

Bayside City Council Bicycle Strategy



December 2013



Foreword From The Mayor

The Bayside Bicycle Strategy sets Council's direction for the development of the bicycle network within the municipality and identifies Council's position in encouraging and supporting more cycling within the Bayside community for the next six years.

Cycling is an activity that can be enjoyed by people of all ages for routine trips to the shops, commuting to work or simply for recreation. The benefits of cycling more often are clear. Cycling can improve people's health, reduce traffic congestion and cut greenhouse gas emissions that cause climate change. Cycling can also improve access to employment and education and drive growth for business through increased street activity.

The Bicycle Strategy is one of a series of complementary transport strategies that together will strengthen Council's Transport Policy and Implementation Framework to achieve a more integrated and sustainable transport system within the municipality. This will help ensure Bayside remains a great place to live and continues to attract business and tourism.

The aim of the strategy is to increase cycle use throughout Bayside facilitated through the further development of the bicycle network and the promotion of cycling as a healthy, cost effective and sustainable mode of transport for short journeys.

Join us on our sustainable journey and make Bayside an easier and safer place to get around for all of us.

A handwritten signature in dark ink, reading "Laurence Evans". The signature is written in a cursive, flowing style.

Cr Laurence Evans
Mayor

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1. Introduction

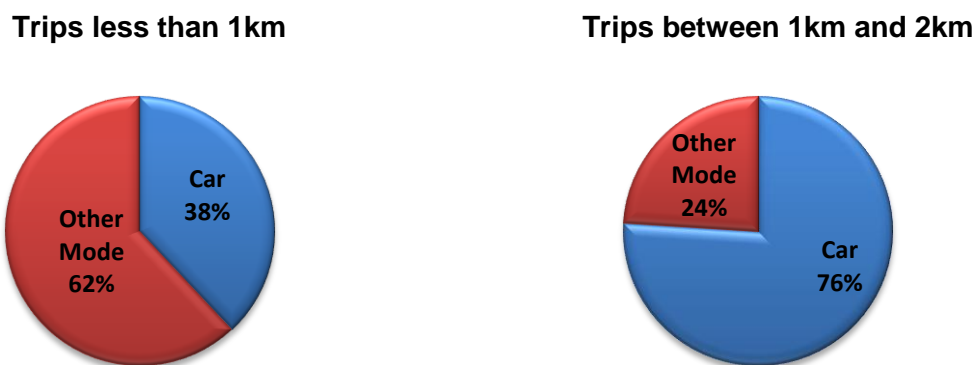
Cycling is one of the most sustainable forms of transport and has a significant role to play in the transport system within Bayside. It has the potential to make an important contribution to quality of life, providing an accessible, clean, healthy and enjoyable way to travel short distances and to enjoy urban and open spaces.

Unsurprisingly, there is strong community support for actions to improve cycling conditions within Bayside. Results from a phone survey conducted in 2012 as part of a consultation program for the development of Council's Integrated Transport Strategy found that 72.6% of Bayside residents thought that it was "important" or "very important" that Council make it easier for people to be able to cycle around their neighbourhood.

Whilst the popular cycling routes in Bayside – The Bay Trail and Beach Road – already attract large numbers of recreational and training cyclists, we need to motivate more people from all backgrounds to ride more often.

Short trips are classed as those trips undertaken primarily for utility purposes, such as travelling to school, the local shops, or to public transport hubs to catch other forms of transport such as the train. Riding a bike can be suitable for such short trips up to 20 minutes (approximately five kilometres). Whilst longer trips are possible, it is likely that riding a bike for such trips would only appeal to a small proportion of the Bayside population. Figure 1 identifies the percentage of short trips within Bayside undertaken by private car.

Figure 1: The percentage of short trips undertaken by car within Bayside



Source: Victorian Integrated Survey of Travel and Activity, Department of Transport, 2010

There is a real opportunity to facilitate a proportion of the short trips made within Bayside by cycling, especially for those trips between 1km and 2kms. For this to be achieved, a well connected bicycle network that allows people to ride safely and easily from door to door with secure end of trip facilities is essential.

The proportion of women riding within an area is often regarded as a key indicator of a bike-friendly city. Data obtained from both the 2011 Census and the Bayside BikeScope survey indicates that more men than women cycle in Bayside, a familiar trend across metropolitan Melbourne. However, Council would like the broadest range of cyclists possible and will prioritise actions that create a more attractive cycling environment for women, children and older residents. Making cycling accessible to the whole community will create opportunities for:

- People who are socially excluded, enabling them to become more mobile and providing them with greater accessibility to local services and amenities;
- People who lead sedentary lifestyles, enabling them to improve their health and wellbeing through a more active lifestyle; and
- People who incur high costs for transport, enabling them to save money by using a low cost form of transport to access their daily needs.



The Bayside Bike Strategy 2013 – 19 replaces the 2003 Bicycle Strategy and presents directions aimed at addressing the needs of all cyclists and facilitating a culture of cycling in Bayside through the development and promotion of a bicycle network that is safe, well connected, accessible and convenient and which positively contributes to the economy, the health and wellbeing of the community and to a low carbon future within Bayside.



2. The Vision for Cycling in Bayside

The Bicycle Strategy builds on the foundations and achievements of Council's first Bicycle Strategy which was developed in 2003 and received a commendation award from the Victorian Planning Institute for excellence in promoting Health and Wellbeing in Victorian communities.

Council is committed to building a transport system which meets the needs of all residents and supports and fosters a prosperous economy and a socially connected and healthy community. As part of this commitment, Council recognises that cycling is one of the most sustainable forms of transport and has a major role to play in the transport system within Bayside. With this in mind, Council's vision for cycling is:

"To increase cycle use throughout Bayside, facilitated through the development of infrastructure which is safe, well connected, convenient and attractive for cyclists and the promotion of cycling as a healthy and sustainable mode of transport."

3. Guiding Principles for Cycling

The Bayside area is well suited to supporting cycling. The topography, climate and attractive natural environment make it an easy place to ride. Popular cycling routes such as the Bay Trail and Beach Road attract large numbers of recreational, utility and training cyclists. However, these factors alone will not lead to an increase in cycle use throughout Bayside. To achieve the vision of the Bicycle Strategy a set of guiding principles have been derived through research and analysis, and feedback from the community:

Principle 1 Ensure the provision of high quality bicycle infrastructure across Bayside

The development of a bicycle network is the core feature of any proposal aimed at increasing cycling. Cyclists should be provided with routes that are safe, well connected, convenient and attractive which are also characterised by high standards of design and maintenance. Outcomes associated with this principle include bicycle routes and infrastructure that will:

- Link existing bicycle facilities and routes both within and outside of Bayside;
- Connect important local destinations and amenities; and
- Meet the needs of current and future cyclists.

Principle 2 Improve the integration of cycling with land use development, public transport and other key amenities

The way we plan for land use and transport can increase the proportion of cycling trips and the creation of an environment conducive to cycling will assist in facilitating an increase in transport choice within the community. The provision of end of trip facilities for cyclists and how well cycling is integrated with other sustainable modes of transport will be a major factor in ensuring that cycling is an attractive mode of transport for local trips within Bayside. Outcomes associated with this principle include:

- Strengthening of the Bayside Planning Scheme to recognise and include travel demand management features, e.g. Travel Plans;
- Adequate and secure bicycle parking at key destinations; and
- The provision of cycle parking at community events and festivals.

Principle 3 Develop a culture of cycling within Bayside that encourages people to ride a bicycle

The provision of high quality bicycle infrastructure and facilities alone will be unlikely to facilitate a significant increase in riding without a complimentary investment in a program of promotion. Informing the community about the benefits of cycling, the location of the bicycle network and the places it can take you through a



range of promotional activities will be integral in attracting new people of all ages and abilities to ride a bicycle. Outcomes associated with this principle include:

- An informed community who are aware of the of the transport choices available within Bayside;
- Easily accessible information regarding cycling within Bayside;
- Safe use of the road network by all road users; and
- Safe use of the shared path network and improved etiquette amongst shared path users.

Each guiding principle is supported by associated strategies and actions.



4. The Policy Context of Cycling

At the Commonwealth, State and local level there is great support for cycling through existing legislation, strategies and initiatives as outlined within this section.

4.1 Commonwealth

The Australian Cycling Strategy 2011-16

At the national level the Australian Bicycle Council developed the National Cycling Strategy 2011-16. The strategy contains a target to double the number of people cycling in Australia by 2016. This target is underpinned by six key priorities and objectives:

- **Cycling Promotion** – Promote cycling as both a viable and safe mode of transport and an enjoyable recreational activity;
- **Infrastructure and Facilities** – Create a comprehensive network of safe and attractive routes to cycle and end-of-trip facilities;
- **Integrated Planning** – Consider and address cycling needs in all relevant and land use planning activities;
- **Safety** – Enable people to cycle safely;
- **Monitoring and Evaluation** – Improve monitoring and evaluation of cycling programs and develop a national decision making process for investment in cycling; and
- **Guidance and Best Practice** – Develop nationally consistent technical guidance for stakeholders to use and share best practice across jurisdictions.

All levels of government, voluntary organisations, employers, schools and the community have a role to play in working towards achieving the 2016 target and encouraging more people to cycle.

4.2 State

Victoria's Cycling Strategy "Cycling into the Future 2013 – 23"

Victoria's cycling strategy *Cycling into the Future 2013-23* was released by the Victorian State Government in December 2012. The strategy aims to grow and support cycling in Victoria. It aims to make it easier for more people to cycle and to make it safer for people who already ride. The strategy identifies six directions that will build an understanding of cycling and the types of trips Victorians make by bike, help increase these trips in the future and encourage more people to consider cycling. The six directions are:

- **Build evidence** – build a stronger evidence base for the Victorian Government to make more informed decisions;
- **Enhance governance and streamline processes** – clarify accountability and improve co-ordination, planning and delivery;
- **Reduce safety risks** – reduce conflicts and risks to make cycling safer;
- **Encourage cycling** – help Victorians feel more confident about cycling and make cycling more attractive;
- **Grow the cycling economy** – support opportunities to grow and diversify Victoria's economy through cycling; and
- **Plan networks and prioritise investment** – plan urban cycling networks to improve connectivity and better target investment in urban networks, regional trails and specialist cycle sport infrastructure.

The strategy will be accompanied by a series of action plans which will set out priority actions for the short term to deliver the strategy's objectives.



The Victorian Transport Integration Act 2010

The Transport Integration Act 2010 requires all Victorian transport agencies to work together towards the provision of an integrated and sustainable transport system that contributes to an inclusive, prosperous and environmentally responsible state. The Act requires transport agencies, including Bayside City Council, and other areas of government to have regard to the transport system objectives and decision making principles specified in the Act. **Table 1** demonstrates how the Bicycle Strategy is consistent with the transport system objectives contained within the Act and how it will contribute to the delivery of economic, social and environmental benefits.

Table 1: Links Between the Bicycle Strategy and the Transport Integration Act

| Objective Contained Within The Act | How The Bayside Bicycle Strategy Will Address Objective |
|--|---|
| Provide a means by which people can access social and economic opportunities to support individual and community wellbeing | The provision of new bicycle infrastructure will improve accessibility for cyclists to key destinations within Bayside |
| Facilitate economic prosperity | The bicycle network will enable access to places of employment, key services and local amenities |
| Actively contribute to environmental sustainability | The promotion of cycling as an attractive mode of sustainable transport for short trips will encourage a shift from the private car and assist in reducing the number of private vehicle trips within Bayside |
| Provide for the effective integration of transport and land use and facilitate access to social and economic opportunities | More intensive mixed use development taking place within areas well served by sustainable modes and improved integration of cycling routes with transport nodes will assist in reducing the need to travel |
| Facilitate network wide efficient, coordinated and reliable movement of persons and goods at all times | The completion of gaps within the cycle network will improve connectivity, thus encouraging more trips to be made by bike and reducing reliance on private vehicles |
| Be safe and support health and wellbeing | The provision of safe cycling infrastructure will improve cyclist safety. More people participating in cycling will result in improved health and wellbeing benefits |

State Planning Policy Framework

The State Planning Policy Framework (SPPF) provides the principles for land use development within Victoria. It seeks to create a safe and sustainable transport system by integrating land use and transport that provides access to social and economic opportunities, facilitates economic prosperity, contributes to environmental sustainability, co-ordinates reliable movements of people and goods and is safe. The SPPF contains the following objective relating to cycling:

- To integrate planning for cycling with land use and development planning and encourage as an alternative mode of transport.

SmartRoads Network Operating Plans

SmartRoads has been developed by VicRoads in partnership with stakeholders. It ensures that decisions about the operation of the road network support land use and transport planning and better consider the effects on the surrounding community, Victoria's key activity centres and the environment.

SmartRoads is an approach that manages competing interests for limited road space by giving priority use of the road to different transport modes at particular times of the day. These priority movements are then assigned to arterial roads across the network. All road users will continue to have access to all roads. However, certain routes will be managed to work better for cars while others will be managed for public transport, cyclists and pedestrians.

Changes to the operation of Victoria's road network will be implemented gradually. The changes will involve more effective use of traffic lights to allow extra time for road based public transport, reduced delays for pedestrians and improved co-ordination to assist with traffic flow. Road users can also expect to see a change



in nature of trips and travel, with public transport, walking and cycling being recognised as increasingly important transport modes.

4.3 Local

The Bayside Bicycle Strategy is informed by a number of existing Council strategies and masterplans that are relevant to facilitating an increase in cycling across Bayside.

Bayside 2020 Community Plan – ‘Our City, Our Future’

The *Bayside 2020 Community Plan* has a vision that ‘in 2020, Bayside will be a truly interconnected community with support for people of all ages and stages in their life’ and contains six key priority areas which each work towards achieving the vision.

The Community Plan recognises the need for the availability of a range of improved transport options to manage the competing transport demands within the Bayside community and includes a specific area of focus to ensure that there is a strategy in place to facilitate improvements to the bicycle network within Bayside. Whilst the Bicycle Strategy identifies a range of improvements to be made to the bicycle network within Bayside, these improvements will also compliment each of the key priority areas identified within the Community Plan as outlined within **Table 2**.

Table 2: Links Between the Bayside Community Plan and the Bicycle Strategy

| Community Plan Key Priority Area | How The Bicycle Strategy Will Address Key Priority Area |
|--|--|
| Community connection | The provision of new bicycle infrastructure will improve accessibility for cyclists to key destinations and services within Bayside, thus fostering participation opportunities for the community. |
| Life stage issues | The provision of a safe and well connected bicycle network will encourage people of all ages to participate in riding a bike, encouraging more active lifestyles and optimising the health and wellbeing of the community. |
| Planning, infrastructure and transport | Improvements to the bicycle network within the municipality will enable residents to replace an increasing proportion of short trips (such as those to the local shops or schools) which are currently undertaken by car with cycling. |
| Our environment | The promotion of cycling as an attractive mode of sustainable transport for short trips will encourage a shift from the private car and will directly contribute to Bayside’s response to climate change and mitigate its effects. |
| Recreation, leisure, arts and culture | The provision of new bicycle infrastructure will improve accessibility for cyclists to recreational, leisure, arts and cultural opportunities within Bayside. |
| Local economy | Improvements to the Bayside bicycle network will facilitate increased street activity as more people choose to ride to access their daily needs at local shopping centres. |

Bayside City Council – Council Plan 2013 – 2017

The Council Plan sets out Councils vision, goals, strategic objectives and strategies for its four year term in office. The goals of the Council Plan are directly aligned with the six key priority areas of the Community Plan and include one additional goal which addresses financial responsibility and good governance. The goals of the Council Plan are outlined within **Table 3**.

Table 3: Links Between the Bayside Community Plan and the Bicycle Strategy

| Council Plan Goals | How The Bicycle Strategy Will Contribute to Council Plan Goals |
|----------------------------------|--|
| An engaged community and Council | A number of community engagement activities have been undertaken to date to help inform the development of the Bicycle Strategy. The strategy will be placed on public exhibition for community feedback. |
| A strong supportive community | The provision of a safe and well connected bicycle network will encourage people of all ages to participate in riding a bike, encouraging more active lifestyles and optimising the health and wellbeing of the community. |
| A liveable city | Improving and promoting the bicycle network within the municipality will enhance the transport options available to the community. |



| | |
|-----------------------------------|--|
| A sustainable natural environment | The promotion of cycling as an attractive mode of sustainable transport for short trips will encourage a shift from the private car and will directly contribute to Bayside's response to climate change and mitigate its effects. |
| A creative active community | The provision of new bicycle infrastructure will improve accessibility for cyclists to recreational, leisure, arts and cultural opportunities within Bayside. |
| A thriving local economy | Improving the bicycle network will assist in improving accessibility to places of employment, activity centres and other key services within Bayside. |
| Financial responsibility | A key area of the Bicycle Strategy is to maximise the use of the existing local road network as part of the on-road bicycle network. This will assist Council in making the best use of available resources. |

Bayside Integrated Transport Strategy 2013 – 2023

The Bayside Integrated Transport Strategy (ITS) sets Council's proposed direction for transport planning and the provision of transport services within Bayside for the next 10 years and beyond. A set of guiding principles for the ITS were derived through research and analysis and feedback from the community. These guiding principles are outlined within **Table 4**.

