECREATIONAL PATHS/TRACKS/ROADS

The draft strategy focuses primarily on three types of paths which will differ according to their primary function. The table below outlines the different types of paths and the design characteristics/standards of each one.

**Table 4.2
Proposed Path Types**

Type of Path	Description	Design Characteristics
Pedestrian Path	Pedestrian paths are for the exclusive use of pedestrians. Cyclists under 12 years of age are permitted to ride on footpaths. Pedestrian paths are generally found in residential area. There is a	<ul style="list-style-type: none"> • Off road – 1.5m-2.0m • May be sealed or unsealed

³ Bicycle Network Strategy 2011

Type of Path	Description	Design Characteristics
	physical separation of pedestrians from vehicles and bicycles.	
Bicycle Path	Bicycle paths are for the exclusive use of cyclists. Bicycle paths can be provided on road e.g. bike lane along Gisborne Road or off-road. The design standards of bicycle paths (e.g. width and amenities) will depend on the level of use and the degree of separation needed between cars and bicycles. These paths will generally cater for both commuter (at speed) and recreation cyclists.	
Shared Path	Shared paths are designed for both walkers and cyclists but may also be used for other activities such as skateboarding or scootering. A shared path may be along a roadside or through parkland.	<ul style="list-style-type: none"> • Walkers and cyclists share the path and cyclists must give way to pedestrians. • Paths can be line marked or not. • High degree of separation of from vehicles – care must be taken at intersections and designed to minimise vehicles crossovers (driveways) • Paths would be signed as shared paths. • Minimum width 2.5m

Council has endorsed an Urban Pathways Hierarchy Definitions for use in future path development. ***This hierarchy is included in Appendix Six of this report.***

Through the resident surveys, the community expressed a greater interest in the development of paths/tracks for recreational purposes as a higher priority (56%) than those used for commuter purposes.

Effective links and access points from the pedestrian network within Bacchus Marsh and Ballan to the river tracks are also highly desirable.

A strong interest was also expressed in circuit paths and connectivity as well as interest in the development of the Avenue of Honour Heritage Trail for local residents and tourists.

Consultation also indicated strong interest in improving safety for cycling on secondary roads between townships such as between Gordon and Ballan. The beauty of the area attracts people and cycling based tourism is likely to increase if safety on the roads was increased. Consideration should be given to providing shoulders on selected roads increase cycling safety as well as signage alerting motorists to the likely presence of cyclists in the area.

Key Recommendations
<ul style="list-style-type: none"> • That a feasibility study is undertaken to determine the viability and cost of developing the Avenue of Honour Heritage Trail.
<ul style="list-style-type: none"> • That Council support the further development of tracks and trails along the Werribee River and Lerderderg River by Parks Victoria.
<ul style="list-style-type: none"> • That consideration is given to providing shoulders on selected roads between Gordon and Ballan and Ballan Daylesford to encourage and increase cycling safety.
<ul style="list-style-type: none"> • That where cyclists regularly use secondary roads, consideration of signage-alerting motorists to the likely presence of cyclists in the area are installed.

4.10 ROAD CROSSINGS

Proposed pathways will see road crossings required at strategic locations throughout the network. A technical assessment of each road crossing will be undertaken throughout the design phase as works are funded to determine whether a suitable treatment is warranted.

4.11 PROMOTION OF THE HIKE AND BIKE NETWORK

The resident survey indicated that there is a need to promote the opportunities that are currently available.

Whilst the name of the available walks and their distance is available on Council's website, there is no map to support this information. An online map is a cost efficient way of providing this information and allows the map to be regularly updated as new works are added without incurring the cost of printing. Information to be provided includes trail specific information, activity centres, townships, safe crossing points, and rest stops with public toilets, as well as the designated route.

Regular updates of the map on Council's web site as required will enable residents and regional cyclists to identify routes and trails within the municipality. Awareness about Council's website being the most current point of information for walking/cycling opportunities should be promoted via other Council publications as well as a link being established from Bacchus Marsh Tourism Association site for example.

In addition to the map being available via the website, a hard copy should also be developed. The Moorabool Positive Ageing Strategy recommends the development and publication of a Recreational Open Space and Walking Routes Guide that considers the needs of seniors.

A brochure outlining the hike and bike network will be a useful tool for both locals as well as visitors to the area. As a minimum, the map should be available from Council Offices as well as through the Bacchus Marsh and District Tourist Information Centre. Promotion of the trails within the overall tourist promotion of the Shire featuring walking and cycling as a key attractor for tourists within Moorabool should be undertaken.

The promotion of health and wellbeing through the promotion of walking routes using brochures/maps, signage and school and community promotion and events should also be undertaken.

Key Recommendations:
<ul style="list-style-type: none"> • Ensure a hike and bike network map is available on Council's website and ensure it is updated annually.
<ul style="list-style-type: none"> • Produce and regularly update the hike and bike marketing strategy detailing the available routes within the Moorabool Shire.
<ul style="list-style-type: none"> • Publicise the hike and bike network through the Bacchus Marsh and District Tourist Information Centre.
<ul style="list-style-type: none"> • Promote health and wellbeing through the promotion of walking routes using brochures/maps, signage and school and community promotion and events.

4.12 ENCOURAGING WALKING AND CYCLING

In order to encourage more people to walk or cycle Council can further promote the benefits of the recently established community walking groups. It is recommended that Council also continue the establishment of walking and riding school buses.

Addressing critical gaps in the existing network and improving connectivity to trails along the rivers for example will be of most benefit in increasing walking and cycling in Moorabool.

Key Recommendations
<ul style="list-style-type: none"> • Work in partnership with other organisations such as the neighbourhood houses, community health centres to further establish community-walking groups. • Encourage local schools to establish walking (and potentially riding) school buses.

4.13 FUNDING OPPORTUNITIES

The planned growth in Moorabool Shire provides a unique opportunity to have paths developed through new subdivisions primarily on the fringes of Bacchus Marsh and Ballan townships.

Pathway implementation should be a requirement of the planning approvals process for new residential development and to ensure paths are built in locations recommended in precinct structure plans and are constructed in accordance with Councils pathway standards.

For paths constructed outside of growth areas, Council will be the primary funder through the capital works budget.

Funding and grant opportunities for paths and trails include:

- Community Facilities Funding, Sport and Recreation Victoria
- Community Support Grants, Department of Planning and Community Development
- Other Association / Industry based grant opportunities as they become available
- Developer contributions
- The Australian Tourism Development Program will fund tourism projects. The program will fund projects such as the development of tourism niche markets and the development of tourist attractions and facilities, which build on and complement existing industries.

4.14 REVIEW OF HIKE AND BIKE STRATEGY

A set review process is valuable to ensure the Hike and Bike Strategy remains relevant and up to date. It is important that the principles and actions within the strategy reflect the changing needs and priorities of Council and the community.

The Hike and Bike Strategy should be reviewed every 2 years to assess status and relevance of the implementation of the recommendations.

5. RECOMMENDED ACTION PLAN AND FUTURE WORKS

This section outlines the key actions proposed for the next 10 years in order to implement the recommendations and key strategies identified throughout this document. Table 5.1 documents the planning and management actions whilst the second table (Table 5.2) documents the works to be undertaken to improve the Hike and Bike Network across Moorabool Shire. Each action in Table 5.1 has been prioritised into a recommended timeframe as follows:

- High – 1-3 years
- Medium 4-6 years
- Low – 7-10 years

It is recognised that there are some actions that are a highly desirable but are likely to take between 7 to 10 years before they are realised due to the projected rate of development in Moorabool and when access to developer contribution funds are likely to be available to support the costs of these projects.

It is noted that all projects nominated will also be considered through Council's annual budget process and are subject to both internal and external funding opportunities.

The strategy outlines a program of capital works and projects (Table 1.2) to support the growth and utilisation of the Moorabool Hike and Bike Network. Recommendations have been listed and categorised (in section five of the report) as Primary (Shared path network, strategic linkages), Secondary (link destination points off the primary linkages including public transport routes) and Local (creating linkages toward primary network).

All recommendations require prioritisation consistent with Council's Capital Works Evaluation Guidelines to determine the action plan for implementation. Timeframe for delivery will also be driven by funding committed toward these categorised recommendations as part of Council's budget process.

As the timing of each of the individual works and the length of pathway and the nature of the construction has not been determined, itemised costings have not been able to be prepared for the strategy.

However, indicative estimated costs have been made in regard to the cost per square metre for the two primary types of pathway recommended in the strategy (based on current commercial rates as at May 2013).

- \$125 per m² - concrete footpaths – 1.5 metres wide
- \$75 per m² - concrete paths – 2.5 metres wide (shared paths)
- \$30 - \$35 per m² - unsealed paths – 1.5 metres wide (i.e. granitic sand or alternative including plinth edge)
- \$30-\$35 per m² - unsealed paths – 2.5 metres wide (i.e. granitic sand or alternative including plinth edge)

The rates above are indicative only and each individual project will require further investigation as part of determining the funding required.

5.1 PLANNING AND MANAGEMENT ACTION PLAN

The table below contains the recommendations for the Moorabool Shire Hike and Bike Strategy.

**Table 5.1
Hike and Bike Strategy Recommendations**

ITEM NUMBER	RECOMMENDATIONS	Priority for Action
PLANNING, MANAGEMENT & MAINTENANCE		
1	That the following Precinct Structure Plans and Council Policies are considered in the development of the Hike and Bike Network. <ul style="list-style-type: none"> Bacchus Marsh Activity Centre Structure Plan 2011 Ballan Structure Plan 2014 Gordon Structure Plan 2011 Council Urban Growth Policy Statement Council Rural Growth Policy Statement Moorabool 2041 	High and Ongoing
2	Ensure implementation of the process to ensure all existing and proposed paths (on road and off road) are documented and mapped using Council's GIS system.	High
3	Ensure the process for altering the status of paths (e.g. proposed to complete) is undertaken including referral to the Asset Register.	High
4	Ensure the budget allocation for maintenance of paths is also increased as new paths are developed.	Ongoing
5	That the recommendation guiding principles outlined in table 4.1 are used to assist with determining future recommendations identified in this strategy across the Shire.	High
INFRASTRUCTURE STANDARDS		
6	That the Austroads Standards and Guidelines are adhered to in the provision of bicycle infrastructure and Vic roads CycleNotes numbers 10 and 11 when developing signage for the hike and bike network.	Ongoing
7	That Council develop a signage policy which considers materials; locational considerations; safety / risk; approvals) and signage strategy including directional and trail signs.	High
TRACK & TRAIL DEVELOPMENT		
10	That where possible Council recommend development of paths that connect to existing track and trails to increase their usability.	Ongoing
11	That a feasibility study is undertaken to determine the viability and cost of developing the Avenue of Honour Heritage Trail.	High
12	That shared path fitness circuit is developed in Maddingley Park.	High
13	That Council have further discussion regarding the further development of tracks and trails along the Werribee River and Lerderderg River with Parks Victoria.	High
PROMOTION OF HIKE AND BIKE NETWORK		
15	Develop a hike and bike network map and make it available on Council's website and is updated annually.	High and Ongoing
16	Produce and regularly update the hike and bike marketing Strategy detailing the available routes within the Moorabool Shire.	High and Ongoing
17	Publicise the hike and bike network through the Bacchus Marsh and District Tourist Information Centre.	High and Ongoing
18	Promote health and wellbeing through the promotion of walking routes using brochures/maps, signage and school and community promotion	High and Ongoing

ITEM NUMBER	RECOMMENDATIONS	Priority for Action
	and events.	
19	Work in partnership with other organisations such as the neighbourhood houses, community health centres and other organisations to establish community-walking groups and sustain existing groups.	High and Ongoing
20	Encourage local schools to establishment walking and riding to school buses.	Medium

5.2 RECOMMENDED WORKS PROGRAM FOR THE HIKE AND BIKE STRATEGY

The table below outlines the proposed works program, by each key township for the Hike and Bike Strategy. Please note a surface type has not been recommended for each path as Council will need to make this decision as each item is considered in the future capital works budget.

