



Wyndham Pedestrian & Cycle Strategy

Draft

Contents

Executive Summary.....	iii
Introduction	1
Key Definitions	1
A Vision for Wyndham: Wyndham 2040 & Council City Plan	2
Strategic Context	3
Legislative context	3
Policy Context	4
About Wyndham	5
Demographics	6
Travel behaviour in Wyndham.....	6
Car Ownership	6
Travel to Work	6
Commute Times	7
Sport and active recreation participation.....	7
Consultation/Surveys.....	7
About Walking & Cycling.....	8
Benefits of Walking & Cycling	8
Barriers to Walking & Cycling.....	9
The Network	10
The Current Network	10
The Future Network.....	11
Objective 1: Achieve an integrated pedestrian and cycle network that will enable all users to move around the network according to their needs.....	13
Why is this a priority?	13
Action 1.1 – Network Audit.....	14
Action 1.2 - Network Plan	14
Action 1.3 – Activity Intense Areas	15
Action 1.4 - Network Implementation Plan	16
Action 1.5 - Safety and Accessibility	16
Objective 2: Pedestrian and cycle transport infrastructure meets the needs of all people within Wyndham.....	18
Why is this a priority?	18
Action 2.1 – Improve Infrastructure	19

Action 2.2 - Council Projects	19
Action 2.3 - Innovation.....	20
Action 2.4 - Local Policy or Planning Scheme Amendment	20
Action 2.5 – Amenity.....	21
Action 2.6 – Aboriginal Cultural Paths	22
Objective 3: Wyndham residents have access to information on smarter, healthier, more environmentally sustainable travel choices through education, promotion and communication.	23
Why is this a priority?	23
Action 3.1 - Schools.....	24
Action 3.2 - Signage.....	24
Action 3.3 - Maps	25
Monitoring and Review.....	28
APPENDIX A - Maps.....	29
Types of Paths	29
Map 1 Western Metropolitan Melbourne Regional Trails Network.....	30
Map 2 Wyndham Paths.....	31
Map 3 Shared Paths	32
Map 4 On Road Paths	33
Map 5 Bike Only Paths	34
APPENDIX B – Opportunities for infrastructure improvements	35
APPENDIX C - Abbreviations & Definitions.....	37

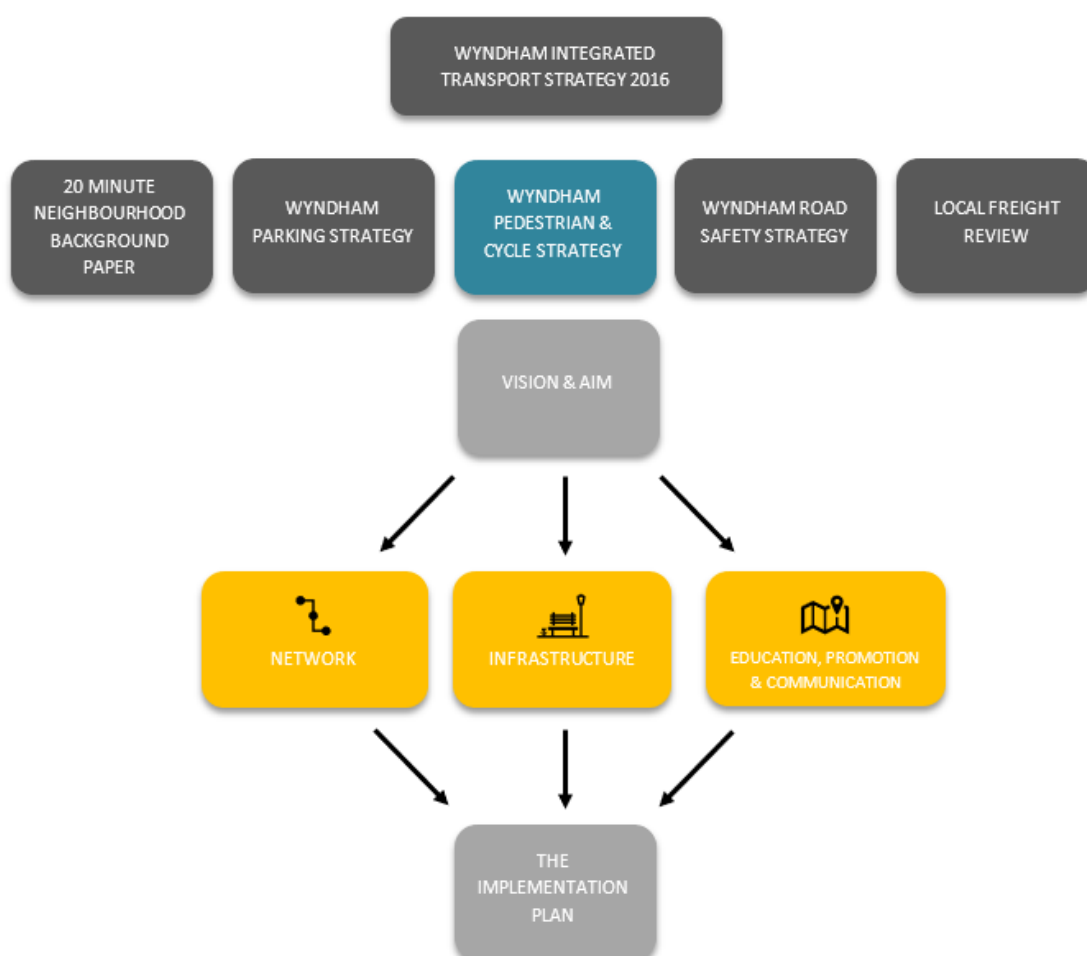
Executive Summary

Wyndham 2040 articulates the City's vision for the future across four themes; People and Community, Places and Spaces, Earning and Learning, and Leadership and Participation. Council's vision for Places and Spaces is a transport system that is efficient, responsive and easy to navigate, with greater connectivity to Melbourne, while infrastructure, built spaces and the diversity of housing options contribute to the quality of life of residents at all ages.

We are all pedestrians at some point in every journey, and most of us cycle at some time in our lives. We all benefit when the place we live in is good for walking and cycling. For the network to be convenient and attractive for all users it needs to cater for individuals with varied abilities and confidence levels.

The Wyndham Pedestrian and Cycle Strategy builds on the achievements of the 2011 Bicycle Network Strategy which are outlined in the 'Pedestrian and Cycle Strategy supporting document' [{LINK}](#) and is a key action from the Wyndham Integrated Transport Strategy adopted in 2016.

The vision of this Strategy is that Wyndham will have a pedestrian and cycle network that is accessible, integrated, comfortable, attractive and safer for people of all ages and abilities. In doing so the Strategy will provide Council with a strategic direction for pedestrian and cycle network planning, infrastructure provision, and education, to meet the needs of the community and deliver on the vision.



See Table 1 for other related policies and documents

Introduction

Citizens use transport networks to access employment, education and social opportunities as well as access a wide variety of services and almost all of these trips include a walking component. Whether they walk, cycle, take public transport, drive or use a mobility aid to get to their destination, almost all residents will begin or end their trip as a pedestrian. Walking and cycling are often the fastest modes of transport for short trips in congested urban areas and an effective way to improve health, reduce carbon emissions and save on transport costs.

There is good potential for walking to become a more popular form of transport in Wyndham due to the relatively flat topography, suitable climate, and proximity to public transport hubs and activity centres. Notwithstanding these favourable conditions and advantages associated with active travel, during an average week more than half of Wyndham adults (60.9%) do not use walking as a mode of transport for trips longer than 10 minutes. The fact that Wyndham has less active travel by means of walking may be relative to Wyndham's growth and the distance to shopping, medical and public transport.

The Wyndham Pedestrian and Cycle strategy seeks to improve walking and cycling outcomes in Wyndham by identifying specific actions needed to address missing links and provide effective, convenient and connected walking and cycling routes whilst ensuring good networks across Wyndham.

This strategy responds to the Wyndham Integrated Transport Strategy and updates and extends the existing Wyndham Bicycle Network Strategy (2011) whilst also incorporating walking.

Key Definitions

Pedestrians

The Victorian Road Rules define pedestrians as people who are:

- On foot
- On wheeled devices such as skateboards, rollerblades, wheelchairs and motorised mobility devices
- Pushing a bicycle

Throughout this document the word 'walking' will be used to define the basic form of mobility available to each individual. This includes those who walk with a mobility aid, a wheelchair or a motorised mobility device.

Cyclists

According to the Victorian Cycling Strategy 2018-28 people can be categorised by their propensity to cycle based on their comfort level and interest/intent to cycle for transport.

- **Strong and fearless** – will mix with traffic and cycle regardless of road conditions.
- **Enthusied and confident** – already riding but could ride more and experience could be improved.
- **Interested but concerned** – curious about cycling, enjoy riding, put off/afraid by need to ride close to motor vehicles (especially on higher-speed, higher volume roads or where conflicts

are more likely) and pedestrians. This group makes up the largest proportion of cyclists and investment in cycling infrastructure would likely encourage the amount they ride.

- **No way, no how** – cannot cycle, or will not due to unsuitable terrain, or due to having no interest.

It should be noted that there is currently a gender imbalance of cyclists related to concerns with on-road cycle facilities as well as large amounts of school aged children who often ride on footpaths who are required under the road rules to transition to on-road cycling from the age of 12. Children make up the largest single group of cyclists and pedestrians during school pick up and drop off times in Wyndham.

A Vision for Wyndham: Wyndham 2040 & Council City Plan

Wyndham 2040 articulates the City's vision for the future across four themes; People and Community, Places and Spaces, Earning and Learning, and Leadership and Participation. Council's vision for Places and Spaces is a transport system that is efficient, responsive and easy to navigate, with greater connectivity to Melbourne, while infrastructure, built spaces and the diversity of housing options contribute to the quality of life of residents at all ages. Active travel networks play a key role in providing the transport network our community desires.

Wyndham's transport system will be efficient. People will be able to move around Wyndham easily. There will be more ways to connect to Greater Melbourne.

Wyndham 2040 Vision

The **Council City Plan 2017-2021** outlines Council's strategic priorities to realise the 2040 vision. The Pedestrian & Cycle Strategy will assist Council in achieving the following objectives from the Council Plan 2017-2021:

1.2.4

Council will help to create a safer, more cohesive community by: effective planning, design and regulation of public spaces which encourage active transport and social inclusion opportunities; actively engaging with the community to improve perceptions of safety; and encouraging shared responsibility to prevent and address issues which impact on residents' sense of safety and wellbeing.

2.2.1

Council will seek to enhance the health and wellbeing of residents and visitors who experience the negative effects of commuter-stress by advocating for higher levels of accessible, affordable, low emission public transport; increase car parking and opportunities for active transport in and around public transport hubs including train stations; and ensure new developments include infrastructure that will address our City's growth needs.

Strategic Context

The **Wyndham Integrated Transport Strategy 2016** (WITS) identifies the shared vision and goals of the community relating to transport and traffic concerns and provides strategic actions to achieve these goals.

The following elements of the WITS specifically relate to pedestrians & cyclists

- Target 2 – Proportion of mode share for walking and cycling trips to triple by 2040.
- Program 5 – Build a connected and accessible walking and cycling network.
- Action 5 – Develop a Wyndham Cycling Strategy to replace the 2011 Wyndham Bicycle Network Strategy and review every five years.
- Action 6 – Develop a Wyndham Walking Strategy and review every five years.

