

Most Liveable and Best Connected?



The Economic Benefits of Investing in Public Transport in Melbourne

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The World's (Second) Most Liveable City...



Is our public transport system world-class?

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A. Melbourne in Perspective:
What are our strengths and weaknesses?

B. A Sound Economic Choice:
Why does Melbourne need world-class public transport to keep ahead?

C. The Reform Agenda:
What are we hoping to achieve on the ground?

Copenhagen

Helsinki

Oslo

Stockholm

Vienna

Zurich

Geneva

Toronto

Montreal

Vancouver

Melbourne

Sydney

Brisbane

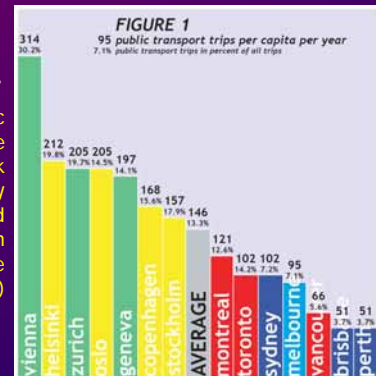
Perth



Modal Split and Significance of Public Transport in the Travel Market

1.

Melbourne's public transport mode share and annual trips rank closely behind Sydney and significantly behind every non-Australian city in the sample (except Vancouver)



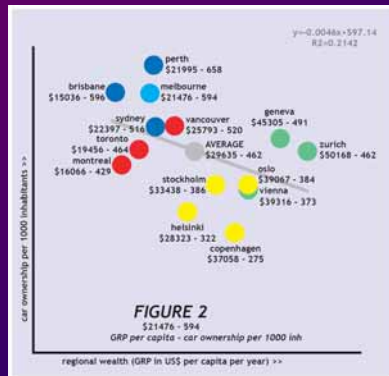
All data refers to 1995/96 and was collected for: Kenworthy J, Laube F (2001) *The Millennium Cities Database for Sustainable Transport*. UITP, Bruxelles and ISTP, Murdoch University, Perth

Comparison of Metropolitan Wealth and Car Ownership

2.

Melburnians own more cars than the wealthier Europeans and the similarly wealthy Canadians and Sydneysiders.

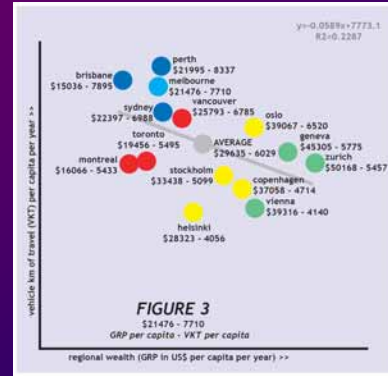
If any, there is a negative correlation between wealth and car ownership across this sample.



Comparison of Metropolitan Wealth and Car Use

3.

Similar results and an even stronger negative correlation between regional wealth and car use.

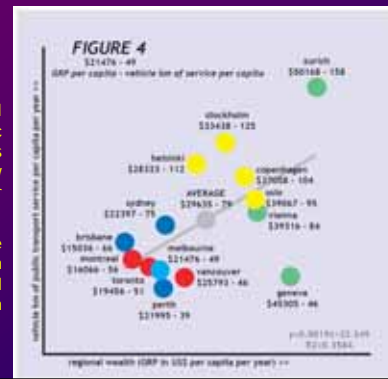


Comparison of Metropolitan Wealth and Public Transport Service Provision

4.

Melbourne's overall provision of public transport service is relatively low (eg. significantly lower than Sydney's).

There is some positive correlation between regional wealth and public transport supply in this sample.

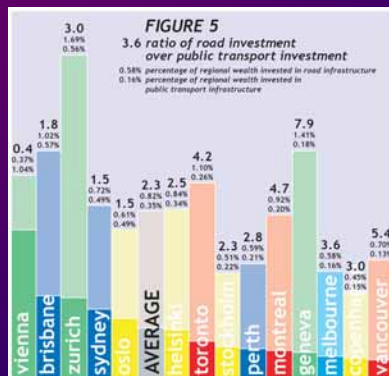


Investment in Roads and Public Transport Infrastructure

5.

Melbourne invests a relatively small proportion of its wealth into transport infrastructure.

What is spent is invested with a greater priority for roads than in any other non-Canadian city in the sample (except Geneva).