Table 4: Links Between the Integrated Transport Strategy and the Bicycle Strategy

| ITS Guiding Principles | How The Bicycle Strategy Will Address This Guiding Principle |
|--|---|
| Improved local accessibility | Improved bicycle infrastructure within Bayside will assist in improving accessibility to key destinations and services within Bayside. |
| Create better public transport connections | Council will advocate for improved end of trip facilities, such as improved cycle parking, at public transport hubs within Bayside. |
| User friendly streets | Providing a balanced and appropriate level of priority for cyclists will enable greater sharing between users of streets within Bayside and assist in establishing user friendly streets within the municipality. |
| Integrated transport and land use | Increased mixed use development taking place within areas integrated with cycling routes will assist in reducing the need to use private vehicles for short trips. |
| Improve perceptions and enable choice | The development of a culture of cycling within Bayside will assist in raising the awareness of the benefits of cycling and will actively promote and support its increased use within the community. |

Draft Bayside Road Safety Strategy 2013 – 2018

The draft Bayside Road Safety Strategy 2013 – 2018 has been developed to reduce the number of people killed or injured in road crashes within Bayside and to enhance safety and accessibility for pedestrians, cyclists and public transport users, as they are not only vulnerable on the road network but provide the most sustainable transport modes.

An analysis of the most recent crash data indicated that there were 262 cyclist crashes within the municipality between 2007 and 2011, with approximately 41% (109) of these occurring on Beach Road alone.

The Bayside Bicycle Strategy is closely aligned with the draft Road Safety Strategy as they both contain a range of actions that will enhance the safety of cyclists and other vulnerable road users within the municipality.

Municipal Strategic Statement

The Municipal Strategic Statement (MSS) provides the vision for land use planning and development within the City of Bayside. The MSS is embedded in Bayside's Planning Scheme, which outlines Council's directives and statutory powers for land use. The MSS provides principles and strategies that are relevant to the development of the Bicycle Strategy, including:

Transport and access

- The need to provide integrated transport options to reduce reliance on the car; and
- The need to address the shortage of car parking in Activity Centres and the foreshore.



Infrastructure

- The provision of infrastructure to meet the needs of the existing and future community; and
- The need to manage the impacts associated with major community infrastructure.

Strategies

- Improve bicycle networks and facilities, providing safe and convenient access to key destinations in and around Bayside for the full range of cyclists and cycling experiences;
- Facilitate safe pedestrian and bicycle access to and between activity centres;
- Maximise the opportunity to minimise the number of vehicle trips; and
- Encourage the use of public transport and commuter cycling through the provision of adequate facilities.

Wellbeing for All Ages and Abilities Strategy 2013 - 2017

The Wellbeing for All Ages and Abilities Strategy 2013 - 2017 strives to achieve the highest levels of health and wellbeing for the Bayside community by encouraging people to lead healthier lives and building environments that help them to do so. **Table 5** below identifies the associated goals and objectives which have been established within the Strategy that the Bayside Bicycle Strategy will influence.

Table 5: Links Between the Wellbeing for All Ages and Abilities Strategy and the Bicycle Strategy

| Goals | Relevant Objectives | How the Bicycle Strategy will influence Goals and Objectives |
|-------------------------------------|--|--|
| An engaged and supportive community | <ul style="list-style-type: none">• Support opportunities that build social networks and community connections | The provision of new bicycle infrastructure will improve social connectivity and accessibility to key services for the community |
| A healthy and active community | <ul style="list-style-type: none">• Support opportunities for physical activity that are inclusive;• Increase Bayside residents utilising active transport; and• Improve Bayside infrastructure that supports physical activity. | The provision of new bicycle infrastructure will support an increase in cycling participation and will assist in improving the health and wellbeing of those people who lead a sedentary lifestyle through increased physical activity |
| Safe and sustainable environments | <ul style="list-style-type: none">• Decrease road accidents and injuries in Bayside | The provision of safe bicycle infrastructure will improve cyclist safety |

Open Space Strategy 2012

The Open Space Strategy (OSS) is a 20 year planning document that provides policy and strategic direction to enable Council to make decisions about how open space is used, developed, managed, and maintained across the municipality. The OSS is relevant to Bicycle Strategy as it identifies a number of missing links in the shared path network as well as potential opportunities to improve the connectivity of the bicycle network. The relevant actions from the OSS have been incorporated within the Bicycle Strategy.



5. The Value of Cycling To Bayside

Bayside, like all of Melbourne, is facing a future of change and our transport system must be resilient enough to adapt. The main challenges include:

- A high proportion of short trips being undertaken by car;
- Increasing parking pressures around activity centres and train stations;
- Growth in the use of traffic corridors such as Beach Road, Bay Road, Bluff Road and Nepean Highway;
- The continued attraction of visitors from outside of Bayside to the attractive natural features of the Bayside foreshore and large scale events, increasing the demand for a finite supply of on street parking space;
- The need to improve cross city travel both within and beyond the municipal boundaries; and
- The need to respond to climate change through reducing reliance on private car use.

Whilst private vehicles continue to provide people with unmatched mobility, shifting to a more sustainable transport system, which achieves a greater balance between cars and sustainable modes such as cycling, will help address these challenges as well as produce significant benefits for the residents of Bayside as outlined below.

5.1 Health

Increasing levels of physical inactivity and obesity in the population is impacting on both quality of life and life expectancy. At the same time, the costs of treating illnesses related to inactivity, specifically obesity, are expected to grow, requiring increasing health service resources. One of the root causes of obesity and other major diseases is an increasingly sedentary lifestyle and lack of physical activity.

Your Health: The Chief Health Officers Report 2010 (Department of Health 2010) provides an overview of the health and wellbeing of Victorians. It highlights that lifestyle behaviours such as poor diet, smoking and low levels of physical activity contribute to the burden of disease. Obesity continues to increase in prevalence with 50% of all Australian adults overweight or obese in 2010. Additionally, physical inactivity in Australian adults is prevalent and in 2010, approximately 41% of Australian adults were not active enough to gain health benefits (source Victorian Population Health Survey 2010).

It is not just adults who are not physically active enough to gain health benefits. Physical activity patterns amongst Australian children have changed and a substantial number are insufficiently active to achieve the health benefits of physical activity. The Australian Department of Health and Ageing recommends that children should accumulate at least 60 minutes of moderate to vigorous physical activity every day. However, findings from the 2007 Children's Nutrition and Physical Activity Survey indicate that 68% of Australian children aged 9-16 years are not meeting the recommended guidelines for physical activity.

The 2011-12 Victorian Population Health survey found that 74.3 per cent of Bayside adults did sufficient physical activity, which was significantly higher than Victorian adults (63.9 per cent). In Bayside only 2.6 per cent of adults were considered sedentary (little or no physical activity) and a further 19.9 per cent did insufficient physical activity.

A more recent 2012 survey of Bayside Council residents showed that most adult residents (74.7 per cent) were physically active, doing two and a half hours of moderate to vigorous physical activity in the past week. Males were more likely to be physically active, and age seemed to have little effect on physical activity with persons aged 56 years and over only doing slightly less than their younger counterparts in Bayside.

The 2011-2012 Victorian Population Health Survey data also indicates that body weight issues in Bayside predominately concern males - 57.1 per cent of adult men were considered overweight. Compared to Victorian males, Bayside males were more likely to be overweight but less likely to be obese. Only 22.1 per cent of Bayside females were considered overweight and 8.9 per cent, obese – considerably lower than the Victorian results for female body weight.



Riding a bike is one of the easiest forms of physical activity for the majority of the population as it can be incorporated into daily routines, something particularly important in achieving health objectives. If you swim you have to head off to the beach or a pool, a bit of weight-lifting training probably requires a visit to the gym, but riding a bike can become part of a daily routine and carried out at different intensities to suit individual needs.

5.2 Social

Those who do not have access to a private car, or choose not to drive, or are unable to drive have become excluded from many aspects of normal social life. The *General Social Survey: Summary Results – Australia (Australian Bureau of Statistics, 2010)* indicates that a lack of access to transport can be a barrier to people's participation in social and economic activities of mainstream society and found that:

- 12% of adults felt that they sometimes had difficulty getting to places where they needed to go and 4% felt that they either could not get to places or often had difficulties in doing so; and
- Young adults 18-24 years old and the older age groups (75 years and over) were the least likely to have access to motor vehicles and more likely to experience difficulty in getting to the places that they needed to go.

Increasing cycling levels will improve the social interactions that we have with each other and improve our sense of community. *Design Principle – Social Inclusion (Healthy Spaces and Places, 2009)* highlights that cycling friendly neighbourhoods can contribute to higher levels of social and community engagement, thereby providing mental and physical health benefits. They will also provide for more pleasant and sustainable public spaces and serve to support local facilities.

5.3 Environmental

Travel demand within the region is likely to increase as a result of residential growth within both Bayside and neighbouring municipalities. In addition, the continued attraction of visitors from outside of Bayside to key destinations such as the foreshore, secondary schools, employment nodes, major activity centres and large scale events will place even more travel demand pressures on the municipality.

Such growth will contribute to increased levels of traffic congestion and associated environmental impacts unless measures are introduced to facilitate a shift from car travel to modes such as cycling. The need for cleaner alternative means of gaining access to locations that generate trips must be viewed as a priority. Over short distances cycling is very efficient, being a low energy and pollution free mode of transport. With approximately 76% of all trips within Bayside less than 2kms being undertaken by car, cycling offers a viable alternative for such trips.

Much of what cycling has to offer in alleviating some of the environmental issues that we associate with today's transport network, hinges on its success as an alternative mode of transport to the car. Growth in cycling, alongside a continued increase in levels of motorised traffic, will have little overall affect on reducing levels of air and noise pollution. Clearly what is needed is a considerable change in current trends in transport use, towards greater use of sustainable modes.

5.4 Economic

Cycling can contribute to increased prosperity for businesses and individuals through increased street activity as those people who ride a bike tend to spend a longer period of time at local destinations. The Heart Foundation's *Good for Busine\$\$* report found that car drivers tended to be 'drive through' shoppers stopping only for one item rather than visiting an activity centre specifically to spend time shopping. Installing bicycle parking can produce higher levels of retail spend than an equivalent space for a car park. Improvements to the



bicycle network and associated facilities will facilitate greater opportunities to access employment and retail both within and beyond Bayside and result in a higher level of economic inclusion for all of Bayside's residents.

In addition, results from the 2009/10 *Household Expenditure Survey* reveal that transport makes up 16% of the average Australian family's budget, a similar proportion to housing and food costs. With fuel costs likely to continue rising, meeting transport needs through the use of private cars will become more costly. The cost of buying and maintaining a bike is relatively cheap when compared to the cost of running a car.

5.5 Road Safety

In terms of road safety, cycling poses a very low threat to other users and research suggests that increases in cycling can increase safety amongst cyclists. A study undertaken within the UK in 2009 by the Cyclists Touring Club found that where there are more bike riders there is generally a lower crash rate. This is due, in part, to higher bicycle use leading to modified road user behaviour as more car drivers are also regular cyclists and have a greater appreciation for other cyclists and road users. Also, a reduction in the number of vehicles on the road reduces the opportunity for potential vehicle conflicts with cyclists.



Figure 2: The Benefits of Cycling



6. Developing the Bicycle Strategy

The development of the Bicycle Strategy has involved the following tasks:

Background and Research Phase

- The numerous documents outlined within 'The Policy Context of Cycling' section have each been reviewed; and
- Site visits to the various sites that form part of the bicycle network within Bayside have been visited.

Community Engagement

Bayside BikeScope Survey

In November 2012 Council teamed up with Bicycle Network Victoria to conduct the Bayside BikeScope survey. The survey was used to collate a range of information to determine the characteristics of riders within Bayside. However, specific information was also sought to identify the needs of both residents and riders in relation to the bicycle network and to assist in identifying measures that need to be addressed to facilitate an increase in cycling participation within Bayside. The survey ran for a period of 5 weeks and a total of 1,546 responses were received.

Bicycle Strategy Workshop

In March 2013 a Bicycle Strategy Workshop was held at Council's Corporate Centre in Sandringham. The workshop was attended by 20 members of the public representing cyclists of different ages and abilities. A range of ideas that could be considered by Council in trying to facilitate an increase in cycling were discussed.



Online Discussion Forum

During April and May 2013 an online discussion forum seeking input to the development of the Bicycle Strategy was hosted on Council's website. This was the first time that an online discussion forum had been used as a community engagement tool by Council. In order to raise community awareness about the launch of the online forum a wide range of promotional activities were undertaken in parallel. These activities included:

- Officer attendance at the Farmers Market;
- An advertisement in the Bayside Leader;
- Distribution of information to libraries within Bayside;
- Distribution of information to every school in Bayside;
- Distribution of information to every bike shop in Bayside; and



- Distribution of information to passengers and cyclists at Bayside train stations.



The online discussion forum attracted 58 registered participants who made a total of 132 comments. In addition, the online discussion forum also had a total of 1,480 site visits from 787 unique visitors.

The high level of interest in the online discussion forum suggests that the community regards cycling as is an important component of Bayside's transport system and is interested in being involved in Council's approach to the planning and development of the cycling environment within Bayside.

Analysis of Community Engagement Feedback

- Review and analysis of the feedback and comments received from the community engagement process.

Draft Bicycle Strategy

- Preparation of the draft Bicycle Strategy for public comment.

Public Exhibition of the draft Bicycle Strategy

- The draft Bicycle Strategy was released for community and stakeholder consultation from 25 September 2013 to 25 October 2013. A total of 20 submissions were received from community members, Government Agencies and other stakeholders. Submissions included responses from Public Transport Victoria, Bicycle Network, Victoria Walks, Alfred Health and Whitehorse Cyclists.

Development of the final Bicycle Strategy

- The community and stakeholder feedback received through the public exhibition of the draft Bicycle Strategy was used to inform the development of the final Bayside Bicycle Strategy.



7. Statistics, Trends and Community Engagement Feedback

7.1 Community Profile

The City of Bayside is a leafy, predominantly residential municipality, located in Melbourne's middle southern suburbs. One of Bayside's key defining features is the stunning foreshore, which covers approximately 24% of Bayside's publicly accessible open space. Bayside is also characterised by beautiful parks and open spaces, vibrant retail centres and is considered one of Melbourne's most attractive municipalities.

The Bayside community is diverse with a wide range of transport needs. The official 2012 population of the City of Bayside was 96,824 persons. Bayside's population is forecast to increase to 105,393 persons by 2026, an increase of 9,292 persons from 2011 (City of Bayside Population Forecast 2012). This represents a total increase in population of 9.7% over that period.

With the ageing of the baby boomer generation, it is anticipated that the proportion of persons aged 60 years and over in Bayside will increase from 24% in 2011, to 26% in 2021 and then to 28% in the year 2031. Many older adults may face reduced mobility as they are no longer able to drive and riding a bicycle may be a suitable alternative for some able bodied older persons. Simple measures to improve access and the safe movement of these users will also benefit the wider community in Bayside.

Many Bayside households are family households (71%) comprising couples with children, and older couples without children. Nearly a quarter of Bayside households were lone persons. Council's population forecast estimates a large increase in the number of couple (no children) households and lone person households. Council's Housing Strategy will direct most new housing to activity centres to minimise change in established residential areas. Concentrating land use in activity centres can reduce reliance on cars for the majority of people's travel needs.

Compared to most other local government areas in Victoria and metropolitan Melbourne, Bayside is amongst the least disadvantaged 10% of all local government areas. Despite this, Bayside does have some scattered pockets of neighbourhoods with a lower socio-economic profile which are masked by the general affluence across the municipality. Almost all of these disadvantaged neighbourhoods in Bayside are public housing estates. For those residents with no access to a car, riding a bike will provide greater accessibility to employment and other local services and amenities.

