



READY, SET, PEDAL MANNINGHAM BICYCLE STRATEGY 2013

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1.0 Introduction

The current Manningham Bicycle Strategy was adopted by Council in 2001. Following steady implementation of the actions recommended in the 2001 Strategy, a review of the action plan was undertaken in 2006 and a five year supplementary action plan was developed and adopted.

The 2001 Strategy included the extension of the Mullum Mullum Creek Trail, to provide a key recreational link to the Eastern Freeway to the south and to the Main Yarra Trail to the north. In addition, missing links along the Ruffey Creek Trail were also constructed to provide an off road connection through the centre of the municipality. It is noted that sections of the Ruffey Creek Trail between Parker Street and Foote Street and along Eumerella Avenue are yet to be completed. Incomplete links from the 2001 Strategy have been noted as missing links in the current Strategy.

During the life of the 2001 Strategy, cycling numbers in metropolitan Melbourne have grown beyond what was envisaged in 2001. Within Manningham, participation in recreational cycling has grown significantly with the ongoing upgrade of the Mullum Mullum Creek Shared Path and Koonung Creek Linear Shared Path trails.

Since 2001, changes in the strategic direction of the State Government and a growing interest in cycling within the municipality and greater Melbourne has also highlighted the need to review the current Strategy and actions.

Council recognises the benefits of encouraging cycling within and through the municipality as a sustainable mode of transport which is integral to improving the health of our community, improving safety, minimising congestion and achieving environmental benefits. The development of a new Bicycle Strategy is a key action in the Manningham Council Plan 2009-2013 to "investigate and implement accessible, affordable, safe, and connected community assets". As such, Year 4 of the Council Plan included action plan item 7.3.1 "Review and update the Manningham Bicycle Strategy to set a strategic direction for the development of bicycle infrastructure and a direction for community education and promotion of cycling, integrating with other modes of transport".

The Manningham Council Plan 2013-2017, which was adopted on 25 June 2013, further reinforces Council's commitment to cycling. Theme 3, of the draft Council Plan 2013-2017, title "Getting from Place to Place" states "We acknowledge the importance of an integrated and efficient transport network, with a variety of accessible, safe and affordable transport options to enable travel, in, out and around the area. The reduction on the reliance on cars is a priority for Council and we will endeavour to ensure pedestrian and bicycle routes are well integrated with connections to public transport and the City."

The new Manningham Bicycle Strategy 2013 is an overarching document, which sets out the vision, takes into account State and Federal Government strategic context and makes recommendations regarding the scope of actions identified to encourage greater uptake of cycling as a viable and safe mode of transport within Manningham. This Strategy will guide Council in local implementation, such as the development of bike paths, end of trip facilities (bike parking, seats), advocacy initiatives, and marketing and promotional activities. A

bicycle network has been developed showing the proposed on road and off road shared path routes to be implemented over the life of the Strategy.

The Bicycle Strategy is supported by a separate companion Action Plan document which details the various actions to be implemented on an annual basis. The Action Plan (2014-2017) actions will be reviewed annually, to ensure that Council is meeting the objectives and the long term goals of this Strategy over its life. The Strategy will span several action plans.

1.1 Aim of the Strategy

As indicated above, the Manningham Bicycle Strategy 2013 sets out the vision, the strategic context and scope of actions identified to encourage a greater uptake of cycling within Manningham. The Strategy will guide Council in local development of cycling infrastructure and bicycle facilities, the facilitation of behaviour change via community education and cycling promotion programs and will inform Council advocacy initiatives.

The vision of this Strategy is to meet the cycling needs of the Manningham community into the future, to ensure that cycling is a safe, attractive and viable mode of transport.

This will be achieved by providing an ultimate local bicycle network, to encourage a greater mode shift to cycling. This Strategy particularly focuses on local trips within a 3-5km radius from destinations such as activity centres, community hubs, regional sporting and community recreation reserves.

Data sourced from the 2011 Census indicates that cycling represents 0.28% of all work trips from Manningham. In comparison, riding accounts for 3.8% of all Method of Travel to Work from the City of Melbourne and 1.03% from Banyule City Council.

It is considered that once the ultimate bicycle network and other strategy actions are implemented, a reasonable target for cycling would be a 1% mode share for all trips to work for our municipality. This is separate to the significant increase in recreational cycling and short trips anticipated as a result of the implementation of this Strategy.

1.2 Types of Riders

A research paper released in 2006 by the then Portland Office of Transportation in the USA described four types of cyclists. The paper titled "Four Types of Cyclists" and prepared by Roger Gellars the then Bicycle Coordinator suggested that cyclists can be separated into 4 distinct categories;

- The 'Strong and the Fearless', will ride "regardless of roadway conditions" and take a "strong part of their identity" from riding a bicycle.
- The 'Enthused and Confident' cyclists are comfortable riding on a road with automobiles, but "prefer to do so operating on their own facilities" and appreciate efforts made to improve the bikeway infrastructure.

- The 'Interested but Concerned' group are curious about bicycling, "like to ride, but are afraid to do so and therefore do not regularly ride" and "will not venture out onto the arterial roads".
- 'No Way No How' group of people are not going to ride a bicycle, "for reasons of topography, inability, or simply a complete and utter lack of interest".

