

Victorian Cycling Strategy

March 2009





Victorian Cycling Strategy

Outline of Report





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Premier's and Minister's Foreword





The Victorian Government is taking action on transport, so that Victorians can have the best transport network in Australia – and the most sustainable.

Victoria has seen a massive growth in cycling over the past five years.

The recently released *Victorian Transport Plan (The VTP)* commits \$115 million in improvements to cycling infrastructure. This includes new bicycle lanes and shared walking and cycling paths on priority bicycle routes, a public bicycle hire program for Melbourne's CBD, and the Provincial Pathways Program, which includes rail trails and walking paths in regional areas.

Our Government's ongoing investment in cycling goes well beyond this \$115 million. Funding in *The VTP* is on top of funding for new bike paths to be built alongside new road projects and upgrades and \$4 million each year for cycling and walking in the VicRoads annual budget.

These investments represent the largest commitment to cycling in the State's history with at least \$18 million a year allocated towards cycling infrastructure over the next several years.

We are investing in cycling because we want to give Victorians more transport options, and help build a cleaner, more sustainable future for Victorians.

This *Victorian Cycling Strategy* complements *The VTP*, which responded to a clear call from Victorians for greener transport choices.

It sets out a blueprint to develop cycling as a safe and appealing transport mode for Victorians of all ages, genders, levels of fitness, cycling experience and location.

The Strategy is based on five strategic directions:

- Build networks to connect communities
- Promote and encourage a culture of cycling
- Reduce conflicts and risks for cyclists
- Better integrate cycling with public transport
- Integrate cycling into land use planning.

A number of priority actions are included in the Strategy and over the next 12 months Victorians will see 12 metropolitan bike projects well underway or commenced, along with 11 bike projects in regional Victoria.

These priorities will be bolstered over the medium and long term with a range of additional initiatives, to support a state-wide growth in cycling.

We look forward to building a more cycle-friendly, liveable and sustainable Victoria through this critical and coordinated investment.

John Brumby MP
Premier

Tim Pallas MP
Minister for Roads and Ports



1 Introduction and Executive Summary

INTRODUCTION

The Victorian Government recognises that cycling is an increasingly important and rapidly growing part of Victoria's transport solution. Cycling provides an effective and healthy means of personal transport without adverse environmental impacts, and more and more Victorians are choosing to cycle for more of their travel.

While the Strategy focuses on cycling as a form of transport, the Government recognises the importance of cycling to recreation, health and leisure. It also acknowledges that the recreational cyclist may in future take up cycling for commuting and other trip purposes.

This Strategy supports initiatives that will have a state-wide impact, including promotional campaigns and safety programs. It prioritises network development in areas of high demand and growth,

including the inner 10 km of Melbourne, Central Activities Districts (CADs), and regional centres, while focusing on improving network connectivity across Victoria.

It is important that infrastructure improvements are complemented by a range of other measures to promote and support increased cycling.

The Strategy will be reviewed in line with *The VTP*.

VISION

The *Victorian Cycling Strategy* has a vision for cycling as a safe, readily available, convenient and preferred transport option for Victorians.

OBJECTIVE

To achieve this vision, the *Victorian Cycling Strategy* will help guide policies, programs and projects that address the current and emerging needs of cyclists and support the

continued growth of cycling into a major form of personal transport. The aim is to increase the number of cycling and walking trips in inner Melbourne by 15,000 and grow cycling in the rest of the State by 2020.

RATIONALE

We want to promote growth in cycling because cycling leads to:

- **Reduced congestion.** More cyclists means less road congestion and fewer crowds on public transport, particularly in inner metropolitan areas
- **Low energy and environmental footprint.** Cycling does not produce greenhouse gases, other pollutants or noise and uses little road and parking space¹
- **Health and fitness.** Cycling improves fitness, short and long-term health, and reduces stress²
- **Affordability.** With low initial cost and negligible running costs, cycling is cheaper than a car or even public transport
- **Social inclusion.** Cycling gives mobility and independence to those without cars, which can include children, teenagers, older people and people with disabilities³
- **Extended access.** When used in conjunction with other modes of transport, like trains, cycling extends the reach of public transport
- **Community safety.** More cyclists and pedestrians mean more watchful eyes and therefore less crime.⁴



1 J Dodson and N Sipe, *Oil Vulnerability in the Australian City*, Griffith University Urban Research Program, Research Paper 6, December 2005. Cycling Promotion Fund, *Economic Benefits of Cycling for Australia*, June 2008.

2 Cycling Promotion Fund, *Economic Benefits of Cycling for Australia*, June 2008.

3 The City of London Cycling Plan: *Consultation Draft*, 2003, p. 4.

4 Department of Sustainability and Environment, *Safer Design Guidelines for Victoria*, 2005.

EXECUTIVE SUMMARY

The *Victorian Cycling Strategy* covers:

- **Achievements to date in cycling.** The *Victorian Cycling Strategy* is the largest investment in cycling in the State's history and represents an unprecedented commitment to supporting cycling in Victoria. The Strategy builds on a wide range of achievements to date, and complements a number of Victorian Government policies, including:
 - *The Victorian Transport Plan*, 2008
 - *Melbourne @ 5 Million*, 2008
 - *Keeping Melbourne Moving*, 2008
 - *arrive alive 2008-2017*, 2008
 - *The Victorian Planning Provisions*
 - *The Transport Integration Bill*, to be introduced in 2009

- **Growth in cycling as a sustainable transport choice.** Cycling levels have been increasing in recent years following a decrease in cycling over the mid to late twentieth century. Research shows that levels of cycling are highest in inner Melbourne, among males and among people aged 25-34^{5,6}
- **Benefits and barriers to cycling.** Cycling has many benefits for both individuals and the community, but barriers to cycling include infrastructure and attitudinal factors. Understanding these barriers and the benefits of cycling are key to supporting cycling's growth

- **Five Strategic Directions.** Priority actions and future directions for supporting cycling were drawn from Department of Transport (DOT) stakeholder consultations and research, including focus groups on active transport, interviews with Local Council officers, a survey of walking and cycling infrastructure, analysis of travel data, and a review of international literature. The actions fit under the following five Strategic Directions:
 - Build networks to connect communities
 - Promote and encourage a culture of cycling
 - Reduce conflicts and risks for cyclists
 - Better integrate cycling with public transport
 - Integrate cycling into land use planning.

Priority actions include:

- Significantly improving the on and off-road cycling network within 10 kilometres of the CBD through priority investment in cycling infrastructure
- Completing cycling networks in Central Activities Districts
- Completing cycling links in regional centres
- Developing bicycle facilities as part of major transport projects, such as road and rail
- Travel planning and safe cycling programs in Victorian schools
- A range of promotional and educational campaigns and tools to encourage cycling
- A review of cycling accident patterns and creation of appropriate counter-measures
- Launching a 'look out for cyclists' campaign to educate about road rules and cyclist safety
- Establishing a public bike hire system for Melbourne
- Installing 33 bike cages at train stations by the end of 2009
- Creating a 'cycleability' toolkit for local government to help assess and guide the planning and development of cycling facilities in new developments.



5 Dr. Kevin J. Krizek, Dr. Ann Forsyth, and Laura Baum. *Walking and Cycling Literature Review: Final Report*. For Department of Infrastructure, State of Victoria, Melbourne, Australia, January 14, 2008; John Pucher and Ralph Buehler, 'At the Frontiers of Cycling: Policy Innovations in the Netherlands, Denmark and Germany', *World Transport Policy and Practice*, December 2007; A. Bauman, C. Rissel, J. Garrard, I. Ker, R. Speidel, and E. Fishman, 2008, *Cycling: Getting Australia Moving: Barriers, facilitators and interventions to get more Australians physically active through cycling*, Cycling Promotion Fund, Melbourne.

6 K. J. Krizek, P.J. Johnson, and N. Tilahun, 'Gender Differences in Bicycling Behavior and Facility Preferences'. For Conference on Research on Women's Issues in Transportation, 2005.

GOVERNMENT RESPONSIBILITY FOR CYCLING

State Government

The Department of Transport leads on policy related to cycling. It delivers cycling initiatives in conjunction with agencies and programs including VicRoads; Department of Planning and Community Development; Parks Victoria; 'Go For Your Life'; Transport Accident Commission (TAC); and VicHealth.

Local Government

The State Government works in partnership with Local Government to deliver cycling initiatives. Councils have developed initiatives to support cycling through local transport strategies, bicycle plans and budget allocations for cycling facilities. Historically, Councils have often led the way with cycling-related programs and have been champions of active transport more broadly.

Councils have a crucial role in the construction, development and maintenance of bicycle infrastructure throughout Victoria, as they oversee all local roads within their respective municipalities.

This includes the construction of new bicycle paths, parking facilities, relevant signage and on-going maintenance. Councils also manage the majority of bicycle paths, shared paths and infrastructure in local parks. In short, Councils are a critical partner with the State Government in both the delivery and maintenance of cycling facilities across the State.

In addition, Councils are partners in a number of travel behaviour change programs such as TravelSmart, Ride2Work Day and Ride2School Day that aim to encourage more people to travel by bicycle.





2 Overarching Framework

GUIDING PRINCIPLES

The *Victorian Cycling Strategy* is guided by the following principles:

- Cycling is a legitimate transport mode to be supported and grown
- Both big projects and ideas and smaller incremental steps are important
- Integrating cycling with other modes of transport will improve Victoria's whole transport network
- Cycling has a wide range of trip purposes for transport, such as commuting to work or school, and short trips to local services
- Cycling policies, programs and infrastructure projects must reflect the needs of all current and potential cyclists regardless of age, gender, fitness and experience, and location

- Cycling access should be considered as part of all urban design, land use planning, transport planning and the planning and delivery of major projects
- Both cycling infrastructure investment and other programs are important for solutions
- The coordination of research, policies, infrastructure development and other programs (including community development, active transport, sport and recreation, cycle tourism and behaviour change programs) needs improvement.

STRATEGIC DIRECTIONS

The *Victorian Cycling Strategy* includes five Strategic Directions to achieve the vision of significant growth in cycling as a transport choice throughout Victoria. These Strategic Directions have been developed in the context of the guiding principles, which in turn were drawn from research and stakeholder consultations. Actions under each Strategic Direction are discussed in Section 6.

The five Strategic Directions are:

- **Build networks to connect communities** aims to develop quality cycling networks in priority areas across Victoria that are connected to significant destinations and attractions, and to establish better processes for planning cycling networks
- **Promote and encourage a culture of cycling** aims to promote a cycling consciousness in the Victorian community so that cycling is considered to be a legitimate, viable, and preferred transport

choice by a range of different people for a range of trip purposes

- **Reduce conflicts and risks for cyclists** aims to reduce conflicts between all road users and increase road safety by improving infrastructure at potential conflict points, improving understanding and courtesy among road users, and recognising the community benefits of cycling in road system management
- **Integrate cycling with public transport** aims to increase combined use of cycling and public transport and extend the reach of the public transport network through improving links between cycling networks and facilities and public transport
- **Integrate cycling needs with land use planning, transport planning and the built environment** aims to promote aspects of land use policies and planning, transport planning, and urban design that support cycling in Victoria's built environments.





