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Submission to Route 96 Project

Summary

Victoria Walks generally supports the Route 96 project. A high performing tram network is important for promoting walking as part of everyday life.

In relation to Nicholson Street, we generally support the provision of dedicated tram lanes, but the proposed removal of on-street car parking is likely to lead to higher traffic speeds. We would strongly urge PTV and road agencies to carefully manage this potential in the surrounding road design.

In relation to Fitzroy Street, Victoria Walks does not have a view on the most desirable stop location, but we support the City of Port Phillip's Option 3 proposal to investigate improvement of traffic signal timings and phasings.

In relation to Acland Street, Victoria Walks strongly supports the City of Port Phillip's proposals, particularly Option 3, as the one that provides the highest level of pedestrian amenity. The evidence suggests that pedestrianisation of Acland Street will very probably enhance its retail performance. International studies have found an average 17% increase in retail turnover associated with pedestrianisation.

Victoria Walks does not support Option 2 for Acland Street, as this provides poor pedestrian amenity compared to the other options identified by both PTV and the City of Port Phillip.

Tram stop design along Route 96 should:

1. Ensure each stop is conveniently connected to the local footpath network, which may necessitate provision of new or upgraded pedestrian infrastructure
2. Avoid using fencing to funnel tram passengers to very narrow entry and exit points
3. Avoid creating barriers to crossing the road for pedestrians
4. Avoid creating double-leg signalised pedestrian crossings of the road
5. Use zebra crossings or pedestrian operated signals with immediate response for crossing points to tram stops
6. For stops with defined access points/crossings, there should generally be a crossing at each end of the stop to facilitate access from all directions.

Background

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 in which Victorians 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.

See [Attachment 1](#) for further information on the importance of promoting walkable environments.

Support for Route 96 Project

Victoria Walks generally supports the Route 96 project. The public transport system needs continual investment to ensure capacity keeps pace with demand.

A high performing tram network is important for many reasons, including its role in promoting walking as part of everyday life.

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

Facilitating increased tram patronage will have public health benefits. 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).

Tram stop design

We have not seen fully detailed design for tram stops as part of this project, but we would emphasise the need for the following specifications in order to facilitate pedestrian access to trams and walking more generally:

1. Ensure each stop is conveniently connected to the local footpath network, with provision for those with limited mobility. In some instances this may necessitate

provision of new or upgraded pedestrian infrastructure in the broader road corridor, beyond the tram stop itself.

2. Avoid using fencing to funnel tram passengers to very narrow entry and exit points that generate artificial pedestrian congestion. This is already a problem in some city tram stops such as the stop on Bourke Street adjacent to Spencer Street, creating sometimes significant delays for tram users in exiting the stop. Exit and entry points should be designed in anticipation of large volumes of pedestrians.
3. Tram stops should not create long barriers to crossing the road for pedestrians. Some of the larger existing tram stops in the city create a barrier to pedestrian movement.
4. Avoid creating double-leg signalised crossings of the road as part of tram stop design. Design that requires pedestrians to wait at two sets of lights to cross a road provides very poor service to pedestrians.
5. For stops with defined access points/crossings, there should generally be a crossing at each end of the stop to facilitate access from all directions and avoid non-direct routes to the stop, as this might discourage patronage and/or encourage less safe crossing behaviour.
6. Ensure pedestrians can cross the road without significant delay. Use zebra crossings, or pedestrian operated signals with immediate response, for defined crossing points where possible. Zebra crossings generally provide a higher level of service to pedestrians and tram users than signalised crossings and provide a good option for lower speed environments.
7. If signalised crossings are required, ensure the phasing:
 - does not generate long wait times for pedestrians and provides immediate response for mid-block crossings; and
 - provides for longer crossing times, including adequate time for pedestrians to cross the entire road corridor in one movement/phase.

We understand that the project will involve prioritisation of trams in the phasing of traffic signals. We would support this and recommend that it be extended to prioritisation of pedestrian movement through intersections, particularly around stops.

All of these comments are provided against a context of higher capacity services and fewer stops as a result of the project. This means that higher numbers of people will be concentrated in fewer locations, so each stop will have higher levels of pedestrian traffic than has been historically associated with trams. Pedestrian movement should therefore be prioritised in the management of the road network around stops.

We have not specifically assessed the proposals for Stops 124 and 125, but the specifications above would apply.

