

# Walking and cycling access from a local government perspective: Findings and policy implications

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## Abstract:

To achieve the economic and sustainability benefits of transport performance that comes with providing people with multiple transport choices, walking and cycling must be recognized and supported as viable and legitimate modes of transport. Policy is a critical tool to achieve this goal and good policy requires a sound evidence base. The paper describes one of several research projects conducted in 2007 by the Department of Transport in order to help inform policy that could support these outcomes. The research consisted of interviews with local government officers to obtain data on community walking and cycling needs from a local government perspective. The paper discusses the findings, which are categorised under 6 themes: 1) the state of walking and cycling networks across Victoria; 2) reasons for walking and cycling trips; 3) barriers to walking and cycling; 4) the need to integrate walking and cycling with public transport; 5) council interventions to increase walking and cycling; and 6) remaining challenges for Local and State Government. The paper describes how these findings informed the *Victorian Cycling Strategy*, released in March 2009. The objective of the Strategy is to support the recognition of cycling as a legitimate and viable transport choice and to increase cycling in the State.

## 1 Introduction

In order to achieve the economic benefits and sustainability of the level and quality of transport performance that comes with providing people with multiple transport choices, walking and cycling must be recognized as viable and legitimate modes of transport. Walking and cycling for transport purposes benefit Australia's economy and environment. Road congestion costs the Australian economy more than \$12.8 billion in 1996 and is projected to cost \$29.7 billion per year by 2015 (BTRE 2007). Road vehicle crashes cost Australians more than \$18 billion per year (Australian Department of Infrastructure, Transport, Regional Development and Local Government Website 2009). Physical inactivity is estimated to cost Australia around \$10 billion per year in direct health care costs, while active transport for short journeys is effective in decreasing obesity, diabetes and other lifestyle diseases and improving productivity at work (Victorian Cycling Strategy 2009, Cavill 2008). Moreover, evidence on the "safety in numbers" phenomenon indicates that greater cycling activity would decrease crash statistics for cyclists, not increase them (Jacobsen 2003; see also Robson 2005, Krizek, Forsyth and Baum, 2009: 26). Transport is Australia's second largest source of carbon pollution, causing 14 per cent of total emissions. It is one of the fastest growing sectors for emissions and currently accounts for approximately 34 per cent of household greenhouse gas emissions (Dept of Environment, Water, Heritage and the Arts 2008).

The State of Victoria has made the commitment to support and encourage walking and cycling as viable transport options. Such a commitment requires a strong evidence base to inform policy and program directions.

In 2007, as one of a number of research projects to develop a solid evidence base for policy and program development, the Department of Transport (DOT) in Victoria conducted a data collection exercise with Local Councils in Victoria in an effort to understand the range of walking and cycling access needs across the State, and to more effectively support walking and cycling and the environmental and economic benefits they can bring. This paper explores how the data collected: 1) provided important insights into the issues and challenges facing local councils in different locations in their efforts to support walking and cycling in their communities and 2) informed the policy direction of the *Victorian Cycling Strategy*.

The paper begins with a description of the context within which the research was undertaken, the purpose of the research and the methodology. There is a brief discussion of the main findings of the research. The final section explores how the findings influenced the policy direction for cycling.

It should be noted that the full report is approximately 150 pages in length and contains 32 tables. Due to the length limitations of the conference papers, only 5 tables are included to give an indication of the type of data collected, and the findings are presented without the level of detail presented in the Needs Analysis Report.

## 2 Context

The DOT Walking and Cycling Branch was established in late 2006 to raise the profile of walking and cycling as travel modes and to increase walking and cycling in the community for transport purposes.

The main functions of the Branch were to administer two grant programs:

- the Local Area Access Program (LAAP), which partners with local governments to fund small-scale, demonstration, infrastructure projects to improve walking and cycling access and encourage these forms of transport, and
- Travel Demand Management initiatives, such as the *TravelSmart* program, which is a behaviour change program in Victorian schools, universities and workplaces that encourages replacing vehicle use with more sustainable modes of transport.

It quickly became apparent that there was a dearth of information about walking and cycling. If the Branch was to effectively support walking and cycling as transport modes and take on responsibility for program and policy development, this gap needed to be addressed.

### Objectives of the research and expected findings

In deciding to conduct a Needs Analysis about walking and cycling access in Victorian communities with local council officers, the then Walking and Cycling Branch (DOT) had a number of objectives. First, the Grant Programs had been set up with criteria developed within the Department. While it was assumed that the criteria reflected the needs and issues that must be addressed to support increases in walking and cycling, an evidence base would help the Branch to focus the programs more effectively and develop policy to achieve its aims.

The Department of Transport (DOT) wanted to:

- know more about what prevents or motivates people to walk and cycle across Victoria;
- better understand the main issues in community walking and cycling access from a local council perspective; and
- understand the issues faced by councils in addressing these access needs.

DOT also hoped to get some idea of the types of tools that council officers thought might be useful in this work.

In terms of the findings, DOT wanted:

- a broad overview of issues confronting communities and councils;
- to highlight the patterns and types of problems in geographical areas, and
- to highlight themes and issues relevant to all councils.