“By 2040 Wyndham is a connected city that offers a wide choice of transport options; supports efficient travel within and beyond its region; and provides a sustainable transport system that maximises safety, health, equity, social inclusion, quality of life, environmental outcomes and economic prosperity”

WITS Vision 2016

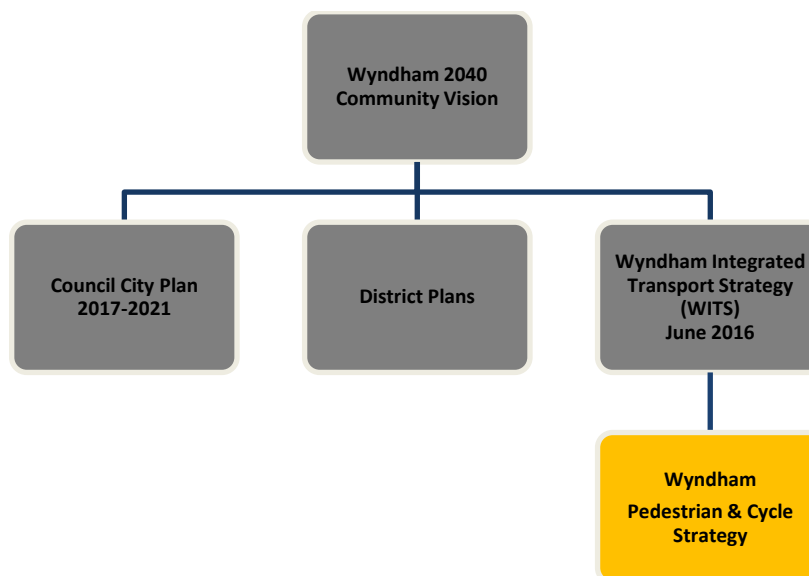


Figure 1: How the Pedestrian & Cycle Strategy fits within the City's strategic framework

Legislative context

The Transport Integration Act 2010 (TIA) is a principles-based legislative document based on the following principles.

- Social and Economic Inclusion
- Economic Prosperity
- Environmental Sustainability
- Integration of Transport and Land Use
- Efficient, Coordination and Reliability
- Safety, Health and Wellbeing

Since its inception, the TIA has provided a framework for transport decision making to ensure the provision of an integrated and sustainable transport system in Victoria. Detailed information on

these policies and principles and how they relate to the transport network in Wyndham, are outlined in pages 9-11 of the WITS.

Policy Context

Pedestrian & Cycle policy in Wyndham is influenced by all levels of Government. Commonwealth and State Governments have a significant impact on regional and local outcomes through their control of policy and infrastructure development. In addition, non-government organisations produce relevant documents that provide guidance to assist decision making. The overarching policy framework for transport in Wyndham is detailed in the WITS.

The Pedestrian & Cycle Strategy uses the WITS as a key document, including the documents identified in its policy framework. Set out below are the additional documents and policies which have been considered in the development of the Pedestrian & Cycle Strategy.

Federal & State	Regional & Local
National • Austroads Guides • Australian Standards • National Charter of Integrated Transport and Land Use Planning 2003 • National Cycling Strategy • National Road Safety Action Plan 2018-2020 • Australian Infrastructure Plans and Infrastructure Priority Lists • Review of Disability Standards for Accessible Public Transport 2015 State • Plan Melbourne • Victorian Cycling Strategy • Precinct Structure Plans • Manual for Road Design • Transport Integration Act 2010 • Road Management Act 2004 • Disability Discrimination Act 1992 • Victoria Road Safety Strategy 2013-2022 • Public Health and Wellbeing Act 2008 • Pedestrian Access Strategy 2010 • VPA Engineering Design and Construction Manual for Subdivisions in Growth Areas • Parks Victoria Linking People and Spaces 2002 • Movement and Place in Victoria • VicRoads - Practitioner guidance for bicycle infrastructure treatments, including: – Traffic Engineering Manual (TEM) Volume 2 and 3 – Guidance on Pedestrian and Cyclist Treatments at Roundabouts – Guidance on Treating Bicycle Car Dooring Collisions – Design Guidance for strategically important cycling corridors – Shared Path Audit Guidelines	Regional • Western Melbourne Transport Strategy • Western Metropolitan Region Trails Strategic Plan 'West Trails' Local • Wyndham 2040 Vision • Wyndham City Plan 2017-2021 • Municipal Strategic Statement • Wyndham Planning Scheme • Wyndham Integrated Transport Strategy, June 2016 • Bicycle Network Strategy, December 2011 • Road Management Plan • Leisure Strategy 2013-2017 • Werribee River Shared Trail Strategy 2013 • Environmentally Sustainable Design Framework • Accessibility Action Plan 2019-2022 • Early Years Plan 2013-2017 • Youth Plan 2013-2017 • Aged and Disability Service Access Policy • Tree Policy 2018 • Smart Cities Strategy • Wyndham Bay Trail - Shared Path Alignment Study • Wyndham Urban Framework Plan (Draft) • Active Wyndham (Draft) • Road Safety Strategy • Wyndham Coastal Management Plan Issues & Opportunities Paper

Table 1: Relevant policies and documents

About Wyndham

Wyndham covers an area of 542km² and features 27.4km of coastline bordering Port Phillip to the east. The municipality is situated in one of Australia's most productive regions, part of the largest area of rich basalt soils on the continent. Wyndham is adjacent to the municipalities of Greater Geelong, Moorabool, Melton, Brimbank and Hobsons Bay.



Figure 2: Map of Wyndham

Population Projections

Wyndham is one of the largest and fastest growing municipalities in Australia, adding 14,251 residents between 2017 and 2018. Wyndham City's population is forecasted to increase by 218,901 people to reach 489,379 by 2041. According to *Victoria in the Future 2019*¹, the official State Government projection of population, Wyndham will have the largest population growth of all Local Government areas in Victoria from 2018 to 2036.

¹ Department of Environment, Land, Water and Planning (2019), *Victoria in Future 2019: Population Projections 2016 to 2056*, Victorian State Government, accessed < <https://www.planning.vic.gov.au/land-use-and-population-research/victoria-in-future>>.

Demographics

Wyndham has a relatively young population with a median age of 32 years. In 2041, the largest age group is forecasted to be 0-4, followed by 30-34². In 2016, all age groups experienced a positive net migration, however the age group with the largest net migration was 25 to 34 years, followed by 35 to 44 years³.

Wyndham's age structure forecast suggests that the population of all age groups will increase, but the greatest increase will be young children and working age adults. This means that the transport system will need to accommodate an increasing number of education and commuter trips, but also accommodate the transport needs of young people, older adults and people with mobility challenges.

Travel behaviour in Wyndham

Data from the 2012-2016 Victorian Integrated Survey of Travel and Activity (VISTA) provides vital insights into the travel behaviour of Wyndham residents. The survey showed us that on a weekday⁴:

- 70,000 walking and cycling trips were made in the Wyndham Local Government Area (LGA).
- Approximately 66,000 walking trips and 8,000 cycle trips originated within the LGA.
- The survey showed the majority of walking trips were for social / recreational purposes (37.82%) with a weighted average distance of 1.1km and weighted average time of 13.5 minutes. Walking for personal business was the second highest survey result representing 17.25% of the trips originating in the LGA.
- The survey showed the majority of bicycle trips were for education purposes (48.18%) with a weighted average distance of 2.7km and weighted average time of 13.7 minutes. Cycling for social / recreational was the second highest survey result representing 26.21% of the trips originating in the LGA.

Car Ownership

In Wyndham 58.6% of households currently have access to two or more vehicles, compared to 50.7% of households in Greater Melbourne, 3.5% of households in Wyndham did not have access to a car, compared to 8.5% of households in Greater Melbourne⁵.

Travel to Work

In 2016, 34.4% of Wyndham residents worked within the municipality however an increasing number of residents are travelling outside the municipality for work, with most residents travelling to work in the easterly direction toward the City of Melbourne⁶.

² Australian Bureau of Statistics (2016), *Census of Population and Housing*, Analysed and compiled by .id Consulting, accessed [click here to view](#)

³ Ibid.

⁴ Victorian Integrated Survey of Travel & Activity (VISTA), accessed [click here to view](#)

⁵ Ibid.

⁶ Ibid.

Compared to the Greater Melbourne average, Wyndham has a higher proportion of residents who travel to work by car (69.3% compared with 64.7%), yet also has a higher proportion of residents catching the train to work than the Greater Melbourne average (14.5% compared to 11.5%)⁷.

2016 Method of Travel to Work for Wyndham Residents

					
Car or truck	Car or truck	Worked at Home	Walk	Motorbike	Bike
69.3	15.3	3.6	1.0	0.3	0.3

Figure 3: Method of Travel to Work⁸

Commute Times

Roads and trains in Wyndham and Greater Melbourne are becoming increasingly congested as the population quickly grows and a significant number of residents who work outside the municipality travel east to Inner Melbourne and Inner West Melbourne. In 2018, 20% of Wyndham residents travelling to work or study by car reported a travel time of 90 minutes or more to and from work or study. Most residents reported a travel time of 30-60 minutes to and from work or study⁹.

Wyndham residents who travelled to work or study by active transport were significantly more likely to take less than 30mins per day to commute. This makes sense as it reflects the fact that most (but not all) respondents commuting to work or study by active transport modes are travelling relatively small distances.

Sport and active recreation participation

Sport and active recreation is an important part of most Wyndham residents' lives with 77% of all residents connecting to a sporting activity.

The Wyndham Sport Strategy identified that 30.79% of people choose to walk for recreation. Cycling also has a high community demand, with 8.13% of the community cycling for recreation.

Adults identified the weather and darkness as limiting their ability to participate in sport and recreation as well as time constraints due to work, family or school¹⁰.

Consultation/Surveys

Pedestrians are a broad and diverse group, which by being ubiquitous in terms of the basic ability of people to take part also means that people do not typically identify as being a pedestrian in the same way that some persons see themselves as a cyclist. That people self-identify as a cyclist means that there was a strong response when seeking feedback about cycling in Wyndham. The following

⁷ Australian Bureau of Statistics (2016), *Census of Population and Housing*, Analysed and compiled by .id Consulting, accessed <<https://profile.id.com.au/wyndham>>.

⁸ Ibid

⁹ Metropolis Research (2018), 2018 Annual Community Survey, November 2018. Wyndham City Council, accessed < www.wyndham.vic.gov.au>.

¹⁰ Wyndham City Council (2017), Wyndham Sports Strategy 2045, accessed < www.wyndham.vic.gov.au>.

consultations and surveys have provided information for this strategy and assisted in the identification of current constraints and opportunities in the Wyndham cycling network:

- 2016 community led survey of local cyclists: This survey gathered information on cycling in Wyndham as well as feedback about the existing network. The summary of this community feedback is available online as a supporting document. [{INSERT LINK}](#)
- 2017 Community Consultation: Council officers undertook wider community consultation on the draft cycling strategy in 2017.
- 2018 Children's Week Picnic Consultation: This survey gathered information about walking in Wyndham and how Council can encourage more people to walk. Information from the walking survey at the Children's Week Picnic indicated that the community wants to see better connections in the walking network, an improvement in paths and maps indicating walking trails. Most survey respondents walk for leisure and fitness and find walking to be a fun and enjoyable activity.
- The 2018 Annual Community Survey identified the top three issues for Council to address in the coming twelve months as traffic management, roads maintenance and repairs and parking. By increasing the ease, attractiveness, and accessibility of active transport there is likely to be a shift in the mode of transport chosen by residents. This would result in a corresponding reduction in the demand on vehicle (car) infrastructure. The survey can be accessed at: www.wyndham.vic.gov.au.

About Walking & Cycling

Benefits of Walking & Cycling

Walking & Cycling have a large number of benefits and are a great way to improve health, reduce environmental impacts, enhance social interaction, save money and support local businesses.

Health

Lack of physical activity increases the risk of a number of health issues. Over half (57.8 percent) of Wyndham residents are overweight or obese¹¹ and 60.8% don't meet physical activity guidelines¹². Incorporating walking and cycling into daily travel to work, school, shops and public transport can increase physical activity levels and promote regular cardio-vascular activity which is essential to a balanced, healthy lifestyle.