There are 15,849 school aged (5 to 17) children who reside within Bayside. Whilst all of these children do not necessarily attend a school within Bayside, there are 30 schools operating from 35 campuses within Bayside which represent significant trip generators and also an opportunity to encourage cycling to a large proportion of people.

Bayside has a good allocation of open space per capita of population compared with other middle and inner ring suburbs. There are five large parks spread across the municipality which provide mainly for sports and family recreation. These parks are Elsternwick Park, Dendy Park, Green Point, Cheltenham Park and Tjilatjirin Reserve.

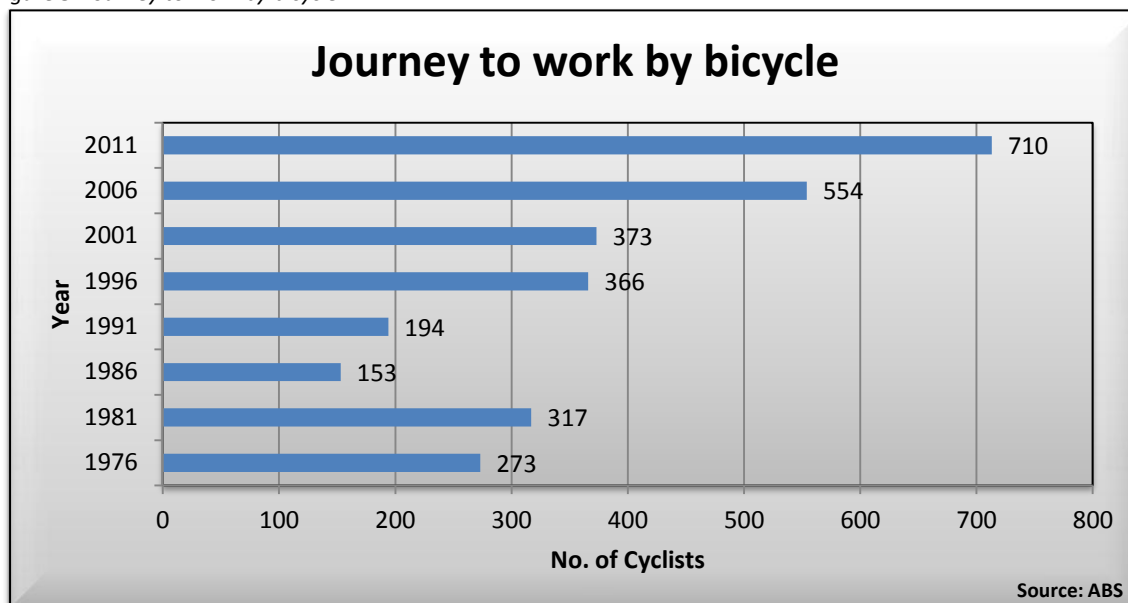
7.2 Cycling Within Bayside: What Do We Know?

7.2.1 Journey to Work 2011 Census Data (Australian Bureau of Statistics, 2011)

There has been a significant increase in the number of Bayside residents who choose to travel to work by bicycle. Census data from the Australian Bureau Statistics (ABS) indicates that the number of residents riding a bicycle to work increased from 373 in 2001 to 710 in 2011. This represents an increase of almost 91% over the ten year period. **Figure 3** over page highlights the increase in the number of Bayside residents who travel to work by bicycle.



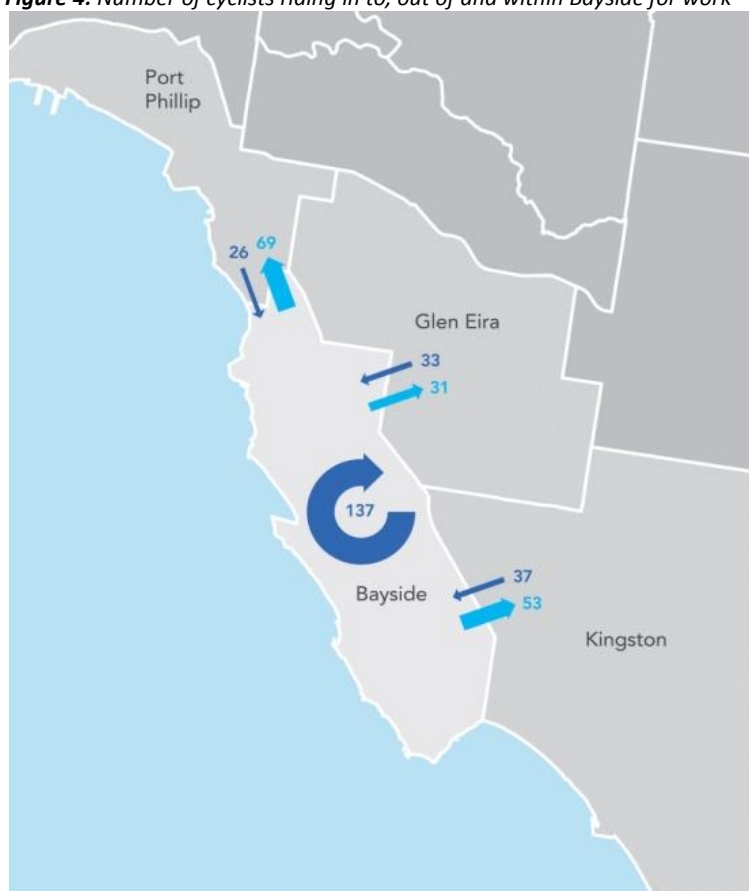
Figure 3: Journey to work by bicycle



Given that the journey to work data is collected by the ABS during the Victorian winter (June), it is considered that the actual number of residents choosing to ride a bicycle to work in the warmer months of spring and summer may be higher than the recorded figure.

Figure 4 identifies the number of cyclists riding in to, out of and within Bayside for work by destination as recorded by the ABS in 2011.

Figure 4: Number of cyclists riding in to, out of and within Bayside for work



Source: ABS 2011

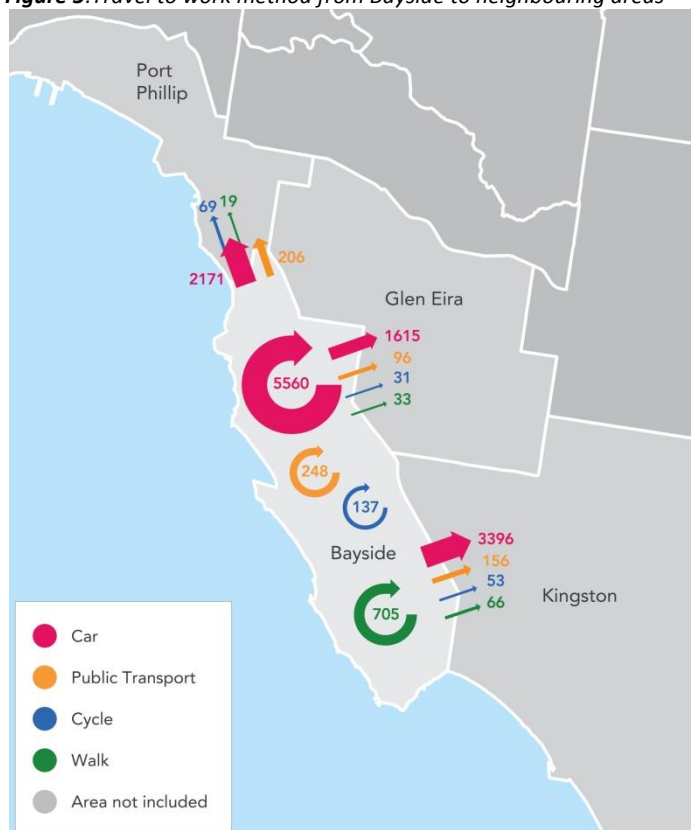
The number of women participating in cycling is considered to be an indicator of how safe and accessible cycling is within a particular area. In many Northern European countries such as the Netherlands, riding a bike is prevalent amongst many women, particularly on public roads. Within Bayside the ratio of women to men who chose to commute to work by bicycle was 1:3 (ABS 2011). The highest number of women commuting to work by bicycle was most prevalent in the 45 to 49 age group.

Approximately 15% (4,697 trips) of journeys to work by all modes from Bayside (VISTA 2010) are less than 5kms which indicates that there is a real opportunity for a number of these trips to be made by bicycle as the topography, climate and natural attractive environment make Bayside an easy place to cycle around.

Figures 5 and 6 over page identify the different modes of transport used to travel to work from Bayside to neighbouring authorities and the CBD.



Figure 5: Travel to work method from Bayside to neighbouring areas



Source: ABS 2011

Figure 6: Travel to work method from Bayside to Melbourne CBD



Source: ABS 2011

7.2.2 Super Tuesday Cycle Count

Super Tuesday is Australia's biggest visual bike count and provides reliable annual figures of bicycle commuter flows and their movements on roads and bike paths in the morning peak (7am - 9am). The aim of the count is to establish a reliable benchmark for bicycle commuting.

Super Tuesday cycle counts have been undertaken within the Bayside area in 2011, 2012 and 2013. Almost all of the sites surveyed have demonstrated an increase in the number of people riding bikes. As anticipated, the Bay Trail, Beach Road, The Esplanade and St Kilda Street were all heavily utilised by people riding bikes during the Super Tuesday cycle counts. Other Bayside locations that experience a high level of riders are North Road, Hampton Street, South Road, Nepean Highway and New Street. It is worthy of noting that the number of cyclists recorded in the first Super Tuesday cycle count increased from 2,876 in 2011 to 5,147 in 2013. This represents an increase of almost 90% in commuter cycle flows in a two year period. **Table 6** over page highlights some of the busiest commuter routes within Bayside as recorded through the Super Tuesday cycle counts.

7.2.3 Bayside Household Survey 2011

In October 2011 Council undertook a household survey to find out more about recreational activities within Bayside. Feedback from the survey identified riding a bike as the third most popular recreational activity within Bayside with 38.2% of all persons included within the survey participating in cycling. Furthermore, when the data was analysed to determine the most popular recreational activity for children aged 5 to 14 years old, riding a bike was identified as the second most popular recreational activity with almost 41% of children participating in cycling within Bayside. However, this figure is significantly lower than the ABS national average of almost 66% which suggests that there is an opportunity to facilitate an increase in recreational cycling amongst children.



Table 6: Summary of cyclists counted along some of the busiest commuter routes

| Location | 2011 | 2012 | 2013 | % increase since 2011 |
|--|------|------|------|-----------------------|
| South Road, Beach Road and Esplanade | 316 | 376 | 393 | +23% |
| St Kilda St, Head Street towards Nepean Hwy, St Kilda St, Head St, Ormond Esplanade | 259 | 329 | 343 | +32% |
| Head Street, Bay Trail towards Brighton and Bay Trail | 266 | 293 | 474 | +78% |
| Hampton St towards Ratho Ave, South Road towards Bluff Rd, Hampton St and South Rd | 106 | 123 | 129 | +21% |
| Glen Huntly Rd towards train station, Nepean Hwy, New St, Glen Huntly Rd and Brighton Rd | 248 | 263 | 310 | +25% |

Source: Super Tuesday Bicycle Counts

As part of the survey respondents were asked to rate specific recreational facilities in terms of low, medium and high importance. In doing so, walking paths and shared cycling paths were identified by respondents as the most important recreational facility within Bayside. In comparison, on-road cycling lanes were identified as the sixth most important recreational facility within Bayside with over 55% of respondents identifying them as very important.

Respondents were also asked to identify how satisfied they were with the existing recreational facilities in terms of low, medium and high satisfaction. From a range of 21 recreational activities, on-road cycling lanes were identified as the recreational facility with the lowest level of satisfaction within Bayside by 42% of respondents. In comparison, walking paths and shared cycling paths were ranked 12th in terms of the lowest level of satisfaction amongst respondents.

The feedback received from the household survey demonstrates that further improvements to both the on-road and shared path network within Bayside are required throughout the lifespan of this strategy if Bayside is to improve its reputation as a pleasant place to cycle for recreation.

7.2.4 Community Engagement Feedback

Bayside BikeScope Survey

The BikeScope survey sought to identify both the characteristics and the needs of residents and riders in relation to the bicycle network to assist in identifying measures that need to be addressed to facilitate an increase in cycling participation within Bayside. Some of the key areas of feedback are considered within this section.

Frequency of Riding Within Bayside

Figure 7 over page highlights how often the survey respondents ride a bike within Bayside with 3 days a week being the most popular answer (19.1%). Interestingly, over 20% of respondents indicated that they ride a bike once a week or less.

Persuasive factors to encourage regular riding

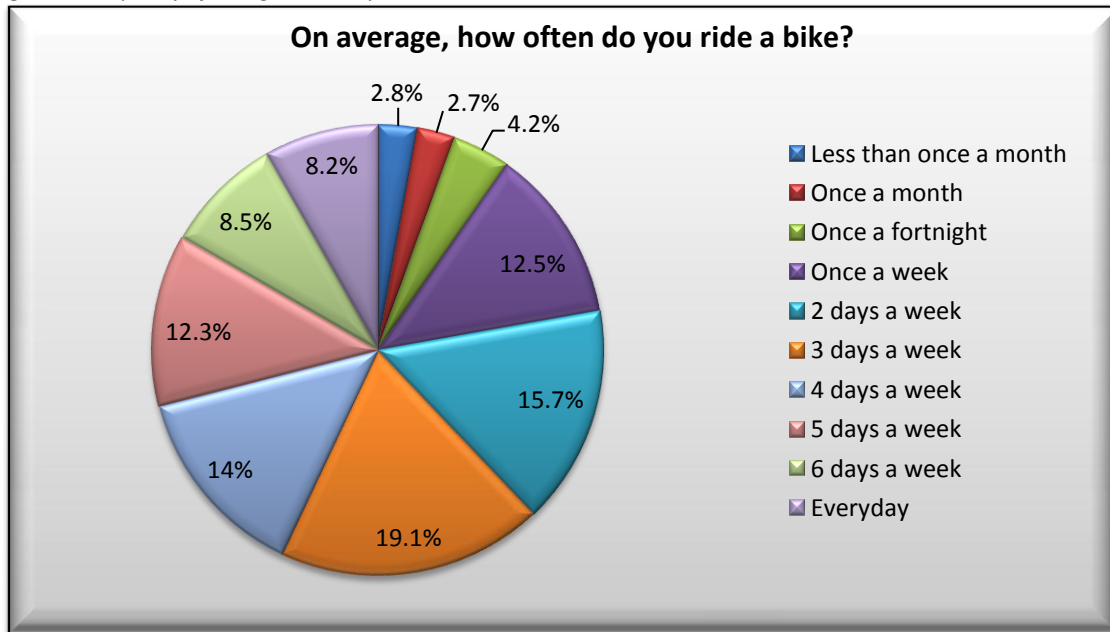
Those people who rode less than once a month were asked to identify those measures that may encourage them to ride more regularly. The top three measures were identified as:

- Access to a continuous off-road shared trail (43%);
- More off-road trails (39%); and



- Improved links between off-road shared paths and destinations (34%)

Figure 7: Frequency of riding within Bayside

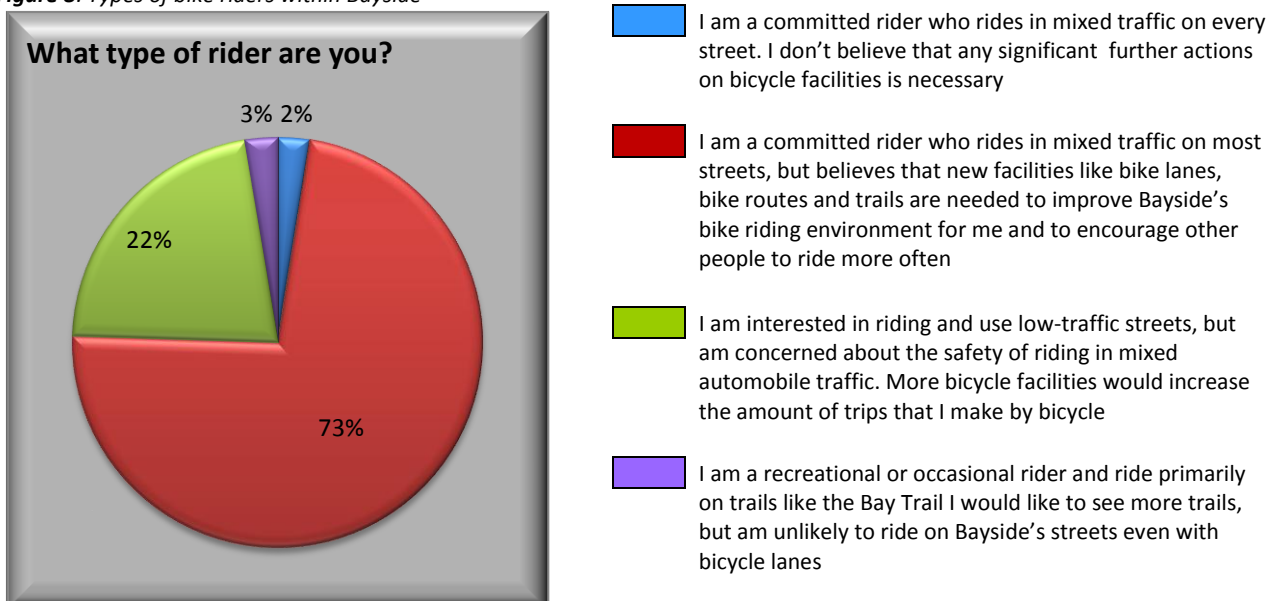


This feedback suggests that the provision of more off-road shared trails as well as improving access to such facilities within Bayside would encourage less frequent riders to ride more often. It is also considered that the provision of off-road shared trail facilities will play a significant role in enabling lesser experienced cyclists within Bayside to develop and improve their cycling skills and confidence. This may lead to the progressive uptake of on-road cycling for some people.

