Foreword

The Cycling Plan at a glance

- The Cycling Action Plan establishes a Ballarat Bicycle Network that focusses investment on linking destinations and providing continuous and safe cycling routes.

- The plan aims to identify and create safe, predominantly off-road or quieter routes which are suitable for families and children or individuals considering cycling.

- Where possible, the approach encourages cycling projects to achieve health, economic, amenity and safety improvements (in addition to transport) through integrated designs which include tree planting, traffic calming, quality urban design and finishes, and improvements for pedestrians, wayfinding and accessibility.

- The plan prioritises delivery of safe and continuous routes (which will have the greatest impact on increasing the number of everyday cyclists) in preference to supporting individual projects across the city.

- The measure of success is more people cycling.

Priority Projects

- **Rail Corridor Cycleway** - Separated, protected off-road trail alongside the rail corridor connecting Wendouree Train Station to Ballarat Train Station, and connecting through to the existing “Bunny Trail” to M.A.D.E.

- **Sturt Greenway** – A safe, separated cycling connection along the Sturt Street corridor, linking the CBD with Lake Wendouree and Victoria Park, as a major tourism and commuter opportunity.

- **Missing Links** – Safe, separated connection through the CBD, linking Ballarat Station to existing Yarrowee River and Canadian Creek trails.

- **Western Access** – Safe, legible cycling route from the Ballarat West Growth Area to the CBD, including safety improvements across major roads and linking existing off-road and shared paths.

- **Signage and Wayfinding** – Design and implement distinct route signage to give confidence to navigate the Ballarat Bicycle Network.
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Encouraging more people to ride their bikes is a key aspect of transitioning Ballarat towards a more sustainable and equitable future. It is critical to maintaining the lifestyle and accessibility so valued by the Ballarat community. With the population forecast to increase from 100,000 to 160,000 by 2040, the option of cycling will become an increasingly vital mode of mainstream transport for residents and visitors seeking to avoid increasing congestion and the financial costs of running and parking a private vehicle.

While a number of people already choose to ride a bike, either to commute to work, for sport or for pleasure, there is significant room for improvement. Making Ballarat a more attractive and enjoyable place for cyclists is about planning carefully to improve our cycling infrastructure. It also involves raising awareness of the many benefits of cycling and motivating people regardless of gender, age or ability or to get on their bikes more often.

This Cycling Action Plan is one of a suite of mode-specific action plans that together will help to transition Ballarat to a more sustainable future. This plan is fundamentally about making Ballarat a better place to ride a bike, outlining practical steps to be delivered over the short, medium and long term and embedding cycling as a fundamental mode of transport within an integrated transport system for Ballarat.
Figure 1: An Integrated and Sustainable Transport System

### Public Transport
- V-Line Trains
- Buses
- Taxis
- Ride sharing

### Walking
From a transport perspective, when referring to “walking” or “pedestrian” these terms are broadly defined to include not only people walking but also people using prams, wheelchairs, motorised mobility scooters and other mobility aids.

### Freight and Commercial
- High Productivity Vehicles (incl. B-Doubles)
- Vans
- Deliveries
- Service Vehicles

### Green Vehicles
- Car share
- Electric Bikes
- Electric Vehicles
- Biofuels
- Car Pooling

### Cyclists
Cyclists can be split into two groups:
- Utility’ cycling is any cycling undertaken simply as a means of transport, for daily journeys such as the journey to work or school.
- ‘Recreational’ cyclists tend to prefer quieter routes which provide access to natural or scenic features such as along the Yarrowee Creek trail. The recreational group includes sport cyclists.

### Community Transport
Community transport provides people with specialised transport needs with access to recreation, shopping, medical care, social services and social contact. It includes buses, cars and taxis and is generally managed by Council and other community organisations.

### Private Vehicles
- Cars
- Motorbikes
- Scooters

### Emerging and Future Innovations
It is crucial the policy context recognises the rapid expansion in new ways to move, and embraces the opportunities and benefits they could provide:
- Technology based ride-share opportunities, not yet mainstream
- Self-drive vehicles
- Other methods and modes of travel yet to emerge

### Users of the Transport System
1.1 What cycling can do for Ballarat

An improved cycling network and increased community awareness will benefit Ballarat in many ways.

Easier Local Living as Part of a ‘10 Minute City’

Better, safer and more easy to follow cycling networks will enable the community to replace an increasing proportion of short trips by car (particularly to schools and local shopping centres), with cycling. Removing physical barriers and changing perceptions will make cycling increasingly attractive to people of all ages, abilities and financial circumstances.

Improved Health and Wellbeing

Australia is amongst the most obese nations and this high level of obesity contributes to an increasing rate of diseases such as diabetes, cardiovascular disease, various cancers and osteoarthritis. Physical inactivity has been estimated to cost the Australian healthcare system $1.5billion annually, with the total financial cost of obesity in Australia in 2008 estimated to be $8.3billion. Our sedentary lifestyles are now being referred to as the ‘new smoking’.

Council has a role to play in improving the health of the community by enabling and encouraging people to take up cycle and to be more physically active.

Research has shown that cycling contributes positively to building social connections between people.¹ This increase in social interaction within the community results in much improved personal relationships and overall community health, contributing to improved mental wellbeing by reducing feelings of stress, anxiety and depression.

