



ATTACHMENT ONE

MONASH WALKING AND CYCLING STRATEGY

**ACTIVE
MONASH**



Snapshot

Council is committed to a city that is walking and cycling friendly and one where residents of all ages and abilities can easily walk and cycle as their preferred form of exercise and transport. Therefore, the strategy considers opportunities to better cater for the needs of all people who use pathways including people in wheelchairs, parents/carers with prams, young children on scooters, as well as cyclists and walkers.

Cycling and especially walking are among Victorian's most popular activities. Approximately 36% of the population walks and 12% of the population cycles as their preferred form of physical activity. Well-planned, inviting pathways and trails will encourage people to be more active as part of their daily routine and as a result derive some of the social, health and wellbeing, environmental and economic benefits that come with walking and cycling.

The strategy recognises that often people walk and cycle for very different reasons and it is important to understand and plan for facilities that support different needs. Therefore the strategy takes into account that people may walk and cycle for health and fitness, recreation, or transport reasons.

The strategy provides a framework and principles for the planning, design, improvement and management of Council's network of pathways and trails. A further objective is to provide a framework for encouraging greater involvement of residents, community organisations, and government in the development of walking, cycling and other pathway related activities and opportunities.

The Walking and Cycling Strategy is a strategic document that considers activity and lifestyle trends, industry and government guidelines and standards, partnership opportunities, and the aspirations of residents. The strategy will inform Council's service and capital works priorities and will assist in ensuring that the provision for pathway and trail related activities are sustainable into the future.

The following principles will guide the future planning, design and management of pathways and trails within Monash:

- > Addressing a diverse range of needs
- > Planning and provision of opportunities
- > Supportive environments for physical activity
- > Understanding the priorities
- > An encouraging and supportive community

An analysis of existing policies, strategies and consultation findings, identified a number of emerging themes and issues. Stakeholders and residents highlighted these themes in a number of different forums. Each theme was

analysed by identifying the relevant key findings, discussing relevant trends and opportunities and proposed recommendations in response to the issues. This resulted in an Action Plan which outlines the strategies for addressing service planning and infrastructure development priorities for the next 4 years. Some of the key actions include:

- > Identify and map proposed off-road and on-road trails according to the hierarchy of trails and planning principles proposed in the strategy.
- > Identify short, medium, and longer-term initiatives to enhance the Scotchmans Creek Trail in line with design guidelines, and allocate a budget for the next 3 years to upgrade.
- > Identify opportunities to rectify existing on-road cycling infrastructure that negatively impacts on cyclists
- > Commence an audit of signage to identify off-road and on-road signage requirements (location, type) for pathways.
- > Line mark nominal shared pathway and bicycle lanes, including regulation symbols, starting with Gardiners Creek Trail.
- > Construct link between Holmesglen and Jordanville Railway Stations - Waverley Rail Trail.
- > Investigate the level of interest in re-establishing the Monash Bicycle Users Group.



Acknowledgments

Monash City Council acknowledges local Aboriginal Indigenous Australians, with the Wurundjeri people and Boon Wurrong clans of the Kulin Nations, as the original custodians of the land now known as Monash and pays respect to their leaders, past and present. Monash City Council would like to acknowledge the services of LMH Consulting in helping develop the Walking & Cycling Strategy. Monash City Council also recognises the contribution from Youth & Recreation, Transport, Infrastructure, Planning & Design and Urban Design departments, and other Council Officers who formed part of the Steering Committee. In addition, representatives from the Walking & Cycling Network and numerous community groups, who provided advice and information where required, and the involvement of those residents, organisations, and schools who participated in the survey and focus groups. Council looks forward to building on the partnerships established as part of the project.

Glossary of Terms

Term Definition for the purpose of the Walking and Cycling Strategy

MCC Monash City Council

Footpath A pedestrian only pathway that generally runs alongside roads. Note: Children up to 12 and adults accompanying them are permitted to cycle on footpaths

Shared pathway Pathways that can be used for cycling and pedestrian related activities

Active transport A physically active means of transport that includes walking, cycling and using other non-motorised forms of mobility

On-road trails or bike lanes An on-road carriageway that may be exclusively for cyclists or may be shared by cyclists and vehicles

Household survey Online survey conducted as part of the Walking and Cycling Strategy

Pathway The generic term used for footpaths and off-road trails

Trail Generally a pathway that passes through parks, along creek sides or parallel to road but separate to footpaths

Single use pathway Pathways that are generally used for one type of activity only e.g. cycling or walking activities

Commuter A person who travels to a place of work or education by private or public transport or by walking or cycling etc.

Off-road pathway Provision made for walkers and cyclists away from the roadway e.g. walking trails, footpaths

Schools survey Survey completed by schools for the Walking and Cycling Strategy

Table of Contents

Snapshot	2
Planning for an active future	6
What is the vision for walking and cycling in Monash?	6
What are the principles that underpin the Walking and Cycling Strategy?	6
What policies influenced the strategy?	8
Who did we consult with?	8
Understanding the needs of walkers and cyclists	9
Different types of walking and cycling	9
Benefits of walking and cycling	10
What is 'active transport'?	11
What were the key findings and analysis?	12
Creating and maintaining a well connected walking and cycling network	12
Effective signage and pathway markings	13
Ensuring consistent design standards	14
Effective planning for walking and cycling	15
Incorporating walking and cycling into our lifestyle	16
Sharing our pathways and roads	17
An informed community	18
Strengthening partnerships	18
Our plan for addressing the key findings	20
How the strategy will be implemented, monitored & reviewed	22
Appendix A: The Action Plan	24
Action Plan Part A – Service Planning and Development	24
Action Plan Part B – Infrastructure Development	29
Appendix B: Our pathways and trails hierarchy	32



Planning for an active future

Council has the opportunity to promote physical activity and healthy lifestyles through the way it plans and develops the municipality; its programs, services, support it provides and the awareness it creates within the local community.

What is the vision for walking and cycling in Monash?

Council's vision for walking and cycling is for Monash to be a city where:

- > People embrace walking and cycling as part of their lifestyle and enjoy walking and cycling because it provides the opportunity to connect with nature, friends and family.
- > Pathways and amenities inspire people of all ages to exercise, have fun, be together, or just 'be'; take people on a journey to where they want and need to go; and connect people and neighbourhoods.