Types of Bike Riders Within Bayside

Figure 8 provides a strong indication of the types of riders in Bayside. The majority of riders fall into the ‘*I am a committed rider who rides in mixed traffic on most streets, but believe that new facilities like bike lanes, bike routes and trails are needed to improve Bayside’s biking environment for me and to encourage other people to ride more often*’.

Figure 8: Types of bike riders within Bayside



Main Reasons For Riding

When asked about the main reasons for riding a bike within Bayside, health and fitness was identified as the main reason by almost 68% of respondents. Other significant reasons for choosing to ride a bike within Bayside include recreation/passive cycling (59%) and riding to work (41%). **Figure 9** highlights the main reasons for respondents riding a bike in Bayside.

Figure 9: Main reasons for riding within Bayside

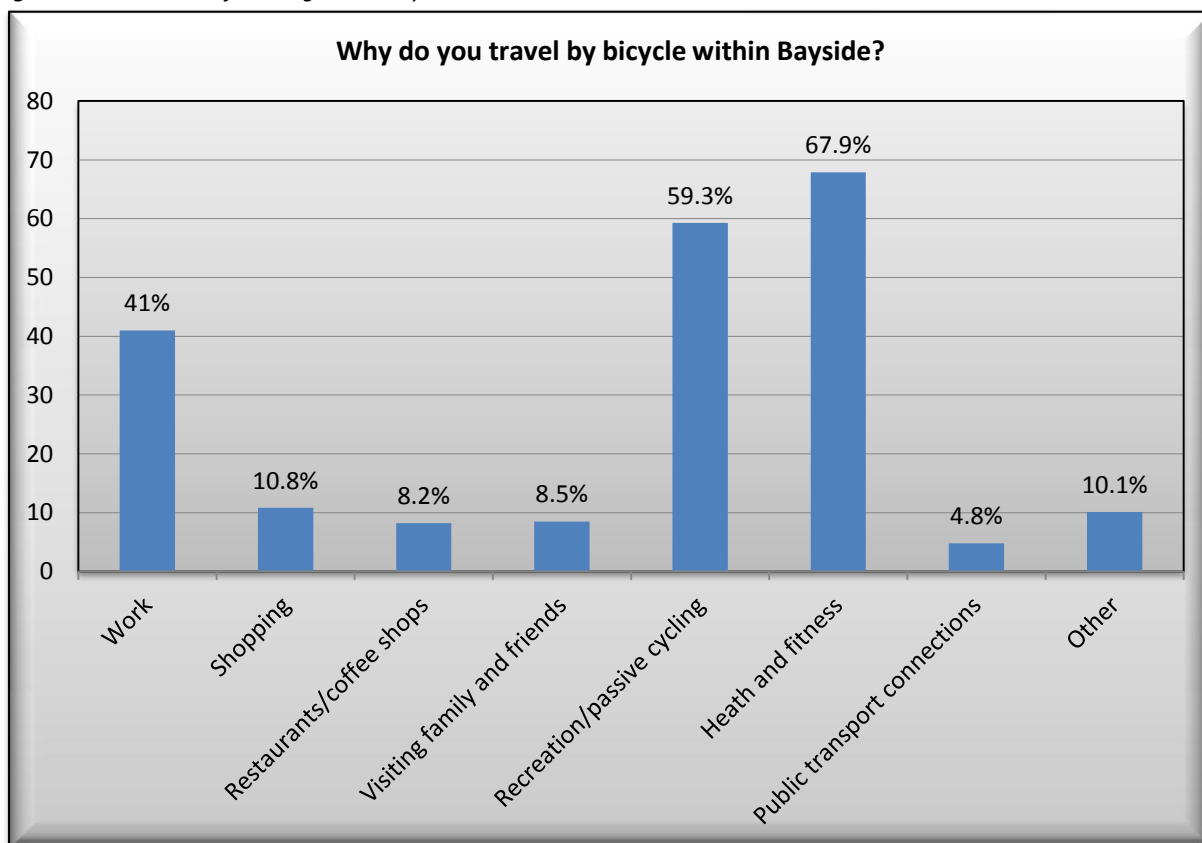


Figure 9 suggests that there are potential opportunities to increase the number of cycling trips within Bayside undertaken for the purpose of connecting with public transports modes such as trains. However, any increase in cycling trips for this purpose will depend on the quality of end of trip facilities such as bicycle parking at train stations.

Suggested on-road improvements

The majority of roads identified by respondents as needing to be improved for cyclists were roads managed by VicRoads with similar improvements suggested for each road:

Beach Road

- Dedicated bicycle lane
- Removal of car parking
- Improved surface

Nepean Highway

- Dedicated bicycle lane
- Improved surface

Bluff Road

- Dedicated bicycle lane
- Removal of car parking

Bay Road

- Dedicated bicycle lane
- Truck ban



In contrast, only a small number of local roads managed by Council were identified by respondents as needing to be improved for cyclists and these included:

New Street

- Surface improvements
- Continuous bicycle lane
- Improved road markings

Martin Street

- Wider bicycle lane
- Continuous bicycle lane
- Surface improvements

Dendy Street

- Surface improvements
- Continuous bicycle lane

Suggested off-road improvements

Respondents suggested improvements to a number of shared off-road paths including:

Bay Trail

- Increased separation between cyclists and pedestrians
- Improved surface
- Widen path

Nepean Highway Shared Path

- Improved surface
- Extend path (currently a missing section at Gardenvale)
- Improved lighting

Elster Creek Trail

- Improved surface
- Wider path
- Improved lighting

Intersections with conflict

As part of the BikeScope survey respondents were asked to identify those intersections within Bayside where they had experienced conflict. Two of the most common sites identified included Beach Road / Balcombe Road / Bluff Road intersection and the Beach Road / South Road intersection.

Bicycle Parking

Respondents indicated that more bicycle parking is required at destinations within Bayside. The majority of respondents (51%) report to be using on-street posts or other street furniture to park their bikes, with only 31% of respondents using on-street bicycle parking hoops. The majority of respondents gave a medium to low level of satisfaction for on-street bike parking and bike parking at train stations. This finding indicates that more bicycle parking is required at destinations within Bayside. Where insufficient bike parking is provided, this may deter people from making short trips that could be undertaken by bike, such as riding to the shops, cafes and train stations.

Bicycle Strategy Workshop

Participants at the workshop were asked to identify a range of ideas that could be considered by Council in trying to encourage more people to cycle for short trips within Bayside. Some of the common themes



discussed included:

- Engaging with schools to encourage more children to ride to/from school;
- Improving bicycle parking at key destinations;
- Undertaking marketing campaigns to raise mutual awareness between all road users;
- Inclusion of regular cycling articles in local media;
- Promoting cycling at public events; and
- Infrastructure improvements to both the on-road and off-road bicycle network across the municipality.

Online Discussion Forum

The online discussion forum asked for feedback on three specific questions relating to cycling within Bayside. Details of the questions are provided below together with some of the common themes that emerged:

How does Council get more people cycling?

- Cycling education/training for school children;
- Appointment of a full time Bike Officer at Council;
- Councillors to champion cycling issues;
- Education campaigns aimed at both cyclists and drivers to improve road user behaviour; and
- Improved end of trip facilities, for example, secure bicycle parking, showers and changing facilities.

Where do we need more bicycle parking?

- Activity centres;
- Train stations; and
- Beaches.

What bicycle infrastructure is needed for Bayside?

- Elster Creek Trail upgrade;
- Greater priority for cyclists at intersections and roundabouts;
- Lighting on the Bay Trail;
- Bicycle storage boxes at all intersections;
- An off-road shared user path at Reserve Road;
- Improvements to the on-road bicycle lanes on Martin Street; and
- On-road bicycle lane along Hampton Street activity centre.



8. Roads, Crashes and Safety

8.1 Who is in charge of the roads?

Roads in Bayside are owned and managed either by Council as local roads, or by VicRoads as State roads. Whilst Council is responsible for the maintenance of local roads, in many cases it has to seek endorsement from VicRoads to implement modifications to the network, for example to modify speed limits or to provide pedestrian crossings.

Roads managed by VicRoads are managed according to designated priority functions. On these roads, VicRoads is responsible for the installation of bicycle infrastructure, the implementation, operation and maintenance of all traffic and pedestrian signals and speed limits.

During the development of the Bicycle Strategy Council has received a number of requests from the community for new and improved bicycle infrastructure along many roads managed by VicRoads. Whilst Council has limited control on what happens on these roads, it will advocate for bicycle infrastructure improvements on them.

8.2 Cyclist Crashes and Safety

It is important that Council understands where cyclist crashes are occurring within the municipality to determine the issues facing cyclists. A review of cyclist crashes occurring in Bayside between January 2007 and December 2011 has been undertaken using the VicRoads CrashStats database and these are outlined within **Table 7** together with the number of cyclist crashes occurring in neighbouring municipalities.

Table 7: Summary of cyclists crashes within Bayside and neighbouring municipalities

| Cyclist Crashes (2007 to 2011) | | | | |
|--------------------------------|-------|---------|--------------|---------------------------------|
| | Fatal | Serious | Other Injury | Total number of cyclist crashes |
| Bayside | 1 | 99 | 162 | 262 |
| Kingston | 1 | 98 | 146 | 245 |
| Port Phillip | 1 | 176 | 326 | 503 |
| Glen Eira | 0 | 60 | 160 | 220 |

*Crashes include any crash in which the police were called to and where a person needed medical treatment.

Over the five year period 2007 to 2011 there was a total of 262 cyclist crashes in Bayside. Of these:

- 75% of crashes occurred on roads managed by VicRoads with 25% occurring on Council managed roads;
- 55% of the crashes occurring on roads managed by VicRoads occurred on Beach Road;
- On the Council managed road network 69% of all cyclist crashes occurred at intersections with 31% occurring at midblock locations;
- The five worst intersections for cyclist crashes on the Council managed road network were roundabouts at the following locations:
 - St Kilda Street / Bent Street (3 crashes)
 - Bent Street / Murphy Street (2 crashes)
 - Cochrane Street / Martin Street (2 crashes)
 - Durrant Street / Male Street (2 crashes)
 - Dendy Street / Roslyn Street (2 crashes)
- 92% of all crashes were with vehicles and less than 1% with pedestrians;
- 79% of all crashes occurred in daylight with 10% each at dusk and in the dark; and
- 65% of crashes occurred on roads with a speed limit of 60 kph, 18% with 50 kph, 5% with 80 kph and 3% with 70 kph



The cyclist crash analysis demonstrates the need for Council to work in partnership with VicRoads to provide better protection for cyclists using the VicRoads managed road network. Whilst the number of cyclist crashes on the Council managed road network was much lower than those occurring on roads managed by VicRoads, there is still a great deal of work to be undertaken to reduce the incidence of crashes. This Bicycle Strategy aims to reduce crash risks through improvements to on-road bicycle infrastructure and community education and this is reflected in the strategies contained within Section 10.



9. The Bayside Bicycle Network

The bicycle network within Bayside consists of two components as outlined below.

9.1 The Principal Bicycle Network and Bicycle Priority Routes

The Principal Bicycle Network (PBN) and a subset of routes referred to as Bicycle Priority Routes (BPR's) have been developed by VicRoads, in partnership with all local government. The PBN is a network of proposed and existing bicycle routes that help people ride to major destinations in the Melbourne metropolitan area. The PBN and BPR's guide state investment in the bicycle network.

The BPR's have the greatest potential to provide separation from motorised traffic and provide access to activity areas and it is considered that they will provide the highest return on any State Government investment in the provision of bicycle infrastructure by delivering an increase in cycling along such routes. The PBN and BPR's consist of on-road routes, on both VicRoads and Council managed roads as well as off-road routes which either Council or VicRoads may be responsible for depending on their location.

9.2 The Municipal Bicycle Network

The Municipal Bicycle Network (MBN) is a planned network of existing and proposed bicycle routes within Bayside that provide links between the PBN to provide access to a range of local destinations such as activity centres, schools and community centres and are generally for shorter trips. Council is responsible for the development and management of the MBN which tends to be located on the local road network and through local parks and reserves. **Appendix 1** identifies the bicycle network within Bayside.

9.3 Limitations of the Existing Bicycle Network

There are contrasting differences in the provision of the existing bicycle network within Bayside:

- A comprehensive bicycle network exists within those areas of the municipality north of South Road, namely Brighton, Brighton East and Hampton East;
- Those areas in the south of the municipality, namely Beaumaris, Black Rock and Cheltenham have a number of on-road bicycle lanes, but are not as well served their counterpart areas in the north of the municipality; and
- Those areas within the middle of the municipality such as Hampton, Highett and Sandringham have a limited bicycle network.

Specific limitations associated with the network include:

- Nepean Highway acts as major barrier for cyclists. There are limited opportunities to safely cross Nepean Highway and this restricts cycling to destinations both within and outside of the municipality;
- Busy roads such as Bay Road, Beach Road and Bluff Road create barriers for potential cyclists; and
- The popularity of the Bay Trail in some locations contributes to congestion along the shared path, sometimes resulting in conflict between users.

Council will seek to address these limitations by:

- Examining the feasibility of providing more bicycle infrastructure so more residents can access bicycle facilities;
- Extending existing routes to important destinations such as shopping centres, public transport hubs, schools, work places, open spaces and cultural and sporting facilities;
- Upgrading existing bicycle facilities to provide greater physical and visual separation to attract new riders;



- Identifying alternative on-road routes that avoid some of the busier roads within Bayside that currently act as a potential barrier in attracting new cyclists; and
- Advocating to VicRoads for increased bicycle infrastructure on the PBN and BPR's.

9.4 Bicycle Links to Neighbouring Municipalities

There are three municipalities adjacent to Bayside. Existing and proposed bicycle links between Bayside and the surrounding municipalities are outlined below:

City of Glen Eira

North Road, Thomas Street and Nepean Highway form the border between Bayside and the City of Glen Eira. There is an on-road cycle lane along both North Road and Thomas Street and the Nepean Highway shared path runs adjacent to the Nepean Highway. The Elster Creek Trail, is a shared user path which starts at Bentleigh Station, passing through Bayside to provide a link to the Bay Trail. This strategy contains a proposal to upgrade sections of the Elster Creek Trail within Bayside including the section through Union Street Reserve which provides a direct link into the City of Glen Eira.

City of Port Phillip

The Bay Trail at Head Street provides a direct link between Bayside and the City of Port Phillip. Other direct on-road cycle links exist between New Street and Glen Huntly Road. St Kilda Street also forms a border between Bayside and the City of Port Phillip and a proposal to provide a shared user path along the eastern side of St Kilda Street is currently being investigated by Council. This proposal would formalise a section of the Elster Creek Trail within Bayside and also assist in establishing a continuous shared path through Bayside, and the City's of Port Phillip and Glen Eira.

City of Kingston

A section of the Frankston rail line and Charman Road form the border between Bayside and the City of Kingston. There is an on-road bicycle lane along Charman Road. A number of east-west roads including South Road, Highett Road, Bay Road, Park Road and Balcombe Road also provide a link between Bayside and Kingston. On-road bicycle lanes exist on South Road and Balcombe Road.



