Victoria Walks Inc.
Level 7, 225 Bourke Street
Melbourne VIC 3000
P: 03 9662 3975
E: info@victoriawalks.org.au
www.victoriawalks.org.au
Registration No. A0052693U

Plan for a walkable Melbourne

Victoria Walks submission to

Metropolitan Planning Strategy

Discussion Paper – Melbourne, let's talk about the future

March 2013

Supported by VicHealth

“Artists, philosophers, urban planners and architects have been dreaming, writing about and drawing ‘ideal cities’ for hundreds of years…

In most of these visions the pedestrian is the measure of ideal urban spaces.”

European Cooperation in Science and Technology (Methorst 2010, p.34)

EXECUTIVE SUMMARY

Past Metropolitan Strategies developed over the last two generations have assumed that the fundamental model for Melbourne's growth and development will endure largely unchallenged. In reality new directions are not only needed, they are more urgent than ever. The motor vehicle for people and freight movement will continue to be a major force in how Melbourne is planned and shaped, but it can no longer be essentially the only force.

Walking is fundamental to many primary objectives of planning – intensified urban centres, reduced vehicle use and congestion, greater use of public transport, and building the knowledge economy. However it is largely taken for granted as a transport mode.

The health benefits of walking are extensive and critical in the context of an obesity crisis in Australia. The total cost of obesity in Victoria was estimated to be $14.4 billion in 2008 (Access Economics 2008).

There are multiple ways to achieve significant health benefits from walking, particularly in meeting the recommended 30 minutes daily physical activity for adults. Walking can be built into everyday life, including:

- Recreational walking
- Walking to access jobs, shops or schools
- Walking to public transport.

Walking is the most popular, affordable and readily attainable form of medium intensity physical activity, with more than a million Victorians actively walking for exercise (ABS 2012).

Walkability adds substantial value to retail, office and residential property. There is also evidence that the agglomeration benefits that are central to the knowledge economy are most significant within, or in some cases even exclusive to, walkable catchments.

The prevalence of walking varies greatly across Melbourne. In Melbourne City and Yarra, approximately 70% of short trips (under 2km) are walked and for inner suburbs more than 50% are walked. In the outer metropolitan areas walking drops to around 25% of short trips (DoT 2010, p.22).

Walking to school has dropped dramatically. In 1970, 49% of children in Victoria walked to school and 16% travelled by car, but by 1994 these levels were effectively reversed, with 20% of young people walking and 52% travelling to school by car (ABS 1984 and 1995).

Walking should be favoured as the realistic and preferred form of transport for short trips. Currently, in many road situations the pedestrian who is using less of the road, less of the planet's resources, less imported oil that depletes our balance of trade, that emits less noise and pollution, is not rewarded. Preference goes to single occupants in cars, whose unsustainable choices are favoured when pedestrians and cars meet. The constant provision of more car parking spaces is a classic example of how poor strategy simply favours one choice over another. We need facilities and urban design that support and promote the pedestrian over other transport modes, in those locations where walking is the most cost effective and efficient form of moving people.

The Discussion Paper promotes a polycentric model of the city. A reorientation of employment growth away from the CBD, towards suburban centres, could have benefits in terms of providing employment within walking distance, but there are significant challenges to successfully achieving such a reorientation. Suburban centres are more car oriented than

the CBD, so there will need to be an associated change in the way they operate, to avoid increasing traffic congestion and a reduction in walking.

A broad range of measures will be required if the Metropolitan Planning Strategy is to provide for a walkable Melbourne.

It is important to ensure that all areas are connected by convenient, high frequency, direct public transport. Most people access public transport by walking. Public transport users in Melbourne average 34 minutes walking each day – enough to meet health guidelines – compared to six minutes for car travellers (DoT 2010, p24).

Increased density of development should be promoted in and around activity centres and public transport, where this does not compromise heritage values. Density in key locations allows more people to live and work within walking distance of destinations relevant to their everyday lives, including public transport.

Currently, the same controls on medium density housing apply almost universally across Melbourne. The random increase in density this has produced may not be particularly helpful in creating a walkable city. Melbourne is around 50% more dense than Brisbane, Canberra, Hobart and Darwin, yet all of those cities had a higher level of walking to work in 2006 (Bauman et al, 2012, p202).

There is a critical need for different development controls, including different standards for medium density housing, in areas targeted for infill, compared to those that are not. It is quite possible to promote a walkable city while allowing neighbourhoods outside targeted areas to retain their existing character.

It should not be left entirely to councils to determine where increased density should go, as it was in implementing (or not implementing) Melbourne 2030. We need a metropolitan response, not an ad hoc response. The Government should show leadership and set clear parameters for councils, but allow them to retain some flexibility.

It is also important to understand that increased density, even in appropriate locations, will not generate the potential increase in walking unless the environment is designed to support it. Public transport will not attract the desired level of patronage if there is not also significant attention and investment in creating walkable routes to that transport. Hence the need for a strong focus specifically on walking as a mode of transport.

Walking needs to be acknowledged as a transport mode in its own right, with:

- an ‘owner’ within government.
- dedicated funding
- a dedicated policy
- walking audits of urban environments and comprehensive network planning

If the city is designed with the walking needs of children, seniors and those facing mobility issues at the forefront of planning, it will deliver a liveable Melbourne for all citizens.

Consolidated recommendations

Victoria Walks' recommendations are detailed throughout this submission and brought together below. All are important if a walkable Melbourne is to be achieved. However we have highlighted (in green) a number of key recommendations, which set out the fundamental building blocks of a walkable Melbourne.

1. The proposed '20 minute city' model should operate at three levels:

    - A neighbourhood scale, where 95% of Melbourne residents live within a 1km walking catchment of basic day to day services, including healthy food options, primary school, café, doctor or pharmacy and high quality open space, including capacity to 'escape to nature.'

    - Higher order services should be available at major suburban centres within 20 minutes by walking and/or public transport (including walk, wait, travel time). These centres should be designed with a 1.6km radius high quality walking environment.

    - The CBD, to be 20 minutes public transport trip from most major suburban centres centres.

    At all levels, the 20 minute city should be planned to facilitate walking by seniors and children, to ensure that it is accessible to the whole community.

2. Facilitate increased density (3-8 storey) development with high quality infrastructure around activity centres and along public transport routes in the inner suburbs of Melbourne.

3. Plan Fisherman's Bend as a demonstration project for walking oriented CBD expansion.

4. Within the CBD and inner suburbs:

    - Review traffic light phasing to focus on the number of people moving through an intersection, rather than vehicles.

    - Re-allocate road space from cars to pedestrians and increase the level of shared space.

5. Ensure efforts to promote employment in suburban centres are accompanied by measures to re-orient travel away from access by car, and to promote access by other modes, particularly walking.

6. Avoid facilitating office and retail development in what is currently the Business 4 Zone and in industrial zones, as proposed by Zone Reform. Instead, facilitate retail competition by increasing opportunities within what are currently the Business 1, 2 and 3 Zones.

7. Promote increased density of development in and around activity centres and public transport, where this does not compromise heritage values.

8. Set clear parameters for Councils in identifying areas for increased density, to provide a consistent metropolitan response.

9. Ensure that areas for increased density are clearly delineated in the planning scheme and zoned accordingly, with planning controls that differentiate them from areas that are

not proposed for increased density, including substantially different standards for medium density housing.

10. Link funding for place making and infrastructure investment to areas where development density is being increased.

11. Undertake a fundamental review of planning scheme car parking requirements, including consideration of removing car parking minimum requirements and applying maximum parking limitations in certain situations.

12. Develop specific key performance indicators for the Growth Areas Authority on intersection density (measuring street connectivity) and levels of walking in growth area communities.

13. Ensure that public transport is provided at the time of development in growth areas, including delaying development until the public transport is available, if necessary.

14. Ensure that walkability to public transport is incorporated in both land use planning and planning for the public transport network.

15. Promote provision of high quality local open space that is integrated into local neighbourhoods.

16. Promote consideration of broader neighbourhood pedestrian access in open space planning, with walking as the preferred form of access and limited car parking provision.

17. Review the Metropolitan Trail Network to ensure that separate paths are provided for recreational walkers and commuter cyclists, where there are high levels of cycle traffic.

18. Ensure that all areas are connected by convenient, high frequency, direct public transport.

19. Encourage walking to transit rather than facilitating park and ride.

20. Re-focus transport expenditure away from new freeways, towards other transport needs.

21. If new freeway projects are pursued, incorporate:

    - design to minimise community severance
    - reallocation of road space to pedestrians on arterial roads predicted to be relieved of traffic
    - comprehensive improvements to walkability in and around centres affected by the freeway.

22. Promote streets as green walking corridors, and better provide for street trees by investigating options to reduce power line maintenance impacts on trees, including the potential to progressively relocate power lines underground; and reviewing VicRoads guidelines for street trees on arterial roads.

23. As a prerequisite for funding new public projects, require auditing of walking access around applicable activity centres and public transport stops, to identify and fund priority pedestrian works, based on the Principle Pedestrian Network methodology.

24. Reduce speed limits in residential areas and within identified catchments of activity centres. If applied generally, introduce a step-wise reduction from 50 km/h to 40 km/h in the short-term, and subsequently to world's best practice of 30 km/h.

25. Ensure health is included in the principles of the Draft Strategy.

26. Prepare a metropolitan Walking Strategy, in association with a Walking Strategy for Victoria.

27. Establish a unit dedicated to supporting walking within the Department of Transport or Planning and Community Development.

28. Ensure Public Transport Victoria (PTV) facilitates walking in planning and managing public transport.

29. Develop mode share targets for walking. An example of possible targets would be to increase walking from 3.4% of journey to work in 2011 to 7% by 2021, and/or 60% of trips between 0.4 and 0.99km by 2021.

30. Develop a target for walking to school, as a measure of success for the Metropolitan Planning Strategy. A possible target would be 35% of primary school students and 25% of secondary school students walking to school by 2021.

31. Make walking to school and mode share targets key performance indicators for relevant government agencies, such as VicRoads and the Departments of Transport, Education and Planning and Community Development.