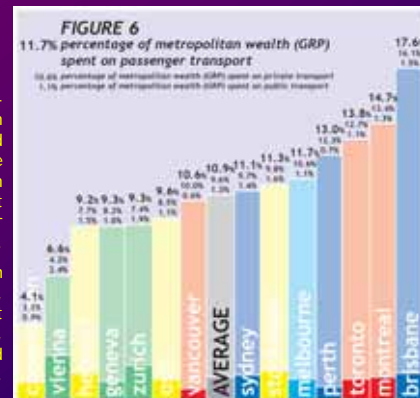


Transport Spending Relative to Metropolitan Wealth

6.

Public transport-oriented cities in Europe have by and large been more successful in minimising transport costs for their economies.

Among the Australian and Canadian cities, Melbourne's transport expenses are average, but facing upward pressure.

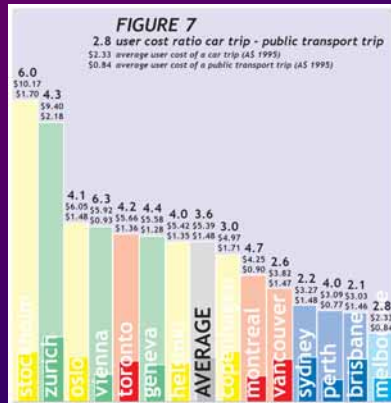


User Cost of Personal Travel

7.

In nominal dollars, Melbournians enjoy the cheapest average costs for car trips and among the cheapest public transport trips.

The user cost ratio between the two modes is relatively favourable to car travel.



Melbourne



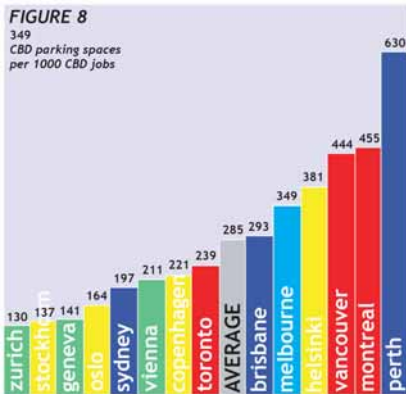
photo by Jeff Kenworthy

Parking Provision in the CBD

8.

Melbourne's CBD parking supply is relatively generous - higher than in all European cities in the sample (except Helsinki), Toronto, Sydney and Brisbane.

Between 1995 and 2000, off-street parking in Melbourne's CBD grew further by more than 45%, faster than employment.

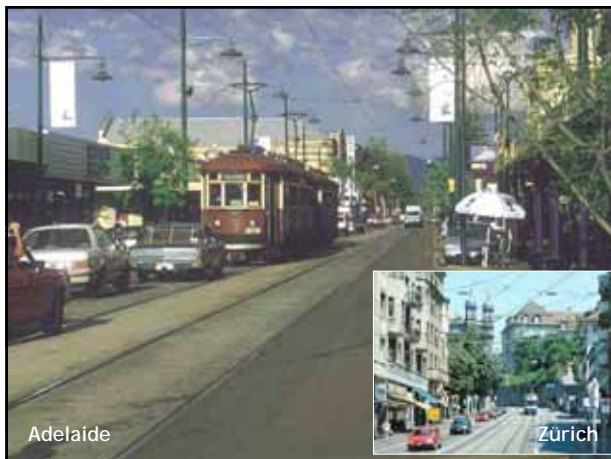
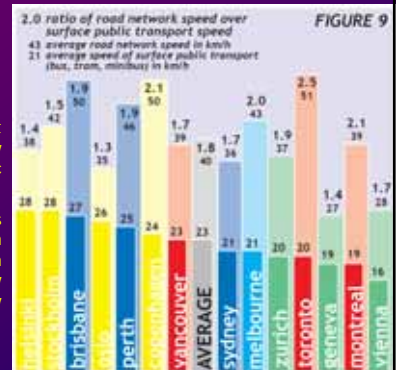


Comparative Speed of Road Traffic and Public Transport (trams and buses)

9.

Surface public transport is typically significantly slower than road traffic in all cities.

The ratio in Melbourne is more unfavourable than in the other Australian cities and in every European city (except Copenhagen).