3 Achievements to date

The *Victorian Cycling Strategy* is committed to grow cycling through improved infrastructure, cycling programs and better integration with other forms of transport.

Since 1999 the Government has built 926 km of bike paths and on-road facilities, more than 300 km of these in the metropolitan area.

MORE FUNDING FOR CYCLING INFRASTRUCTURE

In 2008, under *The VTP*, the Victorian Government committed to increase significantly the funding for cycling infrastructure and programs supporting more active modes of transport, with a \$115 million increase in funding for bicycle lanes and shared walking and cycling paths on priority bicycle routes, the Provincial Pathways Program, which includes rail trails and walking paths, and a public bicycle hire program for Melbourne's CBD.

This is in addition to the more than \$32 million provided for in *Meeting Our Transport Challenges* (2006) and VicRoads base funding of \$4 million per year for the Bicycle and Pedestrian Programs.

Prior to the release of *The VTP*, there have also been significant additions to the off-road cycling network in recent years, including the new 35 km EastLink trail, with 20 km of links connecting with other trail networks, leading toward the city, Port Phillip Bay, and many other destinations.

A key element of this Strategy will be incorporating cycling infrastructure into road and rail investment, as a matter of course. Bicycle facilities are often provided as part of major road projects and whenever roads are upgraded or duplicated, including upgrades to metropolitan arterial roads as part of the \$1.9 billion Outer Suburban Arterial Roads Program and through the \$60 million Urban Road Management Systems program. These facilities may include on-road bicycle lanes or off-road bicycle paths.

Since 1999, approximately \$75 million has been spent on bicycle facilities as part of major road projects. These projects include off-road bicycle paths as part of the Craigieburn, Geelong and Hallam Bypasses.

A 1 km Copenhagen-style bicycle lane on Swanston Street between Victoria Street and the University of Melbourne has improved cyclist safety and access in inner Melbourne. By swapping the bicycle lane with the parking lane, cyclists can now ride safely between the parked cars and the footpath.

BETTER END OF TRIP FACILITIES

Bicycle storage will be an integral part of all new stations, station upgrades, car park upgrades and park and ride developments.

In January 2009, 23 new bike cages were completed at stations across metropolitan Melbourne and key regional centres to expand commuter options to combine cycling and train travel. These cages are in addition to the more than 900 existing secure bike facilities across the train network. Ten more bike cages will be completed by the end of 2009, providing space for more than 850 bikes in secure and weather protected cages. Figure 1 shows the location of bike parking and storage facilities across Melbourne's metropolitan train network.



TRANSPORT PORTFOLIO PROGRAMS

To support more sustainable forms of transport, including cycling, the Department of Transport oversees a number of programs, including the Local Area Access Program (LAAP) and the TravelSmart travel behaviour change program.

The Victorian Government has committed \$16 million over four years to respond to local access needs through the Local Area Access Program which supports local governments to develop and deliver small-scale demonstration projects that improve access to local facilities and services, and support the use of sustainable transport alternatives, particularly walking and cycling. The program assists Councils to develop, test and evaluate a range of solutions to local transport problems, and showcase their results.

Bicycle projects currently underway include the Shared Path Connectivity Project along Ballarat Buninyong Road, Mt Clear. This project will provide safer connections and combine two school access points into one on Ballarat Buninyong Road. The project includes the construction of pedestrian and cycle path links between two shared paths, and a link across Ballarat Buninyong Road via a signalised intersection, to be implemented through VicRoads.

The TravelSmart program was launched in Victoria in 2002. The program involves small-scale travel behaviour change 'travel planning' projects in schools, workplaces, hospitals and tertiary institutions, and aims to reduce people's dependency on cars and to encourage the uptake of sustainable travel alternatives for more of their travel.

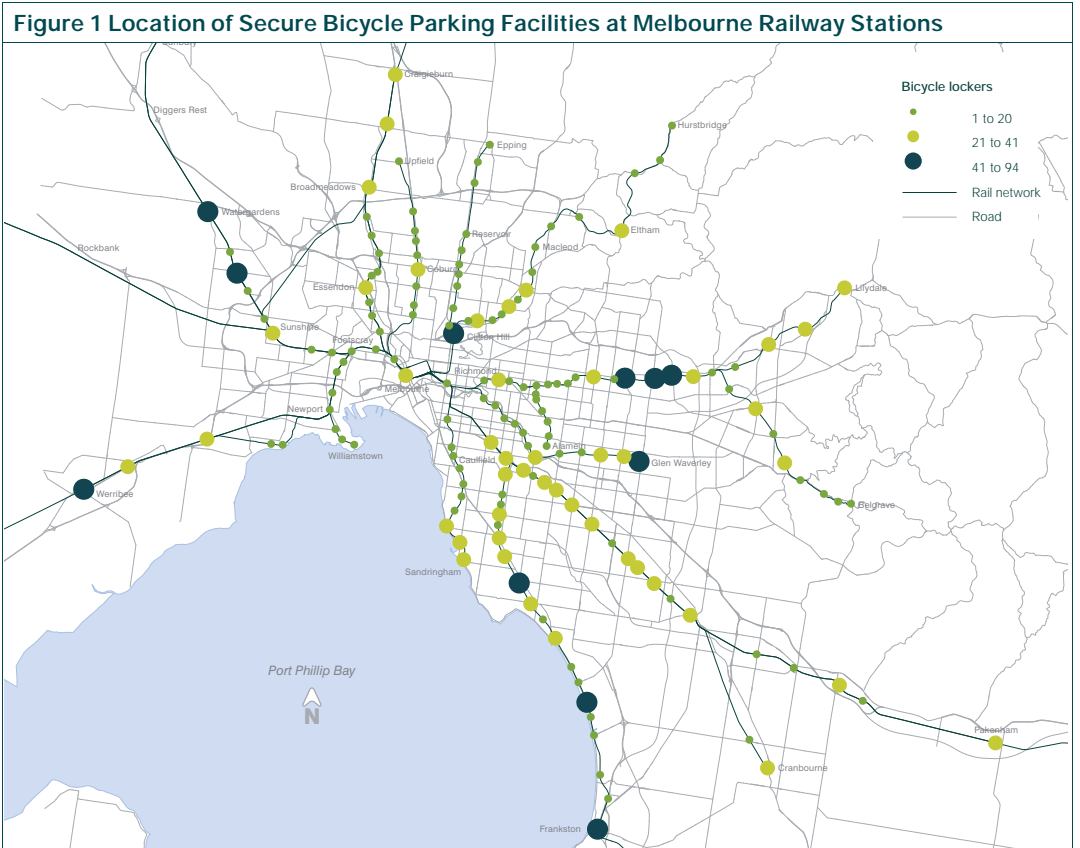
TravelSmart developed robust methodologies, particularly in relation to travel planning, with this method being recognised as an effective method to bring about a behavioural shift in travel mode. Experience gained from the TravelSmart program will assist in the development of future travel demand management programs, such as those proposed in Strategic Direction 2 of this Strategy.

Ride to Work Day is a great motivator for people to ride to work, with many first-time riders regularly riding to work within the next 12 months. The Government has sponsored Ride to Work Day for three years. In sponsoring Ride to Work Day in 2008, the Government produced 20,000 TravelSmart maps to help people find appropriate and sustainable travel plans. TravelSmart maps are also provided for specific municipalities or organisations like universities on an ongoing basis.

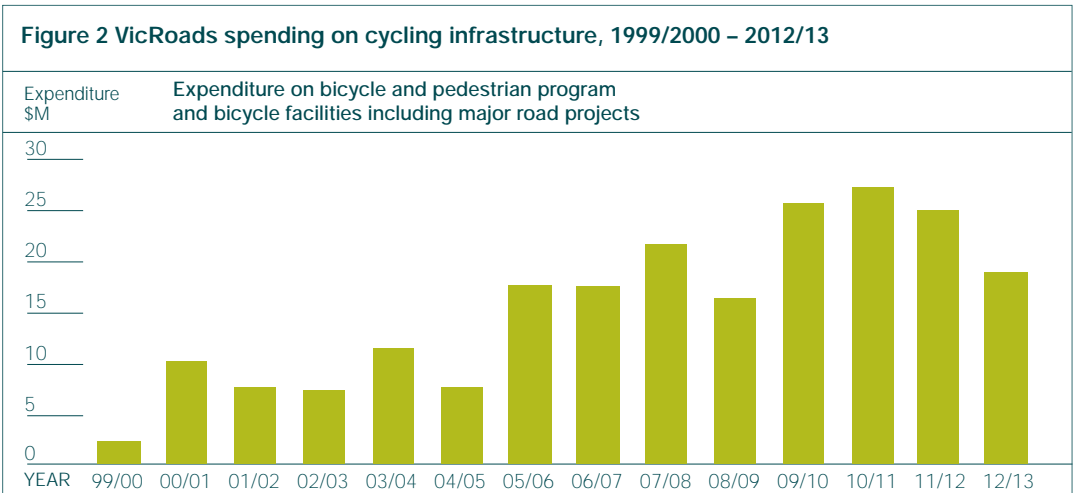
In addition to infrastructure, VicRoads provides a number of programs aimed at promoting safe cycling, including Bike Ed, Bike Ed trailers, and the Bike Ed Challenge. The VicRoads Bike Ed program is designed for children aged 9 to 13 years to develop the skills they require for safe and independent riding on roads and paths. Fully equipped Bike Ed trailers are available through VicRoads regions to support schools and community groups in delivering the program. Instructor training is provided by the Department of Education and Early Childhood Development (DEECD) for teachers and community members.