Table 5.2
Recommended Future Hike and Bike Works Program

Road Name	Location	Description of Works	Considerations	Type of Path	Priority Category	Cost Estimate
Bacchus Marsh & Darley						
Albert Street	Cairns Drive to Robertsons Rd	Upgrade to shared path	Area undergoing development	Shared Path	Primary	174,125.00
Lerderderg Track	Western Freeway to Avenue of Honour, extension of existing track	Proposed new shared path	Challenging topography	Shared Path	Secondary	540,500.00
Albert Street	Fitzroy St to Gisborne Rd	New Footpath construction	N/A	Footpath	Secondary	40,875.00
Bacchus Marsh Road	Holts Lane to existing footpath north west of Ascot Avenue	New Footpath construction		Footpath	Secondary	43,350.00
Cairns Drive	Robertsons Rd to Albert St	New Footpath construction	N/A	Footpath	Secondary	69,900.00
Franklin Street	Connecting current path to Griffith St	New Footpath construction	N/A	Footpath	Secondary	8,625.00
Holts Lane	Gisborne Rd to Lerderderg walking track	New Footpath construction	N/A	Footpath	Secondary	55,950.00
Holts Lane	Halletts Way to Davies St	New Footpath construction	N/A	Footpath	Secondary	53,175.00
Holts Lane	Bacchus Marsh Rd to 40 m east of Ross St	New Footpath construction	Sharp bend and steep terrane	Footpath	Secondary	45,450.00
Jonathan Drive	Edward Court to Taylor Drive	New Footpath construction		Footpath	local	35,325.00
Jonathan Drive	Davies Drive, along Taylor Drive to Gisborne Rd	New Footpath construction	N/A	Footpath	Local	31,725.00
Labilliere Street	Barry St to McCrae St	New Footpath construction	N/A	Footpath	Secondary	50,775.00

Road Name	Location	Description of Works	Considerations	Type of Path	Priority Category	Cost Estimate
Labilliere Street	Connecting between Leisure Centre entrances	New Footpath construction	Existing path	Footpath	Secondary	4,950.00
Main Street	Ascot Ave to roundabout at intersection with Halletts Way	New Footpath construction	Steep grade. Existing gravel path in this location	Footpath	Secondary	34,500.00
Margaret Drive	Grant St to Clarinda St	New Footpath construction	Link to water channel shared path	Footpath	Local	31,500.00
Mimulus Road	Griffith St to Werribee Vale Rd	New Footpath construction	Developer contribution	Footpath	Secondary	63,450.00
Morrison Drive	Wittick St to Grey St	New Footpath construction	N/A	Footpath	Secondary	46,275.00
River Bend Road	Lerderderg track to start of existing footpath	New Footpath construction	N/A	Footpath	Secondary	16,125.00
Robertsons Road	Links Rd to Lerderderg walking track	New Footpath construction	N/A	Footpath	Secondary	60,300.00
Simpson Street	Bond St to Lord St	New Footpath construction	N/A	Footpath	local	12,000.00
Station Street	Bond St to Fisken St	New Footpath construction	N/A	Footpath	Secondary	54,525.00
Taverner Street	Grant St to Bond St	New Footpath construction	N/A	Footpath	Secondary	29,100.00
Underbank Boulevard	Construction to begin and conclude at main St	New Footpath construction	Steep grade	Footpath	Secondary	151,725.00
Wittick Street	Albert St to existing path outside Scout Hall	New Footpath construction	N/A	Footpath	Secondary	67,950.00
Gisborne Road	Wellington St to Albert St	New footpath construction	N/A	Shared Path	Primary	10,750.00
River View Road	Riverview Dr roundabout along Ruxton Way to join existing trail intersecting View Gully Rd	New footpath construction		Unsealed footpath	Primary	72,975.00
Avenue of Honour	Moon Reserve to cemetery	Proposed new shared path		Shared path	Primary	73,625.00

Road Name	Location	Description of Works	Considerations	Type of Path	Priority Category	Cost Estimate
Links Road	Robertson Road to Fairway Crescent	Proposed new shared path	N/A	Shared Path	Secondary	94,250.00
Main Street	Pearce St to Hopetoun Cemetery	Proposed new shared path	Feasibility study required. Pedestrian overpass required over the Western Freeway.	Shared Path	Primary	383,250.00
Main Street	Halletts Way to Donald Street	Proposed new shared path		Shared Path	Primary	106,500.00
Masons Lane	Gisborne Rd to Masons Lane Rec Reserve Entrance	Proposed new shared path	Look at extension to the Lerderderg River track in future	Shared Path	Primary	142,625.00
Water channel shared pathway	Lerderderg Walking trail near Jannette Crt to Werribee River Track	Proposed new shared path	High cost and security concerns	Shared Path	Primary	574,375.00
Pepper Tree Park Path	Pepper Tree Park East of Grant St, along the river	Upgrade existing gravel path to shared path		Shared Path	Primary	61,625.00
Main Street	Grant S to Madden Drive	Upgrade to shared path	N/A	Footpath	Primary	107,500.00
Caledonian Park	Along Werribee River	Upgrade to shared path	Consultation required with Melbourne Water	Shared Path	Secondary	100,750.00
Fisken Street	Main Street to Pepper Tree Park	Upgrade to shared path		Shared Path	Primary	62,625.00
Fitzroy Street	Grey St to Albert St	Upgrade to shared path	N/A	Shared Path	Secondary	58,250.00
Gisborne Road	Leila Court to Grey Street	Upgrade to shared path	N/A	Shared Path	Primary	94,500.00
Gisborne Road	Masons Lane to Leila Court	Upgrade to shared path		Shared Path	Primary	34,000.00
Main Street	Young Street to Pearce Street	Upgrade to shared path	Feasibility study required	Shared Path	Primary	90,250.00
Pepper Tree Park	Pepper tree park walking trail along the river	Upgrade to shared path	High construction costs.	Shared Path	Secondary	169,000.00

Road Name	Location	Description of Works	Considerations	Type of Path	Priority Category	Cost Estimate
South Maddingley Road	Roundabout on Griffith St to School	Upgrade to shared path	New footpath in this location	Shared Path	Primary	68,750.00
Station Street	Grant St to Station entrance	Upgrade to shared path	Links to Station	Shared Path	Primary	28,625.00
Young Street	Masons Lane to Main Street	Upgrade to shared path	existing path	Shared Path	Primary	118,375.00
Davies Street	Holts Lane to Grey Street	New Footpath construction	N/A	Footpath	Secondary	31,050.00
Greenway through land	Bond Street to Main Street	Proposed new shared path	Depending of developer purchase of land	Shared Path	Primary	125,750.00
Griffith Street	Cassinia St to Halletts Way extension	Proposed new shared path	land currently under development-developer contribution	Shared Path	Primary	50,000.00
Griffith Street	Powlett Street to Grant Street	Proposed new shared path	busy section; school zone and bus stop area	Shared Path	Secondary	63,875.00
Griffith Street	Stone Hill Drive to Powlett Street	Proposed new shared path	Developer has already constructed footpath along part of this section	Shared Path	Secondary	108,500.00
Halletts Way	Main St to Griffith St	Proposed new shared path	Developers Contribution	Shared Path	Primary	293,125.00
Grant Street	Roundabout at intersection with Gisborne Rd to Grammar school entrance	Upgrade to shared path		Shared Path	Primary	104,375.00
Grant Street Service Road	Meikle St to South Maddingley Rd	Upgrade to shared path	Heavy traffic and school zone area	Shared Path	Primary	61,000.00
Grey Street	Davies Street to Gisborne Road	Upgrade to shared path	N/A	Shared Path	Secondary	88,875.00
Halletts Way	Main St to Links Rd	Upgrade to shared path	Developer contribution/ Freeway Crossing	Shared Path	Primary	383,125.00
Grey Street	Davies St to Gisborne Rd	Upgrade to shared path		Shared Path	Secondary	105,625.00
Ballan						

Road Name	Location	Description of Works	Considerations	Type of Path	Priority Category	Cost Estimate
Barry Street	Griffith Street to Labilliere Street	New Footpath construction	N/A	Footpath	Secondary	17,175.00
Caledonian Park	Along the Werribee River- extension of existing trail	Proposed new shared path	Consultation required with Melbourne Water	Shared Path	Secondary	180,875.00
Duncan Street	Edols St to Atkinson St	New Footpath construction	N/A	Footpath	Secondary	9,750.00
Edols Street	Windle St to Jopling St	New Footpath construction	N/A	Footpath	Secondary	16,950.00
Jopling Street	Edols St to Atkinson St	New Footpath construction	N/A	Footpath	Secondary	9,675.00
Stead Street	Inglis St to Steiglitz St	New Footpath construction	N/A	Footpath	Secondary	8,250.00
Stead Street	Edols St to Atkinson St	New Footpath construction	N/A	Footpath	Secondary	7,800.00
Steiglitz Street	Duncan Street to Windle Street	New Footpath construction	N/A	Footpath	Secondary	12,150.00
Ballan Cemetery	Ballan Cemetery to Werribee River/ Caledonian Park	Proposed new shared path	Investigate further river crossing	Shared Path	Secondary	43,375.00
Ballan Swimming Pool	Roch Court to Ballan Swimming Pool	Proposed new shared path	N/A	Shared Path	Local	44,750.00
Berry Street	Blackwood Street to Spencer Road	Proposed new shared path	N/A	Shared Path	Primary	117,750.00
Bradshaw Street	Inglis street to Simpson Street	Proposed new shared path	Medium	Shared Path	Local	25,750.00
Cowie Street	Edols Street to Atkinson Street	Proposed new shared path	Entrance to the Ballan Recreation Reserve.	Shared Path	Primary	17,750.00
Hogan Road	Inglis Street to Densley Street	Proposed new shared path	Possible river crossing. Possibly funded through developer contributions or included within development	Shared Path	Primary	54,125.00
Hogan Road	From Densley St to Freeway	Proposed new shared path	Developer's contribution	Shared Path	Primary	101,000.00

Road Name	Location	Description of Works	Considerations	Type of Path	Priority Category	Cost Estimate
Hogan Road	West extension from No 64 to River	Proposed new shared path	N/A	Shared Path	Secondary	83,250.00
Old Geelong Road	Inglis St to Gillespies Lane	Proposed new shared path	Possibly funded through developer contributions or included within development of residential area.	Shared Path	Primary	96,125.00
Old Melbourne Road	Ingliston Road to Werribee River	Proposed new shared path	N/A	Shared Path	Primary	90,125.00
Spencer Street	Berry St to Simpson Street	Proposed new shared path	N/A	Shared Path	Primary	62,625.00
West of Hogan Road	Hogan Road extension West along Werribee River	Proposed new shared path	Possibly funded through developer contributions or included within development of residential area.	Shared Path	Secondary	269,000.00
Atkinson Street	Cowie Street to Lay Street	Upgrade to shared path	N/A	Shared Path	Primary	171,000.00
Blackwood Street/Greendale Road	Round about to Berry Street	Upgrade to shared path	N/A(Current existing path is new and in good condition)	Shared Path	Primary	63,375.00
Cowie Street	Inglis St to Edols Street	Upgrade to shared path	N/A	Shared Path	Primary	32,125.00
Gillespies Lane	Old Geelong Rd to Windle Street	Upgrade to shared path	Proposed shared path	Shared Path	Primary	177,000.00
Inglis Street	Geelong Ballan Rd to Sunline Court	Upgrade to shared path	N/A	Shared Path	Primary	178,125.00
Lay Street	Atkinson St to Old Melbourne Rd	Upgrade to shared path	N/A	Shared Path	Primary	40,875.00
Lay Street	Old Melbourne to Gosling Street Cemetery	Upgrade to shared path	N/A	Shared Path	Secondary	22,125.00
Simpson Street	Spencer Rd to Blackwood St and Caledonian Park entrance	Upgrade to shared path	N/A(Priority and cost estimate are not given for this segment)	Shared Path	Primary	79,125.00

Road Name	Location	Description of Works	Considerations	Type of Path	Priority Category	Cost Estimate
Windle Street	Windle St pathway from Gillespies Lane to Simpson Street	Upgrade to shared path	Possibly funded through developer contributions or included within development of residential area.	Shared Path	Primary	137,125.00
Blackwood						
Martin Street	Simmons Reef Rd to Golden Point Rd	New footpath construction	N/A	Unsealed footpath	Secondary	7,840.00
Blackwood Crown Recreation	Reserve, along Simmons Reef Rd to Greendale Trentham Forrest Rd	New footpath construction	N/A	Unsealed footpath	Secondary	13,580.00
Blackwood Street road reserve	Recreation Reserve to Muddy Lane	Proposed new shared path	Area prone to flooding in heavy rainfall	Shared Path	Primary	14,750.00
Bungaree						
Bungaree Wallace Road	Railway Line to outside No 342	New Footpath construction	Path to Primary school	Footpath	Primary	11,400.00
Bungaree Wallace Road	Bungaree-Wallace Road to No 322	Upgrade to shared path	Part of this is already existing	Shared Path	Primary	178,875.00
Dunnstown						
Dunnstown Road	Roundabout to end of residential area (approx. 250m)	New footpath construction	N/A	Unsealed footpath	Secondary	8,960.00
Ti Tree Road	Old Melbourne Rd intersection (approx..250 m)	New footpath construction	N/A	Unsealed footpath	Secondary	11,480.00
Old Melbourne Road	Dunnstown Rd to Oval	Upgrade to shared path	Crossing a railway line	Shared path	Primary	64,875.00
Elaine Egerton Road						
Austins Road	Pearsons Rd to Elaine Egerton Rd	New Footpath construction		Footpath	Local	12,825.00

Road Name	Location	Description of Works	Considerations	Type of Path	Priority Category	Cost Estimate
Elaine Egerton Road	Main St to Austins Rd	New Footpath construction	N/A	Footpath	Secondary	19,275.00
Pearsons Road	Midland Highway to Austins Road	New Footpath construction		Footpath	Secondary	19,350.00
Midland Highway	Recreation Reserve to CFA building along Midland Hwy	New footpath construction	N/A	Unsealed footpath	Primary	33,320.00
Gordon						
Cartons Road	Paddock Creek extension to Main Street	New Footpath construction	N/A	Footpath	Secondary	8,625.00
Gladstone Street	Main Street to Hopwood Place	New Footpath construction	NA	Footpath	Secondary	32,925.00
Main Street	From Lyndhurst Street to Cartons Rd	New Footpath construction	N/A	Footpath	Primary	35,175.00
Paddock Creek Reserve	Gladstone St to Cartons Rd	New Footpath construction	Crown Land	Footpath	Secondary	35,475.00
Stanley Street	Dicker Street to Hopwood Place	New Footpath construction	NA	Footpath	Secondary	24,075.00
Thomas Drive	Ruxton Way to Hopetoun Park	New Footpath construction		Footpath	Secondary	55,425.00
Stanley Street	Main St to Dicker St connecting to footpath outside primary school	New footpath construction	NA	Shared Path	Secondary	39,250.00
Old Melbourne Road	Cartons Road to 200 m east of Willunga Avenue	New Footpath construction		Footpath	Primary	60,750.00
Greendale						
Brady Lane	Recreation Reserve to roundabout	New footpath construction	N/A	Unsealed footpath	Local	1,680.00
Ballan Greendale Road	Roundabout to end of residential area	New Footpath construction	Footbridge may be required over the river. Road is too narrow to accommodate footpath	Footpath	Secondary	47,925.00