The paper also indicated that the majority of people fall within the 'Interested but Concerned' category.

These categories have also been referenced to in the Australian Federal Governments' recently released 'Walking, Riding and Access to Public Transport – Draft Report for Discussion'.

Taking the above into consideration, the Manningham Bicycle Strategy aims to focus on encouraging the 'Interested but Concerned' members of our community to take up cycling as a safe and viable alternative form of transport, in particular for short trips.

2.0 Current Cycling Numbers in Manningham

Data Analysis

Development of this Strategy required an understanding of the current cycling rates within Manningham as a benchmark for review and monitoring of progress in increasing cycling participation within Manningham.

Australian Bureau of Statistics Data

The Australian Bureau of Statistics "Method of Travel to Work" census data indicates that cycling to work equated to a mode share of 0.23% of total trips to work from Manningham in 2006 compared with 0.28% in 2011. In contrast, Banyule City Council recorded a bicycle travel to work mode share of 1.03% and the City of Melbourne recorded a mode share of 3.8% in the 2011 Census. Although there has been an increase in the number of cyclists travelling via bicycle to work, from 122 persons in 2006 to 147 persons in 2011, there is capacity to further increase Manningham's cycling mode share for commuting purposes.

Super Tuesday Data / Pin Point Survey

The Super Tuesday and Pin Point Surveys are bicycle surveys conducted by Bicycle Network.

Super Tuesday is an annual visual bicycle count, designed to measure bicycle commuters during the morning peak period. The aim is to establish a benchmark by which to compare data and base judgements when assessing the adequacy of bicycle routes / facilities in an area.

The Pin Point survey is an online consultation survey which allows riders to identify issues, preferences or problems along a route or within a specified area.

Council participated in the Pin Point Survey in May / June 2011 and in the Super Tuesday Survey in March 2012. Both the Super Tuesday and Pin Point Surveys indicated that:

- The Koonung Creek Trail is identified as a key east / west commuter route;
- The Main Yarra Trail is also a key commuter route;
- Bulleen Road and Banksia Street are important on road routes that can provide connections to Heidelberg Train Station and the Main Yarra Trail;
- Templestowe Road was identified as a missing link, as were connections to Banksia Street.

RiderLog Survey Data

A RiderLog survey was commissioned to gain a greater understanding of the main routes cyclists currently utilise within Manningham. RiderLog is a Bicycle Network Smartphone application which tracks and records the routes along which cyclists travel, through GPS technology.

The RiderLog data indicates that during weekday peak periods, the majority of bicycle travel occurs along the Koonung Creek Trail and the Main Yarra Trail, generally for commuting purposes. However, during the weekends, cyclist numbers increase along the Mullum Mullum Creek Linear Trail.

Traffic Counts

Traffic counts were conducted on several local roads identified as on road bicycle routes on the Ultimate Bicycle Network Plan, to ensure that the streets selected provide a low speed and low volume environment and do not pose an unacceptable risk to cyclists.

Each road selected for inclusion in the Ultimate Bicycle Network Plan as an on-road bicycle route has a designated speed limit of 50km/h or less. Where the speed or volume along a particular road was considered high, or the function of the road posed an unacceptable safety risk to cyclists, a shared path has been proposed to improve cyclist safety.

Council Bicycle Counters

Council has also invested in the provision of a bicycle counter on the Koonung Creek Linear Trail, in the vicinity Church Road, to count the number of cyclists and pedestrians travelling on this path. Data is collected in 15 minute intervals and provides important information on the use of the Koonung Creek Linear Trail by various users.

Council has also recently purchased a bicycle counter for installation along the Mullum Mullum Trail to enable monitoring of the number of cyclists and pedestrians utilising this trail.

3.0 Challenges and Benefits

3.1 Challenges to Cycling in Manningham

Topography

Although Manningham has an undulating terrain, the eastern part of Manningham is located 12km east of the Melbourne Central Business District, which is not considered a significant distance to travel by bicycle for commuting purposes. There are opportunities to provide off road and on road paths where the grades are more conducive to cycling for novice and inexperienced riders.

Suitable infrastructure

Notwithstanding the important work that has occurred along the off-road trails, there is considerable infrastructure that is required to be provided within the municipality to encourage a significant increase in the number of people cycling for both commuting and recreational purposes. This includes connections to activity centres, regional sporting facilities and the provision of bicycle facilities, such as convenient bicycle parking and other end of trip facilities.

Perception of Safety

Amongst the 'interested but concerned' group, perception of safety is a key concern when deciding if cycling is a viable form of transport. It is imperative that these concerns are addressed through appropriate education and promotion of cycling as a safe and viable transport option, in particular for short trips.

3.2 Why ride?

The benefits of cycling are well documented and include improved health and wellbeing, as well as positive social, environmental and economic outcomes, with numerous studies conducted in Australia and overseas to quantify these benefits. Some of these benefits are noted below.

Health Benefits - There are both physical and psychological benefits associated with riding a bike, including:

- Minimisation of the risk of heart disease and diabetes
- Weight management
- Assist in reducing stress, anxiety and depression levels.