Environment

Replacing car trips, where practical, with walking and cycling can provide a range of environmental benefits like improved air quality and reduced reliance on non-renewable energy sources. Reduced car travel also lowers the amount of road runoff pollution that enters the waterways and natural vegetation.

Economy

Increased pedestrian volumes are often linked with greater economic benefits for local businesses as people are encouraged to stop, stay and spend money within the local community. Walking and

¹¹ Department of Health. 2011-12 and 2014. Victorian Population Health Survey.

¹² Department of Health. 2014. Victorian Population Health Survey 2014 - Modifiable risk factors contributing to chronic disease in Victoria.

cycling also provide affordable transport as walking is free and cycling costs little, in comparison to vehicle ownership costs.

Congestion

A modal shift to walking or cycling, particularly for short journeys, reduces demand on other transport modes (particularly private vehicles) and can significantly reduce localised traffic congestion. When compared with private car travel, walking and cycling can be a more efficient way to travel and takes up less space on our road network.

Community

Many studies have demonstrated the link between the built environment (human-made surroundings), transport, and health. Research has shown communities with good access to public transport, walking and cycling infrastructure are often associated with higher levels of social connectivity and wellbeing.

Barriers to Walking & Cycling

Despite the benefits of walking and cycling, only 1% of residents walk or cycle to work in Wyndham. Often walking and cycling cannot be used for a whole journey due to the distance residents have to travel to work and to meet every day needs. Short local trips suitable for walking or cycling may be deterred by connectivity issues, especially for people with mobility challenges. Examples of these issues include:

- Non-continuous footpaths.
- Footpaths or kerb ramps that are too narrow or too steep to be navigated by people with mobility aids, such as wheelchairs and baby strollers, or kerb ramps that are not positioned correctly posing a hazard to people with visual impairments.
- Footpaths that are too narrow or obstructed by objects such as street poles, street furniture, street trees, and business signs.
- Footpaths that are not adequately buffered from high volume and high speed traffic.
- Lack of support infrastructure such as lighting, public toilets, water fountains, or seating areas.
- Lack of, or unmaintained tactile ground surface indicators.
- Unmaintained footpaths with hazards such as broken glass, trip hazards, dirt, tree roots, broken surface, loose manholes, overgrown vegetation, garbage and uneven pavement.
- Connectivity issues between new and existing areas.
- Several locations requiring specific safety improvements including: safer crossing points, priority treatments, hoops to hold while waiting to cross, crossing islands, and safer roundabout design.
- Lack of end of trip facilities such as bike storage and showers.

Improvements to the pedestrian and cycle network will support people to choose walking or cycling by removing or lessening barriers.

The Network

The Current Network

The indicative network maps shown in Appendix A are included to provide a high-level snapshot of the existing main network of shared paths and cycle paths in Wyndham (as at June 2019). Appendix A also includes the current Western Metropolitan Region Strategic Trail map which maps the 19 existing and potential regional trails that comprise the Western Metropolitan Melbourne regional trail network.

The following map depicts the current pedestrian and cycle paths across Wyndham.

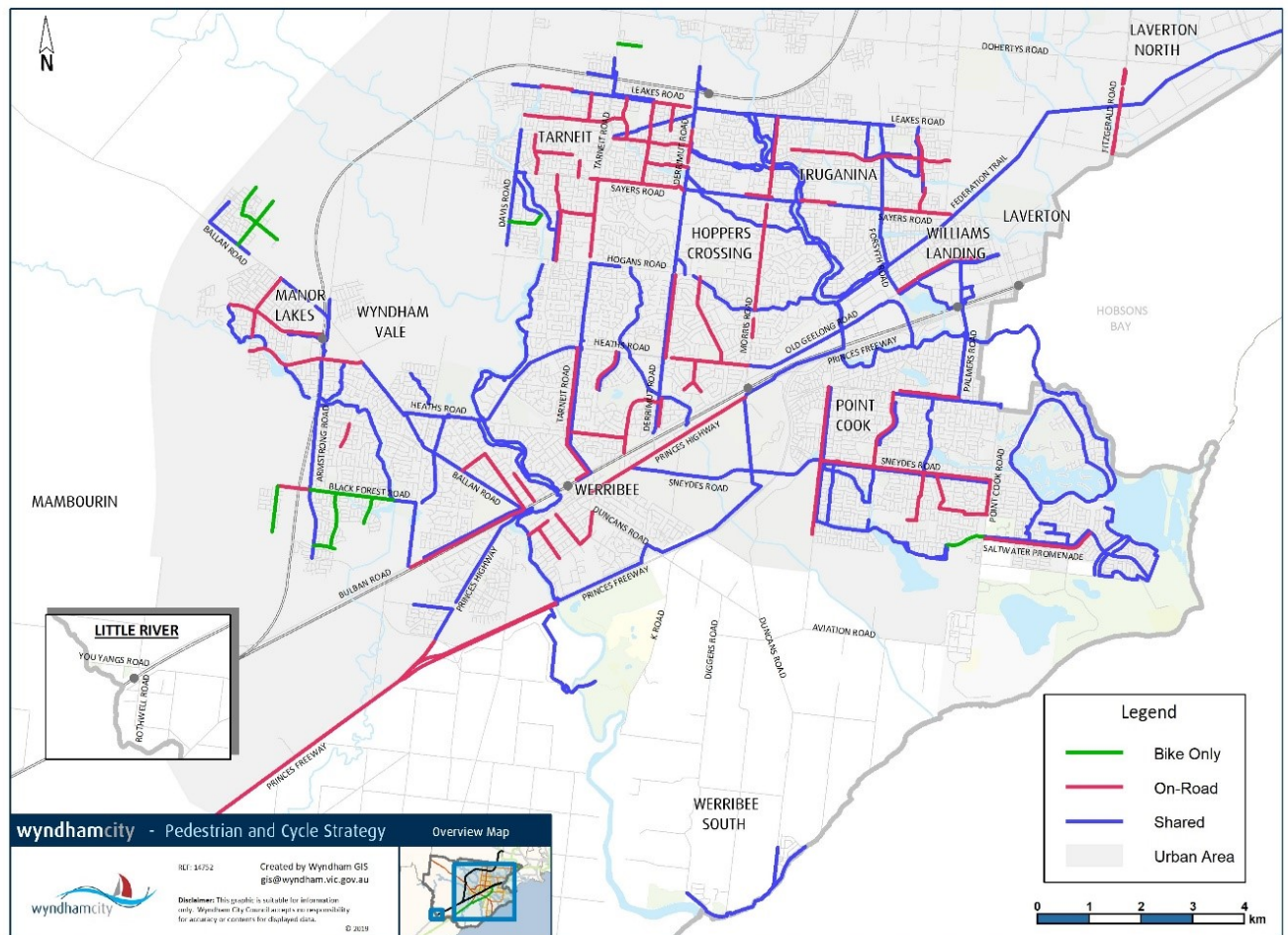


Figure 4: Map of Wyndham

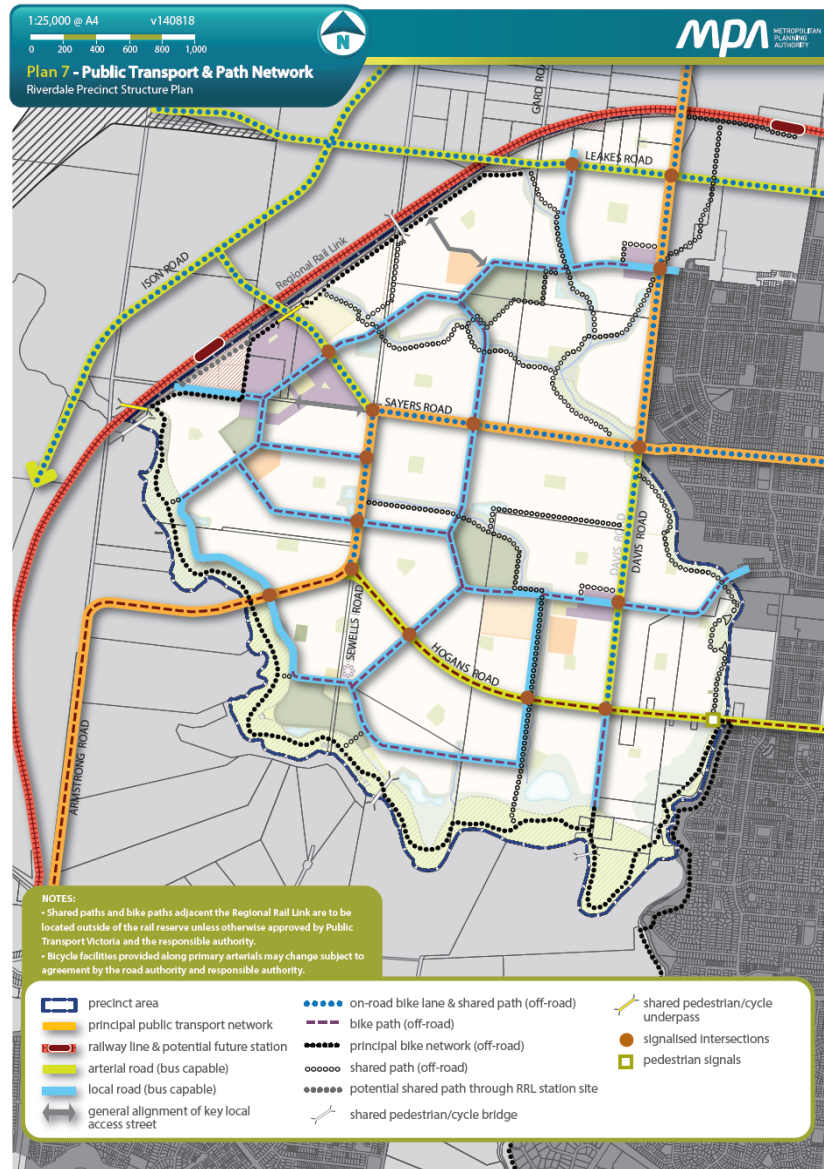
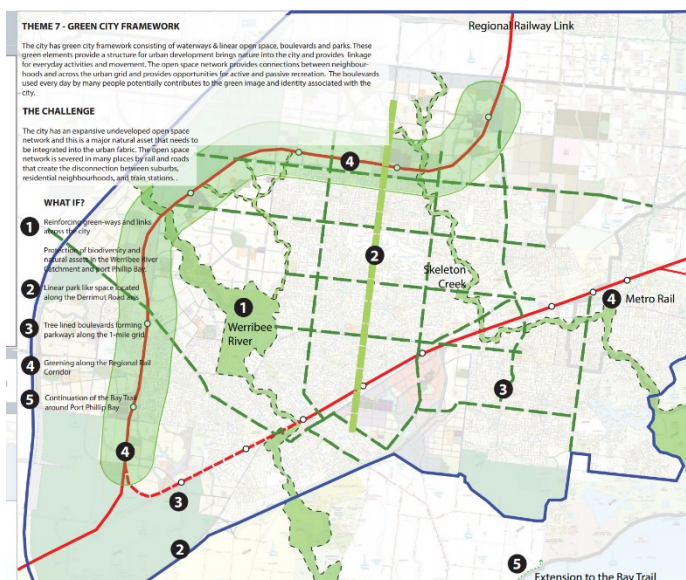
Wyndham's current network is not well understood. Current maps of the network provide an incomplete snapshot in time, which is continually developing. The planning and management of the network will need to continue to respond to and drive changes over time.