Road Name	Location	Description of Works	Considerations	Type of Path	Priority Category	Cost Estimate
Hopetoun Park						
Hopetoun Park Road	Thomas Drive to Ruxton Way	New Footpath construction		Footpath	Secondary	77,550.00
Hammond Circuit	Selby Court to Riverview Road	New footpath construction	NA	Unsealed footpath	Secondary	8,505.00
Selby Court	Webb Crt trail entrance along Selby Crt to Hammond Circuit	New footpath construction	NA	Unsealed footpath	Secondary	12,880.00
Circling Hopetoun Park area	Walking trail circling Hopetoun Park	Upgrade existing trail to gravel footpath	Consultation required with Western Water and very steep topography	Unsealed footpath	Local	132,685.00
Lal Lal						
Clarendon Lal Lal Road	Along Clarendon-Lal Lal Rd from Rosella Rd to Eaglehawk Rd	New footpath construction	N/A	Unsealed footpath	Primary	27,685.00
Eaglesons Road	Clarendon La La to Vaugh Street	New footpath construction	NA	Unsealed footpath	Local	7,280.00
Eaglesons Road/ Vaughn Street	Clarendon Lal Lal to Eaglesons Rd	New footpath construction	NA	Unsealed footpath	Secondary	13,860.00
Lal Lal Falls Road	Intersection at Yendon – Lal Lal Rd to Ironmine Rd	New footpath construction	N/A	Unsealed footpath	Secondary	106,400.00
Long Forest						
Long Forest Road	Existing track from freeway to Sundew	Maintain current existing path	NA	Unsealed footpath	Local	197,715.00
Mount Egerton						
Main Street	Whipstick Road to Water Tank Road	New footpath construction		Unsealed Footpath	Primary	29,785.00
Reserve Road	Primary school on Reserve Rd to the Recreation Reserve.	New footpath construction	N/A	Unsealed footpath	Primary	24,430.00

Road Name	Location	Description of Works	Considerations	Type of Path	Priority Category	Cost Estimate
Myrniong						
Old Western Highway	Old Melbourne Rd to existing path approx. 100m north	New Footpath construction	N/A	Footpath	Secondary	9,300.00
Shuter Street, Hardy Street	Winding through Myrniong, beginning at the Recreation Reserve before winding through the Jim Barry Rese	Proposed new shared path	N/A	Shared Path	Primary	178,125.00
Muddy Lane	Western Freeway to Blackwood Street	Upgrade to shared path	Existing footpath was constructed in 2009	Shared Path	Primary	30,125.00
Old Western Freeway	Short Street to Muddy Lane	Upgrade to shared path	N/A	Shared Path	Primary	17,250.00
Wallace						
Butter Factory Road	Intersection to end of built up area. approx. 100m	New footpath construction	N/A	Unsealed Footpath	Secondary	3,290.00
Bungaree Wallace Road	Erin Crt to Ormond Rd intersection along Bungaree-Wallace Rd	New footpath construction	N/A	Unsealed footpath	Secondary	13,580.00
Ormond Street	Bungaree Wallace Road to Oval	New footpath construction		Unsealed Footpath	Primary	5,250.00

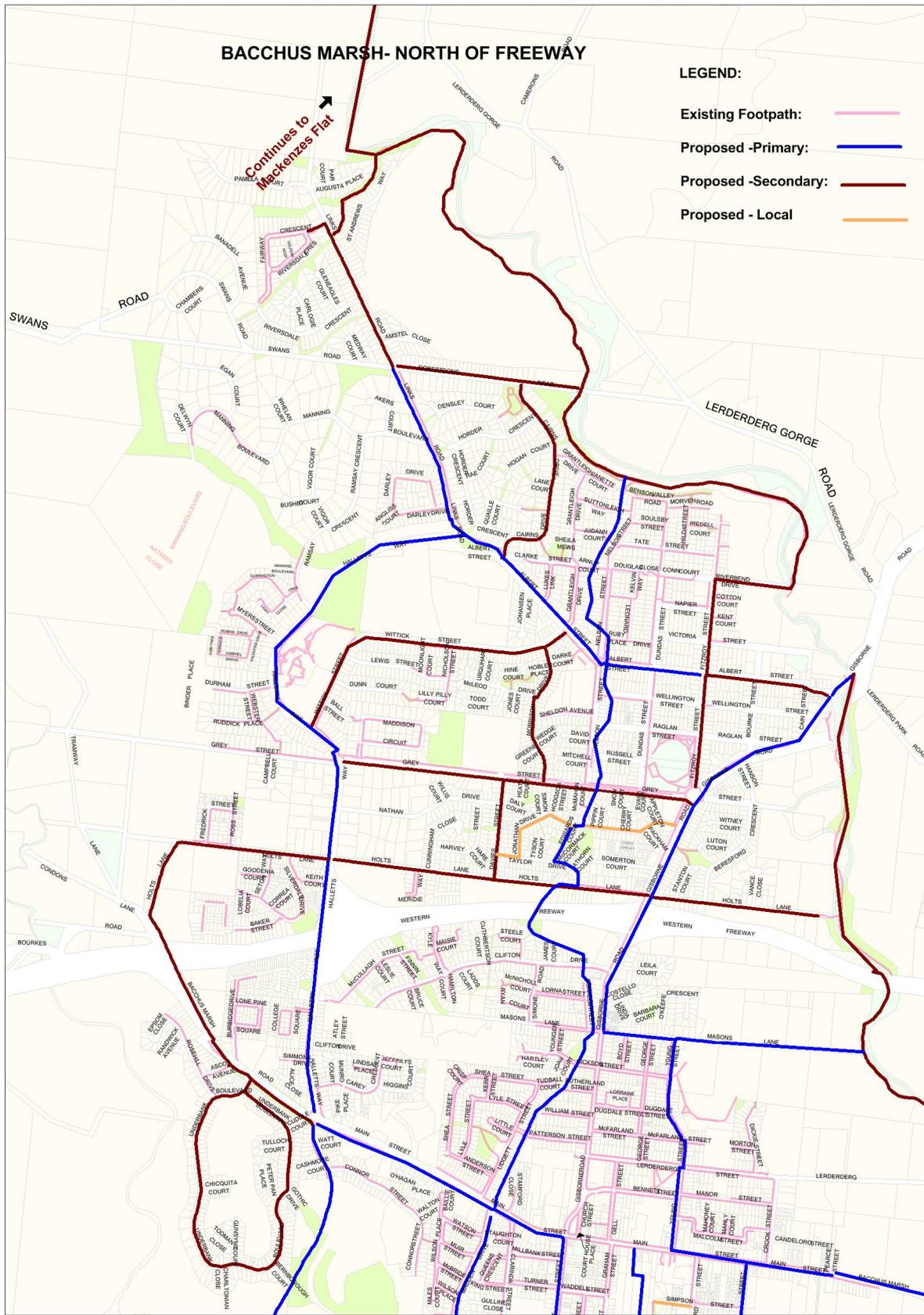
5.3 FUTURE DEVELOPMENT WORKS MAPS

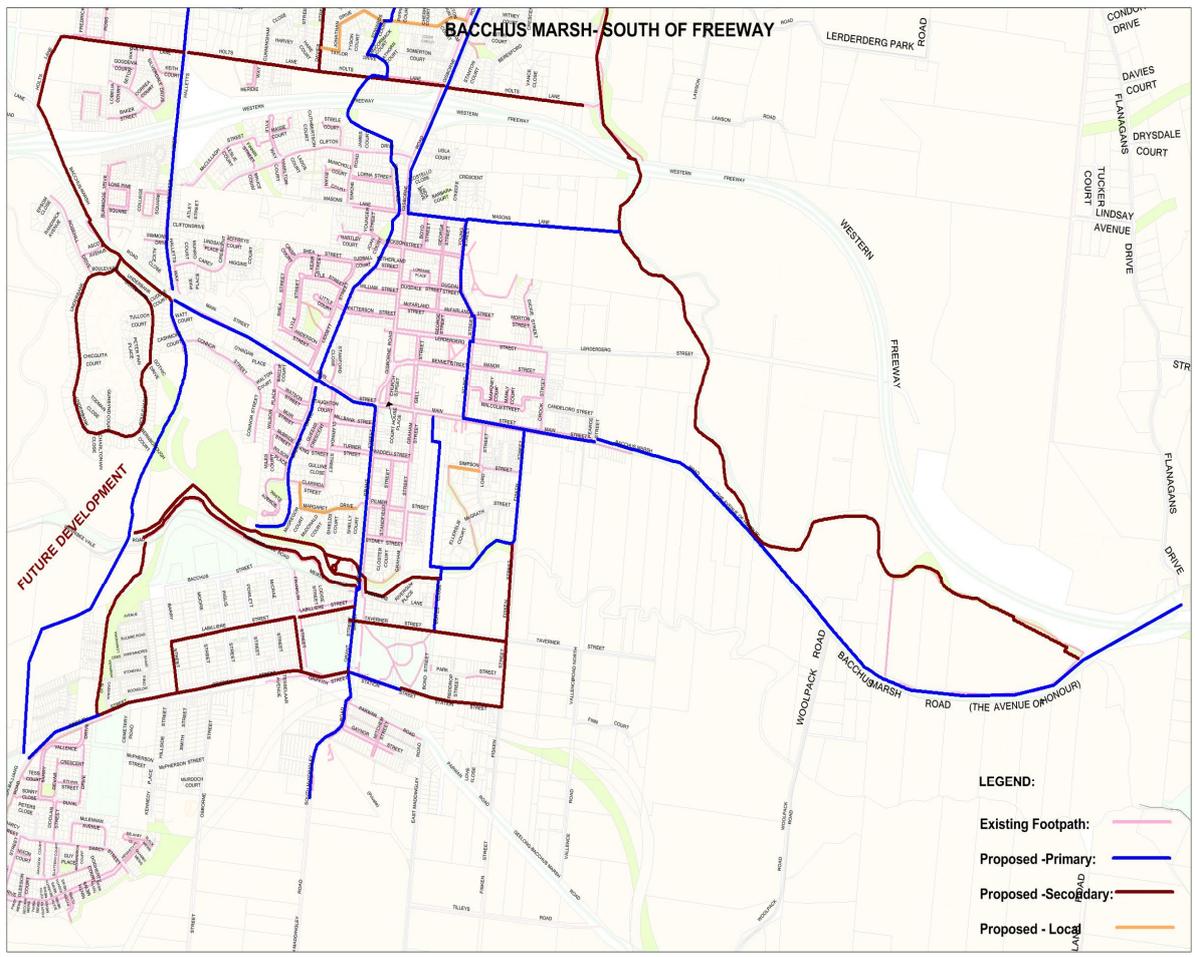
The following pages include maps of each township within Moorabool Shire where future improvement and development works have been identified to encourage the community to increase their walking and cycling opportunities through the provision of improved infrastructure.

Maps are included of the following towns.

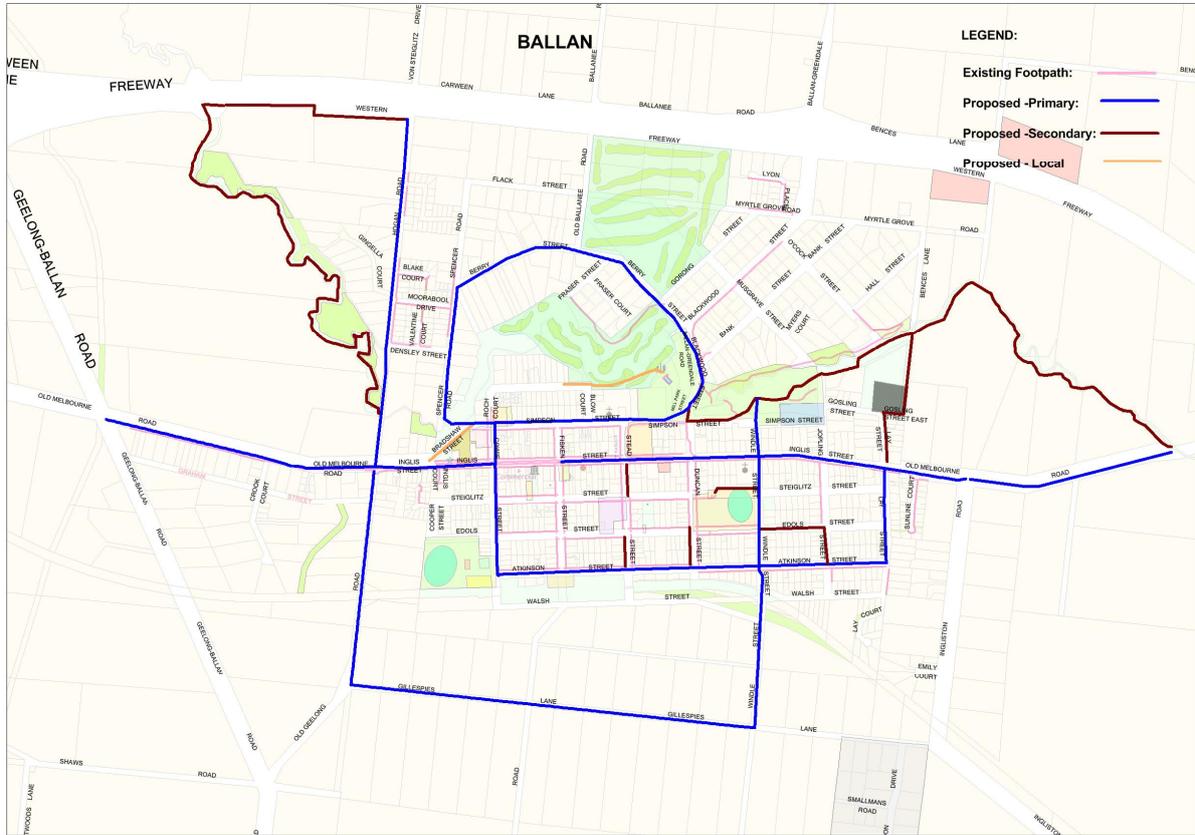
- Bacchus Marsh
- Ballan
- Blackwood
- Bungaree
- Dunnstown
- Elaine
- Gordon
- Greendale
- Hopetoun Park
- Lal Lal
- Long Forrest
- Mt Egerton
- Myrniong
- Wallace

Recommended works for each of these townships are outlined in Table 5.2.