Economic and Social benefits include cost and time savings, such as:

- Reducing personal and family expenses (ditching one family car and cycling to work can save up to \$800 a month) (Source: <u>http://www.austroads.com.au/abc/benefits-of-cycling</u> (Australian Bicycle Council))
- Saving time, especially on short trips (when travel time is measured from door to door, journeys up to 5kms are generally faster by bicycle) (Source: http://www.austroads.com.au/abc/benefits-of-cycling (Australian Bicycle Council)
- Attracting cyclists to shopping strips generates additional revenue for local traders each square metre allocated to bike parking generates \$31 per hour, compared to \$6 per hour for a car parking space (Source: Lee A and March A(2010) Recognising the economic role of bikes: sharing parking in Lygon Street, Carlton (Australia))

Environmental benefits include but are not limited to the following:

- Helps reduce urban traffic congestion (estimated to cost Australia \$20 billion a year by 2020 if no mitigating action is taken) (Source: Australian Bicycle Council, National Cycling Strategy 2011-2016)
- A 20 per cent shift in trips from cars to bikes would result in reduced air pollution and emissions, resulting in an annual environmental benefit of \$33 million. (Source: Cycling Into the Future 2013-23, Victoria's Cycling Strategy, pg 31)

4.0 Where To From Here?

In order to facilitate the involvement of the 'interested but concerned' members of our community in cycling, in particular in their local area, it is proposed that the Bicycle Strategy will focus on meeting the following three objectives.

- <u>Objective 1</u> Improve on-road and off-road cycling infrastructure, to connect to key destinations and generators;
- <u>Objective 2</u> Improve end of trip facilities at key destinations and improve bicycle facilities on key routes; and
- <u>Objective 3</u> Undertake educational and promotional activities to increase the community's awareness of cycling as a viable form of transport for both commuting and recreational purposes.

The above objectives are inter-related and must be delivered concurrently in order to maximise growth in the uptake of cycling within Manningham.

Objective 1 – Cycling Infrastructure

The provision of new on-road and off-road bicycle routes is imperative to provide a connected network throughout the municipality.

As indicated in Section 5.2 of this Strategy, the State Governments' recently released planning discussion paper "Melbourne lets talk about the future" introduces the concept of a 20 minute city. As such, it is intended through the Bicycle Strategy, to provide on and off road bicycle routes connecting a local area to an activity centre or primary destination, within a 20 minute cycling radius.

In addition, where feasible, routes connecting catchments to either the Koonung Creek Linear Trail or the Main Yarra Trail have been considered to enable cycling access to these major commuting and recreational routes.

In the majority of instances, routes crossing the arterial road network have been directed to existing signalised intersections, pedestrian operated signals or median refuge islands to provide a safe crossing point for cyclists along the bicycle network.

However during the planning for the development of the Strategy and Ultimate Bicycle Network, the need for additional safe crossing points has been identified at the following locations:

Pedestrian Operated Signals:

- Foote Street, Templestowe at Ruffey Creek Linear Path / McLachlan Street;
- Reynolds Road, Templestowe at Church Road;
- Blackburn Road, Doncaster East, south of Beverley Street at the existing school crossing; and
- Mullum Mullum Creek Linear Park at Heidelberg Warrandyte Road.

Median Refuge Islands:

• George Street, Doncaster at Ruffey Lake Park west of Astran Place

Regional Cycling Infrastructure

There is a need to improve bicycle facilities crossing the Yarra River in the vicinity of Manningham Road, connecting the City of Manningham and the City of Banyule. Currently, there is no safe bicycle facility to cross the river at this location, without dismounting. The existing bridge on Manningham Road has only a pedestrian path and there is no identified opportunity to provide for on road bicycle lanes.

The provision of a shared path bridge across the Yarra River in the vicinity of Banksia Park, would provide an attractive connection between the Cities of Banyule and Manningham, linking Banksia Park, the Heide Museum, the Main Yarra Trail on the west side of the river, Heidelberg Train Station, the Heidelberg (Burgundy Street) Activity Centre and the proposed Banyule Arts Precinct in the Yarra Flats. It would also provide an alternative to the existing and very steep ramp from the Main Yarra Trail to the north side of Manningham Road which discourages cyclists.

A further detailed investigation of this significant regional bicycle link is required, with a view to seeking State Government grant funding to supplement local government contributions for project implementation.

Objective 2 – Bicycle Facilities

In order to provide a complete bicycle network, the provision of bicycle facilities such as convenient bike parking and seating, is imperative to make cycling easier and a feasible alternative transport option.

Bicycle facilities are to be provided along cycling routes and at various destinations to encourage participation. The average speed of cyclists for transport purposes is generally 20-30km/h (Source: Austroads: Guide to Road Design, Part 6A: Pedestrian and Cyclists paths). Given that this Strategy focuses on short trips to various destinations, the majority of trips will take approximately 9 - 15 minutes.

As such, where trips are within a range of 3-5km, bicycle facilities will typically be provided at the destination.

The majority of longer transport trips are anticipated to be made along existing trails, such as the Koonung Creek Linear Trail and the Main Yarra Trail. Additional bicycle facilities along these trails will be installed on an "as required" basis.