Increased Prosperity

Businesses and the wider community also benefit economically from more people cycling. Cyclists tend to spend longer at local shops, with research from the National Heart Foundation concluding that people accessing shopping areas by bike and foot spend more money than those who drive.² A more sustainable transport system also means that Governments, and consequently ratepayers, benefit from reduced infrastructure costs for the construction and maintenance of roads. Individuals also benefit from the ability to have access to cheaper transport. The RACV estimated the annual cost of owning a medium sized car (such as a Toyota Camry) in 2014 was around $11,000. The ability to access daily needs on bike can significantly support the family budget.³

Transport Efficiency

Without intervention, congestion will continue to worsen in Ballarat as the population grows. Increases in congestion will motivate the community to make different choices about which mode of transport offers the most efficient option for a particular trip. The car may not be the most convenient or preferred option for some trips and cycling may provide a quick and cost-effective alternative. It is often argued that cycling is a slower method of transport than motor vehicles. However, vehicle speeds in peak hour traffic are often the same (or lower) than cycling speeds.

Enabling people to choose modes which make less of a contribution to congestion, such as cycling, also benefits other transport users through more efficient use of the network as more road space remains available for businesses and freight users to run their businesses and support the economy.

Safer Travel

Encouraging safer travel by drivers and cyclists, and reducing the total number of vehicle trips, can reduce the number of accidents. Slower vehicle speeds and safer street environments can reduce the severity of injuries when crashes do occur. Integrated land use and transport projects, focused on people and the triple bottom line, can achieve much safer travel in Ballarat.

Reduced Greenhouse Gases and Energy Use from Transport

Greenhouse gas emissions are the main source of air pollution, and they are causing atmospheric changes. These changes are now being directly linked to global warming, changes in rainfall patterns, rising sea levels and increasing frequency of natural disasters. It is estimated that 17% of Victorian greenhouse gas emissions are transport related. Cars contribute 80% of that total. Increasing the number of people who ride their bikes to service their daily needs will directly contribute to Ballarat’s response to the climate change challenge.
1.2 Riding today?

Across Australia, more people are cycling than ever before with over half of Australian households owning one or more bicycles. As a recreational pursuit, cycling is the fourth most popular activity, behind walking, gym, and golf.

A significant barrier to determining the rates of cycling within Ballarat, and monitoring progress towards a more cycle-friendly city, is the current lack and poor quality of data available. The Australian Bureau of Statistics (ABS) publishes some relevant data relating to method of travel to work and rates of car ownership, however these statistics are limited, and exclude large sections of the population who may cycle for non-work related purposes. Bicycle Network’s Super Tuesday and Super Sunday counts provide an additional data source, allowing local governments to participate in undertaking commuter and recreational bike counts in their Municipality.

Taking these limitations into consideration, there are a number of key statistics that can be used to give a broad indication of the prevalence of cycling.

ABS Census data from 2001 to 2011 shows that while the number of people cycling as their primary method of travel to work or full-time study increased between 2001 and 2006, the total mode share remained stable. Between 2006 and 2011 both the number and share of people travelling by bike to work or full-time study decreased, with only 0.9% of Ballarat residents choosing to commute by bike (just 387 people) (Table 1). This is comparable with other regional cities in Victoria (Table 2). There is also a significant gender gap in rates of cycling to work in Ballarat, with more than eight times the number of males choosing to ride their bikes to work than females. This is significantly higher than the national average which sees three times as many men choosing to commute to work than women.

Table 1: Mode of travel to work – One mode

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2006</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Car as Driver</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>12,422</td>
<td>13,840</td>
<td>15,561</td>
</tr>
<tr>
<td>Females</td>
<td>9,880</td>
<td>11,400</td>
<td>13,225</td>
</tr>
<tr>
<td>Total</td>
<td>22,302</td>
<td>25,240</td>
<td>28,786</td>
</tr>
<tr>
<td><strong>Bicycle</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>358</td>
<td>401</td>
<td>334</td>
</tr>
<tr>
<td>Females</td>
<td>37</td>
<td>51</td>
<td>53</td>
</tr>
<tr>
<td>Total</td>
<td>395</td>
<td>452</td>
<td>387</td>
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Table 1: Mode of travel to work – One mode

Table 2: Mode of travel to work – Regional Centres (Total)

<table>
<thead>
<tr>
<th></th>
<th>Ballarat</th>
<th>%</th>
<th>Bendigo</th>
<th>%</th>
<th>Geelong</th>
<th>%</th>
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<tr>
<td>Bicycle</td>
<td>387</td>
<td>0.9</td>
<td>420</td>
<td>0.9</td>
<td>901</td>
<td>0.9</td>
</tr>
<tr>
<td>Total Trips</td>
<td>42,290</td>
<td></td>
<td>45,741</td>
<td></td>
<td>95,403</td>
<td></td>
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The Super Tuesday Bike Commuter Count measures the number and gender of bicycle commuters once a year. Bicycle Network recruits volunteers to visually observe and record people using bicycles. The counts have been conducted in Ballarat from 2011 to 2015. The 2015 (Figure 2) results have shown a 9% decrease in the number of commuter cyclists from 2014, with females accounting for just 19% of all riders (below the average national female ridership of 23%).