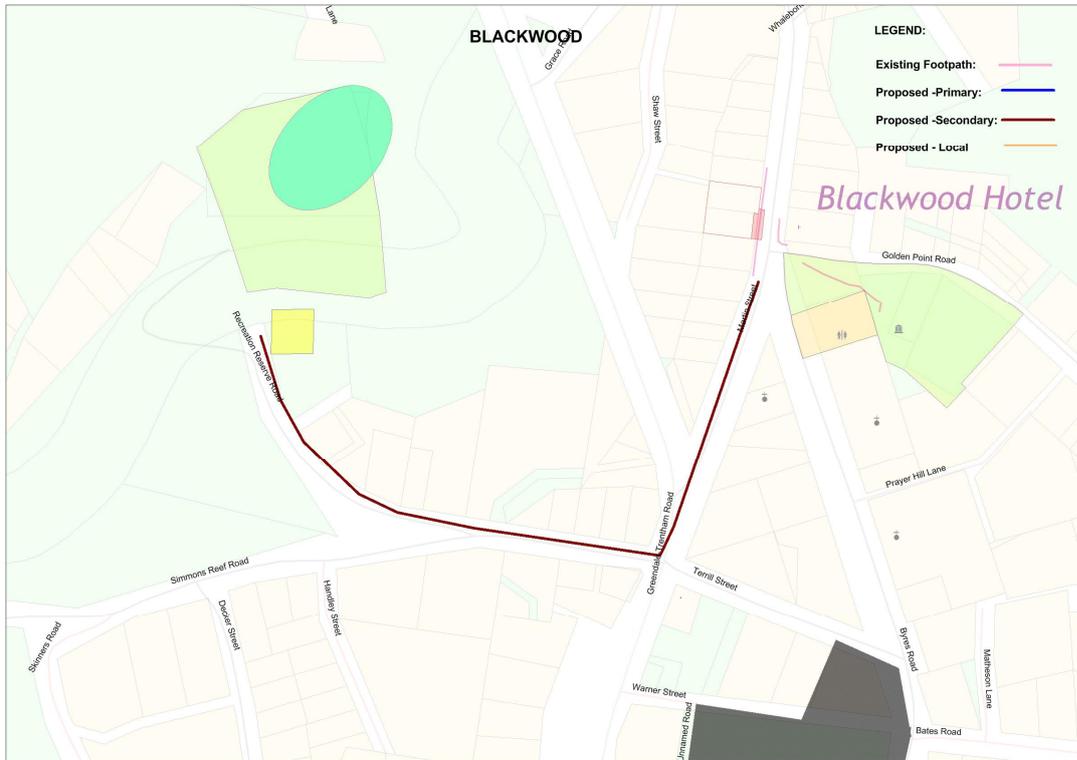


5.3.2 Ballan Proposed Hike and Bike Network

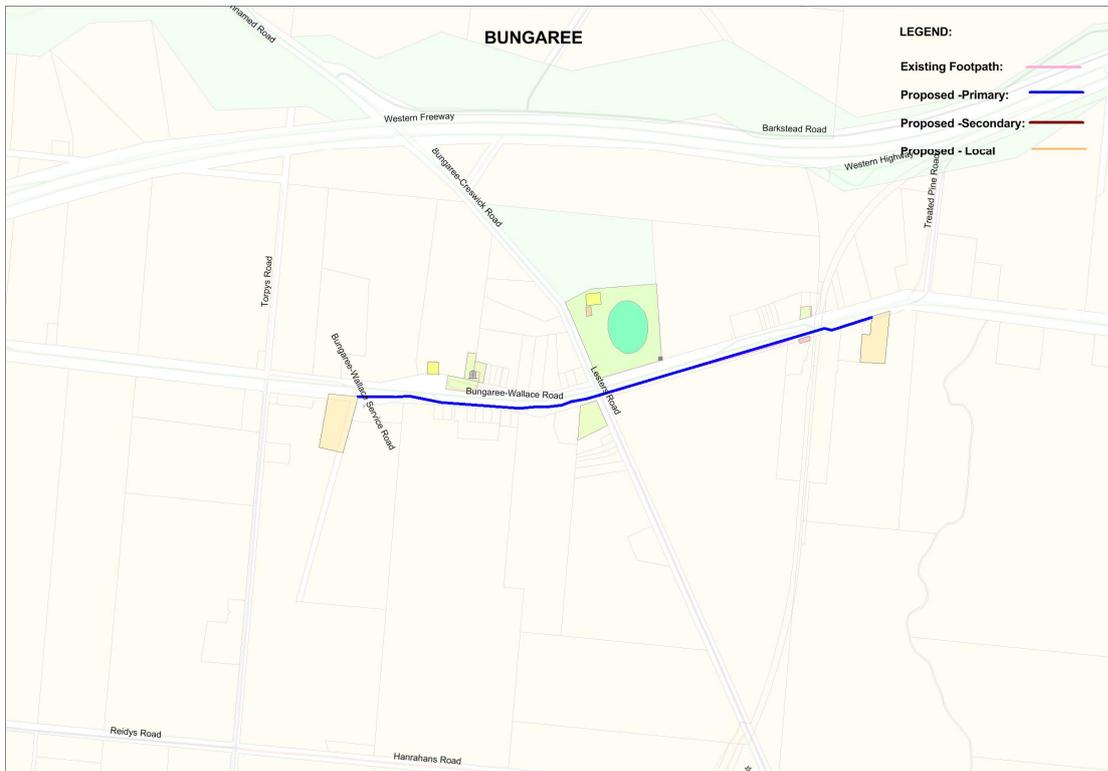


- Throughout the development of this strategy, a connection of the network with the Ballan Golf Course has been identified as an opportunity for further investigation and consideration. It is recommended for further discussions between Council and the Golf Course Management to occur regarding the viable opportunity for implementation of this.

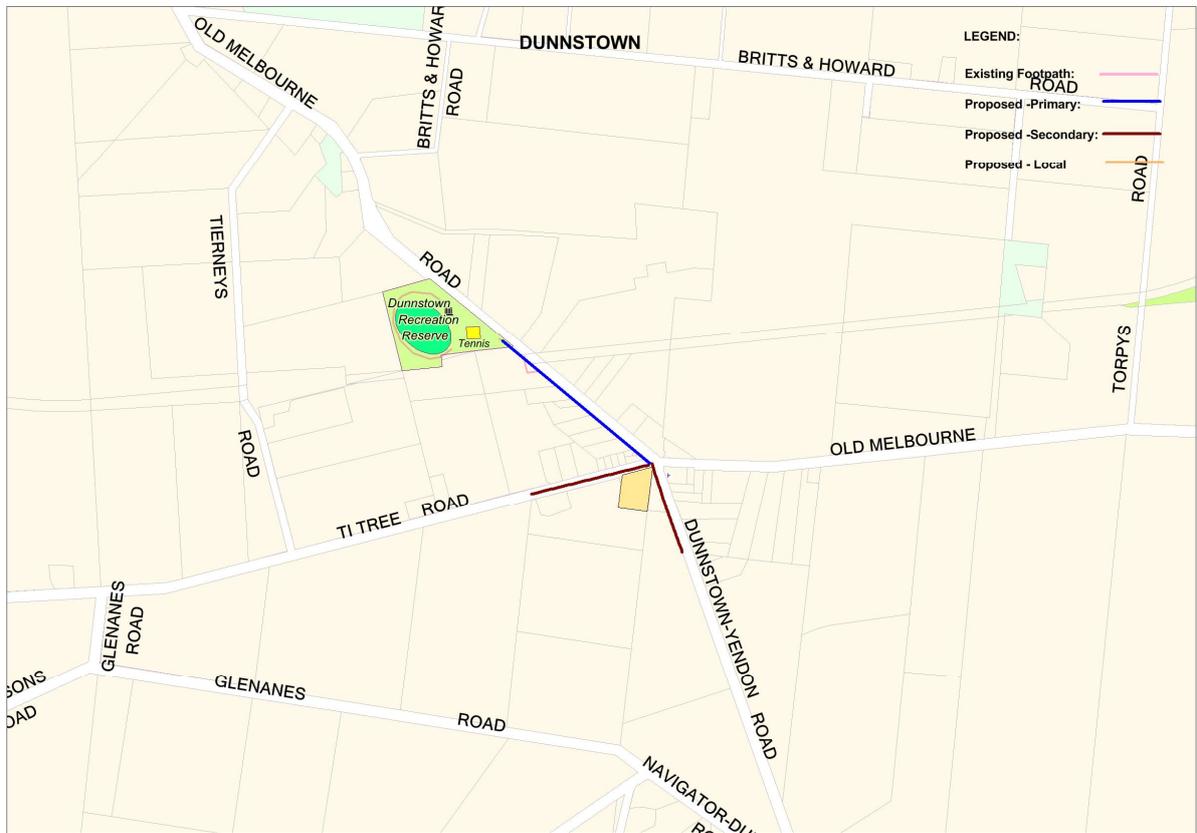
5.3.3 Blackwood Proposed Hike and Bike Network



