

DECEMBER 2012

CYCLING INTO THE FUTURE 2013–23

VICTORIA'S CYCLING STRATEGY





Published by the
Victorian Government,
Melbourne, December 2012.

© State of Victoria 2012

This publication is copyright. No part may be reproduced
in any process except in accordance with the provisions
of the *Copyright Act 1968*.

Authorised by the Victorian Government Melbourne

Printing managed by Finsbury Green

For more information contact **03 9655 6096**

CONTENTS

Minister's foreword	v
Executive summary	vi
1 Cycling in Victoria	1
2 Growing cycling in Victoria	5
Current cycling patterns	5
Potential growth	5
3 Benefits of cycling	8
Healthier Victorians	8
Better places to live	9
Stronger economy	9
Healthier environment	10
4 Strategic framework	11
Direction 1: Build evidence	12
Direction 2: Enhance governance and streamline processes	14
Direction 3: Reduce safety risks	16
Direction 4: Encourage cycling	20
Direction 5: Grow the cycling economy	22
Direction 6: Plan networks and prioritise investment	24
5 Implementation, monitoring and evaluation	29
Appendix 1: Cycling networks, paths and infrastructure	30

Some of our work in metropolitan Melbourne includes:

- > a new bridge on the Capital City Trail at Abbotsford
- > bike lanes along Chapel Street
- > extensions and improvements to the Federation Trail, Gardiner's Creek Trail and Bay Trail on Beach Road
- > Jim Stynes Bridge for walking and cycling between Docklands and the CBD along the Yarra River
- > Heatherton Road off-road bike path from Power Road to the Dandenong Creek Trail
- > a bridge over the Maroondah Highway at Lilydale
- > bike connections to Box Hill and Ringwood
- > Parkiteer bike cages and bike hoops at 16 railway stations
- > Westgate Punt weekday services
- > bike paths along the Dingley Bypass, Stud Road, Clyde Road and Narre Warren – Cranbourne Road
- > bike infrastructure as part of the Regional Rail Link project
- > a new trail in association with the Peninsula Link.

Some of our projects in regional Victoria:

- > on-road bike lanes in south Geelong
- > a shared path at Koo Wee Rup
- > an off-road bike path beside the Ovens River in Wangaratta
- > progressing work to extend the Great Southern Rail Trail from Foster to Welshpool
- > upgrading the Glengarry to Cowarr section of the Gippsland Plains Rail Trail
- > supporting cycling solutions in Ballarat
- > extending bike and shared paths at Halls Gap and Venus Bay.

Examples of our support for local councils:

- > Plenty River Trail at Greensborough
- > Kororoit Creek Recreational Trail
- > Hume Region Significant Tracks and Trails Strategy
- > City of Casey Sport Cycling Strategy.

The Victorian Government also invests in awareness and education and events like Amy's Gran Fondo, and the Melbourne to Warrnambool Cycling Classic.



MINISTER'S FOREWORD

Millions of Victorians love their bikes.

For many of us, riding a bike is a regular part of our routine. Some of us ride for pleasure, for fitness, for fun with family and friends. Some of us ride for sport. Some of us ride for new adventures and to see more of the world we live in. For more and more people, cycling is the way to get to work each day.

Across the country, there are more bikes sold than cars. And after the inspiring achievements of our own Cadel Evans, cycling is riding a wave of popularity.

With more and more people taking up cycling, the Coalition Government is investing in more cycling infrastructure, co-ordinating formerly inconsistent planning and working to make cycling safer and easier.

We want to position Victoria to become Australia's most bike friendly state.

We are investing more than \$30 million in cycling in 2012-13. This includes improving and extending cycling paths, building new trails, installing bike cages and hoops and supporting cycling events and programs. In regional areas, decommissioned rail corridors have been reinvented as shared use paths for the enjoyment of Victorians and our visitors.

In addition, the Coalition Government has committed \$18 million to link the Darebin Creek Trail to the Main Yarra Trail. These are two of the most important commuter and recreation trails in Melbourne. Linking them has been in planning for 15 years. It will help residents in northern suburbs access the extensive off-road trail network south of the Yarra River as well as significant job opportunities.

In 2012 we updated Melbourne's Principal Bicycle Network – the masterplan of all current and future bike routes – to bring together popular off-road trails with on-road lanes and paths. The network now links bike riders to key places throughout Melbourne, including local shopping centres, train stations, schools, public pools and other popular destinations.

From now on, we will plan all Melbourne's bike paths together, by bringing together the Principal Bicycle Network and the Metropolitan Trail Network of recreational trails. This master plan allows us to link bike routes together across Melbourne and guide investment in cycling.

Better planning is a key part of improving cycling in our state. Over the years, as cycling became more popular, different government departments and other agencies started building bike paths and other infrastructure. This has sometimes meant that bike paths have been built that don't link up, creating 'missing links', or made it difficult to understand how priorities are determined and by whom. *Cycling into the Future 2013–23* aims to address this by co-ordinating, planning, prioritising and delivering better connected cycling infrastructure. We will establish an Interdepartmental Cycling Committee, chaired by the Department of Transport, to enhance co-ordination and ensure there are clear lines of accountability when there are multiple interests in cycling. This will make delivery of cycling projects and programs more effective, efficient and timely.

We are building cycling into designs for our cities and towns, and we are making sure that the needs of bike riders are considered as we plan major new transport and infrastructure projects. We're running campaigns to help remind drivers to look out for bikes and have increased penalties for dooring. We're using social media to help build a culture of respect between drivers and bike riders, an increasingly important issue as more and more cyclists share the road with cars, motorbikes and trucks.

Cycling into the Future 2013–23 recognises that it will take many years and much effort to consolidate Victoria's position as the most bike friendly state in Australia. This strategy provides a sound base towards this goal, while continuing to support the growing number of Victorians now riding their bikes for transport, recreation, sport and fitness.

This strategy will be accompanied by a series of Action Plans, commencing with a two-year Action Plan for 2013 and 2014. The strategy and Action Plans will be complemented by *Victoria's Cycle Tourism Action Plan 2011–2015* which seeks to position Victoria as the leading state for cycle tourism.

My colleagues and I appreciate the input of local governments and leaders in the Victorian cycling community in developing this strategy and I look forward to continuing to work together to deliver it.



The Hon Terry Mulder, MP
Minister for Roads

EXECUTIVE SUMMARY

More and more Victorians are taking up cycling – as a means of getting to work, as a way of staying fit and healthy, as a family activity on weekends and as a way to get around.

The Victorian Government is committed to supporting and encouraging cycling, recognising the important part cycling can play in responding to a range of challenges facing Victoria.

- > It can help to reduce physical inactivity and improve the health of Victorians.
- > It can contribute to creating better places to live by making it easy for people to move around their local communities.
- > Cycling can support economic growth and help generate jobs. It is a cost-effective form of transport that can help reduce delays on our roads and public transport networks.
- > Cycling can also contribute to a healthier environment by helping to reduce air pollution, noise and greenhouse gas emissions.

Cycling into the Future 2013–23 will support the Government's Metropolitan Planning Strategy and Regional Growth Plans in addressing these challenges.

