

How is public transport performing in Australia

CILTA Moving People – Thursday 17 March 2011

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- › Measuring performance
- › Australia vs the world
- › Australian performance
 - Mode share
 - Cost
 - Community satisfaction
- › Improving performance in Australia
- › Conclusions



Source: *Parramatta Advertiser*, 13 Jan 2009

Measuring performance

- › Measurement of performance only make sense relative to goals
- › Measurement can be quantitative and qualitative
- › Public transport offers accessibility in a spatial area so
 - Measurement can be within a spatial area
 - Measurement can compare performance between spatial areas
- › Concentrate here on urban public transport



Source: Jenny Brake, University of Newcastle upon Tyne, UK

- › Public transport policy objectives are multidimensional contributing to cities in
 - Economic aspects
 - reduction in congestion through mode shift away from car
 - Environmental sustainability with the transport sector being a significant contributor to greenhouse gas emissions
 - Social aspects
 - positive health impacts
 - positive social inclusion benefits
- › Elements of performance measurement
 - Mode share
 - Cost
 - Community satisfaction/ Liveability

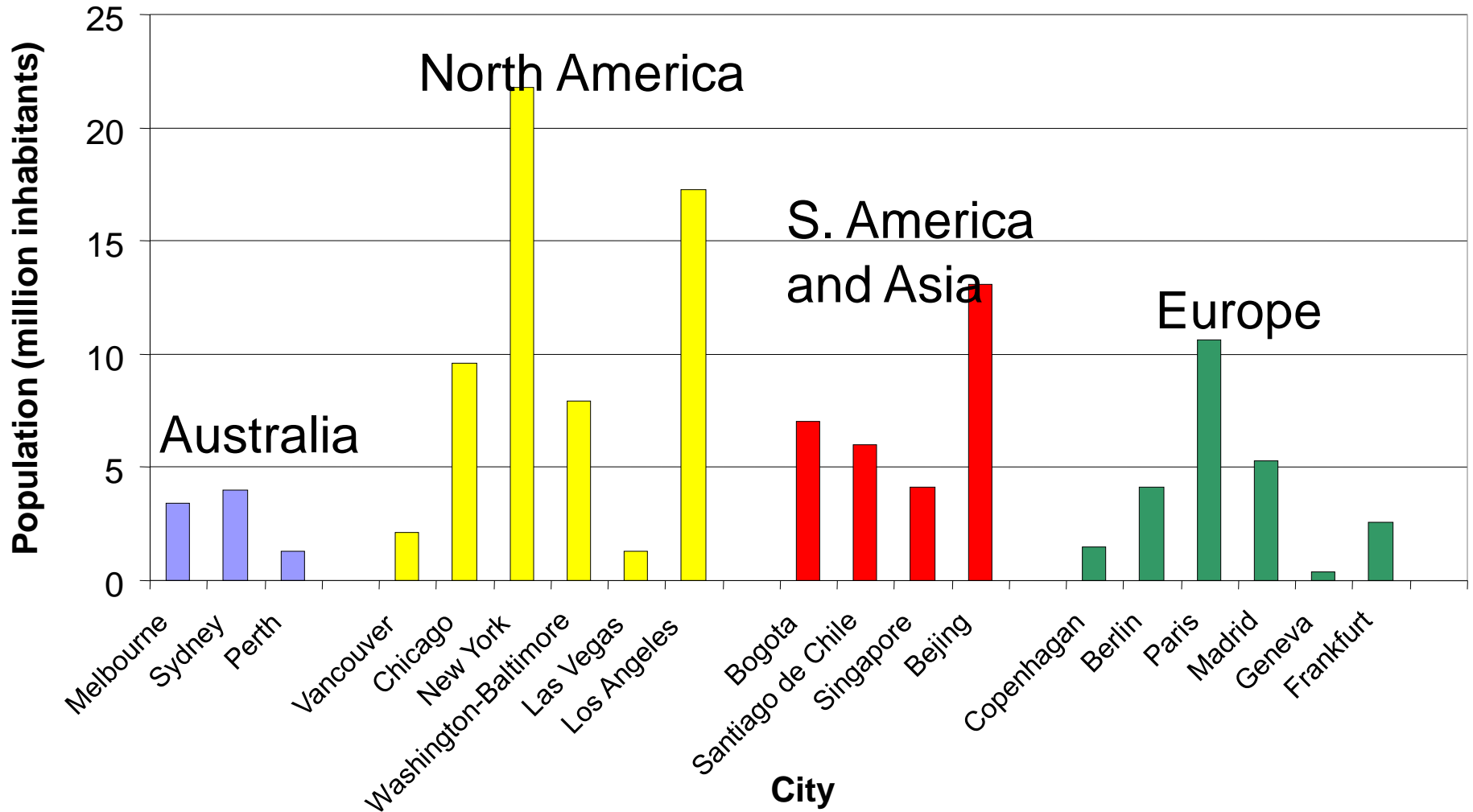
Australia vs the world

- › Australian cities are difficult to benchmark against other world cities in the aspects known to be important in public transport provision
- › Different characteristics suggest different comparators (and data difficult to ensure comparisons)