5.3.4 Bungaree Proposed Hike and Bike Network



5.3.5 Dunnstown Proposed Hike and Bike Network

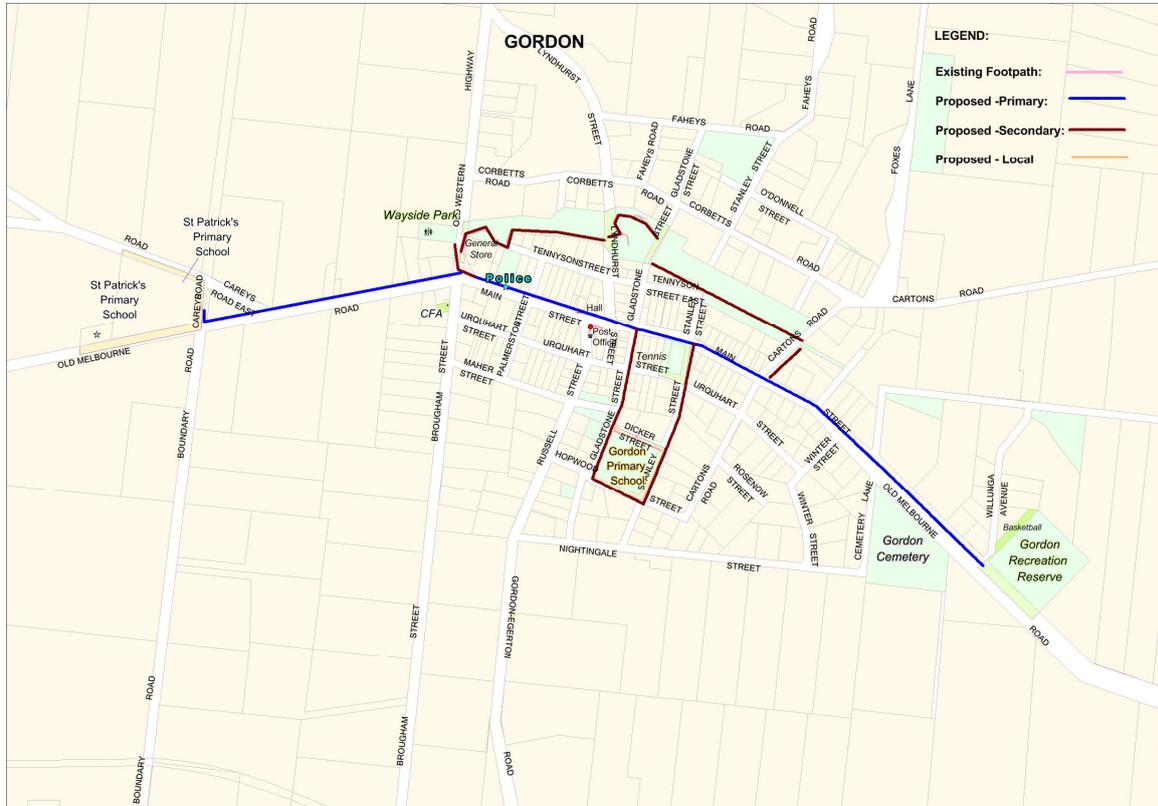


5.3.6 Elaine Proposed Hike and Bike Network

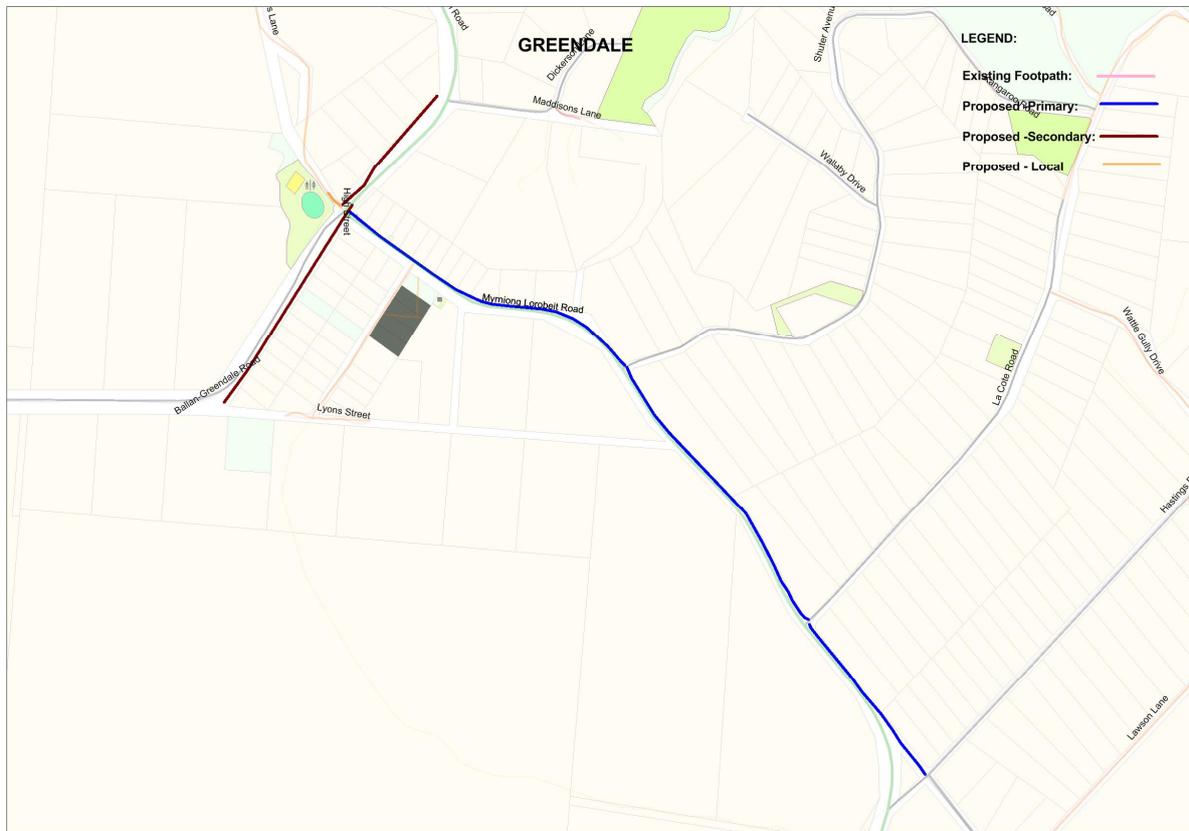




5.3.6 Gordon Proposed Hike and Bike Network



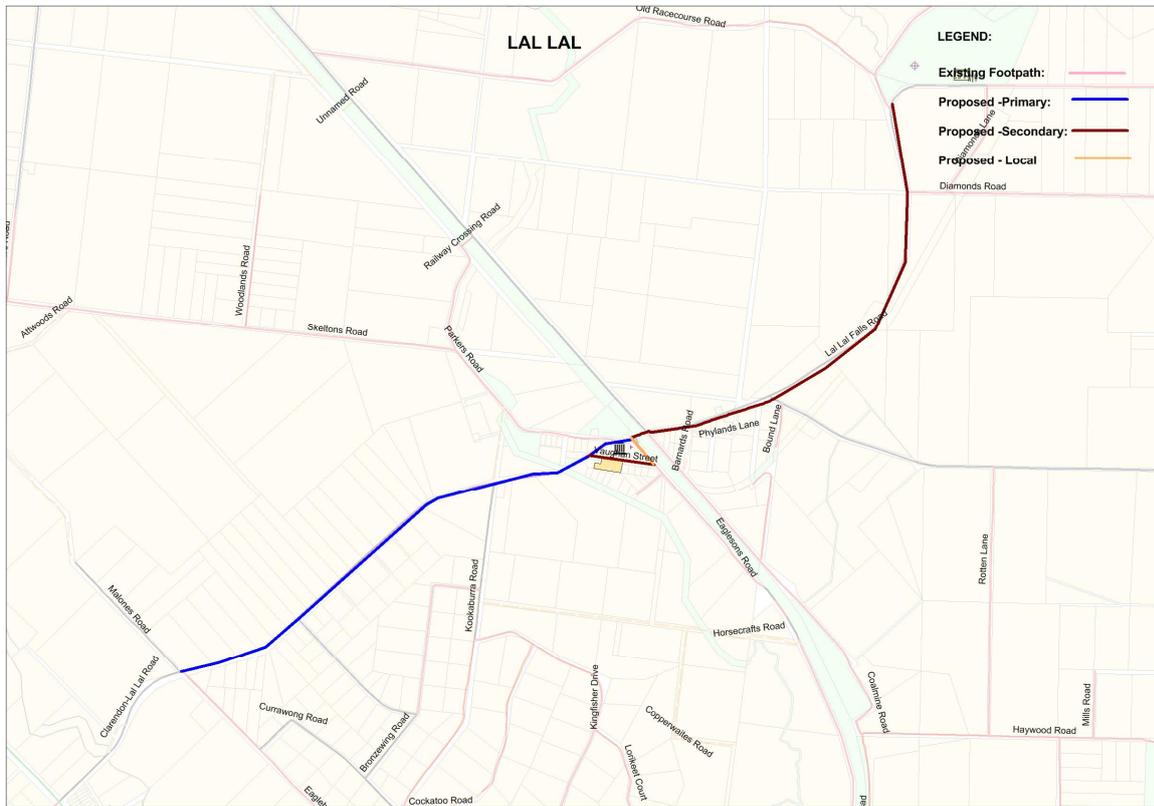
5.3.7 Greendale Proposed Hike and Bike Network



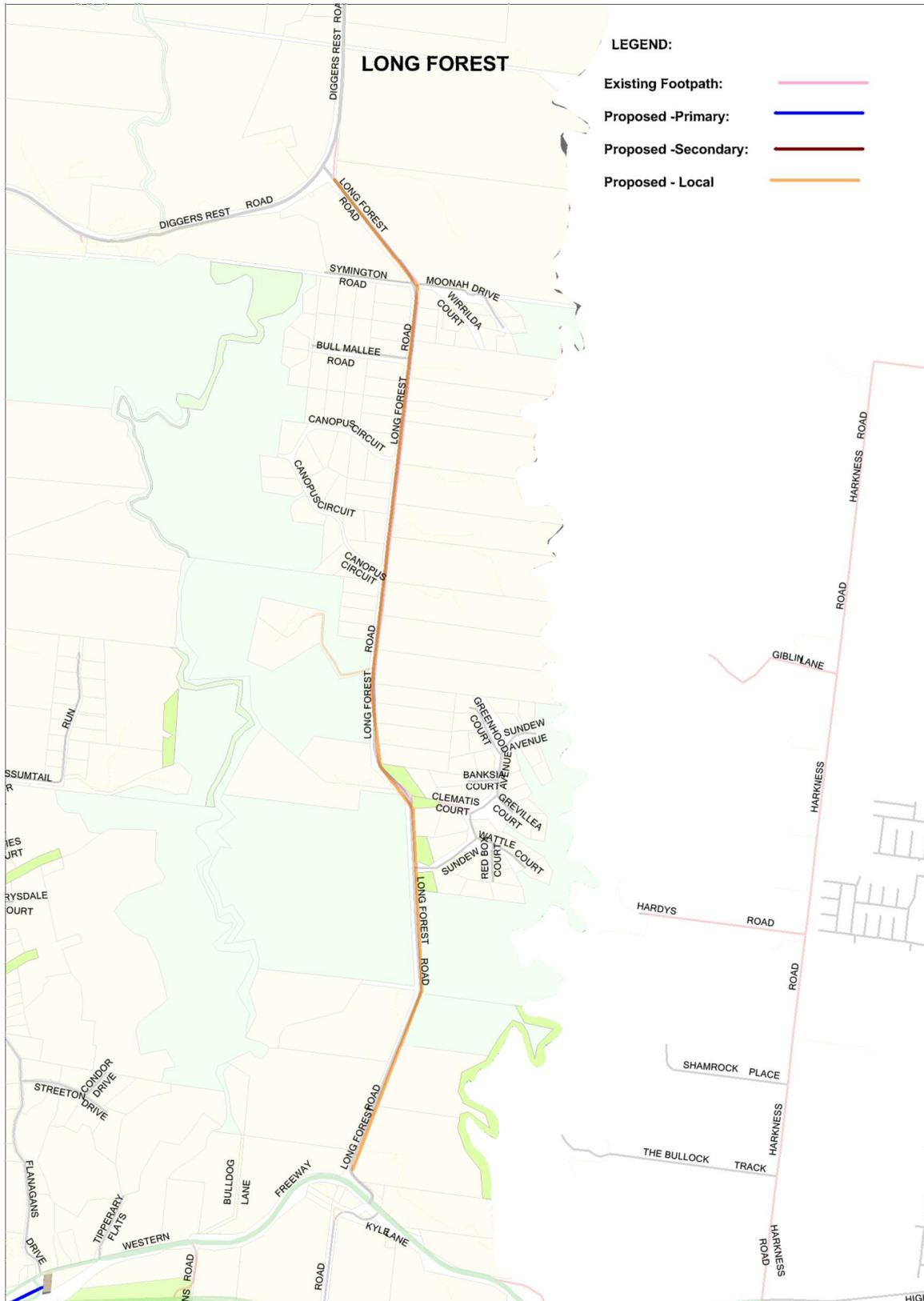
5.3.8 Hopetoun Park Proposed Hike and Bike Network



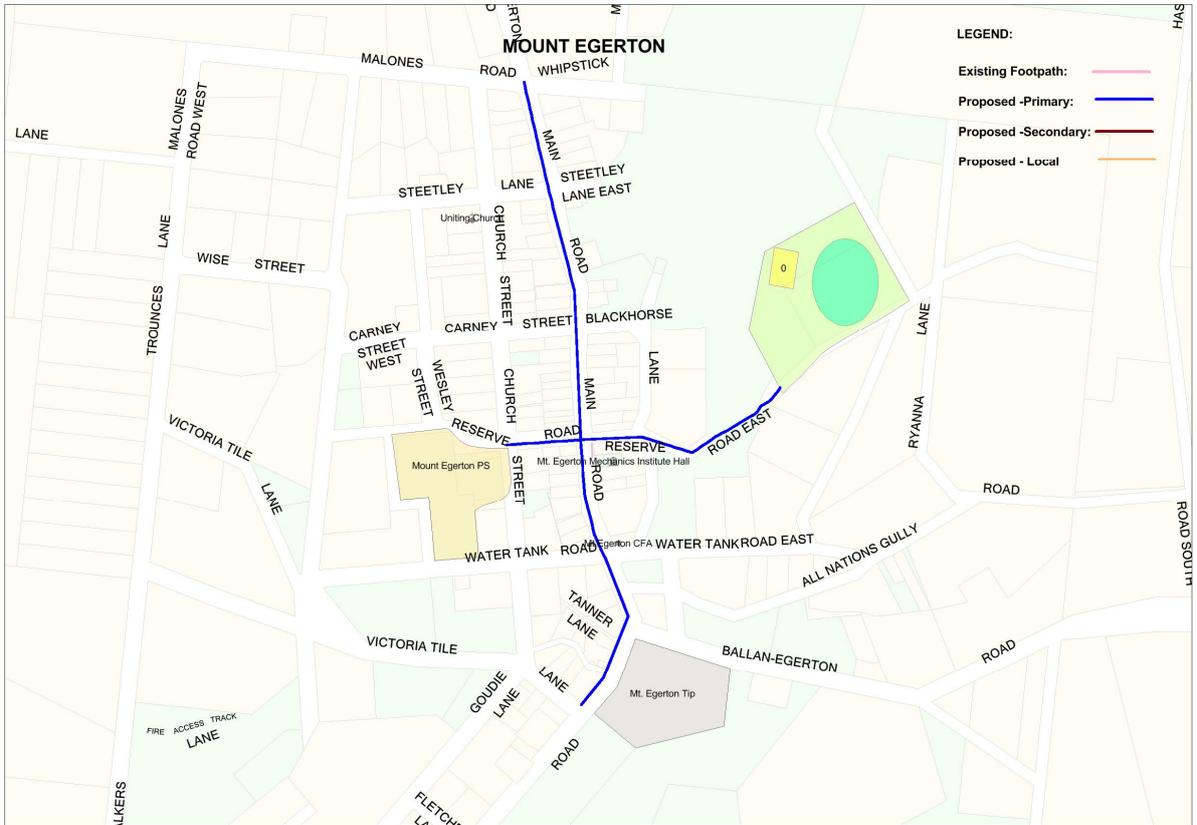
5.3.9 Lal Lal Proposed Hike and Bike Network



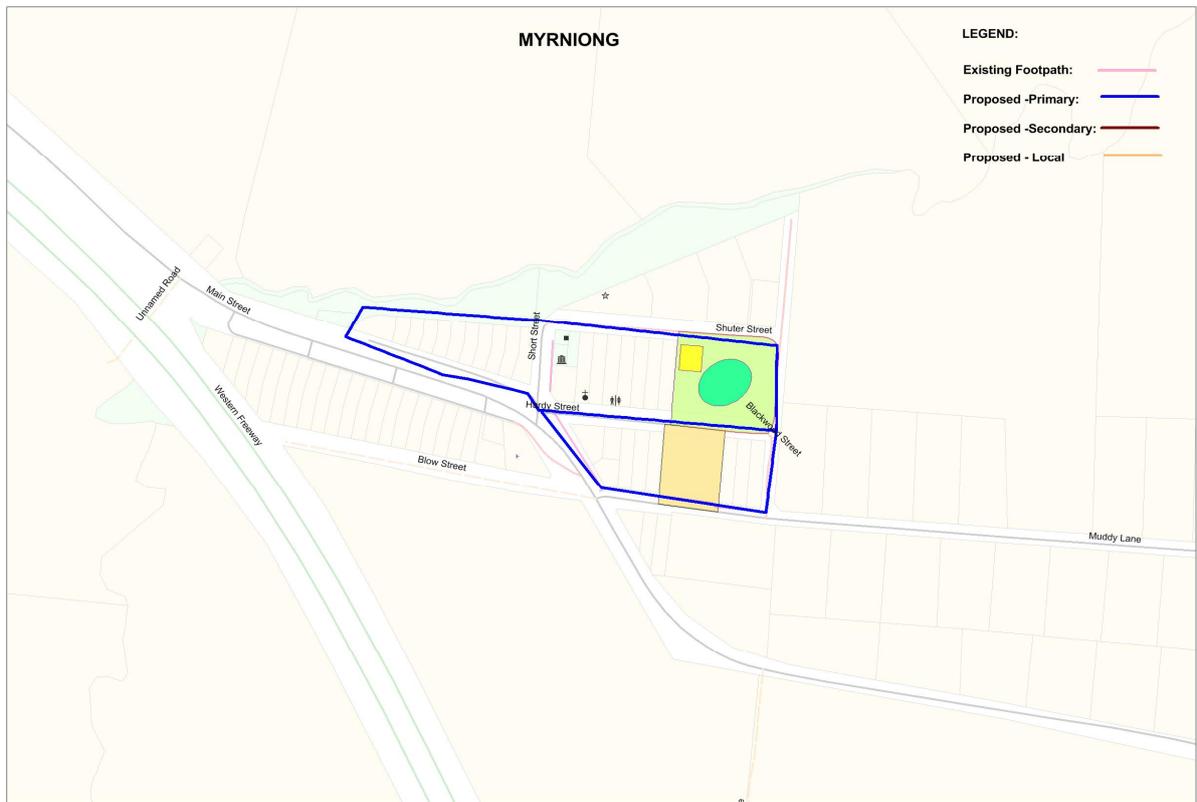
5.3.10 Long Forest Proposed Hike and Bike Network



5.3.11 Mount Egerton Proposed Hike and Bike Network



5.3.13 Myrning Proposed Hike and Bike Network



5.3.12 Wallace Proposed Hike and Bike Network



APPENDIX ONE: RESIDENT SURVEY RESULTS

1. Respondent Profile

The following table summarises the survey respondent sample

User Survey Respondent Sample

CATEGORY	SUB-GROUP	RESPONSE NUMBER	PERCENT %
Gender	Male	12	41.1%
	Female	17	58.6%
Age Range	0-10 years	0	0.0%
	11-20 years	0	0.0%
	21 - 50 years	17	58.6%
	51 - 65 years	9	31.0%
	66 + years	3	10.3%
TOTAL		30	100%

Of the survey respondents 58.6% or 17 were female.