There has been strong growth in cycling over the last 10 years, with more than 1.08 million Victorians now riding a bike each week. Cycling is currently the fourth most popular recreational form of exercise in Victoria. As a way to get to work, cycling increased by five per cent each year between 2001 and 2011.

Cycling has the potential to grow even further, particularly for:

- > short local trips in all areas of Melbourne and our regional centres
- > children riding to school
- > use of regional trails.

Cycling into the Future 2013–23 aims to grow and support cycling in Victoria. It aims to make it easier for more people to cycle and to make it safer for people who already ride.

Cycling into the Future 2013–23 takes a holistic, co-ordinated and strategic approach to cycling by considering the needs of all bike riders and developing policies, programs and actions to address these needs. Currently, a number of barriers prevent the growth of cycling, including gaps in cycling networks, how people think and feel about cycling, and the way investment in cycling is supported by government systems and processes. Addressing these barriers means that *Cycling into the Future 2013–23* must do more than build better networks – it must build knowledge, attitudes and processes that will grow and support cycling.

In reviewing the previous Government's *Victorian Cycling Strategy* in 2011, the Victorian Auditor-General's Office identified that more co-ordination, better planning for implementation and better evaluation were required to effectively implement the previous strategy. The Auditor-General's Office reported that the previous strategy was developed without sufficient understanding of cycling.

In response to these criticisms, *Cycling into the Future 2013–23* seeks to improve data on cycling. By building a better evidence base, the strategy will enable more informed decisions to be made. The strategy will gather more comprehensive information on the characteristics of current and potential cycling and the preferences of bike riders, and develop a clearer understanding of how to overcome barriers to more people cycling.

Agencies with an interest in cycling tend to focus on individual goals and priorities. The strategy will develop a more co-ordinated and strategic approach to cycling that responds to the diversity of cycling needs. The strategy will bring together planning for Melbourne's bike paths for the first time, to plan the Principal Bicycle Network and Metropolitan Trail Network together. It will help target investment and programs to make sure we get the most out of what we put into cycling.

Cycling into the Future 2013–23 identifies six directions that will build our understanding of cycling and the types of trips Victorians make by bike, help us to increase these trips in the future and encourage more people to consider cycling:

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

Cycling into the Future 2013–23 will be accompanied by a series of Action Plans. The first Action Plan will be for two years. The plans will set out priority actions for the short term to deliver the strategy's objectives. Actions will be aligned under the six strategic directions.

The *Victorian Cycling Action Plan 2013 and 2014* identifies actions that will be put in place during the period of the plan. In response to criticisms by the Victorian Auditor-General's Office, the Action Plan also identifies the Victorian Government agencies that will be responsible for implementing and evaluating the actions. This approach will also be adopted in future Action Plans. The initial Action Plan establishes a whole of Victorian Government committee to co-ordinate, monitor and report on progress.

Cycling into the Future 2013–23 aims to grow and support cycling and build a more bike-friendly state.





1 CYCLING IN VICTORIA

Cycling is an important transport, sport and recreation activity in Victoria.

For some people, the primary purpose of riding is to get from one place to another in the most efficient and effective way, whether that is to school, the shops, the local oval or the railway station. Others travel across the city or town to get to work or connect with friends and family. For others, the main purpose is to get out and about in Victoria and simply enjoy the journey or to challenge themselves through training or race events.

There has been significant growth in cycling over the last ten years, with the number of people cycling for recreational purposes growing by 2.6 per cent per annum between 2001 and 2011.^{1,2} Cycling as a means of transport is growing even faster, with trips to work by bike growing at 5 per cent each year between 2001 and 2011.³ Parts of Melbourne's Principal Bicycle Network have recorded an average increase of 10.8 per cent per year in the number of cyclists.⁴

Cycling is growing.
More than 1.08 million
people now ride a bike
each week in Victoria.

Cycling into the Future 2013–23 aims to grow and support cycling so we can:

- > improve the well-being of Victorians
- > provide better places to live
- > support a stronger economy and generate jobs
- > contribute to a healthier environment.



- 1 Australian Sports Commission (2010), *Participation in Exercise, Recreation and Sport Survey (ERASS) Annual Report 2010*, p. 20
- 2 Sport and Recreation Victoria (2012), personal communication
- 3 Australian Bureau of Statistics, Australian population census (2001–2011), personal communication
- 4 VicRoads (2012), *Bicycle Volumes 2005-2012: Inductive Loops in Melbourne, Daily Average Bicycle Volumes – Individual Site Within Inner Cordon – Group 1*

In 2012, the Victorian Government released a discussion paper, *Melbourne, Let's Talk About the Future*, to prompt debate around the challenges facing Melbourne and ideas for meeting these challenges.⁵ The paper indicates that:

- > Making it easier and safer for people to cycle can encourage active lifestyles and help create quality public places.
- > Local access can be improved through better cycling connections to services, jobs and social activities, helping to make Melbourne a '20 minute city'.
- > Improving options for cycling provides people with more choice about how to get around the city and offers a low-cost travel option.

The Victorian Government released a major update of Melbourne's Principal Bicycle Network in 2012. The revised Network brings together popular off-road trails with on-road paths, linking Victorians to key places throughout Melbourne.

In regional areas, decommissioned rail corridors have been reinvented as shared use paths.

The Principal Bicycle Network is a network of proposed and existing cycle routes that help people ride to major destinations in the Melbourne metropolitan area. The Network helps guide state investment in the bicycle network.

The Victorian Government has identified a subset of routes on the Principal Bicycle Network that are Bicycle Priority Routes, in partnership with local governments under the *Smart Roads* program. *SmartRoads* is an innovative approach that manages competing interests for road space by giving priority use of the road to different transport modes at particular times of the day.

Bicycle Priority Routes have the greatest potential for separation from motorised traffic, are direct and provide access to activity areas.

We will manage Bicycle Priority Routes so that they can work better for bike riders and use them to guide priorities in developing the Principal Bicycle Network.

5 Ministerial Advisory Committee for the Metropolitan Planning Strategy for Melbourne (2012), *Melbourne, Let's Talk About the Future*, Department of Planning and Community Development



This increase in cycling generates benefits for the community, including transport, productivity, health, recreation, tourism and environmental benefits. Cycling contributes to more lively and active cities, towns and regions, as well as supporting Melbourne's and Victoria's liveability.

Cycling into the Future 2013–23 will support the Metropolitan Planning Strategy and Regional Growth Plans, which are being developed by the Victorian Government to set a vision for Victoria and develop a blueprint for Victoria's growth and development. Cycling will be a part of this blueprint, which will bring together planning for transport and land use.

Strong growth in cycling is continuing. Catering for this growth will require completing gaps in existing paths and tackling capacity limits on major cycling routes, particularly where there are safety conflicts. It also requires bike riders and car drivers to share roads respectfully.

Lots of people cycle for lots of reasons. The challenge is to accommodate them all, as shown in Figure 1.

People who cycle will have a range of ages, skills, fitness levels and confidence. People who travel at slower speeds or who are less confident in their cycling skills may feel more comfortable on off-road bike paths where they are totally separated from motor vehicles. Experienced cyclists are more likely to share traffic lanes with motor vehicles or ride along roads that have on-road bike lanes.