What are the principles that underpin the Walking and Cycling Strategy?

Addressing a diverse range of needs

- > There are times when the needs of walkers and cyclists are similar and can be accommodated together; however there are times when it will be necessary to provide differently for walkers and cyclists.
- > People choose to walk and cycle for a variety of reasons, including to commute to work or school, for fitness or competition, for recreation or to access places in the local community.
- > In addition to walkers and cyclists, the needs of all possible pathway users will be considered when planning and developing pathways, including people in motorised wheelchairs, children on scooters, joggers, parents/carers with prams, and people walking dogs.

Planning and provision of opportunities

- > Planning will seek to optimise the integration of walking and cycling networks, including footpaths and trails .
- > Sustainable and responsible development of infrastructure needs to consider:
 - the initial cost of developing infrastructure and costs associated with ongoing maintenance and life cycle
 - the implications for the safety and comfort of walkers and cyclists
 - the best outcomes that can be achieved for the funds available and for the wider community.

- > The planning, development, management and maintenance of walking and cycling infrastructure is the responsibility of a number of Council departments, including departments responsible for transport and infrastructure, recreation, and urban planning and design. It is important to involve other departments that plan for specific groups in our community (e.g. community development, children's services, and youth services).
- > The planning and provision of walking and cycling infrastructure will be in accordance with an agreed framework that is consistently applied.

Supportive environments for physical activity

- > Pathways will be planned and designed to optimise safety and perceptions of safety.
- > Appropriate pathway infrastructure such as seating, drinking water, signage, natural shade, toilets, accessible car parking will encourage people of all ages and abilities to use pathways.
- > Opportunities to create different pathway environments and experiences will be explored.

Understanding the priorities

- > Priorities will be determined according to criteria established as part of the Walking and Cycling Strategy.
- > Priorities may be refined over time in consideration of changing community needs and funding opportunities.

An encouraging and supportive community

- > Positive partnerships with community groups, peak associations, education institutions, state government will be critical to achieving the outcomes of the Walking and Cycling Strategy.
- > Embracing of walking and cycling as part of our way of life will require motorists, cyclists, and walkers to be considerate of each other.
- > Community groups and targeted initiatives are important if residents are to understand the opportunities available to them and embrace walking and cycling as part of their lifestyle.



What policies influenced the strategy

The Walking and Cycling Strategy has been developed in consideration of key Council and government policy and planning documents.

Key references in the development & implementation of the Walking & Cycling Strategy:

Council Plan and Monash 2021

Monash Environmental Sustainability Road Map

Monash Health and Wellbeing Plan

Monash Positive Ageing Strategy

Monash Disability Access and Inclusion Action Plan

Monash Planning Scheme

Monash Physical Activity Plan

Road Management Plan

Victorian Pedestrian Access Strategy

Victorian Cycling Strategy (2009, 2013)

Planning references VicRoads Principal Bicycle Network (PBN) and Bicycle Priority Routes (BPR), and Melbourne Trail Network (MTN)

The National Urban Design Protocol

Who did we consult with?

The Walking and Cycling Strategy has been informed by research from Council's key planning documents as well as research specifically conducted for the strategy, which includes:

- > community survey – 373 respondents
- > school survey – 12 schools
- > submissions – 8
- > community/clubs forums - 3
- > consultation with adjoining LGAs
- > transport providers forum
- > interviews with key agencies/ organisations
- > staff workshops and discussion sessions

Council received a further 16 submissions to the draft strategy.

Understanding the needs of walkers and cyclists

Council recognises people walk and cycle for very different reasons and it is important to understand and plan for facilities that support different needs. Council is committed to effective planning and development of opportunities associated with walking and cycling in recognition of their well documented health and wellbeing benefits¹.

Different types of walking and cycling

Generally, people are inspired to walk and cycle for transport, recreation or health and wellbeing reasons. These are not mutually exclusive however; the following breakdown provides an effective way of understanding the primary motivations for walking and cycling.

Walking and cycling for transport

- > Commuting to get to work, school, university, or other transport links.
- > Local commuting walking or cycling to get to places in the local community.

Walking and cycling for health and recreation

- > Fitness walking or cycling for the primary purpose of improving fitness.
- > Recreation walking or cycling to be outdoors, visiting places of interest, or socializing.

¹ Refer References cited in the Walking and Cycling Strategy

In 2010:

35% of Australians walked for exercise or recreation at some time

20% walked at least 3 times a week

11.9% of Australians cycled for exercise or recreation at some time

2.7% cycled at least 3 times a week

Reference: Exercise, Recreation & Sport Survey, 2011

Benefits of walking and cycling

Social benefits

- > Communities where people interact more are associated with longer, healthier lives, social change, community support, and enhanced economic outcomes².

Personal benefits

- > people who are active are less likely to be affected by 'lifestyle' illness such as heart disease, depression, obesity and diabetes.
- > regular physical activity contributes to improved physical and mental health and wellbeing .

Economic benefits

- > enhanced levels of physical activity is associated with improved work place productivity and less absenteeism and reduced health costs due to improved health status.

Environmental benefits:

- > a reduction in air and noise pollution because of an increased use of in non-motorised transport.
- > enhanced urban environments and streetscapes because communities desire attractive environments for physical activity.

² The Benefits of Community Engagement: A Review of the Evidence

‘Car travelers face pollution levels inside their vehicles that are 2 to 3 times higher than those experienced by pedestrians and cyclists in the open air.’

Reference: www.science.unsw.edu.au/news/air-pollution-worst-inside-cars-research/

What is ‘active transport’?

Active transport is the term given to activities such as walking, cycling or skateboarding for the primary purpose of getting to a destination³. A destination may be work, school or university, the local shops, a park, or a public transport facility. It encourages travelers to be physically active as part of their journey, and to use motorised transport less. Increased participation in active transport activities lead to the social, physical, economic and environmental benefits of walking and cycling.

VicHealth identify that children engaging in active transport activities are more likely than others to:

- > be independent and motivated and to get out and about .
- > be better accustomed to navigating their way around.
- > be more comfortable and confident in social and public situations.
- > develop independent mobility skills and awareness and social responsibility.
- > spend less time in sedentary activities and are more regularly active.