The majority of participants were in the 21-50 years age groups with 58.6% of respondents fitting into this age cohort. The next main group were the 51-65 years age group with 31% of respondents followed by the 66+ years old with 10.3% of responses. No responses were received from anyone under 21 years of age.

2. Question Responses

The survey responses by question are listed as follows:

Question 1. What can Council do to encourage walking and cycling for commuter, fitness, recreational purpose in Moorabool. (Survey respondents could tick two responses and provide suggestions)

- Provide safe paths/track to shopping areas and community facilities 66.7%
- Improve signage for existing routes 60.0%
- Promote the benefits of walking/cycling 43.3%
- Increase the number of seats/resting points along tracks/trails 23.3%
- Provide more bicycle parking facilities 20.0%

Respondents indicated that their highest priority, 66.7% was for council to encourage walking and cycling for a range of purposes was to provide safe paths/track to primary destinations such as shopping areas and community facilities.

The next highest priority with 60 % of respondents was to improve signage for existing routes followed by promoting the benefits of walking/cycling by 43.3% of respondents. Increasing the number of seats/resting points along tracks/trails was identified by 23.3% and provision of more bicycle parking facilities by 20% of respondents.

Respondents were also asked to provide comments or suggestions with the following results recorded.

Question 1. Comments/Suggestions

- Fix the existing tracks first before creating new ones.
- Maintain/restore the current tracks, such as federation walk, peppertree, and position them out of the natural waterways. Provide bridge/ford crossings that can make the tracks useable all year round. Provide more signage and update the tracks and trails brochures to reflect all tracks. Provide information about significant historical or flora/fauna along the tracks. Install signs to indicate length of track.
- Creation of walking trail in Mount Egerton would be fantastic! No circuit is currently in place at all.
- Currently I don't think I have seen any bike racks for push bikes other than the ones on either side of the Village shopping centre.
- Develop off road paths. Develop safe road crossings. On road bike lanes are a second best solution and a disincentive to potential users.
- The shire could have some of the best of mountain bike riding in the State. Look to You Yangs for an example. Continuous paths are also important especially for visitors to the area.
- My walking buddy and I have found that there are many Streets without paths on either side. This makes it very difficult, especially considering we are both pushing prams. We also need a footpath over the Halletts Way over-pass. Better footpaths would make walking around town easier.
- Advertise where tracks are.
- All pedestrian lights should work as soon as the button is pressed (like the ones near the hospital) to Stop impatient people (kids) from going ahead anyway. Obviously multiple and frequent use times would need a timer.
- Natural surveillance and activities nearby help with safety. The track over from the train Station to Main Street via Maddingley Park; over walking bridge and along walking path next to the river then between houses has partial natural surveillance and no lighting. This is a pleasant walking short cut through to the shops but doesn't always feel safe, especially at night. Signage is lacking in Maddingley Park. Visitors coming from the Station wouldn't know how to get to Main Street. Bike parking is at the railway Station but very little in Main Street area. I chain my bike to bench seats.
- Increase tourism.
- The Halletts Way Bridge is a major safety issue and needs to be addressed to allow residents to walk in this area.
- Danger from motor traffic is No. 1 deterrent. Therefore make roads safer for bikes: - construct rideable bike lanes, not just white lines which disappear into potholes or become as narrow as a tightrope: continuous lanes with adequate width, so that the cyclist doesn't have to plunge off the road every time a fast or large vehicle approaches, with a smooth bitumen surface at least as good as motor traffic gets. Such lanes should be developed on all main roads linking towns in the shire, starting with Ballan-Gordon and Ballan-Daylesford. Ballan-Bacchus Marsh via Werribee Gorge could be metalled, as it's the only route between the two towns except for the Freeway, and no-one rides that.
- Repair and extend the footpaths by the Lerderderg River which were damaged by the floods.
- By law, unaccompanied children on bikes over the age of 12 must not ride on footpaths. I do not blame any parent who tells their children, under or over 12, not to ride on the road. I am on high-alert when I ride Gisborne Road in the school peak time, so I could not imagine any 13 year old riding in the same conditions. Many drivers do not pay attention to Stop signs and other road laws. They would not see a child on a bike.
- A lot of our teenagers have part time jobs in McDonalds and/or KFC. Currently there is no safe path for them to take to get there. They have to be taken by car which is a round trip of approximately 14km - it is not always possible for an adult to take them and it does not foster and encourage independence.
- We live in a beautiful area but there is a severe lack of walking tracks available and our parks are neglected. It would also be nice to know if there are safe, easy to use walking

tracks in the Wombat State forest. People should be encouraged to Stay fit and use the outdoors - currently in Moorabool they aren't.

Question 2. What are the current barriers stopping you from walking/cycling more? (Tick all that apply)

- | | |
|---------------------------------------------------|-------|
| • No track/path where I want to go | 65.5% |
| • No safe route to where I want to go | 55.2% |
| • Existing tracks don't connect | 41.4% |
| • Lack of circuit tracks | 37.9% |
| • I am not aware of the tracks that are available | 34.5% |
| • Lack of signage for existing walks | 31.0% |
| • Not enough seating along current tracks | 24.1% |
| • No bike parking facilities | 17.2% |
| • Not enough time | 13.8% |
| • Health reasons | 3.4% |

The responses above are in order of highest response to lowest response. Clearly the lack of tracks/path is considered by 65.5% of respondents to be the most significant barrier to walking and cycling, followed by 55.2% who consider there is no safe route to where they want to go. 41.4% responded that existing tracks don't connect whilst 37.9% identified the lack of circuit tracks as a barrier.

Lack of awareness of existing track by 34.5% of respondents and lack of signage for existing walks by 31% were also identified as barriers. Other barriers listed above were identified by less than 30% of respondents.

Respondents were also asked to provide comments or suggestions with the following results recorded for Q2.

Q2 Comments/Suggestions

- Both the Lerderderg River path and the path along the Werribee River from Peppertree Park are in desperate need of repair; the grass needs slashing. The ford across the river is now permanently under water as the pipe that took the river under the "bridge" is either damaged or blocked.
- Since all development south of the railway line has been destroyed by the approval of the wind farm the options for the picturesque views of the countryside are now non-existent.
- Washed out tracks and overgrown tracks in summer (snakes)
- It was very hard to find cycle tracks in and around Bacchus Marsh. My husband bought a bike for Christmas a couple of years ago and decided to take the bikes and kids into town (BM) to cycle some of the tracks. I took a few nights trolling the internet to find any tracks then I switched to looking for "walking" tracks. We found 4 or 5 of these - Pepper Tree Park, links golf course, Moon Reserve, and another kind off Stanfield Cres - I don't know if you are meant to ride along walking tracks but as we couldn't find any designated bike paths the walking tracks met with the bikes.
- Most of the current recreational tracks around Bacchus Marsh have been closed or in a State of disrepair for >2 years.
- I worry about dogs on the loose, and people seem to think its ok to let their dogs off in parks, and on the road going past the "roundhouse" and out that way. Their dogs are a threat to my little dog so I am always looking well ahead ready to change my route if needed. I usually try to walk middle of day when Streets are quieter.
- Using the same track becomes boring, there should be many alternatives and variations as you go. Loops, connections, sights, shops etc.
- Bike tracks don't connect. For example, to ride to Moon Reserve one has to ride on the road to get to the Start of the track. Roads are too dangerous to ride on in Bacchus

Marsh. There should be bike tracks networking across and around the town, not just here and there with no connection. I live in Maddingley. Traffic is 'full on' especially in Grant Street and you wouldn't risk Fiske or Station Streets. The bike track from the end of Bond Street is a good example but as I said above it lacks natural surveillance in parts and there is no lighting. I would walk my dogs along the track next to Peppertree Park/Werribee River but again it doesn't feel safe and there is no natural surveillance on that side of the river when you get further along the track.

- Signage and interpretations.
- Bus line policies refusing to carry bikes.
- Re signage, the channel paths of Ballan are good for walking & cycling, but rights are ambiguous in places, especially near farms.

Question 3. Which should be funded first?

Please note that some respondents ticked both responses.

- Commuter routes i.e. walking or cycling routes to work, school, shops 46.7%
- Recreational paths/trails i.e. along the creeks, parks etc. 56. %

Results indicate that more respondents 56% think that recreational paths should be funded ahead of commuter routes.

Question 4. For what reason do you walk/cycle?

12 respondents took part in the question "What is the main reason why you walk/ cycle?"

- Fitness 50%
- Recreation/fun 41.7%
- Commute to school/work 8.3%

Half of the respondents (50%) walk/cycle for fitness, 41.7% for recreation/fun and 8.3% of respondents walk /cycle to commute to school/work

Question 5. Where should paths or tracks be developed to encourage walking and cycling in Moorabool?

Respondents were asked to identify where paths or track should be developed to encourage walking and cycling in Moorabool.

The following responses were received.

- Near the railway Station so that people from other districts can catch the train to Ballan and then cycle south towards the Brisbane Ranges. Facilities would need to be built on the way to those areas. At present any plans would have to be approved by Wind Farm Developers as well as Council. The Wind Farm is only 3.5.Kms from the CBD of Ballan. Ballan is now squashed between the Western Freeway and the railway Station. The Wind Farm is inappropriately placed and will destroy any meaningful expansion of Ballan.
- From Hillview to town.
- Along Longforest Road in a circuit.
- Halletts Way (especially on the bridge) bridge.
- Around the rehabilitated dam/lake and recreational reserve in Mount Egerton would be a great Start. Lots of potential within the adjacent State Park (Whipstick?) as well along our creeks and rivers, around parks and playgrounds.
- Link neighbourhoods to shops and transport nodes. Provide links between made footpath networks.
- Paths should be put in along heavily used Streets in the town. Our population is ageing and unpaved Strips are dangerous in the wet particularly. Existing paths need to be

maintained. I had a heavy fall recently and had nasty facial injury because of the cracked path.

- Werribee Gorge to Melton Reservoir if it could be achieved through the valley.
- Footpath over Halletts Way overpass.
- From different areas to schools.
- Commuter routes should be a recreational path where possible.
- Around tourist tracks, scenic routes & new development areas.
- Along the Avenue of Honour, connecting the town to its number one feature.
- Between Werribee Gorge and Mount Blackwood following the Myrning Creek.
- All throughout the township, especially from Darley. Bacchus Marsh township is fairly flat and good for getting around on a bike or walking (good for oldies!), but again it is about connectiveness, natural surveillance and lighting.
- Along major tourism attractions and townships. E.g. linking township and rail Stations to natural attractions and cafe restaurants and wineries etc.
- Along rivers, Navigators, Yendon, Lal Lal.
- After the Structure plans for each town in the shire are completed, we as the public will have a better idea/understanding as to where walking and cycling paths/tracks within each town in the shire should be located. I would strongly suggest that walking tracks around our current water features i.e. Bostock Reservoir and Pykes Creek Reservoir are created with good signage including (Neighbourhood Watch Signs) resting seating along the tracks and how long each track takes to complete.
- Gordon to Ballan - A relatively short bike ride, good for commuters and tourists alike.
- Along the Lerderderg River from Darley to the Avenue of Honour.
- Along the Avenue of Honour.
- Across town from Darley to Maddingley so children can ride to school safely.
- Bostock Reservoir; across Freeway bridges.
- Walking: signage to encourage use of public laneways, and lean on farmers who block off public laneways, break down boundary fences, etc. Cases in point around Ballan:- access to Wombat State Forest via ... (off Blakeville Rd); ...'s Lane between Kerin's and Geary's (fenced off with "Stock grazing" sign throughout 2012); and Drovers Lane out to Geary's (fenced off). (needs clarification - CF)
- Routes from the town centre into the State Parks.
- To follow the irrigation channel right across the town, from the river in Darley through to Maddingley Park and Bacchus Marsh Station. This would encourage children to ride to the secondary schools in safety. There could be room for walking as well.
- The track along the river and the Avenue seems to get a lot of use but should be extended. Hardly any children ride their bikes to school anymore and the traffic is so busy around school Start and finish times without help it will only get worse. I have a bike and I enjoy cycling but not on the roads. Safe tracks would encourage people to get out more and bring visitors to our town.
- I live in Spargo Creek and I would like to cycle to Ballan occasionally. There is currently no path or bike lane, and riding on the Ballan-Daylesford road is dangerous, as it is quite narrow in places. There is also no path/bike lane in the other direction (towards Daylesford).
- For many intended areas, we have been constrained by geographical features, and/or roads. For instance, the Werribee Vale Road could not be added to with walking and cycle paths. However, the main roads out of Bacchus Marsh, to Balliang, which are popular with many cyclists, could be upgraded.
- The track at Caledonian Park is in serious need of upgrading. Most of the time it is overgrown, it is full of holes and it does not connect so that a person can do a complete circuit - there needs to be a bridge of some sort across the river so that people take advantage of this area instead of it going to waste.