### **3 Methodology**

The decision was made to conduct face to face interviews with council officers. This qualitative research methodology was chosen because it can elicit the range of issues and wealth of detail needed in order to understand the walking and cycling access needs across Victoria. We also decided that DOT officers, not consultants would undertake the interviews rather than read a report filtered through the perceptions and understandings of consultants<sup>1</sup>.

Anticipating that walking and cycling needs vary with geographic location, we divided Victoria's local council areas into five geographical categories of Councils that we assumed are most likely to have significant, different types of needs: These were:

- Inner metropolitan - the centrally located councils occurring mostly within 10 km from the Melbourne central business district (CBD);
- Middle and outer metropolitan - councils located immediately to the north, west, east and south-east of the most centrally located councils, and occurring mostly within 10 to 20 km from the Melbourne CBD in the north and west of Melbourne, and extending 30 to 40 km to the east and south-east respectively;
- Growth and interface - councils located in the then designated growth areas and at the urban and rural interface of Melbourne's boundaries;
- Regional centres - councils that included a regional centre or a boundary within 8 to 10 km of a regional centre, and
- Rural - councils not located in proximity to a regional centre.

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<sup>1</sup> The fact that the interviewers were DOT officers, not consultants, was positively commented on by a number of council officers.

Each of Victoria's 79 local council areas was placed in one of these five categories. Six councils were randomly selected from each category. In total, officers from thirty of Victoria's 79 councils were interviewed. Of all the councils we approached, only one rural council did not participate. After several months, we randomly selected another rural council from the set of rural councils minus the non-participating council.

The interviews were conducted over a period from May to September 2007; the last rural interview was conducted in November. With one exception, for each interview there were two (and in some cases, three) interviewers to ask the questions and record the answers. For each interview, we asked to interview three officers from the council. This was done in order to ensure that we had a breadth of expertise and perspectives from each council. The number of officers at an interview ranged from two (the third officer being ill on the day) to eight. In one case, there were so many officers who wanted to be interviewed that we conducted two separate interviews at that council.

The officers we interviewed had expertise in: transport planning, transport management and/or engineering, strategic planning, statutory planning, urban design, place management, community development and social planning, recreation and leisure, infrastructure and assets, economic planning, and sustainable transport.

DOT promised that officers and councils would not be identified in the report that we planned to release publicly. The interviewers requested permission of all the officers at each interview to use the data we collected in the course of the interview. The interviews were not recorded or taped; the interviewers took notes.

The majority of the interviews lasted two to two and a half hours. The shortest interview was just under one hour (with two council officers) and the longest was almost three hours. As soon as possible after each interview (in most cases, this was immediately after the interview), the interviewers debriefed to go over the notes and ensure they were consistent, discuss the data and conduct a preliminary assessment of the findings from that interview. Each debrief took between 2.5 and 4 hours.

The first draft of the report was finished in March 2008 and consisted of some 150 pages. We are now close to a final edited version, which we hope to release in the near future. In March 2009, DOT organised four forums in different parts of Victoria and invited officers from all the local councils to provide feedback on our findings. While there was considerable interest, the Victorian Bushfires occurred just prior to the Forums. As a result, only forty-five officers from 20-30 councils attended.

At the same time as we conducted the interviews, DOT conducted a complementary electronic, on-line survey to collect more detailed data from local council officers on existing walking and cycling infrastructure and its quality. All 79 councils in Victoria were invited to participate, with 44 completing the survey and eight more completing part of it. The results of this survey are also currently being prepared for publication.

## Limitations

In conducting the Needs Analysis, we assumed that local council perspectives accurately reflect community access needs. While we could not test this assumption, DOT conducted fourteen focus groups in August 2007 to collect data from individuals on their perspectives of the barriers and motivations to walking and cycling. The focus groups ranged in age, gender, geographical location, and ethnic identity. We found strong patterns of agreement and similar issues between the focus groups and the interviews.

The results were meant to tell us about patterns within categories, across all the categories and some unique situations in specific locations. The findings were meant to identify needs; they cannot provide us with solutions or the best combinations of solutions.

## 4 Findings

### Theme 1: The state and quality of walking and cycling networks is related to geographical location

Local council officers were asked to describe the state of their walking and cycling networks in terms relevant for their localities. This enabled officers to focus on problem areas for their municipalities without the distraction of commenting on predefined infrastructure types that had no relevance to their municipalities. Tables 1 and 2 contain the range of responses.