32. Regularly evaluate the performance of metropolitan planning in promoting walking, by assessing performance against walking targets; increased density in targeted locations; and professional assessment of walkability in new development.

33. Allocate a fixed proportion of transport spending to walking and/or place making. This must be clearly separated from, and additional to, any walking infrastructure improvements associated with upgrades of other modes.

34. Prepare and present a package of walking measures for Commonwealth funding consideration.

35. Quickly progress the current review of development contributions and provide a simplified system of 'off the shelf' development contributions, to enable local councils to fund community infrastructure, including walking infrastructure.

36. Require the Department of Education to ensure that schooling is made available on a local basis, within walkable catchments, consistent with broader urban planning policy.

37. Ensure new private or public school development occurs in walkable catchments within the urban area – not in Green Wedge areas outside the Urban Growth Boundary.

CONTENTS

1.0 INTRODUCTION

1.1 Changing course

We sense that Melbourne is at a critical turning point. The Discussion Paper is very welcome, it challenges and raises new concepts in how we can see Melbourne's future and conveys a sense of the urgency for a significant change in direction.

Past Metropolitan Strategies developed over the last two generations have assumed that the fundamental model for Melbourne's growth and development will endure largely unchallenged. In reality new directions are not only needed, they are more urgent than ever. The motor vehicle for people and freight movement will continue be a major force in how Melbourne is planned and shaped, but it can no longer be essentially the only force.

The shift in the guiding light of Melbourne's overall strategy has to embody a wider view of what is of long term benefit to the residents of all of Melbourne and indeed the whole of Victoria. There are three burgeoning demands, which we cannot ignore.

Firstly, there is a need to shift resources much more to health promotion and prevention. The current model of putting most of our health resources into attending to people once they are sick is not a sustainable strategy. It will financially consume more and more resources as we attend to the health needs of the people who have relied on a city form, structure and urban design which ironically contributed to their poor health. This reason alone should be enough of an incentive and driver to change the way we plan, design and build our neighbourhoods, our suburbs and the metropolitan form.

Secondly, the current model of continually seeking to address our travel needs almost solely through the lens of the motor vehicle is not sustainable. Cars beget roads and roads beget cars. It's a spiralling debt burden which chases itself in a never ending pursuit of the final piece of infrastructure which will finish the traffic puzzle. Cars and roads are critical for the effective functioning of a city, but they are not the answer to every trip. There is an urgent need for a substantial investment in the short, medium and long term in public transport, as a key alternative to driving.

Thirdly, the relegation of walking (and cycling) to the role of minnows in the transport mode choice is short sighted and is forcing an increasing cost burden on to individuals and the community.

Ironically a changed set of priorities in all three is a win-win for the community, for individuals and for the city.

Addressing the capacity and opportunity for Melbourne's citizens to use walking, as a viable, productive and healthy transport choice is not a quick fix with some funding initiatives and a few promotional gimmicks. It's a fundamental shift in the planning and design of the whole city and its local areas and neighbourhoods. It needs to be part of a progressive, planned and fundamental shift in the way we look at and shape Melbourne's future. We need targets to increasing the level of walking as a legitimate and sustainable choice, which provide funding linked to outcomes.

Walking should be factored as the realistic and preferred form of transport for short trips – we need to seriously consider positively discriminating in favour of people who use walking. The constant provision of more car parking spaces is a classic example of how poor strategy simply favours one choice over another. We need facilities and urban design that support and promote the pedestrian over other transport modes, in those locations where walking is the most cost effective and efficient form of moving people. Currently, in many road situations the pedestrian (and the cyclist) who is using less of the road, less of the planet's

resources, less imported oil that depletes our balance of trade, that emits less noise and pollution, is not rewarded. Preference goes to single occupants in cars, whose unsustainable choices are favoured when pedestrians and cars meet. Generally the 'rewards' in the urban situation are geared to those that have least regard for health costs, for the value of exercise, and for those who impose a heavy touch on the planet.

Those cities which have embarked on the necessary changes, such as; Vancouver, Portland (Oregon), Copenhagen, Freiburg (Germany), have embraced a strategic approach to change. The result for each have been fundamental shifts that are now seen in transport mode choices, levels of health and well-being, community engagement and sense of belonging, vibrant neighbourhoods and more active children and people of all ages. Melbourne has choices – the directions chosen will have profound effects on the type of city we live in, how much it costs us to run the city and how liveable the city will be.

1.2 Walking overlooked

Walking is fundamental to many primary objectives of urban and transport planning – intensified urban centres, reduced vehicle use and reduced congestion, greater use of public transport, and building the knowledge economy. Despite this, walking is largely overlooked or taken for granted in both planning and transport policy.

> "Despite the importance of walking, it is often overlooked as a mode of transport." (Australian Government 2012, p.1)

Walking was virtually ignored in *The Victorian Transport Plan 2008*.

In transport policy, walking is often dealt with as a tack-on to cycling, even though far greater numbers of people walk, and walking offers greater potential for modal shift. Walking requires walking specific policy and investment.

In planning debate, increased walking is usually an assumed outcome of increased density or better public transport. Walking will not necessarily simply follow increased density, especially if this is a continuation of randomly distributed increases in density, rather than a concentration around activity centres and public transport corridors. We need to actively facilitate walking to deliver the full benefits of intensified centres and public transport improvements.

The international literature is clear, there is no silver bullet for creating environments that promote walking. A multi-layered approach is required (Krizek, Forsyth and Baum 2009; Donovan and Munro 2013; Ewing and Cervero 2010).

This submission sets out the suite of policies required to create a walkable Melbourne. Consistent with the communication around the Metropolitan Planning Strategy, our submission takes both a transport policy and land use policy perspective.

1.3 Background – Victoria Walks

Victoria Walks is a walking health promotion body working to get more Victorians walking every day. Our vision is for vibrant, supportive and strong neighbourhoods and communities where people can and do choose to walk wherever possible.

Our cities, towns, neighbourhoods and urban areas have become largely automobile dependent and less walkable. This has contributed to the emergence of more sedentary lifestyles where people do not engage in the recommended levels of physical activity.

Physical inactivity is a significant factor in the dramatic rise in the levels of obesity and preventable diseases such as Type II diabetes and cardiovascular disease.

Walking-friendly neighbourhoods and urban spaces are essential to encourage and enable people to walk. Walking is associated with positive health outcomes, improved fitness and better physical, social and mental health. Making towns, cities and suburbs more walkable has many health, environmental and economic benefits.

2.0 THE IMPORTANCE OF WALKING

Despite being largely taken for granted as a transport mode, the value of walking in reducing the environmental effects of transport and reducing traffic congestion is typically well understood in planning discussion. More often overlooked are the economic, health and social benefits of walking, and these are discussed briefly below.

2.1 Health benefits

Australia has one of the highest rates of obesity in the world, with the total cost of obesity in Victoria estimated to be $14.4 billion in 2008 (Access Economics 2008). Lack of 'incidental' physical activity such as walking and cycling for transport is a contributing factor to high rates of obesity for both children and adults. Countries with the highest levels of active transport tend to have the lowest obesity rates (Bassett Jr et al 2008), and a similar inverse association for both obesity and type 2 diabetes has been demonstrated for states and cities in the USA (Pucher et al 2010).

A recent study of more than 12,000 Australian teenagers found they were much more likely to eat their recommended intake of fruit (41%) and vegetables (24%) per day than they were to get the recommended level of exercise (15%). This was particularly so for girls, with only 8% getting the 60 minutes moderate to vigorous physical activity recommended for teenagers, compared to 22% of boys (Morley 2012).

Daily walking or cycling to and from work reduces the risk of coronary heart disease (Hu et al 2007). For adults with diabetes, walking more than two hours a week was associated with 39% lower all-cause mortality (Gregg et al 2003). The health improvements of walking also provide cost savings. In an economic analysis of moderate-intensity physical activity for adults with diabetes, a 3-mile daily walk resulted in cost savings (including health and social costs) of $1,000 per person per year (Di Loreto et al 2005).

There are multiple ways to achieve significant health benefits from walking, to meet health guidelines of 30 minutes daily activity for adults. Walking can be built into everyday life, including:

- Recreational walking
- Walking to access jobs, shops or schools
- Walking to public transport.

As an example, public transport users in metropolitan Melbourne average 28 minutes walking to and from public transport each day, plus six minutes walking for other purposes, while car travellers average only six minutes in total (DoT 2010, p.24). As a result, there is evidence that travel to work by *any method other than a car* will have health benefits. A recent study of 822 adults in Adelaide found average weight gain over four years of 1.26kg

for non–car commuters; 1.53kg for occasional car commuters; and 2.18kg for daily car commuters (Sugiyama et al 2013).

2.2 Economic benefits

> "The economic value of walking has been described as the walking economy.
>
> There is a direct link between the city's economic prosperity and the safety and convenience of the pedestrian experience." (City of Melbourne 2012, p.34)

Beyond its role in improving the efficiency of the overall transport system, walking plays a significant role in fostering economic development, particularly the economic vitality of activity centres. A useful summary of the positive relationship between walkable environments and retail health is provided by the National Heart Foundation discussion document *Good for Busine$$, the benefits of making streets more walking and cycling friendly* (Tolley 2011). A variety of studies are cited demonstrating that providing a more pedestrian friendly environment will increase retail turnover and retail property values.

Various studies have identified that walking is a more important mode of travel to shopping, and car travel is less important, than is typically perceived by retailers. For example, a study in Graz, Austria, found that retailers thought 58% of their customers drove to the shop and 25% walked, but in fact only 32% drove and 44% walked (Sustrans 2006, cited in Tolley 2011).

Significantly, there is evidence to suggest that better walkability adds substantial value not only to retail property but also to office and residential property. A study of more than 4,200 properties in the United States concluded:

> "We found that, all else being equal, the benefits of greater walkability were capitalized into higher office, retail and apartment values.
> …
> These types of properties with a Walk Score of 80 were worth anywhere from 6 to 54 per cent more than properties with a 20 Walk Score, depending on property type. Consistent with their higher values, we also found higher net operating incomes for the office and retail properties." (Pivo and Fisher 2010, pp. 1 and 19)

The evidence that walkability adds to land value is consistent with the evidence on agglomeration economies – the spatial concentration of economic activity that leads to greater productivity (Donovan and Munro 2013). Some studies suggest that the emergence of the knowledge economy has strengthened the significance of agglomeration economies. There is also evidence that agglomeration economies are most significant within, or in some cases even exclusive to, walkable catchments (Arzaghi and Henderson cited in Donovan and Munro 2013).

