



Hepburn Cycling and Walking Strategy

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Prepared by CPG for Hepburn Shire Council

This report has been prepared from the office of CPG

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1 Executive Summary

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1.1 Heading Number 2

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2 Introduction

Cycling and walking are healthy choices in an active lifestyle. Hepburn Shire recognises the benefits of these activities and the opportunities they provide to improve health and wellbeing of individuals, connect people to their communities, create tourism opportunities and contribute to an environmental ethic by reducing chemical and noise pollution caused by other modes of transport.

This strategy is an exciting and positive step toward improving access to infrastructure and services focussed on getting more people walking and cycling more often.

Council has developed the plan with the aim of providing an achievable set of actions that provide greatest benefit and deliver innovative solutions for increasing mobility of residents and visitors between destinations.

2.1 Purpose of the Cycling and Walking Strategy

The broad purpose of the strategy is to identify a clear direction for the Hepburn Shire Council around development, provision, management, maintenance and marketing of existing and proposed walking and cycling infrastructure within the Shire until the year 2016.

More specifically, the objectives of the strategy include the following;

1. To make Hepburn Shire more walking and cycling friendly by developing a strategic plan for the creation/improvement of walking and cycling networks.
2. Research and identify the needs and expectations of the community using a range of consultative measures
3. Identify and define the network in four main categories, commuter walk and commuter cycle and recreation walk and recreation cycle.



4. Prioritise further development of walking and bike paths within the municipality inclusive of an action list identifying and including rationale for the following;

- Short Term Recommendations (1 - 2 years)
- Medium Term Recommendations (2 – 5 years)
- Future Long Term Recommendations (5 – 10 years)

Within these recommendations, priorities are identified as, upgrade, renewal or new works.

5. Identify capital cost estimates for construction to allow Council to seek relevant levels of funding.
6. Identify likely funding sources, and other issues which may impact on the viability of the proposed project including Hepburn Shire Council's financial state and on-going ability to provide maintenance.

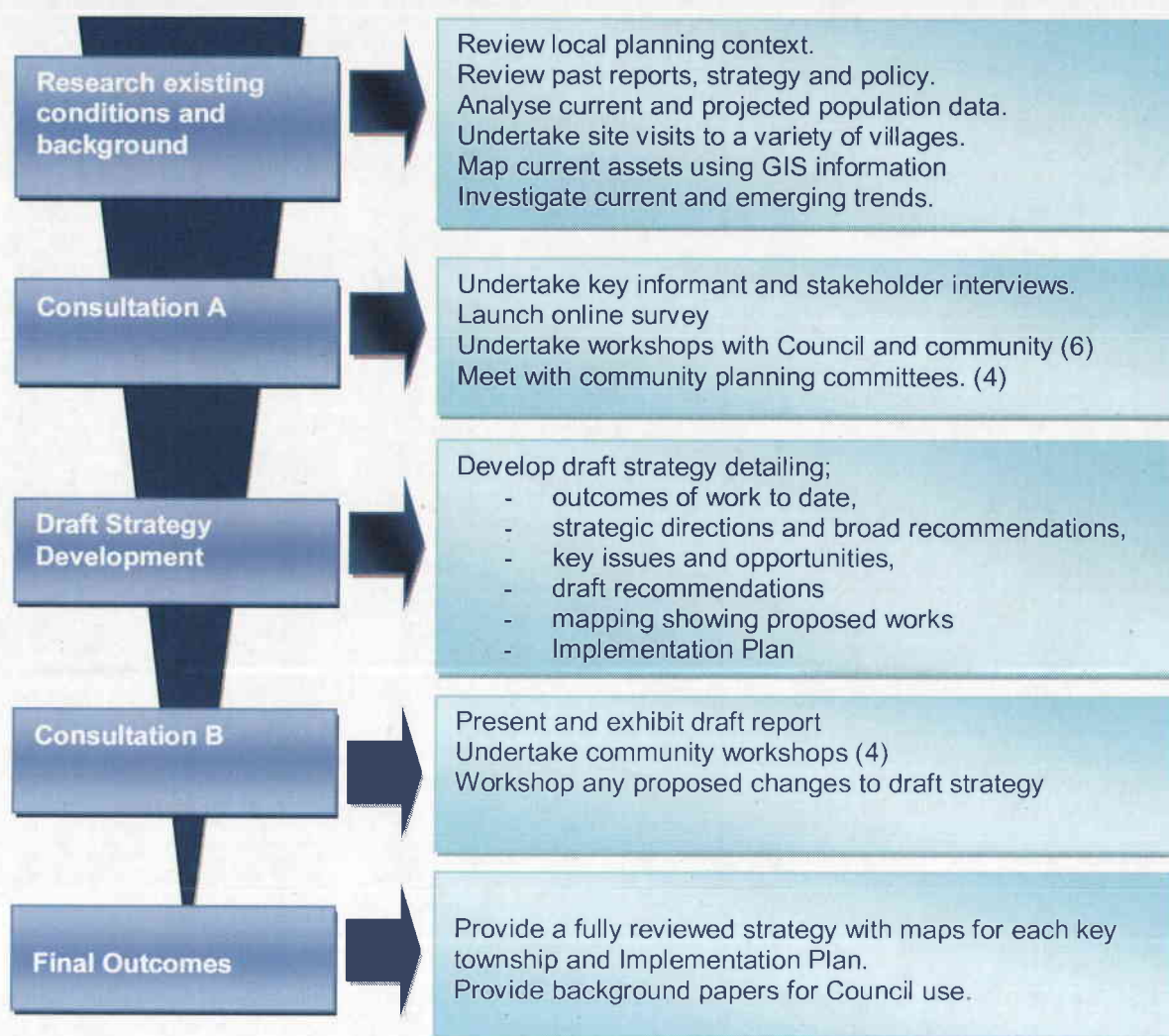


2.2

Methodology

The approach to this strategy has been strongly supported by extensive consultation. Engagement of local communities has been crucial to the overall directions provided in the report. Over twenty separate meetings and workshops with community groups, interested residents, Council staff and other stakeholders has taken place through the five month planning process.

A brief overview of the methodology is provided below.





2.3 The Importance of Cycling and Walking

Council plays a key role in providing benefits in lifestyle for local residents. Cycling and walking deliver a variety of benefits and are two activities that transcend social status, allowing equitable access to independent mobility and healthy, active choices. Specific benefits are detailed below to provide examples of the importance of investing in infrastructure that improves walking and cycling opportunities.

2.3.1 Environmental Benefits

The broad environmental benefits of increased opportunity for cycling and walking also bring added health benefits that come, for example, from cleaner air, less traffic noise and fewer road accidents.

“Walking and cycling are highly efficient in use of urban space and energy, rarely cause injury and give streets vitality and personal security. Many car trips are quite short, less than 2 km, indicating that walking or cycling could be a feasible alternative and contribute to reducing the pollution from a cold-start vehicle travelling only a short distance.”¹

Australia produces almost 46 million tonnes of greenhouse gas emissions per year. The average family's transport is estimated to generate about six tonnes of greenhouse gas each year mostly due to car usage.² Walking and cycling represent sustainable alternatives to the combustion engine driven vehicle, particularly for short trips.

Vehicle noise is also a major environmental pollutant that can be mitigated through providing cycling and walking alternatives.

The provision of footpaths and trails within an urban environment is also an opportunity to provide welcoming streetscapes with shaded and landscaped surrounds.

The environment of an urban path significantly influences how that space is perceived and used. Some linkages may connect through green spaces and maintain a natural environment and self-sustaining ecosystem..

¹ Mason, C. Transport and health: en route to a healthier Australia? Medical Journal of Australia (2000)

² <http://www.greenhouse.gov.au/gwci/transport.html> Accessed January 17, 2011



Air Pollution and Cooling

The significant increase in hard surfacing for roadways and the reduction in green spaces leads to higher temperatures in towns and cities known as the 'heat island effect'.³

Landscaping along trails and footpaths help address this issue by providing opportunity for trees and shading to assist cooling of air and the absorption of atmospheric pollutants.⁴ Vegetation also provides an opportunity for people to be close to 'nature', with the associated positive impact that this can bring in terms of mental health and experience of flora and fauna in an urban situation.

A comparative study of four urban areas revealed that the greatest influence on their ecology was the proportion of green space, particularly trees. The places with the greatest number of trees had better carbon-storage capacity and the temperature was 7°C cooler where vegetation cover was 50 percent compared to areas where the vegetation cover was only 15 percent.⁵

2.3.2 Community and Social Benefits

On a broader scale, the provision of publicly accessible infrastructure for cycling and walking provides a range of social, physical and emotional benefits for individuals and community.

The broad health benefits of access to public open space for recreation and physical activity are numerous and research provides much evidence to support this.

Physical health benefits of cycling and walking include:

- Reduction in risk of heart disease by as much as half⁶;
- Reduced risk of having high blood pressure and high cholesterol⁷;
- Prevention of obesity and weight management⁸;
- Increased lean muscle, muscle strength and bone density;
- Improved fitness and stamina;
- Stronger immune system⁹;

³ Lowry, W. P. 'The climate of cities: their origin, growth and human impact'. *Scientific American*, San Francisco, W. H. Freeman and Company.