Attracting people to take up cycling requires more than bike paths and lanes. Sometimes it is lack of confidence that stops people from cycling; at other times, it is concerns about safety, uncertainty about how to get about by bike, a lack of places to securely store a bike or difficulty in bringing a bike with you. *Cycling into the Future 2013–23* will help make cycling easier and safer so that Victorians feel confident about cycling.

Figure 1: Bike riders and cycling infrastructure



2 GROWING CYCLING IN VICTORIA

Current cycling patterns

Between 2001 and 2011, the number of people in Victoria cycling at least once a year for exercise and recreation increased by around 30 per cent.^{6,7}

In 2011, the number of Melburnians who rode a bike to work increased by 35.7 per cent compared to 2006. This built on increases between 2001 and 2006. In the regional centres of Geelong, Ballarat and Bendigo, around 1.1 per cent of people cycle to work.⁸

In addition, the average number of bike riders using key cycling routes in Melbourne increased by 53 per cent between 2005 and 2011.⁹

Victoria has an enviable cycling record of 19 per cent of Victorians riding a bike in a typical week and up to 42 per cent over a year.¹⁰

Cycling is currently the fourth most popular recreational form of exercise in Victoria.

In Melbourne the 2011 census recorded almost 25,700 cycling trips to work, compared to just over 18,900 in 2001.

Potential growth

Despite this increase, there is still potential for significant growth in the use of bikes to get to work and other destinations, for sport, for recreation and tourism. While average daily bike volumes on Victoria's cycle paths, trails and routes have been increasing each year, there is room for more people on our cycling networks.

Access to a bike is not a barrier to cycling for most Victorians. Almost two out of three households in Victoria own a bike. For the last 10 years in a row, more bikes have been sold in Australia than cars.¹¹

More people cycle in Victoria than in any other state or territory in Australia.

Increasing cycling has the potential to free up space for other forms of transport. Making sure cycling is viewed as an important component of the transport system will help this to occur.

6 Australian Sports Commission (2010), *Participation in Exercise, Recreation and Sport Survey (ERASS) Annual Report 2010*, p. 20-1

7 Sport and Recreation Victoria (2012), personal communication

8 Australian Bureau of Statistics (2006-2011), *Australian Population Census*

9 VicRoads (2012), *Bicycle Volumes 2005-2012: Inductive Loops in Melbourne*

10 Australian Bicycle Council and Austroads (2011), *Australian Cycling Participation, Results of the 2011 National Cycling Participation Survey*

11 Australian Bicycle Council (2009), *Annual Report*

While cycling is already a popular form of recreation and exercise, there is considerable room for it to grow even further, given the number of Victorians who have access to a bike.

Overall, only 1.6 per cent of transport trips are on a bike.¹² Few journeys to work or school are by bike in Melbourne and regional centres (just 3 per cent of trips to work and school), compared to other cities around the world.¹³

Figure 2 shows that people living in the inner suburbs of Melbourne are more likely to cycle for transport than people living in the outer suburbs.

There is a great opportunity for cycling to be used more frequently for shorter trips to replace either a public transport or motor vehicle trip. Nearly three-quarters of trips between one and two kilometres are currently made by car. However, this is an easy distance to cycle for most of the active population.¹⁴

Longer distances that are typical for trips to work can also be readily cycled by most people, especially if they have access to end-of-trip facilities, such as bike storage, personal lockers and showers.

12 Department of Transport (2009), *Victorian Integrated Survey of Transport and Activity (VISTA)*

13 Department of Transport (2009), *Victorian Integrated Survey of Transport and Activity (VISTA)*

14 Department of Transport (2009), *Victorian Integrated Survey of Transport and Activity (VISTA)*

15 Department of Transport (2009), *Victorian Integrated Survey of Transport and Activity (VISTA)*

Figure 2: Proportion of transport trips made by cycling, 2009¹⁵



Note: Regional centres include Ballarat, Bendigo, Geelong, Latrobe, and Shepparton.



There is significant potential to increase cycling, particularly for:

- > short trips in all areas of Melbourne and regional centres
- > children riding to school
- > use of regional trails.

There is also an opportunity to increase the number of children cycling to school. While general cycling rates have been increasing, most children are now being driven to school. In 1970, about 84 per cent of children walked, cycled or used public transport to get to school.¹⁶ In 2005, 91 per cent of children were driven to school.¹⁷

Opportunities to grow cycling are not limited to Melbourne. In regional Victoria, cycling to work has not grown as strongly over the last decade as it has in inner Melbourne. However, as can be seen in Figure 2, the proportion of trips that are cycled in regional Victoria is much the same as the proportion in Melbourne's 'middle' suburbs.

Cycling in rural and regional areas is more diverse than in Melbourne. In some areas, tourism-based cycling is popular. Often, this is because of the availability of trails such as the Murray to Mountains Rail Trail and the Old Beechy Rail Trail or mountain biking tracks. In other areas, the ease of moving around regional centres for bike riders is a factor. For example, the development of cycling facilities in Geelong and Bendigo has encouraged more people to cycle around local areas.

Given the widespread availability of bikes, a growing cycling network, an improving road system, a relatively flat topography and a mild climate, there is strong potential for a greater number of Victorians to cycle.

16 Commonwealth Bureau of Census and Statistics (1970), *Journey to work and journey to school*

17 Department of Transport (2009) in-house data

3 BENEFITS OF CYCLING

Cycling can play a significant part in responding to challenges such as obesity, transport affordability and emissions of greenhouse gases. Cycling can improve the health and wellbeing of Victorians, create better places to live, support a stronger economy, generate jobs and contribute to a healthier environment.

Healthier Victorians

The direct gross cost of physical inactivity to the Victorian budget was estimated at \$375 million per year in 2007.¹⁸ Public health researchers have shown that each additional hour per day spent in a motor vehicle increases the chance of being obese by six per cent.¹⁹ Increased levels of cycling could produce significant savings in health costs. Most importantly, it could save and enhance people's lives.

Cycling can help to reduce poor employee health and absenteeism, which costs Australian organisations \$7 billion each year.²⁰

The *Victorian Public Health and Wellbeing Plan 2011-2015* aims to develop an effective prevention system and a strong and responsive healthcare system. This plan aims to encourage greater levels of physical activity for children and adults. Encouraging cycling is one option for getting more exercise while having fun at the same time.

Employees cycling to work take on average one less day of sick leave per year than employees who do not cycle, saving organisations about \$61.9 million each year.²¹



18 Econtech (2007), *Economic modelling of the net costs associated with non-participation in sport and physical activity*, Canberra

19 Frank L D, Andresen M A and Schmid T L (2004), Obesity relationships with community design, physical activity, and time spent in cars, *American Journal of Preventative Medicine*, vol. 2, pp. 87-96

20 Health Services Australia (November 2002), *Managing Absenteeism Report*

21 Hendriksen I J, Simons M, Garre F G, Hildebrandt V H (2010) The association between commuter cycling and sickness absence, *Preventative Medicine*, vol 5, pp. 132-5, and Direct Health Solutions (2010), *2010 Absence Management Survey*

Better places to live

Cycling can make it easier for people to move around their local communities, particularly for short trips. Compared to the costs of owning and operating a car, cycling is a low cost form of transport.²² A Victorian study found that attracting cyclists to metropolitan shopping strips generates additional revenue for local traders – each square metre allocated to bike parking generated \$31 per hour, compared to \$6 generated for each square metre used for a car parking space.²³

Places that offer recreation opportunities such as cycling are attractive places to live and visit. They provide people with opportunities to maintain and improve their health. Increasing the number of people cycling in local areas helps to make local streets safer, more active and more vibrant. In turn, this helps people to feel more confident and secure on their local streets.