Table 1 – The pedestrian network

Geographical category	Range of In findings: The pedestrian network Summary
<b>Rural</b>	Six councils perceived walking network connection problems. <ul style="list-style-type: none"> <li>• Beyond the centre of main towns footpath networks become poor</li> <li>• Footpaths don't exist in smaller towns or other areas</li> </ul>
<b>Regional centres</b>	Six councils perceived walking network connection problems. <ul style="list-style-type: none"> <li>• Missing links in towns and between towns</li> <li>• Cul de sacs</li> <li>• Suburbs and developments disconnected from one another and destinations</li> <li>• Quality of networks varies between town centres</li> </ul>
<b>Interface and growth</b>	Six councils perceived walking network connectivity issues. <ul style="list-style-type: none"> <li>• Variable depending where you are; away from town centres they deteriorate</li> <li>• Missing links</li> <li>• Need to fill gaps in old and developing communities. In older areas walking connections are poor (e.g., crossings)</li> <li>• In new areas we try to create good links</li> <li>• Not enough connections to destinations</li> </ul>
<b>Middle and outer metropolitan</b>	Six councils perceived walking network connection problems. <ul style="list-style-type: none"> <li>• Variable: connectivity and access issues exist as specific locations</li> <li>• Reasonably good networks exist in around half of councils</li> <li>• Crossing arterials</li> </ul>
<b>Inner metropolitan</b>	Six councils identify walking network connectivity issues. <ul style="list-style-type: none"> <li>• Gaps and bad connections exist in particular spots</li> <li>• Difficult crossing main roads</li> <li>• Quality of the infrastructure (especially narrow footpaths)</li> <li>• Signage and legibility could improve connectivity</li> </ul>

Table 2 – The cycling network

Geographical category	Range of findings: The cycling network Summary
<b>Rural</b>	Six councils consider cycling network connections to be a problem. <ul style="list-style-type: none"> <li>• Little formal cycling facilities in most centres but also little traffic in most centres making cycling possible</li> <li>• On and off road networks poorly connected</li> <li>• Roads are narrow and dangerous between centres</li> </ul>
<b>Regional centres</b>	Six councils consider cycling network connectivity to be a problem. <ul style="list-style-type: none"> <li>• Can cycle in town centres</li> <li>• Cycling infrastructure is mostly recreational</li> <li>• Shared or off-road paths sometimes disconnected from destinations</li> <li>• Between centres the network often is 'sealed shoulders'</li> </ul>
<b>Interface and growth</b>	Six councils perceive cycling network connections to be a problem. <ul style="list-style-type: none"> <li>• Little infrastructure exists</li> <li>• Networks don't connect to destinations</li> <li>• There are many off-road recreational paths not useful for other purposes</li> </ul>
<b>Middle and outer metropolitan</b>	Six councils perceive that connectivity is generally poor. <ul style="list-style-type: none"> <li>• Good networks along one axis only (e.g., good north-south but not east-west) (at two councils)</li> <li>• Major roads and heavy traffic are a problem</li> <li>• Cycling networks are not connected to anything (at four councils)</li> <li>• Good off-road network but paths are not direct, have gaps and do not link (at three councils).</li> </ul>
<b>Inner metropolitan</b>	Six councils perceive that cycling network connections are a problem. <ul style="list-style-type: none"> <li>• Gaps exist, but are not a major issue</li> <li>• Poor cycling infrastructure quality (at five councils)</li> <li>• Cyclist competition for space with cars</li> <li>• Conflicts with parking and pedestrians are problematic</li> <li>• Main network is off-road (at one councils)</li> <li>• Poor destination connections (at one council)</li> <li>• Signage needed (at one council)</li> <li>• Cycling congestion (at three councils)</li> </ul>

For local councils outside of Metropolitan Melbourne, a lack of pedestrian infrastructure and poor connectivity of the pedestrian network are significant issues. In metropolitan councils, officers identified poor quality footpaths (i.e. narrow paths, obstacles and presence of cracks), poor footpath connectivity and inadequate pedestrian crossings on main streets.

In considering the connectivity of walking networks, whether people use the network for recreation is important. In some instances, officers described the pedestrian networks as "good." In the course of the interview, however, it became clear that the officers were speaking from the perspective of recreational walking or walking for health reasons and not from the perspective of walking for transport, where connectivity between origin and destination points is critical.

For cycling networks in Victoria, the major geographical differentiation is between councils in the inner metropolitan category and all the other geographical categories. Officers from inner metropolitan areas indicated that, while they do have cycling infrastructure, it can be of lesser quality because of problems with retrofitting. For some of these councils, congestion on footpaths and cycle paths was an issue.

In the main, as the distance of the local council from the centre of Melbourne increases, officers were more likely to identify the lack of formal cycling facilities as an issue. Lack of infrastructure, major network gaps and poor connectivity to destinations were the main issues. Some of the traffic volume and speed issues raised by Inner metropolitan council officers are also relevant in the Middle and outer metropolitan areas.

Across Victoria, officers asserted that off-road networks were often poorly connected to destinations and therefore, are not useful for non-recreational (transport) purposes. This likely reflects the fact that many off-road paths were originally developed as recreational facilities with less concern for providing transport networks or for linking possible origins with destinations.

#### 4.1 Theme 2: Reasons for walking and cycling trips

Table 3 presents the data collected from council officers on the motivation for walking and cycling. Transport was identified as a main motivator only for people in the inner metropolitan areas of Melbourne where there is a higher level of walking and cycling infrastructure. This is facilitated by high housing densities and the close proximity of workplaces to residential areas. In fact, commuting into central Melbourne by walking or cycling has been growing at a rapid rate. Recent Journey to Work figures (Australian Bureau of Statistics, 2006) indicate that between 2001 and 2006, walking and cycling have been the fastest growing travel modes across Melbourne. While 'car, as driver' increased by 1.2 per cent (948,046 daily journeys in 2006), 'bicycle' as the travel mode increased by 7.5 per cent (18,855 daily journeys in 2006) and 'walking' by 6.3 per cent (47,984 daily journeys in 2006). (DOI 2007).