VicRoads Bicycle Projects since 2006-07	
Completed	34
Ongoing	17
Local Area Access Program (LAAP) projects since 2006-07	
Completed	5
Committed	53
Total dollars for completed and committed LAAP projects \$8.2M	
TravelSmart projects since 2006-07	
Completed	4 (most are multiple-year projects)
Committed	18
Total dollars committed for completed and committed TravelSmart projects \$1.5M	
Ongoing TravelSmart programs \$1M	
Combined LAAP and TravelSmart projects since 2006-07	
Committed	12
Total dollars for committed combined LAAP/TravelSmart projects \$1.4M	



Source: Adapted from Sinclair Knight Merz, Audit of Bicycle Facilities at Public Transport Nodes: Final Report, Melbourne, March 2009

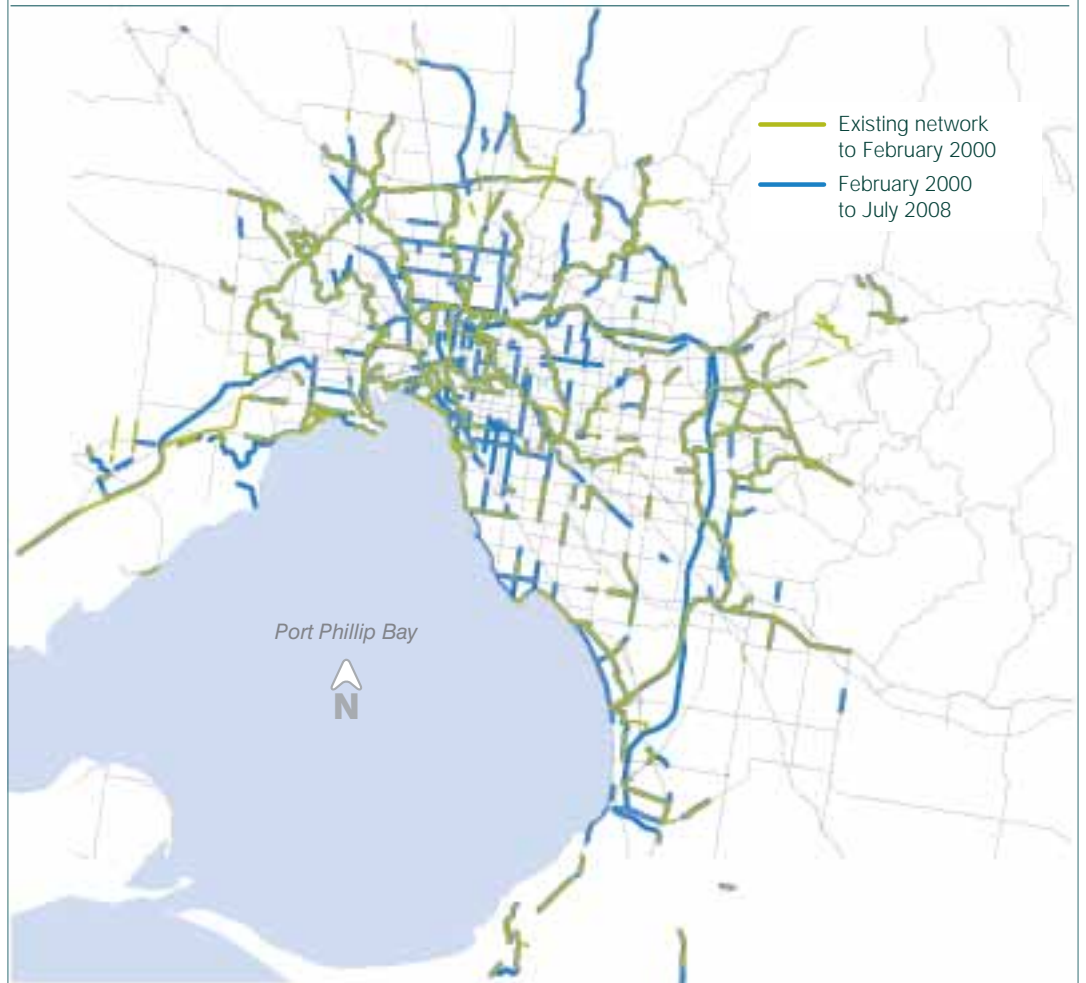


Source: VicRoads



VicRoads provides on-road bicycle lanes and off-road bicycle paths through its Bicycle Infrastructure Program and as part of major road projects. Since 1999, approximately \$100 million has been allocated for bicycle facilities as part of these two activities across Victoria (Figure 2). Figure 3 shows the extent of the bike lanes and paths delivered in the metro Melbourne area since February 2000.

Figure 3 Bicycle network 2000–2008



Source: VicRoads Spatial Information Services. SIS Job Number 26228, March 2009.



MORE SUPPORT AND ENCOURAGEMENT TO USE SUSTAINABLE TRANSPORT ACROSS GOVERNMENT

'Metropolitan Trails Network' is a planned 1200 km of shared trails creating a link between Melbourne's recreational precincts, open space, public transport and local trails. Parks Victoria, in partnership with Local Government, has the role of implementation of the Network following priorities in *Melbourne 2030* and *Linking People + Spaces*, a strategy for Melbourne's open space (2002). In 2008-2009, through the Metropolitan Trail Network Grants Program and the initiatives, 'Trails for a Liveable City' and 'Urban Parks and Trails', the State Government will invest \$2 million in 16 projects to complete pivotal links on metropolitan shared trails. Currently almost 700 km of off-road trails are complete and they are proving a popular route for many people to recreate and travel to work, increasing opportunities for sustainable transport and improving the health of Victorians.

Bicycle projects currently underway include a \$1.5 million commitment to developing an alternative bicycle route to the Gipps Street Steps. This is the first stage of a long term project to link Gipps Street and Walmer Street on the Yarra River.

'Go for your life' is a whole of Victorian government initiative, with a current investment of over \$150 million. Improving cycling levels supports the objectives of 'Go for your life' by increasing levels of physical activity and creating structural changes which support physical activity, including encouraging active transport.

'Go for your life' includes a number of programs that encourage cycling, including the 'Go for your life' Flagship Bike Plan which commenced in 2006 with a \$2.9 million investment over four years. The plan initiated the Ride2School program, which seeks to increase the number of Victorian children riding safely to and from school. This program is administered by Sport and Recreation Victoria (in the Department of Planning and Community Development) and is delivered by Bicycle Victoria. This program also supports bike education in schools and provides grants to increase bike sheds and storage facilities in schools. As of December 2008, 42 per cent of Victorian schools were registered with the Ride2School program. Through its state-wide communication strategy and Community Education Program, 'Go for your life' also supports many bike riding events and cycling festivals.

Transit Cities and Central Activities Districts: Over \$490 million has been allocated through the program to revitalise major suburban and regional centres.

Melbourne @ 5 Million (December 2008) provides policy initiatives that are complementary to the directions of *Melbourne 2030* and builds on the achievements of the Transit Cities program. Six new Central Activities Districts have now been announced in Box Hill, Broadmeadows, Dandenong, Footscray, Frankston and Ringwood, with \$50 million committed in *The VTP*.

Existing commitments to regional Transit Cities will continue. A regional blueprint is due for release later in 2009.

Creating Better Places is a grants program that funds urban improvement projects in principal or major activity centres. Funding commenced in 2005 and has included a number of capital works and urban design projects related to cycling. In 2009, the Epping Central Wayfinding project will use a \$105,500 investment to construct pedestrian and cyclist infrastructure along key routes linking local destinations.

Community Road Safety Grants is a four year program that has been funding road safety projects, including bicycle safety projects, since 2008. Currently \$100,000 has been committed by TAC to six cycling-related projects

that will be run in conjunction with a range of community groups and Local Councils. A bike education program for the newly arrived Karen community in the City of Wyndham is one example. This initiative involves a \$20,000 investment to improve participants' understanding of traffic laws and identify safe routes to local facilities such as schools and resettlement services.

Streets Ahead is a VicHealth initiative that supports children to get active in their neighbourhoods. The three year program commenced in June 2008 with a \$1.7 million investment and will increase physical activity through active transport among children aged 4 to 12 years.

Ride 2 School – Sustainable Bike Sheds Competition is a program that promotes greater participation in the state-wide Ride2School program by offering winning schools the construction of a student-designed eco-sustainable bike shed. The \$80,000 program, funded through the Sustainability Fund, commenced in 2006 and has already built four bike sheds to provide secure bike storage and encourage more students to ride to school.





4 Cycling as a transport mode – trends and patterns

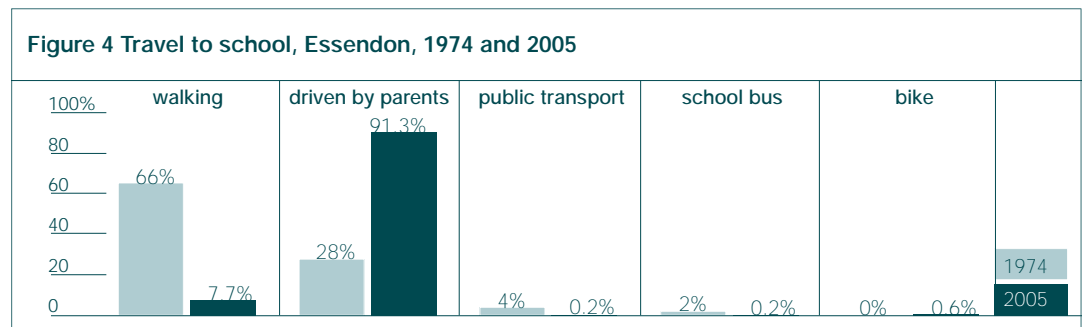
THE LAST 20 YEARS

Table 1 shows that during the 1990s, although 38 per cent of all weekday trips in Melbourne were less than 2 km long and 60 per cent less than 5 km long, most were in a car. Over half (55 per cent) of all car trips in Melbourne were less than 5 km long. These are convenient distances by bicycle.

Table 1 Transport Mode Share in Melbourne 1994-1999							
Mode share based upon Number of weekday trips by transport mode (Melbourne)							
Distance of trips (km)	Walk %	Bicycle %	Car %	Public Transport %	Missing/ Other %	Total %	% share of all trips by km-band
0-2	41	2	55	1	1	100	38
2-5	5	2	87	5	1	100	22
5+	1	1	84	13	2	100	40
Total	17%	1%	74%	6%	1%	100%	100%

Source: VATS 94-99. This chart uses estimated distances (not straight lines); Car=Car passenger and car driver trips. Figures are rounded to the nearest whole number.

The late twentieth century also saw a dramatic shift in how children travel to school, from walking to being driven by parents (Figure 4). This trend will have long-term health implications, and creates significant congestion. It is estimated that 17 per cent of all morning peak-period vehicle travel is now school travel.



Source: Adapted from DOT in-house data and Consultation Planning Survey Services, Essendon (Vic.) Council and Western Region Council for Social Development (Vic.), Awareness Essendon: an action-research programme for the City of Essendon, in conjunction with the Western Region Council for Social Development, Carlton South, Vic., 1974.



The negative impacts on transport network efficiency, road safety and amenity, and children's health caused by the current high use of cars to travel to school, are some of the key motivators leading to demand for more active transport initiatives.

A shift to walking or cycling, supervised when appropriate, would not only significantly improve road congestion but also contribute to the long-term health and wellbeing of children, by assisting reduction of childhood obesity and encouraging lifestyle patterns that combat adult chronic diseases.

There are encouraging signs from Ride2School that the trend can be reversed. During Term Four of 2008, more than 67,000 children at 290 schools reported through the monthly Hands Up! Active Travel Count that they had walked or ridden to school that day. This is 47.8 per cent of the population of these schools.

THE RECENT GROWTH IN CYCLING

Although use of walking and cycling remains low for travel to school, active transport is becoming more popular for other travel activities. Recent data indicate that there has been impressive growth in cycling to and from work. Table 2 shows average annual growth between 2001 and 2006, while Figure 5 compares the average yearly growth rate between 1996-2001 and 2001-2006. Figure 5 shows that cycling rates have increased exponentially in recent years.