⁴ Littlefair, P. J., Santamouris, M., Alvarez, S. Dupagne, (2000) *Environmental site layout planning: solar access, microclimate and passive cooling in urban areas*. BRE Report 380, CRC Ltd.

⁵ Whitford, V., Ennos, A. R. and Handley, J. F. (2001) 'City form and natural process – indicators for the ecological performance of urban areas, UK'. *Landscape and Urban Planning*, Vol. 57(2), pp91-103.

⁶ Government of Western Australia. (2002) Facts about physical activity, October 2002. Perth, Western Australia: Premier's Physical Activity Taskforce. http://www.patf.dpc.wa.gov.au/documents/Fact_Sheet_1.pdf

⁷ Bauman, A., Bellew, B., Vita, P., Brown, W., Owen, N. Getting Australia Active: towards better practice for the promotion of physical activity. op. cit.

⁸ State Government of Victoria. www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Physical_activity_keeps_you_healthy

⁹ New South Wales Health. (2005). Benefits of physical activity. www.health.nsw.gov.au/public-health/health-promotion/activity/benefits/



Mental health benefits of cycling and walking include:

- Reduction in stress, anxiety and depression¹⁰;
- Improved mood and sense of wellbeing;
- Improved concentration, enhanced memory and learning¹¹;
- Reduced feelings of fatigue and depression; and
- Improved psychological wellbeing and mental awareness¹².

Social benefits of cycling and walking include:

- Increased community cohesion¹³;
- Improved social/community networks and social capital;
- Improved family and community connectedness;
- Safer communities; and
- Reduction in sense of isolation and loneliness.

2.3.3

Economic Benefits

Cycling and walking add to the economic activity of a place in numerous ways. Improving the environment and creating a sense of place in urban centres through high quality footpaths and pedestrian friendly streetscapes increases propensity to stay and walk and pass shops that rely on foot traffic for business.

In an area as geographically significant as Hepburn Shire, the delivery of cycling and walking through scenic and historic areas provide immense potential as a tourist destination. Increased tourist visitation provides immediate economic activity, creating wealth, jobs and secondary multipliers throughout the broader economy.

The capacity of small business to capitalise on the geography and culture of the area trails and develop the walking and cycling market is evidenced through the successful development and ongoing operation of local walking tour businesses and bicycle hire businesses.

¹⁰ Government of Western Australia. Facts about physical activity, October 2002.

¹¹ Queensland Government. Benefits of physical activity.

¹² Government of Western Australia. Facts about physical activity, March 2003.

¹³ Liveable Streets, 1981. D. Appleyard



3 Existing Conditions

3.1 Community Profile

3.1.1 Geographic Distribution

Hepburn Shire is a municipality of villages and townships with the major population centres of;

1. Daylesford (3,080 people),
2. Creswick (2,423 people),
3. Clunes (1054 people) and,
4. Trentham (622 people).

Overall, the Shire has a population of 13,732 people with approximately 6,553 residents living in smaller villages such as Lyonville, Glenlyon, Yandoit, Franklinford, Newlyn, Bullarto, Musk and many others. These smaller villages have more limited access to community services, schools and other specialised commercial services.

Strategy Implications

The population is broadly distributed geographically, making walking and cycling connections between populations an often challenging achievement.

Shoulder sealing along main roads may be a significant consideration in this strategy given the distribution of population across a range of areas.

The use of low traffic country roads for walking and cycling may be feasible however signage notifying motorists of use by pedestrians and cyclists should be implemented.

Other than cycling and walking, the capacity to ride to buses and either lock up bikes or carry them on buses will need to be considered for those travelling between towns.



3.1.2 Age Distribution

Young people and the elderly are particularly challenged when transport and mobility is considered.

The Hepburn Shire has a higher than average ratio of older adults (55+ years) with 31.9 percent of the population in this cohort compared to 24.3 percent nationally.¹⁴

The Shire has a lower than average ratio of young people (0-24 years) with 28.1 percent compared to a national figure of 33.4 percent.¹⁵

Young people are generally disadvantaged with respect to personal modes of transport, with most relying on parents to drive them, public transport or walking and cycling to connect them with activities and places. Restricted mobility can have negative impacts on a young person's lifestyle and personal development through the following;

- Restricted education and employment opportunities
- Restricted social opportunities
- Restricted access to services
- Isolation
- Late arrival for appointments
- Compromised safety levels

Strategy Implications

The need to provide a well connected pedestrian and cycling access from residential precincts to transport nodes (i.e. buses and trains) and retail or activity nodes is crucial in providing local access for young people in a safe and effective manner.

With a significant cohort of older adults, Hepburn Shire must also focus on the need to improve accessibility and ensure that, in particular, the footpath network is maintained to a high standard in areas of high activity. The onset of chronic disease (arthritis, diabetes, heart disease) becomes more prevalent as we age therefore the use of seating, level surfaces, ramping instead of steps and connection to key community and health services is important for an ageing community.

This is equally important for families and parents of young children who may be pushing prams.

¹⁴ <http://www.censusdata.abs.gov.au/ABSNavigation/Quickstats> Accessed:15-2-2011

¹⁵ Ibid



3.1.3 Economic Prosperity

All median incomes (individual, household and family) are significantly lower than the national average.¹⁶

Income	Hepburn	National
Median Individual	358	466
Median Household	624	1027
Median Family	907	1171

This would indicate that discretionary income is generally low for Hepburn and that a need for alternative, accessible transport modes could be important for ensuring mobility and connection for residents.

Given the geographical spread of population in Hepburn, vehicle ownership and usage is relatively high. ABS data indicates that single passenger vehicles are the most common form of transport used to access a work place.¹⁷ It is important that this be noted as an opportunity to change behaviour through the introduction of practical and well maintained walking and cycling routes and the promotion of these for short trips to and from local locations.

Although oil prices have dropped recently, price increases for fuel over the last 3 years may well have changed behaviours toward individual use of motor cars. Again this provides opportunity to develop and invest in infrastructure related to lowering the use of vehicles for shorter, localised trips.

Strategy Implications

¹⁶ Ibid

¹⁷ www.censusdata.abs.gov.au



3.2 Existing Walking and Cycling Networks

The Shire of Hepburn has an existing network of footpaths, on road cycling lanes and off road trails that provide opportunity for cycling and walking activity across the municipality.

3.2.1 Footpath Network

Footpaths primarily serve a commuting function, providing a stable and easily traversed surface for people to walk to places where a service or product is accessed. In general, the footpath network is provided in the four main centres of Daylesford, Creswick, Clunes and Trentham. These primarily connect several blocks within main town centres where most retail and civic buildings are located and begin to become less connected and frequent as development moves into

residential zones. In some instances, footpaths are provided to key recreation or community services.



Duke Street footpath- part of the current Urban Network in Daylesford.

Smaller villages in the Shire (i.e. Newlyn, Lyonville, and Glenlyon) have limited footpath infrastructure, relying generally on roadside verges or quiet roads to navigate locally.

3.2.2 Cycling Lane Network

Cycling lanes provide for a mixture of recreation and commuting purposes, providing links between off road trails through urban centres as well as providing a direct road linked path of travel for commuters.

Cycling lanes are provided in the major centres of Daylesford (connecting to Hepburn) and Creswick.

No designated lanes are provided in other towns or villages although some areas are line marked on road edges with no standard approach to width or designated road marking or signage indicating cycling use.

Generally bike lanes are required in busy urban centre and usually end in areas where vehicular traffic frequency drops off and cycling along roads is deemed to be relatively safe.



*Central Spring Road, Daylesford
Wide thoroughfare with no marked lanes for cycling*



Very few cycling lanes are provided throughout the municipality and this may be an area of focus for this strategy in providing a network of lanes within the central activity nodes of major townships.

3.2.3 Off Road Trail Network

The Hepburn Shire has a vast range of off road trails maintained and developed by a range of public land managers.

Some of the iconic trails in the area pass through some of the beautiful mineral springs and scenic forests of the area, providing a significant tourist attraction. These trails assist in highlighting the natural beauty of the area and provide access to spots frequented by tourists and locals alike.

Tourism is a significant industry in the Hepburn Shire with service industries linked to tourism generating substantial economic activity. The four major townships in the Hepburn Shire had a total of 110,097 access local visitor information centres in 2009-10.¹⁸

Councils draft Economic Development Strategy identifies further opportunity for "tourism development around the natural environment" and enhancing "tourism potential by improving the tourism based product based on natural and heritage assets."¹⁹

Key trails that currently exist include;

1. Great Dividing Trail

An inter municipal trail that generally follows the top of the Great Dividing Range from Bacchus Marsh to Blackwood, Daylesford, Castlemaine, Bendigo, Creswick and Ballarat. Key section of the trail runs from Lake Jubilee through to Lake Daylesford and then out to Hepburn along the Dry Diggings Track. This track is broadly managed by Parks Victoria and the Great Dividing Trail Association with sections crossing into Council responsibility around Lake Daylesford and Hepburn Mineral Springs Reserve.

2. The Three Lost Children Walk

The walk begins in Daylesford in Victoria's spa country and leads to the Wombat Picnic Ground in the Wombat State forest. The walk commemorates the tragic story of three small boys who wandered away from their homes in Daylesford in 1867.

¹⁸ Hepburn Shire Council VIC data 2009-2010

¹⁹



The Three Lost Children Walk follows the approximate route the boys walked and takes the walker through bush and forest landscapes that were once active goldfields.