10. Strategies and Actions

Fourteen strategies have been identified to achieve the vision and guiding principles of the Bicycle Strategy and they are now outlined within this section.

Principle 1: Ensure the provision of high quality bicycle infrastructure across Bayside

The development of a comprehensive network of direct and well connected cycle routes that are safe, accessible, convenient, comfortable and attractive is the core feature of any proposal aimed at facilitating increased levels of cycling participation. Bicycle infrastructure should provide links to key destinations and be characterised by high standards of design and maintenance.

Strategy 1 – Ensure the provision of high quality on-road bicycle infrastructure across the municipality

Action 1.1 *Improve the provision of the on-road bicycle network*

Some cyclists will take to the road regardless of conditions. However, a key factor in attracting new riders to cycle for short trips is the need to improve infrastructure in and around key destinations such as shopping centres, public transport hubs, schools, workplaces, open spaces and cultural and sporting facilities. Council will undertake bicycle audits along key routes within the municipality to identify infrastructure and traffic management opportunities for improved safety and connectivity for cyclists.

When providing on-road bicycle facilities, Council will continue its approach of separating cyclists from vehicles through the provision of on-road bicycle lanes which generally consist of a solid white line and a bicycle symbol. Whilst this approach has already worked in attracting a number of cyclists in Bayside, it is recognised that bicycle lanes which provide greater physical and visual separation will also be needed in some locations if rider numbers are to increase further. In view of this, Council will trial the implementation of the following treatments within Bayside:

- Audio tactile line marking – a white line paint treatment containing a rumble strip that creates a vibration when driven over by vehicles; and
- Green lane treatments – a paint treatment that makes a bicycle lane more visible by colouring the sections of the lane green. This type of treatment is currently used at busy intersections within other metropolitan municipalities across Melbourne.

Proposed future projects, where new or improved on bicycle infrastructure will be considered, include:

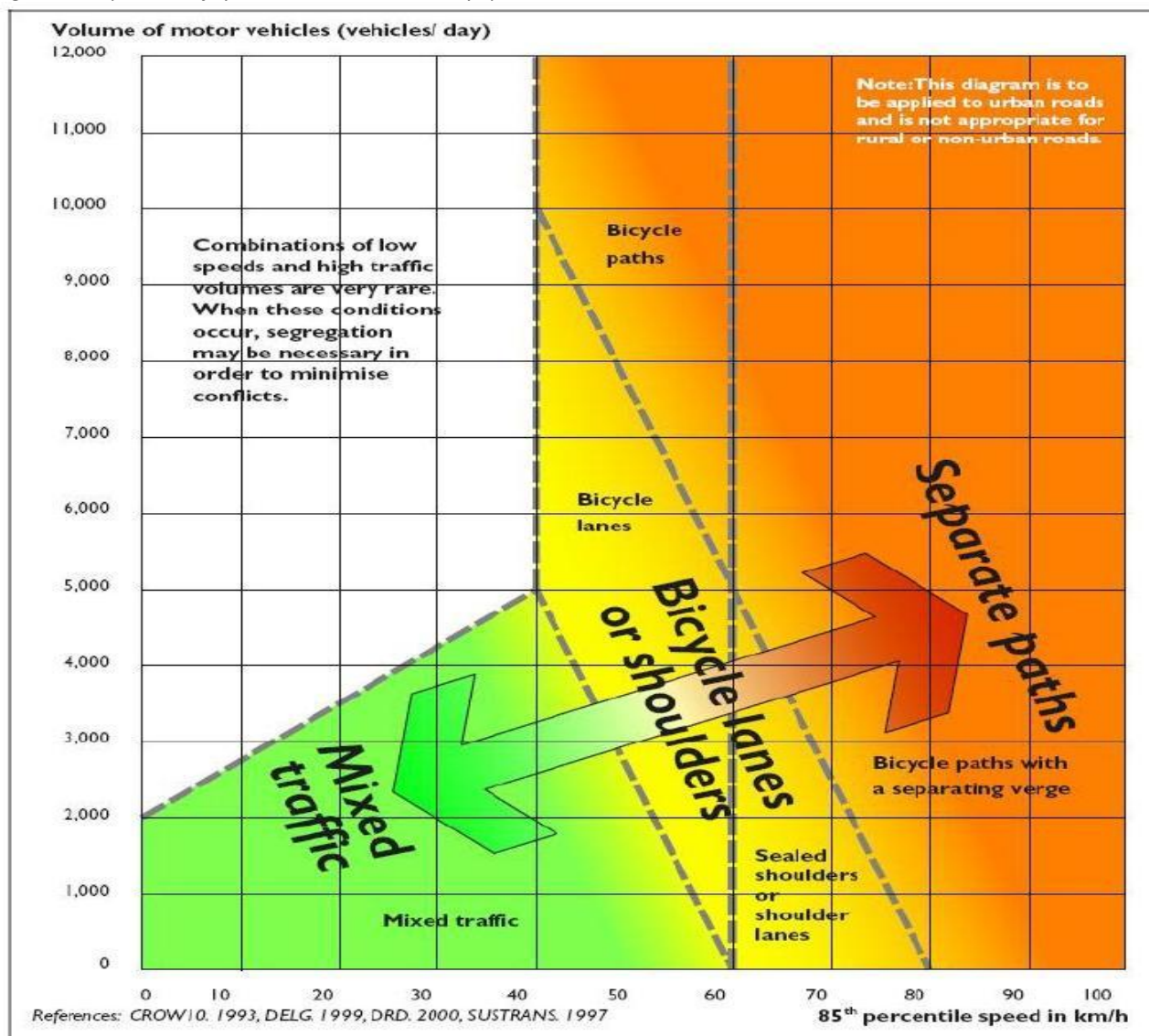
- New Street, Brighton
- Thomas Street, Brighton East
- Martin Street, Gardenvale
- Reserve Road, Beaumaris and Cheltenham
- St Andrews Street, Brighton

Action 1.2 *Maximise the use of the existing local road network as part of the on-road bicycle network*

The development of safe, direct and well connected on-road bicycle routes will be supplemented by the creation of bicycle routes along less trafficked local roads that still provide efficient access to key destinations. However, when considering the type of bicycle facility to provide along a particular road Austroads guidelines suggest that separation from motor vehicles is not always required on local and collector roads that have traffic volumes less than 3,000 vehicles per day and speeds less than 50km/h as outlined in **Figure 10** over page. In such circumstances it is considered appropriate that cyclists may share the road with motor vehicles.



Figure 10: Separation of cyclists and motor vehicles by speed and volume



Within Bayside there are a number of local streets with low traffic volumes and speeds. Whilst the majority of these streets do not have the available space to accommodate a separated bicycle lane, they are still well suited to cyclists of all abilities. In view of this, it is considered appropriate that cyclists share the road with motor vehicles on such roads. The image below is representative of a typical low traffic volume and low speed street within Bayside.



Those local streets that form part of the on-road bicycle network are identified as the Municipal Bicycle Network within Appendix 1. However, in order that these roads are easily identifiable to cyclists using the bicycle network Council will investigate the use of bicycle advisory markings along them and where this is not feasible, consideration will be given to them becoming signed bicycle routes.

Bicycle Advisory Markings



Apperley Street, Fitzroy, Melbourne: Bicycle advisory markings are used to indicate a local bicycle route using a quiet local street

The practice of using 'bicycle advisory markings' (BAM's) is a new world-wide trend in bicycle lane provision, including in Australia. BAM's are useful for marking a shared road space where there is insufficient space to provide an on-road bicycle lane. In some instances the markings can help riders and motor vehicles share road space, however they are advisory only and do not have any legal standing.

The Austroads Guides only provide limited guidance on the use of BAM's and are clear that wide kerbside lane markings and other treatments are only advisory and that marked bicycle lanes are always preferred on busier roads. It should be noted that the provision of BAM's will only be investigated on lower speed and low volume streets within Bayside.

Action 1.3 *Advocate to VicRoads for increased bicycle infrastructure on the Principal Bicycle Network and Bicycle Priority Routes within Bayside*

The Principal Bicycle Network (PBN) and a subset of routes referred to as Bicycle Priority Routes (BPR's) have been developed by VicRoads in partnership with all local government. The PBN is a network of proposed and existing bicycle routes that help people ride to major destinations in the Melbourne metropolitan area.

VicRoads has also identified a subset of routes on the PBN that are known as Bicycle Priority Routes (BPR). BPR's have the greatest potential for separation from motorised traffic and provide access to activity areas. The PBN and BPR's consist of on-road routes, on both VicRoads managed roads and Council managed roads as well as off-road routes which either Council or VicRoads may be responsible for depending on their location. The PBN and BPR's guide state investment in the network.

Community feedback received during the development of this strategy identified the need for either new or improved bicycle infrastructure on the following roads managed by VicRoads:

- Balcombe Road (BPR)
- Beach Road (PBN)
- Nepean Highway (BPR)
- South Road (BPR)
- Bay Road (BPR)
- Bluff Road (PBN)
- Hampton Street (BPR)
- North Road (BPR)

Council will advocate to VicRoads for increased bicycle infrastructure on the above mentioned PBN and BPR's throughout the lifespan of this strategy.

Action 1.4 *Address the needs and safety outcomes of cyclists in all transport infrastructure upgrades and road maintenance programs*

As part of the *Transport Integration Act 2010*, Council has responsibilities to manage the local road network to support sustainable alternative transport modes. Road maintenance projects and the provision of new infrastructure facilities such as intersections and traffic calming measures provide an opportunity to



incorporate a design that can accommodate cyclists. This does not necessarily mean that specific facilities for cyclists should be installed but that cyclists should be able to navigate through traffic devices and road layouts safely and easily.

Council will establish a process to explore opportunities to extend and enhance the bicycle network as part of all transport infrastructure upgrades and road maintenance projects, with the needs of cyclists considered in range of projects including:

- The resurfacing of roads;
- The design and positioning of grates and gutters;
- Incorporating cycle facilities into traffic calming measures; and
- Incorporating formal cycle crossing points into new traffic and pedestrian signals.

In addition, Council will coordinate road works to minimise inconvenience to cyclists during works on both the road network and on the off-road bicycle network through the application of the relevant guidelines, standards and legislation.

Strategy 2 – Ensure the provision of high quality off-road bicycle infrastructure across the municipality

Action 2.1 *Develop a network of well connected off-road bicycle routes that are safe, accessible, convenient, comfortable and attractive*

Many cyclists do not consider on-road cycling as an option, particularly on those roads with high volumes of traffic and high vehicle speeds. Off-road bicycle facilities provide an opportunity for a wide range of users including children, families and commuters to participate in cycling. Off-road facilities are also important for lesser experienced cyclists as they provide an opportunity to develop confidence and skills, which may lead to a gradual uptake of on-road cycling. Off-road bicycle infrastructure is commonly provided as a shared path used both by pedestrians and cyclists.

A survey of 535 Bayside residents, undertaken as part of the development of the Bayside Integrated Transport Strategy, indicated a preference (69.5% support) for off-road bicycle facilities. Council will seek to further develop the network of off-road bicycle routes in Bayside. Proposed future projects include:

- Little Brighton Reserve, Union Street, shared path
- St Kilda Street shared path (part of the Elster Creek Trail between Bent Avenue and the City of Port Phillip boundary)

Action 2.2 *Improve the quality of the existing off-road cycle network*

The most popular shared user path within Bayside is the Bay Trail which runs for 17 km adjacent to the attractive Bayside foreshore and is a popular recreational and commuter route. Other popular shared user paths within Bayside include the Elster Creek shared path which runs alongside the Elster Canal and the Nepean Highway shared path. Council recognises that there is a need improve the quality of these routes in order to facilitate increased levels of cycling participation along them. Possible future projects include:

- Upgrade of the Elster Creek Trail shared path between Gardenvale Station and Head Street;
- Completion of the Nepean Highway shared path missing link between Gardenvale Station and Rose Street; and
- Duplication of the Bay Trail between Bay Street and Sandown Street to provide segregated facilities for pedestrians and cyclists.



Action 2.3 *Improve access to the Bay Trail across Beach Road*

Cyclists trying to access the Bay Trail and the Bayside foreshore from the adjacent side streets off Beach Road, e.g. Dendy Street, are unable to cross Beach Road and access the Bay Trail legitimately. In order to improve accessibility for cyclists at such locations, the provision of an attractive and safe legal path of travel to join the Bay Trail needs to be provided. Council will investigate the feasibility of directing on-road cyclists on to a widened section of shared footpath, via a new pram ramp, to access controlled crossing opportunities along Beach Road. Appropriate signage and surface treatments will also need to be considered to ensure the safe use of such a facility. The locations to be investigated include:

- Dendy Street, Brighton
- South Road, Brighton (in collaboration with VicRoads)
- Melrose Street, Sandringham
- Bayview Crescent, Black Rock
- Tramway Parade, Beaumaris

Strategy 3 – Improve directional signage for cyclists

Action 3.1 *Develop a structured approach to providing directional signs for cyclists*

To encourage more people to consider cycling and to increase the convenience of existing cyclists, work must be undertaken to increase user confidence in navigating around Bayside with consideration given to how it can be supported by and be supportive of existing places and other modes of transport. The existing provision of directional signs for cyclists in Bayside is limited. In view of this, Council will develop a structured approach to providing directional signage linking major and local destinations. Signage information needs to be trusted and located where it is needed and can easily be seen by cyclists.

Action 3.2 *Implement directional signage for cyclists in accordance with the adopted approach on an area by area basis*

Following the development of an approach to provide directional signage for cyclists, directional signage for cyclists will be implemented on an area by area basis.

Strategy 4 – Improve safety and priority for all cyclists

Action 4.1 *Examine the feasibility of improving priorities for cyclists at roundabouts on key bicycle routes*

Community feedback received during the development of this strategy has indicated a need to improve priority for cyclists at roundabouts within the municipality. Additionally, the cycle crash analysis undertaken as part of the development of this strategy identified a number of roundabouts within the municipality where cyclist crashes have occurred between 2007 and 2011.

A common issue identified by the community was the use of entrance chicanes at roundabouts which are designed to reduce the speed of motor vehicles entering roundabouts. Whilst these chicanes do slow motor vehicles, they also force those cyclists who have not already taken the lane on approach to the roundabout, to suddenly do so at the roundabout. This can sometimes result in conflict with those motor vehicles about to enter the roundabout.

Council will examine the feasibility of improving priority for cyclists at those roundabouts where the existing on-road bicycle lane terminates prior to the roundabout. Those roundabouts that will be examined include (but not limited to):



- Dendy Street / Roslyn Street;
- Martin Street / Cochrane Street;
- New Street / Bent Avenue;
- New Street / St Andrews Street;
- New Street / Dendy Street; and
- New Street / Were Street.

Three options will be considered when examining how priority for cyclists can be improved at roundabouts within the municipality:

- If there is sufficient on-road space to accommodate a bicycle lane up to the give-way line marking at a roundabout, then subject to no site specific safety issues being identified, works will be programmed to provide a bike lane a bicycle lane up to the give-way line at the roundabout;
- Where there is insufficient space to accommodate an on-road bicycle lane up to the give-way line marking at a roundabout, the feasibility of reallocating a section of the adjacent footpath / nature strip to accommodate a section of bicycle lane will be explored; and
- At those locations where it is not feasible to provide an on-road bicycle lane up to the give-way line marking at a roundabout, additional road markings and signage will be used to highlight the potential presence of cyclists (to motor vehicle drivers) emerging from the bicycle lane on the approach to a roundabout.

Action 4.2 *Implement bicycle storage boxes at intersections*

Bicycle storage boxes provide a visible location in front of waiting vehicles at an intersection where cyclists, particularly those turning left or right, can wait for the green signal phase. Bicycle storage boxes also provide a space for hook turning cyclists from the road on the right to store ahead of the traffic stream on the road which the cyclist is turning into. This can be particularly useful to less confident cyclists at those intersections where right turning may be unattractive to them. The Bicycle Strategy recommends the installation of bicycle storage boxes at all signalised intersections within the municipality and Council will work towards achieving this throughout the lifespan of the strategy.

Action 4.3 *Advocate to VicRoads for early starts for cyclists at traffic signals*

Traffic signals that support or favour bike riders will increase the number of riders on a route. Early starts for cyclists (also called late starts for vehicles) provide bike riders with a green signal, in the form of a bicycle lantern, while the general traffic continues to face a red light. After a pre-determined length of time, usually a matter of seconds, the parallel vehicles are also given a green light. This can be done by either reducing the amount of green time for parallel vehicles or increasing the overall cycle time. Early starts for bike riders are generally used at sites where there are a high volume of cyclists along a local (council managed) road that crosses an arterial (VicRoads managed) road. Council will investigate, identify and prioritise those intersections within the municipality where early starts for cyclists would enhance the level of service for cyclists.