³ VicHealth Fact Sheet – Active Transport)



What were the key findings and analysis?

An analysis of existing policies, strategies and consultation findings identified a number of emerging themes and issues. Each theme has been analysed by identifying the relevant key findings, discussing relevant trends and opportunities, and proposed recommendations in response to the issues.

1. Creating and maintaining a well connected walking and cycling network

Both walkers and cyclists stressed the need to identify and complete gaps in the pathway network as the highest priority for the next five years.

35% of walkers and 44% of cyclists said 'I do not have access to a well connected network of pathways.'

Reference: Walking and Cycling Strategy, Community Survey 2012

Walkers and cyclists reported the following key concerns and opportunities for completing gaps:

- > the abrupt cessation in pathways, unsigned deviations in pathways and limited pathways through urban precincts such as shopping centres and railway car parks.
- > concerns over the change in pathway use from shared use (e.g. bicycle and walking) to single use (e.g. walking only) along many pathway routes, which can force cyclists onto roads or can be seen to encourage them to break road rules if they proceed on bicycle along footpaths.
- > lack of continuous and safe on-road routes as a major deterrent to cycling in Monash - 'stop-start' bike lane provision on roads, the abrupt cessation of bike lanes particularly at roundabouts and intersections, the change in width and positioning of bike lanes on the road carriageway, the change in use (e.g. bike only lane to shared bus bike lane) along a length of road discourages commuter cycling in the city.



- > completing gaps along trails and creating links to and through key destinations from local neighbourhoods and from other major trail networks.
- > reduce barriers and improve connectivity at road crossings to cater better for the needs of pedestrians and cyclists (Victorian Pedestrian Strategy).
- > need to better synchronise lights at pedestrian crossings, with extended wait for light changes, insufficient time to cross and right hand turns for cyclists, reported (Green Light Plan⁴).
- > pathways within parks and reserves are important as informal meeting places to exercise close to home, especially for older people and parents/carers with children.
- > creating and completing tracks with key government authorities such as the Melbourne Water Pipe Reserve, Bicycle Priority Routes, PBN, VicRoads and VicTrack.

The strategy provides a framework and principles for the planning, design, improvement and management of Council's network of pathways and trails. Similarly the state government's strategy 'Cycling into the Future 2013-2023' guides the planning of infrastructure that supports cycling as a form of transport. The focus for both plans is on connecting major business and retail activity centres⁵, separating cyclists and motorists, and increasing the use of local roads and off-road paths instead of major roads.

2. Effective signage and pathway markings

The need for more effective signage was raised by 60% of respondents to the community survey⁶. Signage can be a cost effective way to address the gaps in the pathway network in the short term. Good directional signage will assist walkers and cyclists navigate their way around pathway detours and will define walker and cyclist right of way through areas such as car parks. Signage in conjunction with education material and programs, will also inform path users about who is permitted to use different types of pathways.



In particular:

4 <http://www.dpcd.vic.gov.au/localgovernment/projects-and-programs/green-light-plan>

5 <http://www.vicroads.vic.gov.au/Home/Moreinfoandservices/Bicycles/StrategicDirectionsForCycling/BicycleNetworkPlanning/PrincipalBicycleNetwork.htm>

6 Walking and Cycling Strategy, community survey

- > Signage to key destinations such as Jells Park, Monash University campus, Holmesglen TAFE, sporting reserves and recreation centres, shopping precincts, community facilities, public transport; as well as signage to destinations outside the municipality, such as Chadstone Shopping Centre, and the Melbourne CBD.
- > Define on-road routes and connections to off-road pathway network.
- > Landmark and distance signage to identify their locations and distance to key destinations.
- > Stenciled signage that identifies the name of the pathway, and reminds pathway users that pathways are shared (e.g. dividing lines) and the need to observe pathway courtesies.
- > 'Emergency markers' enable pathway users to identify their position in the case of an emergency (e.g. Gardiners Creek Trail in adjoining municipalities).

A review of existing and required signage should be undertaken as part of an audit of pathways. The review should consider opportunities to enhance signage in relation to detours in the pathway network, linkages to primary trail networks, linkages to local and regional destinations including shops, parks and school, and emergency location signage.

There is an opportunity to work with other councils, industry associations and peak bodies, and state government to develop a statewide approach to pathway signage.

3. Ensuring consistent design standards

Consultation highlighted the perception that the standard of pathways within Monash is lower than adjoining municipalities. This was specifically identified on municipal pathways and trails such as Gardiners Creek Trail, Scotchmans Creek Trail, Station Trail and Rail Trail.

The strategy proposes a hierarchy of pathways to which development guidelines can be applied. This will identify the type and level of infrastructure to be provided for each category of pathway and ensure pathways are developed in line with consistent amenity and safety guidelines. The application of universal design principles will further optimise opportunities for all pathway users regardless of age or ability.

The strategy proposes 4 categories or level of pathway, Level 1-Municipal pathways, Level 2-Suburban/District pathways, Level 3-Neighbourhood pathways and Level 4-Parkland pathways. Please refer to Appendix B.

Consultation identified the need for provision guidelines for a number of pathway features including:

- > **Width of on-road lanes and off-road pathways** – current provision does not distinguish between major and minor pathways. It is acknowledged that in some cases it is not possible to provide the desired width of pathway, as in the case of on-road pathways, because of the lack of space.



- > **Placement and colour of pathway infrastructure along pathways** – consideration should be given to the colour and placement of infrastructure to ensure it can easily be seen, particularly by cyclists travelling at speed.
- > **Amenities such as lighting, toilets, and seating** – amenities that support older residents and families to be encouraged to walk and cycle.
- > **Transitions between pathways and roads** – even transitions between different carriageways will ensure pathways are easy to use by people with different needs including people in wheelchairs, parents/carers with prams and people on trikes.
- > **The type and placement of vegetation plantings** – attractive pathway environments and minimise the incursion of vegetation onto pathway surfaces.
- > **Infrastructure supporting walking and cycling as part of everyday travel** – integration with public transport including bus tops, well designed transport interchanges and secure bike storage facilities.

4. Effective planning for walking and cycling

Residents attending the public forums highlighted the need for a more holistic and integrated approach towards planning for walking and cycling, with a specific focus on linking the strategy with Council’s long term vision.