The apparently broad economic value of walkability is likely to be related to travel efficiencies over short distances. Walking is generally the fastest means of travel for trips of up to 400 metres (Australian Government 2012). It follows that creating the conditions to shift these short trips from cars to walking will improve the overall efficiency of the economy.

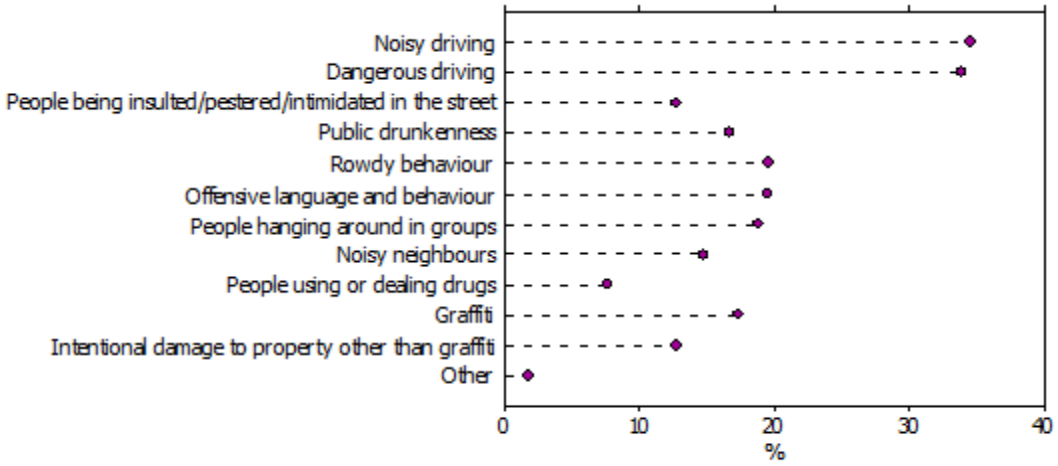
2.3 Community wellbeing

A recent report by the Grattan Institute – *Social Cities*, 2012 – explains both the importance of community engagement and the role of walking and street life in promoting it.

> “Research shows that social connection is crucial to wellbeing... Loneliness can have serious health consequences, with a similar impact to high blood pressure, lack of exercise, obesity, or smoking.”
>
> “The shape of our cities can make it easier, or harder, for people to interact with each other. Where we live, work and meet, and how we travel between these places, has a big impact on how much time we have to connect, and who we can meet face-to-face.
>
> “Walking increases opportunities for face-to-face social contact and helps people to map their neighbourhood in social terms. Improved walkability also enhances the social life of people with limited mobility and increases property values (as reflected in the increasing use of ‘walk scores’ by real estate agents).” (Kelly et al 2012, pp. 4 and 13)

Transport policy that prioritises walkable environments rather than high speed car travel is likely to help address community concerns around anti-social behaviour. In the most recent ABS survey of Australian’s perceptions and experiences of ‘crime victimisation’, survey respondents were asked questions relating to their perceptions and opinions about social disorder issues in their local area.

As illustrated below, noisy and dangerous driving were clearly the most significant concerns people had about social disorder in their community.



Please note: More than one type of issue may be reported so percentages may not add to 100%.

Perceptions of social disorder issues, adult Australians, 2011 (Victoria Walks 2012)

3.0 HOW MUCH DO WE WALK?

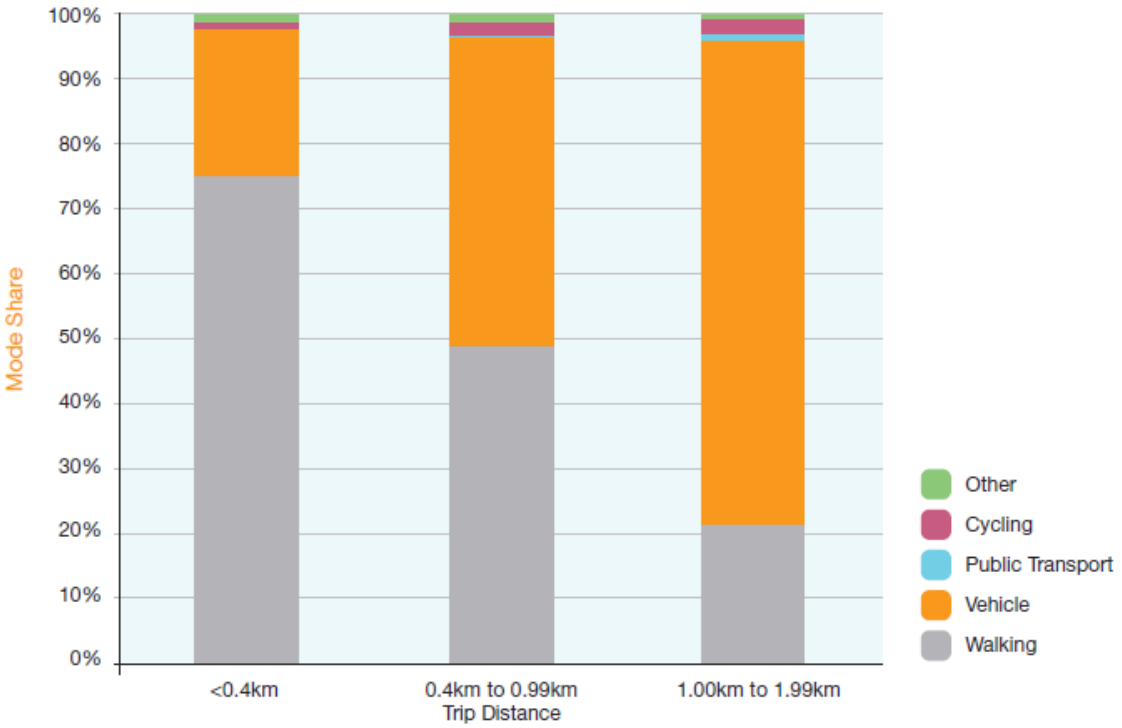
Walking is most commonly utilised for trips other than the journey to work, which tends to be longer than other trips. In 2007 around 13% of all trips were made on foot (DoT 2009, p5). In terms of journey to work, walking in Melbourne was halved, from 6% of trips in 1976 to 2.9% in 2001. Since then, mode share appears to have stabilised at around 3.5% (3.6% in 2006, 3.4% in 2011) (Mees and Groenhart 2012). However it may be that increases in walking to work in central Melbourne, associated with inner city apartment development and employment growth, are masking a continued relative decline in other areas. Half of Southbank residents and 34% of Docklands residents walk to work (City of Melbourne 2012, p.34).Analysis suggests that the mode share of walking in the journey to work declined in many outer eastern and north-eastern suburbs between 2006 and 2011 (Charting Transport 2013b).

The recent resurgence in public transport patronage will be having a positive impact on walking, but Victoria Walks is not aware of information that quantifies this.

3.2 Short trips

An analysis of Vista 2007 data revealed that the average walk trip in Melbourne was approximately 1 kilometre and that 23% of walk trips were over 1.6 kilometres (about a 20 minute walk).

As illustrated by the graph below, 75% of all trips less than 400 metres in Melbourne are walked and a little more than a fifth of trips between 1 and 2 kilometres, are made on foot.



Proportion of people walking for all trips less than 2km – metropolitan Melbourne 2007 (DoT 2010, p.19)

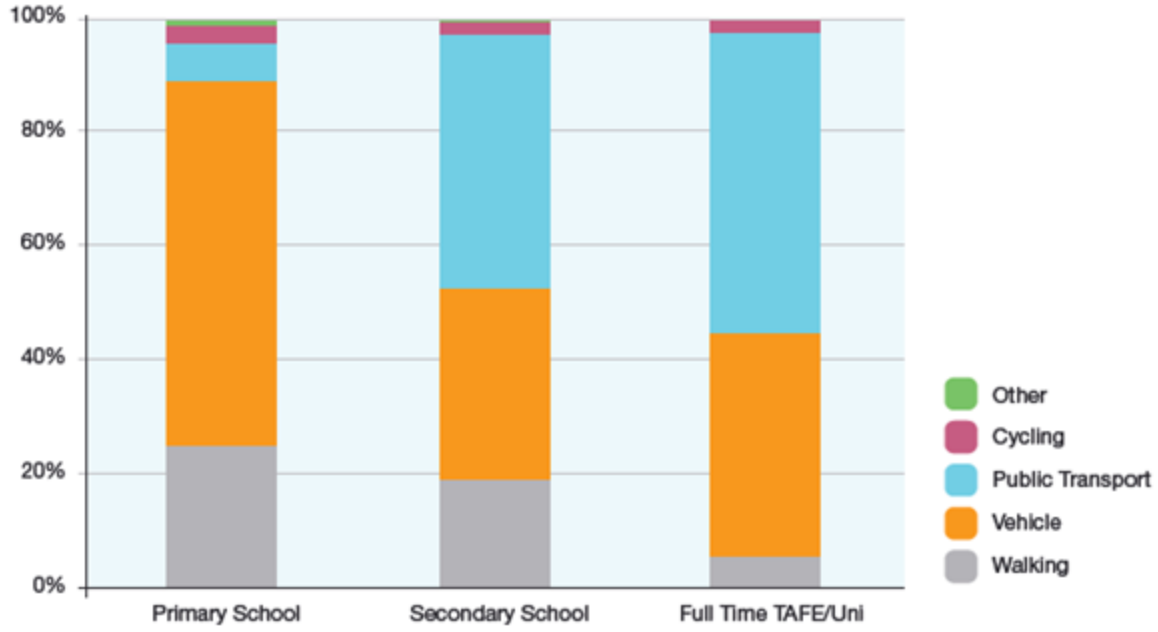
There are, however, very large variations in the propensity to walk short distances, in different parts of the metropolitan area. A DoT analysis of trips under 2km, using 2007 data, revealed:

- In Melbourne City and Yarra, approximately 70% of short trips are walked;
- In other inner areas like Maribyrnong, Port Phillip, Stonnington and Moreland more than 50% of short trips are walked;
- In the outer metropolitan areas of Melton, Hume, Whittlesea, and Nillumbik 26-27% of short trips are walked and only 16% of trips in Cardinia (DoT 2010, p.22).