It is also important that bicycle facilities are provided on private property where significant retail developments are situated. There may be opportunities to encourage the increased provision of bicycle facilities through the planning permit process for new developments and advocating to trader associations the increased benefits cyclists provide to the retail sector. A 2010 case study conducted in Lygon Street, Carlton "sought to identify the economic value of replacing car parking with bike parking in shopping strips. The case study in Lygon Street Carlton in Melbourne showed that cycling generates 3.6 times more expenditure than a car. Each square metre allocated to bike parking generates \$31 per hour, compared to \$6 generated for each square metre used for a car parking space, with food/drink and clothing retailers benefiting the most from bike riders" (Source: Lee A and March A(2010) Recognising the economic role of bikes: sharing parking in Lygon Street, Carlton (Australia))

The provision of bicycle facilities will also be investigated and proposed at major bus stops, where there is a need to improve integration between cycling and public transport use.

Objective 3 – Behaviour Change (Education and Promotion)

An important factor in encouraging the increase of participation in cycling is influencing behaviour change via community education and promotion of cycling.

Promotion of new routes and end of trip facilities is required to enable residents to make active travel choices, particularly for short trips to primary destinations.

The development of cycling maps targeting various user groups will allow the community to plan their journey, knowing that a particular route is conducive to their level of cycling ability. Cycling maps may also assist in the promotion of programs such as Ride2School, bicycle education in schools, and active travel planning for businesses within the municipality. It is considered appropriate that maps of bicycle routes on Council's website be updated annually. In addition, once one third of the network has been completed, the information be made available to cyclists "on the go".

In addition, education on the cycling road rules, safety and general bicycle maintenance can improve resident confidence to ride, when they are unsure of how or where to begin.

Both cycling and pedestrian etiquette along the existing and proposed shared path network is imperative to ensuring the safety and enjoyment of the key recreational trails by all users. Signage such as "ring bell when approaching a pedestrian" is proposed to reinforce acceptable behaviour of cyclists along shared paths. Appropriate signage will be considered as part of capital delivery.

5.0 Strategic Context

5.1 Federal Context

The Federal Government has developed the National Cycling Strategy 2011-16 as a framework for all levels of government, community and stakeholders to work together to encourage more people to cycle. The Strategy recognises that increasing the number of people who ride a bike for transport and recreation provides a range of benefits to the community. The aim of the Strategy is to double the number of people cycling in Australia by 2016. In the context of Manningham, this equates to an increase of 0.27% of commuter trips in 2011(147 persons travelled by bicycle out of a total of 53,191 trips) (source ABS Census Data 2011) to 0.55% (or 294 persons) in 2016.

The Federal Government has also recently released the Walking, Riding and Access to Public Transport draft report for discussion. The draft report aims to stimulate national discussion on active travel and build on national policies currently in place, such as the National Cycling Strategy, discussed above. The draft report explores how the Australian Government can work with all levels of government, businesses and the community to encourage and support walking and cycling as part of an efficient, safe and sustainable transport system.

5.2 State Context

The State Government is responsible for the broader regional bicycle network, which includes VicRoads' Principal Bicycle Network (PBN). The PBN is a planning tool and includes on and off road routes, generally located along arterial roads and key off road routes, such as the Koonung Creek/EastLink Trails.

Recently VicRoads has adopted the SmartRoads Strategy which provides a tool to better manage the available road space amongst competing transport modes. As a result, the Bicycle Priority Routes (BPR) were introduced to link major, principal and central activity areas and the CBD, with a view to encouraging greater uptake of cycling for trips up to 5km. The BPR are also included in the Principal Bicycle Network, but have a higher priority for implementation.

In addition to the PBN, the Metropolitan Trail Network (MTN) is also a planning tool which aims to develop a network of bicycle routes, and walking routes generally along rivers and creeks. The majority of the network is off road shared paths catering to both recreational cyclists and commuters. Implementation and maintenance of the MTN is undertaken by VicRoads, Parks Victoria, Department of Sustainability and Environment (DSE) or Council, subject to land ownership.

In December 2012, the State Government released "Cycling into the Future 2013-23" which outlines the Governments' commitment to supporting and encouraging cycling in Victoria. 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". As a result, the State Government Strategy proposes to bring together the planning for both the Principal Bicycle Network and the Metropolitan Trail Network to develop a more coordinated and strategic approach.

"Cycling into the Future 2013-23" is underpinned by six strategic directions:

- Build Evidence
- Enhance Governance and Streamline Processes
- Reduce Safety Risks
- Encourage Cycling
- Grow the Cycling Economy
- Plan Networks and Prioritise Investment.

Actions plans will be developed to set out the priorities for the short term. Initially a 2 year action plan will be developed with the proposed actions to be guided by the abovementioned strategic directions.

In addition the State Government has also released its vision for Melbourne's growth to the Year 2050. The Strategy titled "Plan Melbourne - Metropolitan Planning Strategy focuses on planning for the growth and development of metropolitan Melbourne over the next 40 years. Two directions are of note in the Strategy:

• Direction 3.4 focuses improving local travel options to increase social and economic participation and states "the more people walk and cycle within their neighbourhood,

the more likely they are to interact with the neighbours and to use local services and shops, helping build stronger communities"

• Direction 4.1 focuses on living locally and the "20 minute" neighbourhood concept, whereby existing local services are accessed through improved connections for walking, cycling and public transport.