The Future Network

Ultimately this strategy will build upon the existing network to enable an integrated city that supports increased active transport to ensure people can access the opportunities Wyndham has to offer. In greenfield areas the network is being provided through the implementation of the Precinct Structure Plans, in addition the Wyndham Urban Framework Plan will provide guidance for the future urban form of Wyndham. An important aspect of the future network is the recognition of the benefits of living locally which will be achieved through the implementation of the 20-minute neighbourhoods concept, in selected areas, as specified in [Plan Melbourne](#). 20-minute neighbourhoods are defined by a range of hallmarks that either directly or indirectly relate to walking and cycling.

How 20-minute neighbourhoods will be implemented in the Wyndham context is yet to be determined however, the objective will be to have an integrated network that links transport and land use to allow people to meet their everyday needs by walking and cycling. This strategy will help create a more liveable city by encouraging increased walking and cycling mode share.

Figure 5: A range of documents that will guide the development of the future networks



THE PEDESTRIAN & CYCLE STRATEGY

Vision

Wyndham will have a pedestrian and cycle network that is accessible, integrated, comfortable, attractive and safer for people of all ages and abilities.

Aim

To provide Council with a strategic direction for pedestrian and cycle network planning, infrastructure provision, and education, to meet the needs of the community.

Objectives

Three objectives have been identified that guide the development of the Strategy these are:



THE NETWORK

Achieve an integrated pedestrian and cycle network that will enable all users to move around the network according to their needs.



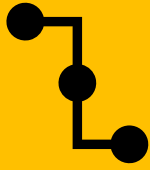
INFRASTRUCTURE

Pedestrian and cycle transport infrastructure meets the needs of all people within Wyndham.



EDUCATION, PROMOTION & COMMUNICATION

Wyndham residents have access to information on smarter, healthier, more environmentally sustainable travel choices through education, promotion and communication.



The Network

Objective 1: Achieve an integrated pedestrian and cycle network that will enable all users to move around the network according to their needs.

Why is this a priority?

It is critical to have a connected network with high quality infrastructure and no missing gaps for walking and cycling to become preferred options in our community.

A well-connected network, composed of direct, convenient routes, is one of the key ingredients of walkability. A greater level of connectivity can provide for a more stimulating urban environment¹³. Similarly, a better-connected cycle network would encourage more Victorians to cycle, or cycle more often, to destinations close to where they live¹⁴.

Victoria's 30-year Infrastructure Strategy has recommended accelerated investment in the roll-out of Victoria's Strategic Cycling Corridors and identified walking network improvements for completion within 0-15 years, working closely with local government. The recommendation includes:

- the expansion of walking and cycling networks, including to address missing links; and,
- the improvement of standards for existing walking and cycling networks, in particular the separation of walking and cycling paths and also from other road users.¹⁵

"Continuous footpath connections are critical to facilitate walking by children, parents, seniors and others with limited mobility"

Wyndham's current network has gaps that limit connectivity for pedestrians and cyclists. Residents report that some sections of footpaths and cycle routes are missing and that connections are often poor, this can be a disincentive to walking and cycling for transport and can present barriers for people with limited and restricted mobility. A comprehensive active transport network is planned in Precinct Structure Plan areas to service the areas once constructed. However, out of sequence development has and will cause breaks in the network which will need to be connected over time.

In addition to providing a connected network across Wyndham there are key trails already identified that will benefit Wyndham's local tourism by connecting significant routes, creating liveability and providing regional links. For example, the completion of the Bay Trail within Wyndham will provide increased access and connection along the coast in, and to the east of, Wyndham. The Bay Trail will encircle a large proportion of Port Phillip Bay and by doing so could help both residents and visitors access unique locations. There is the potential for this trail to not only improve active transport options but to also to provide economic benefits via supporting events and increased visitor numbers. A connected network will provide appropriate links between activity centres, along regional routes and directly to key destinations - connecting the places people are to the places they want to get to.

¹³ Victoria Walks, 'Urban Design for Walking', <http://www.victoriawalks.org.au/urban_design/>

¹⁴ Victorian Government 'Victorian Cycling Strategy 2018-28' <<https://transport.vic.gov.au/getting-around/walking-and-cycling>>

¹⁵ Infrastructure Victoria (2016), '30 Year Infrastructure Strategy', Victorian Government, Melbourne <<http://www.infrastructurevictoria.com.au/sites/default/files/images/IV%2030%20Year%20Strategy%20WEB%20V2.PDF>>

Action 1.1 – Network Audit

	ACTION NUMBER	ACTION
	1.1	Conduct an initial audit of the pedestrian and cycle path network, to identify missing links and infrastructure issues.

Wyndham's pedestrian and cycle network has variations of the network due to changing standards and over time, also pedestrian and cycling infrastructure has not always been provided as development has occurred.

As a result, the network is fragmented, with areas not constructed to current standards, and lacking appropriate signage. Prior to being able to improve the pedestrian and cycle network, a clear understanding of the location of missing links and current infrastructure condition is required.

Council will conduct audits of the pedestrian and cycling path network, to identify missing links and infrastructure issues. The information collected will be used to inform future capital works programs.

Action 1.2 - Network Plan

	ACTION NUMBER	ACTION
	1.2	Develop Wyndham pedestrian and cycle network plans.

Wyndham's desired future pedestrian and cycle network is a connected one that caters for all users. The current network is made up of a variety of path types that may or may not easily connect to other paths. Some roads do not have footpaths, or if they do, they may be located on one side only. The existing cycle network does not cater properly for the different types of cyclists wanting to use it. A disconnected network makes wayfinding harder, increases safety concerns, and is an additional deterrent to people deciding to choose active travel.

The pedestrian and cycle network plans will assess the existing network and consider ways to improve the safety and connectivity, whilst integrating it with land use. Elements that may be considered when developing the network plans are:

- Access for people of all abilities.
- Access to local destinations such as public transport, shops, community or health services, parks, schools and community facilities. The identification of key places people are trying to use is an important part of developing the network plans.
- The differing needs of training, commuter and recreational cycling.
- Connections to metropolitan and regional trails.
- The surrounding land use development of the area.

Key documents will be considered in the network plans, including:

- Township strategies
- Precinct Structure Plans

- Parks and open space masterplans, such as the K Road Cliffs Master plan

Routes will be identified to build upon Wyndham's existing path network, open spaces and public transport network, where appropriate, to provide linkages for everyday activities and movement.

The Department of Transport has developed a Strategic Cycling Corridor Network for metropolitan Melbourne that provides a hierarchy of cycling corridors in Wyndham, and connections to other metropolitan municipalities. Similarly, Principal Pedestrian Networks are being developed. These documents will inform the development of the network plans.

The construction and the planning of a connected network, without missing links, will enable a variety of users to walk and cycle to access their daily needs, is a critical aim for this strategy. Council will plan and develop a connected network that considers the different types of users and destinations, and the path types required to link them.

Action 1.3 – Activity Intense Areas

	ACTION NUMBER	ACTION
	1.3	Utilise the Movement & Place framework to assess activity intense areas to improve interactions between pedestrians, cyclists, and other transport modes.

Activity intense areas are destinations that attract higher numbers of pedestrians and cyclists than other parts of the municipality. These can include:

- town centres/activity centres
- health and education precincts
- major sporting areas or sporting facilities
- 20-minute neighbourhoods (once identified)

The large number of people expected to want to use these areas, as well as increasing use of motorised mobility devices and innovative vehicles (e.g. e-bikes and e-scooters), can result in conflict that needs to be managed. Better planning of these areas by ensuring appropriate infrastructure to support the desired use will allow safer access for all users. For example, widening existing shared paths or construction of separated paths to accommodate the increased number of pedestrians and cyclists. Liveability of our activity intense areas can be maximised for our community by ensuring that there is an appropriate mix of transport modes.

The Victorian Government's Movement and Place framework provides a guide to planning and developing the transport network whilst balancing the needs of different users in a variety of places. Importantly, it sees the network not only as a way of keeping people moving, but also as places for people to live, work and enjoy.

We will utilise the Movement and Place framework to assess how people journey through activity intense areas and to provide guidance for the development of options and solutions to reduce potential conflict between pedestrians, cyclists, and other transport modes. This assessment will inform the Network Implementation Plan (Action 1.4).

Action 1.4 - Network Implementation Plan

	ACTION NUMBER	ACTION
	1.4	Prepare an Implementation Plan for infrastructure improvements in the pedestrian and cycle network.

The first stage of this action is to utilise the Audit findings (Action 1.1) to develop a list of priority projects to be incorporated into Council's capital works program and used to inform Council's advocacy to State and Federal Governments.

Council has developed a Prioritisation and Appraisal Framework for the assessment and development of priority transport projects across the municipality. The list of projects will be assessed using the framework to develop a clear, justified, list of active travel priority projects.

The second stage is to use the priority list to prepare a Network Implementation Plan for footpaths, shared paths and separated cycle paths. The Network Implementation Plan will include short term, long term projects and projects of differing scale such as new path projects that are standalone projects or to be included as part of larger projects funded by either Council, State and Federal Governments. Subject to development of the network plans (Action 1.2), key metropolitan trails such as the Federation Trail Greening the Pipeline project and the Bay Trail will also be included.

We will also identify improvements to the path network that can be achieved alongside projects that are part of the broader capital works program (e.g. active and passive open space, community facilities, strategic redevelopment sites, roads and paths).

Action 1.5 - Safety and Accessibility

	ACTION NUMBER	ACTION
	1.5	Support and advocate for a safer and accessible pedestrian and cycle network.

When infrastructure is built to a standard that maintains and improves safety, directness and accessibility for all users, then it can encourage more pedestrian and cycle activity and result in a shift in mode share over time. Wyndham needs an efficient and convenient pedestrian and cycle network that is well designed, has direct routes, provides connectivity and has no missing links.

Poor perceptions of safety in the municipality can also reduce people's willingness to use active transport. The essentials for improved community safety are to improve the quality of the environment, minimising the opportunity for crime, whilst promoting accessible and liveable places that encourage the feeling of safety and community participation. This can be achieved through the adoption of the Crime Prevention through Environmental Design (CPTED) and Safer by Design (Crime Prevention Victoria) design principles.

Whilst Council is responsible for managing much of the pedestrian and shared path network in the municipality. There are also parts of the path network under the management of State Government and private landowners. It is important for Wyndham's pedestrian and cycle networks to be accessible for all types of users and for growth within Wyndham to consider people with disability in future planning and development.

Adequate path connections across roads need to be provided for all people, particularly for people with lower mobility and users of wheelchairs and motorised mobility devices, and tactile ground surface indicators are essential for increasing the safety, efficiency and convenience of vision impaired pedestrians. Currently in Wyndham there are public transport bus stops that lack hard stands for wheelchair access and older private developments that may not be fully accessible. Werribee Station is not Disability Discrimination Act (DDA) compliant with steep ramps and no lift access.

Council will support and advocate for a safer and accessible pedestrian and cycle network. This includes advocacy to State Government and private landowners, to increase the number of compliant facilities and services related to transport in Wyndham.

Intersections, crossings and path alignments generally prioritise vehicles ahead of pedestrians and cyclists. Council will advocate for infrastructure to be appropriately designed with the safety and convenience of pedestrians and cyclists in mind and increased prioritisation of cyclists should be part of the design process. Existing shared paths will be investigated for an upgrade to separated cycle and pedestrian paths either where known conflicts exist or an increase in capacity is required, due to the number of users.



INFRASTRUCTURE

Objective 2: Pedestrian and cycle transport infrastructure meets the needs of all people within Wyndham.

Why is this a priority?

Provision of high-quality infrastructure, paths and supporting infrastructure, is central to how people choose to move around Wyndham. When pedestrian and cycle paths are welcoming and pleasant to use, with high quality amenity, then cyclist and pedestrian numbers have been shown to increase.¹⁶ Infrastructure provision is a priority because, without improvements, the network will remain incomplete and less attractive to use.