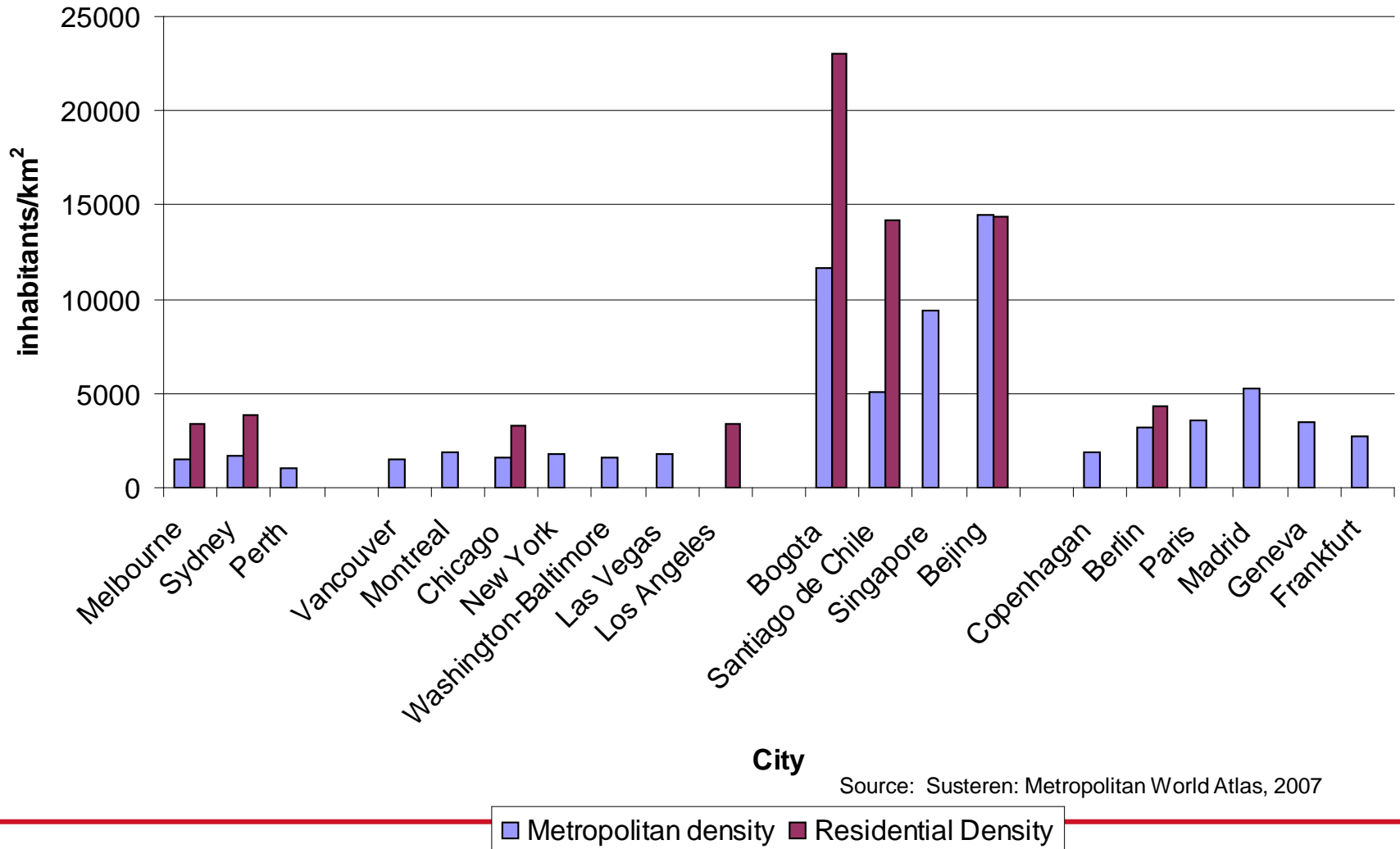


Source: teacher.scholastic.com/.../australia_globe.gif

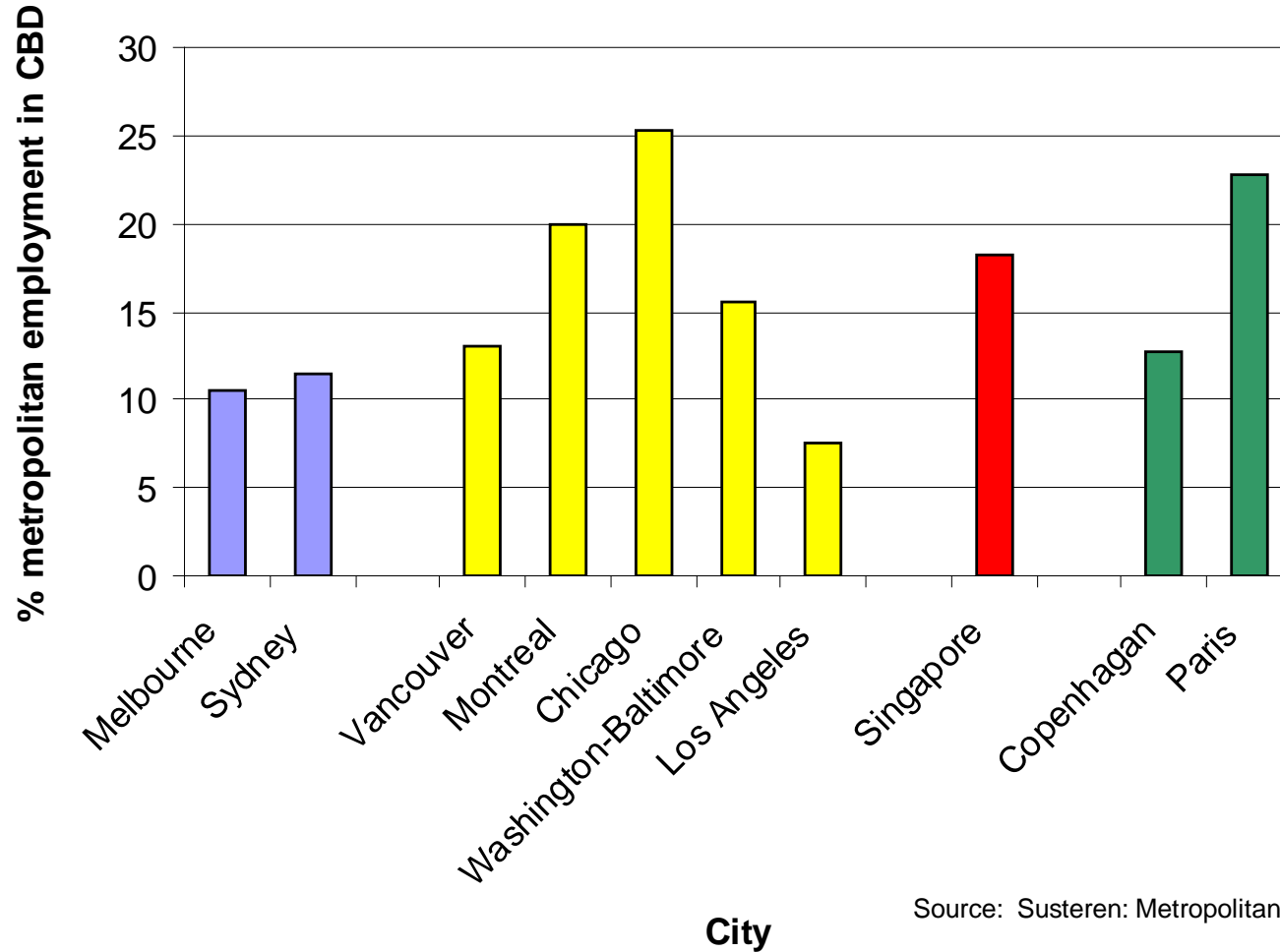
Cities and population size



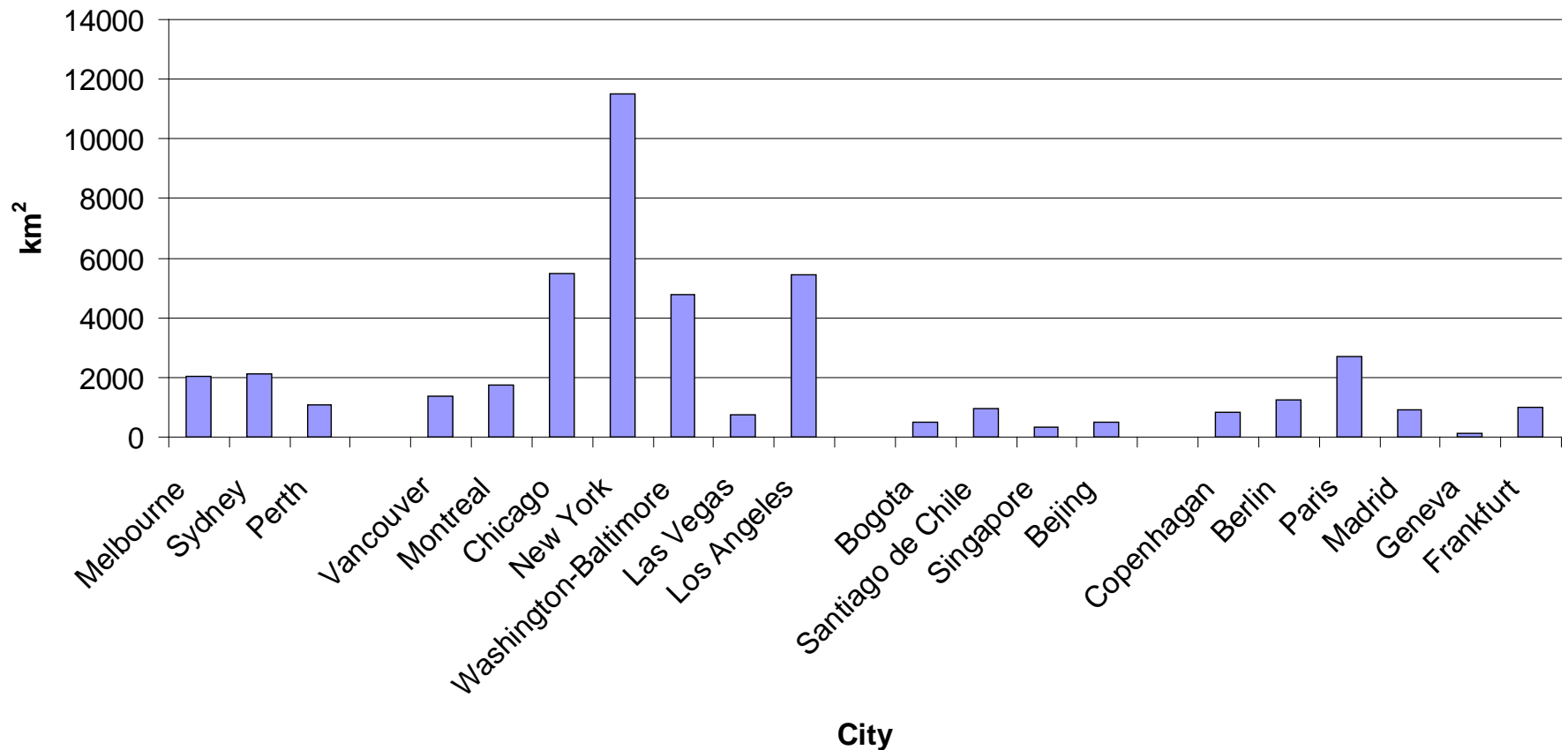
Source: Susteren: Metropolitan World Atlas, 2007



CBD share of employment



Source: Susteren: Metropolitan World Atlas, 2007



Source: Susteren: Metropolitan World Atlas, 2007

Australia vs the world – conclusions

- › In terms of size, Australian cities have more in common with Europe
- › In terms of densities, Australian cities have more in common with North America
- › CBD employment shares are low, only Los Angeles lower
- › Built up area is slightly higher than Europe but considerably lower than North America
- › South American and Asian comparators have higher populations and densities of several magnitudes greater as a result of their small built up areas