3. Lake Daylesford Loop Track

Known as the Peace Mile this track is very well used, highly accessible and loops around picturesque Lake Daylesford.

mwp.

A major issue is the 'pinch point' of the walk at Bleakley Street where further treatment is required to alleviate the risk to pedestrians.



4. Mineral Springs Walks

A number of Mineral Springs have associated walks branching off at Lake Daylesford, Lake Jubilee, Lyonville and possibly most significant Hepburn Mineral Springs Reserve.

These walks represent an important tourism marketing tool providing access to the unique mineral spring areas within the municipality. These are managed by Council, Parks Victoria with the Mineral Springs areas overseen by the Victorian Mineral Springs Committee.



5. The Domino Trail (~~Rail Trail~~)

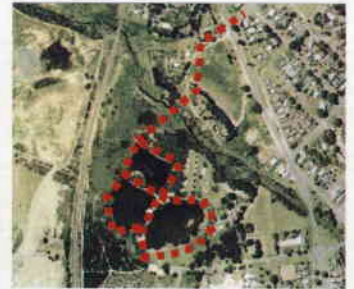
Beginning in Trentham and currently accessible into Lyonville, the Domino Trail provides a picturesque walk along a disused railway that linked Daylesford to Carleshue. There is significant potential to extend the Domino Trail, however works to improve conditions along the Trentham to Lyonville section are a high priority with a major bridge needing refurbishment at the Coliban River. The railway line past Lyonville is available for development however it is also used by the Spa Country Railway, providing a tourist focussed train ride (with food and entertainment) from Daylesford to Musk and back again.





6. **Calembeen Park Reserve Walking Tracks**

Hepburn Shire Council has \$100,000 available to develop and improve walking tracks around Calembeen Park. The scope of works is currently under development with the expected trail to loop around the main water bodies at the park.



St. Georges Lake

One of the key issues for trails is the provision of ongoing maintenance of already existing trails and the integrated management of trails between different land management agencies.

The proactive management and strategic delivery of new projects will be a focus for this study involving key land managers such as Parks Victoria, Department of Sustainability and Environment and Hepburn Shire Council.

3.3

Current Strategic Directions

A number of Council generated plans and strategic reports provide direction for the Hepburn Cycling and Walking Strategy.

Key reports considered include the following;

Reserve Management Plans

Lake Daylesford Reserve, Jubilee Lake Reserve, Calembeen Park Reserve, Hepburn Mineral Springs Reserve, Bath Street Reserve

Community Plans

Jim Crow Creek (Yandoit, Franklinford and Clydelsdale)
Lyonville, Clunes, Newlyn/Rocklyn, Trentham, Glenlyon, Creswick

Positive Ageing Strategy (2009-2012)

Access and Inclusion Plan

Points of relevance for this strategy are summarised in the table on the following page.



Study	Key implications for the Cycling and Walking Strategy
Lake Daylesford Reserve Management Plan	<p><i>Trail connections</i></p> <ul style="list-style-type: none"> • Develop more effective walking track connections to the lower reserve. • Provide local pedestrian link through northern area of reserve and connections through to Jubilee Lake. • Provide connection to Great Dividing Trail. • Provide strong connections to the CBD of Daylesford. <p><i>Signage</i> Provide commonly themed signage that:</p> <ul style="list-style-type: none"> • identifies the reserve and activity nodes (way finding signs); • provides directional guidance along trail; • Interprets historical aspects of the reserve; <p>Reduce or consolidate risk management signs</p>
Jubilee Lake Reserve Management Plan	<p><i>Trail connections</i></p> <ul style="list-style-type: none"> • Develop more effective walking track loop with signage • Provide pedestrian link through to Lake Daylesford • Provide connection to Great Dividing Trail <p><i>Signage</i> Provide commonly themed signage that:</p> <ul style="list-style-type: none"> • identifies the reserve as a public place and what it contains; • provides directional guidance along trail; • Interprets historical aspects of the reserve; <p>Reduce or consolidate risk management signs</p>
Calembeen Park Reserve Management Plan	<p><i>Trail connections</i></p> <ul style="list-style-type: none"> • Develop a loop walking track made of an appropriate organic material around site • Link to surrounding North and West Creswick residents with walkway across to Little King Street and Luttet Street • Reinstate boardwalk between intermediate pool and lake
Hepburn Mineral Springs Reserve Management Plan	<p><i>Trail connections</i></p> <ul style="list-style-type: none"> • Develop a loop walking track connecting Hepburn and Daylesford with the HMSR. • Provide local pedestrian link through the north-west corner of the reserve • Improve condition of walking paths <p><i>Signage</i> Provide commonly themed signage that:</p> <ul style="list-style-type: none"> • identifies the reserve and activity nodes • provides directional guidance along trail • Interprets historical aspects of the reserve



	<ul style="list-style-type: none"> • Reduce or consolidate signs • Provide way finding signs <p><i>Traffic Management</i></p> <ul style="list-style-type: none"> • Provide clear delineation between vehicles and pedestrians/park users • Undertake Traffic Management Plan to investigate one way flow through the reserve • Restrict vehicle access • Landscape car park areas more effectively • Create secondary activity node to reduce congestion
Bath Street Reserve Management Plan	<p><i>Trail connections</i></p> <ul style="list-style-type: none"> • Develop a walking track made of an appropriate organic material on higher ground or board walk • Link to loop around Trentham township and to Trentham Falls walk <p>Members of the Trentham community have developed a proposal for a township walk – <i>The Wombat Trail</i> along with a walk to Trentham Falls.</p>
Jim Crow Creek Community Plan (Yandoit, Franklinford and Clydesdale)	<p>To develop activities and infrastructure in order to benefit all residents and visitors to the district.</p> <p>Focus on increasing participation of local residents in sporting, recreation and leisure activities.</p> <p>Provide loop trails around the three districts</p>
Lyonville Community Plan	<p>Re- establish tourist railway/bike walking track to Trentham and repair Coliban Bridge</p> <p>Town Signage, entrances, historical, walking trails and other</p>
Clunes Community Plan	<p>Improving pedestrian safety and footpath linkages at Clunes Primary School.</p>
Newlyn/Rocklyn Community Plan	<p>Footpath extension and crossing</p> <p>Walking tracks</p> <p>Roadside maintenance including weeds and safer walking areas</p>
Trentham Community Plan	<p>Develop an Open Space Strategy which promotes the concept of Trentham as a walking and cycling town</p> <p>Investigate the development of walking / cycling trails including to the Falls, rail trail to Lyonville/Bullarto and in the adjoining Wombat Forest</p>
Glenlyon Community Plan	<p>Walking and bike trails including well signed maps</p> <p>Trail along Loddon River,</p> <p>Separate walking and bike trails, bike track to Daylesford and other communities.</p> <p>Link the reserve to the town via a walking track.</p> <p>Upgrade track down the Loddon River.</p>
Creswick Community Plan	<p>Increase visitors to the area through trails that link the main street and historic precinct</p> <p>Promote and improve all recreational facilities</p>



	Support the development of a walking track/ bicycle path Master plan that links in with existing footpaths around town
Positive Ageing Strategy	<p>Survey respondents indicated that exercise and physical activity are important to them. 88% of respondents report undertaking some form of regular physical activity, 42% daily. Walking was the most common form of exercise.</p> <p>Seating Undertake a review of seating in main shopping areas and highly patronised reserves to ensure there is adequate seating options and include community stakeholders in this process. Investigate and develop a community sponsorship scheme allowing community to recommend a site and fund the installation of seating.</p> <p>Footpaths Conduct a review of footpaths in main shopping centres, significant points of access leading to them and other missing links in the network for quality and need for development. Formalise system of community input for development and maintenance of footpaths.</p> <p>Transport Promotion of active transport options through the Front SEET Project.</p> <p>Promoting Physical Activity Six monthly promotions focused on keeping active and physically fit, using print media and in collaborating agencies newsletters, i.e. Hepburn Health Service.</p>
Access and Inclusion Plan	<p>Footpaths Ensure that Council's footpath maintenance program identifies and rectifies barriers to access; e.g. cracks, lack of kerb ramps, lack of made footpath, inappropriate guttering, etc., and make recommendations for Action</p> <p>Ensure that priority for maintenance is given to footpaths located in the main thoroughfare and select routes that provide access for all.</p> <p>Implement a systematic review of all kerb ramps on street crossings. Priority for maintenance to be given to high use street crossings.</p> <p>Conduct regular inspections of footpaths to ensure that Private assets (Street furniture, A frames etc) are being placed according to Local Laws Policy 19 to ensure access is maintained.</p> <p>Overhanging Branches To undertake annual inspections of street frontages, where there are established footpaths, to ensure that overhanging branches from private properties are trimmed back.</p> <p>To actively publicise the danger of overhanging branches and requirements of private property owners to ensure that footpath access is maintained.</p>