In the middle and outer metropolitan areas, some officers did note that there are commuters in their municipalities, but recreation becomes the more frequently cited reason for walking and cycling as the distance from inner Melbourne increases.

It should be noted that tourism plays a strong role in specific geographical locations in rural and regional Victoria. Data from the On-Line survey conducted with Victoria's 79 councils by Bartley Consulting Pty Ltd. (Bartley Forthcoming) suggest that tourism is important to the local economy of almost 2/3 of the responding councils. In the interviews, officers indicated that walking and cycling were important current and future strategic considerations for the tourism industry in their municipalities.

**Table 3 – Motivations for walking and cycling**

Geographical category	Range of findings: Motivations for walking and cycling Summary
<b>Rural</b>	Officers at six councils outlined motivations for walking and cycling. <ul style="list-style-type: none"> <li>• Mostly recreational walking and cycling (at six councils)</li> <li>• Health and/or service clubs encourage walking for fitness and recreation (at three councils)</li> </ul>
<b>Regional centres</b>	Officers at six councils outlined motivations for walking and cycling. <ul style="list-style-type: none"> <li>• Recreational and/or health seem to be primary motivators (at six councils)</li> </ul>
<b>Interface and growth</b>	Officers at five councils outlined motivations for walking and cycling. <ul style="list-style-type: none"> <li>• Recreation and/or health are primary motivators (at five councils)</li> <li>• Some commuters (at five councils)</li> <li>• Some school age children (at five councils)</li> <li>• No data (at one council)</li> </ul>
<b>Middle and outer metropolitan</b>	Officers at five councils outlined motivations for walking and cycling. <ul style="list-style-type: none"> <li>• Walking and cycling are important for recreation / health (at four councils)</li> <li>• Recreational and transport motives (at three councils)</li> <li>• No data (at one council)</li> </ul>
<b>Inner metropolitan</b>	Officers at six councils outlined motivations for walking and cycling. <ul style="list-style-type: none"> <li>• Recreation / health are important motivators (at three councils)</li> <li>• Transport is an important motivator (at four councils)</li> </ul>

### Theme 3: Barriers to walking and cycling

There is a great deal of research on the barriers to walking and cycling. Council officers identified many of the common barriers, including long distances, difficult topography, extremes of weather, convenience, features of the built environment and safety (fear of crime as well as fears about traffic), and social attitudes. For cyclists, lack of end of trip facilities is also a barrier. The interesting point about barriers, of course, is that perceptions are more important than the actual barriers.

While natural barriers such as topography and weather are important, it is clear that the built environment and land use decisions create man-made barriers that are as critical, if not more critical than the natural ones. They are certainly more prevalent. As Table 4 illustrates, officers report that distances are a major barrier to walking and cycling and the need to travel long distances to services is a common feature of contemporary life for all Victorians, wherever they are located, with the possible exception of the inner metro area, where other features of the built environment overtake distance as the main barrier. Officers from councils in rural, regional, outer Melbourne and the middle suburbs of Melbourne reported that services are located at such a distance that people will not or cannot walk or cycle and must depend on cars to reach those services. It should be noted that the actual distance to services may not be the issue. It is the perception of the distance that matters. For example, in one of the outer suburbs, the interviewers were told by a resident that it was “too far to walk to the council offices.” The interviewers later learned that this “too far” was a five minute walk.

Most officers from middle and outer metropolitan Melbourne identified a need for mixed land use and higher residential densities if people are to have access to the services they need within walking and cycling distance. Officers in rural areas saw low density housing and lack of local services (including public transport) as the problem. Walking and cycling activity in communities might increase if greater local employment and services were available in Victoria. Currently, walking and cycling are not viable ways of travelling in these areas.

The problem is compounded by attitudes about cars in relation to other modes of transport. There has been a great deal written about the dominance held by cars in our society and the economic and social prominence they have. Officers variously spoke of a “car culture” or “laziness” when describing people’s mode choices and behaviour. The interviewers probed the interviewees on the relative importance of infrastructure provision versus behaviour. This is further discussed in Theme 5.

Features of the built environment such as major roads, roundabouts and railroad tracks are major obstacles to walking and cycling. In many cases, these obstacles are the result of prioritising motorised transport over non-motorised modes. For example, the road rules give priority to cars in roundabouts. The timings on traffic signals at intersections appear to give greater priority to vehicles than pedestrians<sup>2</sup>. This frame of reference not only does not prioritise walking or cycling; it relegates these modes to the realm of second-class and minority road users and actively discourages walking and cycling.

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<sup>2</sup> The Local Area Access Program funded a demonstration project in 2006 exploring this issue: the Inner Melbourne Action Plan (IMAP) Pedestrian Greenlight Project.