The objectives and principles of the Walking and Cycling Strategy have a close relationship with a number of objectives in Monash 2021 and Monash Planning Scheme⁷. Of particular relevance are actions in the strategy that ensure pathways optimise opportunities:

- > for residents to access ‘activity centres’ safely and directly on foot or by bicycle.
- > for residents to access open space and recreation opportunities within comfortable walking distance from home.
- > to link to the broader walking, cycling and open space networks in the region.
- > to cater for a range of different walking and cycling needs.
- > to add to the diversity of open space and recreation environments.
- > provide basic convenience facilities such as drinking fountains, seating, toilets and bicycle racks.

Throughout consultation, Monash residents have reinforced the need for these design elements to be applied to the planning of the pathway network and the facilities needed to support use by the community.

⁷ Monash Planning Scheme



In particular, residents identified the need for shopping precincts that are more pedestrian and cycling friendly with wider footpaths, seating, trees, toilets, and secure bike racks. Both walkers and cyclists reinforced the advantage of shopping precincts with attractive and quality eateries. These establishments help create energetic and social environments, which are an attractive destinations for local walkers and cyclists.

‘Walkability’ and ‘bikeability’ audits are becoming a popular mechanism to assess the ease by which residents can move around their community. They also provide a community perspective on how to enhance neighbourhoods and urban environments. A number of resources are available to assist council’s assess the walkability/bikeability of neighbourhoods. Council has already commissioned Walkability audit reports for the Oakleigh Village Centre⁸, Clayton Activity Centre⁹ and Glen Waverley Activity Centre.¹⁰

5. Incorporating walking and cycling into our lifestyle

The household survey¹¹ identified a number of motivational and lifestyle factors that are likely to influence participation in walking and cycling. Both walkers and cyclists identified the need to fit their activity into their daily routine (walkers 70%, cyclists 60.6%); being able to measure the benefits of their exercise (walkers 58.2%, cyclists 65.9%); setting a good example for family (walkers 39.4%, cyclists 38.4%); and finding other people to walk or cycle with (walkers 35.2%, cyclists 43.8%); as key motivators. Cyclists also included finding safer or more inspiring paths (50.1%) and walkers the need to feel fitter (36.3%) as significant motivators. Being motivated by friends or family inspired 37.2% of cyclists and 31.6% of walkers; motivating someone else inspired 18.9% of cyclists and 18.3% of walkers. 33% of walkers said they were motivated by their dog’s health or wanting to spend more time with the family pet.

What is likely to get Monash residents walking and cycling more?

- > Being able to fit activities into their daily routine and
- > Being able to measure the benefits of their exercise-

Reference: Household survey, 2012

Council’s opportunity to encourage people to embrace walking and cycling as part of their lifestyle includes the planning and implementation of:

8 Rodney Tolley, Kinect Australia, 2006
9 Rodney Tolley, 2008
10 Rodney Tolley, 2009
11 Household survey, Walking and Cycling Strategy, 2012

- > **infrastructure** – such as pathways and bike storage infrastructure at transport interchanges that allow a seamless transition between different modes of transport; local pathways to key destinations such as schools, attractive and inspiring pathway environments, and change facilities at work places.
- > **initiatives** – to help residents measure the benefit of walking and cycling. A whole of community approach that involves doctors, health and recreation centres, clubs and groups, schools, and provides residents with the opportunity to establish their goals and measure improvements, is likely to have the greatest success. Creating online communities is a good support.
- > **innovative programs** that invite and encourage residents to join an activity and access information, for example setting a good example for the family and keeping the family pet fit.

6. Sharing our pathways and roads

Both walkers and cyclists raised the need for greater courtesy, tolerance, and understanding between cyclists, walkers, and motorists. Cyclists travelling at speed and not giving polite or adequate warning of their approach on shared pathways, and ignoring road rules were the most common complaints from drivers and walkers. Groups of

75% of survey respondents said they feel safe walking in Monash while 10% of cyclists said they feel safe riding on roads in Monash

Reference: Walking and Cycling Strategy, community survey 2012

walkers taking up the full width of pathways, stopping to talk on pathways and dogs on long leashes or off-leash were the most common complaints of cyclists using off-road pathways. A perceived lack of respect and tolerance and not obeying road rules were the most common complaints expressed by motorists and cyclists using roads.

Cyclists also recommended that Monash work with the state government and adjoining councils to investigate promotional opportunities to raise awareness of cyclists rights and responsibilities as road users and to promote cycling as a legitimate road use.

Anecdotal feedback indicates there may be conflict between dog off leash activities and trail activities. Research shows that dog ownership provides significant physical, emotional, and social benefits to dog owners and so should be supported. However, consideration should be given to locating dog off leash areas away from trails and requiring dogs to be on leash when using pathways and nearby environs. Additional promotional activities could be considered to ensure dog owners are aware of their responsibilities in terms of controlling their dogs and pathway etiquette.

7. An informed community

Council is committed to understanding community needs for information, particularly information that makes it easier for residents to achieve their walking and cycling aspirations.

Community groups involved in preparing the Walking and Cycling Strategy were keen to work with Council to identify and promote walking and cycling opportunities, including recreation and ride-to-work groups, and provide information that would encourage greater participation. These groups also identified the need for assistance in promoting their group and activities and developing skills and contacts that would assist them achieve this.

Council acts as centre point for communication opportunities:

- > to provide information about existing walking and cycling groups and associated calendars of activities
- > for people to flag interest in establish an informal local walking or cycling group
- > to profile walking and cycling routes in local communities, including their suitability for different needs e.g. wheelchairs, prams, bikes
- > promote special features of the pathway network and activities shared with families and friends. Consider inviting residents, schools, children etc. to write articles
- > to link to external websites, such as Heart Foundation Walking, that host information and opportunities to support the community.

Council has identified the need to update information about pathways in Monash and linkages to key destinations. Consideration should be given to combining this information into a TravelSmart¹² map for Monash. TravelSmart maps highlight walking, cycling and public transport routes and are tailored to the local area to include information about walking clubs, bicycle user groups, public transport ticketing information and special events.