3.4 Key Research Findings



4 Consultation

4.1 Site Visits

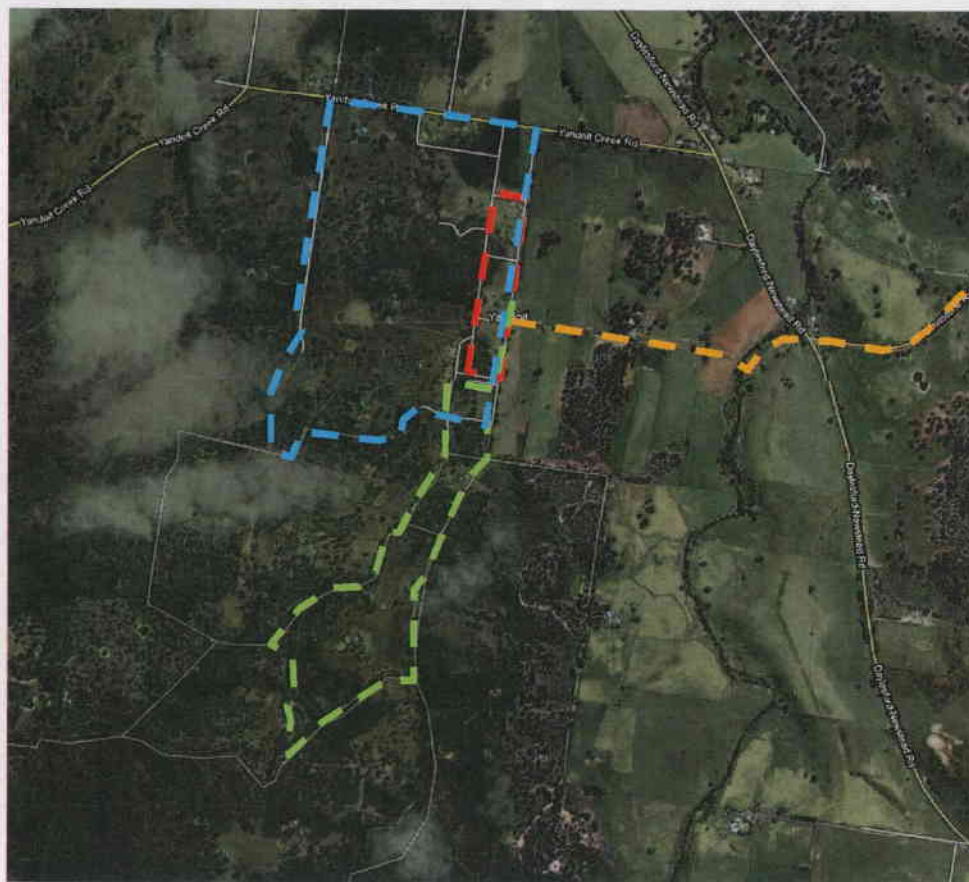
The outcomes of site visits are provided below. Assistance was provided by Council staff and Community Planning Committees.

4.1.1 Yandoit, Franklinford and Clydesdale

Potential for 'loop' trails already exists in these areas with the main requirement being signage to mark and theme the potential trails and development of some easy to read mapping that can also provide interpretation of the environment and history of the area.

The proposed trails for Yandoit are as follows;

— Mystic Walk - Scenic/Nature	— Glamorgan Walk- Scenic/Nature
— Township Walk- Historic	— Limestone Walk- Historic/Scenic



Yandoit also has a recreation reserve where a small walking track loop is planned as part of an overall upgrade. This would potentially link in with the proposed Glamorgan Walk.



Clydesdale

<p>— Jones and Reece Road Walk- includes elevated walk, memorial cairn and Rise and Shine Heritage Park.</p>	<p>— Christmas Reef Road Walk- Historic/Scenic</p>
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Franklinford

<p>— Township Walk- Historic</p>	<p>— Cemetery Walk- Historic cemetery and Clarkes Island along Jim Crow Creek</p>
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4.1.2 Glenlyon

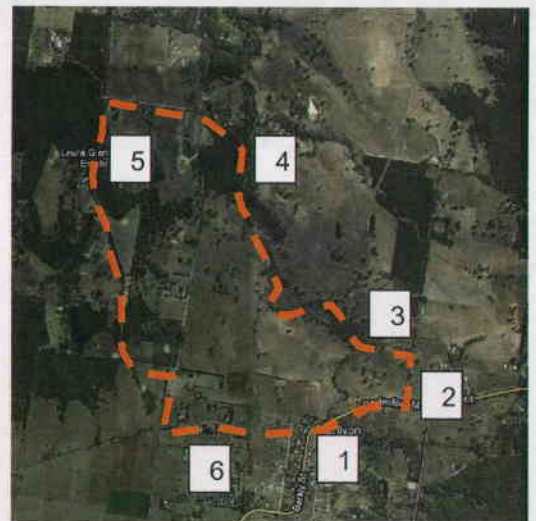
Signage and mapping were the key requirements highlighted in Glenlyon although some assistance to the landcare group in forming a track that can then be maintained along the Loddon River is also required. (see photo right)

The other issue raised was the lack of continuity in access to the river reserve given that some areas have remained on old titles and in private ownership. This creates issues in access the most picturesque asset in Glenlyon for a continual walking path. Further trails to the recreation reserve and Loddon Falls are provided below.



Loddon Falls Walk

1. Begin at Glenlyon General store.
2. Walk up Daylesford/Malmsbury Road to Holcombe Road.
3. Turn into Sewells Road and walk to Loddon Falls.
4. Follow the falls to Butlers Lane.
5. Follow Butlers Lane to Green Gully Road.
6. Continue to Back Glenlyon Road and continue back to the General Store.



Loddon River Reserve Walk

1. Begin walk at Glenlyon Store, cnr Daylesford/ Malmsbury Road and Ford Street.
2. Walk along Daylesford Malmsbury Road to Loddon River Drive.
3. Drop down to the Loddon River and walk along bush track along the side of the river to the Glenlyon Recreation Reserve.
4. Walk around the reserve following the race track and exit back along Loddon River Drive and back to the Glenlyon General Store.



Butlers Bridge and Beyond





Begin at Butlers Bridge.
(North of Glenlyon)

Walk along Loddon
River downstream to Walls Lane.

From here walkers can
access the state forest
for numerous walks to
Porcupine Ridge, Guildford, etc as
marked on State Forest maps available
through DSE.

Glenlyon



4.1.3 Daylesford

Daylesford requires connections to be made to create a Principal and Secondary Footpath Network that provides for residents and visitors to be able to navigate through the main activity centre and back out to residential zones or other trails. Specific recommendations are provided in Section 5.

Key trails include Lake Daylesford loop walk (Peace Mile), Jubilee Lake Walk and Mineral Springs Walks.

Mineral Springs walks are easily accessed from Lake Daylesford and cross into crown land managed directly by Parks Victoria and the Victorian Mineral Water Committee.

Further walks such as the Great Dividing Trail and Goldfields Walk are also accessed in this area.

Key issues that require resolution include;

- Completion of Commercial and Urban Footpath Network
- Development of bike lanes into central zone (namely Vincent Street) from surrounding road network
- Stronger cycle lane marking along Vincent Street to Primary School
- Completion of Peace Mile Loop with safe pedestrian bridge at Bleakely Street
- Connection of Lake Daylesford to central zone
- Connection of Lake Jubilee with trail to Lake Daylesford
- Increase in bike racks and street trees in central zone
- Improvement of access to hospital and use of tactile markers in this area
- Wayfinding signage linked to Commercial Footpath Network and improvement of navigation within central zone
- Signage highlighting pedestrian crossings and cyclists at key intersections (e.g. roundabouts at upper and lower Vincent Street.)



4.1.4 Hepburn



4.1.5 Lyonville



4.1.6 Newlyn/Rocklyn



4.1.7 Creswick



4.1.8 Clunes



4.1.9 Trentham



- 4.2 Community Workshops**
- 4.3 Stakeholder Interviews**
- 4.4 Key Consultation Findings**



5 Key Recommendations for Design Elements

5.1 Commuting Pedestrians- the Footpath Network

The footpath network is crucial in providing an integrated network of stable pathways that enables walkers (and cyclists to a lesser degree) to get to places of common interest or use. Such destinations include;

- Workplaces
- Retail or shopping precincts
- Community or civic facilities
- Education facilities
- Public Transport nodes (train and bus)
- Trails
- Recreation spaces or venues (parks, pools etc.)
- Health or related services

The footpath network should also be considered as a hierarchy in order to provide an appropriate level of resourcing and maintenance based on use and importance.

Those footpaths that make up the central activity node of townships will provide the **Commercial Network** and will be maintained to the highest standard.

Those footpaths that connect residents to the central activity node of townships and link into the principal footpath network will be considered as the **Urban Network** and will be delivered to a minimum design standard and may be delivered to higher standards at Council discretion.

The following sections provide recommended design guidelines aimed at developing a footpath network that will encourage and support increased usage and participation in walking.

5.1.1 Positive Bias for Pedestrians

In attracting people to walk instead of drive, it is important to create an environment that emphasises the priority of pedestrians over other forms of transport, particularly in the Commercial Network. The footpath network should be designed to;

1. Align paths directly across roads

Footpaths should be directly aligned at intersections to provide the most direct and intuitive link possible, prioritising the pedestrian link over any vehicle infrastructure.

The footpath route should inherently provide the most direct link which reduces the time and energy expended by the pedestrian in reaching their goal.

2. Provide raised or coloured pedestrian crossings at intersections, roundabouts or car parks that do not deviate for vehicle infrastructure.