In addition, between the 2001 census and the 2006 census:

- The proportion of journeys to work in the CBD by bicycle and walking rose from 4 to nearly 8 per cent
- In both metropolitan Melbourne and regional Victoria (balance of Victoria), more people travelled to work by bicycle than by bus
- There were nearly 5,000 fewer car journeys to work in metropolitan Melbourne.⁸

Visual counts and 24 hour electronic measuring show that rider numbers in inner Melbourne have risen since 2006 by 42 per cent.⁹

The key reasons for the increase in cycling include population growth, changing inner suburb demographics (more young professionals living in inner suburbs), employment growth in the Melbourne local government area (up 20,000 or 1.4 per cent per annum), the provision of more and improved bicycle paths, road and public transport congestion, and costs of travel.

WHO IS CYCLING, AND HOW FAR?

Figure 6 shows the local government area origins and mode share for those cycling into the City of Melbourne for work in 2006. The Statistical Local Areas (SLAs) of Moreland – Brunswick, Yarra – North and Darebin – Northcote have the highest cycling mode shares at 12.7 per cent, 12.6 per cent, and 9.5 per cent, respectively.

Table 2 Growth in 'cycled only' journeys to work, 2001–2006⁷

Place of work	2001 daily journeys	2006 daily journeys	Average annual growth rate 2001–2006 %
Melbourne LGA	4,163	7,225	11.7
Nine other inner LGAs*	3,981	5,981	8.5
Balance of Melbourne Statistical Division	4,039	4,835	3.7
Non-metropolitan Victoria	6,098	6,250	0.5
Total Victoria	18,281	24,291	5.8

* Maribyrnong, Moonee Valley, Moreland, Darebin, Yarra, Boroondara, Stonnington, Glen Eira and Port Phillip.
Source: Department of Transport, Transport Demand Information Atlas for Victoria 2008, Vol. 1, Melbourne, 2008



7 Department of Transport, *Transport Demand Information Atlas for Victoria 2008*, Vol. 1, Melbourne, 2008.

8 Department of Infrastructure, *Transport Demand Information Atlas for Victoria 2007*, Vol. 1, Melbourne, December 2007.

9 Communication from Bicycle Victoria

Figure 5 Growth in 'cycled only' journeys to work, 1996–2001 and 2001–2006

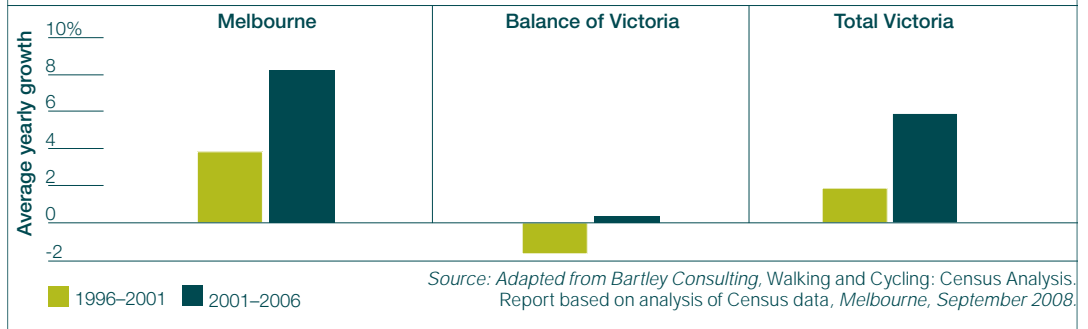
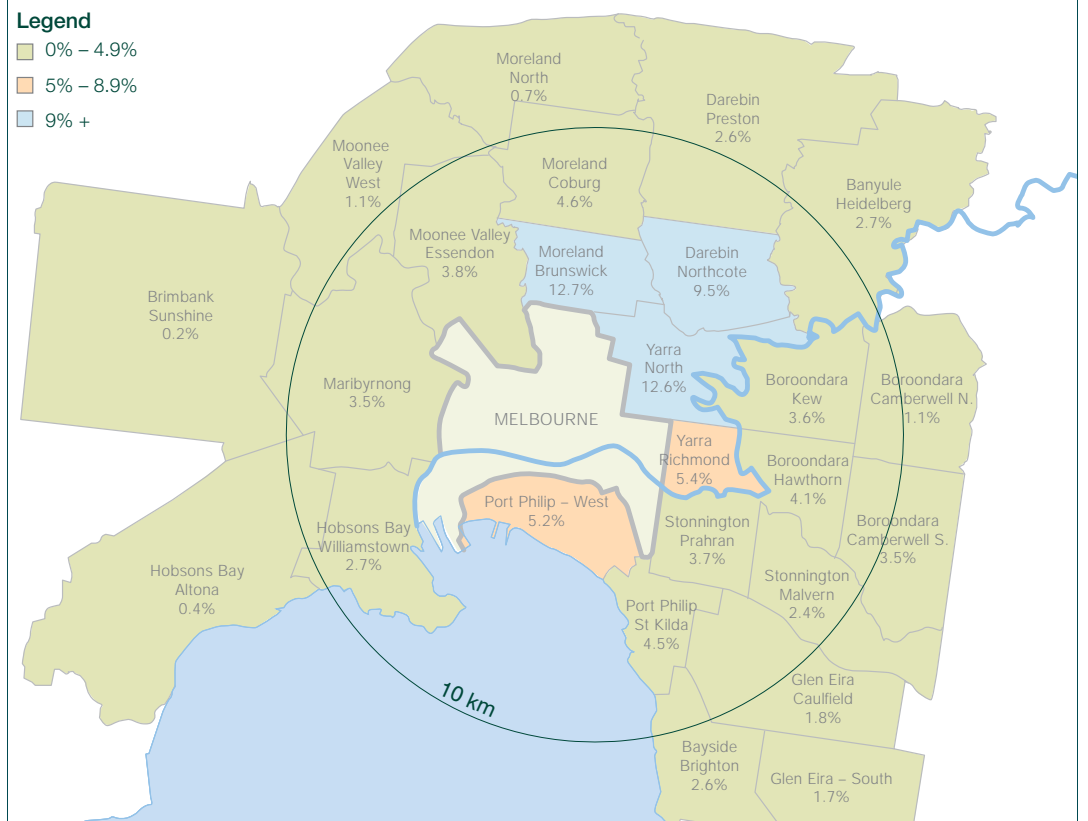


Figure 6 Spatial variations in cycling mode share

(percentage of total journeys to work destined for the City of Melbourne), 2006



Source: ABS Journey to Work data, Census of Population and Housing, 2006

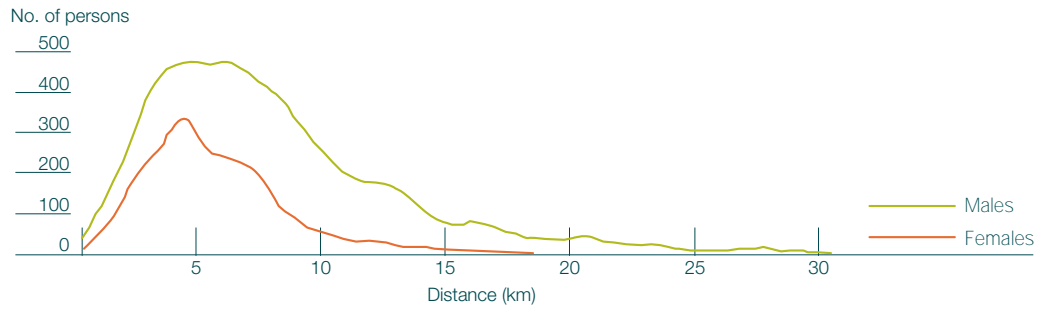


Census results for 2006 also show that in Melbourne, substantially more men cycle to work than women, and men tend to cycle greater distances (Figure 7). The mean distance is 8.2 km for males and 6.1 km for females. These facts highlight the need for the guiding principle in this strategy that policies and programs should reflect the needs of all current and potential cyclists inclusive of age, gender, fitness, experience and location.

Figure 8 shows that most cyclists coming into the Melbourne local government area for work are aged between 25 and 34 years, though those in the older age groups tend to cycle slightly longer distances on average. Again, this suggests the need for a variety of initiatives that encourage people of all ages and abilities to cycle.

Figure 7 Bicycle trips into Melbourne local government area (LGA), by gender

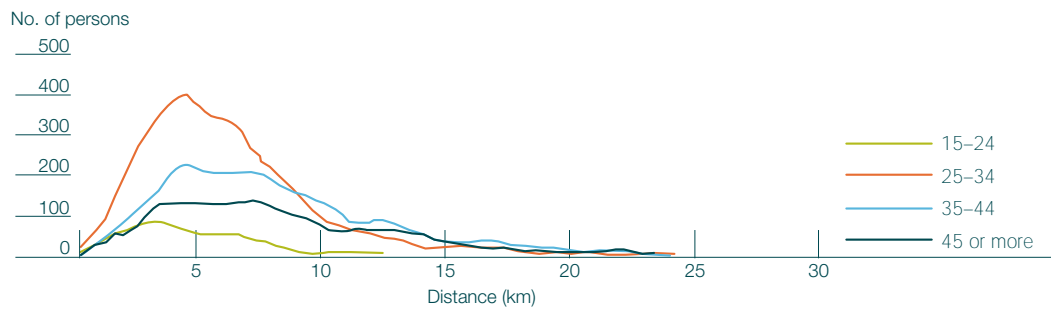
Journey to work, by bicycle only, by sex, Melbourne (C) LGA place of work, 2006



Source: DOT

Figure 8 Bicycle trips into Melbourne local government area (LGA), by age

Journey to work, by bicycle only, by age (years), Melbourne (C) LGA place of work, 2006



Source: DOT





5 The benefits of cycling and the barriers to cycling

The benefits of cycling are significant, both to individuals and to Victoria, so understanding the barriers to cycling is the first step towards overcoming them.

BENEFITS OF CYCLING

Less congestion: Although there has been a small percentage reduction in the use of cars for commuting, the number of cars on the road is growing. According to Sir Rod Eddington's report, *Investing in Transport*, as quoted in *The VTP*, if no action is taken, many of Melbourne's major roads will be at or over capacity by 2020 and the metropolitan train network will 'hit the wall' by 2014.¹⁰

The Victorian Competition and Efficiency Commission estimates that the cost of road congestion to the Victorian economy is (up to) \$2.6 billion a year.¹¹ More cyclists mean fewer cars on the roads, particularly at peak times, and this benefits everyone.

Along with growing congestion, significant growth in people using public transport is putting pressure on much of the network. Increases in cycling as a share of journeys to work would contribute to relieving congestion on public transport.

Costs: With rising petrol prices, the running costs of private vehicles are an increasing burden on household income. Cycling is almost always a less expensive option than private motor vehicles and public transport. The initial cost is low and running costs are negligible. This makes cycling a particularly cost effective transport option on short trips and on longer trips when combined with public transport.

Health: Inactivity poses many health risks but 30 minutes activity a day can offset this. The substantial health trends associated with inactivity include:

- The rate of obesity in Australia is among the highest in the developed world and costs the nation \$21 billion a year¹²
- Diabetes rates have doubled in the last 10 years.¹³

A more active Australia would save the country millions a year in health costs.

