Destination 2020: Achieving Government Transport Policy

PUBLIC TRANSPORT USERS ASSOCIATION

Pre-Budget Submission 2007-08

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1. 20% by 2020 – a worthy target

Under *Growing Victoria Together*, the Victorian Government has stated that the proportion of motorised trips undertaken by public transport will increase to 20% by 2020. The PTUA strongly supports this policy, however we are deeply concerned by the lack of progress towards achieving it. While the rail network has seen increased patronage, mode share for public transport as a whole has remained broadly static in the face of growing motor vehicle traffic, especially in areas where public transport does not currently offer a time-competitive alternative.

1.1. The importance of mode shift

Achieving the Government's goal of 20% mode share for public transport will have numerous social, economic and environmental benefits.[1]

Congestion: raising the proportion of journeys made by public transport will enable more efficient use of road space and ensure road capacity is available to high value uses. A relatively small shift of journeys from car to public transport can result in a disproportionate improvement in traffic flow, as witnessed during school holidays.

Road safety: public transport is at least five times safer than travel by motor car, and an effective public transport system provides an alternative means of mobility for high risk drivers.

Health: use of public transport in place of driving can provide incidental physical exercise that reduces the risk of lifestyle diseases including obesity, diabetes and heart disease.

Environment: an increased role for public transport can cut the amount of air and noise pollution in urban areas, the largest source of which is motor vehicles.

Climate change: a shift from private motor vehicles to walking, cycling and public transport would cut emissions from transport, which is one of the largest and fastest growing sectoral contributors to Victoria's greenhouse emissions.

Transport costs: where available, public transport can enable families to escape high petrol prices and devote a higher proportion of their expenditure to local goods and services.

Participation: an effective public transport system helps to reduce social exclusion and enables transport-disadvantaged people to access employment, education and community services.

2. Barriers to achieving 20/2020

A sensible approach to successful achievement of the Government's 20/2020 policy must start with an examination of the reasons behind people's choice of mode. Numerous surveys have highlighted a small number of common themes underlying modal choice, and these issues are repeatedly raised with the PTUA by current and would-be public transport users.[2]

Barriers to growing the share of journeys undertaken by public transport can be categorised under 5 key headings:

1. **Coverage** - ensuring that frequent, full-time public transport services exist, especially in growth areas. Motorists cannot be expected to leave their car at home when no alternative is provided.

2. **Integration** - ensuring that individual services integrate to form a comprehensive network and that transfers between connecting services can be made quickly and easily with minimal waiting times.

3. **Speed** - to attract discretionary passengers, a comprehensive backbone of frequent, high-speed, grade separated rail services should be provided, while road and traffic light priority measures should be provided for road-based public transport (trams and buses).

4. **Reliability** - providing road and traffic light priority measures for public transport and enforcement thereof, as well as adequate maintenance of rolling stock and infrastructure.

5. **Safety** – ensuring that passengers not only *are* safe, but also that they *feel* safe and are not deterred by fear of criminal or anti-social behaviour.

The recommendations contained within this submission are all aimed at addressing these key drivers of modal choice.

2.1. Expanding coverage

Adequate coverage is one of the most fundamental pre-requisites of a public transport system if it is to attract a healthy share of journeys. People will not use public transport if it is not available in their local area or doesn't go where they want to go.

About two thirds of Melbourne does not have easy access to the rail system, and many areas do not have adequate bus services, especially after hours and on weekends. This dramatically reduces the pool of employment opportunities that are accessible by public transport and leads to excessive reliance on private motor vehicle use.[3]

Recommendation 1: Expanding coverage

a: The Government should accelerate expansion of the electrified train network to include within the next decade:

- Mernda
- Rowville
- Doncaster East
- Cranbourne East
- Baxter
- Sunbury
- Melton
- Melbourne Airport

b: The Government should improve access to the train network by the addition of railway stations over the next five years at:

- Southland
- Newport West
- Derrimut Road
- Forsyth Road
- Lyndhurst Park
- Coolaroo
- Campbellfield
- Eltham North
- Cave Hill
- Pakenham Lakeside

c: The Government should accelerate the rollout of SmartBus standard bus frequencies and operating spans across Melbourne.

d: The Government should commit to a bus fleet expansion program to provide investment certainty for the bus building industry to expand capacity.

2.2. Integration

It is clearly impractical to provide a public transport system that enables people to travel from any part of Melbourne to any other part of Melbourne without at least one change of service in between. An effective public transport system relies on routes intersecting with each other, thus offering passengers the opportunity to transfer and travel to diverse destinations all over the city. The importance of this "network effect" is outlined in Box 1.

Unfortunately, Melbourne's public transport system is not as well integrated as it could be. Numerous tram routes terminate "in the middle of nowhere" several hundred metres from the nearest train station, meaning passengers cannot transfer between the services. Many bus services are scheduled to depart from train stations moments before a train load of passengers arrives, leaving a long wait until the next bus. As a result, Melbourne has a low proportion of journeys involving a transfer compared to cities with high public transport patronage.