Raised or coloured pedestrian crossings provide a physical level change which is similar to a speed bump for drivers. Drivers who may not have



registered a painted crossing section will physically experience a shift in driving conditions and be more likely to note this as a pedestrian crossing point. These types of facilities can be particularly useful in areas where there are many stimuli for drivers, or where traffic is consistently mingling with pedestrian activity.

3. Provide signalised or signed crossing points on major roads and intersections.

The provision of lit or signed crossings (raised or zebra) can provide extra safety and alert drivers to crossing points. Pedestrians should always be given right of way at these types of crossings.

Signalised crossings can also assist in providing safe crossing points for pedestrians in areas that are either high speed traffic areas or busy intersections where cars are entering from multiple directions.

4. Provide 'shortcuts'

It is often the case that walkers and cyclists can navigate routes that vehicles cannot, through reserves or other appropriate land easements that provide more direct routes to destinations than roads. E.g. a dead end road may well provide a small easement that connects to a destination point such as a recreation reserve or shopping precinct.

Recommendation:

Council should consider a range of intersection treatments and alternative route options to consistently provide positive bias toward walkers in the Commercial Footpath Network.

5.1.2

Quality of Footpath

The quality of the infrastructure provided is crucial to ensuring that the pedestrian experience is an enjoyable and safe one. Hepburn Shire Council will need to consider the following key points in designing an effective footpath network;

1. Materials used

Sealed footpaths using either concrete or asphalt are recommended for all principal networks. Comparatively, asphalt is a less costly capital investment but can attract higher life cycle costs with more maintenance required. Concrete can tend to create sharp tripping edges where tree roots or other conditions create movement along expansion joints whereas asphalt does have some flexibility in movement. Flood prone areas may be better suited to concrete given the issue of scouring and washaway that is more likely to damage asphalt.

Gravel footpaths are less accessible, more expensive to maintain and more prone to washaway however they are far less expensive to develop and can provide a basis for later sealing works. Some areas of the secondary footpath network may be delivered initially as a gravel surface and upgraded to a sealed surface as funds allow.

2. Maintenance



Maintenance of footpaths is paramount to ensuring a safe and reputable network. Inspection of footpaths should be scheduled annually for the Commercial Network and biannually for the urban network. High use footpaths such as those directly adjacent to a school should also be designated for annual inspections. The results of these inspections should be summarised highlighting all non conformance items and subsequent recommended actions. Where non conformance items fall outside maintenance budgets, special consideration should be made to Council for budget allocations or application for the following year's capital works should be considered.

A separate budget item should be considered each year to reactively repair issues that are highlighted to Council by means other than the designated inspections (e.g. other workers or resident requests)

3. Road Verges

Where footpaths do not exist, it is often accepted that people will walk alongside the road. In this sense, road verges that clearly link in with secondary footpath networks should be maintained and be free of weeds or high grasses that impede pedestrian access.

4. Footpath width

Footpath width needs to be considered in the light of intended use and traffic intensity. Main shopping or civil precincts for example may well need to include space for outdoor dining areas and signage as well as a mix of pedestrians wheeling bikes, prams or wheelchairs. Residential footpaths may need to be able to provide only for tow people walking side by side. It is recommended that;



Footpaths within the Commercial Network should be maintained at between 2.0 and 2.5 metres in width.

Urban Network footpaths should be maintained at a minimum of 1.2 metres in width.

Recommendation:

Council will provide quality footpaths generally made of bitumen or concrete and will maintain these with a documented inspection and rectification program.

Council will maintain minimum standard widths as noted for both Commercial and Urban footpath networks and will, where assessed, aim to provide higher than minimum standard infrastructure for high use footpaths.

5.1.3 Pedestrian Comfort and Safety



Providing an external environment that is comfortable and safe for pedestrians can be achieved in a number of ways that attract higher levels of use. Treatments that should be considered include the following;

1. Shading

The use of street trees and other plantings, particularly on the northern side of a footpath can provide maximum shading benefit. The use of deciduous trees can also provide solar access in winter months and solar protection in summer. The use of trees and understorey planting can also provide some shelter from wind in exposed areas, although this generally should be tested against lack of passive surveillance along a pathway.

Shade can also take the form of built structures and it recommended that these be provided at key destinations such as public transport stops or other activity nodes.

2. Seating

Seating should be provided at regular intervals to accommodate pauses required for pedestrians. Seating can be varied and could include the edges of planter boxes, seats with arms, bench seating, public sculpture or other landscape features.

3. Traffic Quietening

A number of physical changes in road surface and orientation can assist in providing slower but more consistent flow of traffic.

Slowing vehicles provides a safer environment for pedestrians. Direct correlation exists between lowering speed and lowering pedestrian injury rates (see point 4 below).

A number of street treatments exist that can assist in physically changing the road environment to slow vehicles. These include chicanes, raised crossing, speed bumps, rumble strips, narrowing of roadways, narrowing of intersections and signage.

4. Lowering Speed Limits

The simplest way to reduce traffic speed is to lower speed limits. A reduction in motor traffic speed to 30 km/hr would not only reduce the levels of pedestrian injuries sustained in collisions, but also give both parties a better chance of avoiding the collision in the first place. The chances of being killed rise dramatically with an increase in the speed of the car. The probability of a pedestrian fatality is 5% at 30 km/hr, rising to 37% at 50 km/hr and to 83% at 70km/hr.²⁰

Council should look to discuss and negotiate speed reduction with VicRoads in the Principal Footpath Network areas with particular focus on central activity zones.

5. Improving Driver Behaviour

Improving driver behaviour is an ongoing aim of both a number of public authorities including Council, Victorian Police and VicRoads. Council should

²⁰ <http://casr.adelaide.edu.au/pedspeed/PEDSPEED.PDF>



continue to work with these agencies on improving road safety through community safety prevention measures and coordination of a comprehensive education, prevention and infringement approach.

6. Drinking Fountains and Public Toilets

Provision of public amenities in the principal network and on highly used walking or cycling loops is important in providing as comfortable experience for users. It would be expected that these facilities would be located at key activity nodes or destinations as is practical. Signage to these types of facilities should also be used on trails and networks to ensure users have capacity to access amenities as required. Any brochures or mapping should also highlight public toilets and drink stops.

7. Crossover points

Providing safe crossing points along roadways is paramount in delivering a well connected path network. As discussed earlier the prioritisation of pedestrians should occur to ensure that footpath infrastructure is attractive to potential users as a safe and direct way of accessing services or locations.

Crossover points should be considered with the following options in mind;

- Use of tactile markers for vision impaired pedestrians
- Pedestrian visibility, reduction in blind spots for vehicles .
- Designated zebra crossings
- Raised crossing points
- Signalised crossing points
- Signed or lit crossing points
- Rumble strips
- Use of different road material
- Coloured Strips
- Reduction of road width (lane crossings no greater than 4 metres)
- Use of pedestrian refuges
- Reduction of intersection width

Recommendation:

Council work toward improving pedestrian comfort and safety through a range of initiatives and specific design interventions as noted above.



5.1.4 Accessibility

1. Managing objects on footpaths

In high activity areas, it is common for street furniture, signage, bins and café seating to encroach on the walkability of a footpath network.

Street furniture is important, however layout and planning requirements for outdoor eating areas should be strictly adhered to and placement of equipment should provide for a continuous and clear path of travel for pedestrians.



Footpath obstructions related to commercial activity were reported by many clients in a recent survey by Guide Dogs NSW/ACT.

These included:

Footpath dining	reported by 60% of respondents
Goods displayed on footpath	reported by 53% of respondents
Signage on footpaths	reported by 14% of respondents

A clear path along the building line is an important element that provides a consistent guiding line for people to follow. People who are blind or vision impaired usually prefer to travel along the clear path next to the building line as this provides many clues for directionality and entry location. Building alignment is often used by people with impaired vision to align to cross the road safely.



Planning permit requirements should clearly stipulate the placement of outdoor eating spaces and signage. Redundant infrastructure should be promptly removed.

2. Overhanging branches

Overhanging trees limit the capacity of people to easily navigate a footpath and provide a significant risk issue for the vision impaired.

Council should inform homeowners of their responsibilities to;

- Ensure that the trees on their property are trimmed so that they do not present a hazard
- Report any areas that have overhanging trees and shrubs to Council so that they can be trimmed
- Sweep footpaths regularly, particularly when trees are dropping leaves and seed pods as they are a slip hazard

Council should also look to undertake the following with regard to street trees;



- Ensure that street trees are trimmed so that they do not present a hazard
- Respond promptly to complaints about the need for trees to be trimmed
- Ensure that footpaths are swept regularly, to minimise slip hazards caused by fallen leaves and seed pods

Trees should be vertically trimmed to above 2.2 metres

Horizontal clearance should be provided for the full width of the footpath

3. Tactile Markers

Tactile markers should be installed in the Commercial Network and within other high activity nodes. These markers provide directions in a non visual manner, providing assistance to those pedestrians with vision impairment. They also provide a non slip surface at crossing points where drop kerbs may be installed.



4. Wayfinding

Wayfinding signage is important to provide contextual signage for those pedestrians who may not be familiar with destinations. Wayfinding signs can provide as little information as a series of distances to various destinations or can provide maps and photographs of destinations as well as descriptions. These should be provided at strategic intersections within the Principal Network as well as within the central activity node.