The Victorian Government has identified tackling the epidemic of preventable chronic diseases as one of its seven broad policy priorities for the future. Cycling and other active forms of

transport are cost-effective ways of assisting in reducing these diseases.

Cycling can increase and maintain recommended levels of physical activity, which can help productivity at work and contribute to reduction in depression, anxiety and sedentary lifestyle diseases. Current Australian cycling participation for recreation and commuting purposes has been estimated to cut sedentary lifestyle disease costs by approximately \$154 million.¹⁴

Environment: People are increasingly conscious of their greenhouse gas emissions and the volume of non-renewable energy resources that a car uses. Research shows vehicle emissions are highest when the engine is cold, and thus short trips by car (less than 5 km) produce higher emissions per kilometre than longer trips.¹⁵ This makes cycling a good environmental option for short trips in particular.

The environmental benefits of not using the car are substantial.

- On average, a car emits 287 grams of greenhouse gases per kilometre. Even with an average day of year occupancy rate of approximately 1.4 people per car, 197 grams of greenhouse gas are emitted per person, per kilometre for private vehicles. The equivalent emissions for carrying a person on public transport are 128 grams of greenhouse gas per kilometre.¹⁶
- Every litre of petrol used emits 2.5 kg of carbon dioxide, predominantly out the exhaust, but also through the production of the fuel.¹⁷
- In Victoria, nearly 20 million tonnes of greenhouse gas emissions, representing 16.5 per cent of Victoria's net total emissions, are emitted directly by the transport sector.¹⁸ A further 0.5 million tonnes of greenhouse gases are produced generating energy to power Victoria's public transport. In total, 17 per cent of Victoria's net emissions are associated with transport.

10 R Eddington, *Investing in transport: Overview: East West Link Needs Assessment*, March 2008, pp. 21–22.

11 Victorian Competition and Efficiency Commission, *Making the Right Choices: Options for Managing Transport Congestion*, State of Victoria, 2006.

12 Government of Australia. Australian Institute of Health and Welfare website. Viewed at <http://www.aihw.gov.au/mediacentre/2007/mr20071113.cfm> on 04/02/09; Access Economics, *The Economic Costs of Obesity*, 2006.

13 Government of Australia. Australian Institute of Health and Welfare. *Australia's health 2006*.

14 A. Bauman, C. Rissel, J. Garrard, I. Ker, R. Speidel, and E. Fishman, 2008, *Cycling: Getting Australia Moving: Barriers, facilitators and interventions to get more Australians physically active through cycling*, Cycling Promotion Fund, Melbourne.

15 P Hoglund and A Ydstedt, 'Reduced air pollution and fuel consumption with pre-heated car engines', *Urban Transport and the Environment for the 21st Century*, Lisbon, Portugal, 1998.



16 Department of Environment, Water, Heritage and the Arts, 10 top tips for fuel efficient driving, <http://www.environment.gov.au/settlements/transport/fuelguide/tips.html>; Department of Transport in-house calculation, 2008.

17 Department of Transport, in-house calculation 2008.

18 Australian Government, Department of Climate Change, <http://www.climatechange.gov.au/inventory/index.html>

BARRIERS AND OBSTACLES TO CYCLING

Research commissioned by the Department of Transport into the obstacles and barriers for current and potential cyclists¹⁹ indicates that the main barriers and obstacles to cycling include:

- Gaps in cycling networks and disconnects between off-road and on-road cycling paths
- Difficulties getting to particular destinations due to indirect routes and land uses that do not encourage cycling
- Infrastructure shortcomings, including:

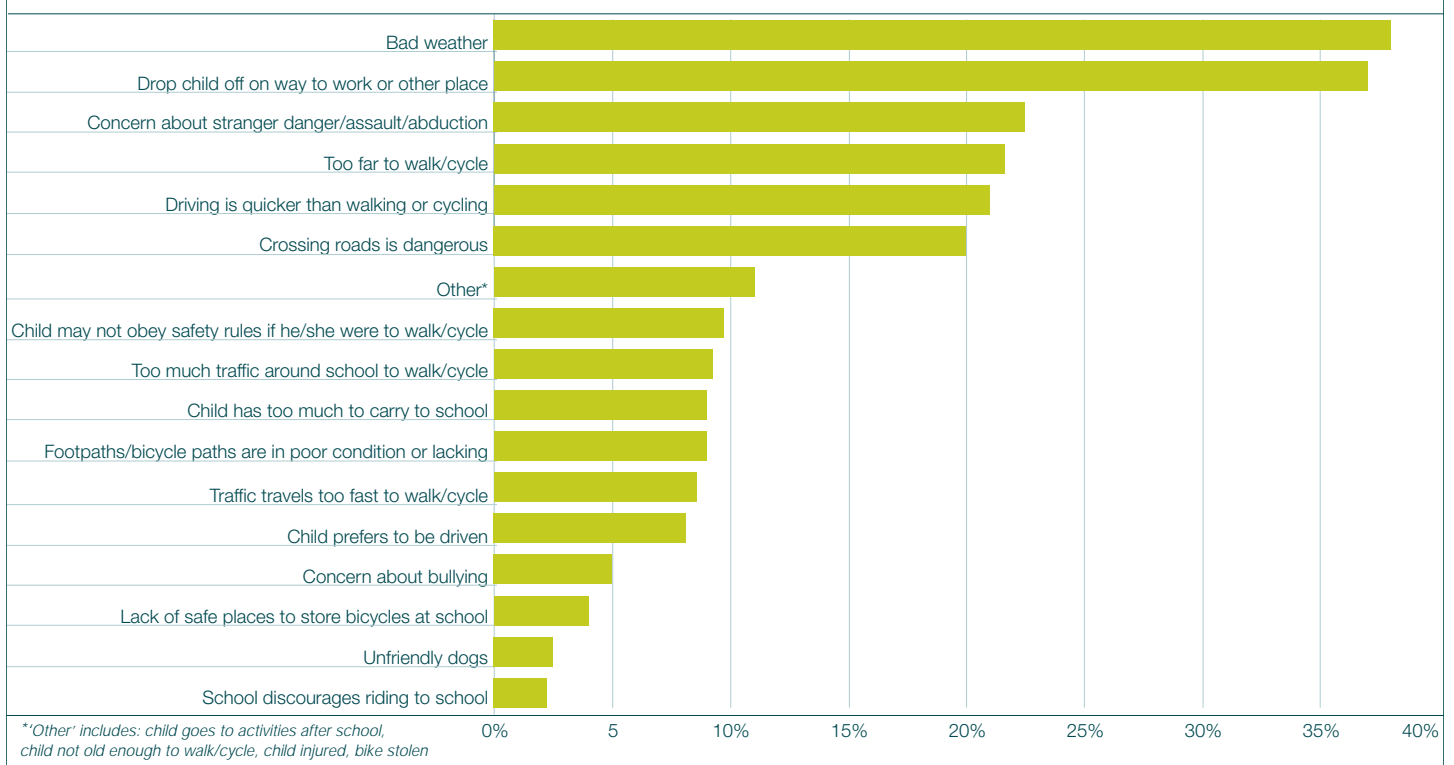
- On-road paths – inadequate separation of cyclists and vehicles as well as the design of roundabouts and railway crossings
- Off-road paths – inadequate separation of cyclists and other off-road path users, particularly pedestrians, or paths too small for the volume and mix of cyclists
- Path design shortcomings, such as lighting, width, steepness, blind corners and sharp turns
- Poor access through neighbourhoods associated with inappropriate urban design, such as courts and

- places that do not allow access through to other streets
- Lack of connections with other modes of transport
- Lack of end-of-trip facilities such as change rooms, storage facilities and bike parking
- Attitudinal barriers. Some people believe that, in comparison to car travel, cycling is:
 - Slower
 - Relatively inconvenient when carrying objects
 - Less convenient for multipurpose trips.

Some people are also discouraged by the fact that cycling is more exposed to the elements (bad weather, darkness).

Risk and perceptions of risk are also an issue, in terms of both crime and risk of injury. For many parents in particular, risk is a major issue in not allowing their children to cycle to school. The range of reasons parents prefer to drive children to school is listed in Figure 9. A number relate to perceptions of the relative safety of car travel.

Figure 9 Reasons why parents drive their children to or from school²⁰



19 Wallis Consulting, *Encouraging Walking and Cycling: Focus Group Final Report*, 2008. (forth coming).
 20 J Garrard, S Crawford and T Godbold, *Evaluation of the Ride2School Program: Progress Report*, Deakin University, August 2007.



6 Strategic Directions

The key cycling Strategic Directions proposed for Victoria are to:

1. Build networks to connect communities
2. Promote and encourage a culture of cycling
3. Reduce conflicts and risks for cyclists
4. Integrate cycling with public transport
5. Integrate cycling needs with land use planning and the built environment.

These Strategic Directions cover a variety of cycling-related issues. In some cases, proposed actions will help to implement more than one Strategic Direction. As shown in countries with high rates of cycling like Germany, Denmark and the Netherlands, focusing on many strategies for action at once is important if the aim is to increase substantially the number of cyclists.

1. BUILD NETWORKS TO CONNECT COMMUNITIES

Strategic intent

The *Victorian Cycling Strategy* aims to develop good-quality, well-connected cycling networks that make cycling a viable transport choice for people of all ages and experience levels. This will be achieved by building networks of continuous cycling routes, providing communities with quality connections to significant destinations and attractions.

Outcomes this Strategic Direction hopes to achieve include:

- Substantial development of networks in priority areas
- Improved processes for the planning of bicycle networks to maximise the effectiveness of investments.

Background

Central to a good bicycle network plan is the idea that its sum is greater than its parts. A path is more useful when connected to key destinations.

Once one network is established it can be expanded, or strategic links can be added to connect it with others. A hierarchy of interlinked networks can be developed, linking a range of different types of destination, including public transport hubs and Central Activities Districts.

Routes within networks need to be visible, safe, and complemented by cycle parking facilities at destinations. On-road routes need to be continuous at intersections.

For over a decade, VicRoads has delivered cycling infrastructure through its Bicycle and Pedestrian Programs. The Principal Bicycle Network (PBN) was established in the 1990s to guide the development of bicycle routes in Melbourne. The PBN is a network of on-road and off-road priority bicycle routes that cover the Melbourne metropolitan area, with many on arterial roads. The PBN mainly consists of on-road bicycle routes (65 per cent) and its primary purpose is to serve cycling for transport. More recently, the PBN is being redefined to improve its quality and connectivity using a more appropriate mix of arterial roads, local roads and off-road paths.

VicRoads has worked progressively to develop bicycle projects on the PBN, through projects undertaken in consultation (or in conjunction) with Local Councils. The PBN consists of 3,485 km of proposed and existing, on-road and off-road routes. Approximately 1,200 km (35 per cent) of the PBN have been completed.

VicRoads also funds development of identified Priority Bicycle Routes (PBRs) in regional cities and towns that have a population of more than 5,000 people.