Part of achieving this, is rethinking how we allocate road space. VicRoads SmartRoads program manages competing interests for limited road space by integrating some routes with public transport, cyclists and pedestrians whilst maintaining others for primary use by cars and trucks." Priority is also given to selected modes along given routes at different times of the day.

Council's Bicycle Strategy has based the bicycle route selection on Direction 4.1 - Living Locally - a 20 minute city, whereby "living locally" means travel distances of up to 20 minutes. Living locally can be achieved amongst other considerations, by improving transport connections, especially walking, cycling and local bus service links to existing services.

5.3 Local Context

Council has a number of plans, strategies and policies in place that aim to increase the number of people cycling within the municipality for both commuting and recreational purposes. The main policies in place which provide an overarching strategic direction to this Strategy are summarised below.

Generation 2030 Community Plan

The Generation 2030 Community Plan reflects the community's vision for Manningham and guides future planning for our local area. As an overarching document, the Community Plan is designed to steer the strategic direction of Council and guide the development of policies, strategies and actions.

Goal 3.2 of the Generation 2030 Community Plan aims to achieve "A well connected and accessible community, with linked bicycle and walking pathways". Four specific actions have been identified to improve cycling rates within the municipality to improve connectivity, health and safety, whilst decreasing carbon emissions and road congestion.

Council Plan 2013-2017.

The 2009-2013 Council Plan details the vision and values Council aims to achieve. The relevant aspect of the vision to the development of this Strategy is "a community with access to high quality, responsive services, facilities and infrastructure, to meet changing needs." Action item 7.3.1 required Council to "Review and update the Manningham Bicycle Strategy to set a strategic direction for the development of bicycle infrastructure and a direction for community education and promotion of cycling, integrating with other modes of transport".

Manningham's Council Plan 2013-2017 further reinforces Council's commitment to cycling. Theme 3, of the Council Plan 2013-2017, entitled "Getting from Place to Place" states "We acknowledge the importance of an integrated and efficient transport network, with a variety

of accessible, safe and affordable transport options to enable travel, in, out and around the area. The reduction on the reliance on cars is a priority for Council and we will endeavour to ensure pedestrian and bicycle routes are well integrated with connections to public transport and the City."

Municipal Public Health Plan 2009-2013

The Health and Wellbeing Vision of Council's current Municipal Public Health Plan 2009-2013, is "to build a healthier community and a better place to live, work and play by supporting an active, healthy, safe community that embraces diversity, co–existing in a balanced natural and urban environment."

Other relevant Council strategies

In addition to the above documents, there are a number of other Council strategies that complement the work proposed in the Manningham Bicycle Strategy 2013. These include, 'Active for Life" Recreation Strategy, Road Safety Strategy, Local Activity Centre Strategy, Arterial Road Strategy, Doncaster Hill Pedestrian and Cycling Plan and Developer Contributions Plan. Other local pedestrian and cycling plans including Jacksons Court and other Reserve Management Plans – (Koonung Creek / Mullum Mullum / Warrandyte River Reserve / Warrandyte Reserve / Green Gully / Zerbes Reserve / Rieschiecks Reserve / Ruffey Creek / Ruffey Lake Park), Manningham Integrated Transport Strategy, Principal Pedestrian Network Plan, Activity Centre Structure Plans (including Templestowe Village, East Doncaster and Jacksons Court). Further information relating to these documents can be found at www.manningham.vic.gov.au. Council is also involved in the development of School Active Travel Plans.

6.0 Ultimate Bicycle Network - Methodology

The 2001 Bicycle Strategy and 2006 Supplementary Action Plan have been successfully implemented to introduce and improve bicycle routes across the City of Manningham.

The Ultimate Bicycle Network shown in Appendix 1 shows the bicycle network proposed to be achieved over the life of the Strategy. This network is a combination of on and off road paths, generally located along the local road network.

6.1 Route Selection Principles

The Manningham Bicycle Strategy Ultimate Bicycle Network has been developed following extensive on site investigations of the feasibility of each and every proposed on-road and off-road route. In addition, internal and external stakeholder consultation has been undertaken to ensure that the proposed routes are in keeping with the long term objectives of the various stakeholders including Manningham Council officers, other municipalities, Parks Victoria and VicRoads.

Analysis of the existing bicycle network has been undertaken and gaps within the network have been identified. In addition primary destinations have been identified. Primary destinations are recognised as cyclist attractors.

Following the selection of primary destinations, initial mapping of bicycle routes was based on the following guiding principles:

- Consideration of existing and proposed State Government bicycle network and linkages;
- Consideration of Bicycle Network RiderLog results;
- The provision of linkages to abutting municipalities, where appropriate;
- Linking primary destinations and the commuter trails (Koonung Creek Trail and Main Yarra Trail), where feasible;
- Connectivity of the existing bicycle network to proposed routes, where feasible;
- Bicycle routes to connect as many destinations as possible, without departing significantly from the optimal route between primary destinations;
- Consideration of catchment areas and linkages to higher population density areas;
- Stand alone commercial facilities were not treated as destinations;
- Linkages to transport nodes, where feasible; and
- Existing safe crossing points of arterial roads / waterways were identified and routes were directed through these points where feasible.