Adelaide

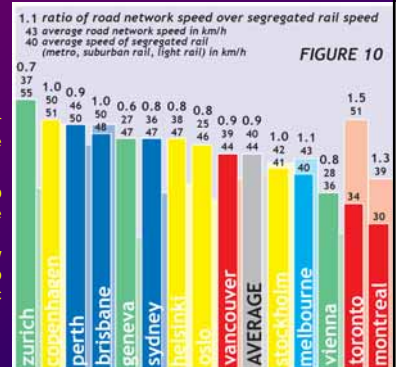
Zürich

Comparative Speed of Road Traffic and Public Transport (segregated rail)

10.

Segregated rail is faster than road traffic in nine of the fourteen cities.

In Melbourne, trains do not keep up with the average speed of cars, resulting in very few speed-competitive trip relations on public transport.

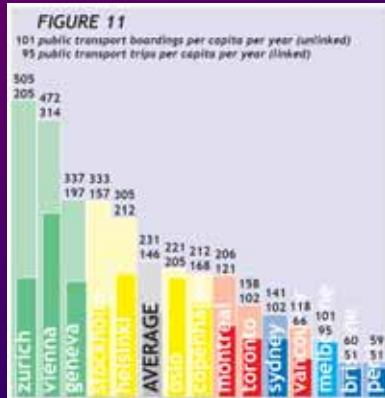


Public Transport Transfers

11.

Melbourne has almost as many *linked* public transport trips as boardings (*unlinked* trips).

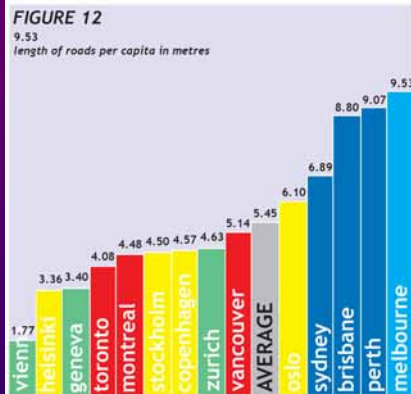
This points to a low occurrence of transfers on a system that is clearly not designed to encourage them.



Provision of Roads

12.

Melbourne has the highest provision of road length relative to population in the sample - despite a relatively uncomplicated urban geography. This trend has not been curbed since 1995.

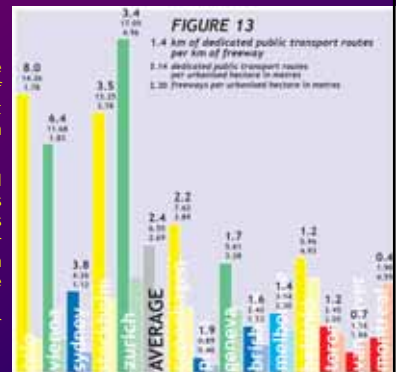


Comparison of Dedicated Public Transport Infrastructure and Freeways

13.

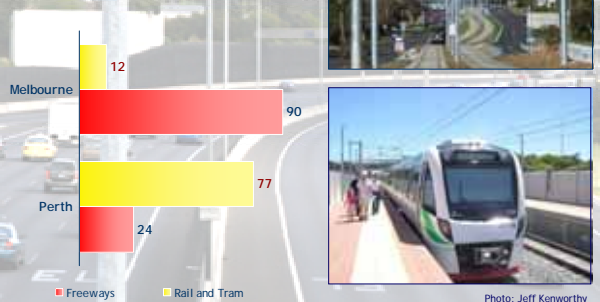
Melbourne does not have an extraordinary supply of dedicated public transport routes (eg. less than Sydney).

The length of dedicated public transport routes relative to freeway km is lower than in the other Australian cities and in every European city in the sample (except Helsinki), and has decreased further since 1995.



Major new transport infrastructure completed in 2005, under construction or with committed funding in Metropolitan Melbourne and Perth

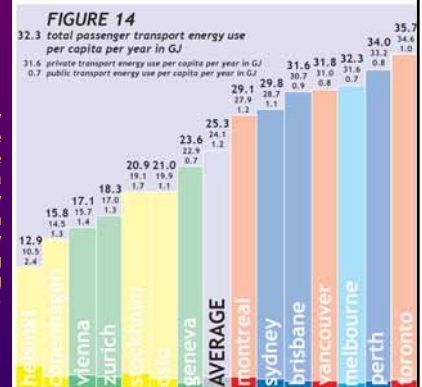
Length in km



Energy Use in Transport

14.