Figure 2: Super Tuesday – 2015 Results

Quick Stats for Super Tuesday 2015 in Ballarat

Super Sunday recreation counts are used to determine the recreational usage of the Municipality’s shared path network by monitoring the numbers of all users including cyclists, walkers, runners and dogs. A total of 610 bike movements were recorded in the most recent count conducted in 2014, representing a 35% increase in the number of recreational cyclists from the year before. While these results are encouraging, transitioning Ballarat to a more sustainable, bike friendly-city will require the community to take up cycling as an everyday activity, not only as a weekend past time.

Research has indicated a number of reasons that many people may be hesitant to cycle to work or study:

- Too far (33%)
- It’s not safe (13%)
- Not fit enough (6%)
- No facilities (3%)
- Do not consider cycling for transport (7%)
- Don’t own a bicycle (18%)

While both the ABS data and Super Tuesday counts show a decline in the proportion of people choosing to ride to work over other modes, particularly the private car, there is significant potential for Ballarat to increase rates of everyday ridership. The size of Ballarat and the high number of residents that live within close proximity to their place of work means that, by addressing many of the key barriers identified above, more people could be encouraged to choose to ride their bike to more places more often.

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7 Bicycle Network (2015), Super Tuesday Bike Commuter Count – Victoria, Melbourne: Bicycle Network.
Part 2 - Cycling as mainstream mode of transport

This Cycling Action Plan provides specific projects and actions to integrate bicycle riding into Ballarat’s integrated transport system. It builds on and replaces the currently adopted Ballarat Bicycle Strategy (2014 - 2019) by expanding the current focus on recreational and trail related projects to consider cycling as an important transport mode in its own right. This aligns with the policy direction in Council’s long term plan for managing growth and change over the next 25 years Today, Tomorrow, Together: the Ballarat Strategy (2015).

This new plan intentionally focuses investment and effort on the everyday bicycle user, seeking to increase the current stagnant rate of growth in cycling across the Municipality. It also enables cycling to be fully integrated with other modal plans currently under development for roads and freight, walking and public transport. Everyday cycling needs to be a mainstream transport option for Ballarat’s future.

2.1 Local planning within the bigger picture

This plan is part of a wider effort to increase bike riding across Australia and Victoria; striving to complement and implement the goals of plans and strategies at the national, state and local levels to foster an effective and integrated approach to increasing the rates of cycling.

Victorian Transport Integration Act 2010 makes it clear that our transport system must be integrated and economically, socially and environmentally sustainable. The Transport Integration Act utilises a principles-based approach which focuses on a general requirement to “have regard to” the broad policy framework when making decisions, exercising powers or performing functions related to the transport system. It seeks to use an aspirational framework to drive change and achieve integrated transport and land use planning outcomes, and identifies the role of transport in affecting and influencing broader societal outcomes.

The core focus of the National Cycling Strategy 2011-2016 is to realise a step-change in the attitudes to cycling and in the numbers of riders in the short term, with a goal to double the number of people cycling over a five year period. The Strategy includes six clear priorities and objectives whose underpinning actions include marketing and education programs to promote cycling as a viable commuting and recreational option, encouraging the provision of end-of–trip facilities, and ensuring that state and local land use planning and infrastructure strategies take into account active transport needs.

The State Government’s Victorian Cycling Strategy sets standards for bike riding policies and guides future investment in bike riding infrastructure development programs and activities, with an aim to promote cycling as a viable and attractive alternative transport option to cars.

The VicRoads SmartRoads Strategy aims to better manage the use of Victoria’s road network by assigning priority to different modes of transport at particular times of the day. The strategy includes an aim to support and encourage higher occupancy and sustainable travel modes through allocation of road space, signal priority and information for road users to make smarter travel choices.
2.2 The Role of Council in making it happen

In Ballarat, Council has most influence over integrated land use planning, road space allocation in local streets and parking. These components are where Council has direct powers to invest and manage infrastructure and shape planning outcomes.

In terms of implementing this cycling strategy, Council has direct responsibility for certain components.

- Some capital works projects including new and upgraded cycling trails
- Behaviour change and programs, including support for schools programs
- Coordinating stakeholder input and aspirations
- Partnering with other government and non-government stakeholders to influence change

The State Government has primary responsibility for public transport and declared roads. Council will work collaboratively with the State Government to support improvements to cycling infrastructure on roads which it administers and to support the better integration of cycling and public transport connections. In some cases Council can influence decision-making, in other circumstances multiple levels of Government and the private sector can contribute financially to benefit the Municipality.

2.3 What this plan seeks to achieve locally

This new Cycling Action Plan 2017–2025 seeks to directly implement the range of existing policy on cycling, through practical, local priorities - focusing on improving bike riding infrastructure and networks across Ballarat while seeking to motivate more people to ride more often and to more places.

Success for this plan means achieving the following goals:

- **Goal 1:** Partner with the community to develop a user-focused cycling network, as a game changing enabler to growth in bike riding
- **Goal 2:** Manage cycling networks as a mainstream transport mode, linked to public transport and walking networks
- **Goal 3:** Change travel behaviour to increase bike riding, particularly focusing on those groups not currently cycling
- **Goal 4:** Build an everyday bike riding culture in Ballarat so that it is seen as a legitimate use of the road with mutual respect between riders and drivers
- **Goal 5:** Support sport, recreational, fitness and other special interest cycling
Part 3 - Action Plan for encouraging bike riding

The goals of this Action Plan will be achieved by prioritising investment, effort and encouragement of the following:

1. Define and establish a cohesive network of cycling routes between destinations, targeted at novice or everyday riders (known as the Ballarat Bicycle Network).