Clearly there are factors other than the distance between destinations that are affecting the decision to walk or drive. There may be socio-economic reasons, such as the clustering of young adults in inner areas, however it seems highly likely that a significant proportion of the variation is due to environmental design. There is a clear opportunity to increase the proportion of trips undertaken by walking.

3.3 Travel to school

In 1970, 49% of children in Victoria walked to school and 16% travelled by car; but by 1994 these levels were effectively reversed, with 20% of young people walking and 52% travelling to school by car (ABS 1984 and 1995).



Proportion of trips to Victorian education institutions by mode, 2007 (DoT 2010, p.21)

The trend towards driving of children to school may be due to their parents' perceptions of safety.

> "Fear of children being abducted by strangers is a significant limitation on children walking to school and around their community, as is the perception of too much traffic. There is also a widely held view that children at primary school are too young to travel independently in their neighbourhood." (VicHealth 2011, p13)

While 'stranger danger' and changing social norms are major factors, so are perceptions of road safety.

> "The majority of primary school parents (73 per cent) saw road safety as a barrier to their children's physical activity in the community.
> …
> Forty per cent of neighbourhood residents …did not feel safe due to the traffic on the streets and described the amount of traffic as making it difficult or unpleasant to walk or cycle. This percentage increased to almost 50 per cent for primary school parents …regarding the same issue." (VicHealth 2011, p.10)

Fostering children's independent mobility is vital to their health and development and in establishing positive life long behaviours. Recently, small steps have been made toward making the road environment around schools safer, with the introduction of 40kmph speed limits outside school entrances at key times in Victoria. However a much broader approach is required. Countries that have high levels of active transport have a multi-faceted approach (Garrard 2009, p6). The necessary measures can be summarised as follows:

> "Small changes can be achieved, at least in the short-term, through programs such as Safe Routes to School, Walking School Buses, School Travel Planning, and Walk/Ride to School events. However, these initiatives need to be complemented by area-wide improvements that support children's independent mobility within their overall neighbourhood. These include reduced urban speed limits, good cycling and walking infrastructure, and secure bike storage at schools, shopping centres and community facilities." (Garrard 2009, p.16)

Walking to school should not be seen in isolation from the general neighbourhood context, but requires particular attention and provides an important barometer for walkability.

4.0 PRIMARY ELEMENTS FOR A WALKABLE MELBOURNE

4.1 The 20 minute city

Debate on the concept of the '20 minute city' requires consideration of transport mode – 20 minutes' walk is very different to 20 minutes travel by bike or by car. This lends itself to considering the 20 minute city at varying levels across the metropolitan area.

Victoria Walks believes that 95 per cent of residents should live within a 20 minute walking catchment of basic day to day services, including:

- healthy food options
- primary school
- at least one café – important in facilitating community interaction and supporting people working from home
- doctor or pharmacy
- high quality open space, including capacity to 'escape to nature' in a natural or semi-natural environment, eg open space along a local creek.

Clearly other services and employment are also desirable, but some will not always be feasible to provide at the neighbourhood scale.

Focusing on this neighbourhood scale is often suggested in planning literature.

> "In the knowledge economy, the village/precinct assumes increased locational significance, because of its role in liveability, to the point where urban planning strategies should seek to promote this level as well as the more amorphous city-wide level." (Bus Industry Confederation 2012, p.31)

Higher order services should be available at major centres within 20 minutes by walking and/or public transport (including walk, wait, travel time). These centres should be the primary focus for office based job creation. Government services should generally be available at this scale, along with comparison shopping. These centres in particular should be designed to promote access primarily by walking, cycling or public transport. Large scale at-grade car parking should be avoided. The severance effects of the arterial road network should be actively managed and minimised.

At both levels, the 20 minute city should be planned with the needs of seniors and children in mind. If the city is designed around those groups, it can be expected to cater for all citizens. For that reason, the neighbourhood centre should be based on a 1km walking radius (measured by actual walking route), even though a healthy adult is likely to be able to walk about 1.6km in 20 minutes. People can be expected to walk further to the major centre, so a 1.6km radius is appropriate for prioritisation of works to promote walkability at that level.

Major centres should generally be within 20 minutes public transport trip of neighbouring centres and the CBD.

Recommendations

1. The proposed '20 minute city' model should operate at three levels:

    - A neighbourhood scale, where 95% of Melbourne residents live within a 1km walking catchment of basic day to day services, including healthy food options, primary school, café, doctor or pharmacy and high quality open space, including capacity to 'escape to nature.'

    - Higher order services should be available at major suburban centres within 20 minutes by walking and/or public transport (including walk, wait, travel time). These centres should be designed with a 1.6km radius high quality walking environment.

    - The CBD, to be 20 minutes public transport trip from most major suburban centres centres.

    At all levels, the 20 minute city should be planned to facilitate walking by seniors and children, to ensure that it is accessible to the whole community.

4.2 Inner Melbourne

The Melbourne CBD has the highest levels of walking in the state and it is critical that the planning strategy strengthens the capital city role of this area. Planning for a polycentric metropolitan area should not be allowed to undermine the central city.

While high levels of walking are a feature of the CBD, there are still opportunities available to make the city more walkable. The significance of car transport to the functioning of the CBD is diminishing rapidly, dropping from 35% of journey to work in 2001 to 26% in 2011 (Charting Transport 2013a). Nevertheless the majority of road space in the CBD remains dedicated to this traffic, while the volume of pedestrians is often outgrowing the space

dedicated to them. Similarly, the phasing of traffic lights typically revolves around car traffic, when pedestrians greatly outnumber car occupants.

Opportunities for improving walkability include:

- Review of traffic light phasing to focus on the number of people moving through an intersection, rather than vehicles.
- Re-allocation of road space from cars to pedestrians.
- Greater use of shared space, particularly on narrower streets.

Melbourne City Council is currently preparing a walking strategy and the Government should support the implementation of that, through the co-operation of agencies such as VicRoads.

Places Victoria is preparing a masterplan for Fisherman's Bend, recently rezoned for CBD type development. This area should be developed as a demonstration project for walking oriented CBD expansion.

The inner suburbs of Melbourne, such as those in the Yarra, Stonnington, Port Phillip and Maribyrnong municipalities, have somewhat different characteristics to the CBD. Nonetheless, they generally have high levels of pedestrian activity and should therefore be a key area of focus for reorienting road space and time from cars to walking.

There is international evidence that simple proximity to city centres is a strong determinant of walking (Ewing and Cervero 2010). This is confirmed by the higher rates of walking in central areas of Melbourne described above. It may be that centrality acts as a proxy for other key determinants such as destination accessibility, access to public transport, pedestrian friendly urban design and restricted car parking. Nonetheless, concentrating development generally in and around the CBD and inner city suburbs can be expected to increase walking. For this reason, we also support the vision of an expanded Central City as signalled by the Discussion Paper.

Recommendations

2. Facilitate increased density (3-8 storey) development with high quality infrastructure around activity centres and along public transport routes in the inner suburbs of Melbourne.

3. Plan Fisherman's Bend as a demonstration project for walking oriented CBD expansion.

4. Within the CBD and inner suburbs:

    - Review traffic light phasing to focus on the number of people moving through an intersection, rather than vehicles.
    - Re-allocate road space from cars to pedestrians and increase the level of shared space.

4.3 Centres and corridors

Intensified development around centres and public transport corridors will assist in facilitating walking as a transport mode. In particular, intensified development is likely to encourage walking if it results in a mix of different uses within close proximity to each other.

The Discussion Paper promotes a polycentric model of the city. A reorientation of employment growth away from the CBD, towards suburban centres, could have benefits in terms of providing employment within walking distance, but it faces significant challenges. Suburban centres are more car oriented than the CBD, so there will need to be an associated change in the way they operate if positive changes in mode share are to be advanced.

Expansion of suburban employment outside centres and corridors will have a highly negative transport impact. In this regard, the Zone Reform proposals to facilitate office and retail development in what is currently the Business 4 Zone and in industrial zones are of significant concern. It is acknowledged that this change is identified in the government's economic strategy as reducing entry barriers (State of Victoria 2012b, p40). However the proposed changes would generate a range of problems, including cost pressures for industry, as detailed in the Planning Institute's submission to zone reform (PIA 2012). Industrial areas are generally poor walking environments and are not suitable locations for core retail activities such as supermarkets or intensive job clusters such as large offices. Efforts to promote retail competition should focus on increasing opportunities within what are currently the Business 1, 2 and 3 Zones, potentially including rezoning of areas to provide more land in those zones, or their successor.

It is not clear that current or recent policy, which theoretically supports walking in activity centres, is actually resulting in walkable environments. This is perhaps largely because the car parking requirements undermine other policy aspirations (discussed further in section 4.5).

An example is the Watergardens Town Centre. Despite being built fairly recently, between 1996 and 2004 – or perhaps *because* it was built recently – this centre has extremely poor walkability. Approaching the central complex on foot, even from the closest and most directly accessible houses, requires walking hundreds of metres across major highways and through large car parks – an inhospitable environment for pedestrians. Even walking from one part of the centre to another requires trips across roads and parking areas of up to 350 metres.

Recommendations

5. Ensure efforts to promote employment in suburban centres are accompanied by measures to re-orient travel away from access by car, and to promote access by other modes, particularly walking.

6. Avoid facilitating office and retail development in what is currently the Business 4 Zone and in industrial zones, as proposed by Zone Reform. Instead, facilitate retail competition by increasing opportunities within what are currently the Business 1, 2 and 3 Zones.

4.4 Density

Increased density of development should be promoted in and around activity centres and public transport, where this does not compromise heritage values. Density in key locations

allows more people to live and work within walking distance of destinations or walk to public transport, enabling them to access destinations further away.