3 Other Survey Comments

Survey respondents were provided with the opportunity to make any other comments. The following comments were received.

- Making it safer for kids to ride to primary schools is the best way to change attitudes to cycling, I think. Stop mums driving their kids everywhere. We need to make it fun to ride.
- Ballan is ripe for appropriate development but it is useless to contemplate the short term financial gain for the district by establishing a wind farm without looking at the long term effects and damage to the environment. Ballan residents do not seem to realize that the permit has been granted, the development will go ahead and there seem to be nothing we can do to get the company to modify the design so that rural residents living close to turbines will be protected. No one wants to know. People Power is the only way to save Ballan from becoming another Waubra or Waterloo in South Australia.
- Need more paths and parks (to walk through) in new subdivided areas.
- Any walking track at all would be welcome!!!
- Develop path networks rather than Standalone tracks. Improve the footpath networks. Don't forget the walking component of public transport - the walk to/from the bus Stops.
- Start with connecting all the paths together.
- Suggestions:-Regular historical walks of different lengths / points of interest. -A clear Starting point (info centre) for all town walks with an interactive information board that includes 'what's on' in town & surrounding area.
- The Myrniong and Korkuperrimul Biolink project has revegetated much of the land between Mt Blackwood and Werribee Gorge and a walking track along this route would be great for recreation and to connect to the Myrniong Plough Restaurant for walkers.
- A network of walking and bike paths throughout the whole township is needed.
- Tourism.
- Around the suburb that I live in there is a challenging walking track where people from all around the region come and take the test to complete it: I would suggest that the planners from the shire go and investigate and learn from this and see if it can be replicated in the shire somewhere: Here is the link to it: <http://www.dandenongrangesattractions.com.au/attractions/1000-Steps/> (From a resident who does not live in the Shire but owns a property in Ballan).
- This town is ideal as a recreational walking bike track as it is virtually flat with a beautiful river running through the centre. Why not promote this for tourism?
- Rec routes fine, especially for walking, but getting A - B by bike needs to be encouraged.
- Some driver education: slow down for cyclists and walkers. Tried to contact your Group months ago, when you first advertised - left message with Council, never heard back.
- Thanks for undertaking this survey. Bicycle Network Victoria has been telling us for years how much Councils spend on bicycle infrastructure, so it would be good to hear then talking up the benefits of Moorabool. They do promote cycle tracks in other parts of the State, so it would be good to see our own towns in print. "The Balliang to Bungaree Track"?

APPENDIX TWO: BMTAC'S PRIORITIES AND LONG TERM GOALS 2009

BMDTAC Works Priorities

Priority Ranking	Description	Type	Track Length	Private Land	Comment
1	Pedestrian paths and pedestrian freeway crossing along Halletts Way.	Path	1.4	N	Road issue
2	Signage for tracks (initially pointers and distance markers) and associated maps/brochures	Signage	N/A	N/A	
3	Establish a footpath on the side of Fiske Street from the Werribee River to Simpson Street (this is on MSC's Footpath Register but has not been established).	Path	0.4	N	Recently completed
4	Link between the Hillview Estate and Grant Street/Peppertree Park/Werribee River circuit to give safe pedestrian access to the town for this fast developing area.	Path	0.9	N	Distance assumes link joins existing footpaths along Griffith St
=5	Establish a footpath alongside Holts Lane from the Lerderderg River to Gisborne Road.	Path	0.8	N	
=5	Investigate the potential to re-open pedestrian access between end of Pilmer Street and reserves linking Simpson Street and McGrath Street (recently closed as a result of Marsden's sub-division) across vacant (contaminated) Crown Land.	Track	0.2	?	
7	Establish a 2.5m shared pathway between Bond Street Pedestrian Bridge & Eddie Toole Place, Main Street as sub-division & development provides opportunity.	Track	0.7	Y	
8	Extension of track along the Lerderderg River to connect the existing track that runs behind Bacchus Marsh Golf Course (as far as the water channel) to Gisborne Road. Note that this route is across private land and so although there is an informal track at present this cannot be formalised without consent of the landowner.	Track	1.7	Y	
9	Establish a 2.5m shared pathway on the east side of Bond Street between Maddingley Park and Bond Street Pedestrian Bridge (on land occupied by defunct water channel).	Path	0.2	N	

Priority Ranking	Description	Type	Track Length	Private Land	Comment
10	Establish a Lerderderg River crossing adjacent to Bacchus Marsh Golf Course to connect with Lerderderg Gorge Road. Safe link for training and leisure cyclists from river path to training path. Would allow cyclists to avoid narrow rural roads with high speed limits.	Track and River Crossing	0.4	?	Maybe shorter. Depends on exact location of crossing.
11	Request review of all crossings of Grant Street from Main Street to Griffith Street roundabout by Vic Roads in conjunction with Moorabool Shire Council with a view to improving safer pedestrian access. Speed limits to be included as part of this review.	Road Crossings	N/A	N	N/A
=12	Establish Rowsley Valley Horse Riding Trail (mainly signage issues)	Track	14	?	Length is from BM-Balliang Rd to bottom of Cut Hill.
=12	Walking/cycle track from end of Halletts Way (BM Secondary College/Pentland Primary) to Links Road (adjacent to Telford Park), across open space.	Track	0.7	?	
14	Extension of the Lerderderg River Trail from Andrew's Way to Mackenzies Flat.	Track	2.5	Y	
15	Report and recommendation regarding signage of shared pedestrian and bicycle usage paths.	Signage	N/A	N/A	
16	Path connecting the extension of Masons Lane to Lerderderg River and thence to Main Street.	Track	0.1	Y	Track from end of Mason La to river?
17	Walking Trail along Werribee River, from Fiskin Street to Avenue of Honour Circuit (through negotiation with private land owners).	Track	2.6	Y	
18	Trail amenities to be established – Lerderderg River Track at end of Robertsons Road (Toilets, Drinking Water tap, sheltered picnic tables)	Amenities	N/A	?	
19	Connect new Silverstein Estate, close to Anthony's Cutting with Avenue of Honour circuit.	Track	1.7	N	Over bridge, up Flannagans Dr to Streeton Dr
20	Establish a 2.5 Metre shared path along the Werribee River escarpment on the planned sub-division on Balliang Road/Griffith Street between Bacchus Marsh West Golf Club/McCormack Road & Barry Street. Consider linkages to Peppertree Park.	Track	2.9	Y	

BMDTAC Long Term Goals

Ranking	Description	Total votes	Type	Track Length (km)	Private Land	Comment on distance
1	Create a "Triangular Circuit Trail" along the banks of the Werribee & Lerderderg Rivers from their confluence to a North-South link through Bacchus Marsh. This North-South link ideally to follow the route of the Southern Rural Water irrigation channel. Creative solutions will need to be found if this is to be achieved but the land adjacent to the channel should be retained for public amenity and not be allowed to fall into private ownership. SRW are amenable for their land to be used where the channel can be placed underground, otherwise they have concerns over public liability and their need for access to affect on-going maintenance.	19	Track	12.61	Y	Distance excludes pre-existing tracks
2	Establish a formal network of bike and walking tracks <u>within</u> the town to connect all residential estates with schools, parks and shops. This to include a review of the optimal route of The Great Dividing Trail through Bacchus Marsh as these plans develop.	14	Track	Various	N	
3	Establish a formal network of bike and walking tracks to create links with outlying areas and any regional tracks, this to include: <ul style="list-style-type: none"> a. The Lerderderg Gorge b. Werribee Gorge c. Melton West (High Street) with links to Long Forest Road, Hopetoun Park and any new planned estates. Such track to take account of any planned realignment of the Western Highway through Anthony's Cutting. d. Rowsley and the Brisbane Ranges 	8	Track	a: 2.5 b: 6.4 c: 6 d: 12	Y	Distance excludes pre-existing tracks. Includes road issue.

APPENDIX THREE: BMDTAC TOWNSHIP ROUTES

BMDTAC PROPOSED ROUTES THROUGH BACCHUS MARSH TOWNSHIP

Some of the suggested routes are across private land and so development of these routes might only come about if the land were sold for development in the future. In such instances the parts of the route in question are in ***bold italics***.

North-South routes and East West routes have been identified. Each of the routes have been given numbers and then split in two. For North-South routes the Freeway is used as the divide and for East West routes, Gisborne Road/Grant Street are used as the divide.

BMDTAC PROPOSED ROUTES THROUGH BACCHUS MARSH TOWNSHIP

North South Routes from the West	Route	Officer Comment
1 N	Great Dividing Trail/Swans Road thence over Bald Hill to Tramway Lane to Freeway.	Already included in Council Plans
1.S	From Freeway south along Bacchus Marsh Road, right into Underbank Boulevard, via Bernborough Court to link with Peppertree Walk at the ford.	Already included in Council Plans
2S	Pamela Court to Links Road then right onto Halletts Way extension via Telford Park and Pentland Primary on Halletts Way to Freeway.	Already included in Council Plans
2S	From Freeway along Halletts Way to roundabout (top of Stamford Hill), Straight across thence down to Peppertree Walk at the ford (there is also the route turning left into Connor Street, through to its end and thence down through the waste ground to Peppertree Walk).	Already included in Council Plans
3N	Water Channel Route" From Links Road onto Links Walk around back of Bacchus Marsh Golf Club to Start of Water Channel (where water pipe crosses the Lerderderg). <i>Follow Water Channel to Nelson Street</i> , cross Albert Street at pedestrian refuge, thence along Nelson Street past Darley Primary School. Cross to east side at school crossing, thence to Grey Street patrolled crossing. Via Water Channel easements to Holts Lane, right into Holts Lane and then left onto track accessing Freeway underpass.	Security and cost make this unviable.
3S	Follow water channel route to Clifton Drive <i>thence along Donald Street, across Masons Lane and via water channel easements to Dickson Street. Along water channel to Stamford Hill (would require a patrolled crossing for school hours). Continue the channel route to the end, between McGregor Court and White Avenue</i> , thence down to Peppertree Walk via a graded track.	Security and cost make this unviable
4N	Gisborne Road to Freeway via Federation Walk.	Already included in Council Plans
4S	Gisborne Road to Main Street (crossing at Court House Hotel) and thence along Grant Street to Station Street.	Already included in Council Plans
5N	From Gisborne Road at Lerderderg, onto walking track along east bank. At Holts Lane cross to West bank to <i>continue to Freeway</i> .	Already included in Council Plans
5S	<i>Along river bank to Masons Lane, right into Masons Lane and enter Masons Lane Reserve at NE corner, through Reserve to Dickie Street, right into Lerderderg Street (past Bacchus Marsh Primary), left</i>	Agreed

North South Routes from the West	Route	Officer Comment
	into Young Street and thence down to Main Street, across Main Street to Eddie Toole Park. At rear of Eddie Toole Park through to Reserves at the end of Simpson Street (until such times as this option may become available, from Main Street between RSL and Public Hall to pedestrian laneway through to Simpson Street, then right into Simpson and down to Reserves at end of the road). Through Reserves, crossing McGrath Street and through to Reserves along Weribee River. Then right to <i>Pedestrian Footbridge</i> crossing Weribee River at the end of Bond Street (note that should land between the River and Eddie Toole Park be sold for development, then a more direct route should be planned through these developments). Along Bond Street, across Taverner Street and thence, through Maddingley Park, to the Rail Station.	
6S	From Dickie Street, left into Lerderberg Street and then right into Crook Street and on to Main Street. Cross Main Street into Fiskin Street, thence down to Taverner Street (to existing path to Maddingley Park).	Already included in Council Plans
7N	From Diggers Rest Road to Freeway along Long Forest Road.	Agreed
7S	From Freeway along Hopetoun Park Road to Hopetoun Park (investigate potential of route at end of Webb Court, down to river flats and thence to Captain Moon Picnic Reserve).	This track is more of a walking trail through forested area rather than a footpath connection.

West East Routes From the South	Route	Officer Comment
1W	From Bacchus Marsh Racecourse & Recreation Reserve along Bacchus Marsh-Balliang Road on east side and thence down Griffith Street to Grant Street.	Already included in Council Plans
1E	From Grant Street to Railway Station	Already included in Council Plans
2W	<i>Weribee Gorge to Peppertree Walk</i> , along Peppertree Walk (north side) to pedestrian refuge on Grant Street.	This track is more of walking trail through forested area. Not just a footpath connection
2E	Crossing Grant Street, right to Peelmans Lane and then left along the Reserve by the river to <i>Bond Street pedestrian bridge</i> . Crossing the Weribee River then right along the River Reserves to Fiskin Street.	This path already exists however requires walkers to cross the river at pedestrian or vehicle bridges.
3W	Along Bacchus Marsh Road (from the Freeway) then down Stamford Hill to Grant Street roundabout.	Already included in Council Plans
3E	Along Main Street to Start of Avenue of Honour and produce Stores and thence to Avenue of Honour Circuit .	Already included in Council Plans

West East Routes From the South	Route	Officer Comment
4W	From Tramway Lane, along Holts lane to Bacchus Marsh-Gisborne Road.	Agree – footpath required the entire length of Holts Lane.
4E	Along Holts Lane to Lerderderg River.	Agree
5W	From Tramway Lane, along Grey Street to Bacchus Marsh-Gisborne Road.	Other paths planned or in existence within 100m meet this need.
5E	Along Grey Street to Lerderderg River via easements, if available.	Requires access to easement– likely to be unachievable
6W	Swans Road to Links Road, turn right and then left into Robertsons Road then right onto Links Walk along the Lerderderg River to the water channel. Thence continue along a river track to the Bacchus Marsh-Gisborne Road (if and when this land is sold for development).	Requires access to private property – likely to be unachievable

APPENDIX FOUR: PLANNING DOCUMENTS

Moorabool Planning Documents

The Moorabool Planning Scheme is the key guiding document for the provision of infrastructure across the Shire. The future development of the Hike and Bike Strategy must be undertaken within the framework provided by the Moorabool Planning Scheme.