Throughout Victoria, there are 734 km of PBRs identified for construction, of which 431 km (59 per cent) have been completed.

The Victorian Government has made a strong commitment to improving Victoria's cycling networks by committing \$100 million under *The VTP* to increase funding for bicycle lanes and shared walking and cycling paths on priority bicycle routes, and \$5 million for a public bike hire scheme in inner Melbourne. *The VTP* also provides \$10 million for the Provincial Pathways Program, which includes rail trails and cycling and walking paths to provide regional communities and visitors with safe off-road routes between smaller regional communities and link key tourism locations.

The VTP builds on previous Victorian Government initiatives to improve cycling infrastructure, including those funded through *Meeting Our Transport Challenges*, *Keeping Melbourne Moving*, and through the ongoing VicRoads cycling infrastructure budget.

The priority proposed upgrades to Victoria's networks (Figure 11) will complete missing links in the network into a redefined PBN. The priority upgrades will also increase separation of cyclists and vehicles on key routes, give cyclists priority through intersections and develop better off-road connections.

Many of Victoria's off-road routes were built for recreation but are now used for commuting and/or for access to local services. The network approach will be used to integrate some existing off-road routes with on-road routes and to connect some of these to significant destinations.

VicRoads will extend bicycle networks in Melbourne, as well as, in cities and towns in regional Victoria. Figure 10 shows where Government investment in cycling infrastructure is underway or commencing in Victoria in 2009/10.

'The only reason I started riding into the city is because they opened up the Federation Trail' – female, 18–35, cyclist, Melbourne

(Excerpt from Wallis Consulting, *Encouraging Walking and Cycling: Focus Group Final Report 2008*)

'A majority of the Local Council Officers interviewed report that they want to connect paths to other Council paths...'

(Excerpt from draft *Needs Analysis Report 2008*, based on interviews with over 100 Local Council officers on walking and cycling access needs in their communities)



ACTION STARTS NOW

CYCLING INFRASTRUCTURE PROJECTS UNDERWAY OR COMMENCING IN 2009-2010

Bicycle Projects: Metropolitan Melbourne

- 1 Federation Trail Extension – off-road bicycle path from Millers Road, Altona to Williamstown Road, Yarraville.
- 2 Merri Creek Pipe Bridge – bicycle path as part of upgrade of pipe bridge by Melbourne Water.
- 3 Bicycle crossing at the intersection of Willsmere Road and the Anniversary Trail, Kew.
- 4 Widen and improve the Gardiners Creek off-road bicycle path from the Hawthorn Velodrome to Toorak Road, Kooyong.
- 5 Widen and improve the Gardiners Creek off-road bicycle path from Kooyongkoot Road to Glenferrie Road, Hawthorn.
- 6 Fitzroy Street off-road bicycle path – Acland Street to Albert Park, St Kilda.
- 7 Mount Alexander Road on-road bicycle lanes – Mount Alexander Road/Shamrock Street/Grice Crescent.
- 8 Off-road bicycle path along Hyde Street and Whitehall Street to Footscray Road, Yarraville.
- 9 Upgrade of on-road bicycle lanes along Cecil Street from Albert Road to Whiteman Street, South Melbourne.
- 10 Construction of bridge over the Maroondah Highway in Lilydale to connect the Lilydale Warburton Rail Trail with the Lilydale Railway Station.
- 11 Provision of signalised crossing on the Lilydale Warburton Rail Trail to provide access across York Road, Mt. Evelyn.
- 12 Bulleen Highway on-road bicycle lanes – Golden Way to Koonung Creek.

Cycling Infrastructure Projects: Regional Cities and Towns

- 13 McLennan Street on-road bicycle lanes, Mooroopna.
- 14 Poplar Avenue on-road bicycle lanes, Shepparton.
- 15 Bendigo-Redesdale Road on-road bicycle lanes – Bendigo-Redesdale Road-Sternberg Street to Guys Hill Road, Strathdale.
- 16 Coronation Avenue off-road bicycle path, Bright.
- 17 Melrose Drive off-road bicycle path, Wodonga.
- 18 Campaspe Esplanade/Warren Street off-road bicycle path, Echuca.
- 19 Gregory Street on-road bicycle lanes – Gregory Street – both sides, Ballarat.
- 20 Gillies Street off-road bicycle path – Gillies Street, Ballarat.
- 21 Northern Highway on-road bicycle lanes between Tootle Street and Foote Street, Kilmore.
- 22 Moorabool Street off-road bicycle path – South Geelong.
- 23 Swanston Street link – Barwon Terrace, South Geelong to Eastern Beach Road, Geelong.

Figure 10 Locations of Cycling Infrastructure Projects Underway or Commencing in 2009-2010



Source: VicRoads



Actions

Priority Actions

- Deliver a network within 10 km of the CBD

The Victorian Government is committed to relieving peak-period congestion in Melbourne's most congested areas and will make investing in cycling infrastructure a priority within a 10 km radius of Melbourne's CBD. This has long been a goal of the PBN, and in the development of the redefined PBN, priority will be given to meet the recent rapid growth in cycling activity, which is expected to continue.

The map (Figure 11) proposes an indicative cycle network for inner Melbourne and shows strategically significant commuter routes running both straight out of the city centre and across the city. The indicative routes were developed using a range of criteria including connections to key destinations, directness, route continuity, the ability to provide adequate separation from motor traffic, the desire to accommodate novice as well as experienced cyclists, and the competing demands for road space from other road users.

The cycling projects identified and recommended in the Eddington Report have been included in the Strategy either in part or in full.

Figure 11 Vision for the Redefined PBN in Inner Melbourne



Source: VicRoads and DOT



Further priority projects under *The VTP*

Priority cycling projects for inner Melbourne over the next 12 years of the cycling infrastructure program under *The VTP* include:

- Complete the Federation Trail to provide an off-road path connection from Williamstown Road to Hyde Street, Yarraville
- Provide on-road bicycle facilities on Balwyn Road, Balwyn
- Installation of bicycle priority traffic signals at select intersections in Fitzroy
- Connect Williamstown to the Melbourne CBD and Docklands
- Upgrade the cycle route to the east, extending the existing route to Kew/Camberwell North
- Provide further upgrades to the Gardiners Creek off-road path
- Upgrade the Maribyrnong River Path
- Link and possibly upgrade the link from Queens Parade to Albert Street
- Link the Chandler Highway to Wellington Street
- Improve bicycle facilities along William Street and Latrobe Street as primary routes into and through the CBD
- Improve bicycle facilities on key north-south routes, including Royal Parade, St Georges Road and Brunswick Street, Fitzroy
- Create a northern CBD bicycle bypass to the west to connect with the Maribyrnong River Trail
- Upgrade of the Merri Creek trail around the Rushall Station
- Link Melbourne University with the Capital City Trail (Main Yarra Trail) in the east
- Provide links outlined in the Maribyrnong Cycling Strategy, possibly including a link between Footscray and Sunshine
- Improve access to the Capital City Trail on the south bank of the Yarra River near Alexandra Avenue at Yarra Street in Prahran
- Improve cycling access along Footscray Road to the CBD
- Improve key links in the Prahran area and Eastern suburbs
- Improve links in Albert Street and Elizabeth Street in line with works to be undertaken by Melbourne City Council.

• Completing networks in Central Activities Districts

As outlined in *The VTP*, the Government is committed to facilitating growth at six designated Central Activities Districts (CADs) and taking pressure off the flow of travel into inner Melbourne. CADs provide high levels of accessibility for walking, cycling, public transport or car by being located at junctions in the Principal Public Transport Network. Accessibility can be further enhanced by better infrastructure, planning and transport access including cycling access to and within these centres. Cycling projects will be developed as part of these plans in the coming four years. In the short term, existing strategies such as the Broadmeadows and Footscray Transit City Access and Mobility Strategies will provide an important starting point to identify priority projects.

DOT, VicRoads and Local Councils, working together, will identify priorities and delivery mechanisms.

• Completing links in regional centres and the outer metropolitan area

Investment in cycling networks in regional centres is also a priority under the *Victorian Cycling Strategy*.

There is a need to upgrade and complete missing links in the off-road and on-road bicycle networks in many cities and towns of regional Victoria including Geelong, Ballarat, Bendigo, Benalla and the Latrobe Valley.

Specific projects in regional centres include:

- Connecting the Barwon River, Bay and Bellarine Rail Trails in Geelong
- Providing bicycle facilities between Latrobe Terrace and Mercer Street in Geelong
- Extension of off-road bicycle path from Church Street to Fyansford Common in Geelong, including an investigation into providing an appropriate link to Deakin University.



Recreational cycling infrastructure in the outer metropolitan area also will be improved, such as:

- The Diamond Creek to Hurstbridge off-road shared path
- Maroondah Highway Bridge at Lilydale on the Warburton Rail Trail.

DOT, VicRoads and Local Councils will work together to identify the priorities and deliver mechanisms for projects.

• **Developing bicycle facilities within major transport projects**

A key element in building networks to connect communities is the provision of bicycle facilities as part of major road projects and whenever roads are upgraded.

The needs of cyclists will always be considered as part of the design and construction of major road projects and may include the development and upgrading of on-road bicycle lanes or off-road bicycle paths as part of the project, in most cases as a matter of course. *The VTP* provides \$1.9 billion for major road projects through the Outer Suburban Arterial Roads Program and \$60 million through the Urban Road Management Systems program.

Trails along major roads and rail lines can be used to provide arterial commuting routes and to link networks together.

Potential projects include:

- Provide off-road bike paths to be developed alongside the Peninsula Link and the Dingley Arterial, Springvale Road to Perry Road

• **Actively pursuing opportunities to take advantage of non-transport infrastructure projects to include cycling infrastructure**

There are often opportunities to include cycling infrastructure when building infrastructure for non-transport purposes.

This represents a cost-effective method of developing cycling infrastructure, and might include cycle facilities at

- Major new facilities, e.g. sports stadiums
- Along service corridors, e.g. for water supply
- Rail trails and rail lines.

In 2009, the Victorian Government will seek the views of the Victorian Bicycle Advisory Council and Local Councils within the 10 km radius of Melbourne CBD to refine the detail of the cycling network.

Future Directions

Future Directions for the Cycling Infrastructure program will include:

- An audit of cycling facilities to develop a priority for enhancing connections to different types of destinations (e.g. train stations, schools)
- Identification of new techniques to provide priority for cyclists at intersections
- Developing a clear hierarchy of routes within networks, focussing at first on major centres. Depending on actual or predicted cyclist volumes, highest priority routes could have wider lanes, better quality of surface and greater level of separation from motor vehicles. Consistent design guidelines would also make the importance given to cycling clear to motorists
- Trial wayfinding signage and guidelines, in particular, with public transport.



2. PROMOTE AND ENCOURAGE A CULTURE OF CYCLING

Strategic Intent

The *Victorian Cycling Strategy* aims to encourage more Victorians to see cycling as a viable transport option and enhance the state's reputation as 'cycle-friendly'.