It is not necessary to increase density everywhere. It is quite possible to promote a walkable city while allowing the suburbs outside centres and corridors to retain their current character.

Currently, the same controls on medium density housing apply almost uniformly across Melbourne and even regional towns. The random increase in density this has produced is not particularly helpful in creating a walkable city. Melbourne is around 50% more dense than Brisbane, Canberra, Hobart and Darwin, yet all of those cities had a higher level of walking to work in 2006 (Bauman et al, 2012, p202).

It is also important to understand that increased density, even in appropriate locations, will not generate the desired levels of increase in walking (or cycling and public transport use) unless the environment is designed to support it. Hence the need for a strong focus on walking as a mode of transport in its own right, as described more broadly in this submission.

Victoria Walks supports embodying the Strategy in the State Planning Policy Framework as suggested by the Discussion Paper, but it needs to impact further on the Victoria Planning provisions. An important example is the need for different development controls, including different standards for medium density housing in areas targeted for infill, compared to those that are not. This may relate to different residential zones, assuming that aspect of Zone Reform is advanced.

It should not be left entirely to councils to determine where increased density should go, as it was in implementing (or not implementing) Melbourne 2030. We need a metropolitan response, not an ad hoc response. The Government should set clear parameters for councils, but perhaps allow them to retain some flexibility. The ultimate outcome must be that areas for increased density are clearly delineated in the planning scheme and zoned accordingly.

Funding for infrastructure and place making (such as improved public transport, walking infrastructure, and greener, better quality streets and public spaces) should be tagged to areas where density is being increased. People are more likely to support change – especially after the fact – if it includes improvements to the amenity of the area. Councils are more likely to support intensification and its associated political risks if it is linked to funding that enables them to ‘give something back’ to the community.

Recommendations

7. Promote increased density of development in and around activity centres and public transport, where this does not compromise heritage values.

8. Set clear parameters for Councils in identifying areas for increased density, to provide a consistent metropolitan response.

9. Ensure that areas for increased density are clearly delineated in the planning scheme and zoned accordingly, with planning controls that differentiate them from areas that are not proposed for increased density, including substantially different standards for medium density housing.

10. Link funding for place making and infrastructure investment to areas where development density is being increased.

4.5 Car parking

In 2009 the Department of Transport commissioned an international review of the literature regarding techniques to promote walking and cycling. This review found that the availability of free car parking was one of the key factors that determined the choice between walking and driving.

> "Pricing factors are tremendously important for spurring non-motorised travel. Auto and fuel taxation and parking are two factors that stand out." (Krizek, Forsyth and Baum 2009, p.7)

A more recent review of international literature reached a similar conclusion.

> "Minimum parking requirements are the single most significant impediment to a more efficient and durable urban form..."
>
> "Hindsight shows that minimum parking requirements have had hugely negative consequences. In the long run minimum parking requirements have generated more congestion, because they have increased the supply (and hence lowered the cost) of parking. This has subsidised vehicle ownership and travel and undermined uptake of other transport modes. Travel behaviour studies show a strong link between the availability and cost of parking and people's tendency to drive."
> (Donovan and Munro 2013, p.50)

The significance of car parking for walking in particular relates to the fact that, in addition to promoting vehicle use, when provided in the form of large scale ground level parking lots, it actively discourages walking.

> "Not only does ample and free parking provide an easy excuse for auto travel, vast parking areas are also the bane of pedestrian travel." (Krizek, Forsyth and Baum 2009, p.15)

Victoria Walks is aware of the limited changes to Victorian parking requirements made in mid 2012. However the terms of reference of the relevant Ministerial Advisory Committee were restricted to consideration of the limited changes already proposed by the Department of Planning and Community Development (Car Parking Advisory Committee 2012, p7). The planning scheme still requires car parking beyond the levels that business would naturally supply and actively promotes vehicle use at the expense of other transport modes.

> "In effect, planners count the cars parked at existing land uses, identify the highest number counted as peak demand (without consideration of price), and then require developers to supply at least that many parking spaces (without consideration of cost). Planning for parking is planning without prices." (Shoup 1997)

The confused policy position around car parking is illustrated by the Discussion Paper itself, which notes with apparent approval (p.56):

> "In an increasing number of developments purchasing a car space is optional and bicycle parking and car sharing schemes are included."

The Victoria Planning Provisions strongly discourage this type of development, when they should support it.

A fundamental review is required that considers whether car parking requirements should be removed, or at least revised to avoid the starting premise that high levels of car parking

should be provided in all development. Car parking maximum limitations or levies have been imposed in central areas of cities such as Sydney, Auckland and indeed, Melbourne. Broader application across metropolitan Melbourne should be considered.

Recommendation

11. Undertake a fundamental review of planning scheme car parking requirements, including consideration of removing car parking minimum requirements, applying maximum parking limitations in certain situations.

4.6 Growth areas

The elements of environmental design that promote walkability are well understood and documented, so they will not be repeated here. It is the responsibility of the Growth Areas Authority (GAA) to ensure that walkability is embodied in precinct structure planning.

Creating highly permeable and connected street networks should be a key focus for urban planning in growth areas. This is important because:

- There is evidence that street connectivity, as measured by intersection/street density, is perhaps the most important single design factor in promoting walking (Ewing and Cervero 2010).
- The street network is a highly durable element of urban form that will persist through many different eras into the future.

In designing the street network it is also important to ensure long term flexibility in public transport provision.

The Discussion Paper acknowledges that infrastructure and services need to be provided to the growth areas "in a more timely manner" (pp. 66 and 74). This is a critical issue for growth areas; public transport in particular is an area requiring dramatic improvement.

> "It is emphasised that high quality public transport with an emphasis on reliability and frequency should be an automatic part of development to improve the connectivity between adjacent residential areas, activity centres, employment precincts and transport nodes. The transport infrastructure required to implement such a high quality network should be viewed as essential as all other household infrastructure connections such as sewerage, electricity, gas, telephone, drainage which are all provided at the beginning of a development." (Metropolitan Transport Forum 2011)

If public transport is unavailable when new suburbs are developed, residents will be forced to drive for trips beyond convenient walking distance, establishing habits that are likely to persist even if public transport services are subsequently provided. Victoria Walks therefore supports the position of the Metropolitan Transport Forum, that:

> "If the government cannot support public transport to the growth corridors then it should not allow the development." (Metropolitan Transport Forum 2012)

Clearly, the detailed design of growth area communities to promote walking to public transport and local services is also very important. Hence the need to set targets and evaluate the performance of the GAA in enabling walking. It may also mean that traffic calming is needed on and around bus routes to produce a more walkable environment.

Recommendations

12. Develop specific key performance indicators for the Growth Areas Authority (GAA) on intersection density (measuring street connectivity) and levels of walking in growth area communities.

13. Ensure that public transport is provided at the time of development in growth areas, including delaying development until the public transport is available, if necessary.

14. Ensure that walkability to public transport is incorporated in both land use planning and planning for the public transport network.

4.7 Open space and recreational walking

Walking is the most popular, affordable and readily attainable form of medium intensity physical activity, with more than a million Victorians actively walking for exercise. Walking is easily the most common form of exercise, with a participation rate estimated at 24.3%, compared to fitness/gym (17.6%), cycling/BMX (8.8%) and jogging/running (7.8%) (ABS 2012).

Compared to those who are walking for transport, recreational walkers are generally more focused on the journey, rather than the destination. They are looking for high quality, interesting and aesthetically attractive natural and urban environments.

The planning system has generally been successful in acquiring land for open space purposes, with a typical 5% land contribution when land is subdivided. However there appears to have been less success in securing and allocating funding to ensure that open space is well developed to create environments that are attractive to people. Substantial areas of open space often seem to remain little more than open paddocks.

Where there is investment in open space, it is often an intensive investment in a 'regional level' facility designed to serve a broad area. Supporting infrastructure typically includes substantial car parking. This is evident for example in the planning of playgrounds, where there seems to be either poorly developed local spaces with a very small 'off the shelf' plastic playground or very substantial regional playgrounds designed to be arrived at by car.

There needs to be a greater focus on providing high quality local open space that is integrated into local neighbourhoods, with good pedestrian networks that are green corridors.

As the use of more popular open space areas increases there will be a need to re-evaluate the infrastructure provided. A recent review of the Principal Bicycle Network found that "almost three-quarters of recreational paths on the Metropolitan Trail Network, originally intended for leisure and low levels of transport use, now have high levels of transport use (State of Victoria 2012a, p.24)." The trail network should therefore be reviewed to ensure that separate paths are provided for recreational walkers and commuter cyclists, due to the relatively high speed of commuter cyclists.

Recommendations

15. Promote provision of high quality local open space that is integrated into local neighbourhoods.

16. Promote consideration of broader neighbourhood pedestrian amenity and access in open space planning, with walking as the preferred form of access and limited car parking provision.

17. Review the Metropolitan Trail Network to ensure that separate paths are provided for recreational walkers and commuter cyclists, where there are high levels of cycle traffic.

4.8 Public transport

Walking is the primary means of accessing public transport – 59% of people walk to the train, 92% of people access bus services by walking and 95% of people access tram services by walking (SKM cited in DoT 2011). To promote public transport, therefore, is to promote walking. The relationship is mutually beneficial – to achieve optimal use of public transport, high quality walking environments are required around stations/stops.

It is important to acknowledge that a polycentric city model requires significant reconfiguration of the public transport system, which is highly monocentric, being focused on the CBD.

The Metropolitan Planning Strategy needs to ensure that all areas are connected by convenient, high frequency, direct public transport. This should be a genuine alternative to car travel for everyone. There seems to be a level of consensus that this should be based on much better bus services, connecting to a slightly extended train and tram network, as signalled in the Discussion Paper p.58) and described in other work (PTUA 2009, BIC 2012, Donovan and Munro 2013). Where traffic congestion is an issue, public transport will need to be afforded active priority over private vehicles. Victoria walks generally supports the public transport and walking suggestions in the Discussion Paper (pp.82-84).

A possible model is Brisbane's BUZ network, with lines that run every 10 and 15 minutes in peak and off-peak periods respectively, all day, all week (Donovan and Munro 2013).