Giving up operating a car and relying solely on riding a bike to get around could save someone living in Victoria up to \$19,200 per year, based on RACV estimates of the costs of operating a car.²⁴

Stronger economy

Bike and bike accessory sales in 2011 were worth an estimated \$1 billion.²⁵ The Australian cycling industry employs around 10,000 people.²⁶ Growth in cycling will help to increase jobs in this sector.

Cycling also has the potential to free up public transport and road space. This can result in reduced delays on the road network, which can make our cities and urban centres less congested and more productive, improving Victoria's prosperity.²⁷ Doubling the current level of cycling would have a noticeable impact in helping traffic to flow better.

Sporting events and cycling tourism also generate economic benefits, as outlined in Victoria's *Cycle Tourism Action Plan 2011–2015*.^{28, 29} For example, cycling visitors to the Barwon South West Region spend between \$24 and \$35 million each year as a result of using trails and mountain bike hubs in the region.³⁰

Nationally, cycling tourism and events are estimated to generate \$254 million each year for local economies.

22 In addition to the cost of buying a car, the RACV has found that a motor vehicle can cost up to \$370 per week to run. RACV (2011), *The line up, Royal Auto*, July 2011, pp. 60-7

23 Lee, A and March, A (2010), *Recognising the economic role of bikes: sharing parking in Lygon Street, Carlton, Australian Planner*, vol. 42, no. 2, pp. 85-93

24 RACV estimates it can cost up to \$370 per week to run a car. This is equivalent to more than \$19,200 per year. RACV (2011), *The line up, Royal Auto*, July 2011, pp. 60-7

25 Figures provided by Bicycle Industries Australia (September 2011)

26 Figures provided by Bicycle Industries Australia (September 2011)

27 Currently, cyclists are estimated to save the economy \$63.9 million per year in reduced congestion costs: Department of Health and Ageing (Cth.) and Cycling Promotion Fund (2008), *Getting Australia Moving*, p. 5

28 SGS Economics and Planning (March 2011), *Economic Impact of Cycle Tourism*

29 Tourism Victoria (2011), *Victoria's Cycle Tourism Action Plan 2011–2015*, p. 18

30 Inspiring Place and Robin Crocker Associates (2009), *Barwon South West Regional Trails Masterplan*, p.66



Healthier environment

Riding a bike does not produce any air pollutants, greenhouse gas emissions or noise. Analysis suggests that a 20 per cent shift in trips from motorised modes to bikes would result in reduced air pollution and emissions for an annual environmental benefit of \$33 million.³¹

Cyclists benefit from access to Victoria's forests, parks and other natural areas of public lands and share an interest in keeping these places healthy and productive. The Healthy and Productive Land Strategy being developed by the Victorian Government will set out how the needs of cyclists will be met in forests, parks and other natural areas and how the impact of cycling on the natural environment will be managed in sensitive locations.

³¹ Sinclair Knight Merz (2011), *Benefits of Walking and Cycling*, Melbourne, p. 35

4 STRATEGIC FRAMEWORK

Cycling into the Future 2013–23 recognises that it has taken cities and communities with high levels of cycling many years and much effort to achieve their success. This strategy continues steps to make Victoria a more bike-friendly state.

As shown in Figure 3, the strategic framework sets out three steps the Victorian Government will take to grow and support cycling:

- > inform decisions
- > make it easier to get things done
- > take steps to make Victoria a bike-friendly state.

The first step is to understand opportunities for increasing cycling. With better knowledge we can make more informed decisions about prioritising investments, targeting initiatives and measuring success.

The second step is to streamline how we work together. With more co-ordination and better processes we can plan and deliver projects more effectively and efficiently. We can also consider cycling issues holistically as part of transport network plans, investment priorities and program delivery.

The third step focuses on targeting investment, developing better connected networks and delivering projects and initiatives that address safety concerns and support growth in cycling. As cycling grows, a more strategic approach is needed to prioritise investments to meet all cycling needs and deliver the greatest value for all Victorians.

The first two steps enable cycling to be supported more effectively and efficiently and will be the focus in the initial years of the strategy. These steps will provide strong foundations for further actions into the future.

Six strategic directions have been identified across these three steps. Together, these six strategic directions address major barriers to growing and supporting cycling in Victoria.

Figure 3:
Cycling Strategy
Framework and
Strategic Directions



DIRECTION 1: BUILD EVIDENCE

We will build a stronger evidence base to make more informed decisions. We will share information amongst Victorian Government agencies with responsibility for and interests in cycling. We will improve data collection so that better informed and more strategic decisions can be taken about investment priorities.

Local governments, community organisations and the Victorian Government share roles in collecting, collating and publishing information on cycling in Victoria. The Victorian Government's focus is on information that will assist in understanding cycling demand and needs.

Data gaps

Current data on cycling allows us to understand the numbers of trips that are occurring in Melbourne and the numbers of people who ride bikes to work. This data is obtained from VicRoads bike counters and the national population census undertaken every five years. Other data sources allow us to gain a general understanding of cycling for different purposes, such as the National Cycling Participation Survey, the Exercise, Recreation and Sport Survey, and the Victorian Integrated Survey of Travel and Activity.^{32, 33}

However, these data sources do not provide us with a complete picture of all cycling trips that occur or the types of people that ride bikes. The accuracy of the data is also limited due to small sample sizes.

Broad trends can be identified with existing data, but the data is not sufficient to allow specific trends in particular locations or for particular types of cycling to be identified.

Data is required for local areas in Victoria on:

- > demographics of current bike riders
- > how far bike riders cycle
- > how frequently bike riders cycle
- > where bike riders cycle
- > use of tourism and recreational cycling trails.

Data is also required to understand the factors that will encourage people to cycle, how much cycling will increase if it is easier to cycle and how easy it is to cycle in a particular local area. Research is also needed to understand why some groups of people (such as women) do not cycle as much as others.