2. Partner with VicRoads and the State Government to deliver key cycling routes within the BBN as premiere quality connections (known as Strategic Cycling Corridors).

3. Continue to improve the entire road network for cyclists.

4. Improve the network of recreational off-road trails.

5. Provide enjoyable, educational and safe cycling circuits linking key tourist sites and visitor destinations with key locations such as the Ballarat Station and the CBD.

6. Provide for bike riding at origins and destinations.

7. Improve integration across sustainable transport modes.

8. Educate the community around bike riding.

9. Ensure bike riders have adequate information.

10. Advocate and collaborate with key stakeholders for bike riding improvements.

11. Improve guidance for scoping and prioritising cycling projects. Promote and raise the profile of bike riding.

12. Improve the monitoring and reporting of bike riding levels in Ballarat.
Many people are deterred from cycling for both recreation and transport as a result of concerns for personal safety and a lack of continuity in cycling infrastructure.

There are currently a number of ‘cycling networks’ that have been defined across Ballarat by various groups and levels of government. These various existing networks are generally presented as guides for types of infrastructure available, and are not currently considered in an integrated way. While an infrastructure-based approach is highly useful for Agencies investing in cycling facilities, this approach is largely irrelevant to actual cyclists using those networks, who simply want to be able to follow a safe, legible and convenient cycling connection to their destination with confidence.

To maximise the opportunities for Ballarat to partner with the State Government for cycling funding, it is crucial for there to be consistency in network routes and priorities.

Through a user-focused approach, the Ballarat Bicycle Network (BBN), which this plan seeks to implement, will fully integrate State, local and regional cycling networks so that funding opportunities provide maximum benefit to everyday cycling users. The BBN routes have been developed with significant input from cyclists and other interested stakeholders, and specifically link activity centres together using a destination-based approach.

Strategically, the BBN proposes to link centres as shown:

Details of rates and infrastructure recommendations are outlined in Volume 2: BBN Technical Report.
CBD Connections

The central business district of Ballarat is an important destination for many cyclists. Establishing strong, connected routes both within the CBD and with the outer BBN will be a key priority. There are several opportunities to partner cycling infrastructure with quality urban design to create safer, more accessible and enjoyable access routes within the CBD. For private businesses, getting a greater proportion of patrons, visitors and staff to cycle in the area means easier, cheaper and more flexible opportunities for on-site parking and accessibility. More people cycling to the CBD also makes more car parking spaces available for those who want to drive. The needs of cyclists and pedestrians will be prioritised when considering design opportunities along the noted CBD connections.

Developing more north to south routes will increase the range of opportunities for a greater number of people, and therefore strengthen the existing BBN. This will provide multiple connections between key locations such as the Ballarat Railway Station, Bridge Mall, and Sturt Street shopping precincts.

Design options for CBD access routes include:

- Slower vehicle speeds
- Tree planting opportunities
- Minimising crossing points and conflict areas with turning vehicles
- Pedestrian crossing improvements, which also benefit cyclists
- Avoiding new roundabouts
- Clear and legible wayfinding and road markings

Exploring opportunities for separation, where possible.
Applying strategic network to a defined cycle network

Bicycle routes are considered for the first time in Ballarat as crucial parts of a multi-modal integrated transport network – intentionally planned and delivered to maximise benefits for the community. The previous focus on sport and recreational riding has been expanded to a more holistic view of riding a bike in Ballarat being a safe, convenient and low-cost transport alternative.

Planning for routes has occurred as would be expected for other mainstream transport modes, with routes identified to ensure appropriate accessibility, connectivity, continuity and logic. Routes have been assessed against the following criteria, and then field tested with cycling stakeholders:

- Provides direct connections between Activity Centres across the Municipality
- Connects with cycle networks already planned for in Precinct Structure Plans for Ballarat West and Alfredton West (Lucas) growth areas
- Maximises coverage and accessibility (more than 90% of urban homes within 500m of a route), providing excellent levels of local access
- Is a short-term option to create a connection, even if there is a preferred longer-term opportunity
- Utilises existing off-road opportunities where possible, including public land along creek and stream reserves, rail trails, existing shared use paths, road-side paths and public parks, reserves and sports fields

Route choice may include more circuitous routes where an alternative less direct route provides:

- A safer option
- Access to a key bicycle friendly destination
- Greater use of existing infrastructure
- Greater potential to attract new cyclists, not currently riding
- Practically more achievable over the short-term

Actions

1.1 Focus cycling investment in improving cycling conditions along Ballarat Bicycle Network
The Victorian Government has emphasised its commitment to supporting and encouraging cycling as an everyday activity, recognising the role cycling can play in responding to a range of challenges, such as contributing to healthier communities and environment, stimulating economic growth and creating better places to live. As such, the State Government has committed to partnering with local Councils to identify and develop Strategic Cycling Corridors (SCCs).