Outcomes this Strategic Direction hopes to achieve include:

- Cycling becomes a top-of-mind travel choice
- Cycling is a realistic choice for many trips among a wide range of people
- Cycling is recognised as a legitimate road use – with all road users taking responsibility for mutual respect on the road.

Background

Overseas research, local research and local experience from the LAAP and TravelSmart programs have helped identify the many barriers to the development of cycling, most of which arise from the physical and cultural environments. Infrastructure investment is addressed in Strategic Direction 1. This Strategic Direction addresses the cultural environment.

Increasing the presence and awareness of cycling is important. Increasing the presence of cycling will increase general community acceptance of it as a legitimate way of getting around.

Along with the infrastructure outlined in Strategic Direction 1, behavioural change programs, promotional activities, policy development and change to regulations are required to encourage usage of cycling infrastructure.

Projects will be developed to target specific audiences — for instance, women, students, parents, motorists and seniors. Some may target times of transition in people's lives — primary to secondary school, school to work, and those moving house. These targeted initiatives will be complemented and reinforced by broad approaches to promoting cycling to all Victorians.

Respondents at 14 focus groups commissioned by Department of Transport in 2007 were encouraged to suggest ways that might encourage them to walk or cycle more. The three main suggestions were: 'promotion, community support and infrastructure'.

(Wallis Consulting 2008)

'...you need to effectively train people or educate them right from get go and instil it as part of society. I don't think that cycling is still seen as, you know, the way to get to work, that sort of thing, it's naturally car or train or tram in Melbourne' – female, 18–35, cyclist, Melbourne

(Wallis Consulting 2008)



Actions

Priority Actions

- Continue travel planning and cycling programs (such as the Ride2School program) in Victorian schools
- Education and awareness campaigns
 - Develop a campaign to promote the benefits of cycling
 - Sponsorship of key events and developing promotional materials in conjunction with ‘Go for your life’ and other related initiatives like cycling festivals, competitions, supporting grass roots cycling groups to run events (e.g. guided tours for new cyclists), maps and web-based tools
 - Development of a cycle route planning website with information about different types of cycle routes in the network and links to public transport. This website may be incorporated in or linked to the State Government’s journey planning website for public transport
 - Expanding bicycle education programs in schools and tertiary institutions in partnership with schools,

potentially in conjunction with the development of travel plans in schools that include identification and development of safe cycling routes to schools. It could also include identifying routes suitable for Riding School Buses (the cycling equivalent to Walking School Buses).

Legislation that appropriately recognises cycling also supports a culture of cycling. In 2009 work is commencing to look at ways legislation can better support the role of cycling, as well as walking, in the transport network. A discussion paper, raising questions and seeking input from interested members of the community, will be released in 2009.

In 2009 the Government is also considering changes to penalties for cyclists who engage in careless and dangerous riding behaviour.

Future Directions

- Through Transport Management Associations, work with large employers to develop and operate sustainable travel plans at work
 - Ensure sustainable travel plans are incorporated into new residential developments
 - Increase adult proficiency in cycling with bicycle education and training for large workplaces and community centres
 - Investigate additional children’s programs to encourage safe cycling with programs that have proved successful overseas
 - Expanding bike theft reduction programs as necessary as cycling levels increase. Overseas experience suggests success requires collaboration among Local Government, police and bicycle retailers. The Department of Transport, Victoria Police and the City of Melbourne are currently looking into improving bicycle storage facilities throughout the city. In addition, effort is being made to minimise bicycle theft from inner city universities
- Appoint cycling ambassadors — community members, government and industry leaders, and celebrities — to serve as role models for safety and to promote cycling
 - Explore opportunities for workplaces to establish bike fleets, secure bike parking, and end of trip facilities
 - Work with other States and the Commonwealth to investigate economic incentives to encourage cycling, for example, through the fringe benefits tax scheme.



3. REDUCE CONFLICTS AND RISKS FOR CYCLISTS

Strategic Intent

The *Victorian Cycling Strategy* aims to reduce conflicts between cyclists and other travellers (including car drivers, pedestrians, and other cyclists) and to improve safety for all cyclists.

Outcomes this Strategic Direction hopes to achieve include:

This Strategic Direction is aiming for a safer, more favourable cycling environment by:

- Improving infrastructure at points of potential conflict
- Recognising the community benefits of cycling in road system management
- Improving understanding and courtesy among all travellers.

Background

Reducing conflicts and improving safety require changes to attitudes and behaviour, focusing on several different fronts. The safety of road users, including pedestrians and cyclists, is a Victorian Government priority, both through *The VTP*, and the road safety strategy *arrive alive 2008-2017*.

Reducing the conflicts and risks faced by cyclists will grow cycling's popularity, especially among groups with low levels of cycling such as women and children. Projects under

this Strategic Direction are intended to provide information to target the whole community, recognising that users of different transport modes are not separate populations, and that at various times a person could be a driver, a cyclist or a pedestrian.

Any new guidelines need to accommodate the anticipated growth in walking and cycling in response to government policies and increased community demands.

Responses from focus groups run by Department of Transport suggest that many regular bike users (as well as vehicle drivers) are unaware of road rules that specifically relate to cyclists. This sometimes leads to a lack of consideration on the roads from and for bike users as well as confusion, which in turn can lead to dangerous situations and the occasional altercation. Both pedestrians and cyclists report problems that occur when pedestrians and cyclists share tracks.

'Everyone thinks they've got the more right to be there so how would you regulate that?'
– male, 18–35, walker/cyclist, Melbourne

(Wallis Consulting 2008)

Actions

Priority Actions

- **Review** cycling crash patterns and identify counter-measures appropriate for rural, regional and metropolitan areas
- A **'Look out for cyclists' campaign** that would complement programs such as *arrive alive 2008-2017*, the 'Share the Road' program and the Safe Cycle campaign, and which would focus on:
 - clarification of road rules and better communicating these to road users
 - promotion and advertising campaigns that foster positive attitudes and mutual respect between cyclists and other road users
 - a guide for local communities to conduct bicycle safety campaigns and activities at the local level
 - a traffic compliance campaign with bike-related road rules.

Key stakeholders for these actions will be Department of Transport, Victoria Police, VicRoads, TAC and Local Councils.

Future Directions

- Investigate changes to driver licence training to give new drivers a better understanding of their responsibilities to cyclists
- Investigate improving safety through traffic-calming measures on local roads, such as changes to car parking and road widths: intersection treatments or mid-block treatments. Any such changes would need to ensure they did not hinder cyclists or shift through-traffic from one residential street to another but send it to arterial roads
- Development of general safe cycling promotional materials, for example, emphasising the need for safety equipment, to be distributed through cycling retailers and/or a marketing strategy.



4. INTEGRATE CYCLING WITH PUBLIC TRANSPORT

Strategic intent

The *Victorian Cycling Strategy* aims to extend the effective reach of the public transport network and improve the cycling/public transport interface to ensure cycling is an easy and attractive travel choice.

Outcomes this Strategic Direction hopes to achieve include:

- Improved linkages and accessibility between cycling networks and facilities and public transport
- Increased use of cycling in combination with public transport.

Background

To allow current and future cyclists to combine cycling and public transport, existing bicycle infrastructure at public transport nodes is being improved and augmented.

This Strategic Direction aims to increase the potential public transport catchment area, improving access to employment, education and services.

In 2008 the *Public Transport Guidelines for Land Use and Development* were developed to assist in the integration of land use and public transport planning across Victoria. The Guidelines address requirements for cyclists such as ensuring cyclists safe access to and from public transport hubs and along roads used by buses. The key design principles encourage the need for bicycle facilities to be considered in all proposals, including changes to streetscapes. Future initiatives under this Strategic Direction would build upon the Guidelines.

Officers at some 20 of the 30 Councils interviewed describe access issues in their communities that could be addressed in order to encourage people to walk or cycle to public transport. The officers specify a range of issues, including steep ramps, ramps that empty directly into busy streets, connecting footpaths, crossings and access through parking lots. In some cases, there are access problems only at a few locations within the municipality. In other cases, they are more widespread or at key locations.

(Excerpt from draft Needs Analysis Report 2008, based on interviews with over 100 Local Council officers on walking and cycling access needs in their communities)

Across Victorian municipalities, while about 56 per cent of shopping areas have bicycle parking storage facilities, 26 per cent of bus interchanges have such facilities.

(Excerpt from Bartley Consulting, Access and Connectivity Survey (Revised Report) for the Department of Infrastructure, 2007).

There is an opportunity here to encourage public transport users to cycle to interchanges.



Actions

Priority Actions

- Melbourne Public Bike Hire Scheme.** This program, provided for under *The VTP*, will establish a system for Melbourne based on successful systems in Paris and other parts of Europe. It will promote greater usage of existing cycling infrastructure in central Melbourne, and promote cycling for short trips in and around the CBD. The system will extend the reach of public transport at the destination, as cycling is faster than walking and more flexible than route-based public transport, and it will build on current strategic efforts by the State to develop safer and more accessible cycling infrastructure. The system will exist within central Melbourne providing access to the inner Melbourne cycling network. The proposed first stage will include at least 50 bicycle stations within central Melbourne, spaced approximately 500 m apart, with capacity for at least 600 bicycles at start-up and the option for quick expansion. The state will work in close consultation with the City of Melbourne and intends to issue a Request for Tender in 2009.

- Bicycle Cage Program.** This program provides secure and free bike parking cages at stations. Each has capacity for 26 bicycles, with the ability to expand. Twenty-three have already been installed, 18 at metropolitan train stations and five at V/Line stations. Ten more locations will soon be announced and park and ride station upgrades will get a bike cage as a matter of course. In the future they will be added to other interchange locations such as tram and bus stops.

It is predicted that mixed mode journeys involving bikes and public transport will continue to increase. More people will be prepared to ride to the station now that their bikes can be secure. Registrations for cages at many stations are already outnumbering the existing bikes locked up around the station precinct which would suggest that already some train users are converting to arriving by bike.

Priority locations for cages are decided on a number of factors, including the level of demand for existing bicycle facilities, accessibility and zone-change stations.

Future Directions

- Work with stakeholders to investigate options for greater carriage of bikes on public transport
- Improve cycle connections to public transport through more secure bike parking at railway stations and other major public transport nodes, and improve local access to public transport nodes
- Investigate the benefits of secure bicycle parking facilities at major public transport nodes (for example, Doncaster Park and Ride) to improve integration of bicycles and public transport systems. The locations would be on preferred cycling routes where public transport use could be significantly expanded
- Build on the Train Stations as Creative Community Hubs program by developing stations to be more bicycle-friendly with secure bike parking, better surveillance and lighting and new services like bike rentals and bike workshops.



5. INTEGRATE CYCLING NEEDS WITH LAND USE PLANNING AND THE BUILT ENVIRONMENT

Strategic Intent

The *Victorian Cycling Strategy* aims to encourage aspects of mixed land use, residential densities and the built environment to support cycling as a viable transport option.

Intermediate outcomes include:

- Good walking and cycling facilities as standard at major attractions, as well as in all new developments/projects and between new developments and surrounding destinations
- Local Councils using the *Victorian Cycling Strategy* and other relevant documents to inform their Municipal Strategic Statements.