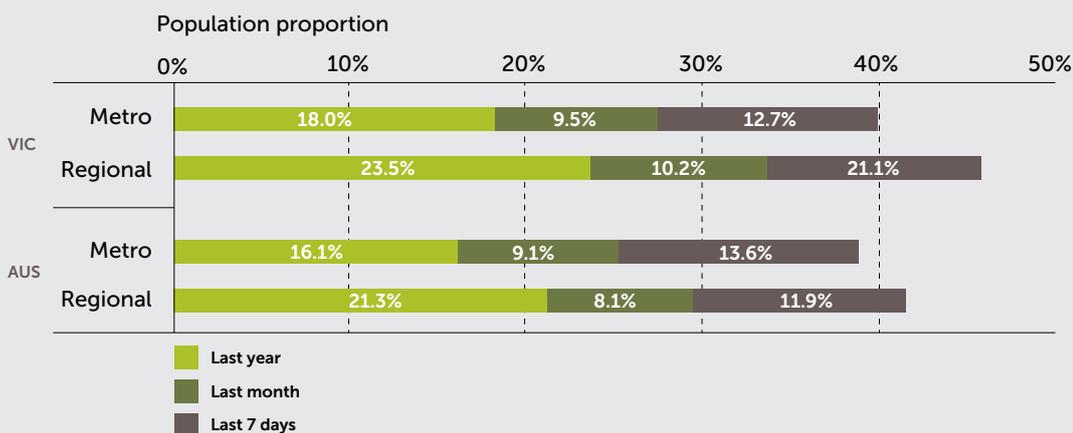
We will collect, collate and analyse data on cycling, so that a more systematic and targeted approach can be taken to planning for cycling. This will help us use resources more effectively to deliver the best value for Victorian bike riders.

32 Australian Bicycle Council and Austroads (2011), *Australian Cycling Participation, Results of the 2011 National Cycling Participation Survey*

33 Australian Sports Commission (2010), *Participation in Exercise, Recreation and Sport Survey (ERASS) Annual Report 2010*, p. 20

Figure 4: The National Cycling Participation Survey shows the popularity of cycling in Victoria.³⁴

Cycling participation as a proportion of resident population



We will also develop ways to share information to support more co-ordinated delivery of cycling infrastructure and actions across Victoria.

Monitoring and evaluation

Monitoring and evaluating the use and effectiveness of cycling infrastructure, facilities, programs and initiatives is critical for prioritising investments, demonstrating the success of initiatives and addressing future demand and emerging needs.

Currently, it is difficult to evaluate the success of cycling projects and programs. Automated bike counters record numbers of cyclists on selected routes in metropolitan Melbourne. They are also used to a lesser extent on a small number of regional trails. Manual counts of cyclists are also collected. However, a range of other indicators could be used.

We will evaluate projects and programs to better understand the impacts of cycling activity on our economy, jobs, health outcomes and the places we live. This will also provide stronger evidence to underpin more effective cycling programs, guidelines and standards.

Measures and indicators

We will measure our progress in building a stronger evidence base for cycling by:

- > increasing the accuracy of data on cycling in local areas
- > increasing the accuracy of data comparing the level of cycling, how easy it is to cycle and demographic information about bike riders
- > increasing the number of initiatives that include monitoring and evaluation
- > recording accurate data on the location, standard, condition and usage of all cycling facilities.

³⁴ Australian Bicycle Council and Austroads (2011), *Australian Cycling Participation, Results of the 2011 National Cycling Participation Survey*

DIRECTION 2: ENHANCE GOVERNANCE AND STREAMLINE PROCESSES

We will enhance co-ordination between agencies and portfolios with interests in cycling. We will improve and streamline processes to make it easier to deliver strong outcomes for cycling.

Governance

Responsibility for cycling in the Victorian Government is shared between a number of agencies and portfolios.

We will establish an Interdepartmental Cycling Committee, chaired by the Department of Transport, to enhance co-ordination where there are multiple Victorian Government interests in cycling. The Interdepartmental Cycling Committee will ensure there are clear lines of accountability and that co-ordination is occurring. This is important for the effective, efficient and timely delivery of cycling projects and programs as well as for targeting investments.

In 2012, the Victorian Government announced new time limits to the process for planning scheme amendments. Amendments that do not require a planning panel will be processed in nine months. Where a panel is required, the maximum time will be twelve months.

Processes

Multiple organisations are involved in planning and delivering cycling infrastructure, including Victorian Government planning authorities, local governments, VicRoads, Parks Victoria, utility providers and a range of public land managers (see Appendix 1). Negotiations with multiple landowners can result in a complex environment for delivering projects. This can lead to increased costs and time delays, particularly for small projects. As a result, there are examples of projects such as the link between the Darebin Creek Trail and the Main Yarra Trail that have taken up to fifteen years to plan and obtain the required approvals for delivery of new tracks, paths and cycling structures.

Community-based cycling clubs organise events and competitions that require permits and approvals from a variety of organisations such as local governments, police and other authorities. Red tape, lateness of responses and the amount of time involved can place significant stress on event organisers and club volunteers. Commercial events and competition organisers also face similar problems.

We will streamline processes to assist cycling projects, initiatives and events to be planned and delivered on time and on budget.

Standards and guidelines

A range of guidelines has been developed for different types of cycling infrastructure, including the type of bike path, path widths, surface treatments, design of intersections and bike parking.

As numbers of bike riders increase and more people take up cycling, guidelines need to be reviewed to address emerging issues and provide for innovative solutions to cycling needs. In some cases, new standards may need to be developed. Greater clarity is needed on what standards and guidelines should be applied to different types of cycling infrastructure, especially off-road paths.

We will evaluate guidelines and develop appropriate technical standards to make it easier to deliver effective cycling infrastructure.

Measures and indicators

We will measure our progress in streamlining governance and processes by:

- > surveying users to evaluate how well guidelines are working
- > collaborating between Victorian Government agencies on more projects
- > reducing the average time taken to complete permits and approvals for new cycling paths and trails.

The Government has already made significant progress in streamlining approval processes for cycling events using public roads to make them more consistent and reduce demands on club volunteers, while continuing to provide strong safety protection for event participants, spectators, officials and road users.



'Cycle Notes' is a series of 21 information bulletins on design standards for cycling infrastructure developed by the Victorian Government.

DIRECTION 3: REDUCE SAFETY RISKS

We will reduce conflicts and risks to make cycling safer. We will identify risks that pose a hazard to the safety of bike riders and take action to reduce these risks.

The Victorian Government is developing a new Victorian Road Safety Strategy that will include policies and actions aimed at reducing the number of bike riders seriously injured on Victorian roads. The new strategy will address issues such as providing a safer environment for bike riders and how bike riders and other road users can share the road together.

Serious injuries and fatalities involving bike riders can have a devastating impact on the individuals involved, their families, colleagues and communities. They also impose a significant burden on the health system and the state's economy. In the five years to 2011, the average number of cycling fatalities each year was 7.4 (two per cent of all road deaths) and an average of 454 bike riders were seriously injured each year (seven per cent of all serious injuries on the roads reported to police).³⁵

Car occupants can also be injured in crashes with bikes, but this is less common due to the protection provided by the car and the relatively low mass of the bike.

Victoria was the first Australian state to introduce mandatory bike helmet wearing laws in July 1990. An evaluation found that the number of insurance claims from bicyclists killed or admitted to hospital after sustaining a head injury decreased by 48% and 70% in the first and second years following the introduction of the law.

The Victorian Government has recently introduced tougher fines and penalties for 'dooring' (opening a car door onto the path of a cyclist) by increasing the on-the-spot fine from \$141 to \$352.

35 VicRoads Road Crash Information System, 2007-2011 accessed 3 September 2012



Managing road space

The Victorian Government, in partnership with key stakeholders, is changing the way we use and operate our road network to make the best use of our existing roads.