Wyndham's current pedestrian and cycle infrastructure is variable and disjointed with gaps due to varying standards over time and rapid growth. There is a difference in older areas vs newer areas,

*"Generally, the countries with the best existing bicycle infrastructure continue to show growth, while areas with low bicycle use, infrastructure, and awareness (and often high car dependency) show slower growth in cycling levels."*¹⁷

with parts of Wyndham providing no footpaths or only on one side of the road, while other areas provide paths on both sides. Also, paths do not always have adequate crossing points. There is the opportunity through Council's capital works program standardise the existing infrastructure/network, and for development in PSP areas to deliver high quality infrastructure that meets current standards.

Poor amenity affects the perception of safety and decreases comfort, particularly for older pedestrians¹⁹. It is important to note that what may be an inconvenience for one user maybe an impassable barrier for a less mobile user. Items as simple as connected road crossings and seats means that all residents, as far as is practical, can choose active travel when moving around Wyndham.

"Lighting has a significant impact on orientation, security and visual quality at night"
– Victoria Walks¹⁸

¹⁶ Transit Cooperative Research Program (2012), 'Pedestrian and Bicycle Facilities', Report 95, pg. 16-29, National Academy of Sciences, Washington.

¹⁷ Jacob Mason, Lew Fulton, Zane McDonald (2015), 'A Global High Shift Cycling Scenario', p 20 <https://www.itdp.org/wp-content/uploads/2015/11/A-Global-High-Shift-Cycling-Scenario_Nov-2015.pdf>.

¹⁸ Victoria Walks Inc (2018) "Pedestrian Infrastructure", Melbourne, <www.victoriawalks.org.au/pedestrian_infrastructure> date visited 2 July 2018

¹⁹ Mantilla, J. and Burt, D. (2016) "Safer Road Design for Older Pedestrians", Victoria Walks, Melbourne. Version 1.1. August 2016 and Victoria Walks Inc (2015) "Shared Paths – the issues" Victoria Walks, Melbourne. Version 3.0. March 2015

Action 2.1 – Improve Infrastructure

	ACTION NUMBER	ACTION
	2.1	Review internal documents, standards and guidelines to identify opportunities to improve infrastructure across the pedestrian and cycle network.

Changes in infrastructure standards and community expectations over time have resulted in a wide variety of path designs across the municipality. Therefore, elements of the existing network may need to be rebuilt to meet current standards. In some cases, Wyndham's standards and guidelines have also not been updated to include the changes, resulting in older standards still being applied to new projects.

Council will review internal documents, standards and guidelines and update the information available to Council officers, to assist them in improving the pedestrian and cycle networks. The review will need to examine internal construction standard drawings and the Road Management Plan maintenance intervention levels. A list of the items that inform the review, can be found in Appendix C.

Action 2.2 - Council Projects

	ACTION NUMBER	ACTION
	2.2	Ensure that Council projects incorporate improvements to pedestrian and cycle infrastructure.

Planning and delivering an improved standard of pedestrian and cycle infrastructure enables Council to demonstrate its commitment to active travel. Opportunities will arise to incorporate improvements as part of the broader capital works program to deliver active and passive open space, community facilities, strategic redevelopment sites, roads and paths.

It is important to note that delivering an improved standard of active travel infrastructure may not always be possible, due to other competing priorities, site constraints or cost.

The Network Implementation Plan (Action 1.4) will be used to identify opportunities in the broader Council capital works program to incorporate improvements to pedestrian and cycle infrastructure.

Action 2.3 - Innovation

	ACTION NUMBER	ACTION
	2.3	Investigate opportunities for pedestrian and cycle innovations within Wyndham.

Community feedback²⁰ shows that 22% of respondents thought that the aspect of Wyndham that can be most improved by technology was transport and congestion. Through its [Smart City Strategy](#), Council is investigating the deployment of smart sustainable mobility solutions and associated infrastructure across the City, creating an opportunity to encourage increased active transport participation through innovations such as e-scooter and e-bikes.

The Smart City Strategy will also:

- deliver a policy for smart lighting (occupancy/use-based lighting), with consideration of environmental concerns, on shared pedestrian cycling paths and walkways;
- investigate opportunities for digital signage; and,
- and innovate the way we communicate relevant information for pedestrians & cyclists.

Whilst there is a great deal of understanding about what works and what does not around the world, sometimes this is difficult to translate to the local environment. Pop-up trials of new ways of implementing pedestrian and cycle infrastructure (e.g. using paint, moveable street furniture, spiked kerbs) can be used to see what works and what does not. Pop-up trials are cheaper to undertake and easily removed if unsuccessful. Trials can also include innovations or events to create paths as a destination, encouraging sense of place and community belonging and to promote access to tourism precincts and key destinations. If Wyndham leads by example, it can influence the private sector to deliver a higher standard of pedestrian and cycling infrastructure provision within the municipality.

Council will investigate opportunities for pedestrian and cycle innovations and explore how they can be used to improve active travel mode share and infrastructure provision within Wyndham.

Action 2.4 - Local Policy or Planning Scheme Amendment

	ACTION NUMBER	ACTION
	2.4	Investigate the development of a local policy and advocate for a planning scheme amendment to better cater for cycle infrastructure within new developments.

Infrastructure improves the trip a cyclist takes, whether it's somewhere to store their bike at the destination, or improved consideration of cyclists along the entire route. Infrastructure provision

²⁰ Wyndham Smart City Strategy 2019-2024, Wyndham City Council, accessed < <https://www.wyndham.vic.gov.au/about-council/smart-wyndham/smart-city-strategy>>.

such as End of Trip Facilities (EOTF) are important for increasing cyclist numbers.²¹ The Victorian Planning Scheme includes requirements for bicycle facilities, but there are anomalies that can only be changed by a State Government amendment to the planning scheme.

The identified inconsistencies that may create barriers for cycling, include:

- There are no requirements for bicycle parking in residential uses less than four storeys. This may be a deterrent for cycling as apartments generally have less space than detached housing to store a bicycle inside the house or in a yard.
- Currently there is a variety of EOTF requirements for specific uses within a private shopping centre or town centre development. Current assessment of EOTF is based on each nominated shop type or individual use. An overall requirement for the whole centre would be easier to assess, as it is often not known at the time of permit approval if a shop will be used for general retail or a café.
- Clause 52.34 – Bicycle Facilities does not include a requirement for uses in the ‘Warehouse Group’ to provide bicycle facilities.

Council will investigate the development of a local policy and advocate for a planning scheme amendment to better cater for cycle infrastructure within new developments to address these inconsistencies.

Action 2.5 – Amenity

	ACTION NUMBER	ACTION
	2.5	Identify the amenity requirements to support increased participation in active travel.

Amenity is important for increasing pedestrian and cycle numbers. Providing infrastructure such as public toilets, water fountains, seating, shelter and canopy trees at regular intervals improves the amenity and usability of the active travel network. The creation of bike hubs along Strategic Cycling Corridors can also accommodate multiple services and attract a wide variety of users.

An example of a large-scale amenity project in Wyndham is the Greening the Pipeline project. This project will transform the outfall sewer along the Federation Trail and greatly improve the Trail through the provision of additional open space. With the creation of this unique space there will be opportunities for people to relax, meet and play, improving the amenity along the trail. More information on this project is available at: greeningthepipeline.com.au

Poor amenity affects the perception of safety and decreases comfort, particularly for older pedestrians²². Tree plantings and other landscaping provide improved amenity and shade for users. Council currently has guidelines and requirements regarding number of trees and other amenity requirements, however these look at the broader amenity requirements for the City and not

²¹ Source: Andrew Morse (2014), ‘Why We Need More End of Trip Facilities’. <http://www.aitpm.com.au/ArticleDocuments/249/Transport_Planning_Session_5-Andrew_Morse_Why_we_need_more_end_of_trip_facilities.pdf.aspx?Embed=Y>

²² Mantilla, J. and Burt, D. (2016) “Safer Road Design for Older Pedestrians”, Victoria Walks, Melbourne. Version 1.1. August 2016 and Victoria Walks Inc (2015) “Shared Paths – the issues” Victoria Walks, Melbourne. Version 3.0. March 2015

specifically at the amenity requirements for pedestrians or cyclists. Trees also take time to grow and provide the desired shading. Components of amenity that support increased participation, include:

- Supportive infrastructure, i.e. seats, toilets, water, rubbish bins, trees and plantings
- Wayfinding
- Lighting
- Active frontages in abutting developments
- Shelter (verandas and awnings)
- Bicycle repair stations and bike hoops

Council will identify the amenity requirements for pedestrian and cycle infrastructure to support increased participation in active travel.

Action 2.6 – Aboriginal Cultural Paths

	ACTION NUMBER	ACTION
	2.6	Investigate opportunities for paths to acknowledge local Aboriginal culture and history.

According to 2016 Census estimates Wyndham has the highest number of people who are Aboriginal and/or Torres Strait Islanders in Greater Melbourne, this represents 0.8% of the total population of Wyndham. There is an opportunity to further recognise Wyndham's rich and diverse Aboriginal community and Wyndham's Reconciliation Action Plan (RAP) provides guidance for respectful acknowledgement and engagement with Traditional Owners across all our business. We will use this principle to guide the proposed opportunities on selected paths.

Selected paths could potentially incorporate cultural elements which will provide a richer experience for all users. Signage and artwork along a route would provide cultural linkages through acknowledgement of important events, knowledge dissemination, providing a 'lived experience' for users, education about the local Indigenous people as well as providing a sense of belonging for Indigenous people using the paths.

The journey through the paths needs to celebrate the heritage of the local Indigenous cultures, new cultural diversity and cultural overlap between the old, new and emerging communities, to ensure they remain flexible and dynamic. Consultation with appropriate groups will help identify the stories and the best location/s, treatments and how they can be incorporated into specific paths.



Education, Promotion & Communication

Objective 3: Wyndham residents have access to information on smarter, healthier, more environmentally sustainable travel choices through education, promotion and communication.

Why is this a priority?

Education, Promotion and Communication play a crucial role in transport mode choice and can influence resident participation in walking and cycling. Behaviour change will only succeed if it is community led so a cultural and attitude change is required. A positive community attitude to walking will influence people to walk more frequently. More people walking creates a safer, more

“Education, Promotion and Communication are critical components to increasing mode share toward cycling.”²³

socially engaged community where walking becomes a desirable choice of transport. Through education, promotion and communication, Wyndham residents are encouraged to be respectful and cooperative to all users to create a more enjoyable road environment that encourages walking and cycling.

However education and promotion should not only focus on the communication of safety messages, albeit important, it should also focus on the positives of walking and cycling as this has a stronger effect on leading people to change their travel behaviours.²⁴ A range of methods including education campaigns, online maps, information material and wayfinding signage are important in communicating the benefits of walking and cycling travel options around Wyndham. In addition, improved wayfinding can increase the confidence of users by providing directions and other information.

Development and implementation of programs are also vital for changing people’s behaviour and to encourage a shift to more sustainable forms of transport, such as walking or cycling. Active Travel to School is an existing program run by Wyndham City Council, to address low active travel rates around schools and reduce traffic and parking congestion. The program aims to reduce car usage and increase active travel to and from schools. This is an important program as perceptions of walking are formed at this early stage of life and behaviours formed at an early age are more likely to lead to healthy and sustainable choices later in life.

²³ Infrastructure Australia (2009), ‘Cycling Infrastructure for Australian Cities: Background Paper’, p2, Australian Government, Sydney.
<http://infrastructureaustralia.gov.au/policy-publications/publications/files/Cycling_Infrastructure_Background_Paper_16Mar09_WEB.pdf>

²⁴ Source: University of New South Wales (2008), ‘A Virtuous Cycle: Safety In Numbers For Bicycle Riders’ ScienceDaily
<www.sciencedaily.com/releases/2008/09/080903112034.htm>

Action 3.1 - Schools

	ACTION NUMBER	ACTION
	3.1	Review the Active Travel to School program to identify what is working well and the barriers to engagement.