Trunk transit services need to be planned to stay ahead of demand – not a rolling response to chronic overcrowding. Public transport planning should encourage walking to transit rather than facilitating park and ride.

Recommendations

18. Ensure that all areas are connected by convenient, high frequency, direct public transport.

19. Encourage walking to transit rather than facilitating park and ride.

4.9 Funding priorities and freeways

It has long been contended that construction of new freeways simply generates additional traffic. A recent consideration of international studies concluded that most additional capacity created by new freeways is taken by induced traffic. In other words, freeways do not result in long term travel time savings, rather they result in car-oriented urban form (Donovan and Munro 2013).

While the travel time and congestion effects of freeways are contested, the city shaping capacity of freeways and other major transport projects seem undisputed.

> "Major infrastructure projects, especially transport projects, can have a significant impact on the location and form of economic activity in our cities: they tend to shape urban development, guiding or influencing households and firms to make particular locational choices. In this way, the decisions made about where, when and what infrastructure is constructed, whether it is significant transport investment or social infrastructure investment such as schools and hospitals, can have a significant influence on the future anatomy of a city, locking in patterns of demand for generations." (New Zealand Government 2010, p.22)

The *Victorian Transport Plan* recognised this phenomenon too. In relation to the 'North East Link' freeway, it noted:

> "It will fundamentally alter the economic landscape in this part of Melbourne, just as the Western Ring Road did in the west." (State of Victoria 2008, p.37)

Further freeway construction will therefore promote car-oriented development, undermining efforts to promote other modes of transport, including walking.

The alternative to freeway led development is to invest in other transport modes, which will increase walking related physical activity.

Victoria Walks acknowledges that freeway proposals are now typically couched as proposals to move freight rather than people. Whatever the reason for constructing freeways, however, the vehicles using them will primarily be cars.

At best, major freeway proposals represent poor value for money relative to investing in other modes and will be counterproductive in efforts to re-orient transport away from cars, towards walking and other modes. At worst, they will also fail to achieve any long term travel time or congestion benefits.

If new freeway projects are pursued, they should incorporate:

- design to minimise community severance
- reallocation of road space on arterial roads predicted to be relieved of traffic, typically involving reduced traffic lanes and
- comprehensive improvements to walkability in and around centres affected by the freeway – described further under 'major projects' below.

Recommendations

20. Re-focus transport expenditure away from new freeways, towards other transport needs.

21. If new freeway projects are pursued, they should incorporate:

    - design to minimise community severance
    - reallocation of road space to pedestrians on arterial roads predicted to be relieved of traffic
    - comprehensive improvements to walkability in and around centres affected by the freeway.

5.0 ROAD MANAGEMENT

Management of the road reserve is a key factor in creating walkable environments. Factors include:

- allocation of space between cars and other modes
- traffic volume and speed
- provision for crossing and level of convenience, such as traffic light priority
- pedestrian infrastructure including seamlessly connected footpaths and pram ramps
- general amenity of the environment and points of interest
- personal safety.

Pedestrian and café area created by removing on-street car spaces, Acland Street, St Kilda (Victoria Walks 2013)

The infrastructure and safety factors are particularly important in facilitating access by seniors, people with a disability, children, and parents with young children. While able-bodied adults can often overcome the physical limitations of the environment, these important sectors of the community have more limited mobility. They are likely to be deterred from walking if suitable infrastructure is not available or the environment is otherwise difficult. Personal safety is also perceived as a particular concern for women at night.

Victoria Walks strongly supports reconfiguration of road reserves to better provide for pedestrians as signalled in the Discussion Paper at page 16. There are numerous local and international examples where reallocation of space from traffic lanes or car parking to pedestrian spaces has resulted in dramatic increases in pedestrian activity and success of local businesses (Victoria Walks 2013 and Project for Public Spaces 2013).

Victoria Walks also supports increased street tree planting to improve thermal comfort for pedestrians, as suggested in the Discussion Paper (p.40). Streets should be green corridors, linking into the open space network. Improved landscaping and street trees should be an outcome of walking audits and network planning, as discussed below.

The issue of street trees requires broader consideration of their interaction with other infrastructure:

- Pruning of existing street trees to provide clear space for power lines often results in highly disfigured trees, detracting significantly from urban amenity. The power lines themselves could also be considered unsightly, and certainly add to visual clutter in the urban environment.

- VicRoads guidelines generally limit tree planting and growth adjacent to main roads.

Ideally, urban power lines should progressively be placed underground. As this process increases the value of adjoining land, it can potentially be funded or part funded by levies on adjoining landowners, as practised in Auckland, New Zealand and other locations. Areas targeted for increased density should be the highest priority for this work.

There are two systemic approaches that Victoria Walks would promote in assessing the walkability of environments and providing a policy response:

- Walking audits assess the barriers to walking in an environment in order to identify the physical improvements required to facilitate walking. An easy to use example of how to undertake a walking audit is available on our website at Victoria Walks: Assessing walkability.

- Network planning facilitates consideration of walking as a transport mode. It can facilitate prioritisation of walking within broader road management. For example, the Principal Pedestrian Network (PPN) methodology developed by the Department of Transport allows walking to be considered within VicRoads Smart Roads system of intersection prioritisation.

These two approaches are complementary and should be used together to facilitate walking.

In terms of implementation, there should be a requirement for local councils to audit walking access around activity centres and public transport stops to identify priority works, based on the PPN methodology. This should include evaluation of intersection treatments such as traffic light phasing. Identified treatments should then be implemented through capital works programmes in order to deliver the 20 minute walkable catchment. Funding for all major projects, including schools, hospitals, cultural facilities and government offices, should be contingent on this work being done, as any significant project will impact on walking in the local area and should be designed to encourage walking for access.

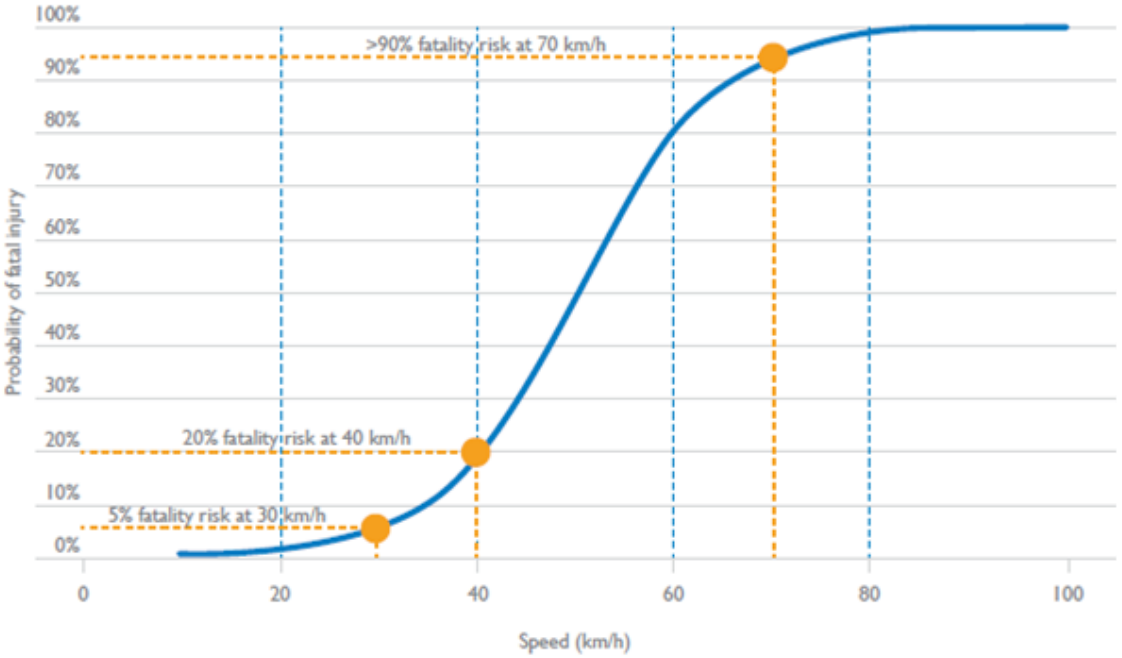
Recommendations

22. Promote streets as green walking corridors, and better provide for street trees by investigating options to reduce power line maintenance impacts on trees, including the potential to progressively relocate power lines underground; and reviewing VicRoads guidelines for street trees on arterial roads.

23. As a prerequisite for funding new public projects, require auditing of walking access around applicable activity centres and public transport stops, to identify and fund priority pedestrian works, based on the Principle Pedestrian Network methodology.

5.1 Speed

There is also a need to think more broadly about lower speed in high pedestrian areas in the development of a safe system.



The impact of vehicle speeds on fatality rates for pedestrians (Austroads cited in Australian Government 2012, p94)

A key principle of the Safe System approach is the establishment of a 'forgiving' road transport system. As set out in the National Road Safety Strategy 2010-2020:

> "The road system must allow for human error [including pedestrian error] and provide forgiving environments that prevent serious injury or death when crashes occur. A Safe System ensures that the forces in collisions do not exceed the limits of human tolerance. Speeds must be managed so that humans are not exposed to impact forces beyond their physical tolerance. System designers and operators need to take into account the limits of the human body in designing and maintaining roads, vehicles and speeds" (ATC 2011, p.34)

The most effective measure for reducing pedestrian road traffic crash deaths and serious injuries is speed reduction (World Health Organization 2008). As illustrated in the graph above, lower vehicle speeds provide a more 'forgiving' environment in the event of pedestrian errors, consistent with a key principle of the Safe System approach. The benefit of reduced traffic speed in areas with high numbers of pedestrians is now broadly understood.

> "There are many urban locations with a high level of pedestrian activity – for example, around entertainment and shopping districts, schools, universities, hospitals and public transport interchanges. In these situations reducing traffic speeds may be the most appropriate course of action." (Australian Government 2012)

This principle should also be applied to areas with a high *potential* for walking and cycling, even if existing levels are low.