Action 4.4 *Advocate to VicRoads for lowering speed limits to 40km/h on selected roads*

Vehicle speed is critical in road safety, particularly for pedestrians and cyclists. Research indicates that where impact speeds can be reduced to 40km/h or less, the risk of severe trauma for pedestrians and cyclists is greatly reduced. Additionally, vehicle speeds also contribute to negative traffic perceptions which are associated with decreases in walking and cycling. Where pedestrians and cyclists are safer, levels of walking and cycling tend to be higher. Council will seek to improve the cycling environment by advocating to VicRoads for 40km/h speed limits on the following roads:

- Bay Street, Brighton (between New Street and Nepean Highway);
- Church Street, Brighton (between New Street and Male Street);



- Hampton Street, Hampton;
- Station Street, Bay Road and Melrose Street, Sandringham;
- Bluff Road and Balcombe Road, Black Rock

Action 4.5 *Develop a Street Space Management Plan which assigns greater priority to cyclists over private vehicles on roads within the municipality*

This approach is aligned with that of many metropolitan municipalities seeking to achieve more sustainable transport environments. It is recognised that priorities for cyclists will vary according to the different streets and roads within Bayside, which will be set out in the Street Space Management Plan. There is wide community support for an approach which makes roads safer and easier to use for modes other than private vehicles. The needs of private vehicles cannot dictate the shape and nature of interventions – which too often leads to poor outcomes. Instead, the Street Space Management Plan will explicitly recognise and provide direction on the requirements for all modes, including cyclists, ensuring adequate arrangements for all.

Action 4.6 *Utilise Local Area Traffic Management to improve cyclists' safety and/or give cyclists greater priority, in terms of access and journey times, over other traffic on roads within the identified bicycle network*

Local Area Traffic Management (LATM) is concerned with the area-based planning and management of street space usage to attain acceptable levels of speed, traffic volume and composition in local and collector streets, while increasing amenity and safety for residents and improving access for pedestrians and cyclists.

Council has a LATM policy which was adopted in June 2012 to ensure a consistent, equitable and inclusive approach to the investigation, consultation, design, implementation and monitoring of LATM schemes. LATM measures implemented as a result of this policy will be used by Council to create and improve safe and attractive bicycle routes on Council managed roads.

Action 4.7 *Minimise conflict on shared paths between users*

There is a need to reduce conflict between pedestrians and cyclists on shared paths across Bayside. Taking the Bay Trail as an example, it provides a significant recreational resource for the local community, attracts visitors from the wider metropolitan area and is a key tourist attraction that provides access to the foreshore and the many popular Bayside beaches. The popularity of the Bay Trail, especially at weekends, can result in conflict between some user groups on the trail. This is of particular concern at intersection points of pedestrian entry to the foreshore.

Council will seek to minimise conflict between pedestrians and cyclists on shared paths. Measures to reduce conflict will vary depending on the type of path or trail and the volume of pedestrians and cyclists, but may include line marking and signage, increasing path widths, greater separation of modes and behaviour change campaigns.

Strategy 5 – Improve conditions and usage for cyclists on Beach Road

Action 5.1 *Work in partnership with Victoria Police, VicRoads and other stakeholders to improve conditions for cyclists along Beach Road*

Beach Road is one of the premier training cycling routes in Australia and is used by up to 8000 cyclists on weekend mornings. It is popular as a training cycling venue because of the limited number of signalised intersections, its gentle topography, the quality of its road surface and the coastal vistas.

Over the 5 year period between 2007 and 2011 there were 109 recorded cyclist crashes on Beach Road. This represents 41% of all cyclist crashes that occurred within the municipality and 55% of those cyclist crashes occurring on roads managed by VicRoads with Bayside.



In November 2010 the Beach Road weekend 6am to 10am 'No Stopping' zones were introduced. An analysis of the current crash data available to Council indicates that the 'No Stopping' zones have improved safety, as there have been no cyclist crashes involving parked vehicles during the 6am to 10am period at weekends.

Over recent years Council has worked in partnership with range of stakeholders including Victoria Police, VicRoads, Bicycle Network Victoria, Cycling Victoria and the Amy Gillett Foundation in trying to better manage the different user groups along Beach Road. Council will continue to work with such stakeholders in trying to improve conditions for cyclists along Beach Road.

Action 5.2 Investigate the feasibility of installing signage along Beach Road aimed at raising the awareness of all road users of the need to share the road respectfully

As road users, whether this be a pedestrian, cyclist or driver of a motorised vehicle we are each responsible for maintaining safe conditions through our own actions. Consequently, all road users need to be aware of other road users, making space for them and taking reasonable actions to ensure that all users are aware of each other and that they share the road respectfully. It is considered that the installation of signage along Beach Road aimed at raising the awareness of all road users of the need to share the road respectfully will assist in improving the safety and amenity of all users of Beach Road.

Action 5.3 Investigate the safety merits associated with each kern-outstand along Beach Road. Where it is deemed safe to alter a kerb-outstand, advocate to VicRoads for its redesign

There are a number of locations along Beach Road where kerb-outstands are present. The kerb-outstands force cyclists from the left-hand lane of Beach Road into the right hand lane, creating a potential for conflict with vehicles already travelling in the right hand lane of Beach Road. The safety merits associated with each kerb out-stand will be investigated and where it is safe to do so, Council will advocate to VicRoads for the redesign of each kerb-outstand.

Action 5.4 Advocate to State Government for funding to implement the actions contained within the Beach Road Corridor Strategy

A key objective of the Beach Road Corridor Strategy (2011) is to improve the overall safety and amenity for all users of Beach Road with a particular emphasis on motorists, cyclists and pedestrians. The strategy contains a number of short term recommendations aimed at improving the safety and amenity of cyclists including:

- Indented parking on the beach side near Hampton Beach;
- Indented parking south of Balcombe Road / Bluff Road roundabout; and
- Education programs to promote the Cyclist Code of Conduct to all users of Beach Road

In September 2010, the former Minister for Roads and Ports wrote to Council advising that \$1 million would be made available to Council to fund the recommendations from the strategy. This funding has yet to be made available to Council. In view of this, Council will continue to advocate to State Government for funding to implement the actions contained within the Beach Road Corridor Strategy.

Strategy 6 – Effective maintenance of the bicycle network

Action 6.1 Monitor and maintain the on-road bicycle network

The quality of the road surface is an important determinant of the attractiveness of a route for cyclists. Poor surfaces deter cyclists from using a route, give an uncomfortable ride, can cause damage to bicycles and cause cyclists to lose control or swerve suddenly. A high standard of maintenance is therefore essential to ensure a good quality riding surface.



Council undertakes a routine maintenance inspection of its municipal road network once every 52 weeks. Any occurrences of road maintenance defects such as potholes, ruts and depressions that are reported in between inspections are assessed by Council. In such instances, Council has set response times to rectify such issues and these are outlined within Council's Road Management Plan. Road condition rating is undertaken every four years to monitor the condition of roads within the municipality. This information is used to prioritise and schedule works as part of Council's annual road maintenance program. All road markings, including on-road bicycle lanes are replaced when a road is resurfaced.

Action 6.2 *Ensure that the reinstatement of roads does not create any unnecessary safety risks for cyclists*

A smooth road surface is a key factor in improving the comfort of cyclists and in encouraging new riders. Uneven road surfaces can expose cyclists to unnecessary safety risks. In view of this, it is imperative that a smooth and even road surface is provided following the completion of road works. Following the completion of road works Council will ensure that the reinstatement of roads does not create any unnecessary safety risks for cyclists.

Action 6.3 *Monitor and maintain the off-road bicycle network*

Issues such as broken glass, overgrown vegetation and low tree branches detract from the attractiveness of the off-road cycle network. As part of Council's routine maintenance inspection the Bay Trail is inspected once every 26 weeks. Other off-road routes such as the Elster Creek Trail are inspected once every 52 weeks.

Whilst the maintenance of the Nepean Highway shared path is the responsibility of VicRoads, Council will undertake a condition assessment of the path within the first year of the adoption of the strategy to identify and document any maintenance issues along the path. The information collated as part of this process will be shared with VicRoads in order for any identified maintenance issues to be resolved.

Action 6.4 *Raise awareness amongst cyclists of the reporting procedure for dealing with maintenance issues*

Given that maintenance issues, both on-road and off-road, have a significant impact on cyclists, it is important that appropriate action is undertaken as soon as possible to rectify any maintenance issues. Council currently has a number of ways in which maintenance issues can be reported; direct contact at the Corporate Centre, telephone, mail, email and via the internet. Council will raise the awareness of the reporting procedure for dealing with maintenance issues to ensure that as many cyclists as possible are able to report any relevant maintenance issues.



Principle 2: Ensure the integration of cycling

The way we plan for land use and transport can increase the proportion of trips undertaken by bicycle and the creation of an environment conducive to cycling will facilitate an increase in transport choice within the community. The provision of end of trip facilities for cyclists and how well cycling is integrated with other sustainable modes of transport will also be a major factor in ensuring that cycling is an attractive mode of transport for short local trips within Bayside.

Strategy 7 – The Bayside Planning Scheme and the role of cycling

Action 7.1 ***Amend the Municipal Strategic Statement to incorporate the vision, guiding principles and policies of the Bayside Integrated Transport Strategy***

The Bayside Integrated Transport Strategy (ITS) sets Council's direction for transport planning and provision for the next 10 years and beyond and recognises the important role that sustainable modes of transport, such as walking and cycling will play in the transport system within Bayside. Through the ITS, Council has prioritised both walking and cycling as the preferred modes of transport for short trips in Bayside. In view of this, to improve and promote sustainable transport access for new development, Council will make amendments to the Municipal Strategic Statement to incorporate the vision, guiding principles and policies of the Bayside ITS.

Action 7.2 ***Ensure the provision of secure bicycle parking and end of trip facilities in new developments***

Using the Victoria Planning Provision requirements as a minimum, ensure the provision of secure bicycle storage and end of trip facilities (showers and lockers) in any new developments within the municipality.

Strategy 8 – Provide high quality end of trip facilities for cyclists

Action 8.1 ***Provide bicycle parking in all public locations where there is an identified need***

Being able to securely park a bicycle is an important factor if more people are to cycle for short local trips. A lack of available bicycle parking can often be the decisive factor in deciding whether to ride or drive to the local shopping strip or other local destinations. Community feedback received during the development of the strategy identified a need for more bicycle parking at a range of locations across the municipality.

Council currently provides bicycle parking hoops in shopping strips and activity centres as part of its street furniture program and will continue to do so. However, the provision of bicycle parking across the municipality will be reviewed to ensure that sufficient opportunities are provided for residents and visitors to park their bicycle in the most convenient and attractive locations. Council will also provide bicycle parking in other public locations where there is an identified need. Such locations may include outside public buildings and foreshore car parks.

Action 8.2 ***Provide bicycle parking at community events and festivals***

Bayside City Council hosts two regionally significant events per year; the Bright n Sandy Wine and Food Festival and Christmas Carols in Dendy Park. A farmers market is also held on the third Saturday of every month at Trey Bit Reserve in Sandringham. Such events attract significant numbers of people to Bayside for a short period of time. Council will provide temporary bicycle parking at Council run community events to encourage the community to ride to these events. For those events run by external organisations Council will encourage event organisers to provide temporary bicycle parking through the permit process.



Action 8.3 *Trial the installation of a bank of bicycle parking in place of an on-street car parking space*

The installation of a bank of bicycle parking in place of an on-street car parking space within a shopping centre can achieve both increased visits (one car space is replaced by approximately 14 bicycle spaces) and reduced footpath clutter. An analysis of the Bayside Business Monitor Surveys undertaken in 2012 confirmed that 70% of the retail catchment within Bayside reside within a 3km radius of a shopping centre which is a relatively easy distance for the majority of people of all ages and abilities to cycle. It is considered that the provision of a bank of bicycle parking in place of an on-street parking space would highlight cycling as an easy and convenient way in which to travel to a shopping centre and would play a key role in attracting more cycling.

Similar initiatives have already proved successful in other metropolitan municipalities such as the City of Port Phillip and the City of Yarra and feedback received from community consultation during the development of this strategy suggested that similar initiatives should be trialled within Bayside.

In partnership with the relevant Traders Association, Council will identify a suitable site within the municipality and implement a bank of bicycle parking in place of an on-street car parking space on a trial basis. The trial will be monitored and evaluated with the results being reported to Council.

Action 8.4 *Develop a program to investigate the availability of secure bicycle parking at schools, public housing estates and large employers within Bayside*

Council will investigate the availability of secure bicycle parking at schools, public housing estates and large employers within Bayside. Where deficiencies are identified on government owned land, Council will advocate for and identify government funding opportunities to support the provision of bicycle parking facilities.

Strategy 9 – Maximise integration between cycling and sustainable modes of transport

Action 9.1 *Work with key stakeholders to ensure bicycle parking is provided at public transport hubs*

To improve sustainable transport options, consideration needs to be given to how well people can interchange between different modes of transport. Cycling is well suited for short journeys between 2kms to 5kms, but in partnership with rail it can be particularly effective in making long journeys competitive with the private car in terms of both time and convenience. Facilities such as secure bicycle parking can be crucial in supporting sustainable transport choices.

There are a number of different types of bicycle parking provided at train stations across Bayside:

Parkiteer bike cages

Parkiteer bike cages provide a convenient, undercover and secure place to park bikes at train stations. Within Bayside there are Parkiteer cages located at both Brighton Beach and Sandringham Stations and both facilities are very well utilised by cyclists.

Registration for the use of a Parkiteer bike cage is required and a \$50 bond has to be paid for the security swipe card that is used to access the cage. Once registered, the Parkiteer bike cage can be used for free. Further information on Parkiteer bike cages can be obtained from Bicycle Network Victoria on 1800 639 634.

Bicycle Lockers

Bicycle lockers are available at Brighton Beach, Hampton and Sandringham Stations and can be rented free for up to three months after paying a bond. The lockers can be used to store a bicycle and other belongings such as helmets, clothes and shoes. For information, or to reserve a bicycle locker, phone Public Transport Victoria on 1800 800 007.



Bicycle hoops

All train stations within Bayside have a number of bicycle hoops to accommodate bicycle parking. However, these bicycle hoops are often poorly located on station platforms in areas offering limited natural surveillance from passengers waiting for train services, thus making them an unattractive option for people to park their bikes. Council will work with stakeholders, such as Public Transport Victoria, to advocate for the improved siting of bicycle hoops at train stations.

Council will also undertake an assessment of land within its control within the vicinity of train stations within Bayside to determine if there are any locations where improvements could be made to the provision of bicycle hoops. For example, recent officer surveys have determined that there are opportunities to provide increased parking opportunities within the vicinity of Middle Brighton Station at Church Street.

Action 9.2 Advocate to State Government for the implementation of Parkiteer bicycle cages at all trains stations within Bayside

Community feedback received as part of the development of Council's new Bicycle Strategy identified the need for improved bicycle parking at all train stations within Bayside. Of those stations within Bayside without Parkiteer bike cages, Council will advocate to the State government for the introduction of Parkiteer bike cages at the following stations (in prioritised order):

- Gardenvale Station;
- Middle Brighton Station;
- North Brighton Station; and
- Hampton Station.



Principle 3: Develop a culture of cycling that encourages people to ride a bicycle in Bayside

The provision of improved bicycle infrastructure and facilities will undoubtedly improve conditions for existing riders and will assist in attracting some new riders. However, investment in infrastructure alone will be unlikely to attract a significant increase in new riders without a complimentary investment in a program of promotion, education and advocacy. The promotion of cycling as a legitimate mode of transport will be crucial in raising community awareness of the needs of cyclists in order to enable road users to interact more considerately and safely. It will also assist in improving the general perception of cycling.