Behaviour change programs focusing on schools can provide opportunities for increasing active transport mode share, as driving to school has a significant impact on peak hour traffic and safety around schools.

‘Active Travel to School’ is an existing program run by Council, to address low active travel rates around schools and reduce traffic and parking congestion. The aim of the program is to build on short term interventions for sustaining active travel within the municipality, and for ongoing behaviour change post program. The expected outcomes of this program are:

- Reduction in car usage, and an increase in active travel to and from school.
- Improved perceived and actual safety of students travelling to and from school.
- Changes in behaviours and attitudes that contribute positively to safety risks and traffic congestion around schools.

An evaluation of Wyndham’s ‘Active Travel to School’ program in 2015/16 found it was enabling positive change. The schools with the greatest change in active travel rates have been the ones where Principals have supported the changes and the teachers, parents and students have been engaged in the process. Continued success of the program requires identifying strategies to support school engagement and to encourage the participation of more schools.

Council will review the current program to identify what is working well and the barriers to engagement with schools.

Action 3.2 - Signage

	ACTION NUMBER	ACTION
	3.2	Develop guidelines for the use and design of a standard suite of directional signs for paths and trails in Wyndham.

Wayfinding signage is designed to assist users in finding their way around the trail network and to reach destinations. This includes destinations along the trail, surrounding destinations and connections to other trails. Wayfinding signage needs to be progressively rolled out within Wyndham to encourage more people to actively travel but also give them the confidence that they can arrive at their intended destination.

Information on distance to a destination is preferred for cyclist signage and on longer trails, whilst time to a destination is preferred on pedestrian signage. Behavioural signage i.e. keep left, dogs on

lead, is important to inform path users and ideally reduce conflict between pedestrians and cyclists. Regulatory signage is required to identify where cyclists can use shared paths or to communicate to pedestrians and motorists that the path or lane is for the use of cyclists only.

There may be existing paths across Wyndham that do not have the correct signage in place for cyclists. The findings from the Audit (Action 1.1) will provide more information on where these locations are, and the Network Implementation Plan (Action 1.4) can be used to program the installation of correct signage as part of future capital works programs

The installation of pedestrian wayfinding signage will be rolled out first in the Werribee City Centre. This signage will provide a consistent approach that can be replicated in other town centres across Wyndham. The West Trails Strategy also identifies the need to develop a standard suite of directional signs for the other major trails in Wyndham. The Federation Trail provides an example of the application of consistent wayfinding signage along its length.

Council will use the Werribee City Centre wayfinding signage rollout and the West Trails Strategy to develop guidelines for the use and design of a standard suite of directional signs for paths and trails in Wyndham.

Action 3.3 - Maps

	ACTION NUMBER	ACTION
	3.3	Develop online maps and information materials to communicate active travel options in and around Wyndham.

In addition to clear wayfinding information, up to date maps, and other supporting information material can provide confidence to pedestrians and cyclists accessing the path network. This can encourage people to use active travel as a preferred mode of transport.

The indicative network maps shown in Appendix A are included to provide a high-level snapshot of the existing main network of shared paths and cycle paths in Wyndham (as at June 2019). The rapid growth of Wyndham means that any static paper map rapidly becomes outdated, as new paths are continually being constructed. In addition, the scale of the area covered in Wyndham makes it difficult for a high level of detail to be provided on a static map.

Online maps can be a useful tool for providing detailed active travel information that is relevant for individual users. Online maps can also be regularly updated as the path network is improved and expanded upon to assist with wayfinding and journey planning. Guiding documents, such as the Strategic Cycling Corridor Network and Principal Pedestrian Network, which are currently being developed by the Department of Transport, and the findings from the Audit (Action 1.1) can be readily included on an online map, once implemented.

The Implementation Plan

THE NETWORK

Objective 1: Achieve an integrated pedestrian and cycle network that will enable all users to move around the network according to their needs.

ACTION NUMBER	ACTION	WHO	TIMEFRAME
1.1	Conduct an initial audit of the pedestrian and cycle path network, to identify missing links and infrastructure issues.	City Transport	2019 - 2020
1.2	Develop Wyndham pedestrian and cycle network plans.	Lead: City Transport Supporting: Urban Futures, Sport & Recreation, Assets & Roads	2020 - 2021
1.3	Utilise the Movement & Place framework to assess activity intense areas to improve interactions between pedestrians, cyclists, and other transport modes.	Lead: City Transport Supporting: Urban Futures	Ongoing
1.4	Prepare an Implementation Plan for infrastructure improvements in the pedestrian and cycle network.	Lead: City Transport Supporting: Strategy & Stakeholder Engagement, Sport & Recreation, Assets & Roads, Planning & Building, Facilities & Open Space, Community Planning & Development,	Ongoing
1.5	Support and advocate for a safer and accessible pedestrian and cycle network.	Lead: City Transport Supporting: Strategy & Stakeholder Engagement, Community Planning & Development	Ongoing

INFRASTRUCTURE

Objective 2: Pedestrian and cycle transport infrastructure meets the needs of all people within Wyndham.

ACTION NUMBER	ACTION	WHO	TIMEFRAME
2.1	Review internal documents, standards and guidelines to identify opportunities to improve infrastructure across the pedestrian and cycle network.	Lead: City Transport Supporting: Assets & Roads, Planning & Building, Facilities & Open Space Community Planning & Development	Ongoing
2.2	Ensure that Council projects incorporate improvements to pedestrian and cycle infrastructure.	Lead: City Transport Supporting: Assets & Roads, Sport & Recreation, Facilities & Open Space, Project Management Office	Ongoing
2.3	Investigate opportunities for pedestrian and cycle innovations within Wyndham.	Lead: City Transport Supporting: Smart City Office, Sport & Recreation, Open Space, Vibrant City Centres	Ongoing
2.4	Investigate the development of a local policy and advocate for a planning scheme amendment to better cater for cycle infrastructure within new developments.	Lead: City Transport Supporting: Town Planning, Urban Futures	2020 - 2022
2.5	Identify the amenity requirements to support increased participation in active travel.	City Transport	Ongoing
2.6	Investigate opportunities for paths to acknowledge local Aboriginal culture and history.	Lead: City Transport Supporting: Community Planning & Development	Ongoing

EDUCATION, PROMOTION AND COMMUNICATION

Objective 3: Wyndham residents have access to information on smarter, healthier, more environmentally sustainable travel choices through education, promotion and communication.

ACTION NUMBER	ACTION	WHO	TIMEFRAME
3.1	Review the Active Travel to School program to identify what is working well and the barriers to engagement.	City Transport	2019 – 2020
3.2	Develop guidelines for the use and design of a standard suite of directional signs for paths and trails in Wyndham.	Lead: City Transport Supporting: Vibrant City Centres, Assets & Roads, Facilities & Open Space, Planning & Building, Community Planning & Development	2021 - 2023
3.3	Develop online maps and information materials to communicate active travel options in and around Wyndham.	Lead: City Transport Supporting: Smart City Office	Ongoing

Monitoring and Review

Monitoring and reviewing of the Wyndham Pedestrian and Cycling strategy will ensure that Council is tracking progress throughout the implementation and ensure that the strategy remains relevant and up to date to reflect the changing needs and priorities of Wyndham. As outlined in the Wyndham Integrated Transport Strategy, this strategy will be reviewed every five years.

APPENDIX A - Maps

The maps in Appendix A show overarching network and do not include smaller sections. Online mapping will supersede mapping in this document and will include strategic cycling corridors once finalised.

Please note that, while we take every effort to get these maps as accurate as possible, some paths may not be exactly as depicted.

Types of Paths

Shared: Legally Shared Paths should have signage to confirm they are Shared Paths, please check for Signage before riding on a path. Shared Paths can be used by both cyclists and pedestrians. On shared paths cyclists should always ride at a safe speed and warn other path users before passing (with a bell). All users of shared paths should respect other users and stay to the left hand side as travel is allowed in both directions.

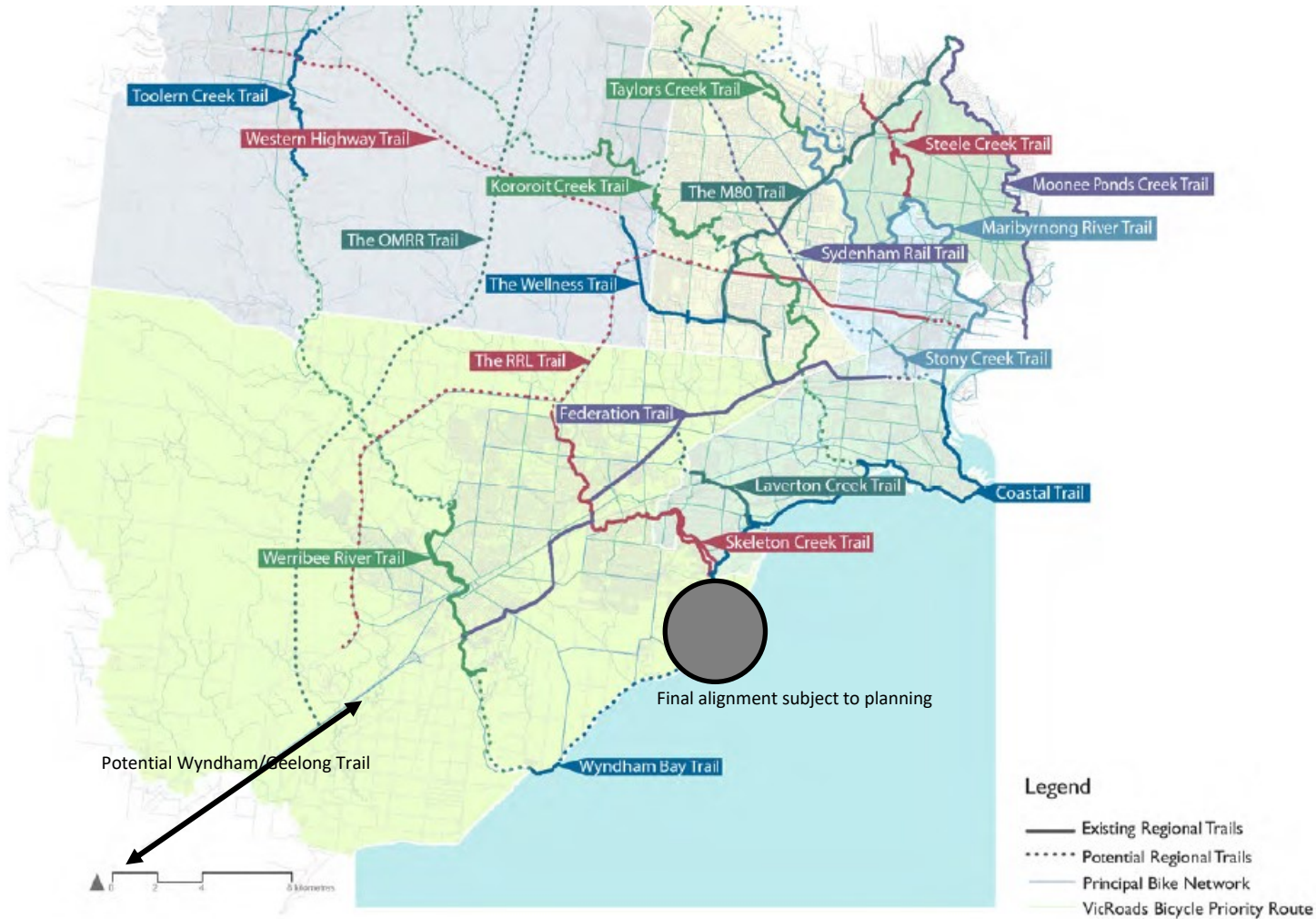
On-Road: On-Road bike facilities can be either bike lanes marked on the road or service lanes (without markings). Cyclists must abide by the road rules when riding on the road.