Melbourne's energy use in transport is the third highest in the sample, indicating a Greenhouse liability and exposing an economic vulnerability in an age of rising costs and declining availability of oil-based fuels.



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Melbourne 2030: Urban Growth Boundary (introduced 2003)

- From Suburban Sprawl to Integrated Fringe Area Communities?
- Share of new housing on Greenfield sites to fall from 38% (2001) to 31% (2030)



Melbourne 2030: Activity Centre Policy

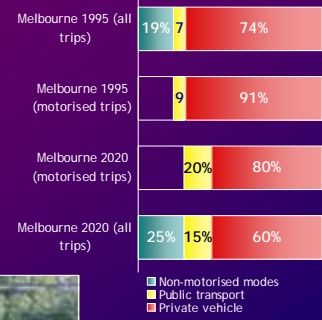
- Identification of 115 existing activity centres to have their nodal function consolidated through densification and hybridisation of uses
- Share of new housing in activity centres and major redevelopment sites to grow from 24% (2001) to 41% (2030)



Illustrations by ecologically sustainable design, city of port philip, DSE

Melbourne 2030: The 20/20/20 Goal

- Increase the share of public transport of all motorised trips from 9% (1995) to 20% (2020)
- Increase the share of non-car trips of all trips from 26% (1995) to 40% (2020)
- Reality check 2005: Only marginal, if any, change in overall modal split since 1995



Legend:
■ Non-motorised modes
■ Public transport
■ Private vehicle

photo by Matthew Patullock



Support for Economic Growth

Metropolitan Transport Plan (MTP) mentions:

- Improving the efficiency of freight and commercial traffic
- Management of safety and environmental issues
- Commitment to 90 km of new freeways and tollways



Support for Economic Growth

MTP does not mention:

- Importance of spatial clustering and interaction of business services and creative industries
- Recognition of the significance of place-making and local amenity in facilitating these processes
- Cost of car dependence



A Strong Role for Public Transport Helps Cities to Generate Wealth

Globally, public transport-oriented cities spend a lower proportion of their wealth on transport than car-oriented cities. The more car-dependent a city, the more money is wasted on just getting around. This is caused by the cost of car dependence and the cost of land given to cars.

Public Transport Reduces Socio-Economic Stress

Low-income households at the urban fringe spend up to 25% of their income on cars. Employment prospects and social inclusion in car-based suburbs depend on cars. Functional public transport access helps lower-income people to 'stay in the loop'.

Public Transport Reduces External Transport Costs

In 1999, there was a nationwide \$22.8 bn 'road deficit', largely generated by the costs of accidents, pollution, noise etc. Excessive reliance on cars exposes Melbourne to the increasing vagaries of global oil availability and prices. Technological progress can only solve a fraction of this problem.

Good Public Transport Saves Time

Segregated public transport must be faster than road traffic, and concentration of destinations in walkable nodes enables non-motorised mobility to be competitive.

Perth's new Southern Rail line: \$1.5 billion, 80 km 130kph.



Public Transport Makes Economic Use of Urban Space

Melbourne's trains can move four lanes of freeway traffic per track without overcrowding. Shifting Melbourne's weekday public transport users onto cars would require an additional 200 km of expressways in the inner area, and an additional five levels of parking across the entire CBD.



240 Persons travel to work:

- in 177 Cars
- in 3 Busses
- in 1 Tram

The collage includes three images: a top-left image showing a dense traffic jam of cars on a city street; a top-right image showing a bus moving through traffic; and a bottom-right image showing a tram moving through a city street.

Public Transport Supports the Globalised Service/Knowledge Economy

Attraction/retention of highly qualified 'knowledge workers' are the principal engine of economic growth and innovation. These industries cluster and thrive in well-connected, high-amenity areas without car dominance.





Public Transport Provides Investment Certainty

Rail and tram infrastructure guarantee high accessibility levels to property developments. Synergies between infrastructure upgrades and land value premiums offer potential for cross-financing.