**Table 4 – Distance and land-use as barriers**

<b>Geographical category</b>	<b>Range of findings relating to distance and land-use as barriers Summary</b>
<b>Rural</b>	Officers at six councils perceived that distance was a barrier to people engaging in walking and cycling activities. <ul style="list-style-type: none"> <li>• Low housing density (big blocks of land) reduced walking and cycling locally (at five councils)</li> <li>• Little public transport between towns, walking is not an option, so people use a car (at one council)</li> </ul>
<b>Regional centres</b>	Officers at five councils perceived that distance was a barrier to people engaging in walking and cycling activities. <ul style="list-style-type: none"> <li>• Distance between residences and services, lack of local services contributes to distance as a barrier (at four councils)</li> <li>• Low density residential housing encouraged car use (at one council)</li> </ul>
<b>Interface and growth</b>	Officers at four councils perceived that distance was a barrier to people engaging in walking and cycling activities. <ul style="list-style-type: none"> <li>• Walking and cycling is non-viable due to urban sprawl and large distances to employment and services (at four councils)</li> <li>• Few local employment and human service opportunities exist (at one council),</li> <li>• Few local nodes provide activities and services within a walking or cycling distance (at one council)</li> <li>• There is no public transport to assist (at one council)</li> </ul>
<b>Middle and outer metropolitan</b>	Officers from two councils perceived that distance was a barrier to people engaging in walking and cycling activities. <ul style="list-style-type: none"> <li>• Commuters and others were restricted by long distances between activity centres (at two councils)</li> </ul>
<b>Inner metropolitan</b>	Officers at two councils perceived that distance was a barrier to walking and cycling locally. <ul style="list-style-type: none"> <li>• Distances from services was an issue where food stores are not close by (at two councils)</li> </ul>

It might be argued that dedicated crossings go a long way toward redressing the balance by giving walking and cycling access. This argument presumes two things. First, it presumes there is a dense grid of access opportunities for walkers and cyclists. This is often not the case, particularly in the middle and outer suburbs and growth and interface areas, where officers report pedestrian and cycling crossings on major arterials and railroads can be 800 to 1500 metres apart. Second, the argument implicitly assumes equal effort is expended by all mode choices; that is it fails to recognise the slower speeds and greater effort required by pedestrians and cyclists to reach access points.

#### **Theme 4: Need to integrate walking and cycling with public transport**

Walking and cycling, in conjunction with public transport trips, are a feasible transport option for trips that are too long to make solely by walking or cycling. The vast majority of officers identified a lack of integration between these modes of transport as a problem. Geographical location was a factor to the extent that councils further away from central Melbourne reported lack of public transport services or lack of frequency as the issue. Those closer to the centre of Melbourne described lack of parking/storage for bicycles at public transport nodes and the inability to take bikes on trains and buses as the issue. Officers in regional and rural councils also spoke of the need to allow bicycles on trains and regional coaches. Some officers suggested that, as public buildings, train stations could provide more extensive cycling end-of-trip facilities such as showers to encourage cycling to the train station rather than choosing motor vehicles.

Poor physical access to public transport was also a common theme. Officers reported poor access to or within train stations and poor access to and from bus stops for pedestrians and cyclists as barriers. A common theme is the lack of access provided for pedestrians and cyclists to get through Park and Rides, which can cover a large area around a train station. In inner Melbourne, officers also spoke of the need to prioritise traffic lights to provide pedestrians with access to trams and buses.

### Theme 5: Council interventions to increase walking and cycling

Council officers see many ways of increasing walking and cycling in their municipalities. These fall into three main categories. A majority of officers suggested that both attitude change programs and infrastructure improvements are needed to encourage walking and cycling and less dependence on motor vehicles for local trips. Some council officers considered that infrastructure improvements should be the main focus of council interventions, while others asserted attitude change programs should be the primary focus.