Long-term outcomes this Strategic Direction hopes to achieve include:

- A built environment that encourages walking and cycling
- Land use policies promoting shorter travel distances.

Background

Supporting the growth of cycling will require greater integration between land use, built environment and transport planning. Mixed land use creates more vibrant spaces and more local travel destinations, and in addition, can improve access to public transport. Higher residential densities can also facilitate higher levels of cycling. Attractive environments, good access through local areas ('permeability of neighbourhoods'), and designs allowing passive surveillance will all help make cycling more attractive.²¹

Community capacity for cycling in new residential or mixed-use developments should be part of planning from the start. By making sure new developments in urban growth areas incorporate cycling facilities, this will improve liveability and connections to surrounding areas. Redevelopment of established areas also should embed cycling needs into the planning process. For example, when developing a Precinct Structure Plan, cycling access should be embedded at the stage of the Infrastructure Investment Plans.

Activity centres, land use attractors and nodes should be planned and developed in a way that:

- ensures that a high level of pedestrian and cycling trips are key outcomes for the development
- delivers high density residential development around those nodes
- links walking and cycling routes to the existing and proposed regional network
- optimises connectivity
- delivers walking and cycling infrastructure within the range of attractor land uses, e.g. employment, institutional, retail, educational, recreational and residential
- ensures cycling routes and infrastructure are constructed early.

A lack of end-of-trip facilities like secure bicycle parking, change rooms and showers is a significant barrier to cycling, especially among groups with low rates of cycling such as women. Currently, the Victorian Planning Provisions (Clause 52.34 Bicycle Facilities) require minimal end-of-trip facilities for the listed land uses or for residences of four storeys or higher and only take

effect when land use change or expansion occurs, or when not waived. As can be seen in Table 3, Council officers report that around 50 percent or fewer of most types of community amenity and public transport hubs currently include end-of-trip facilities.

This Strategic Direction will ensure that, over the longer term, Victorian communities will have the facilities and built environments to ensure cycling is a viable transport choice.

Strategic Planning officers in Local Councils see the Victoria Planning Provisions as a crucial element in supporting this work. 'I'd like to see Planning Scheme controls that support walking and cycling as transport and that push for bike facilities at employer developments, so ongoing decisions can support walking and cycling.'

(Excerpt from draft *Needs Analysis Report 2008*, based on interviews with over 100 Local Council officers on walking and cycling access needs in their communities)



21 Dr. Kevin J. Krizek, Dr. Ann Forsyth, and Laura Baum. *Walking and Cycling Literature Review: Final Report*. For Department of Infrastructure, State of Victoria, Melbourne, Australia, January 14, 2008; Hoehner, Christine M., Laura K. Brennan Ramirez, Michael B. Elliott, Susan L. Handy, and Ross C. Brownson, 'Perceived and Objective Environmental Measures and Physical Activity Among Urban Adults', *American Journal of Preventive Medicine* 2005; 28(2S2), pp. 105–16.

Bicycle parking and storage	Total sample	Inner metro	Middle and outer suburbs	Growth area	Interface/ regional centre	Rural
Train stations	29%	65%	57%	60%	19%	11%
Bus interchanges	22%	22%	55%	22%	25%	8%
Community facilities	52%	74%	57%	42%	55%	47%
Council offices	51%	92%	83%	3%	67%	35%
Parks and playgrounds	26%	45%	36%	20%	34%	19%
Shopping areas	56%	86%	72%	55%	66%	43%
Post offices	35%	56%	43%	18%	58%	25%

Actions

Priority Actions

- **Development of a 'Cycleability' Toolkit for local governments.** This will include a set of guidelines and tools on how to plan, assess and measure the 'cycleability' of proposed/new residential developments or subdivisions, and provide a tool for planners to ensure consistency of local facilities. It will also assist planners and developers to meet the requirements of Clause 56 of the *Victorian Planning Provisions*, which seeks more sustainable and liveable communities in new residential subdivisions. For example, a developer could use the Cycleability Toolkit to help assess its requirements to meet Standard 9 of Element 6 of a Precinct Structure Plan,

which sets out the need to develop a network of walking and cycling links to destinations within a development. The "Cycleability Toolkit" should also help developers meet the standards outlined in the *Public Transport Guidelines for Land Use and Development*. Stage Two of the Toolkit will then provide guidelines for mixed-use developments and may produce guidelines/standards for retrofitting in established areas and neighbourhoods for cycleability, and will investigate the possibility of an award or rating system for developments, based on their cycleability.

- Investigate cycling facilities for all new State Government-funded developments (such as hospitals, schools) and a plan and guidelines to retrofit existing ones.

Future Directions

- Transport and planning portfolios will work together to strengthen the requirements for planners and developers to:
 - provide for cycling networks and end-of-trip facilities
 - support mixed land use, and particularly, short distances between residential areas and services consistent with *Melbourne @ 5 Million* principles.
- Review the principles of the *State Planning Policy Framework* (SPPF) to support objectives in the *Victorian Planning Provisions* that deliver good cycling outcomes:
 - Reconsider Clause 52.34 of the VPP as part of the planned review in 2009 to better support cycling provisions and incorporate

these standards into the parking provisions (such as using cycling rates in lieu of other measures when calculating the number of bicycle facilities required). Investigate options to tailor clause 52.06 of the VPP, which regulates car parking provisions, to be site-specific

- Explore the option of establishing a vision in the principles of the SPPF to support implementation of a strategic network of potential long-distance bicycle routes (corridors) throughout the state, including cycle-lane reserves.

²² The data were provided by Local Council officers who were asked to rate the existence of cycling facilities in their municipality. Bartley Consulting, *Access and Connectivity Survey (Revised Report)* forthcoming.



7 Implementation of the *Victorian Cycling Strategy*

Developing and implementing the *Victorian Cycling Strategy* will achieve better outcomes for cycling in Victoria. It is also an opportunity to strengthen partnerships between local governments and other agencies responsible for cycling programs and facilities. To implement the *Victorian Cycling Strategy* effectively, agencies and governments must work together to engage the community and put a monitoring and review process in place.

COORDINATION ACROSS GOVERNMENTS

Establishing a cycle-friendly policy and regulatory environment requires a whole-of-Victorian-Government approach to ensure that:

- The policies and programs arising from the *Victorian Cycling Strategy* contribute to broad goals about health, active lifestyles, the environment, community building, economic development and tourism
- The various cycling and road management-related programs in different sectors of government are coordinated for maximum impact, and resources are used and shared most effectively
- Consistent messages are provided about the importance and benefits of cycling

- The policies and programs that are developed from the *Victorian Cycling Strategy* are consistent with other government policies, such as *Melbourne @ 5 Million*
- Cycling routes can be delivered on both arterial routes and local roads, as well as in off-road environments.

Government agencies need coordinated and complementary actions to achieve the broader vision and outcomes of this Strategy. Although the *Victorian Cycling Strategy* focuses on transport-related cycling, it is imperative to coordinate and work with agencies focusing on related programs like cycling for tourism, health and recreation. Further, there will be a range of other transport actions delivered in coming years not directly focused on cycling, but complementary to this Strategy. Examples include actions related to wider transport planning and travel demand

programs, including car-free days and home-delivery initiatives. These programs also need to be informed by the *Victorian Cycling Strategy*, and can inform the Strategy's ongoing evolution as a policy document.

At a Local Government level, it would be desirable to develop regional plans for cycling networks across Council boundaries, potentially facilitated by the State Government. The Inner Melbourne Action Plan (IMAP) is one example of such cross-government planning. Local land-use planning should be linked with regional and larger strategies and incorporate all transport modes.

At the same time, coordinated approaches to working with the Commonwealth Government are needed.

GOVERNANCE STRUCTURE FOR THE CYCLING STRATEGY

Overall responsibility for policy related to cycling rests with the Department of Transport. However, in order to meet the objectives of the *Victorian Cycling Strategy*, governance arrangements for the Strategy must include a structure that is capable of allowing input from a variety of government and non-government agencies that have an important interest in cycling initiatives. Significant stakeholders include:

- State Government areas that deliver cycling-related programs (see Sections 1 and 3)
- Local Government – relevant Councils, the Municipal Association of Victoria and the Victorian Local Governance Association
- Advocacy and user groups – such as Bicycle Victoria, Cycling Promotion Fund, Amy Gillet Foundation, and local Bicycle User Groups (BUGs).



CONSULTATION

VicRoads has held substantial consultation and engagement with the bicycling community over a long period of time. In particular, the Victorian Bicycle Advisory Council (VBAC) has played an important role. Established in 1998, VBAC is a broadly based forum established to provide the Government with strategic policy and program advice on cycling matters, through the Minister for Roads and Ports. The structure and wide-ranging membership of the Council is intended to ensure that advice provided to the Minister is contemporary, well informed, and represents a breadth of perspectives within the cycling community.

Continuing in this tradition, consultation with other State Government agencies, Local Government, peak bodies and the community will be integral to the implementation of the strategy. The first priority is to develop a working group to oversee the development of the indicative cycling network for inner Melbourne into an agreed vision.

Consultation will also occur with a range of cycling stakeholders in the development and implementation of the range of actions (both identified in this document, and new ideas) to deliver the five strategies outlined in this document.

Engagement strategies may also include the development of working groups (adapted from approaches used in Canada and Germany) to allow stakeholders to exchange opinions on particular aspects of the Strategy.

COMMUNITY INPUT

Strategic planning based on community consultation will inform any revisions of the *Victorian Cycling Strategy*. Engagement strategies will include regular surveys of cyclists and non-cyclists, and consultations with cycling peak bodies. The Victorian Government will also seek the views of VBAC. Understanding community views will ensure messages promoted under Strategic Direction 2 (promoting and encouraging a culture of cycling) and Strategic Direction 3 (reducing conflicts and risks for cyclists) fit with community interests. Input from cycling interests is vital to the

strategic development of routes and networks (Strategic Direction 1) and could be incorporated through the governance structure outlined.

MONITORING AND EVALUATION

In *The VTP*, Government committed to better integration between transport and land use planning, regular review of *The VTP*, and clear communication of *The VTP*. The *Victorian Cycling Strategy* will be reviewed in line with *The VTP* reviews. The Strategy will be updated so it remains practical, relevant and achievable. As noted, strategic planning informed by community consultation will inform revisions of the *Victorian Cycling Strategy*.

Evaluation is vital to strategy implementation. The Department of Transport will work with stakeholders to determine key measures of success for the *Victorian Cycling Strategy*. The evaluation plan will be regularly reviewed to ensure it remains relevant through the life of the strategy.

Key indicators of success are likely to include measures relating to:


- volumes of cyclists and proportional mode share
- cycle trip purposes and frequency
- quality and quantity of cycling infrastructure
- risk to cyclists (both actual crash statistics, and user perceptions)
- attitudes and perceptions of cyclists and non-cyclists.

Once these indicators are established, benchmarking will be carried out, so that measures can be tracked over time.









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