The effect of better integration was demonstrated by the extension of tram 109 to Box Hill. Even though the extension was not integrated very well into the Box Hill transport interchange, the fact that it now comes close to Box Hill railway station and activity centre has led to a strong increase in patronage. A range of other minor tram extensions could also improve integration and allow a broader range of radial and cross-town journeys to be made by public transport.

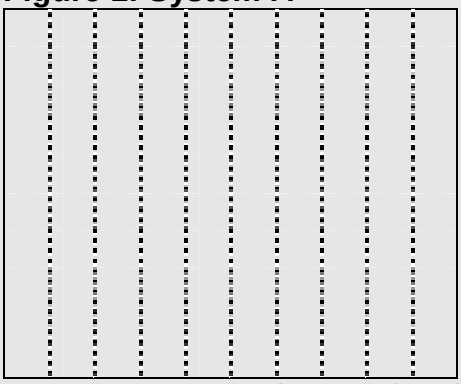
Photo: Sign at a Connex railway station. Current institutional arrangements are failing to ensure adequate integration across public transport services.

Box 1: The Network Effect

Imagine an idealised situation where trips are made between points on a 10-by-10 rectangular grid. Suppose that people are equally likely to want to travel from any point to any other point on this grid.

Now suppose that public transport is provided on all north-south routes on this grid, but on none of the east-west routes. A quick calculation reveals that on average, only about 9% of trips will be in a pure north-south direction, so this public transport system (call it System A) can service at most 9% of trips (which happens to be close to the current mode share for public transport in Melbourne).

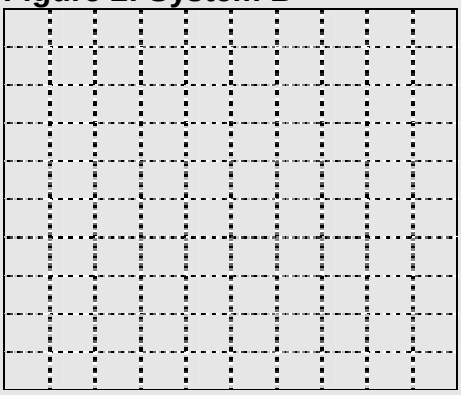
Figure 1: System A



Note: System A can only serve trips where the origin and destination are both on the same north-south route.

Compare this with System B, which provides services on all east-west routes as well as all north-south routes, and allows passengers to change easily from one service to another. With only twice as many services as System A, System B can potentially cater for all trips, or more than ten times System A's capability.

Figure 2: System B



Note: System B can serve trips from any part of the coverage area to any other part of the coverage area.

While it is important for routes to physically intersect to achieve a network effect, it is also important to ensure that services are sufficiently frequent and/or timetables are harmonised to minimise waiting times between services.

Recommendation 2: Improving integration

a: The Government should commence a program of tram extensions to provide more effective interchanges between the train, tram and SmartBus networks, including:

- Extend Route 3 to East Malvern station, and then onto Chadstone (Warrigal Rd)
- Extend Route 48 from North Balwyn to Doncaster Hill (park and ride, etc)
- Extend Route 8 to Hartwell station
- Extend Route 57 to East Keilor
- Complete Route 75 extension from Vermont South to Knox (Stud Rd SmartBus)
- Extend Route 16 to Kew Junction (tram 48 and High St buses)
- Extend Route 6 to Ashburton Station
- Extend Route 109 to Box Hill station
- Extend Route 72 north to Doncaster Road (tram 48)
- Extend (Route 72) south along Burke Rd to Caulfield station
- Extend Park St South Melbourne track to St Kilda Rd
- Extend Route 67 to Carnegie station

b: The Government should ensure that bicycle access to railway stations is prioritised in road network planning, and that adequate secure bike parking is provided to cater for current and latent demand.

c: The Government should adopt a new public transport planning and governance model based upon international best-practice as operating in Zurich and Vancouver that ensures greater integration across sustainable transport modes.

2.3. Journey speed

Even where services are available, many people will not choose to use public transport if journeys are too slow compared to driving. Train services offer the most competitive journey times compared to cars – thus underlining the importance of improving coverage of the rail network – however steps can also be taken to improve the speed of trams and buses.

2.3.1. Frequencies

Waiting often represents a significant proportion of journey time on public transport, especially when using connecting services. Many people who have the option of driving will take their car rather than wait for infrequent services.

Waiting times, and overall journey times, can be cut significantly by offering frequent services that compete with the level of convenience offered by driving. If services run every 15 minutes or better, average waiting times will only be a few minutes and many more people will be tempted to use public transport rather than drive their car. Headways of 15 minutes allow user-friendly “clock face” timetables, while frequencies of 10 minutes or better allow “turn up and go” convenience, thus making the service an attractive and realistic alternative to using a private car.

The additional capacity provided by boosting frequencies also helps to alleviate overcrowding for existing passengers where this is a problem.

2.3.2. Traffic light priority

Many bus and tram passengers will know the frustration of stopping and waiting at red lights that aren’t even a bus/tram stop. This additional stopping and starting can add substantial time to public transport journeys and deter many potential passengers who then choose drive their car instead.