Further detail on wayfinding signage is provided in Section 5.6 of this report.

5. Grades

Gradient in footpaths can have a negative impact on use particularly for those pedestrians with mobility issues. Generally, the Hepburn Shire is a hilly environment and steep gradients are sometimes unavoidable (e.g. footpath access to Daylesford Hospital).

Where practical, Council should reduce gradients to a maximum of 1 in 14 for all footpaths and provide adequate rest points on steep grades.

Recommendation:

Council work on improving accessibility along footpaths through implementing the key initiatives described above.

5.2

Commuting Cyclists- the Bike Lane Network

Commuting cyclists are generally using a mixture of on road and off road bike lanes or shared cycle/walk lanes to get to or from a service or destination.



As with commuting walkers, commuting cyclists are looking for safe, direct routes that do not waste time or energy in reaching key destinations or services such as;

- Workplaces
- Retail or shopping precincts
- Community or civic facilities
- Education facilities
- Public Transport nodes (train and bus)
- Trails
- Recreation spaces or venues (parks, pools etc.)
- Health or related services

The aim of the bike lane network is to provide marked or designated lanes on roads that connect either to central activity zones or connect to quieter residential streets, country roads or the existing trail network.

5.2.1

Positive bias for Cyclists

As with pedestrians, cyclists should also be prioritised through a series of treatments that can emphasise to vehicle traffic that cyclists can be expected in bike lane areas. The Bike Lane Network should consider the following design principles in order to emphasise the presence of cycling commuters;

1. Coloured lanes

Where traffic is particularly busy or cyclists are crossing intersections, the use of coloured lanes may be appropriate as an additional treatment to standard marking with road paint and cycling stencils. The use of raised markers which create an auditory warning for drivers may also be helpful in giving cyclist more protection. These treatments provide a highly visible approach to the development of bike lanes.



2. Separated lanes

Separated lanes provide best practice protection for cyclists by effectively delivering a bike lane physically separated from the road either by height or by barriers such as car parking, median strips or landscape.

This design provides a dedicated area that cars cannot physically enter, effectively eliminating the possibilities of driver error causing accidents.



Separated, two way bike lane- Paris

3. Signage



Provision of signage both for cyclists and drivers is important in raising the profile of the cyclist.

Signage can be provided in a multitude of way in order to give priority to cyclists.

Where lanes are implemented on road bike signage should be marked at a minimum frequency of every 150 metres.

Bike lane signs should be provided at a minimum frequency of every 200 metres.

Consideration (in conjunction with VicRoads) should be given to including a bike lane symbol on road signs to delineate the Bike Lane Network.



4. Provision of 'shortcuts'

Bikes are far easier to manoeuvre through an urban landscape than cars. Opportunities exist to create shortcuts that prioritise walkers and cyclists and create faster routes to destinations than roadways that may simply be dead ends.

This can improve convenience and increase propensity to cycle for commuters.



5. Cycling Support Services

Provision of appropriate support services to ensure cycling is a positive experience is important with areas such as bike racks and showers and changing cubicles in workplaces important in delivering a convenience for cyclists and promoting a message of a cycling friendly township.



Recommendation:

Council will work on creating bike friendly townships through consideration and implementation of the initiatives described above.



5.2.2 Quality of Bike Lanes

1. Width

The width of bike lanes will vary according to the road width and some marking should always be considered better than none.

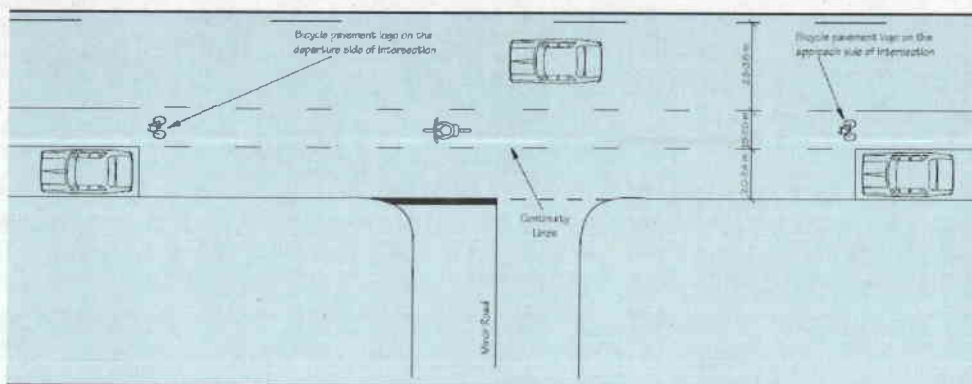
Where possible, a dedicated bike lane provides the highest protection levels for cyclist and results in the most convenient and comfortable level of use through reduced hazards.

Dedicated lanes should be provided ideally between 1.2 and 1.5 metres in width.²¹

Where lanes are shared with car parking a desired width of 4 metres provides for parking and allows space for door opening to occur with minimised risk to the cyclists. Solid white lines should be used to mark car parking areas to ensure vehicles park as close to the kerb as possible, leaving the maximum space for cyclists.



Cycling lanes should be marked with Bike Lane symbols (Australian Standard 1742.9). The symbols should be used both sides of minor intersections (see Fig XX) and every 200 metres on straight road sections. The symbol should be used more frequently in places of high activity or potential conflict such as retail activity zones.



2. Treatment

A number of treatments for cycling lanes exist and the most appropriate depends upon existing conditions, budget and levels of activity in the area.

Possible treatments include the following;

Reduce width of traffic or parking lanes

Traffic or parking lanes can often be wider than necessary and can be reduced to provide a bicycle



²¹ VicRoads- Arterial on road bicycle routes 1999

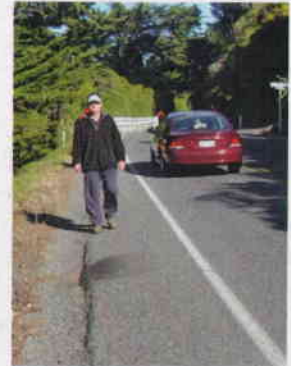


lane or shared parking and cycle lane. Reducing the width of traffic or parking lanes involves line marking and some signage which is a very effective and low cost treatment.

Sealing shoulders

Many rural or regional roads have gravel verges that can be sealed to provide a line marked cycling lane.

This is particularly useful for links between towns or suburbs where road width is available. Given the use of asphalt, this treatment is more expensive but provides effective use of existing road reserve to create good connections along otherwise quiet roads.



Indent car parking

This treatment involves the reduction of nature strip areas to free up roadside car parking for a cycle lane. This treatment can become expensive particularly if the removal of trees and relocation of services is required and should therefore only be considered for a principal cycling connection that is crucial to continuity.

Prohibiting or removing car parking

Where unnecessary car parking space is provided on roadsides, it may be possible to remove or prohibit parking on one or both sides of the road. This will provide space for cycling lanes possibly on both sides of the road.

3. Maintenance

The ongoing condition of bike lanes and road verges must be monitored, with budgeting provided to ensure that, lane sweeping, pothole or crack repair, respraying of lines or symbols and implementation of signage can all be undertaken promptly when issues are identified.

It is recommended that Council allocate funds each year toward bike lane maintenance and ensure that a six monthly inspection regime is implemented with a closed loop system of ensuring non conforming items are recorded, actioned and completed.



Debris can quickly accumulate making bike lanes less safe.

**Recommendation:**

Council will provide quality bike lanes through appropriate marking and development of lanes, implementing a documented and regular maintenance schedule.

5.3**Walking and Cycling for Recreation- the Trail Network**

In this instance "Trails" are defined as those paths and tracks that are used mainly for cycling and walking and are not part of the road or footpath networks.

The Hepburn Shire Council is home to a vast range of off road tracks and trails that are managed by a variety of land management agencies and can take the form of bitumen pathways in historical parks through to dirt tracks in native bushland.

The tracks are used by both local residents and tourists, often as an experience in themselves, passing through areas of cultural, historical and natural significance.

Generally the trails that exist represent an excellent range of facilities and provide a sound foundation on which to build a comprehensive network across the municipality.

Management of trails remains an area where improvement is required with better coordination particularly between Council and Parks Victoria. A more coordinated approach between these two agencies could assist in more fully realising the potential of the trail network.

The trails that exist also provide for a range of activities and are suitable for varying skill levels. User groups often seek out very different experiences that varying types of trails can provide. For example, the less formed trails that surround Creswick provide a challenging ride for experienced mountain bike riders whilst The Domino Trail in Trentham provides a more accessible nature trail for walkers and riders at a variety of levels.



The Domino Trail in Trentham represents a flat, accessible trail for most walkers and cyclists.



A number of potential trail routes exist in smaller villages within the Shire. These can generally be realised with the addition of themed signage and mapping to create village loops and historical and scenic tours. Further details on these are found in Section XX of this report.

The following principles of trail management and development will assist in providing an improved trail network.

5.3.1

Positive bias for Trail Users

Trails inherently prioritise the cyclist and walker as they are dedicated to this type of traffic. The key to providing positive bias toward trail users is in treatment of road crossings where vehicles, cyclist and walkers interact.