Property

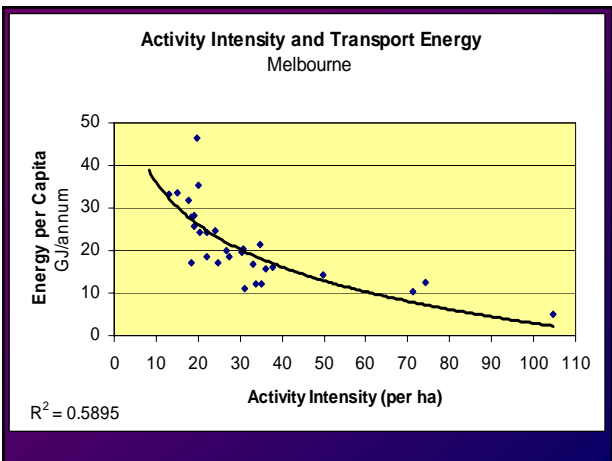
South rail areas to boom: experts

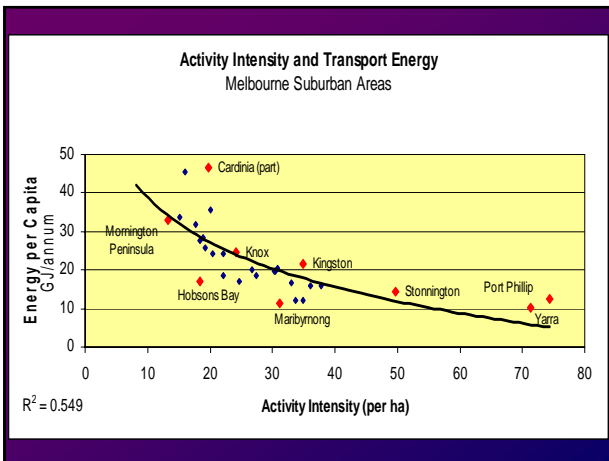


Perth TOD Strategy now to optimise rail investment. Sydney investor has raised \$90m to invest in TOD in Perth as he can make more money there than anywhere else. (Adds an extra 15% minimum to any profit he can make.)

Public Transport Promotes Car-Light Lifestyles

Residents of public transport-rich areas use cars more sparingly and own fewer of them than residents of public transport-poor areas, independent of income. Savings are recycled into more productive sectors of the economy. Services such as neighbourhood car sharing can reduce vehicle ownership further without mobility losses.





ISTP project to explain transport patterns by local govt area in Melbourne and Sydney:

- Intensity of activity (people and jobs per ha) explains 56% of Melbourne's variance and 71% of Sydney's.
- Access to Transit (% of area with high quality access to public transport) explains 61% of Melbourne's variance and 58% of Sydney's.
- Heavily linked, ie density and services both needed.

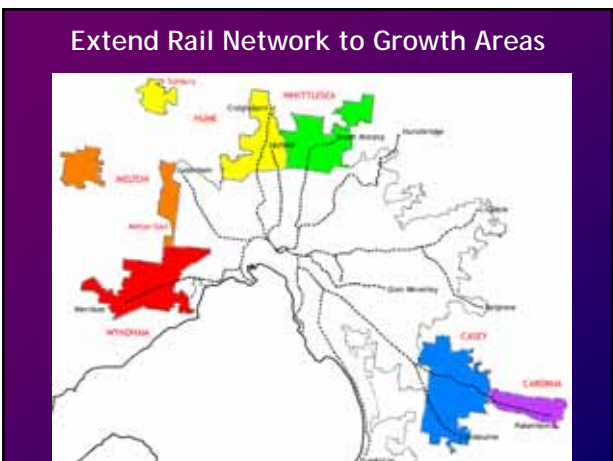
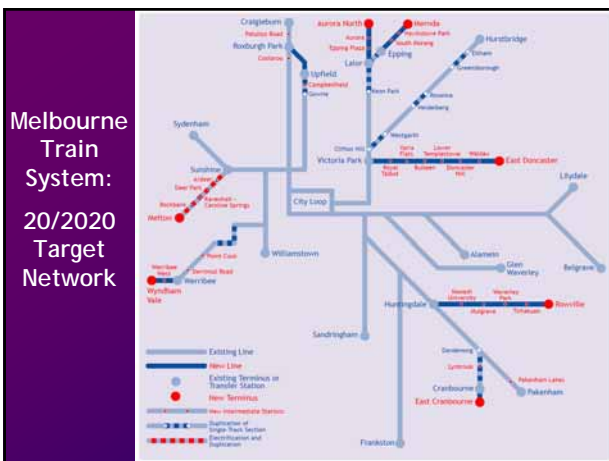