Many cities around the world have virtually eliminated the wait at traffic lights for buses and trams by programming the lights to change to green as soon as the public transport vehicle wishes to cross. This traffic light priority enables buses and trams to offer more competitive journey times and for more frequent services to be offered with the same number of trams or buses, boosting their appeal, effective capacity and cost effectiveness.

2.3.3. Infrastructure investment and maintenance

Due to a combination of deteriorating infrastructure, the existence of single track sections of railway and operational inefficiencies, average train speeds on Melbourne’s metropolitan rail network compare poorly against other cities. Just as

the privatisation of Victoria's regional broad-gauge rail network failed to ensure adequate investment in and maintenance of the infrastructure, the current franchise arrangements for public transport in Melbourne are not adequately addressing an extensive maintenance backlog.

Slow average train speeds are leading to journey times that are less competitive with private motor vehicle use and poor utilisation of the existing train fleet compared to the service levels that would be possible with superior infrastructure and operational practices.

Recommendation 3: Cutting journey times

a: The Government should expand and accelerate the road-based public transport priority programs to provide universal traffic light priority for trams and buses.

b: The Government should bring forward the replacement of Metrol.

c: The Government should bring forward the expansion of the train fleet.

d: The Government should engage an internationally recognised rail expert to review the infrastructure and operating practices of the Melbourne rail network, to identify any impediments to increased train frequencies in Melbourne and recommend measures to mitigate such impediments where they exist. The Government should then adjust the scale and timing of its infrastructure investment program in order to implement the findings of such a review.

e: The Government should accelerate the duplication of all single-track sections of the metropolitan rail network.

f: The Government should review the capabilities of signalling systems across the rail network and upgrade where necessary.

g: The Government should bring forward improvements to bus service levels, operating spans and priority measures in the Doncaster corridor in advance of the opening of EastLink.

h: The Government should boost frequencies on all modes across the network to 15 minutes off-peak and weekends until midnight and at least 10 minutes peak, thereby cutting waiting times and overall journey times.

2.4. Reliability

People who value their time will often abandon public transport if services are frequently late or cancelled. This is an all too common experience in Melbourne, and many motorists adding to peak hour traffic congestion may actually be former public transport users who have given up on unreliable public transport services.

To some extent reliability could be improved by eliminating many of the delays that confront road-based public transport (see *Speed* section). For example, traffic light priority and more rigorous enforcement of bus lanes and tram fairways would reduce recurrent and unexpected delays for buses and trams.

On the other hand, the current franchise model of public transport service provision is failing to hold private operators sufficiently to account for poor performance and is failing to properly address any underlying causes of unreliability, such as inadequate driver recruitment, infrastructure investment and equipment maintenance.

Responsibility for planning and managing Melbourne's public transport system should be assumed by an accountable public body modelled on world's best practice such as those in Zurich, Vancouver and even Perth. Such a body could undertake day-to-day operations itself if appropriate, or it could engage external providers (such as Yarra Trams) on a fee-for-service basis that is subject to strict performance and value-for-money criteria.

Recommendation 4: Improving reliability

a: The Government should adopt a new public transport planning and governance model based upon international best-practice as operating in Zurich and Vancouver that provides greater control over private-sector operators.

b: The Government should ensure road user compliance with bus lanes and tram fairways.

2.5. Safety

While public transport is much safer than driving in terms of road trauma, the fear of physical violence deters many potential passengers, especially women.

A stronger staff presence at transport interchanges (railway stations, etc) and on public transport vehicles would help to deter intimidating behaviour such as violence and property damage, thus encouraging greater off-peak use of the system by discretionary, full-fare passengers. Additional staff could also provide advice for new and infrequent users, thus boosting confidence in the system among people who are currently hesitant to leave the "comfort zone" of their own vehicle.

Significant operational benefits could also be derived from increased staffing, such as:

- reduced fare evasion (which currently costs around $50 million per annum),
- a reduction in dwell times by providing assistance to passengers with mobility impairments to board and alight,
- a reduction in property damage which currently imposes significant legal and maintenance costs, and
- cost-neutral redeployment of roving ticket inspectors to enhanced customer service provision, including ticket inspection.

Recommendation 5: Enhancing public confidence

a: The Government should ensure higher levels of staffing across the system, especially after hours.

3. References

[1] For a more comprehensive discussion of the benefits of public transport, see *Transport & Liveability: The Path to a Sustainable Victoria*, by the Coalition for People's Transport, available at: <http://www.melbourneontrack.org.au/publications/liveability_statement.pdf>

[2] For example, see:
Australia Bureau of Statistics, 2003, *Environmental Issues: People's Views and Practices*, viewed 15 October 2006, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4602.0Main+Features1Mar%202003?OpenDocument>;
Booz, Allen & Hamilton 2001, *Bus Improvement Strategy: Final Report*, Report prepared for the Victorian Department of Infrastructure, Melbourne;
Hughes, G 2006, *Melburnians less likely than Sydneysiders to take the morning train*, media release, AAMI, Melbourne, 6 February

[3] <http://www.dse.vic.gov.au/melbourne2030online/content/popups/fig_14.html>