There is also an opportunity to further support a walking and cycling network whereby residents can share information about new and emerging initiatives and existing programs and that might encourage more people into walking and cycling. By raising awareness of opportunities Council can encourage residents to connect with like-minded people in local neighbourhoods.

8. Strengthening partnerships

Opportunities to further advocate for partnership projects and funding through state and federal governments and other authorities such as Melbourne Water, Parks Victoria, VicRoads and VicTrack will be a priority for Council. This includes consulting and working with the community, walking and cycling groups, and other stakeholders, to better position Council for successful outcomes.

¹² www.transport.vic.gov.au/projects/travelsmart/maps



Neighbouring councils indicated a desire to work with Monash¹³ to identify joint projects relating to signage along and to pathways and key destinations, an interactive website that allows people to track the benefits of their exercise, and initiatives focusing on schools, pre-schools and parents facility based initiatives (e.g. recreation/aquatic centres).

The Monash University Bicycle Users Group (BUG) is the only active BUGs group in Monash. Feedback from cyclists participating in community forums expressed an interest in reforming a Bicycle Users Group that can work with Council to assist with the implementation of the Walking and Cycling Strategy, promote cycling as a commuter and recreation option, and promote events and activities.

Parents at community forms¹⁴ expressed frustration about the lack of initiatives to address traffic related issues near schools that deter them from encouraging their children to walk or ride to school. Local schools cited¹⁵ a lack of parent support, congestion at school drop off points, weather, hilly terrain, and limited pathway linkages as the top five barriers to children walking or cycling to school. There is an opportunity for Council to work with schools to identify site-specific initiatives or trial programs to address traffic related barriers to walking and cycling near schools.

Consideration should also be given to initiatives that provide opportunities for people, in particular children who cannot afford bicycles. Monash University has a bike swap program in place to support students into active lifestyles and in some case to provide their only form of transport.

“Of parents who could not identify barriers to active transport, a large proportion of their children’s trips to school were of active means, either walking or cycling.”

Murdoch Children’s Research Centre, Ride and Stride background paper

13 Walking and Cycling Strategy, survey of adjoining councils

14 Monash Walking and Cycling Strategy, community forums 2012

15 Monash Walking and Cycling Strategy, schools survey, 2012

Our plan for addressing the key findings

Council recognises that enhancing environments for walking and cycling will encourage residents to be more physically active as part of their everyday lifestyle. As a priority, recommendations will focus on actions and strategies that:

- > renew and improve pathways they accommodate the changing walking and cycling needs of the community.
- > address gaps in the pathway network so pathways are continuous (particularly the shortfall in north-south walking and cycling pathways).
- > ensure the design of pathways is in line with good practice guidelines.
- > provide direct routes to key destinations and facilities in Monash and the region.
- > enhance facilities that support walking and cycling including seating, toilets, car parks and facilities at transport connections.
- > optimise the quality of pathway construction and maintenance.
- > encourage increased walking and cycling to school and urban precincts.
- > enhance connectivity between different transport modes.

The recommendations outlined in the Action Plan respond to the issues and opportunities identified as part of key findings and analysis (please refer to Appendix A). They have been prioritised according to whether these issues and opportunities:

- > were significant throughout the consultation process.
- > have been identified in other community planning projects.
- > address risk management issues.
- > will achieve significant benefits for the outlay of resources.
- > can be achieved within available resources.



- > have been identified as a priority by Council, state and federal government agencies, or special interest groups or organizations.

There are two parts to the Action Plan. Part A outlines the strategies for addressing service planning and development priorities and Part B outlines infrastructure priorities for the next 4 years.

The Action Plan provides indicative timelines for addressing the issues and opportunities identified in the Walking and Cycling Strategy. Timelines may vary depending on the availability of funding, the capacity of the community to support initiatives, changing Council and community priorities, and other demands on the Council budget.

Key performance measures for the action plan have also been developed. The measures focus on completing the gaps and creating links in the existing pathway network, the investment of Council funding, and the performance of the new or upgraded pathway. The following three key measures will be reported on annually:

- > metres of constructed pathway
- > investment per metre
- > customer satisfaction of new or upgraded pathway

There is a direct relationship between the type of pathway constructed, according to the hierarchy, and the overall cost (i.e. Level 1 Municipal pathways have higher cost compared to Level 2, 3, 4). How the pathway is performing is also important to Council. Residents will be invited to walk and cycle the new (or upgraded) pathway and provide feedback to Council.



How the strategy will be implemented, monitored & reviewed?

Council will consider the priorities as part of the annual budget process. During this time Council will review opportunities to further support the development of the pathway and trail network.

Council's role will vary for each of the proposed actions and will depend on:

- > the capacity of Council to maintain its role over the life of the strategy.
- > the benefits that might result from Council's involvement in one action as compared to another.
- > the opportunity for funding from other sources such as the state or federal governments.
- > the capacity of the community to play a role.

Council role	What this role means for the Walking and Cycling Strategy, Council will:
Service planning	<ul style="list-style-type: none"> > review the strategy in consultation with the community to identify changed and new service needs and opportunities > review the action plan in consideration of changed community and council priorities
Service and Program Provision	<ul style="list-style-type: none"> > identify services and programs that address community needs and aspirations > seek partnerships with residents, community groups, and key agencies to expand activity and event opportunities > seek funding from state and federal government to implement new programs
Infrastructure Planning and Provision	<ul style="list-style-type: none"> > review the strategy in consultation with the community to identify changed or new infrastructure priorities > design and construct pathways and associated amenities such as road crossing, bridges, seating > seek funding from state and federal government to assist with the building of facilities
Advocacy	<ul style="list-style-type: none"> > make representation to potential project and funding agencies > advocate with and on behalf of residents and community groups
Innovation and Leadership	<ul style="list-style-type: none"> > facilitate community networks and initiatives > encourage and identify new and alternative opportunities > facilitate collaborative initiatives that enhance opportunities > research industry innovations
Information	<ul style="list-style-type: none"> > work with residents and groups to form networks and to provide and exchange information and advice > review the type of information wanted by the community and address these needs where practicable



The Walking and Cycling Strategy will be monitored annually to review key performance measures and to identify any actions that have not been implemented in line with proposed timelines. These actions will then be reviewed to ensure they are still consistent with community and Council priorities and aspirations. A major review of the Walking and Cycling Strategy is recommended to be undertaken in five years.