Where possible, routes are proposed 'off road' through reserves in preference to 'on road'.

6.2 Destinations

Primary destinations are recognised as cyclist attractors. The primary destinations listed below have been selected on the basis of their ability to attract larger numbers of cyclists. Primary destinations include the following facilities:

- Neighbourhood and larger activity centres, including:
 - Westfield Doncaster,
 - the Pines Shopping Centre,
 - o Bulleen Plaza,
 - o Donburn,
 - o Doncaster East / Devon Plaza,
 - o Jackson Court,
 - o Macedon Square,
 - Park Orchards Village,
 - Templestowe Village,
 - Tunstall Square,
 - Warrandyte Goldfields Shopping Centre,
 - Village on High Street,
 - Yarra Street, and
 - Warrandyte (Warrandyte Bakery)

- Community hubs and facilities including:
 - Wonga Park Integrated Community Centre;
 - Warrandyte Community Centre;
 - o Ted Ajani Centre;
 - \circ MC²;
 - o the Pines Living and Learning Centre;
 - o Aquarena;
 - o Doncaster Reserve (Leeds Street);
 - Warrandyte Reserve (Taroona Avenue);
 - The Manningham Templestowe Leisure Centre;
 - o Rieschiecks Reserve; and
 - The 100 Acres.
- Selected regional sporting reserves and community recreation reserves include:
 - Ruffey Lake Park (Boulevard);
 - Ruffey Lake Park (Victoria Street);
 - Finns Reserve;
 - Stiggants Reserve (market);
 - Mullum Mullum Reserve;
 - Westerfolds Park;
 - Warrandyte River Reserve;
 - o Banksia Park;
 - Sheahans Road Reserve;
 - Templestowe Reserve;
 - Bulleen Park;
 - Stintons Reserve; and
 - BMX and mountain bike venues.

Reserves designated as 'Regional' in Council's Open Space Strategy are considered to be primary destinations as well as reserves with multiple attractors.

- Transport Hubs:
 - The Pines Shopping Centre;
 - Westfield Shopping Centre;
 - $\circ \quad \text{the Doncaster Park and Ride; and} \quad$
 - \circ other high use bus stops.

Other Primary destinations:

• Heide Museum of Modern Art

6.3 Topography

Route selection has taken account of topography and routes have generally been selected to run through flatter areas where an option was available. Sections with steeper grades have generally been limited in length, so as to maximise participation.

6.3 Consultation

The development of the bicycle network has been undertaken in consultation with both internal and external stakeholders, including Council officers, State Government agencies such as Parks Victoria and VicRoads, officers from neighbouring Councils and the local community.

6.4 Types of Routes

In order to select appropriate routes, it was necessary to understand the type of cyclists that may use the route. As stated in Section 1.2, the aim of this strategy is to target the 'interested but concerned' members of the community. However it is also noted that cyclists of all skill levels will travel along the Ultimate Bicycle Network routes proposed in this Strategy.

Therefore, it is also important to understand the different ways in which routes may be used by different cyclists.

Bicycle routes are likely to be used either as transport routes or as recreational routes, as shown in Figure 1.

<u>Transport Routes</u> can be either used for commuting purposes or for local trips.

- Commuting are generally direct routes to either the CBD or to the commuter bike paths i.e. Koonung Creek trail, Main Yarra Trail. They are generally used for transport purposes. The aim is to achieve separation, where feasible, to encourage all levels of riders to commute.
- Local Trips routes connect a catchment to a destination, such as an activity centre or community or transport hub. These routes can be on-road or off-road and are likely to be on the local road network where there is a low speed environment and low traffic volumes. This type of route is for transport purposes, but for short distances of 3-5kms.

<u>Recreational Routes</u> can be used for either fitness and / or training purposes or for purely recreational purposes.

- Fitness / Training cyclists who ride for fitness or to train for events such as the Great Victorian Bike Ride are generally very confident riders and will ride on almost any route where a bike can go. These riders generally fall into the 'Strong and the Fearless' category of riders discussed in Section 1.2.
- Recreational these routes are lower intensity routes and generally off -road through linear parks where the community can cycle as a family, to improve fitness or for pure enjoyment.

However it is noted that some routes, such as the Koonung Creek Linear Trail, are used for all of the above purposes, albeit at different times, i.e. commuting trips during the commuter peak periods, fitness (generally early mornings on weekends) and family riding, typically during the day on weekends. The construction of the bicycle routes is to be undertaken to best practise standards applicable at the time, taking into consideration the available budget, site constraints and the function of the bicycle route.



Figure 1 (Source: Bicycle Network www.bicyclenetwork.com.au)

7.0 Funding

Costings for each of the actions in the proposed Action Plan are provided, as well as details of proposed infrastructure improvements and behaviour change programs.

The timing of implementation of major projects such as the installation of pedestrian operated signals will be subject to the availability of funding from Council and external funding sources, such as the State and Federal Governments. At the time of preparing this Strategy, external funding streams were limited.

However, given that the bicycle network presented in this Strategy is proposed to be developed over a number of years, the funding situation is likely to change in the future.