Strategy 10 – Raise the profile of cycling within Bayside

Action 10.1 *Advocate and collaborate with key stakeholders for bike riding improvements in Bayside*

In delivering the Bicycle Strategy, Council will need to advocate and collaborate with a range of key stakeholders in order to secure improvements to the bicycle network within Bayside and to also promote the benefits of cycling to the wider community. Such stakeholders include, but is not limited to:

- VicRoads
- Department of Transport
- Public Transport Victoria
- Vic Track
- Transport providers
- Bike shops
- Bicycle Network Victoria
- Amy Gillett Foundation
- Cycling Victoria

Action 10.2 *Provide a wide range of information relating to cycling on Council's website*

The internet offers a significant opportunity for Council to promote cycling to a wide audience, offers the flexibility to be regularly and easily updated and can become a valuable resource to those members of the community who wish to find out more about cycling. Council's website currently provides limited information on cycling and it is considered necessary that the website is upgraded and expanded in order to inform and promote cycling to the Bayside community. Proposed information to be provided on the website includes, but is not limited to:

- Where to ride
- Bicycle maps
- Using shared paths
- Cycling safety tips
- Bicycle parking
- Location and contact details of bike shops
- Local cycling groups

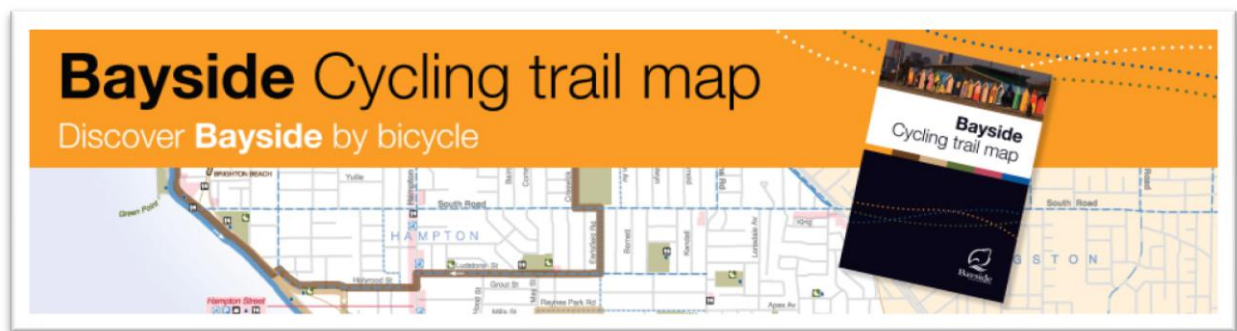
Action 10.3 *Develop a tailored marketing campaign to celebrate cycling when new cycling infrastructure is constructed or other improvements are made*

To ensure that the maximum benefits can be gained from Council's investment in new bicycle infrastructure or other improvements a tailored marketing campaign will be developed for every project to promote and raise the profile of cycling within Bayside. In addition to promoting cycling, the marketing campaign will also help to inform all road users how the new infrastructure functions.



Action 10.4 *Develop and distribute bicycle maps*

Cycle maps are both a promotional tool and an informative way of communicating with new and existing riders about cycling opportunities. The Bayside Cycling Trail Map was released in September 2012 and provides information on the location of bicycle routes as well as information about places, attractions and facilities within Bayside. The map was predominantly aimed at recreational cyclists and identified six cycling trails, each exploring a different area of Bayside. Copies of the map have been distributed to all local bike shops and libraries within Bayside and it has also been made available on Council's website and can be downloaded by visiting <http://www.bayside.vic.gov.au/cyclingmap.htm>



In order to promote and increase cycling for short local trips within Bayside, Council will develop a further bicycle map aimed at enabling Bayside residents to choose the route of their bicycle journey based on their personal preferences no matter where they want to travel to and from within Bayside.

Action 10.5 *Distribute media releases to publicise cycling news relevant to Bayside*

Council's Communication Team is responsible for the development and publication of media releases relating to Council issues and projects. Every media release is published on Council's website and also circulated to local media organisations such as the Bayside Leader and the Bayside Review for potential inclusion within such publications. Media releases provide an effective way of informing the community about current issues and projects that Council is involved with. Officers responsible for bicycle related projects will work in partnership with Council's Communication Team to develop media releases that promote and raise the profile of cycling within Bayside.

Action 10.6 *Include a sustainable transport related article within each edition of 'Let's Talk Bayside'*

'Let's Talk Bayside' is Council's bi-monthly newsletter for residents. It profiles events and issues concerning Bayside and is delivered to 40,000 residents and businesses, direct to their letterboxes. The inclusion of a sustainable transport related article within each edition of 'Let's Talk Bayside' will provide an excellent opportunity to raise the profile of sustainable transport options within Bayside.

Action 10.7 *Utilise social media to promote and raise the profile of cycling*

Social media websites such as Facebook and Twitter continue to grow in popularity and now provide an additional communication stream to inform members of the community about council news and projects. The use of social media provides a real opportunity to create positive social messages relating to cycling that will assist in overcoming the perceived barriers associated with riding a bike and assist in promoting cycling to residents and the wider community. In view of this, Council will use social media to promote positive messages about riding within Bayside on a regular basis.



Action 10.8 *Develop a campaign to promote the health benefits associated with cycling*

It is common knowledge that riding a bike is a relatively easy way of incorporating exercise within our busy schedules whether it is a leisurely recreational ride with the family or a casual trip to the local shops or to work. However, too often the health benefits associated with cycling are not quantified enough. The health benefits associated with riding a bike need to be made real to generate further interest and enthusiasm within the community towards cycling. To address this issue Council will develop a promotional campaign aimed at promoting the health benefits associated with cycling.

Action 10.9 *Promote cycling through existing community groups and local events*

Local community groups and neighbourhood houses provide a significant opportunity for Council to promote cycling to people of all ages from a range of different backgrounds. Council will liaise with such local groups within the Bayside area to promote cycling.

Council run events such as the Bright n Sandy Food and Wine Festival, Carols in the Park and the regular Farmers Market held at Trey Bit Reserve attract large numbers of Bayside residents as well people from neighbouring municipalities to them. In the past, the availability of appropriate bicycle parking facilities at such events may have discouraged people from choosing to ride to them. As per action 8.2 of the strategy, bicycle parking will now be available at such Council run events. In terms of promoting cycling as a real transport option to such events, information will be included within the relevant publicity material that is produced to advertise the events informing members of the public of the availability of cycle parking.

Ride2Work Day and Ride2School Day are both national events aimed at encouraging employees of participating organisations, school children and the wider school community to travel to work or school by bike or any other form of active transport. Both of the days celebrate those people who actively travel to work and school whilst also encouraging those who don't to give it a try. Council has participated in Ride2Work Day for a number of years and will continue to do so in the future. The most recent Ride2Work Day took place in October 2012 and was Council's most successful to date with over 50 employees taking part and travelling to work by a sustainable mode of transport. In collaboration with Bicycle Network Victoria, Council will promote the Ride2Work Day and the Ride2School Day event to large employers and schools within Bayside,

Strategy 11 – Encourage the provision of bicycle facilities at schools and workplaces within Bayside

Action 11.1 *Build Council capacity for travel planning in order to encourage schools and large employers within Bayside to develop and implement Travel Plans*

Over the last decade fewer children have been walking or cycling to school. Today, more and more children travel by car, thus limiting their opportunities to develop good travel habits that benefit their health, wellbeing and independence. In addition, the school run overlaps with morning traffic volume peaks. In view of this, the congestion consequences of car use for school trips can be considerable in terms of its general effect on the road network, causing localised problems around specific schools which are often located in residential areas.

A School Travel Plan (STP) is a written document that identifies local issues relating to the school journey and sets out a package of measures designed to promote more sustainable travel choices for pupils, parents, staff and visitors to the school. In the wider context, successful STP's can contribute to quality of life by reducing noise and air pollution. They can assist in addressing social exclusion, improve an area's sense of community and enhance personal safety and perceptions of security.

Similarly, a Work Place Travel Plan (WTP) is a package of measures adopted by an employer to widen travel choice and designed to promote more sustainable transport travel choices for employees and visitors to an organisation. WTP's are primarily aimed at staff within a given organisation, but also cover business travel and visitors. A WTP aims to reduce the impact of work-generated travel on the environment and wider community



and at the same time bring benefits to the employer and their staff. WTP's are specific to individual employers according to circumstances and they need to adapt over time according to changes and results of monitoring.

Action 11.2 *Encourage all schools within Bayside to participate in the Ride2School Program*

The Ride2School Program is funded by the Department of Planning and Community Development and is administered by Bicycle Network Victoria. The Ride2School Program works with schools, families, communities, policy makers and partner organisations to encourage students to ride, walk, skate or scoot to school. As part of the program schools are provided with practical guidance and advice to create active, healthy children both within and out of school. Being a part of the program will assist schools in advocating for improved facilities in and around schools to support riders and walkers as well as when applying for grants. At present there are only a small number of schools within Bayside registered with the Ride2School Program. Council will encourage all schools within Bayside to register with the Ride2School Program.

Action 11.3 *Work in partnership with those schools in Bayside participating in the Ride2School Program to identify opportunities for infrastructure improvements to support sustainable travel within the local area*

There are 15,849 school aged (5 to 17) children who reside within Bayside. Whilst all of these children will not necessarily attend a school within the municipality, a significant proportion of them will. Given that schools are significant trip generators, an opportunity exists to encourage more children to travel to school by active modes of transport. It is considered that those schools within Bayside participating in the Ride2School Program will be committed in trying to encourage more children to travel to school by sustainable modes of transport. In view of this, Council will work in partnership with those schools within Bayside who participate in the Ride2School Program to identify opportunities for infrastructure improvements within the local area that will support more children in travelling to school by sustainable modes of transport, such as walking and cycling.

Action 11.4 *Implement Council's own Work Place Travel Plan to assist in facilitating an increase in sustainable travel amongst council employees*

Bayside City Council is one of the largest employers in the Bayside community. Over 200 staff members are based at the Corporate Centre at Royal Avenue, Sandringham. Currently the main mode of transport to and from the Corporate Centre is single occupancy car travel.

Council has developed its own Work Place Travel Plan with the aim of reducing single occupancy car travel to and from work and meetings. By doing so, it will reduce greenhouse gas emissions, encourage healthy, active forms of transport and reduce local traffic congestion and car park demand at the Corporate Centre car park in Sandringham and in Royal Avenue. The travel plan has initially been developed for Council's Corporate Centre staff, and will eventually be extended to other Council work locations.

There are a number of actions contained within Council's Work Place Travel Plan which are aimed at promoting and improving facilities for those staff who wish to ride a bike to work. Council will work towards implementing such measures as contained within its Work Place Travel Plan.

Strategy 12 – Enable more people within Bayside to maintain a bicycle and improve their cycling skills

Action 12.1 *Develop a 'Cycle With Confidence' Program for Bayside residents*

Those people with limited bike riding experience or those who have not ridden in a long time may not have the confidence or skills to take up riding. Additionally, a lack of knowledge in basic bicycle maintenance can deter people from considering cycling as a real transport option, e.g. many people do not know how to repair a tyre puncture, which can often be a barrier in choosing to ride a bicycle.



Council will develop a program of bicycle skills and maintenance courses which are designed for residents of all riding abilities. These courses will be promoted amongst the community and will be conducted by qualified and experienced cycling instructors.

Strategy 13 – Monitor and report cycling levels within Bayside

Action 13.1 *Develop and implement a cycling monitoring program*

Council's current understanding of who cycles, when and why is limited to information collected through the ABS census and an annual 'Super Tuesday' bicycle count which is Australia's largest manual cycle count that measures commuter flows at a number of selected sites in the morning peak (7 – 9am) on the first Tuesday in March each year.

To better understand existing travel patterns and to assist the design and prioritisation of future projects a cycle monitoring program will be developed by Council. The development of the monitoring program will directly allow the success of the Bicycle Strategy to be measured. As part of the monitoring program quantifiable data on the number of cyclists on particular routes will be recorded by Council using:

- Automatic bike counters located at fixed locations across the municipality; and
- Regular manual cycle parking counts at key locations.

Additionally, a detailed analysis of crash data will be undertaken on an annual basis to identify any black spots and causes of cyclist crashes to assist in designing and prioritising future projects.

Strategy 14 – Enable cyclists, pedestrians and motorists to interact more considerably and safely

Action 14.1 *Develop and deliver education campaigns to raise awareness and promote mutual respect between all road users and path users*

Good behaviour and safe riding practices will be promoted throughout Bayside to reduce the number of crashes and incidents and to increase the enjoyment of the transport network by all users. As road users, whether this be a pedestrian, cyclist or driver of a motorised vehicle we are each responsible for maintaining safe conditions through our own actions. Consequently, all road users need to be aware of other road users, making space for them and taking reasonable actions to ensure that all users are aware of each other. Council will develop and deliver education campaigns, and where appropriate, work with enforcement agencies, such as Victoria Police, to:

- Encourage motor vehicle drivers to be more aware of cyclists especially by remembering to check mirrors before opening doors and providing plenty of space for people riding bikes when overtaking them and also when accessing any of the foreshore car parks adjacent to the Bay Trail shared path;
- Encourage both motor vehicle drivers and people who ride bikes to adopt a speed that would enable them to respond to any unexpected circumstances without injuring themselves or causing injury to others;
- Encourage people who ride to use the appropriate safety equipment such as helmet, reflectors and lights at all times as required by the Victorian Road Rules;
- Encourage all road users to keep below the appropriate speed limit and adhere to all traffic signals and relevant signs and road markings;
- Encourage pedestrians who walk on shared paths to keep to the left of the path and to be aware of and provide space for overtaking cyclists;



- Encourage cyclists on shared paths to limit their speed and to slow down on approaches to pedestrian crossings pedestrian access/exit points to the foreshore and vehicular crossings;
- Encourage pedestrians to be aware of the potential presence of cyclists on the Bay Trail when entering/exiting beach access paths; and
- Require dog walkers on footpaths and shared paths to keep their dog on a leash and under control.



11. Getting Bayside Moving

The Bicycle Strategy aims to develop a culture of cycling within Bayside where people use bicycles for most of their short trips. Council will measure the success of the strategy with a number of targets and monitoring processes.

11.1 Targets

Council will measure the success of the Bicycle Strategy using the following targets:

| Target | Data Source |
|--|--|
| Based on 2011 census data, increase the mode share of bicycle trips to work from Bayside: <ul style="list-style-type: none">• By 15% in 2017; and• By 30% in 2022 | <ul style="list-style-type: none">- ABS Journey to Work data- Victorian Integrated Survey of Travel and Activity, DoT |
| Increase the number of bicycle trips in Bayside by 3% a year | <ul style="list-style-type: none">- Shared path counters- Super Tuesday counts |

11.2 Monitoring

Council will collate and monitor the following information each year:

- The number of new or replacement bicycle parking hoops implemented
- The length of new or improved on-road bicycle lanes implemented
- The length of new or improved off-road shared paths implemented
- The number of Bayside cycling trail maps distributed to the community