The SmartRoads approach will support cycling by allocating road space and providing traffic signal priority to bike riders where appropriate. This will help to reduce conflict between cyclists and motorists. For example, on Brunswick Street intersections in Fitzroy new technology is being used to detect bike riders and give them an earlier green light. This gives bike riders priority and reduces potential conflicts with pedestrians and vehicles.

We will respond to cycling network priorities and better connect paths and lanes through the SmartRoads approach. We will work with local governments to identify priority routes and areas to improve safety for cyclists.

SmartRoads ensures that decisions about the operation of the road network support land use and transport planning and better consider the effects on congestion, the surrounding community, Victoria's key activity centres and the environment.

Regulations and enforcement

Everyone has a responsibility to follow the road rules. Both bike riders and motorists are legitimate road users and need to respect each other. If we are to reduce road trauma, it is important that all road users share the road safely with each other.

Bike riders are highly vulnerable road users and the rules must be effective in protecting them from injury and fatalities. Bike riders should follow the rules and not place other road users – or themselves – at risk. The rules should help traffic to flow efficiently.

We will support programs and actions to increase awareness of road rules relating to cycling, to encourage safe and respectful behaviours from all road users and to ensure bike riders and other road users have appropriate rights and responsibilities.

In early 2012, the Victorian Government delivered the Road User or Abuser social media campaign using a Facebook page to engage car drivers and bike riders in a discussion on sharing the road safely and respectfully.

Training and education

Public awareness and enforcement campaigns to encourage safe and respectful sharing of roads between cyclists and other road users are delivered across Victoria through VicRoads and Victoria Police.

Training, education and awareness programs can provide Victorians with bike riding skills and an understanding of how to safely interact with others using shared on and off-road facilities. Local governments and community organisations play an important role in local programs and initiatives.

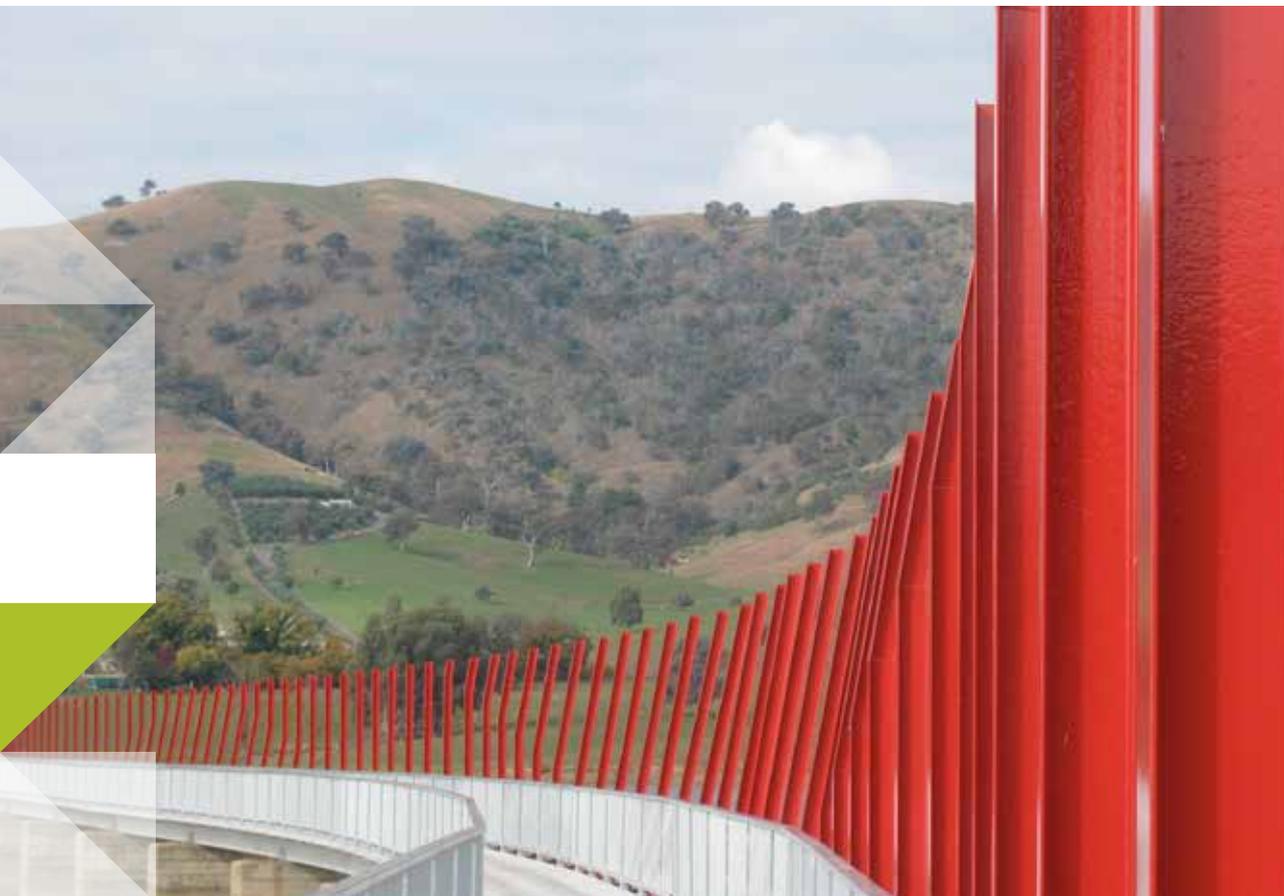
Expanding the reach of training, education and awareness programs for bike riders will help them be more effective. Evidence of their effectiveness and identifying areas for improvement is also needed.

We will work with local governments and other organisations to support and improve training, education and awareness of cycling safety issues.

Measures and indicators

We will measure our progress in reducing safety risks by monitoring:

- > serious injuries per bike rider, serious injuries per kilometre cycled and serious injuries per hour of cycling
- > fatalities per bike rider, fatalities per kilometre cycled and fatalities per hour of cycling.





DIRECTION 4: ENCOURAGE CYCLING

We will help Victorians feel more confident about cycling and make cycling more attractive. We will make it easier for people to cycle and address barriers that prevent them from cycling. This includes providing information about where and how to cycle and supporting community programs to help people cycle and improve their confidence in cycling.

Perceptions of risk

Perceived risk is an important factor influencing attitudes to cycling. An Australian study found that 25 per cent of respondents felt that cycling was not a safe form of transport and 67 per cent of respondents cited unsafe road conditions as a reason for not cycling more frequently.³⁶ Less confident or less skilled cyclists can feel vulnerable sharing road space with motor vehicles, particularly where there are high levels of traffic or high traffic speeds.

Parental perceptions of risk also affect the number of children who ride a bike to school.³⁷ In addition, there is some evidence that women are more strongly affected by perceptions of risk than men. This may be one reason why more men cycle in Victoria.³⁸ For some people, the risks that most concern them relate to personal security, rather than the risk of a crash or accident.

The Victorian Government is providing \$2.8 million over four years to support the Ride2School program. The program helps children build the skills, know-how and confidence to ride or walk to school, and beyond. It includes four steps – hands up, bike ed, part way is okay and walking wheeling Wednesdays. Bicycle Network Victoria delivers the Ride2School program for the Government.