Bike Only: Bike Only paths are for cyclists only and are not to be used by either pedestrians or cars (including no car parking). Bike Only paths only exist in conjunction with roads and foot paths. Cyclists can ride in either direction on a bike only path but should stay to the left hand side.

Footpath: Useable by all pedestrians, and cyclists if they:

- are a child under the age of 13
- are a person 13 and over who is accompanying a child under the age of 13
- are an adult 18 or over who is cycling with a young child in a child seat attached to their bicycle, or with a child pedaling on a bike attachment at the back of an adult bicycle
- have been given and are following the conditions on a medical certificate that says they have a disability that makes it difficult for them to ride on the road
- are an adult accompanying someone with a medical certificate cycling on a footpath

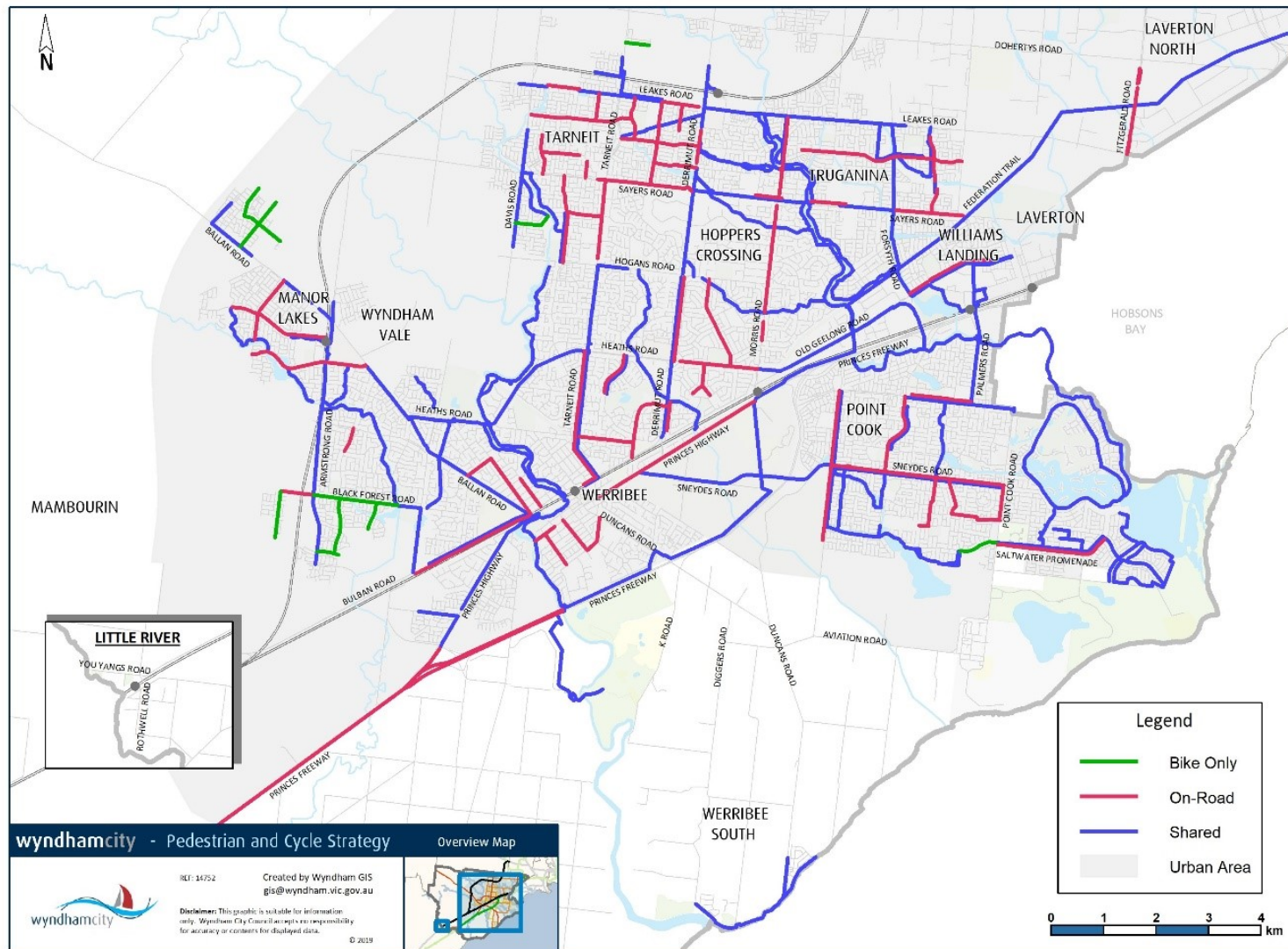
Map 1 Western Metropolitan Melbourne Regional Trails Network



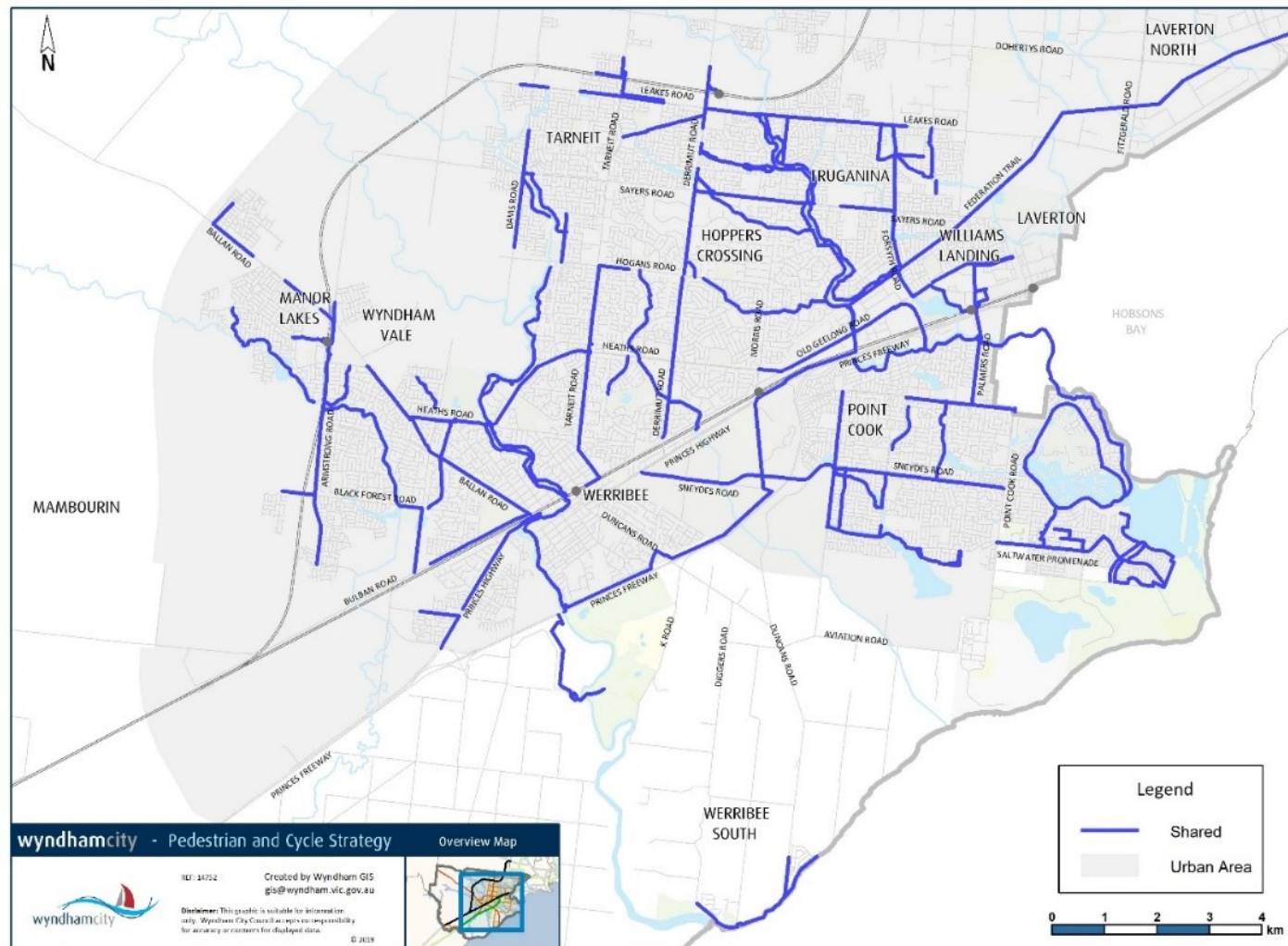
Source: West Trails Western Metropolitan Region Trails Strategic Plan.

Note: The final alignment of the Bay Trail and the potential Wyndham to Geelong Trail are subject to planning.