12. Implementation Plan

Legend

| | |
|--|------------------------|
| | Council Responsibility |
| | Council Advocacy |

| No. | ACTIONS | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | FUNDING IMPLICATIONS |
|--|--|---------|---------|---------|---------|---------|---------|------------------------------|
| Strategy 1: Ensure the provision of high quality on-road bicycle infrastructure across the municipality | | | | | | | | |
| 1.1 | Provide a contra-flow cycle lane at Thomas Street, Hampton, to improve accessibility for cyclists to Hampton Street Activity Centre | | | | | | | Within current budget |
| 1.2 | Investigate options to improve the existing on-road bicycle facilities along the full length of New Street, between Holyrood Street and Nepean Highway | | | | | | | Capital budget consideration |
| 1.3 | Investigate the feasibility of providing a contra-flow cycle lane along the existing one-way section of New Street (between Huntley Street and Nepean Highway) to improve accessibility for cyclists from Nepean Highway to New Street | | | | | | | Capital budget consideration |
| 1.4 | Investigate options of providing an on-road bicycle lane along the full length of St Andrews Street, Brighton, between Well Street and Bay Street | | | | | | | Capital budget consideration |
| 1.5 | Upgrade the existing shared bicycle/parking lane at Thomas Street, Brighton East, to an exclusive bicycle lane | | | | | | | Within current budget |
| 1.6 | Investigate the available options of providing an on-road bicycle lane along Marriage Road, Brighton | | | | | | | Capital budget consideration |
| 1.7 | Investigate the options of providing an on-road bicycle lane along Rusden Street, Brighton | | | | | | | Capital budget consideration |
| 1.8 | Investigate the available options of providing an on-road bicycle lane along Linacre Road, Hampton | | | | | | | Capital budget consideration |
| 1.9 | Investigate the feasibility of widening the existing on-road bicycle lanes along Martin Street, Gardenvale | | | | | | | Capital budget consideration |



| No. | ACTIONS | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | FUNDING IMPLICATIONS |
|------|---|---------|---------|---------|---------|---------|---------|---|
| 1.10 | Provide access for cyclists between Sims Street and Beach Road, Sandringham | | | | | | | Capital budget consideration |
| 1.11 | Provide access for cyclists between Wangara Road and Holloway Road, Sandringham | | | | | | | Capital budget consideration |
| 1.12 | Consider the options for an improved cycle route between Cheltenham Station and Sandringham Activity Centre | | | | | | | Officer time / budget consideration |
| 1.13 | Examine options to improve the existing on-road bicycle lane along Reserve Road between Beach Road and Bay Road, to improve connections, particularly to the Bayside Business Employment Area | | | | | | | Officer time / budget consideration |
| 1.14 | Investigate the available options of providing an on-road bicycle facility along Wickham Road, Hampton East | | | | | | | Officer time / budget consideration |
| 1.15 | Investigate the available options of providing an on-road bicycle facility along Well Street, Brighton | | | | | | | Within current budget |
| 1.16 | Investigate the available options of providing an on-road bicycle facility along Church Street, Brighton, between Dendy Street and Male Street | | | | | | | Within current budget |
| 1.17 | Improve cycle access between Bay Street Major Activity Centre and the foreshore | | | | | | | Officer time / capital budget consideration |
| 1.18 | Improve cycle access from between Church Street Major Activity Centre and the foreshore | | | | | | | Officer time / capital budget consideration |
| 1.19 | Improve cycle access between Martin Street Activity Centre to/from the foreshore | | | | | | | Officer time / capital budget consideration |
| 1.20 | Improve cycle access between Hampton Street Major Activity Centre to/from the foreshore | | | | | | | Officer time / capital budget consideration |
| 1.21 | Improve cycle access between Sandringham Major Activity Centre to/from the foreshore | | | | | | | Officer time / capital budget consideration |
| 1.22 | Investigate opportunities to improve bicycle connectivity between Highett Station and the CSIRO site | | | | | | | Officer time / capital budget consideration |
| 1.23 | Investigate opportunities to improve bicycle connectivity between Highett Station and the Bayside Business Employment Area | | | | | | | Officer time / capital budget consideration |
| 1.24 | Investigate the opportunity to introduce bicycle advisory markings on those roads with low traffic volumes and speeds that form part of the Municipal Bicycle Network | | | | | | | Officer time / capital budget consideration |
| 1.25 | Advocate to VicRoads for the introduction of on-road bicycle infrastructure along Bay Road, Sandringham | | | | | | | Officer time |



| No. | ACTIONS | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | FUNDING IMPLICATIONS |
|---|---|---------|---------|---------|---------|---------|---------|--|
| 1.26 | Advocate to VicRoads for improved on-road bicycle infrastructure along Beach Road | | | | | | | Officer time |
| 1.27 | Advocate to VicRoads for the introduction of on-road bicycle infrastructure on Bluff Road, Hampton | | | | | | | Officer time |
| 1.28 | Advocate to VicRoads for the introduction of on-road bicycle infrastructure on Hampton Street between South Road and Beach Road | | | | | | | Officer time |
| 1.29 | Advocate to VicRoads for the introduction of on-road bicycle infrastructure on North Road | | | | | | | Officer time |
| 1.30 | Advocate to VicRoads, for improved bicycle access between the Bay Trail and South Road | | | | | | | Officer time |
| 1.31 | Seek to improve bicycle access from Melrose Street, Sandringham, to the Bay Trail using the existing pedestrian signals | | | | | | | Capital budget consideration |
| 1.32 | Seek to improve bicycle access from the on-road bicycle lane on Dendy Street, Brighton, to the Bay Trail using the existing pedestrian signals | | | | | | | Capital budget consideration |
| 1.33 | Seek to improve bicycle access from Bayview Crescent, Black Rock, to the Bay Trail using the existing pedestrian signals | | | | | | | Capital budget consideration |
| 1.34 | Formalise bicycle access from Tramway Parade to the Bay Trail | | | | | | | Capital budget consideration |
| 1.36 | Seek to improve bicycle access from the on-road bicycle network to the Nepean Highway shared trail | | | | | | | Capital budget consideration |
| 1.37 | Establish a process to explore opportunities to extend and enhance the bicycle network as part of all transport infrastructure upgrades and road maintenance projects | | | | | | | Ongoing |
| Strategy 2: Ensure the provision of high quality off-road bicycle infrastructure across the municipality | | | | | | | | |
| 2.1 | Upgrade the Elster Creek Trail between Gardenvale Station and Head Street | | | | | | | Within current budget |
| 2.2 | Complete the missing link of the Nepean Highway shared path between Rose Street and Gardenvale Station | | | | | | | Potential funding contribution from VicRoads |
| 2.3 | Investigate options to provide a shared path through Little Brighton Reserve, Union Street, to complete the development of the Elster Creek Trail within Bayside. | | | | | | | Capital budget consideration |



| No. | ACTIONS | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | FUNDING IMPLICATIONS |
|------|--|---------|---------|---------|---------|---------|---------|------------------------------|
| 2.4 | Investigate options to provide a link between the proposed shared path at Little Brighton Reserve, Union Street and the Nepean Highway shared path to complete the development of the Elster Creek Trail within Bayside | | | | | | | Capital budget consideration |
| 2.5 | Investigate options to provide a shared path along St Kilda Street, between Bent Avenue and Spray Street to complete the development of the Elster Creek Trail within Bayside | | | | | | | Capital budget consideration |
| 2.6 | As per the draft Bayside Coastal Management Plan, develop a separated gravel walking path adjacent to the Bay Trail between Bay Street and Brighton Baths, to provide increased separation between pedestrians and cyclists | | | | | | | Capital budget consideration |
| 2.7 | Investigate the feasibility of improving the safety of users of the Bay Trail within the Dendy Street Beach area | | | | | | | Capital budget consideration |
| 2.8 | Investigate ways to reduce conflict between pedestrians and bicycles on the Bay Trail at the front of Middle Brighton Baths | | | | | | | Capital budget consideration |
| 2.9 | Investigate options to continue the Nepean Highway shared trail through Moorabbin Activity Centre | | | | | | | Officer time |
| 2.10 | Investigate options to provide a shared path on Reserve Road | | | | | | | Capital budget consideration |
| 2.11 | Investigate options to provide a section of shared user path from New Street to provide a link to Glen Huntly Road and into the City of Port Phillip | | | | | | | Capital budget consideration |
| 2.12 | Investigate the feasibility of providing an off-road shared path along Cheltenham Road between Bluff Road and Reserve Road, potentially using the existing reserve on the southern side between the road and Royal Melbourne Golf Club | | | | | | | Capital budget consideration |
| 2.13 | Examine the feasibility of providing a cycle connection along the Sandringham railway line to connect to other parts of the municipality | | | | | | | Officer time |
| 2.14 | Examine the feasibility of providing a cycle connection along the Frankston railway line to connect to other parts of the municipality | | | | | | | Officer time |
| 2.15 | Work in partnership with VicRoads to improve existing sections of the Nepean Highway shared path within the municipality | | | | | | | Officer time |



| No. | ACTIONS | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | FUNDING IMPLICATIONS |
|---|---|---------|---------|---------|---------|---------|---------|---|
| 2.16 | Ensure that appropriate off-road shared paths are developed linking a redeveloped CSIRO site to key destinations including Sir William Fry Reserve, Lyle Anderson Reserve, Highett Activity Centre, BBEA, and Southland Principal Activity Centre and Southland Station | | | | | | | Officer time / capital budget consideration |
| 2.17 | Advocate to the Department of Transport, Planning and Local Infrastructure and Vic Track for improved shared path links along the Sandringham rail corridor and the Frankston rail corridor | | | | | | | Officer time |
| Strategy 3: Improve directional signage for cyclists | | | | | | | | |
| 3.1 | Develop a structured approach to providing directional signs for cyclists | | | | | | | Officer time |
| 3.2 | Implement directional signage for cyclists on an area by area by basis in accordance with the adopted approach | | | | | | | Capital budget consideration |
| Strategy 4: Improve safety and priority for cyclists | | | | | | | | |
| 4.1 | Investigate options to improve priority for cyclists at Dendy Street / Roslyn Street roundabout | | | | | | | Capital budget consideration |
| 4.2 | Investigate options to improve priority for cyclists at Martin Street / Cochrane Street roundabout | | | | | | | Capital budget consideration |
| 4.3 | Investigate options to improve priority for cyclists at New Street / Bent Avenue roundabout | | | | | | | Capital budget consideration |
| 4.4 | Investigate options to improve priority for cyclists at New Street / St Andrews Street roundabout | | | | | | | Capital budget consideration |
| 4.5 | Investigate options to improve priority for cyclists at New Street / Dendy Street roundabout | | | | | | | Capital budget consideration |
| 4.6 | Investigate options to improve priority for cyclists at New Street / Were Street roundabout | | | | | | | Capital budget consideration |
| 4.7 | The installation of bicycle storage boxes at all signalised intersections within the municipality will be worked towards throughout the lifespan of the strategy | | | | | | | Capital budget consideration |
| 4.8 | Advocate to VicRoads for an early start at the South Road / New Street intersection | | | | | | | Officer time |



| No. | ACTIONS | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | FUNDING IMPLICATIONS |
|--|--|---------|---------|---------|---------|---------|---------|---|
| 4.9 | Advocate to VicRoads for an early start at the Bay Street / New Street intersection | | | | | | | Officer time |
| 4.10 | Advocate to VicRoads for an early start at the North Road / New Street intersection | | | | | | | Officer time |
| 4.11 | Advocate to VicRoads for an early start at the Reserve Road / Balcombe Road intersection | | | | | | | Officer time |
| 4.12 | Advocate for lower speed limits of 40km/h on selected roads | | | | | | | Officer time |
| 4.13 | Develop a Street Space Management Plan which assigns greater priority to cyclists over private vehicles on roads within the municipality It is recognised that priorities for cyclists will vary according to the different streets and roads within Bayside | | | | | | | Budget consideration |
| 4.14 | LATM measures implemented as a result of this policy will be used by Council to create and improve safe and attractive bicycle routes on Council managed roads | | | | | | | Officer time / capital budget consideration |
| 4.15 | Develop a promotion campaign to raise awareness of shared path etiquette amongst pedestrians, dog walkers, cyclists and other users | | | | | | | Officer time |
| 4.16 | Investigate ways to further reduce conflict on the Bay Trail at the front of Middle Brighton Baths to reduce the risk of pedestrian/cyclist conflict at this location | | | | | | | Officer time |
| 4.17 | Identify high risk crash locations within the municipality by conducting an annual review of available cyclist crash data for Bayside, supplemented by inspections, local knowledge and community input | | | | | | | Officer time |
| 4.18 | Strengthen partnerships with Victoria Police, VicRoads and other relevant stakeholders to advocate for safer road and path user behaviour to improve safety for all users of the bicycle network within the municipality | | | | | | | Officer time |
| Strategy 5: Improve conditions and usage for cyclists on Beach Road | | | | | | | | |
| 5.1 | Work in partnership with Victoria Police, VicRoads, Cycling Victoria and other stakeholders to improve conditions for cyclists along Beach Road | | | | | | | Officer time |
| 5.2 | Investigate the feasibility of installing signage along Beach Road aimed at raising the awareness of all road users of the need to share the road respectfully | | | | | | | Capital budget consideration |



| No. | ACTIONS | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | FUNDING IMPLICATIONS |
|---|--|---------|---------|---------|---------|---------|---------|--|
| 5.3 | Investigate the safety merits associated with each kerb-outstand along Beach Road. Where it is deemed safe to alter a kerb-outstand, advocate to VicRoads for its redesign | | | | | | | Officer time |
| 5.4 | Advocate to State Government for funding to implement the actions contained within the Beach Road Corridor Strategy | | | | | | | Officer time |
| Strategy 6: Effective maintenance of the bicycle network | | | | | | | | |
| 6.1 | Monitor and maintain the on-road bicycle network | | | | | | | Within budget |
| 6.2 | Following the completion of road works on Council managed roads, ensure that the road reinstatement does not create any unnecessary safety risks for cyclists | | | | | | | Within budget |
| 6.3 | Monitor and maintain the off-road bicycle network | | | | | | | Within budget |
| 6.4 | Raise awareness amongst cyclists of the reporting procedure for dealing with maintenance issues | | | | | | | Officer time |
| Strategy 7: The Bayside Planning Scheme and the role of cycling | | | | | | | | |
| 7.1 | Amend the Municipal Strategic Statement to incorporate the vision, guiding principles and policies of the Bayside Integrated Transport Strategy | | | | | | | Officer time |
| 7.2 | Ensure the provision of secure bicycle parking and end of trip facilities in new developments | | | | | | | Officer time |
| Strategy 8: Provide high quality end of trip facilities for cyclists | | | | | | | | |
| 8.1 | Provide bicycle parking in all public locations where there is an identified need | | | | | | | Within budget |
| 8.2 | Provide bicycle parking at community events and festivals | | | | | | | Budget consideration as part of event organisation process |
| 8.3 | Trial the installation of a bank of bicycle parking in place of an on-street car parking space within a shopping centre | | | | | | | Officer time / capital budget consideration |
| 8.4 | Develop a program to investigate the availability of secure bicycle parking at schools, public housing estates and large employers within Bayside | | | | | | | Officer time |



| No. | ACTIONS | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | FUNDING IMPLICATIONS |
|--|--|---------|---------|---------|---------|---------|---------|---|
| Strategy 9: Maximise integration between cycling and sustainable modes of transport | | | | | | | | |
| 9.1 | Work with key stakeholders to ensure bicycle parking is provided at public transport hubs | | | | | | | Officer time |
| 9.2 | Advocate to State Government for the implementation of Parkiteer bicycle cages at all trains stations within Bayside | | | | | | | Officer time |
| Strategy 10: Raise the profile of cycling within Bayside | | | | | | | | |
| 10.1 | Provide a wide range of information relating to cycling on Council's website | | | | | | | Officer time |
| 10.2 | Develop a tailored marketing campaign to celebrate cycling when new cycling infrastructure is constructed or other improvements are made | | | | | | | Officer time |
| 10.3 | Develop and distribute bicycle maps | | | | | | | Officer time / capital budget consideration |
| 10.4 | Distribute media releases to publicise cycling news relevant to Bayside | | | | | | | Officer time |
| 10.5 | Include a sustainable transport related article within each edition of 'Let's Talk Bayside' | | | | | | | Officer time |
| 10.6 | Utilise social media to promote and raise the profile of cycling | | | | | | | Officer time |
| 10.7 | Develop a campaign to promote the health benefits associated with cycling | | | | | | | Officer time / budget consideration |
| 10.8 | Promote cycling through existing community groups and local events | | | | | | | Officer time |
| Strategy 11: Encourage the provision of bicycle facilities at schools and workplaces within Bayside | | | | | | | | |
| 11.1 | Build Council capacity for travel planning in order to encourage schools and large employers within Bayside to develop and implement Travel Plans | | | | | | | Budget consideration |
| 11.2 | Encourage all schools within Bayside to participate in the Ride2School program | | | | | | | Officer time |
| 11.3 | Work in partnership with those schools in Bayside participating in the Ride2School Program to identify opportunities for infrastructure improvements to support sustainable travel within the local area | | | | | | | Officer time |



| No. | ACTIONS | 2013/14 | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | FUNDING IMPLICATIONS |
|--|--|---------|---------|---------|---------|---------|---------|-------------------------------------|
| 11.4 | Implement Council's own Work Place Travel Plan to assist in facilitating an increase in sustainable travel amongst council employees | | | | | | | Within budget |
| Strategy 12: Enable more people within Bayside to maintain a bicycle and improve their cycling skills | | | | | | | | |
| 12.1 | Develop a 'Cycle With Confidence' Program for Bayside residents | | | | | | | Capital budget consideration |
| Strategy 13: Monitor and report cycling levels within Bayside | | | | | | | | |
| 13.1 | Develop and implement a cycling monitoring program | | | | | | | Within budget |
| Strategy 14: Enable cyclists, pedestrians and motorists to interact more considerately and safely | | | | | | | | |
| 14.2 | Develop and deliver education campaigns to raise awareness and promote mutual respect between all road users and path users | | | | | | | Officer time / budget consideration |

The implementation plan will be reviewed at the end of the 2015/16 financial year to determine the success of its implementation to date and to consider any amendments to the proposed future actions.



Appendix One – Bayside Bicycle Network