A reduction in speed limits is recommended in residential areas and within a 2 km radius of schools, shopping strips, parks, and major trip generators such as universities, TAFE colleges, hospitals, large shopping complexes, and other employment centres. The internationally recommended safe speed limit is 30 km/h for areas where vulnerable road users are exposed to vehicular traffic, as defined by the biomechanical tolerance to crash impact forces (World Health Organization 2008). However, given that speed limits in built-up areas are substantially higher than this, and higher than in many other developed countries (Fildes et al 2005) it may be more feasible to introduce a step-wise reduction, from 50 km/h to 40 km/h in the short-term, and subsequently to world's best practice of 30 km/h.

Recommendations

24. Reduce speed limits in residential areas and within identified catchments of activity centres. If applied generally, introduce a step-wise reduction from 50 km/h to 40 km/h in the short-term, and subsequently to world's best practice of 30 km/h.

6.0 IMPLEMENTATION

In addition to the recommendations above, further suggestions on implementation are detailed below.

6.1 A healthy Melbourne

The Discussion Paper sought comment on the five proposed outcome principles and asked whether anything important had been missed. The answer is yes – health.

Creating an environment that promotes health should be an underlying element of the Strategy. The role of the built environment in promoting health has been recognised in recent overarching policy such as the objectives of the Transport Integration Act.

There are various ways that health could be accommodated in the principles proposed in the Discussion Paper. A simple approach would be to rewrite Principle 4 as "Strong and healthy communities"

Recommendations

25. Ensure health is included in the principles of the Draft Strategy.

6.2 A Walking Strategy for Victoria

The Department of Transport prepared the *Pedestrian Access Strategy: A strategy to increase walking for transport in Victoria,* in 2010. The Strategy identifies key directions and priority actions to promote walking. However, the Strategy is no longer on the Department's website and it appears that it is not supported by the current government.

The absence of a strategy or policy for walking is of serious concern. A Walking Strategy for Victoria should be prepared, in conjunction with a metropolitan focused strategy. It is essential that comprehensive walking specific policy is available to help implement Metropolitan Planning Strategy objectives and align with other government priorities.

While Victoria Walks has attempted to outline the required steps to promote walking in this submission, this needs active engagement from the government. In addition to the policy direction provided by a strategy, the process of developing it is likely to further engage key agencies, such as Public Transport Victoria (PTV), in consideration of walking.

Walking is a significant recreational pursuit. Both transport and recreation are important types of walking, but they require somewhat different policy responses. A Walking Strategy should address both recreational walking and walking for transport

Recommendations

26. Prepare a metropolitan Walking Strategy, in association with a Walking Strategy for Victoria.

6.3 A voice for walking

Walking is currently poorly represented within Government. The staff resources previously dedicated to walking within the Transport Portfolio have dissipated in recent times, to the extent that there is no longer a clear 'owner' of walking within the Government. No significant staff capacity has been made available to support the newly formed Victorian Pedestrian Advisory Council. Victoria Walks also understands that there is no longer any programme funding targeted towards the provision of walking infrastructure and amenity within VicRoads.

Walking is critical to successful public transport, but Public Transport Victoria (PTV) does not appear to be playing a role in walking promotion, including walking to access public transport. In fact, Victoria Walks understands that PTV has sometimes resisted efforts to manage traffic speed for the benefit of pedestrians, where this has been perceived to conflict with bus services (MAV forum with select local councils, February 2013).

Recommendations

27. Establish a unit dedicated to supporting walking within the Department of Transport or Planning and Community Development.

28. Ensure Public Transport Victoria (PTV) facilitates walking in planning and managing public transport.

6.4 Targets and evaluation

As walking is a fundamental part of life, not only a mode of transport, it does not necessarily lend itself to easy measurement. However, if the Government seeks to promote walking as a means of transport it should set targets by which to assess practical success in facilitating walking.

The Government should develop a mode share target for walking (and potentially cycling and public transport). An example of a possible target would be to increase walking from 3.4% of journey to work in 2011 to 7% by 2021.

Victoria Walks recommends adopting a target for walking to school. Clearly the journey to work is focused on adults. Walking to school provides a measure of success in adoption of walking by the next generation. A possible target would be 35% of primary school students

(currently around 24% - DoT 2010 p21) and 25% of secondary school students (currently about 19%) walking to school by 2021.

The walking targets should be key performance indicators for relevant government agencies, such as VicRoads and the Departments of Transport, Education, Health and Planning and Community Development.

A Victorian Walking Strategy should encompass targets for walking.

The performance of metropolitan planning in promoting walking should be evaluated by assessing it against the targets for walking, as well as:

- professional auditing of walkability in new subdivisions and brownfield development and
- performance in increasing development density around activity centres and public transport stops.

Recommendations

29. Develop mode share targets for walking. An example of possible targets would be to increase walking from 3.4% of journey to work in 2011 to 7% by 2021, and/or 60% of trips between 0.4 and 0.99km by 2021.

30. Develop a target for walking to school, as a measure of success for the Metropolitan Planning Strategy. A possible target would be 35% of primary school students and 25% of secondary school students walking to school by 2021.

31. Make walking to school and mode share targets key performance indicators for relevant government agencies, such as VicRoads and the Departments of Transport, Education and Planning and Community Development.

32. Regularly evaluate the performance of metropolitan planning in promoting walking, by assessing performance against walking targets; increased density in targeted locations; and professional assessment of walkability in new development.

6.5 Funding

It is important to recognise that the vast majority of government transport spending is used to promote motor vehicle travel and, to a lesser extent, public transport. Policy at various levels of government typically purports to support greater levels of walking compared to car use, but this is not reflected in expenditure.

Walking should be supported through both dedicated funding for walking as a mode of transport, and broader programmes to improve urban amenity.

Walking should not be disadvantaged because it does not naturally provide a small number of big projects suited to applications for Commonwealth funding. State government should prepare and present a package of walking measures for Commonwealth consideration. This could include funding for preparation and implementation of walking strategies, walking audits and/or PPN planning, either by state or local government.

Much of the infrastructure demand created by additional development is imposed on local councils. The current development contributions system makes it very difficult for councils to obtain funding from developers to even partially finance this infrastructure. This limits their

capacity to provide suitable services including pedestrian infrastructure and open space improvements.

Victoria Walks acknowledges the current review of development contributions and support the move towards a simplified system of 'off the shelf' contribution requirements.

Recommendations

33. Allocate a fixed proportion of transport spending to walking and/or place making. This must be clearly separated from, and additional to, any walking infrastructure improvements associated with upgrades of other modes.

34. Prepare and present a package of walking measures for Commonwealth funding consideration.

35. Quickly progress the current review of development contributions and provide a simplified system of 'off the shelf' development contributions, to enable local councils to fund community infrastructure, including walking infrastructure.

6.6 Aligning investment with policy

Victoria Walks supports Ideas 11 (p.80) and 15 (p.89) in the Discussion Paper – using government investment to achieve the best public outcomes.

In particular, there is a need to ensure primary schooling is provided on a neighbourhood basis rather than centralised. Private or public secondary school development should occur in centres within the urban area, and not be allowed to disperse to green wedge areas. Schools play an important role in community life and should be set in a walkable context.

Recommendations

36. Require the Department of Education to ensure that schooling is made available on a local basis, within walkable catchments, consistent with broader urban planning policy.

37. Ensure new private or public school development occurs in walkable catchments within the urban area – not in Green Wedge areas outside the Urban Growth Boundary.

7.0 CONCLUSION

Walking needs to be acknowledged as a transport mode in its own right, with:

1. An 'owner' within government.
2. Dedicated funding
3. A dedicated policy
4. Comprehensive network planning to identify gaps in infrastructure and prioritise road space and time for walking.

This will enable walking to unlock the full potential of better public transport and increased density in key locations.

This submission has outlined some of the broad range of measures that will be required if the Metropolitan Planning Strategy is to provide for a walkable Melbourne. Preparation of a Walking Strategy for Victoria could further develop methods to make Melbourne a walkable city.

If the city is designed with the walking needs of children and seniors at the forefront of planning, it will deliver a liveable Melbourne for all ages.

8.0 REFERENCES

ABS (2012). Participation in Sport and Physical Recreation, Australia, 2011-12 http://www.abs.gov.au/ausstats/abs@.nsf/Products/4177.0~2011-12~Main+Features~Comparison+over+time?OpenDocument, accessed 15 March 2013.

Access Economics (2008). *The growing cost of obesity in 2008: three years on*. Canberra, Report for Diabetes Australia.

Australian Government (2012). Department of Infrastructure and Transport, *Walking, Riding and Access to Public Transport, Draft Report for Discussion – October 2012*.

Australian Transport Council (ATC 2011). *National Road Safety Strategy 2010-2020*.

Bassett Jr, DR, Pucher, J, Buehler, R, Thompson, DL, Crouter, SE (2008). Walking, cycling, and obesity rates in Europe, North America, and Australia. *Journal of Physical Activity and Health* 5(6).

Bauman, A, Curac, N, King, L, Venugopal, K, Merom, D, (2012). Active, healthy cities – how does population physical activity vary between Australian cities? *Health promotion Journal of Australia* 2012; 23: 201-7.

Car Parking Advisory Committee (2012). *Car Parking Provisions Advisory Committee Report January 2012*.

Charting Transport (2013a). The journey to work and the city centre (Australian cities 2001-2011), http://chartingtransport.com/, February 2013

Charting Transport, (2013b). How commuters got to workplaces in Melbourne, 2006 and 2011, http://chartingtransport.com/, March 2013.

City of Melbourne (2012). *Transport Strategy 2012 – Planning for Future Growth*.

Department of Transport (DoT 2009), *Victorian Integrated Survey of Travel and Activity 2007 (VISTA 07)*.

Department of Transport (DoT 2010). *Pedestrian Access Strategy*.

Department of Transport (DoT 2011) Presentation to the Parliamentary Inquiry into Environmental Design and Public Health.

Di Loreto, C, Fanelli, C, Lucidi, P, Murdolo, G, De Cicco, A, Parlanti, N, Ranchelli, A, Fatone, C, Taglioni, C, Santeusanio, F, De Feo, P (2008). Make Your Diabetic Patients Walk: Long-term impact of different amounts of physical activity on type 2 diabetes. *Diabetes Care* 28(6): 1295-1302.