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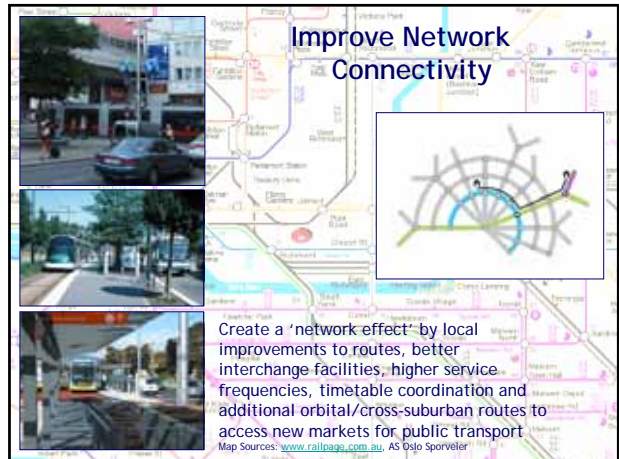
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Public Transport in Growth Areas: Towards the '20/2020 Suburb'?



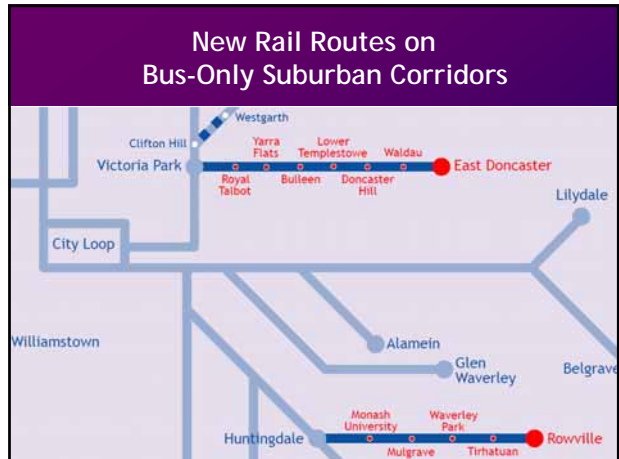
Improve Network Connectivity



Increase Capacity on Congested Rail Routes



New Rail Routes on Bus-Only Suburban Corridors



Access for All: Disability Compliance of the Tram System





Helsinki: Unobtrusive Low-Cost Platform Stops



Low-Floor Centre Sections and Trailers for Older Vehicles
Photos: Light Rail Transit Association



Access for All:
Minimum Service Standards
(7 days + evenings, 15/30-min intervals) across the network

Reform Franchising Agreements

- State Government operating subsidies to the tram and train system increased from \$300m to \$560m per year since privatisation (a significantly higher rate than growth in service levels or passenger numbers)
- Lack of public transport agency with comprehensive network and service planning authority leaves a gap between strategic planning (DOI) and operational planning (Yarra Trams, Connex), which stifles market expansion and responsiveness to user needs
- Consider the reestablishment of an accountable, integrated public transport planning agency in government, as in Perth, Adelaide, Vancouver and nearly all continental European cities.



photos by Jeff Kenworthy

Vancouver: Integrated Planning Delivers Transit Cities and Prioritises Public Transport Investment

Melbourne's 6 Priorities for Public Transport Infrastructure Investment

1. Increase Rail Capacity on congested routes through operational, timetabling and signalling improvements, and duplication of single track lines.
2. Extend Train Lines and Construct Additional Stations to serve urban fringe growth areas - Mernda, Aurora, Wyndham Vale, Cranbourne East and Melton - and the Doncaster and Rowville corridors.
3. Connect All Principal, Major and Specialised Activity Centres by train, tram or SmartBus with a minimum 10-min frequency and with better traffic priority for trams and buses.
4. Upgrade Suburban Bus Services and Frequency (at least every 15 min), as direct services 7 days a week until at least 10 pm.
5. Accelerate Delivery of Measures to Achieve Disability Compliance across the system, and access for all by extending services to all Melbourne residents and jobs
6. Reform Franchising Agreements and reestablish and accountable and integrated public transport planning agency in State Government.

Not a Priority: Major new road projects, other than in designated growth areas at the urban fringe.