Nicholson Street

We generally support the provision of dedicated tram lanes, provided in both tram lane options, particularly Stage 2. However the proposed removal of on-street car parking is likely to lead to higher traffic speeds, as drivers will not have to consider the potential for

traffic to move in and out of car spaces at slow speeds. This potential for higher traffic speed is a particular concern given the significant volumes of pedestrians that can be expected. We would strongly urge PTV and road agencies to carefully manage this potential in the surrounding road design.

Caution should also be exercised in reducing the number of stops provided. Fewer stops will typically mean people have to walk further to access the service. This may be a particular deterrent for people with more limited mobility, including seniors and parents with young children. We appreciate that there is a tradeoff involved between the speed of the service and access to the service. We can see the merit in reducing stops within shopping strips (eg Acland Street) to minimise short trips within the strip by tram, but would urge caution with regard to stops in largely residential areas such as Nicholson Street.

Looking at the conceptual stop design:

- We do not support the provision of staggered signalised crossings in the Centre Island platform design for Stops 11 and 12. This would appear to mean that a pedestrian has to go through two signal phases to cross the road. The crossings should be direct, to facilitate crossing the road, not just access to the stop. Zebra crossings would be preferable to signalised crossings in lower speed environments. The staggering would not be such a concern if the crossings are zebra crossings, as a pedestrian would not experience significant delay, even though the route would not be entirely direct.
- The Easy Access stops are generally preferable to the Centre Island stops from a pedestrian convenience and amenity perspective.
- It is not clear to what extent pedestrian fencing will create a barrier to movement across the road for the Centre Island stops. If pedestrian fencing limits access then it is imperative to have crossings at both ends.

Fitzroy Street

Victoria Walks does not have a view on the most desirable stop location options. However we support the City of Port Phillip's Option 3 proposal to investigate improvement of traffic signal timings and phasings.

In relation to the Stop 133 design:

- There appears to be a 'missing crossing' in the conceptual design – a zebra crossing is shown on one side of the road but not the other (page 6 of the relevant brochure). Whatever location is chosen, crossings should be provided at either end of the stop(s).
- Once again, we would not support staggered signalised crossings that require pedestrians to negotiate two signal phases to cross the road.

Acland Street

We do not support Option 2. Given the removal of Stop 139, the terminus will assume greater significance as a key 'gateway' to Acland Street for tram users, who will be a significant proportion of total visitors to the centre. It is imperative therefore that the terminus is as pedestrian friendly as possible. Option 2 provides poor pedestrian amenity compared to the other options identified by both PTV and the City of Port Phillip. It also maintains the potential for through traffic, which will diminish the overall pedestrian quality of Acland Street, compared to the other options.

If Option 2 is chosen, a zebra crossing should be provided at the Belford Street end of the Stop.

Victoria Walks believes that Acland Street is ready for a high degree of pedestrianisation. We strongly support the City of Port Phillip's proposals, particularly Option 3, as the one that provides the highest level of pedestrian amenity.

We note that the higher the level of pedestrianisation will also reduce vehicle traffic past the other key tram stop at the intersection with Carlisle Street, thereby improving pedestrian amenity in that area.

Retail effects of pedestrianisation

We note that pedestrianisation of retail centres often generates concern that there will be adverse effects on business. The evidence suggests that this concern is not well founded.

A report to Sydney City Council (AECOM 2011) considered the business impacts of pedestrianisation. It reports on a number of studies including:

- The literature review by Hass-Klau (1993) of studies in Germany and the U.K that found "most studies show that the majority of retailers experience an increase in retail turnover of 5 to 20% after pedestrianisation, a finding that holds for small and bigger towns."
- A study by Transport for London (2002) found "case studies show that after pedestrian improvements retail demand was maintained or improved."
- Whitehead et al.(2006) looked at 22 case studies from Manchester, England which suggested that pedestrianisation increases retail turnover by 10 to 25% (with a mean of 17%).
- Yim Yiu (2009) estimated the effect of pedestrianisation on retail rent in Hong Kong. Results suggested that when controlling for external effects, pedestrianisation on average increases retail rent by approximately 17%.

In Melbourne, Swanston Street has been largely pedestrianised, as is now proposed for Acland Street, with vehicle access restricted to trams and bikes. In 2008 the land value, capital value and rental value of properties in Swanston Street were the highest of the ten main streets in the CBD. In 1990, before the Street was partially closed to vehicular traffic, Swanston Street held only the fourth highest rental values (City of Melbourne 2009a).

Similarly, the Bourke Street Mall has been a pedestrian mall with trams since 1983. Yet the greatest concentration of retailing in the city is in the two blocks on either side of the Mall, which each have more than 60,000m² of retail space.