Strategic Cycling Corridors are a concept used for bicycle network planning over recent years in metropolitan Melbourne. Identification of SCCs originated as part of the initiative to ‘Support Walking and Cycling in Central Melbourne’, identified in the State Government’s strategic plan for Melbourne, Plan Melbourne. This initiative is now being extended to regional cities.

SCC’s are corridors that cater for the highest, or potentially highest, cycling volumes. Investment in these corridors will be managed by VicRoads, and prioritised on the basis of those corridors that achieve greatest benefits to cyclists and the whole community.

In Ballarat, VicRoads and City of Ballarat have worked in partnership to identify the following routes as Strategic Cycling Corridors.

These Strategic Cycling Corridor include key connections such as:

- Connections of Miners Rest to Wendouree Station
- Opportunities to link Wendouree railway Station to Ballarat Station (CBD) by the existing rail corridor (or Gregory St as an alternative)
- To connect through the Ballarat Station precinct, linking Lydiard St to the existing off-road bike trail from Humffray St to M.A.D.E (Bunny Trail), (over the Peel St viaduct)
- Ballarat Station through the CBD to connect to the Yarrowee Creek trail to Buninyong
- Sturt St connection linking Lucas to CBD and through to Brown Hill

Note: Actual alignments are indicative only and subject to more detailed investigation.

**Actions**

2.1 Continue to work in partnership with VicRoads and other State Government Agencies to deliver quality cycling connections along the components of the BBN which are recognised by the State Government as Strategic Cycling Corridors (SCC)
Ballarat Strategic Cycling Corridors
While the existing on-road bike network across Ballarat includes significant components of marked bike lanes, Bicycle Boxes and other provisions, there can be a lack of continuity of infrastructure with lanes starting and finishing abruptly, inconsistent surfacing treatments, the presence of obstacles, and a lack of bicycle-friendly infrastructure at junctions and intersections. Ensuring the on-road bike network is safe and accessible for all bike riders is extremely important.

While the BBN will remain the priority for Council funding and advocacy, the implementation and improvement of cycling facilities across the entirety of the road network within the Municipality will be considered as upgrades to road infrastructure and open spaces are undertaken, in line with current Council policy. This can include installation of formal bike lanes, widening existing bike lanes, tightening adjacent entry/ exits at intersecting streets to reduce turning speeds of motorists, installing physical separation treatments, improved crossing points and installing green pavement and vibraline edge line treatments. As roads are progressively improved, missing connections and inconsistencies across the network will gradually reduce.

The prevalence of roundabouts in Ballarat are a concern for some cyclists, as often roundabouts are designed with flared entries and wide circulatory carriageways that encourage higher traffic speeds and reduce the presence of cyclists. Well-designed roundabouts are a safe traffic management opportunity appropriate for a range of situations. However, the concerns of cyclists are recognised and the specific needs of this group will continue to be considered when weighing up the requirements of all road users. On routes with higher cyclist numbers, particularly the BBN, greater weight will be given to the needs of cyclists.

As council continues to upgrade its cycling infrastructure it will be critical that other sustainable transport options are not hampered by new development. For instance, ensuring roads designated for buses are still bus capable and consistent with the Public Transport Guidelines for land use and development will need to be considered.

**Strategy 3: Continue to improve the entire road network for cyclists**

While the existing on-road bike network across Ballarat includes significant components of marked bike lanes, Bicycle Boxes and other provisions, there can be a lack of continuity of infrastructure with lanes starting and finishing abruptly, inconsistent surfacing treatments, the presence of obstacles, and a lack of bicycle-friendly infrastructure at junctions and intersections. Ensuring the on-road bike network is safe and accessible for all bike riders is extremely important.

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As council continues to upgrade its cycling infrastructure it will be critical that other sustainable transport options are not hampered by new development. For instance, ensuring roads designated for buses are still bus capable and consistent with the Public Transport Guidelines for land use and development will need to be considered.

**Actions**

3.1 When upgrading, resurfacing or re-line marking roads across Ballarat, assess the potential for bike lanes as part of the project scope. Where appropriate, include other measures to improve conditions for cycling as part of core business, even when not on a defined cycling route

3.2 Implement where possible Bicycle Boxes at signalised intersections

3.3 Utilise ongoing works to the road network as opportunities to provide more seamless and integrated cycling facilities as part of the road network. This includes limiting construction of barriers for cyclist such as pits and electrical boxes

3.4 Consider all road users when designing roundabouts and other infrastructure
Off-road trails, particularly along the Yarrowee River and Canadian Creeks, are significant community assets for Ballarat, providing safe and scenic cycling routes for both residents and visitors alike to experience many of Ballarat’s attractions and natural features.

Ongoing investment continues to occur in these trails; however, there are opportunities for improvement. Current surface quality varies along Ballarat’s off-road trails, with granitic sand paths particularly prone to water damage in some locations. Lighting and passive surveillance are also limited, and vegetation management, wayfinding and interpretational signage could be further improved. The quality and upkeep of these routes is particularly important as they are often used by safety-conscious cyclists who may be less likely to use on-road cycling facilities.

In many areas, both cyclists and pedestrians use these off-road routes. As the population grows and use of these routes increases, continuing improvements to the off-road network will be important for ensuring that they remain well-maintained, safe and accessible for all users.