36 Cycling Promotion Fund and Heart Foundation (2012), *Riding a Bike for Transport: 2011 Survey Findings*, p. 5

37 Garrard, J., Crawford, S., and Godbold, T. (2007), *Evaluation of the Ride2School Program: Progress Report*, Deakin University, Victoria

38 Australian Bicycle Council and Austroads (2011), *Australian Cycling Participation, Results of the 2011 National Cycling Participation Survey*, p. 22



We will develop and support programs to address perceptions of risk so that Victorians will feel confident about cycling. We will help children develop skills and confidence to ride their bikes safely, recognising that this may encourage them to continue cycling as adults.

Providing information

Information is available on cycling trails, particularly in tourist areas and metropolitan Melbourne. However, maps and information about cycling routes and facilities need to be comprehensive and kept up to date.

Cyclists can be given better information, including maps of recreational rail trails, on-road bike lanes or off-road trails and information on end-of-trip facilities. Making this information more easily accessible may encourage more Victorians to ride.

Along with local governments and community-based organisations, we will help provide better information to cyclists before they leave home and when they are out and about to encourage them to cycle.

For information about cycling experiences in Victoria, go to the outdoor activities section visitvictoria.com.au.

This website provides an overview of cycling trails in Melbourne and regional Victoria, mountain biking adventures and cycling events across the state.

Measures and indicators

We will measure our progress in encouraging cycling by assessing:

- > whether more people are cycling
- > whether current bike riders are cycling more
- > whether more women and children are cycling.

DIRECTION 5: GROW THE CYCLING ECONOMY

We will support opportunities to grow and diversify Victoria's economy and jobs through cycling. We will continue to develop cycle tourism and recreational pursuits such as mountain biking, Bicycle Motorcross (BMX) and road racing that will help to attract more visitors to Victoria, as well as keep the holiday dollar of Victorians in the state and support Victorian jobs.

Cycling for recreation and tourism

Attracting cyclists to a tourism destination can result in spending that supports local businesses and local communities.

Cycle tourists are likely to use the same cycling infrastructure as local cyclists. However, successful cycle tourism is dependent on the total tourism experience rather than just the cycling element. This includes where the trail is located, how easy it is to access, associated tourism products (such as places to see and things to do), whether there are good directions, signs and maps and secure places to store or park bikes. Bike-friendly places to stay overnight are also important.

We will help local tourism operators to provide an integrated approach to information and facilities for cycle tourism through *Victoria's Cycle Tourism Action Plan 2011–2015*. This plan aims to position Victoria as the leading state for cycle tourism.

The previous Coalition Government first introduced Rail Trails. Built on former rail lines, these trails are used for cycling, walking and horse riding. The High Country Rail Trail features spectacular scenery, while the Lilydale to Warburton Rail Trail provides easy access to local vineyards and cafes.

Around 10,000 people are employed in the Australian cycling industry.

Cycling events

The Victorian Government supports major sporting events, building on Victoria's enviable record in this area. Internationally recognised cycling sporting events contribute to Victoria's reputation as a major sporting event destination.

Cycling events generate income for local businesses. Participants, organisers and supporters of events like the Great Victorian Bike Ride and Around the Bay spend money on accommodation and in local stores. Competitive sporting events like the Melbourne to Warrnambool Cycling Classic, Track World Championships and National Road Championships attract professional athletes and enthusiastic spectators to Melbourne and Victoria from the rest of Australia and overseas. These visitors are important for growing local and regional economies.

Cycling clubs and organisations are fundamental in organising and running many cycling events and activities.

We will continue to support competitive and participative cycling events as a key means of encouraging cycling and supporting local economies.

Measures and indicators

We will measure our progress in growing and diversifying the economy by:

- > the dollars invested in cycling events
- > counting the number of participants and spectators – local, interstate and overseas – in cycling events
- > counting the number of cycling tourists using regional trails
- > evaluating the economic benefits of events and use of regional trails.

Melbourne has been awarded the Union Cycliste Internationale title of a Bike City in recognition of our commitment to cycling and reputation for successfully hosting major events.



DIRECTION 6: PLAN NETWORKS AND PRIORITISE INVESTMENT

We will plan and prioritise urban cycling networks, making it easier to cycle to key destinations and helping people to get out and about on their bikes. We will also plan and set priorities for regional trails and specialist cycle sport infrastructure.

Planning networks

The Victorian Government has developed cycling networks in Melbourne using two planning tools: the Principal Bicycle Network and the Metropolitan Trail Network.

Following extensive consultation with local councils and key cycling stakeholders, a review of the Principal Bicycle Network was completed and released in 2012. The network now places greater emphasis on providing access to major metropolitan destinations. The review also found that almost three-quarters of recreational paths on the Metropolitan Trail Network, originally intended for leisure and low levels of transport use, now have high levels of transport use. The revised Principal Bicycle Network now includes these paths.

A range of land managers have a stake in planning future cycling infrastructure. A more co-ordinated approach will incorporate these interests while also allowing the needs of different types of bike riders to be addressed. By bringing together planning for the Principal Bicycle Network and the remainder of the Metropolitan Trail Network, we will be able to better link bike routes and guide investment. Future plans for cycling infrastructure will also consider extensions to new suburbs and urban renewal areas across Melbourne.

The Principal Bicycle Network (see Figure 5) sets out proposed and existing cycle routes that help people cycle for recreation and cycle to work, school, shops and services in Melbourne. The Principal Bicycle Network makes use of many local roads and off-road paths, as well as arterial roads. Bicycle Priority Routes are a subset of the Principal Bicycle Network. They have been selected to provide priority access for cyclists to key destinations under the SmartRoads framework. Improvements on Bicycle Priority Routes will be the focus for developing the Principal Bicycle Network.



From now on we will take a co-ordinated approach to planning cycling networks in Melbourne, by bringing together planning for the Principal Bicycle Network and Metropolitan Trail Network. We will focus on routes such as Priority Bicycle Routes with the greatest potential for growth and the best prospects for providing benefits for both transport and recreational users.

Planning for cycling networks in regional urban centres is crucial for growing and supporting cycling across Victoria. This applies in large centres such as Geelong, as well as in smaller centres such as Bright.

Cycling will play an increasingly important role in meeting transport needs and supporting vibrant, healthy urban communities in regional Victoria. This will be reflected in the development of Regional Growth Plans.

Cycling can play an important role in all urban centres and we will continue to work with local government authorities to plan urban cycling networks across Victoria.

Revenue from the Building New Communities Fund may be used to provide public transport and community infrastructure, including bike paths.

The Government can also enter into work agreements with land owners to provide in-kind contributions and bring forward infrastructure delivery. This can also include construction of bike paths.

Figure 5: Example of the Principal Bicycle Network, November 2012



Prioritising investment

Victorian Governments have been investing in urban cycling networks over the last 20 years. However, many routes are not complete, do not help cyclists negotiate busy intersections and do not connect to other cycling routes or major destinations. As cycling grows, so will the need to better connect paths, lanes and trails.

The Victorian Government will develop investment plans for cycling networks. These plans will be based on priorities for delivery of new urban cycling paths in Victoria. We will also identify opportunities to construct priority missing links on existing paths.

The Victorian Government has also supported local governments and other organisations to build priority regional trails, rail trails and specialist cycling sport infrastructure.