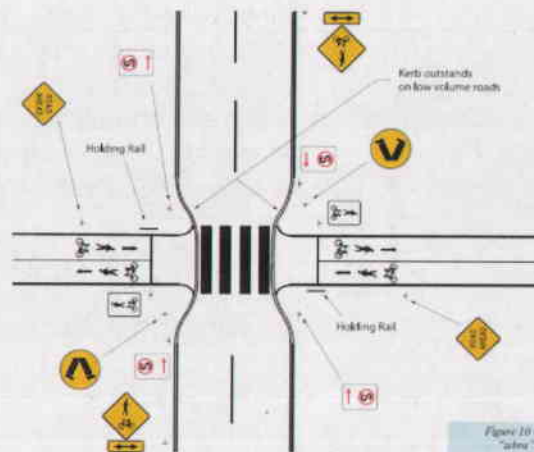
Safe road crossings provide continuity to off road trails increasing the propensity to regularly use this type of asset.

An effective road crossing treatment prioritises the cyclist and walker and delivers a high quality experience for trail users.

Road crossing should at a minimum provide signage for both cyclists advising of a road crossing and for motorists advising of a trail crossing. The use of holding rails and some level of road treatment is also advised.

Cycling/Pedestrian refuges may also be used to allow users to cross busy roads in two stages, provide further physical evidence to drivers of a crossing point and increase protection through physical separation.

Other treatments may include raised pavements, signals or coloured pathways to provide priority for trail users.



Recommendation:

Council will provide clear signage and road crossing treatments at intersections of trails with main road, delivering a positive bias toward trail users at these points.

5.3.2

Connection to footpath and bike lane networks



It is important that off road trails connect into main activity centres as well, thus allowing residents and visitors to access these trails easily from town centres. Where practical therefore, trails should provide connections into the footpath and bike lane networks, transitioning from off road to on road or footpath networks seamlessly.

Where possible, off road trails should be extended into town centres. This is particularly possible where recreation reserves, creek lines or disused railway lines exist. If this is not possible, a seamless transition on to a well signed bike lane or footpath should be implemented.

Off road connection to primary schools, with limited road crossings is particularly important. These trails provide a safe route for school children who generally have less peripheral awareness and increased risk in vehicle traffic zones.

Recommendation:

Ensure connection of trails to back roads, footpaths and cycling lanes to ensure access from urban centres to trails is seamless and understood.

5.3.3

Iconic Trails

Iconic trails are defined as those larger trails that are of regional or greater significance and particularly provide strong recreational and tourism values.

Key trails within the Hepburn Shire that conform to this classification are described in Section 3.2.3.

Iconic Trails should generally be designed to promote high levels of accessibility and use stable surface material such as bitumen or granitic rock that compacts well but is relatively low in cost per lineal metre. Iconic Trails should also be well mapped with brochures and downloadable maps available and be themed and signed appropriately. The development of stylised logos as specific branding would be appropriate for these trails.

Recommendation:

Council will work toward developing and maintaining selected Iconic Trails that are high use and or high profile tracks easily accessed by both residents and visitors.

5.3.4

Trail Heads

Trail heads act as starting points for significant trails and may represent common points where footpath, bike lane and trail networks meet.

The development of trail heads is important in providing a common point of information for users, providing key amenities such as;

- Signage (including wayfinding detailing distances to destinations, location maps, environmental information etc.)
- Seating



- Bike rack
- Car park
- Public Toilets
- Drinking fountain or tap

Recommendation:

Council will develop trails heads for Iconic Trails that provide a recognised start/finish point along with relevant amenities and information as required.

5.3.5

Quality of Trails

As mentioned previously, trail quality will vary significantly as many users such as experienced hikers and mountain bike riders are looking for a physically challenging experience which may even present some inherent risk.

Importantly though, the majority of users will be looking for an accessible relatively safe walking or cycling experience that will allow them to experience a natural, historical or cultural environment of some significance. A large range of users may be looking for convenient loop trails that provide a pleasant environment for exercise.

To that end, the level of quality provided on a range of trails needs to deliver a comfortable, pleasant and safe experience that is physically accessible for almost all the population. The following standards will apply to these types of trails.

1. Width

Width should be maintained on shared trails at 2.5 metres, where practical. Areas of particular narrowness should be well signed to allow for those that cannot access certain points, to turn around.

2. Accessibility

Access to a series of key trails is important and consideration of grade, condition and surface treatment are important.

The trail network within Hepburn Shire is generally made up of trails accessing areas of natural significance and the use of organic materials such as granitic sand or compacted gravel is seen as the most appropriate and cost effective ways of delivering these trails.

These surfaces are generally stable but do require more maintenance than bitumen or concrete. Bitumen or concrete may be more appropriate in flood prone areas where wash away regularly occurs. Rutting and loose surfaces can cause issues for those with mobility concerns.

3. Maintenance and Management

A specific budget allocation should be provided for maintenance to trails specifically managed by Council. Inspections schedules should be implemented to deliver the



It is also recommended that a more formalised management arrangement be developed to coordinate trail management particularly between Parks Victoria and the Shire of Hepburn.

High quality trails should be developed and maintained with the following key features;

- Provides a crushed rock or compacted gravel surface that is solid underfoot but has minimum impact on the natural environment
- Should not cut straight through the landscape but twists and turns around the natural features in a sympathetic manner.
- Provides opportunity to contemplate nature and enables us to take in our surroundings.
- Identifies itself clearly as a trail that is free of conflict and diminished ambience caused by incompatible users e.g. motorised vehicles.
- Provides information about features such as views, waterfalls, history, special habitat and a narrative that will encourage both the novice and the experienced to try it.
- Is easy to access and use. e.g. good transport access to trail heads, vehicle security arrangements.
- Some trails are provided close to population centres.

Recommendation:

Council will provide appropriate quality trails based on profile and usage levels.

High quality, iconic trails will be provided based on the criteria detailed above.



5.4 Road Cycling

A number of routes throughout the municipality are informally recognised as on road cycle training areas.

Although no cycling clubs are formally based in the municipality, some of the roadways are used by groups based in neighbouring Councils such as Ballarat.

Signage identifying these routes should be installed to warn motorists that they may be driving in an area where lone cyclists or a peloton may be training.



Recommendation:

Develop signage to highlight key cycle training routes to motorists along arterial roads.

Advocate to VicRoads regarding the sealing of shoulders on known cycle training routes.



6 Iconic Trails

6.1 The Great Dividing Trail

6.2 The Domino Rail Trail

6.3 The Goldfields Walk

6.4 The Three Lost Children Walk

6.5 The Peace Mile



7 Wayfinding in urban and natural environments.

Wayfinding refers to our ability to use signs, paths and environmental landmarks to navigate through our environment.

In assisting people to walk and cycle about, the provision of 'wayfinding' supports can enhance individual navigation ability and make a pedestrian or cycling experience more comfortable and enjoyable.

The introduction of uniformly coloured and themed wayfinding signage will be important in urban centres. This type of signage should generally be at pedestrian head height and provide details such as;

- a contextual, simplified map with a "you are here" point,
- mapping oriented to the reader of the sign,
- list of key destinations and distances,
- identification of key amenities such as public toilets, visitor information centre, bus stops etc.,
- photographs of destinations or key landmarks to provide further context and,
- further interpretation on history/culture of the area

Wayfinding signage should be located at key entry points to central activity zones and in town centres.

Other wayfinding signage of this type should be located at trail heads or key car parks where trails lead off to locations that are not immediately visible.

Recommendation:

Council will provide wayfinding signage for main township centres.

Council will partner with other agencies to provide wayfinding signage where required at key trail heads.

Council will consider further wayfinding signage for smaller villages on an ongoing basis.





Walking and Cycling Loops

Whether for commuting or recreational purposes, the identification of walking and cycling loops is important to inform people of how long and how far a walk or ride to and from a destination may be.

One of the key trends for leisure participation is the preference for people to be able to walk around their local area for a 20-30 minute period and end up back where they started.

A number of brochures have previously been published (mainly focussed on the Daylesford/Hepburn area) providing timed walking loops for residents and visitors.

The development of basic information packs developing to more specific walking and cycling loops is recommended for the Daylesford and Creswick areas in particular.

In providing this type of information, the aim is to encourage people to be well informed and confident of where they can go and how long it might take.

In turn this assists in increasing the propensity of people to use alternative transport methods to access destinations and undertake activity.



Recommendation:

Develop and deliver information brochures on basic walking and cycling loops based on 20-30 minute timed rides and walks (initially through Daylesford, Hepburn and Creswick).

These may be themed and should highlight major destination points such as supermarkets, hospitals, civic buildings, recreation reserves etc.



9 Engaging Community

Engagement of community in walking and cycling needs to be done in a way that creates significant and sustainable cultural shifts.

Engagement goes beyond marketing and provides opportunities for genuine involvement, community interaction and behavioural shifts in the way people think about walking and cycling in their community.