Inclusion of existing off-road trails within the BBN will enable the full integration of these paths as part of the overall bike network in Ballarat, and recognise the need for seamless integration of on-road and off-road facilities. Users accessing off-road trails will often arrive or depart those trails along the remaining network.

There are also a range of linear reserves across Ballarat not yet accessible to pedestrians and cyclists, which are worthy of further investigation. As identified in the Ballarat Strategy (2015), the extensive drainage network of channels has the potential to provide for new cycling and pedestrian connections. Drainage lines, in as yet undeveloped areas of the municipality, could include future cycling connections as part of their development plans, and rail corridors and other publicly owned land corridors should also be considered. The BBN identifies some of these connections, but linear corridors should continue to be considered for walking and cycling links as new opportunities arise.

**Strategy 4: Improve the network of recreational off-road trails**

**Actions**

4.1 Improve the quality of off-road shared path infrastructure by improving lighting, regular maintenance and vegetation trimming, particularly along the Yarrowee River and Canadian Creek Trails
4.2 Fully integrate the trail network into the BBN, so that off-road, trail and on-road sections of bike network are seamlessly connected for riders
4.3 Pursue new cycling connections as part of future development proposals, providing continuity to linear corridors along stream and drainage lines, disused railway corridors and other relevant opportunities
4.4 Where possible connect popular mountain bike and recreational trails with the existing BBN network. These include Scott St trail, Warrenheip Creek trail, Pennyweight Creek trail, Eureka st cycle route and Canadian Regional Park trails
The overarching Ballarat Strategy (2015) has identified the need to improve the overall visitor experience in Ballarat and improve connections between key sites. The implementation of Visitor Cycling Links offers the potential to do this. The concept involves defining, upgrading where required, and promoting cycling links from the Ballarat CBD/Visitor Information Centre/Ballarat Railway Station to key destinations, such as Sovereign Hill.

Case Study: The Eureka Link

A day trip to Sovereign Hill could involve a leisurely 15 minute ride form the existing Bunny Rail Trail to M.A.D.E. Following this trail, visitors experience the site of the Eureka Stockade, and become familiar with the landscape, architecture and character of Ballarat East as the location of this historical milestone. A further 10 minute ride on quiet streets and trails leads to Sovereign Hill. After a half-day at this key destination, a leisurely 15 minute ride back to the CBD completes the journey. This cycling link could be undertaken by school groups as part of an expanded educational experience of Ballarat, and would provide new and convenient transport option for those without a car, or who have travelled to Ballarat by train.

Case Study: Lakes and Gardens Circuit

Similarly, defined and safe connections from the CBD to Lake Wendouree and Victoria Park would provide visitors without a car to experience some of Ballarat’s greatest natural and cultural attractions. Following a morning on the Eureka Link, the Lakes and Gardens Circuit could enable those visitors to also experience the Botanical Gardens and the War Memorial. Instead of visiting just one of Ballarat’s key attractions as part of a day-trip, visitors have the potential to experience four or five.

The implementation of a Bike Share scheme in conjunction with the new ‘Visitor Cycling Links’ has the potential to contribute significantly to the overall visitor experience of Ballarat. The opportunity to arrive in Ballarat by train, jump on a bike and experience the best that Ballarat has to offer is an exciting opportunity. Bikes could be made available at key points in the CBD and at key tourist destinations. Proper branding and promotion of this program would help to promote Ballarat as a progressive and contemporary visitor destination. The addition of interpretive information would help to inform visitors of the story of Ballarat, providing context and interest at each of Ballarat’s key historic locations.

Actions

5.1 Investigate with key stakeholders the opportunities for safe and logical connections linking key visitor destinations (refer Figure 1 for BBN connections linking key sites)
5.2 Implement a tourist focused Bike Share scheme, with docking stations provided at key points within the CBD, and at key visitor attractions
5.3 Provide accessible and visually appealing interpretive information at key visitor destinations
The presence of bike parking which is visible, secure and easy to access is an important component of a cycle friendly city. Well-located and widely distributed bicycle parking can attract increased bike riding for all types of trips. Currently, Council and private businesses provide a range of bike parking options. In addition, passive storage locations such as street furniture, fences and similar points of attachment are regularly utilised by current cyclists.

Council will aim to provide bike parking throughout Ballarat in all public locations where the need is identified. This will ensure easy access for bike riders to a variety of destinations, increasing the usefulness of the bike as an everyday form of transport.

Developments will continue to be encouraged to include end-of-trip facilities and bicycle parking as part of their project plans. At current usage levels, it is not viable for Council to offer high-end end-of-trip facilities for cyclists. Once there is sufficient demand, Council should investigate public end-of-trip facilities, as are provided in other higher demand situations such as occurs in Brisbane CBD.

**Strategy 6: Provide for bike riding at origins and destinations**

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**Actions**

6.1 Continue to provide bike parking at key locations (identified in collaboration with the community)
6.2 Consider provision of bike parking for community events and festivals
6.3 Engage with developers to continue to encourage end-of-trip
6.4 Monitor demand, with a long-term view to considering public end-of-trip facilities
Part of encouraging people to ride their bike is to provide an integrated network of choice. This includes allowing people to mix modes of transport effectively and conveniently.