**Table 5 – Focus on attitude change programs and improving infrastructure**

Geographic category	Focus on attitude change programs and improving infrastructure Summary
<b>Rural</b>	<p>Officers at three councils considered that a combination of attitude change and infrastructure is the best intervention.</p> <ul style="list-style-type: none"> <li>• Infrastructure and behaviour change and awareness programs are required (at one council)</li> <li>• It is too easy to drive; we need to help people think differently (at one council)</li> <li>• Building infrastructure does not mean people will use it (at one council)</li> </ul>
<b>Regional centres</b>	<p>Officers at five councils considered that a combination of attitude change and infrastructure is the best intervention.</p> <ul style="list-style-type: none"> <li>• The attitude that “people don’t walk in town” has taken years to change (at one council)</li> <li>• Need to provide amenities and infrastructure along with culture change (at two council)</li> <li>• Walking School Bus program is / may be effective as “kids teach families (positive attitudes / behaviours)” (at two councils)</li> <li>• Understanding the motivations of drivers (education, infrastructure, end-of-trip facilities) is important to get new users (at one council)</li> <li>• Safety education is effective in encouraging new cyclists (at one council)</li> <li>• Desire for education materials to convince the community of walking and cycling benefits (at one council)</li> </ul>
<b>Interface and growth</b>	<p>Officers at four councils considered that a combination of attitude change and infrastructure is the best intervention.</p> <ul style="list-style-type: none"> <li>• Interest in the TravelSmart program (at one council)</li> <li>• Cars are status symbols (at one council)</li> <li>• In culturally diverse communities, cultural issues need to be addressed before promoting walking and cycling (at one council)</li> <li>• Need to raise awareness and promote the network (at one council)</li> <li>• Need to provide incentives to use the network (at one council)</li> <li>• Need a well connected network through infrastructure improvements to fill network gaps (at one council)</li> <li>• Cycling is not part of the culture of ethnic residents (at one council)</li> <li>• Council provides infrastructure and is designing maps (at one council)</li> </ul>
<b>Middle and outer metropolitan</b>	<p>Officers at four councils considered that a combination of attitude change and infrastructure is the best intervention.</p> <ul style="list-style-type: none"> <li>• Infrastructure improvements and behaviour change through education and increasing awareness are effective (at four councils)</li> <li>• Missing links in infrastructure causes people to feel unsafe using the network (at one council)</li> <li>• Need to provide signage and promote walking to facilities (at one council)</li> <li>• Need to change attitudes that improving transport is about vehicle access (at one council)</li> <li>• Inconvenience is the biggest reason why people do not walk or cycle (at one council)</li> <li>• Council needs to make it easy for people to walk and cycle locally (at one council)</li> </ul>
<b>Inner metropolitan</b>	<p>Officers at two councils considered that a combination of attitude change and infrastructure is the best intervention. The remaining focused on infrastructure. The range of responses included:</p> <ul style="list-style-type: none"> <li>• Upgrading facilities encourages facility use (at one council)</li> <li>• Traffic calming measures (such as lower speeds, speed bumps) are useful (at one council)</li> <li>• Infrastructure to fill the gaps in the network and addressing the barriers (at one council)</li> </ul>

Internationally, the evidence suggests that a multi-pronged approach is the most effective way to increase walking and cycling. DOT commissioned a literature review of international research, reviews and evaluations of walking and cycling programs, projects, research and best practice in 2007 (Krizek, Forsyth and Baum, 2009). From the 500 articles examined, the authors state that “the most compelling argument, particularly for cycling, is that only via an integrated range of environmental features (including infrastructure and facility improvements), pricing policies or education programs will substantive changes result. This is what has been occurring in the Netherlands, Denmark and parts of Germany for decades” (Krizek, Forsyth and Baum 2009:5. See also Pucher and Buehler, 2008; Krizek and Roland, 2005).

In terms of infrastructure, Krizek, Forsyth and Baum (2009:40-41) conclude that small scale infrastructure interventions have a small or negligible effect on overall levels of walking and cycling except where gaps in the existing system are remedied by infrastructure improvements. The authors assert that with cycling, “the network is king,” as networks provide connectivity, continuity and eliminate gaps. Their work indicates that an overall cycling network is what many users cherish, rather than discrete spot improvements. They note that motor vehicle transportation networks typically consist of neighbourhood streets, collectors, arterials and freeways. A similar analogue could be considered for cycling routes (though not necessarily on the same routes as motor vehicles) (Krizek, Forsyth and Baum, 2009:40).

In the interviews, council officers discussed a range of specific issues about walking and cycling infrastructure, including how well shared paths cater to both pedestrians and cyclists and whether on-road or off-road paths are better or safer for cyclists. A majority of the officers concluded that there is a need to ensure that cycling infrastructure caters both for experienced cyclists who may prefer on-road, more direct access to destinations and those who are less experienced and prefer off-road paths with total separation from motor vehicles, even if these are less direct routes to destinations.

## **Theme 6: Remaining challenges for Local and State Government**

Council officers identified five major challenges to supporting and encouraging walking and cycling at the local council level. These are:

- 1) better integration of transport planning with land use planning;
- 2) the need for strong policy to support walking and cycling and, in the case of infrastructure, better coordination among land managers and among state departments and agencies which have a role in walking and cycling provision;
- 3) funding and resourcing issues;
- 4) technical standards and support; and
- 5) implementation issues in the provision of walking and cycling access.

## 4.2 Integration of Transport Planning with Land Use Planning

One of the most consistent themes to come out of the interviews is the need for better integration of land use planning and transport planning. While a number of the officers acknowledged that a lack of experience among officers played a role, officers from 28 of the 30 councils reported that Victoria's planning provisions do not provide sufficient practical support to ensure cycling and walking infrastructure that would encourage increased use of walking and cycling as transport modes.

Officers noted that while the objectives of Clause 56 of the Victorian Planning Provisions (VPP) seek to ensure walking and cycling access in new developments or subdivisions, it does not define 'walk-ability' or 'cycle-ability.' Nor do the provisions provide a bench-mark standard for 'walk-ability' and 'cycle-ability' that developers must meet in providing walking and cycling infrastructure for residential subdivisions and new developments. As a result, the quality and connectivity of networks often fall short of the standard required to provide good access.

A number of officers suggested that because the VPP provides only for a few minimum standards, it is difficult to encourage "stretch targets" or a higher level and quality of infrastructure for new developments and subdivisions, particularly when councils are trying to attract developers to their municipalities. Officers also suggested that parking provisions could provide better incentives to support cycle parking and other end of trip facilities.