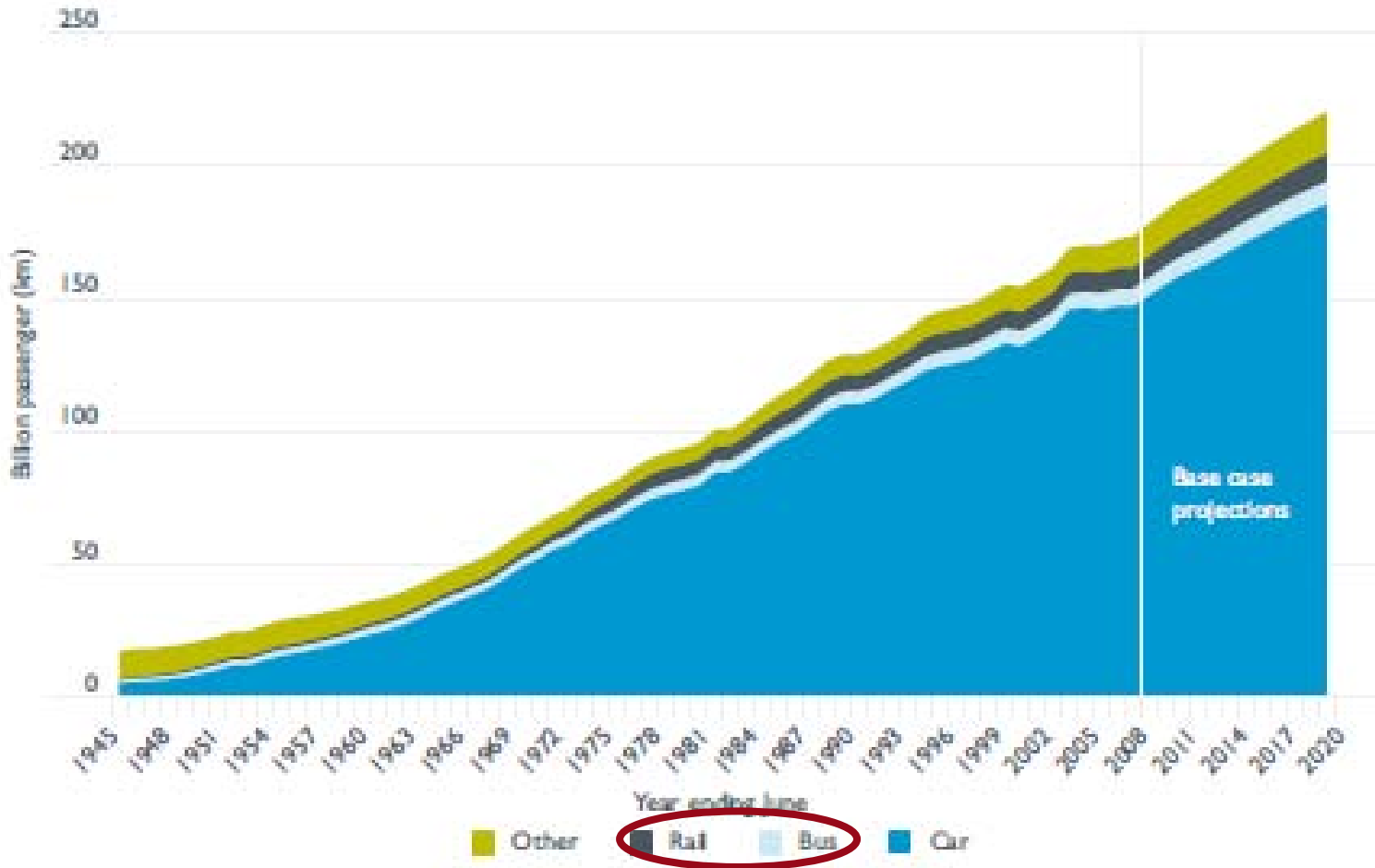


Source:
teacher.scholastic.com/.../australia_globe.gif

Measuring performance

- › Measuring performance from whose perspective?
 - Government? Users? Non-users?
- › Measuring performance:
 - Mode share
 - Costs
 - Customer satisfaction