The implementation of a Bike and Ride scheme in Ballarat could contribute significantly to integrating bike and bus travel, and has the potential to increase both cycling rates and public transport use. By providing bike racks on buses (with no additional fare charges for customers), barriers faced by people wishing to ride or take public transport (such as distance, weather and dangerous routes) may be reduced. A trial of such a scheme is currently being undertaken in Moreland, Bendigo and on connections between Cowes and Wonthaggi routes. Ballarat will engage with Public Transport Victoria (PTV) to be a part of future considerations to extend the service.

The Department of Economic Development, Jobs, Transport and Resources DEDJTR is already highly supportive of implementing bicycle infrastructure at transport stops. Implementing this approach in Ballarat will require a detailed assessment of existing transport stops, outlining their capacity to include bicycle infrastructure and the demand for or frequency that they would be used.

Consideration should also be given to the needs of various modes together at the planning and design stage of all development to increase the effectiveness of an integrated sustainable transport system and to ensure the cost-effective use of resources.

### Actions

7.1 In partnership with PTV, trial a Bike and Ride scheme or similar initiatives to improve integration with public transport in Ballarat

7.2 Consider the needs of pedestrians and bike riders together when improving bike infrastructure

7.3 Work with public agencies to ensure adequate bike space is provided for bike infrastructure when installing new or upgrading existing transport stop
Strategy 8: Educate the community around bike riding

Communities with high levels of bike riding are healthier, more connected, consume less energy, produce less emissions and experience less congestion than those with low levels of bike riding.

Further education is needed to encourage more people to ride bikes. A key priority of Council in increasing the number of everyday cyclists on Ballarat will be to target cultural change within the Municipality by educating the community around the many benefits of cycling and encouraging safe and respectful sharing of roads between all road users.

Education and awareness programs have significant potential to provide residents with important bike riding skills and an understanding of how to safely interact with others using shared on and off-road facilities. Such programs may take the form of practical courses on bicycle maintenance, defensive riding or the wider distribution of TravelSmart maps to all residents. Safe Cycling programs targeted at school aged children can be very effective in educating students about safe cycling and in encouraging more children to ride to school.

Promoting cycling is integral to raising the community's awareness of cycling as a means of everyday transport, as well as a fun and easy option for sport and recreation. In particular, research has shown that a number of groups, such as females and children, are far less likely to cycle regularly and campaigns should focus on these underrepresented groups to achieve maximum impact.10

A major barrier to people cycling is a lack of appropriate facilities at their workplaces. To help counter this, Council, will work with local employers to encourage the development of cycle-friendly workplaces, specifically through the provision of bike parking spaces, showers and lockers.

There are also many world-wide movements (for example, Cyclovia) which aim to provide opportunities for the community to reclaim roads and streets for people and sustainable transport. Ballarat will be proactive and flexible in trialling community led initiatives to increase physical activity and cycling awareness.

Actions

8.1 Liaise with State Government, NGO and other local government partners to participate in campaigns to highlight the benefits of increased physical activity, including bike riding
8.2 Be proactive and flexible in trialling community led initiatives to increase physical activity and cycling awareness
8.3 Work with local employers to encourage the provision of cycling facilities, such as bike storage, showers and lockers, in workplaces
8.4 Raise awareness of on-road cycling to all road users.
8.5 Establish a comprehensive, and fully enveloping social marketing program, with particular emphasis placed on encouraging underrepresented groups to ride their bikes
8.6 Continue support for promotional events such as Ride to School and Ride to Work days, and initiatives such as the 1 in 5 promotion currently being implement in City of Greater Bendigo

To increase the convenience of bike riding for all users, people need to know where they are, the best route to their destination and how long the journey will take.

Dedicated way finding bike signage, much like traditional road signage for motorists, will provide greater certainty and reassurance for people riding bikes in Ballarat. The destination basis to the BBN is an important new approach to managing a more user focused and convenient network. Wayfinding signage will direct people to important local and regional attractions and community facilities such as key shopping strips, schools, parks and other attractions. With cycling to be managed as an integrated part of the transport network, bicycle related signage will be integrated with information on other modes, interchange opportunities, trip durations and other relevant information as would be expected for car drivers, walkers or public transport users.

Maps with greater detail and information can complement way-finding signage and should be distributed in various formats, including electronically and via mobile phone formats. Ensuring the community is up to date with the most relevant information both locally and in a wider context will ensure they have the capacity to plan for multi-modal journeys. It is also important that both signage and maps are accessible to people of all abilities, and as such a variety of sources of information, which are sensitive to the needs of all people, will be made available.

**Strategy 9: Ensure bike riders have adequate information**

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**Actions**

9.1 Implement a clear way finding system, which includes trip times and lengths, so that all cyclists can navigate the cycling network to key destinations with ease and confidence regardless of individual riding experience or knowledge of Ballarat

9.2 Make Council’s webpage a one-stop-shop for all cycling information

9.3 Promote established long-distance and sporting routes, including to Lake Burrumbeet and Lake Learmonth, and the Buninyong Road Nationals – as well as those routes already defined by Ballarat Regional Tourism, previous Council strategic documents and relevant cycling clubs and routes
Achieving the goals of this Bike Plan requires advocacy to, collaboration with, and funding from Council partners. Introducing secure bike parking facilities at public transport stops and stations, for example, and improving bike infrastructure on major arterial roads across Ballarat will require funding and input from the State Government and public transport operators as the owners and managers of these assets.