Key activities that Council can use to engage communities includes;

- Delivery of programs related to walking and cycling
- Education of cyclists, pedestrians and motorists
- Providing a leadership role in best practice

9.1 Programs for encouraging walking and cycling

Programs to be considered for implementation include;

1. **Walking School Bus and Riding School Bus Programs**
Adult supervised walking and cycling program for school children with some funding available through VicHealth and Bicycle Victoria.
2. **Walk to Work and Ride to Work Days**
Bicycle Victoria supported initiatives where council can take a lead role in providing riding leaders at different points
3. **Walking Work Bus and Riding Work Bus Programs**
The potential exists to transfer the successful school bus program to an adult version and provide experienced riders to support groups of inexperienced riders in getting to work on foot or by bike.
4. **Support the delivery of bike education programs in schools**
Ensure that Council and VicRoads work together to provide education programs in schools for cycling.
5. **Support coordination of themed riding programs**
Work with local bushwalking groups (such as group based at Daylesford Neighbourhood Centre) or cycling groups to deliver themed tour program such as Spring in the Bush walks or winery cycling tour etc.
6. **Support local businesses involved in walking and cycling**
A number of operators are beginning to provide a range of walking and cycling related services. These range from bike hire to organising and arranging supervised or guided walks. These businesses should be supported through Council's economic development team with further exposure and marketing.
7. **Promote a 'boot and bike club'**



Coordinate development of a 'club' that encourages households to walk and cycle regularly. Run awards for the most involved households and produce newsletters on a regular basis

Recommendation:

Council will allocate responsibilities for the delivery or facilitation of cycling and walking programs (as noted above) to various roles within Council and develop a walking and cycling internal working group to coordinate the Council response.

9.2

Education

The delivery of information reminding cyclists and motorists of their rights and responsibilities can be undertaken in innovative ways. Partners in this type of activity should include Bicycle Victoria, VicRoads and the Victorian Police.

Education activities could include;

1. The delivery of flyers or brochures with car registrations or rates notices providing a summary of relevant road laws.
2. The distribution of promotional material such as bright 'be seen' vests or drink bottles, wrist bands, etc. that deliver a simple message and reminder.
3. The delivery of radio or television advertisements targeting a locally relevant issue in driver behaviour.
4. Provision of free "bike registering" days where police register and provide serial numbers for bikes whilst promoting safe cycling.

Recommendation:

Council will work with other partners to support the delivery of a range of educational activities to promote cyclist, pedestrian and motorist responsibility.

9.3

Providing Best Practice

As a community leader, the Hepburn Shire Council has the opportunity to undertake activities that can encourage behavioural change within its community. The following points provide some direction for Council on possible activities.

1. The use of Council bikes for moving between a workplace and a practical meeting destination or specific site should be considered.
2. The introduction of bike racks, secure bike lockers and shower facilities in Council offices should be highlighted as best practice and implemented for relevant Council facilities.
3. The Council Planning Scheme should provide regulations on subdivision or other development requirements for positive bias toward walkers and cyclists. This may include the provision of bike racks, design of trails and footpaths to ensure connectivity and active by design principles are



being considered and met where deemed practical. (see Chapter 11 for more detail)

4. The Council local laws should also clearly regulate on footpath dining areas and signage requirements and this should be coupled with an awareness program for shop owners.
5. There may also be opportunity for Council staff to be involved in supporting interpretative walks in bushland or botanical garden areas as part of a walking program over the summer or spring periods.
6. Provision of training for staff in various key roles such as statutory planning, strategic planning, road design, recreation etc. should be undertaken to understand best practice and to coordinate roles and responsibilities of each officer across Council.

Recommendation:

That Council provide a benchmark and leadership role in the provision of walking and cycling services and infrastructure through undertaking a range of initiatives as described above.



10**Tourism and Marketing**

Tourism is a major contributor to the economic activity in the Hepburn Shire. Daylesford and Hepburn Springs are major destinations marketed at a state level as “a village dedicated to wellbeing that provides nourishment for the mind, body and soul...”²²

Access to the mineral springs along well maintained and accessible paths is a crucial ingredient in this product mix.

Marketing provided through Tourism Victoria contrasts purifying natural springs and geothermal waters with decadent local produce and luxury accommodation.

The image is one of escaping (nearby) Melbourne to slow down, relax and participate in gentle activities that rejuvenate the mind and body.

This is particularly relevant to the Daylesford and Hepburn regions and has a strong connection to quality footpaths and trails that ensure pedestrians are considered a priority.

In this sense, the trails and footpaths are a means to an end, providing access to natural settings, scenic vistas and key spa destinations. They provide a relaxing and peaceful experience for users in keeping with the rejuvenation image being supported and promoted as part of the Victoria marketing campaign.

Daylesford and Macedon Ranges Tourism Inc. provide an excellent avenue for the promotion and marketing of trails as well as businesses related to walking and cycling.

Key opportunities for supplementing the existing marketing and tourism activities include the following;

1. The development of the Domino Trail with a first stage from Trentham to Lyonville (including repairs to the Coliban Bridge)
2. Coordinated maintenance of existing trail network between agencies
3. Consistently themed promotional material to support trails
4. Strongly themed and identifiable signage to mark trails
5. Tiered system of trails linked to skill levels and capacities of users

²² <http://www.tourism.vic.gov.au/marketing/marketing/daylesford-and-the-macedon-ranges/>



11 Planning and Management

11.1 Maintenance

11.2 Further study or design required



12 Implementation Plan

The Implementation Plan provides township specific actions and tasks, recommended based on research and consultation undertaken as part of this study.

Information is provided on the nature of the proposed action, its context to the strategic report, lead unit and other partners, the priority rating of the action and probable costs.

12.1.1 Daylesford

Action (distance)	Strategy reference	Details and benefits delivered	Council Unit	Priority rating	Probable Cost	Potential Partners
Improve cycling/walking connection between Daylesford and Hepburn Springs- (3,000 m)		Prioritisation of cyclists and pedestrians Removal of obstacles, bumps over gutters, Improve intersections or crossovers with service roadways, cars accessing properties- coloured lanes in these sections	Engineering	High	\$30,000	VicRoads
Develop Walking/Bike lane on Central Springs Road between Fulcher Street and Table Hill Road (200m)		Improve safety Positive bias toward pedestrians and cyclists Creates connection from Lost Children's Reserve back to Central Daylesford	Engineering	High	\$20,000	
Remark cycle lane in front of school back to Central Springs Road, possibly coloured lane. (400m)		Improve safety Positive bias toward pedestrians and cyclists Protection of children when riding to or from school Encourages children to ride through increased safety	Engineering	High	\$2,000	VicRoads
Develop footpath and bike lane from Lake		Provides connection between iconic lake and off road trails and central Daylesford	Engineering	High	\$25,000	



Daylesford to Central Daylesford. Along Bridport Street to Central Springs Road (300m)						
Develop coloured cycle lane on Raglan Street between Vincent Street and Midland Highway turnoff. (700m)		Provides for students cycling to St. Michaels Primary School and Daylesford High School along Raglan Street	Engineering	High	\$50,000	VicRoads
Provide accessible track completely around Lake Daylesford		Complete loop by creating a pedestrian bridge at Bleakely Street to provide loop around lake Improves safety Creates continuity of experience	Engineering	High	\$20,000	
Provide crossover point at Lake Daylesford along Bleakely Street		Provide road crossing treatment at Bleakely Street, possibly a raised crossing with signage. Manages significant risk and pinch point.	Engineering	High		
Maintain a wider and more accessible track around Jubilee Lake (500m)		Provides iconic trail that is more accessible, better experience for tourists and more accessible for a range of ages and skill levels. Reduces risk of injury by improving a trail in relatively poor condition. Compacted grave surface only	Recreation, Parks	Medium	\$30,000	
Provide footbridge across creek near Jubilee Lake Mineral Spring and create loop to Wombat Reserve		Provide footbridge to create new connection and walking loop to Wombat Reserve	Recreation, Parks	Future	\$65,000	
Restore the footbridge at the Hepburn Reservoir Spillway		Connects alternative walk from Daylesford to Hepburn through bushland. Old footings from bridge are still intact so may be a case of just re-sheeting.	Recreation, Parks	Medium	\$60,000	
Seal Shoulder on A 300 Midland Highway		Improves connection between township on busy section of highway		Medium	\$80,000	



between Raglan Street turnoff and Glenlyon turnoff (800m)						
Provide public toilets and bike racks near supermarket		Clean, safe and easy access point for public toilets and bike racks		Medium	\$120,000	
Shoulder sealing along Daylesford -Trentham Road (up to 5000m)		Initiates connection for Daylesford to Trentham. Potential to connect to trail that may ultimately become part of Daylesford-Trentham – Woodend Rail Trail.		Future	\$500,000	VicRoads
Widen Shoulders on road from Daylesford to Mt. Franklin		Narrow road currently and is designated route promoted through Parks Victoria connecting Daylesford and Hepburn Springs to Mt Franklin		Future	\$200,000	VicRoads
Improve standard of footpaths for people using scooters/wheelchairs etc.		Diminish use of concrete grinding, increase frequency of inspection in high use urban network areas (around hospital, school etc.)		High	Staff Resource	
Widen shoulder on Daylesford-Ballan Road (34000m)		Provide bike commuting to Ballan Railway Station	VicRoads	Future		VicRoads



- 12.1.2 Hepburn**
- 12.1.3 Trentham**
- 12.1.4 Creswick**
- 12.1.5 Newlyn and Smeaton**
- 12.1.6 Yandoit, Franklinford and Clydesdale**
- 12.1.7 Glenlyon**
- 12.1.8 Clunes**





Attachments

- 1. Walking and Cycling Network Maps- Major Townships**
- 2. Works Table**
- 3. Design Standards**
- 4. Community Consultation Report**
- 5. Background Paper**