Notwithstanding the above, it is proposed that when external funding opportunities are presented, be it short, medium or long term, funding will be sought through the preparation of

business cases and funding submissions for specific larger projects, as identified within the Action Plan.

Where proposed bicycle routes coincide with the Principal Pedestrian Network routes, the works will be coordinated and be jointly funded from both program budgets. At this time the current Council 10 year Capital Works Program has allocated approximately \$3.4 million for implementation of the Bicycle Strategy.

In addition, funding for bicycle facility development is also provided through other Council funding streams, including actions arising from reserve management plans. An example of these arrangements is the upgrade of the Mullum Mullum Creek Linear Trail.

8.0 Advocacy

Implementation of the VicRoads PBN is key to achieving an integrated bicycle network and connectivity from the local network proposed in this Strategy's Ultimate Bicycle Network to the PBN. It is imperative that Council continues to advocate for the implementation of the PBN, to ensure that cycling for both commuting and recreational purposes is a feasible transport alternative. Priority should be given to PBN routes which address missing links in the local bicycle network.

9.0 Review of this Strategy

Bicycle Strategy 2013

The Manningham Bicycle Strategy 2013 is an overarching strategic document which sets out the vision, the strategic context and scope of actions identified, to encourage a greater uptake of cycling as a viable and safe mode of transport within Manningham. The Strategy will guide Council in local implementation of cycling infrastructure and bicycle facilities, the facilitation of behaviour change and promotional programs and in advocacy initiatives to further the Strategy objectives.

The Manningham Bicycle Strategy 2013 is proposed to be reviewed when and if the strategic direction of Council, or the State and/or Federal Government changes.

The Strategy identifies the ultimate network of bicycle routes for the municipality, including existing and proposed routes that will be implemented by Council or the State Government. The Ultimate Bicycle Network Council routes are anticipated to require a number of years to design and construct. However, smaller projects are identified through the Action Plan which can be delivered in the short to medium term.

Project delivery will be prioritised to ensure that projects included in the first three year action plan will be of higher community benefit.

Action Plans

Action Plans will be separate companion documents that will detail the various actions to be implemented on an annual basis.

Action Plans will have a life of three to five years. The status of the Action Plan will be regularly reviewed to ensure that the objectives of this Strategy are being achieved i.e. behaviour change as well as infrastructure improvements.

Action Plans will specify a range of actions in relation to marketing, advocacy, infrastructure improvements, bicycle facilities etc.

Action Plans will incorporate actions to be delivered through all relevant Council programs, including reserve management plans, the Arterial Road Strategy and other program areas.

Action Plans will also include the project prioritisation criteria which will guide the program priorities and direct program funds to achieve the greatest benefit at the earliest possible time. The following criteria have been developed to facilitate the prioritisation of projects, based on an associated scoring system as shown in Appendix 2.

- Catchment;
- Safety for existing road function;
- Proximity to Primary Destination;
- Length of Route; and
- Works Complexity.

9.1 Monitoring and Review

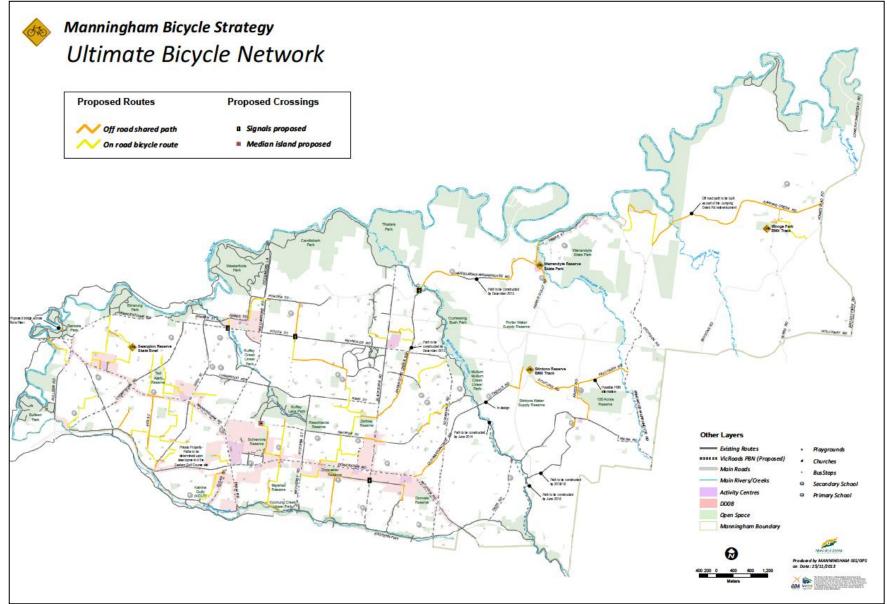
Increases in the number of people cycling in Manningham will be a significant indicator of the success of the Strategy and will be monitored via:

- ABS Census Data, specifically, Method of Travel to Work data, based on Place of Usual Residence. At the 2011 census, cycling represented a mode share of 0.28% of all commuter trips;
- Bicycle Network Super Tuesday counts. It is proposed that Council participate in these counts every three years to gauge the number of cyclists travelling along the main commuter trails; and
- Data collection through Council's bicycle counters along the Koonung Creek Linear Trail and Mullum Mullum Creek Trail.