MUNICIPAL STRATEGIC STATEMENT -CLAUSE 21.05
21.05 DEVELOPMENT AND COMMUNITY INFRASTRUCTURE
21.05-1 Key Issues and Influences

Open space and Recreation

- Open space networks throughout Moorabool Shire's towns are an important element of the Shires urban character.
- Moorabool Shire has a focus on providing integrated cycling and walking networks to link existing residential development to community facilities, commercial hubs, and parks.
- Moorabool Shire endeavours to support the health and well-being of Moorabool communities through the provision of high quality social and recreation facilities and services underpinned by effective engagement Strategies.

On 19 September 2012 Council adopted the Council Urban Growth Policy Statement and the Council Rural Growth Policy Statement. A key principle in the urban policy is as follows:

- To plan for, and manage, current and predicted physical and social infrastructure within the Shire.

The 2014 Implementation task includes the following:

- Provide for an eastern and western 'north-south' transport routes

The following Precinct Structure Plans must be considered in the development of the Hike and Bike Network.

- Bacchus Marsh Activity Centre Structure Plan 2011
- Ballan Structure Plan 2014
- Gordon Structure Plan 2011

The Victorian Planning Policy Framework (VPP)

In addition to the Moorabool Planning Scheme, The Victorian Planning Policy Framework (VPP) outlines the following objectives and is of great importance in Moorabool particularly for the growth areas.

The VPP outlines the following in relation to Sustainable Personal Transport and is relevant to the Moorabool Hike and Bike Strategy.

18.02-1 Sustainable personal transport

Objective

To promote the use of sustainable personal transport.

Strategies

- Encourage the use of walking and cycling by creating environments that are safe and attractive.

- Develop high quality pedestrian environments that are accessible to footpath-bound vehicles such as wheelchairs, prams and scooters.
- Ensure development provides opportunities to create more sustainable transport options such as walking, cycling and public transport.
- Ensure cycling routes and infrastructure are constructed early in new developments.

18.02-2 Cycling

Objective

To integrate planning for cycling with land use and development planning and encourage as alternative modes of travel.

Strategies

Direct and connected bicycle infrastructure should be provided to and between key destinations including activity centres, public transport nodes and major attractions, planned to:

- Separate cyclists from other road users, particularly motor vehicles.
- Provide the most direct route practical.
- Require the provision of adequate bicycle parking and related facilities to meet demand at education, recreation, shopping and community facilities and other major attractions when issuing planning approvals.
- Provide improved facilities, particularly Storage, for cyclists at public transport interchanges, rail Stations and major attractions.
- Ensure provision of bicycle end of trip facilities in commercial buildings.
- Develop local cycling networks and new cycling facilities that link to and complement the metropolitan-wide network of bicycle routes – the Principal Bicycle Network.

Policy guidelines

Planning must consider as relevant:

23/09/2011

VC77

20/09/2010

VC71

23/09/2011

VC77

Guide to Road Design, Part 6A: Pedestrian and Cycle Paths.

Victorian Cycling Strategy (State Government of Victoria 2009⁴)

11.03 Open space

11.03-1 Open space planning

Objective

- To assist creation of a diverse and integrated network of public open space commensurate with the needs of the community.

Strategies

Plan for regional and local open space networks for both recreation and conservation of natural and cultural environments.

Ensure that open space networks:

- Are linked through the provision of walking and cycle trails and rights of way.

⁴ Victorian Planning Policy Framework Clause 18

- Are integrated with open space from abutting subdivisions. Incorporate, where possible, links between major parks and activity areas, along waterways and natural drainage corridors, connecting places of natural and cultural interest, as well as maintaining public accessibility on public land immediately adjoining waterways and coasts.
- Ensure that land is set aside and developed in residential areas for local recreational use and to create pedestrian and bicycle links to commercial and community facilities.

15.01-3 Neighbourhood and subdivision design

Objective

To ensure the design of subdivisions achieves attractive, liveable, walkable, cyclable, diverse and sustainable neighbourhoods.

Strategy

In the development of new residential areas and in the redevelopment of existing areas, subdivision should be designed to create liveable and sustainable communities by:

- Contributing to an urban Structure where networks of neighbourhoods are clustered to support larger activity centres on the regional public transport network.
- Creating compact neighbourhoods that have walkable distances between activities and where neighbourhood centres provide access to services and facilities to meet day to day needs.
- Creating a range of open spaces to meet a variety of needs with links to open space networks and regional parks where possible.
- Providing a range of lot sizes to suit a variety of dwelling and household types to meet the needs and aspirations of different groups of people.

APPENDIX FIVE: PREVIOUS RESEARCH

Moorabool Shire Council Plan 2009-2013

The four-year plan provides the Strategic direction for Council to move towards its desired future.

Vision – Viable and vibrant communities with strong identities forming an integrated Shire.

Mission - Leading and serving our communities by listening to, planning for and providing quality services and advocacy.

Strategic actions have been set under a range of Key Result Areas. Actions relevant to the Hike and Bike Strategy appear below.

Strategic Objective	Strategy
Key Result Area 1 -Representation and Leadership of our community	
Services and infrastructure that meets the Shire's existing and future needs	Identify infrastructure and service funding gap priorities and appropriate solutions and funding options.
	Advocate and plan for improved transport services and a road network for our communities
Key Result Area 2 - Community wellbeing	
Participation in diverse sport, recreation and leisure activities	Provide and promote walking and cycling trails for recreation and commuter use
Key Result Area 3 - Enhanced Natural and Built Environment	
Effective and safe transport networks	Develop transport and pedestrian networks, services and connectivity between and within communities.

Moorabool Strategic Bicycle Plan 2001

The aim of the bicycle plan was to produce a bicycle network and Strategy for implementing bicycle facilities as well as to promote and encourage cycling in Moorabool.

Many of the works identified in this strategy have been implemented but Council did not take up recommendations for the shared paths. It is anticipated that the Hike and Bike Strategy will replace this document in guiding Council's future priorities for cycling.

Bacchus Marsh District – Trails Master Plan 2004-2005

The Bacchus Marsh District Trails Advisory Committee of Council prepared this document for the Shire of Moorabool. The plan identified the fragmented nature of trails in Moorabool rather than an integrated trails network. The Master Plan aimed to ensure that future trail development links existing routes with new trails while reducing fragmentation, thereby increasing the overall amenity of the network.

The plan divided the Bacchus Marsh District into the following zones, Forest, Rural, River and Urban. The highest priority area for this plan is the area in the River and Urban zones. This plan has been regularly updated and the current priorities of this group appear in the Consultation Section 2.3.

Positive Ageing Strategy 2008

The Positive Ageing Strategy was prepared to improve the experience of ageing within Moorabool. It presented a range of action plans under the following goals:

Goal 1: Promote and maintain physical and mental health and wellbeing

- Increase awareness and knowledge of physical, mental health and wellbeing for individuals.

- Increase opportunities for engagement in activities within the community that facilitate healthy ageing.

Goal 5: Provide a safe, secure living environment

- Support the provision of accessible public facilities and infrastructure for seniors.

Goal 6: Support the provision of all age-inclusive transports systems.

- Improve transport infrastructure.

In section 5.4 it advocated for increased access accessibility and age friendly initiatives within the community.

- Develop and publish a recreational Open Space and Walking Routes Guide that considers the needs of seniors.

Municipal Early Years Plan 2006-2009

The Municipal Early Years Plan is an acknowledgement of the importance of early childhood development and the need to support families and young children in an integrated way across service systems. It includes:

Recommendation 8: Design integrated, family friendly community services hubs, link services, amenities, parks etc.

Goal 3: To provide suitable and sustainable infrastructure for council services and broader health and community service system.

Action 3.5 Advocate for Developer Contribution that supports family friendly development and children's services - Develop trails to encourage exercise.

Goal 4: To build a Strong sense of community for Moorabool Children and Families.

- Establish community walking groups' i.e. Street walkers/trail Blazers and Annual pram Stroll. The aim of these programs is to reduce social isolation, increase women's physical health, and reduce the impact of Post Natal Depression.
- Establish walking and riding school buses.

Front SEEAT (Social Employment Education Access Transport) Strategic Plan 2011-2013

The Front SEEAT project is a Transport Connections project and commenced in June 2007. The project is auspiced by Hepburn Shire and Moorabool Shires and now covers all of the two Shires.

By design, all Transport Connection projects are established as collaborative partnerships with a range of Stakeholders involved. Front SEEAT have a Steering Committee with members involved from health, education, employment, local government, and the community.

Rural and regional communities as one of the major barriers consistently rate transport for people to accessing services, employment and social networks. Transport Connections is about supporting communities to work together to improve local transport and access.

The aim of Transport Connections 2010-2013 is to enable a local and a regional focus in responding to limited access to transport needs for people and developing innovative local and regional solutions.

Transport Connections 2010-2013 will increase the focus at a strategic level for engagement and planning. In addition to maintaining a local focus on transport initiatives there will be consideration of regional responses and collaborations aimed at addressing access needs in relation to transport and non-transport options excluding public transport.

This strategic plan describes the strategic direction and the supporting strategies and actions that will assist to respond, from both a regional and a local focus, to the needs of people with limited access to transportation. The following key result areas will be the strategic focus for the project in trying to develop a more innovative approach to developing local and

regional solutions to meet transportation and access needs: s

- Transport and Access Options
- Planning
- Communication and Education
- Governance.

Front SEEAT hopes to achieve sustainable transport solutions in response to community need that builds a stronger, more connected and happier community.

Planning Checklist for Cycling

In October 2012 Bicycle Network supported by Vic Health produced new publications to guide the future planning of cycling in growth areas. The **Planning Checklist for Cycling** is designed for professionals involved in planning, designing and delivering new suburbs in Greenfield areas and is of relevance to Moorabool Shire given the new residential growth occurring throughout the municipality.

The Planning Checklist for Cycling publication provides the following outlines for an effective bicycle network. "According to Austroads (2011) an effective bicycle network includes:

- "A designated regional network of roads and paths that serves longer-distance commuter and recreational trips between regions.
- Designated local networks and routes designed to provide low-stress routes, to feed the regional network and to provide for shorter local trips to shopping centres, recreational activities, and public transport hubs.
- Full construction of route sections between origins and destinations consistent with the route purpose.
- Convenient access into and through residential, commercial and industrial subdivisions, and major developments.
- Access and facilities to travel with a bicycle on public transport.
- Secure long and short-term parking facilities at major destinations.
- Safe routes to schools.
- Well-defined bicycle facilities on arterial roads where significant cyclist demand exists including specifically for commuter trips.
- Appropriate maintenance practices which result in smooth surfaces.
- Calming in local streets.
- Paths, which are interesting, that includes rest areas at appropriate intervals on regional routes, and are designed to appropriate geometric standards.
- Implementation of regulatory, warning and guidance signage on paths.

Providing separated cycle routes along busier roads and mixed traffic conditions on quiet, local Streets will provide transport connections to destinations on the street network. Recreational paths along green easements such as waterways allow access to parks and recreational opportunities as well as supplementing the transport network.⁵

The Checklist runs through a series of sequential items to ensure the above conditions are provided and should be used by relevant Council Staff to guide the future development of cycling facilities in Moorabool.

⁵ Planning Checklist for Cycling Practice Notes. Vic Health/Bicycle Network Oct 2012

APPENDIX SIX: URBAN PATHWAYS HIERARCHY DEFINITIONS

Table H.1: Urban Pathways Hierarchy Definitions

CLASSIFICATION		DESCRIPTION	Standards for New Construction
P1	High Use & Commercial Areas	<p>These are footpaths serving the retail and commercial areas of town centres, e.g. Main St. Bacchus Marsh and Inglis St. Ballan.</p> <p>Also, footpaths service other medium density pedestrian attractors, such as:</p> <ul style="list-style-type: none"> First block away from the major commercial areas; Close proximity to school, railway station or other pedestrian generator. 	<p>125mm thick reinforced concrete x 2.5m wide. Base course 75mm crushed rock. (As per Infrastructure Design Manual)</p>
P2	Strategic & Intermediate Use Areas	<p>Footpaths and shared bicycle paths which link to railway station, bus stops, local shops, churches, schools, senior citizens centres and hostels or other pedestrian generators. Typically they will be along Link and Collector Roads.</p> <p>This category also includes footpaths around or serving Council corporate buildings (offices, works depots, child care centres, se.</p>	<p>125mm thick reinforced concrete x 2.5m wide. Base course 75mm crushed rock. (As per Infrastructure Design Manual)</p>
P3	Local area (Low use)	<p>Footpath constructed as access within residential areas and link to higher level paths. Typically, these will be along Access Level 1 and Level 2 roads.</p> <p>This category also includes all sealed (asphalt, bitumen seal or concrete) rural footpaths in rural areas and in townships other than Ballan and Bacchus Marsh.</p>	<p><u>Bacchus Marsh, Ballan & Townships:</u> 125mm thick reinforced concrete x 1.5m wide. Base course 75mm crushed rock.</p> <p><u>Rural Footpaths:</u> Designed on a case by case basis depending on constraints such as native vegetation, soil types, expected usage. Typically 100mm depth (sealed or unsealed) x 1.2m to 1.5m width.</p>

CLASSIFICATION		DESCRIPTION	Standards for New Construction
P4	Urban Recreational Trails	These are recreation or exercise walking tracks, typically linking the residential areas with recreation reserves, river banks or other scenic areas. They include paths through and within recreation reserves. Typically frequent usage in warmer weather.	<p><u>High Use:</u> 125mm thick reinforced concrete x 2.5m wide</p> <p><u>Medium to Low Use:</u> Designed on a case by case basis depending on constraints such as native vegetation, soil types, expected usage. Typically 100mm depth (sealed or unsealed) x 1.5m to 2m width.</p>
P5	Rural Recreational Trails	Typically unformed tracks for use by hikers or equestrians. Opportunity for visitors to explore and discover relatively undisturbed natural environments along defined and distinct tracks with minimal (if any) facilities. Generally distinct without major modification to the ground. Encounters with fallen debris and other obstacles are likely.	Designed on a case by case basis depending on constraints such as native vegetation, soil types, expected usage.