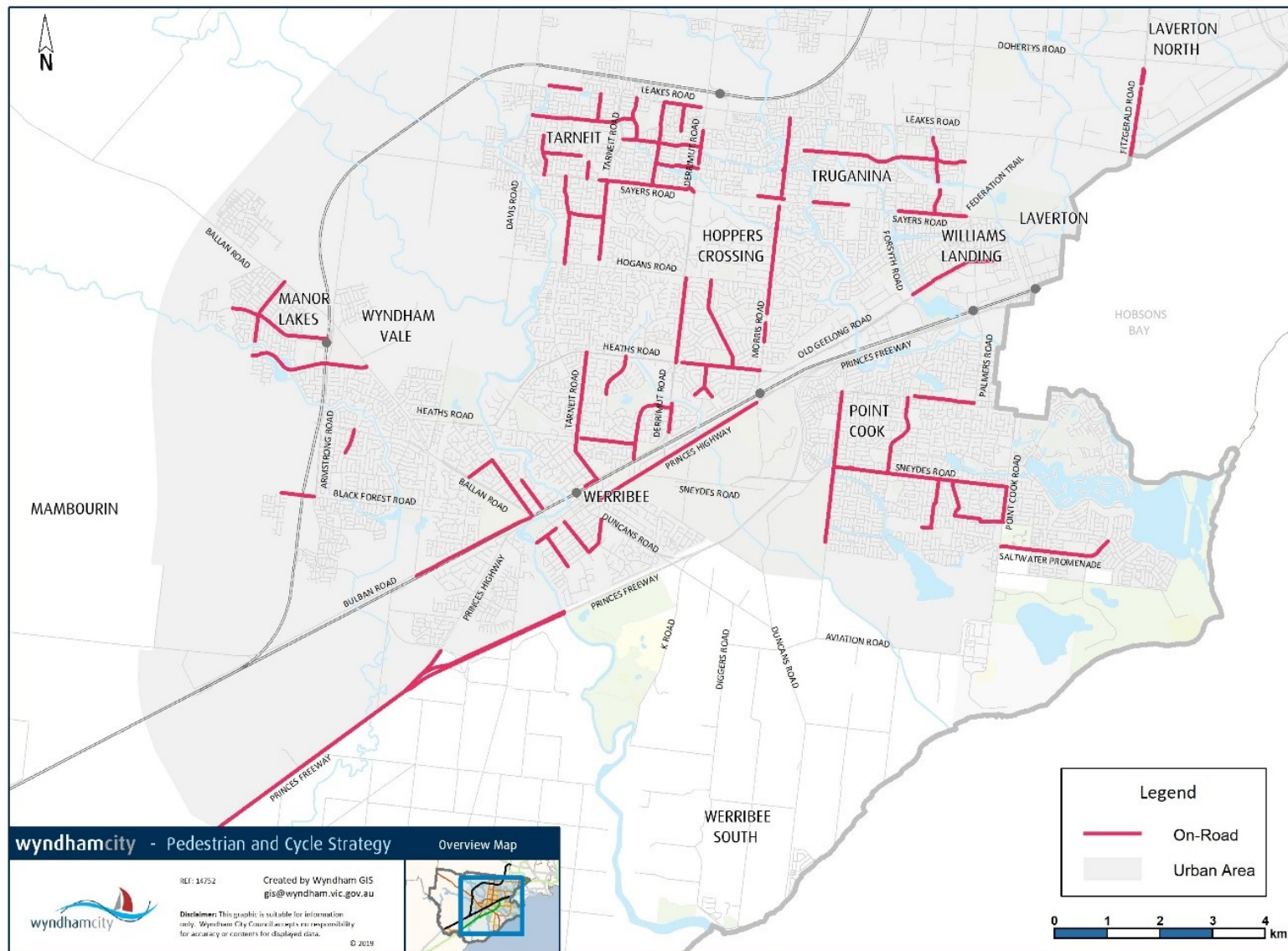
Map 2 Wyndham Paths



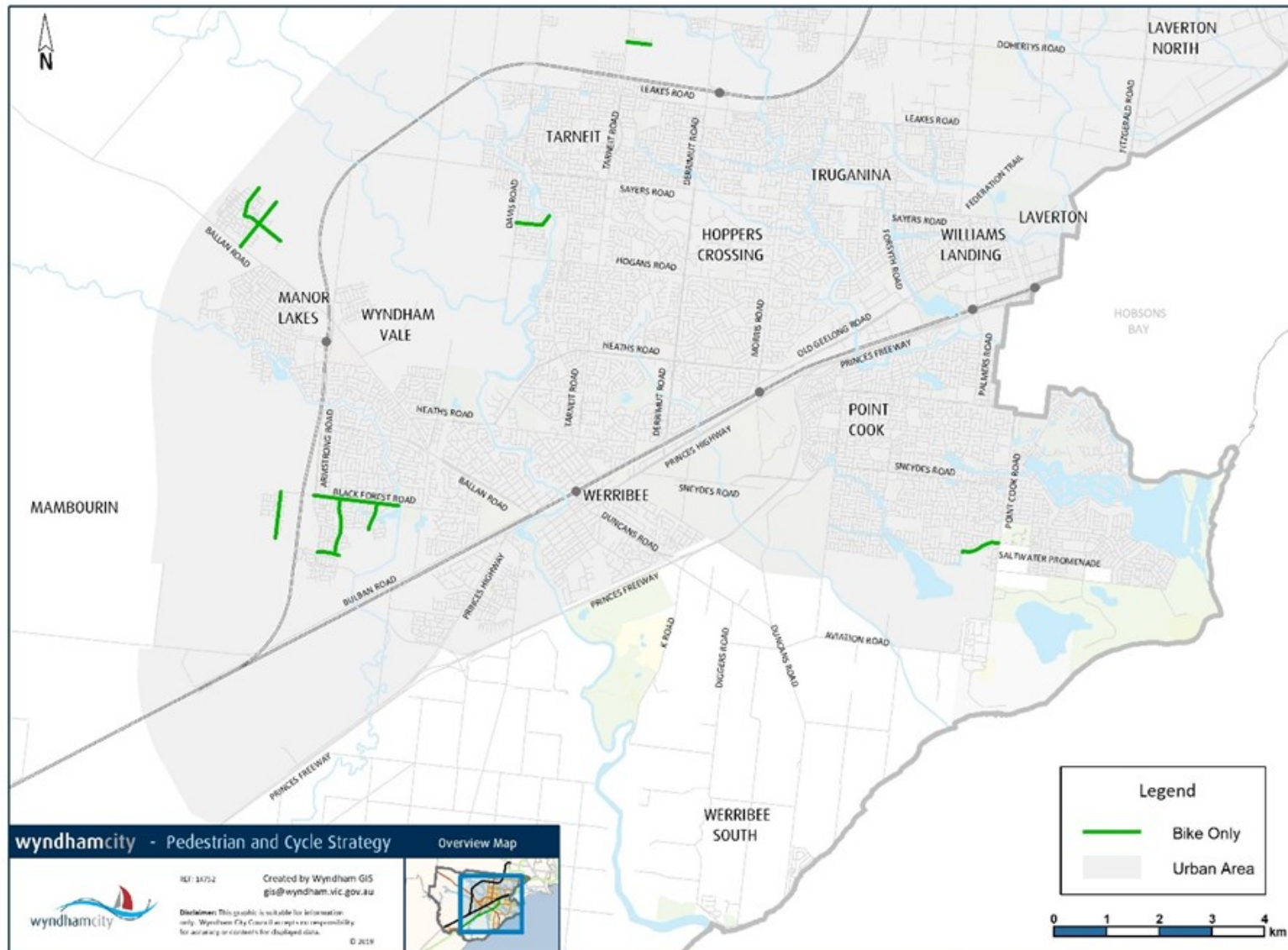
Map 3 Shared Paths



Map 4 On Road Paths



Map 5 Bike Only Paths



APPENDIX B – Opportunities for infrastructure improvements

Action 2.1 details the need for the review of internal documents, standards and guidelines to identify opportunities to improve infrastructure across the pedestrian and cycle network.

For both pedestrians and cyclists, there are several factors to be considered in the development and upgrade of the path network in Wyndham. It should be noted that these issues will continue to evolve as the network expands.

Pedestrian Infrastructure

The following improvements can enhance the network for pedestrians:

- Incorporate Principal Pedestrian Networks.
- Subject to constraints, existing 1.2m wide footpaths should be reconstructed to a 1.5m width.
- Consideration should be given to the construction of wider footpaths on approaches to town centres.
- Minimising the use of slip lanes at intersections.
- Use of pedestrian kerb outstands and/or refuges.
- Raised road crossings that also function as a local speed treatment.
- Signal phasing treatments:
 - Scramble Crossings, e.g. Point Cook Town Centre intersection at Murnong Street and Main Street.
 - Pedestrian automatic head start and automatic green walk.
 - Greater crossing time allowance.
- Reductions in posted speed limits, where appropriate.
- Increased visibility between pedestrians and other road users.
- Where shared paths and off-road cycle paths are constructed in open spaces and reserves there should be tree plantings on both sides of the path, where possible, whilst maintaining clearances and sightlines.

Cycle Infrastructure

The following improvements can enhance the network for cyclists:

- Incorporate Strategic Cycling Corridors
- Subject to constraints, all paths in Wyndham should meet current standards
- Shared user paths along waterways and drainage reserves require other infrastructure (seating, railings) and landscaping elements to be set back one metre. Enough width should be provided to ensure any batter will not require a railing between the path and the waterway/drain.

Accessibility

- Reduce complexity of crossings and crossing distance
- Access to bus stops
- Tactile ground surface indicators are essential for increasing the safety, efficiency and convenience of vision impaired pedestrians.

- Quality of surfaces and detailed design (refer to Safer Road Design for Older Pedestrians)

Guidance for footpaths

Throughout Wyndham there are streets with no footpaths and ‘through’ streets with a path on one side only. Through the network infrastructure Audit (Action 1.1) Council will investigate the need to retrofit footpaths in urban areas through street and court bowls. It is important to acknowledge that residents can raise concerns when Council plans to construct a new footpath in these streets. However, the overarching decision must be to create access to an integrated footpath network that caters for all abilities.

The main criteria to be considered in deciding what side of the road to locate a footpath, include:

- Overhead power – if there are overhead power lines it is preferred to install the footpath on the same side of the road as the power lines.
- Smaller trees can be planted next to the footpath, the opposite side of the road will have a wider nature strip to support the establishment of larger canopy trees.
- Number of street trees to be removed.
- Access to bus stops.
- Links to existing / future paths.
- Number of properties with rooms within an offset of less than 2m of the footpath.
- Street lighting.

Other criteria to be noted are:

- Number of private trees with roots in the nature strip likely to be impacted.
- Number of properties where landscaping will be impacted.
- Pits / services located within the footpath.
- Number of road crossings.
- Parking of extra cars.
- Replacement / construction of crossovers.
- Relocation of letter boxes.
- Removal of landscaping elements constructed by residents within the nature strip.

APPENDIX C - Abbreviations & Definitions

Abbreviation	Definition
PBN	Principal Bicycle Network; the network of existing and planned routes that provide facilities for people to cycle for transport (especially locally), as well as for sport, recreation and fitness
PTV	Public Transport Victoria
SCC	Strategic cycling corridor; a designated cycling route that joins up important destinations: the central city, national employment and innovation clusters, major activity centres and other destinations of major significance
SUP	Shared User Path, or, Shared Path
TEM	Traffic Engineering Manual
TIA	Transport Integration Action 2010 is Victoria's principal transport statute, coming into effect on 1 July 2019.
WITS	Wyndham Integrated Transport Strategy 2016
AS	Australian Standards
CCTV	Closed-Circuit Television
CPTED	Crime Prevention through Environmental Design
DDA	Disability Discrimination Act 1992
DEWLP	Department of Environment, Land, Water and Planning
DoT	Department of Transport
VPA	Victorian Planning Authority
KPI(s)	Key Performance Indicator(s)
LGA	Local Government Area
PPN	Principal Pedestrian Network
PSP	Precinct Structure Plan(s)
PWD	Person with Disabilities
PTV	Public Transport Victoria
SUP	Shared Use Path, or, Shared Path,
TEM	Traffic Engineering Manual
TfV	Transport for Victoria
TIA	Transport Integration Action 2010 is Victoria's principal transport statute, coming into effect on 1 July 2019.
VISTA	Victorian Integrated Survey of Travel and Activity
WITS	Wyndham Integrated Transport Strategy 2016

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

Amenity: Includes cycle parking, end of trip facilities (Showers & Change facilities), water/drink stations, toilets, shelter, seating, shade, etc.

Bike Only: Bike Only paths are for cyclists only and are not to be used by either pedestrians or cars (including no car parking). Bike Only paths only exist in conjunction with roads and foot paths. Cyclists can ride in either direction on a bike only path but should stay to the left-hand side.

Cycle path: An area open to the public which is protected from motor vehicles and which is for use by people on bicycles only (in which case it is a cycle path) or by pedestrians and people on bicycles (in which case it is a shared-use path). A cycle path can be within or outside a road reserve.

Cycle way: A protected cycle lane within a road reserve.

Footpath: An area open to the public which is protected from motor vehicles and which is for use by pedestrians including those in a wheelchair or a personal mobility device. It can also be used by cyclists who are 12 or younger. A footpath can be within or outside a road reserve.

Greenfield areas: Undeveloped land identified for residential or industrial/commercial development.

Infrastructure: cycle paths/lanes, bollards, signage, chicanes

Off-road path: A path for cyclists that is not located within the pavement area of the road.

On-road bicycle lane: can be either bike lanes marked on the road or unmarked service roads.

Parkiteer Cage: A brand of bicycle cage often found at train stations.

Path Condition: Existing state of infrastructure and surface(s)

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

Principal Pedestrian Network: routes within the built environment that are likely and have the potential to carry more pedestrians walking to key destinations and improve the quality of these routes to encourage more walking.

Service road use: Where a cyclist is directed to use the service road in place of an arterial road.

Shared Path: can be used by both cyclists and pedestrians.

Shared zone and spaces: Places where vehicles and pedestrians share the road space, with pedestrians having priority over vehicles.

Strategic Cycling Corridor: a designated cycling route that joins up important destinations: the central city, national employment and innovation clusters, major activity centres and other destinations of metropolitan or state significance.

Trail: Terminology associated with longer distance shared paths, which are often located alongside waterways, the bay or rail lines.