Donovan, S and I Munro (2013). Impact of urban form on transport and economic outcomes. *NZ Transport Agency research report 513.*

Ewing, R and Cervero, R, (2010). Travel and the Built Environment, *Journal of the American Planning Association, Vol. 76, No. 3 Summer 2010.*

Fildes, B, Langford, J, Dale, A, Scully, J (2005). *Balance between harm reduction and mobility in setting speed limits: a feasibility study*. Sydney, Austroads Inc

Garrard J (2009). *Active transport: Children and young people, an overview of recent evidence*, VicHealth.

Gregg, EW, Gerzoff, RB, Caspersen, CJ, Williamson, DF, Narayan, KMV (2003). Relationship of Walking to Mortality Among US Adults With Diabetes. *Arch Intern Med* 163(12): 1440-1447.

Hu, G, Jousilahti, P, Borodulin, K, Barengo, NC, Lakka, TA, Nissinen, A, Tuomilehto, J (2007). Occupational, commuting and leisure-time physical activity in relation to coronary heart disease among middle-aged Finnish men and women. *Atherosclerosis* 194(2): 490-497.

Kelly, J-F.; Breadon, P.; Davis, C.; Hunter, A.; Mares, P.; Mullerworth, D.; Weidmann, B., (2012). *Social Cities*, Grattan Institute, Melbourne.

Krizek, K, Forsyth, A, Baum, L (2009). *Walking and Cycling International Literature Review, Final report*. Victorian Department of Transport.

Mees, P and Groenhart, L, (2012). Transport Policy at the Crossroads: Travel to work in Australian capital cities 1976-2011.

Methorst R, Bort HM, Risser R, Sauter D, Tight M, Walker J (2010). *COST 358 Pedestrians' Quality Needs, PQN Final Report*, COST (Eurpoean Cooperation in Science and Technology), November 2010.

Metropolitan Transport Forum (2011). MTF submission to Growth Areas Authority, 20 December 2011.

Metropolitan Transport Forum (2012). MTF State budget submission, 2013/2014

Morley et al, (2012). *Prevalence and socio-demographic distribution of eating, physical activity and sedentary behaviours among Australian adolescents*, Health Promotion Journal of Australia 2012; 23: 213-8.

New Zealand Government (2010). *National infrastructure Plan.*

G.Pivo and D. Fisher (2010). 'The Walkability Premium in Commercial Real Estate Investments' *Real Estate Economics*, 2010.

Planning Institute of Australia, Victoria Division (PIA 2012). Submission to reformed zones for Victoria

Project for Public Spaces (2013). http://www.pps.org/reference/rightsizing/, accessed 4 March 2013.

Public Transport User Association (PTUA 2009). *Connecting to the Future, the Alternative to the Victorian Transport Plan*.

Pucher, J, Buehler, R, Bassett, DR, Dannenberg, AL (2010). Walking and cycling to health: a comparative analysis of city, state, and international data. *American Journal of Public Health* 100(10): 1986-92.

Shoup, D. C. (1997). The High Cost of Free Parking, *Journal of Planning Education and Research* vol. 17, pp. 3-20.

State of Victoria (2008). *The Victorian Transport Plan*.

State of Victoria (2012a). *Cycling into the Future 2013-23, Victoria's Cycling Strategy*.

State of Victoria (2012b). *Securing Victoria's Economy – Planning, Building, Delivering*,

Sugiyama T, Ding D, Owen, N, (2013), reported at http://www.ajpmonline.org/article/S0749-3797(12)00776-3/abstract, accessed 8 March 2013.

Tolley, R. (2011). *Good for Busine$$, The benefits of making streets more walking and cycling friendly, Discussion paper*, Heart Foundation of Australia.

VicHealth (2011). *Towards active and independently mobile children. Survey review.*

Victoria Walks (2012). Submission to Victorian Road Safety Strategy, 3 October 2012.

Victoria Walks (2013). Acland St Traders at http://www.victoriawalks.org.au/Acland_St/.

Wen, LM, Orr, N, Millett, C, Rissel, C (2006). Driving to work and overweight and obesity: findings from the 2003 New South Wales Health Survey, Australia. *International Journal Of Obesity (2005)* 30(5): 782-786

World Health Organization (WHO) (2008). *Speed management: a road safety manual for decision-makers and practitioners*. Geneva.

APPENDIX – RESPONSE TO QUESTIONS

The Discussion Paper, Melbourne, let's talk about the future, puts forward a number of questions to prompt debate. Victoria Walks' response is set out below.

Question 1. What do you think of these outcome principles?

The need for the urban environment to promote healthy living is omitted from the principles in the Discussion Paper.

Creating an environment that promotes health should be an underlying element of the Strategy. The role of the built environment in promoting health has been recognised in recent overarching policy such as the objectives of the Transport Integration Act.

There are various ways that health could be accommodated in the principles proposed in the Discussion Paper. A simple approach would be to rewrite Principle 4 as "Strong and healthy communities."

Question 2. What do you think is needed to achieve these outcome principles?

A myriad of actions could contribute to achieving the outcome principles, but a walkable environment will be important in achieving all of them. Victoria Walks submission sets out how a walkable Melbourne can be promoted.

Question 3. What are the key ingredients for success in achieving the vision of an expanded Central City?

Facilitate increased density (3-8 storey) development with high quality infrastructure around activity centres and along public transport routes in the inner suburbs of Melbourne.

Plan Fisherman's Bend as a demonstration project for walking oriented CBD expansion.

Within the CBD and inner suburbs, review traffic light phasing to focus on the number of people moving through an intersection, rather than vehicles; and re-allocate road space from cars to pedestrians and increase the level of shared space.

Question 4. What do you think of the idea of identifying and reinforcing employment and innovation clusters across Melbourne?

A reorientation of employment growth away from the CBD, towards suburban centres, could have benefits in terms of providing employment within walking distance, but it faces significant challenges. Suburban centres are more car oriented than the CBD, so there will need to be an associated change in the way they operate if positive changes in mode share are to be advanced. Avoiding out-of-centre development and removal of minimum car parking requirements will be critical to the success of suburban job clusters.

The Government should:

- Ensure efforts to promote employment in suburban centres are accompanied by measures to re-orient travel away from access by car, and to promote access by other modes, particularly walking;
- Avoid facilitating office and retail development in what is currently the Business 4 Zone and in industrial zones, as proposed by Zone Reform. Instead, facilitate retail competition by increasing opportunities within what are currently the Business 1, 2 and 3 Zones; and
- Undertake a fundamental review of planning scheme car parking requirements, including consideration of removing car parking minimum requirements, applying maximum parking

limitations in certain situations.

Question 5. What is needed to support growth and development in regional cities?

Direct government investment in regional cities is likely to support their growth and development. This investment should be accompanied by investment in walking infrastructure around each project.

The Government should, as a prerequisite for funding new public projects, require auditing of walking access around applicable activity centres and public transport stops, to identify and fund priority pedestrian works, based on the Principle Pedestrian Network methodology.

Question 6. What do you think of the idea of a '20 minute city'?

Debate on the concept of the '20 minute city' requires consideration of transport mode – 20 minutes'\ walk is very different to 20 minutes travel by bike or by car.

To be successful, 95per centof people should live within a 20 minute walking catchment of basic day to day services, including healthy food options; primary school; café; doctor or pharmacy; and high quality open space.

The 20 minute city should be planned with the needs of seniors and children in mind. If the city is designed around those groups, it can be expected to cater for all citizens. For that reason, the neighbourhood centre should be based on a 1km walking radius (measured by actual walking route), even though a healthy adult is likely to be able to walk about 1.6km in 20 minutes.

Question 7. How can established suburbs accommodate the needs of changing populations and maintain what people value about their area?

Increased density of development should be promoted in and around activity centres and public transport, where this does not compromise heritage values. Density in key locations allows more people to live and work within walking distance of destinations or walk to public transport, enabling them to access destinations further away.

It is not necessary to increase density everywhere. It is quite possible to promote a walkable city while allowing the suburbs outside centres and corridors to retain their current character. It is important to have different development controls, including different standards for medium density housing, in areas targeted for infill, compared to those that are not. The Government should set clear parameters for councils in identifying those areas, but allow them to retain some flexibility.

Funding for infrastructure and place making (such as improved public transport, walking infrastructure, and greener, better quality streets and public spaces) should be tagged to areas where density is being increased.

Question 8. How do we ensure a healthy and sustainable environment for future generations?

Implement all of the recommendations in Victoria Walks' submission.

Question 9. What do you think about the possible ways of funding infrastructure?

The Government should:

- Re-focus transport expenditure away from new freeways, towards other transport needs.

- Allocate a fixed proportion of transport spending to walking and/or place making. This must be clearly separated from, and additional to, any walking infrastructure improvements associated with upgrades of other modes.

- Prepare and present a package of walking measures for Commonwealth funding consideration.

- Quickly progress the current review of development contributions and provide a simplified system of 'off the shelf' development contributions, to enable local councils to fund community infrastructure, including walking infrastructure.

Question 10. How can all levels of government, business and community work together to create the city you want?

Stakeholders should be brought together to develop a walking strategy for Melbourne.

The Government should also:

- Establish a unit dedicated to supporting walking within the Department of Transport or Planning and Community Development.

- Ensure Public Transport Victoria (PTV) facilitates walking in planning and managing public transport.

- Develop mode share targets for walking. An example of possible targets would be to increase walking from 3.4% of journey to work in 2011 to 7% by 2021, and/or 60% of trips between 0.4 and 0.99km by 2021.

- Develop a target for walking to school, as a measure of success for the Metropolitan Planning Strategy. A possible target would be 35% of primary school students and 25% of secondary school students walking to school by 2021.

- Make walking to school and mode share targets key performance indicators for relevant government agencies, such as VicRoads and the Departments of Transport, Education and Planning and Community Development.

- Require the Department of Education to ensure that schooling is made available on a local basis, within walkable catchments, consistent with broader urban planning policy.

- Ensure new private or public school development occurs in walkable catchments within the urban area – not in Green Wedge areas outside the Urban Growth Boundary.