Appendix A: The Action Plan

Action	Timeframe	Measurable Outcome	Stakeholders (INT – LEAD ONLY)	Resourcing
1. Creating a well connected walking and cycling network				
1. Identify and map proposed off-road and on-road trails according to the hierarchy of trails and planning principles proposed in the strategy.	YEAR 1	Completion of Map and Integration in GIS system	INT: COUNCIL (TRIPD) EXT: Walking/cycling groups, disability action groups, general community	Within operational budget
2. Utilise current road design criteria relating to on-road cycling pathways to ensure future design eliminates/minimises negative impacts for cyclists.	ONGOING	Criteria used to design on-road cycling pathways	INT: COUNCIL (TRIPD) EXT: VicRoads, Bicycle Network Victoria, Dept Transport, bus companies, adjoining LGAs, bicycle interest groups, general community	Within operational budget
3. Identify short, medium, and longer-term initiatives to enhance the Scotchmans Creek Trail in line with design guidelines, and seek budget for the next 3 years to upgrade.	YEAR 1	Completion of Scotchmans Creek Trail Development plan	INT: COUNCIL (TRIPD) EXT: Walking/cycling groups, disability action groups, resident groups, general community	Within operational budget
4. Prepare a 10-year pathway development and funding plan for pathways and determine a 10-year capital works budget with a focus on partnerships with key agencies including state and federal government, Melbourne Water, VicTrack, VicRoads, Parks Victoria.	YEAR 2-4	Completion of 10-year Pathway & Funding plan	INT: COUNCIL (TRIPD) EXT: Walking/cycling groups, disability action groups, resident groups, general community, state and federal government, Melbourne Water, VicTrack, VicRoads, ParksVictoria, Bicycle Network Victoria, adjoining LGAs	Within operational budget



5.	Identify opportunities to better link footpaths to the wider pathway network and key destinations in Monash within Council's Footpath Development Program.	YEAR 2-4	Opportunities included in 10-year Pathway & Funding plan	INT: COUNCIL (TRIPD) EXT: Dept Transport, walking/cycling/disability/ older people interest groups, general community	Within operational budget Est. \$40,000 if external required
6.	Advocate to the state government to identify opportunities for Monash in relation to the government's Green Light Plan.	YEAR 5-7	Commence discussions with State Government	INT: COUNCIL (TRIPD) EXT: Dept Transport, Heart Foundation, Dept. Human Services, walking/cycling/disability/older people interest groups, schools, general community	Within operational budget
7.	Work with Monash University to identify opportunities to provide more effective off-road and on-road pathway linkages to university campuses.	YEAR 1	Opportunities included in 10-year Pathway & Funding plan	INT: COUNCIL (TRIPD) EXT: Dept Transport, Monash University, Bicycle Network Victoria, general community	Within operational budget
8.	Develop a checklist for reserve/parkland master plans to identify opportunities for internal park pathways and links to the wider pathway network.	YEAR 2-4	Completion of Checklist Checklist used in master plan process	INT: COUNCIL (UD)	\$20,000

2. Effective signage and pathway markings

9.	Prepare a pathway signage provision framework (e.g. mounted and trail surface signage, pathway and roadway warning signage, interpretive signage, directional signage, way finding system).	YEAR 2-4	Completion of Framework	INT: COUNCIL (UD) EXT: Walking/cycling/disability/older people/ tourism interest groups, schools, pre-schools, general community	\$50,000
10.	Commence an audit of signage to identify off-road and on-road signage requirements (location, type) for pathways.	YEAR 1	Completion of Audit	INT: COUNCIL (TRIPD) EXT: Walking/cycling/disability/older people/ tourism interest groups, schools, pre-schools, general community	\$60,000
11.	Prepare a timeline and budget for the installation of	YEAR 2-4	Included in 10-year	INT: COUNCIL (TRIPD/UD)	Within operational budget



signage.		Pathway & Funding plan		
12. Commence installation of emergency assistance signage in line with installations in adjoining municipalities.	YEAR 1-10	Included in 10-year Pathway & Funding plan Year 1 – Gardiners Creek Trail completed	INT: COUNCIL (TRIPD)	\$5,000 per annum

3. Ensuring consistent design standards

13. Adopt a pathway hierarchy as the framework for determining design and provision guidelines for on-road and off-road pathways.	YEAR 1	Completion of Pathway Hierarchy Framework	INT: COUNCIL	Within operational budget
14. Determine design and provision guidelines that will apply to the hierarchy of pathways proposed in the Walking and Cycling Strategy.	YEAR 2-4	Completion of Pathway Design & Provision Guideline	INT: COUNCIL (TRIPD)	Within operational budget
15. Prepare a hierarchy of road crossing treatments to apply to pathway and road intersections.	YEAR 2-4	Included in Pathway Hierarchy Framework	INT: COUNCIL (TRIPD)	\$40,000
16. Adopt design and installation specifications for infrastructure designed to control pathway entry and exits e.g. bollards, pedestrian barriers.	YEAR 1	Included Pathway Design & Provision Guideline	INT: COUNCIL (TRIPD) EXT: Walking/cycling interest groups, Bicycle Network Victoria, Victoria Walks	Within operational budget

4. Effective planning for walking and cycling

17. Consider opportunities to involve the community (e.g. residents, schools) in walkability and bikeability audits, and associated infrastructure audits (e.g. seating, signage).	ONGOING	Conduct walkability and bikeability and infrastructure audits for 1 project per year	INT: COUNCIL (REC) EXT: Dept Human Services, Bicycle Network Victoria, Victoria Walks, Heart Foundation, Neighbourhood Houses, walking/cycling/disability/older people/ tourism interest groups, schools, pre-schools,	\$15,000 (community development/engagement support)
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			resident groups, general community	
18. Ensure current good practice guidelines (e.g. Austroads, VicRoads, Healthy by Design guidelines) are incorporated into the planning, design and maintenance of pathways and pathway infrastructure.	ONGOING	Included in Pathway Design & Provision Guideline	INT: COUNCIL (TRIP, UD)	Within operational budget
19. Consider adopting the Walk21 International Charter for Walking to guide the planning of walkable communities.	YEAR 2-4	Feasibility completed	INT: COUNCIL (UD)	\$30,000