Many officers suggested that a holistic planning framework that integrates transport planning and land use planning are fundamental to encourage walking and cycling, along with consideration of walking and cycling access issues early in the planning processes. Officers asserted the merits of longer planning timeframes, mixed-use zoning, higher residential densities and having a long-term vision to provide sustainable solutions, including walking and cycling.

## 4.3 Policy and Coordination

Within local councils, officers indicated that walking and cycling tended to be siloed in one area and that there was little coordination across council and that information about walking and cycling was not shared across council. Officers at several councils noted that the DOT interviews provided the relevant officers within council a valuable and unique opportunity to come together and consider walking and cycling access issues. Only at a few councils is walking and cycling the responsibility of a cross-council group, and at these councils, officers suggested there was good support across council for walking and cycling.

With respect to intergovernmental relations, most officers reported that the policy support provided by State Government was inadequate. They also noted that many state agencies are involved in providing walking and cycling access, with each having its own drivers, responsibilities and stakeholders and that co-ordination between land managers is especially poor. These posed difficult challenges for local council officers trying to provide walking and cycling infrastructure to their communities. Some officers suggested that DOT could play a coordination role.

#### 4.4 Funding and Resourcing Issues

Within many of Victoria's councils, competition for limited council funds and other pressing priorities mean that walking and cycling initiatives often are insufficiently funded. The location of responsibility within council for walking and cycling may also influence the priority given to walking and cycling. If responsibility for walking and cycling are located within the recreation and sport portfolio, they must compete with other recreation and sports needs. Officers at two councils noted that in these cases, "paths aren't as sexy as playing fields" and that "no one notices paths but they notice a new pool."

At those regional, rural and growth/interface councils where walking and cycling are within the transport portfolio<sup>3</sup>, many officers reported they must compete with the requirements to build and maintain road infrastructure. As one noted, "*When we have xxx<sup>4</sup> kilometres of roads and xx bridges to maintain,*" cycling has very little priority and footpaths only in the centre of towns. Interestingly, at all of the inner metropolitan councils interviewed, responsibility for walking and cycling lies with 'transport' and 'engineering' related areas. Funding for walking and cycling appears to be less difficult; this may be due to the importance of walking and cycling as viable transport choices in central Melbourne.

With regard to state funding, officers are equally frustrated. Officers may wish to pursue other funding sources, but accessing them is often difficult as officers, particularly those in smaller councils, often have little time to chase alternate funding sources and complete all the paperwork required.

State funding is subject to the same competing funding priorities. Officers in regional and rural areas frequently perceived that the State Government prioritises initiatives in metropolitan areas over rural and regional areas that have large infrastructure needs. The limited, unpredictable and short-term nature of State-funding provided limits councils' strategic planning abilities. Officers also noted that State Government grant rounds rarely coincide with the budget cycles of councils, although many State Government funding programs require matching funds from Council.

Increasing walking and cycling in the community is the desired outcome of a number of different funding programs that focus on public health, sports and recreation, and transport, but the lack of co-ordination among the different funding processes of State Government departments makes seeking funds inefficient and time-consuming.

The piece-meal nature of funding for walking and cycling infrastructure makes it difficult for councils to develop a walking and cycling network with the levels of access, permeability, connectivity and ease of use required to encourage walking and cycling on short local trips over driving. This is exacerbated by the existing land use and transport patterns in most communities.

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<sup>3</sup> Two pre-interview focus groups found that councils were starting to move walking and cycling from recreation and open space areas into the transport area specifically because it was thought that walking and cycling would receive greater priority and therefore, more funding. AusPoll (2007) suggests that there is a growing trend toward walking and cycling having a less recreational and more 'active transport' focus.

<sup>4</sup> The exact figures are not provided to ensure that the Council cannot be identified.

#### 4.5 Technical Standards and Support

A number of officers suggested that the technical standards and support for walking and cycling infrastructure were inadequate. In 2007, the Austroads Standards were almost a decade old. While some of the VicRoads Cycling Notes are more recent, many of them are also from the early part of the decade. Officers thought that because the standards had been written prior to the resurgence of cycling, the standards do not adequately address the level of demand and level of service currently required in locations such as inner Melbourne or on off-road shared user paths, which must cater to commuter cyclists, recreational cyclists and commuter and recreational walkers. Officers thought that the standards for walking and cycling infrastructure should be updated to reflect new developments and technologies. Austroads has reviewed and revised their road management guidelines between 2007 and 2009. With the possible exception of more generous times provided for pedestrians in some signal timings, the guidelines and standards for walking and cycling are largely unchanged (VicRoads personal communication, 31 August 2009).

Retrofitting is particularly difficult and can be costly as it often requires increasing road space for cyclists. Adding road width is often not possible, so retrofitting often means decreasing on-road parking, which is a source of council revenue; narrowing traffic lanes or taking out traffic lanes, which can be unpopular. Officers identified a need to provide more innovative guidance in this area.

#### 4.6 Implementation Issues

In the area of implementation, many council officers suggested that, in Victoria, motor vehicle use and traffic flows are prioritised at the expense of pedestrians and cyclists. This is especially the case for the provision of adequate pedestrian crossings. Several officers contended that the effects of the current *Road Management Act* (2004) and *Road Safety Act* (1986) serve to create obstacles for pedestrian and cyclist access and mobility, whether or not these were intended consequences. Officers highlighted the importance of the role of the Victorian Government in representing the needs of pedestrians and cyclists in ensuring they have priority access to local and key destinations.