While trails and specialist sporting facilities are of benefit to all communities, they cannot be provided everywhere. Trails and specialist sporting infrastructure will be more effective if they are completed to a standard that is able to provide high-quality experiences and opportunities for a range of bike riders.

We will focus on supporting the construction of high quality regional trails and specialist sporting facilities that are significant to the state.

The Victorian Planning Provisions integrate planning for cycling with land use and development planning, including the provision of end-of-trip facilities such as bike parking and showers in major multi-storey developments.

Integrating cycling networks with land use planning

The Victorian Government is developing the Metropolitan Planning Strategy for Melbourne. Cycling will be considered as part of an integrated response to planning for transport and land use. Cycling is expected to play a role in making Melbourne a '20 minute city' (where people live within a short commute to jobs and everyday services) and will form part of the infrastructure investment required to support city growth.

The Victorian Government is also developing Regional Growth Plans in consultation with local government. These Regional Growth Plans will provide broad direction for land use, development and transport infrastructure across regional Victoria, including key regional centres.

Together, the Metropolitan Planning Strategy and Regional Growth Plans will provide a long-term vision for managing Victoria's growth.

We will support cycling as part of the long-term vision for Victoria's future in the Metropolitan Planning Strategy and Regional Growth Plans in line with the directions in this strategy.

The Victorian Government provides funding to support cycling through a range of programs such as the Community Facilities Funding Program, the Community Works Program and the Regional Growth Fund. These funds are examples of the Victorian Government's aim to treat cycling as a mainstream activity in funding programs.

Integrating cycling facilities with other infrastructure

Cycling is an integral part of the transport system. It is cost-effective and beneficial to provide cycling infrastructure and facilities when other infrastructure investments are being considered. Providing for bike parking and cycling access at railway stations expands the reach of the public transport network. When railway stations are redeveloped or new stations are planned, cycling needs are considered.

Investment in cycling infrastructure has often been funded and built independently. When transport infrastructure is built or public buildings such as schools or hospitals are constructed, cycling facilities are sometimes not considered and must be retrofitted at a later stage. Building bike paths at the same time as upgrading a road, developing a rail corridor or improving tram stops minimises disruption to the transport system and reduces the costs of developing urban cycling networks. Including end-of-trip facilities in new offices, schools and hospitals supports the cycling experience.

We will identify opportunities to cost-effectively meet cycling needs as part of Victorian Government investments in all types of public infrastructure.

Measures and indicators

We will measure our progress in planning networks and prioritising investments by:

- > the increase in the total number of bike riders, cycling hours and distances ridden per dollar invested in the Principal Bicycle Network, Metropolitan Trail Network and priority bicycle routes in regional areas and urban centres
- > the increase in the number of visitors and users of regional trails and specialist sporting facilities such as velodromes, mountain bike tracks and BMX facilities per dollar invested in these facilities.

Parkiteer cages offer 24-hour secure and covered bike parking. More than 50 train stations across the metropolitan and regional networks have Parkiteer cages. Bicycle Network Victoria manages the cages. To join the 4,500 existing members visit www.bicyclenetwork.com.au for more information



5 IMPLEMENTATION, MONITORING AND EVALUATION

Cycling into the Future 2013–23 provides strategic direction for supporting and growing cycling over the next ten years. It will be accompanied by a series of Action Plans. The first Action Plan will be for two years.

The Action Plans will set out priority actions for the short-term to deliver the objectives of this strategy. Actions will be aligned under the six strategic directions. Successive Action Plans will build on work that has been completed in previous plans and will be able to respond to emerging needs and changing trends.

Some actions are allocated to individual agencies, while responsibility for other actions is shared between agencies.

The Department of Transport will establish and chair an Interdepartmental Cycling Committee to implement and monitor the strategy and Action Plans. The Committee will report on progress to the Victorian Government, key stakeholders and the public.

Where there are multiple interests, the Interdepartmental Cycling Committee will also co-ordinate Victorian Government responses to cycling needs and issues. This includes identifying investment priorities and

collaborating to deliver projects and programs more effectively and efficiently – for example, where multiple approvals are required.

The Interdepartmental Cycling Committee will be made up of representatives from government agencies with responsibility for and interests in cycling.

The Victorian Trails Co-ordinating Committee co-ordinates and reports progress on actions relating to tourism-based regional cycling trails. This forms part of its broader role in co-ordinating the Victorian Government's role in all types of tracks and trails across Victoria that have the potential to increase tourism.

A Cycling Reference Group will also be established to provide advice to the Interdepartmental Cycling Committee on implementation of *Cycling into the Future 2013–23* and the accompanying Action Plans. This group will provide a forum for identifying issues and for co-ordinating implementation where responsibilities are shared with local governments and other organisations.

The Cycling Reference Group will consist of representatives of a range of local governments and major organisations representing cycling interests.



APPENDIX 1: CYCLING NETWORKS, PATHS AND INFRASTRUCTURE

The Victorian Government is responsible for planning and developing urban bike networks and regional trails. Local government is responsible for planning local bike paths.

Cycling infrastructure can be shared with or separated from other users, or specifically designed for cycling activities.

Table 1 sets out the relationship between responsible agencies and the type of cycling infrastructure.

Table 1: Cycling infrastructure

Infrastructure type		Examples	Land owners/ infrastructure managers
Purpose-built off-road infrastructure	Specialist infrastructure for cycling sport	<ul style="list-style-type: none"> > Velodromes > BMX tracks > Mountain bike tracks 	<ul style="list-style-type: none"> > Local government > Parks Victoria > Private land holders > Department of Sustainability and Environment
	Separated cycling paths	<ul style="list-style-type: none"> > Off-road paths, trails > Criterium racing circuits³⁹ 	<ul style="list-style-type: none"> > Local government > VicTrack > Melbourne Water > Parks Victoria > Private land holders > VicRoads
	Shared paths for walking and cycling	<ul style="list-style-type: none"> > Shared off-road paths > Informal mountain bike tracks 	<ul style="list-style-type: none"> > Local government > Parks Victoria > Private land holders > Committees of management for regional trails > VicRoads
On-road infrastructure	Separated lanes and roads closed for specialist events	<ul style="list-style-type: none"> > Protected lanes⁴⁰ > Sport events 	<ul style="list-style-type: none"> > Local government > VicRoads > Private road managers
	Partially-separated lanes	<ul style="list-style-type: none"> > Painted lanes 	<ul style="list-style-type: none"> > Local government > VicRoads
	Non-separated	<ul style="list-style-type: none"> > Roads, including sealed verges 	<ul style="list-style-type: none"> > Local government > VicRoads

39 Criteriums are bike races held on a short course. The participants complete multiple laps. The race may involve a fixed number of laps or a fixed length of time. Points are often awarded for positions at specific laps (for example, every 10th lap) as well as positions at the end of the race.

40 Protected lanes (sometimes called Copenhagen lanes) are designed to provide greater separation of bike riders from motor vehicle traffic. The cycling lane is typically situated between a footpath and a car-parking lane.





Accessibility

If you would like to receive this publication in an accessible format, please telephone **03 9655 6000**

ISBN 978-1-921831-53-9