5. Incorporating walking and cycling into our lifestyle

20. Review the map of Monash pathways to include the type of environments (e.g. bush land), terrain (e.g. easy, family), key points of interest (e.g. parks, eateries), infrastructure (e.g. bike storage) relevant to pathways. Consider opportunities to link to GPS route mapping and provide online and in hard copy.	YEAR 1	Development of Map Criteria Updating of Online Map	INT: COUNCIL (REC) EXT: Dept Human Services, Bicycle Network Victoria, Victoria Walks, Heart Foundation, walking/cycling/ disability/older people/tourism interest groups, schools, pre-schools, resident groups, general community	\$50,000 to support information collection, mapping and hard copy and online production
21. Research industry initiatives that have been successful in increasing the level of community participation in unstructured and lifestyle (e.g. walking to work) based physical activity, with a particular focus on walking and cycling.	YEAR 2-4	Completion of ACT!VATING Monash Community Report	INT: COUNCIL (REC) EXT: Adjoining LGAs, Dept Human Services, Dept. Transport, SRV, Neighbourhood Houses, walking /cycling/disability/older people/tourism interest groups	Within operational budget

6. Sharing our pathways and roads

22. Consider media strategies that remind pathway users of pathway etiquette.	YEAR 2-4	Understanding of media strategies	INT: COUNCIL (REC) EXT:	\$10,000 to assist with implementation.
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23. Work with the state government and adjoining LGAs to develop a promotional program that reinforces cycling as a legitimate road use.	YEAR 5-7	Creation of promotional program	INT: COUNCIL (REC) EXT: Adjoining LGAs, Dept. Transport, SRV, Bicycle Network Victoria	\$20,000
24. Review the location of dog off-leash areas in relation to pathways and consider: - alternative provision strategies for dogs off-leash - landscaping and vegetation demarcation strategies - fenced dog off-leash areas where there is a need to accommodate activities in close proximity to each other.	YEAR 1	Completion of audit Included in Pathway Design & Provision Guideline	INT: COUNCIL (LL) EXT: Resident/walking/cycling interest groups	Within operational budget
7. Sharing information				
25. Investigate opportunities to develop an online Active Monash portal that includes: - An online program via which residents can establish physical activity goals, record successes and get information. This may be achieved via an already established program. - Opportunity for people to flag interest in establish an informal local walking or cycling group - Organisations/facilities (e.g. Monash Aquatic and Recreation Centre), health service providers (e.g. Monashlink), commercial providers that offer services (e.g. health check days)	YEAR 4-6	Review of existing online information Creation of online Active ACT!VATING Monash Community portal	INT: COUNCIL (REC, IT) EXT: Recreation and fitness centres, MonashLink, doctors, Resident/walking/cycling interest groups, Heart Foundation	\$50,000 (research, planning, and set up)
26. Consider the development of a Monash TravelSmart	YEAR 2-4	Completion of	INT: COUNCIL (REC)	\$15,000



map and opportunities to integrate this with the Monash University TravelSmart Map.		TravelSmart map	EXT: Bicycle Network Victoria, Victoria Walks, Heart Foundation, Dept. Transport, walking/ cycling/disability/older people/tourism interest groups, schools, pre-schools, resident groups, general community
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8. Strengthening partnerships

<p>27. Work with interested schools to identify:</p> <ul style="list-style-type: none"> - short and longer-term strategies to minimise traffic related barriers to walking and cycling - program and infrastructure initiatives to increase the level of walking and cycling to school - program initiatives to increase the level of walking and cycling by students and families - facilitation and promotion of school bicycle education programs and Bicycle Network Victoria school initiatives 	YEAR 2-4	Completion of strategies review (in partnership with schools)	<p>INT: COUNCIL (REC, TRIP)</p> <p>EXT: Schools/education institutions, Dept. Transport, Dept. Education/Early Childhood Development., Bicycle Network Victoria</p>	Within operational budget for the review
<p>28. Consult with municipalities that adjoin Monash to identify joint program/project initiatives.</p>	ONGOING	Completion of consultation	<p>INT: COUNCIL (REC, TRIP)</p> <p>EXT: Adjoining LGAs, Depart. Transport, Dept. Education/Early Childhood Development., Bicycle Network Victoria, Victoria Walks, walking/cycling/disability /older people/tourism interest groups, schools, pre-schools, Neighbourhood Houses</p>	Within operational budget
<p>29. Support the expansion of the Walking and Cycling Network.</p>	YEAR 2-4	Successfully hold quarterly meetings for the Monash Walking & Cycling Network	<p>INT: COUNCIL (REC)</p> <p>EXT: Walking/cycling/disability /older people/tourism interest groups, schools, pre-schools</p>	Within operational budget



30. Investigate the level of interest in re-establishing the Monash Bicycle Users Group, and if there is sufficient interest, assist the community to establish.	YEAR 2-4	Creation of Monash Bicycle Users Group	INT: COUNCIL (REC) EXT: Bicycle interest groups, Bicycle Network Victoria, Monash University	Within operational budget
31. Investigate the need and interest in a bicycle 'swap program' that provides opportunities for people previously unable to purchase a bicycle and associated equipment due to cost.	YEAR 2-4	Creation of Bicycle Swap Program	INT: COUNCIL (REC) EXT: Bicycle interest groups, service clubs, Men's Shed, U3A, Bicycle Network Victoria, Neighbourhood Houses, Monash University	Within operational budget \$15,000 for program initiatives/set up

PART B of the ACTION PLAN – INFRASTRUCTURE DEVELOPMENT

Action	Timeframe	Measure	Stakeholders (INT – LEAD ONLY)	Resourcing
32. Scotchmans Creek Trail, Mount Waverley – Complete between Forster Road and Waverley Road	YEAR 1	Pathway Completed	INT: COUNCIL (TRIPD) EXT:	\$170,000
33. Replace existing bollards in pathways including appropriate line marking	YEAR 1	Bollard completed	INT: COUNCIL (TRIPD) EXT:	\$25,000
34. Line mark nominal shared pathway and bicycle lanes, including regulation symbols, starting with Gardiners Creek Trail	YEAR 1	Line marking completed	INT: COUNCIL (TRIPD) EXT:	\$20,000
35. Installation of stenciled logo emergency assistance signage to the Gardiners Creek Trail	YEAR 1	Emergency assistance stencil completed	INT: COUNCIL (TRIPD) EXT:	\$275,000