City of Ballarat has a leadership role to play in engaging with key stakeholders, interest groups and keen cycling advocates to engage them in the implementation of this plan.

**Strategy 10: Advocate and collaborate with key stakeholders for bike riding improvements**

Achieving the goals of this Bike Plan requires advocacy to, collaboration with, and funding from Council partners. Introducing secure bike parking facilities at public transport stops and stations, for example, and improving bike infrastructure on major arterial roads across Ballarat will require funding and input from the State Government and public transport operators as the owners and managers of these assets.

City of Ballarat has a leadership role to play in engaging with key stakeholders, interest groups and keen cycling advocates to engage them in the implementation of this plan.

**Actions**

10.1 Advocate to the State Government and its agencies for improved bike infrastructure, expansion to the Melbourne Bike Share Scheme to Ballarat as a tourist focused opportunity, and partnerships to deliver education, training and other cultural and information-based cycling initiatives

10.2 Collaborate with neighbouring municipalities, Ballarat Regional Tourism, Parks Vic and community groups to promote bicycle tourism and Ballarat as a key cycling destination

10.3 Secure ongoing funding and sponsorship from the State Government and other external organisations to deliver strategies and actions identified in this Bike Plan

10.4 Upgrade and enhance mountain bike tracks, facilities and infrastructure

10.5 Recognise the importance of the Buninyong Road Nationals Cycling route in Buninyong and pursue extended funding opportunities for ongoing improvements
This strategy is to be used in everyday decision-making, as well as influencing funding and prioritisation of projects through the Council Plan. Projects implemented to achieve the goals of this Cycling Action Plan will be selected by Council using specific criteria to ensure our efforts deliver the greatest benefit to Ballarat given available budgets.

The following assessment matrix will be used internally when scoping and deciding on cycling related projects:

**Attract – Does the project make bike riding more attractive?**
- Projects must enhance bike riding in Ballarat so more people ride their bike, in place of making trips by other travel options such as driving a car

**Encourage – Does the project encourage people to ride their bike more?**
- Projects must encourage people of all ages and abilities to ride more often. This includes catering for children and groups that are less mobile, such as the elderly

**Links to policies – Is the project consistent with Council’s strategies and plans and does it link to State and Federal government policies?**
- Projects need to deliver on Council’s policy directions and be in line with State and Federal government policies

**Strengthen networks – Does it connect with Council’s strategic walking network (under development) and key destinations?**
- Projects are not isolated from other routes but form part of our identified network that connects popular destinations together. Those located along the BBN create even greater benefits for both people walking and bike riders through reinforcing direct and continuous routes

**Public transport – Is the project making a better link to public transport stops and stations nearby?**
- Projects located near public transport stops and Ballarat and Wendouree stations help make it more convenient to use bus, and train services to get around

**Safety – Does the project make cycling safer or increase the perceived safety of bike riding?**
- All projects must make it safer for people to ride their bikes. Projects that do not improve safety will not be supported

**Transport impacts – Does the project affect other parts of the transport network?**
- Projects need to improve the overall movement of people and goods on our network of streets, roads and public transport routes to best use the limited space we have

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11 Adapted from: City of Port Philip (2014), Get on Your Bike and Go: Make Bike Riding Better in Port Philip
Community support – Does the community support the project?
- Projects that attract the support of the community, or are identified by the community as needing to be implemented

Community awareness – Does the project increase awareness of bike riding?
- Projects that raise awareness of the benefits and barriers of bike riding and its profile amongst our community positively influence how people choose to travel

Community benefits – Does the project benefit our community?
- Projects need to deliver benefits to the community in the particular location as well as contribute to benefits for the wider Ballarat community

The use of this assessment matrix will enable better prioritisation, project scoping and coordination across Council when delivering actions of this Cycling Action Plan. The result will be more seamless and cost effective.

Actions

11.1 Utilise the cycling project assessment framework to help guide the scoping, design and delivery of projects for maximum benefit

Strategy 12: Improve the monitoring and reporting of bike riding levels across Ballarat

Comprehensive information on bike riding across Ballarat is essential to planning new bike initiatives. City of Ballarat currently uses data collected by Bicycle Victoria’s Super Tuesday and Super Sunday counts at a limited number of locations largely used by bike and recreational commuters. This provides valuable baseline data, collected as an annual time-series. While these are helpful, we must find new ways to assess the numbers, experiences and needs of all bike riders. These include school children and older residents bike riding for local trips, as well as recreational riders.

In partnership with community, stakeholder, NGO and other Government partners, City of Ballarat will continue building our knowledge of how many people are bike riding across Ballarat, where they are going, why they are bike riding and how to best improve bike riding across the municipality. This will help us prioritise the work of Council to inform the development of future policies and work programs.

Actions

12.1 Develop a survey program that collects comprehensive annual bike count data
12.2 Investigate the possibility for an interactive website for receiving, storing and developing community information and ideas about ways to improve bike facilities and infrastructure
References

- City of Port Philip (2014), Get on Your Bike and Go: Make Bike Riding Better in Port Philip, Melbourne: City of Port Philip.
- Gerrard, J., Rose, G. and Lo, S. (2008), ‘Promoting transportation cycling for women: The role of bicycle infrastructure’