### 5 Policy as Growth Engine

The analysis of the findings from the interviews made it clear that walking and cycling could be most effectively supported and encouraged if they are recognised as legitimate and viable transport modes. The *Victorian Cycling Strategy*, released in March 2009, does exactly that. The Strategy addresses many of the issues that were raised by local council officers in the 2007 interviews. For example, the Overarching Framework includes a set of guiding principles informed by council officers' responses to our questions. In particular:

- 1) Integrating cycling with other modes of transport will improve Victoria's whole transport network
- 2) Cycling has a wide range of trip purposes for transport, such as commuting to work or school, and short trips to local services,

- 3) Cycling policies, programs and infrastructure projects must reflect the needs of all current and potential cyclists regardless of age, gender, fitness, experience, and location.
- 4) Cycling access should be considered as part of all urban design, land use planning, transport planning and the planning and delivery of major projects.
- 5) Both cycling infrastructure investment and other programs are important for solutions.
- 6) 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.

The Strategy has five strategic directions that seek to ensure the multi-pronged approach suggested by international research and that many officers considered important to encouraging walking and cycling. The five strategic directions are:

- 1) **Build networks to connect communities.** The aim is to develop quality cycling networks in priority areas that are connected to significant destinations and attractions, and to establish better processes for planning cycling networks.
- 2) **Promote and encourage a culture of cycling.** The aim is 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.
- 3) **Reduce conflicts and risks for cyclists.** The aim is 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.
- 4) **Integrate cycling with public transport.** The aim here is to increase combined use of cycling and public transport and extend the reach of the public transport network through the integration of cycling networks and facilities and public transport.
- 5) **Integrate cycling needs with land use planning, transport planning and the built environment.** The aim is to promote aspects of land use policies and planning, transport planning, and urban design that support cycling in Victoria's built environments.

The purpose of the *Victorian Cycling Strategy* is to encourage Victorian communities to choose walking and cycling as viable transport modes that can provide health benefits, cheaper transport, access to services, and help the environment. It seeks to enable local council officers to provide for and support walking and cycling in their local communities. Finally, it seeks to provide direction to state government departments and agencies to support these aims. The results will be improved economic performance, both directly through congestion mitigation, regional tourism based on cycling and walking, and indirectly through the improved individual and community benefits to Victoria, as well as through the contribution of cycling to sustainability.

## References

- AusPoll (2007). *Walking and Cycling Needs in Victoria*, Melbourne (Internal Document).
- Australian Bureau of Statistics, (2006). *2006 Census: Journey to Work Data*. Canberra.
- Australian Department of Environment, Water, Heritage and the Arts Website. Households and Climate Change (2008). Viewed at <http://www.environment.gov.au/settlements/gwci/households.html> on 30/06/2009.
- Australian Department of Infrastructure, Transport, Regional Development and Local Government Website. Road Safety (2009). Viewed at <http://www.infrastructure.gov.au/roads/safety> on 30/06/2009.
- Austrroads (1995). *Guide to Traffic Engineering Practice - Part 13: Pedestrians*. Sydney.
- Austrroads (1999). *Guide to Traffic Engineering Practice - Part 14: Bicycles*. Sydney.
- Austrroads (2007 to 2009). *Guide to Traffic Management. Parts 1 to 13*. Sydney.
- Bartley, Helen, (Bartley Consulting Pty Ltd.), forthcoming. *Access and Connectivity Survey: Infrastructure and facilities from a local government perspective*. Department of Transport, Melbourne.
- BTRE (2007). *Estimating urban traffic and congestion cost trends for Australian cities*. Working Paper 71, Bureau of Transport and Regional Economics, Department of Transport and Regional Services, Canberra.
- Cavill, N. (2008). *Methodological guidance on the economic appraisal of health effects related to walking and cycling*. World Health Organisation, Regional Office for Europe. The Regional Office, Copenhagen, Denmark.
- Department of Infrastructure (2007). Internal Communications.
- Department of Transport (2009). *Victorian Cycling Strategy*, Melbourne.
- Jacobsen, P. L. (2003). "Safety in numbers: more walkers and bicyclists, safer walking and bicycling", *Injury Prevention*, Vol 9, pp. 205-209.
- Krizek, K. J., and Roland, R. (2005). "What is at the end of the road?" Understanding discontinuities of on-street bicycle lanes in urban settings. *Transportation Research Part D*. Vol 10, pp. 55-68.
- Krizek, K. J., Forsyth, A. and Baum, L. (2009). *Walking and Cycling Literature Review: Final Report*. Department of Transport: Melbourne.
- Pucher, J. and Buehler, R. (2008). "Making Cycling Irresistible: Lessons from the Netherlands, Denmark and Germany." *Transport Reviews*, Vol 28(4), pp. 495-528.
- Robson, D. (2005). "Safety in Numbers in Australia: More walkers and bicyclists, safer walking and bicycling", *Health Promotion Journal of Australia*, Vol 16(1), pp. 47-51.