36. Scotchmans Creek Trail, Oakleigh – upgrade Park Road to west	YEAR 1-4	Pathway completed	INT: COUNCIL (TRIPD) EXT:	\$15,000
37. Waverley Rail Trail – Construct between Holmesglen and Jordanville Railway Stations	YEAR 2-4	Pathway completed	INT: COUNCIL (TRIPD) EXT:	Scope of works and costings to be considered as part of annual budget process
38. Waverley Rail Trail – Construct between Jordanville Railway Stations and Alvie Road (Stage 1)	YEAR 2-4	Pathway completed	INT: COUNCIL (TRIPD) EXT:	
39. Line mark nominal 20 km of shared pathway and bicycle lanes including regulation symbols	YEAR 2-4	Line marking completed	INT: COUNCIL (TRIPD) EXT:	
40. New signage (Stage 1)	YEAR 2-4	Signage installed	INT: COUNCIL (TRIPD) EXT:	Scope of works and costings to be considered as part of annual budget process
41. Waverley Rail Trail – Construct between Jordanville Railway Stations and Alvie Road (Stage 2)	YEAR 2-4	Pathway completed	INT: COUNCIL (TRIPD) EXT:	
42. Monash University, Blackburn Road – Construct shared pathway (Stage 1)	YEAR 2-4	Pathway completed	INT: COUNCIL (TRIPD) EXT:	
43. Scotchmans Creek Trail – Upgrade in Waverley Road between Glen Waverley Main Drain & Aquatic Centre (both sides)	Year 5-7	Pathway completed	INT: COUNCIL (TRIPD) EXT:	

Departmental Key

TRIP Transport & Infrastructure Planning

REC Youth & Recreation

UD Urban Design

LL Local Laws

COM City of Monash



Appendix B: Our pathways and trails hierarchy

Council has classified pathways and trails according to the function they will serve in the overall pathway network. Some pathways and trails play a key transport or commuter role, getting people to destinations such as work places, schools, community facilities, or train stations. Other pathways and trails are less important in terms of transport but are important in terms of recreation. These pathways amble along creek lines, traverse parks, and link to destinations such as Jells Park.

Classifying pathways and trails helps Council determine the level of development and the type of infrastructure needed to support the different groups of people who use them.

Three different levels of pathway have been identified and these will guide pathway planning in the future:

Level 1 – Municipal pathways and trails

These pathways and trails form the spine of the pathway network in Monash and are a significant part of the regional pathway and trail network that links Monash with the eastern metropolitan region. They are likely to link with paths in adjoining municipalities, to major facilities in the region, and may be part of a statewide or national network of pathways. These pathways and trails need to be designed to cater for commuter, fitness, and recreation walking and cycling.

Included in this classification are pathways that are part of:

- > the Metropolitan Trail Network (MTN), which is a network of recreational routes in metropolitan Melbourne largely consisting of shared pedestrian and bicycle pathways.
- > the Victorian Principal Bicycle Network (PBN), which is a network of on-road and off-road cycle routes that provides access to key destinations around Melbourne and metropolitan area. The PBN network has a key focus on commuter cycling.



- > the Bicycle Priority Routes (BPR), which is the part of the PBN (on-road routes) that is integrated with the road network.

Generally these pathways will have a solid surface and are wider than other pathways because of the need to cater for both commuter and recreation walkers and cyclists. These pathways need to be designed to cater for commuter, fitness, and recreation walking and cycling.

Examples of these pathways and trails in Monash include:

ROUTE	TYPE
Dandenong Creek Trail	Off-road
Ferntree Gully Road	On-road
Gardiners Creek Trail	Off-road
Princes Highway	On-road
Scotchmans Creek Trail	On-road/Off-road
Station Trail	On-road/Off-road
Rail Trail	On-road/Off-road

Level 2 – Suburb/District pathways and trails

Generally, these pathways and trails link suburbs within Monash and to major community, retail, sporting, and transport hubs in Monash or just outside the city’s boundaries.

Generally they will have a solid surface and may vary in width depending on the role they play in the overall pathway and trail network. Level 2 pathways and trails will generally link into the level 1 network.

Examples of these pathways and trails in Monash include:

ROUTE	TYPE
Forster Road / Gardiner Road	On-road
Glen Waverley Station/Shepherd Road	On-road/Off-road
Lawrence Road	On-road
Legend Park-Glen Waverley Shopping Centre	On-road
North Road	On-road/Off-road
Park Road/Alvie Road	On-road
Route 7 Trail	On-road/Off-road
Scotchmans Creek Trail	On-road/Off-road
Watsons Road/Strada Crescent	On-road/Off-road
Wellington Road	On-road/Off-road



Level 3 – Neighbourhood pathways and trails

Generally, level 3 pathways and trails allow people to get to facilities such as schools, local shops, and local parks in their own or nearby neighbourhoods. Surfaces of these pathways and trails may vary depending on the role they play in the network and where they are located. Pathways through environmental areas, for example, may not have a solid surface. Level 3 pathways will generally link into the level 2 pathway and trail network.

Examples of these pathways and trails in Monash include:

ROUTE	TYPE
Atheldene Estate	On-road/Off-road
Centre Road Shared Pathway	Off-road
Cootamundra Drive/Albany Drive	On-road/Off-road
Electra Reserve	On-road/Off-road
Golf Road Shared Pathway	Off-road
Reserve off Heany Street	On-road/Off-road
Huntingdale Road	On-road
Lum Reserve/Allendale Crescent	On-road/Off-road
Freeway Reserve/Keirens Way	Off-road
Springvale Road Bicycle Route	Off-road

Level 4 - Parkland pathways and trails

These are pathways and trails in local parks and reserves. They generally support activities such as walking, ambling, jogging, and children's bike riding. They may also include fitness trails. If these pathways are part of a more significant pathway and trail network that traverses the park, then they will be constructed to accommodate the higher level of activity.

Examples of these pathways in Monash include:

ROUTE	TYPE
Gladeswood Reserve Pathways	Off-road