XAPPY PEDALLING!

Appendix 1

Ultimate Bicycle Network Plan



Appendix 2

Action Plan - Project Prioritisation Criteria

Project prioritisation is required to guide the program implementation and direct program funds to achieve the greatest benefit, at the earliest possible time. The bicycle strategy aims to maximise participation in cycling as a viable, safe and sustainable form of transport in part through the most cost effective provision of assets.

The following criteria have been developed to facilitate the prioritisation of projects, based on an associated scoring system. These prioritisation criteria apply to the Bicycle Strategy implementation budget only. Projects which currently receive funding from other sources (i.e. Mullum Mullum Creek) will be prioritised through prioritisation systems associated with those programs. They will however be listed in the Action Plan as ongoing projects.

The Bicycle Strategy 2013 Action Plan projects will generally be prioritised for implementation based on the listed criteria utilising the scoring system set out below. The Bicycle Strategy Action Plan program for project delivery in a given financial year may differ from the project priorities arising from this process, due to:

- Selection of projects with budgets to suit the total available annual budget;
- Cost efficiencies and opportunities to package works, spatial considerations and the desirability of packaging projects in close proximity to other Bicycle Strategy projects in a given year to achieve cost efficiencies;
- Where road or drainage works are proposed under other programs and the location of these works coincides with the Bicycle Strategy project locations, the Bicycle Strategy project may be brought forward to minimise community disruption and achieve cost efficiencies;
- Where grant monies are received for a specific project, the timing of the project may be brought forward;
- Bicycle project priority for routes coinciding with the PPN are to be determined from PPN project priorities; and
- Project priorities may vary subject to the availability of funding for associated works such as pedestrian signals, to facilitate route continuity and cyclist safety.

Destination Criteria

• **Proximity to Primary Destination** – routes which are closer to a primary destination should be prioritised ahead of paths further from a primary destination, as they are likely to attract higher levels of utilisation.

Catchment Criteria

• **Catchment** – routes serving catchments which are zoned to permit higher density development should be prioritised ahead of paths with catchments in lower development density areas. The catchment criteria accounts for anticipated future development in an area.

Physical Criteria

- Length of Route The construction of short route sections constituting missing links in the network can result in cost effective completion of a greater section of the network. Such projects should be awarded higher priority.
- **Safety** Cyclist safety is paramount. Factors impacting cyclist safety include current available clearance of cyclists from traffic, higher speed limits and traffic volumes along the road. Priority should be given to projects which address existing safety issues.
- Works Complexity The type of terrain will influence construction costs. Where works such as significant earthworks, vegetation removal, retaining walls, boardwalks, modifications to existing traffic treatments or where an existing footpath requires removal to provide a shared path, the degree of difficulty of providing the bicycle route is increased. This will impact on the budget allocation for a particular project. The future asset life cycle costs and ongoing maintenance also needs to be considered.

Criteria	Description	Scoring		Weighting
		DD08, ACZ	5	20
Catchment	Catchment determined based on a cycle distance of 3km and average	Residential zoning (Res 1 to Res 3)	4 - 3	
Catchment	potential development density in the catchment	Low Density	2	
		Rural Conservation	1	
	Cyclist safety is paramount and existing conditions requiring improvement	Link / Arterial Road	5	30
Cofety for existing		Collector Road	4	
Safety - for existing road function	should be prioritised ahead of other projects. Issues impacting cyclist safety include speed and traffic volumes on the road. There is a correlation between	Local Access - Through	3	
	road functional classification and traffic speed and volume.	Local Access - No Through Road	2	
	Todu functional classification and traine speed and volume.	Off Road (thru reserve)	1	
		route within 500m of primary destination	7	20
	Sections of proposed path in closer proximity to a primary destination should be given higher priority, than sections of path which are more remote from a primary destination	route between 500m and 1km of primary destination	6	
Description to Deimon		route between 1km and 1.5km of primary destination	5	
Proximity to Primary Destination		route between 1.5km and 2km of primary destination	4	
Destination		route between 2km and 2.5km of primary destination	3	
		route between 2.5 and 3km of primary destination	2	
		route length of 3km from primary destination	1	
		route length up to 250m	6	- 15
		route length between 250m and 500m	5	
Length of Route	Priority is to be given to lower cost projects which involve the construction of missing links and shorter sections of path as the earlier construction of these	route length between 500m and 1km	4	
Length of Route	assets should encourage greater uptake of cycling	route length between 1km and 2km	3	
		route length between 2km and 3km	2	
		route length over 3km	1	
	The type of terrain will influence construction costs. Are retaining walls or a boardwalk required? Are traffic islands/modifications to existing traffic treatments required to provide for cyclist? Does the existing footpath need to	Significant works / ongoing costs	1	15
Works Complexity		extensive works / ongoing costs	2	
trend complexity	be removed to provide a shared path? Consider asset life cycle costs and	Moderate works / ongoing costs	3	
	ongoing maintenance.	Minor works / ongoing costs	5	

BICYCLE STRATEGY 2013 ACTION PLAN - PROJECT PRIORITISATION CRITERIA