The Bourke Street Mall is a focal point of Melbourne's retail sector with 81,000 visitors passing through each day. By comparison, London's Regent Street has 55,000 pedestrians per day. Retail rents in the city 'super-prime' retail areas, which centre on the Mall, have continued to increase and in 2009 averaged nearly \$6,000m². The Mall is the second most popular location for weekday visitors in the City of Melbourne and the most popular on weekends (City of Melbourne 2009b). Clearly, after 30 years of life as a pedestrian and tram precinct the Bourke Street Mall retains its retail power.

In relation to Acland Street specifically we note that:

- a minority of people access Acland Street by driving
- the majority of people that do drive park their cars on side streets rather than Acland Street itself and
- the majority of traffic on Acland Street is through traffic (City of Port Phillip 2013).

We note also the success of previous changes that have reduced car parking on Acland Street to provide more pedestrian space. All of these factors indicate that further pedestrianisation will not compromise Acland Street's retail performance and is, in fact, highly likely to improve it.

Conclusions and summary recommendations

Victoria Walks supports the Route 96 project and its potential to increase tram patronage and associated walking.

There is room for improvement in some aspects of the tram stop design, in order to provide a higher level of service for pedestrians, including tram customers.

The project presents an important opportunity to reconfigure Acland Street in order to improve the pedestrian environment and retail performance, as envisaged by the City of Port Phillip proposals, particularly Option 3.

If you have any queries regarding this submission please contact Duane Burt, Senior Walkable Communities Advisor on dburt@victoriawalks.org.au or 9662 3975.

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Attachment 1

The importance of walking

The recent convergence of problems associated with rapid population growth in urban areas, obesity, inactivity, climate change, traffic congestion, road trauma, and threats to community liveability has highlighted the need to increase use of more sustainable mobility options for the numerous short to medium distance trips that characterise urban living.

The provision of environments that encourage people of all ages and capacities to use active transport (walking, cycling and public transport) as part of their daily activities delivers multiple benefits including:

- health benefits of leading an active life (increased physical activity and reduced rates of chronic diseases)
- transport benefits of reduced congestion, car space requirements and costs
- increased mobility for people who do not drive cars (children, adolescents, older adults and some disadvantaged and low income groups)
- environmental benefits of reduced air, noise, and visual pollution
- energy use reductions through lower fossil fuel use and greenhouse gas emissions
- community strengthening through increased social interactions on streets and within neighbourhoods
- improved community safety, as 'peopled' places are safer places.

(Garrard 2008; Giles-Corti et al 2010)

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 and 34% lower CVD mortality (Gregg et al 2003). These health improvements 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).

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). An Australian study also found a positive association between time spent driving to work and being overweight or obese (Wen et al 2006).

Human-scale urban environments that support walking and cycling can also improve social interactions and increase community attachment, livability, and amenity (Litman and Doherty 2009). Heavy traffic is associated with reduced street-based activities and social interactions between neighbours (Appleyard and Lintell 1980, Bosselmann and Macdonald 1999, Hart 2008).

Noise pollution associated with motor vehicle traffic also impacts on the health of Victorians. Transport is the main (and loudest) source of noise pollution in Victoria. Environmental noise impacts on people's lives through annoyance, sleep disturbance, reduced work or school performance, stress and anxiety, reduced enjoyment of home life and other physical health effects. Seventy per cent of people hear traffic noise in their homes and over one million Victorians are annoyed by it. The social survey found that the percentage of people exposed to and annoyed by traffic noise has increased since 1986 (Environmental Protection Authority 2007).

Traffic congestion is an increasing, and increasingly expensive, problem in Australia's rapidly growing cities, including Melbourne. The costs of traffic congestion in Melbourne are projected to rise from \$1.2 billion in 2005 to \$3 billion by 2020 (Bureau of Transport and Regional Economics 2007). As Figure 1 demonstrates, replacing motorised trips with active trips contributes to more efficient use of road space, and represents a cost-effective means of reducing traffic congestion.



Figure 1: Road space required to move 69 people by walking, bus, bicycle and car, Canberra, September 2012

(Source: Cycling Promotion Fund [<http://www.cyclingpromotion.com.au/>])

Despite the societal value in having more people walking, Victoria is not doing well in promoting it, especially for children. 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). The ABS no longer collects travel to school data, but state-based surveys (including in Victoria) suggest that rates of walking and cycling to school continue to decline, with parental concerns about traffic safety a major contributing factor (Carver et al 2008a; Garrard 2010).