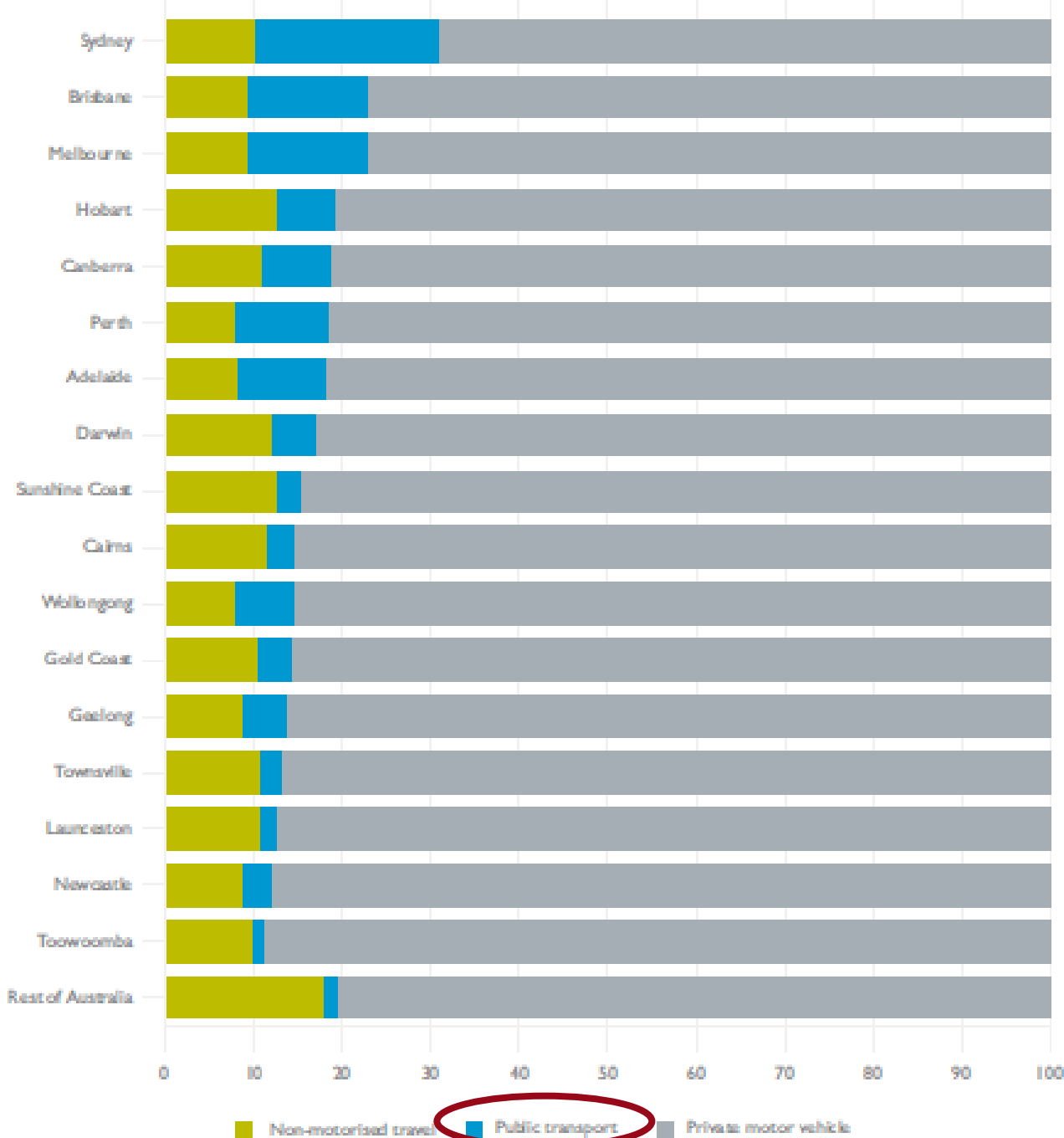
Travel in all Australian Cities



Source: BITRE 2008

Source, State of Australian Cities, 2010, p 55
Major Cities Unit

Mode share for travel to work for Australian Cities

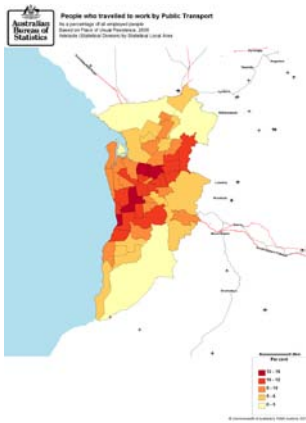


Source: ABS 2006

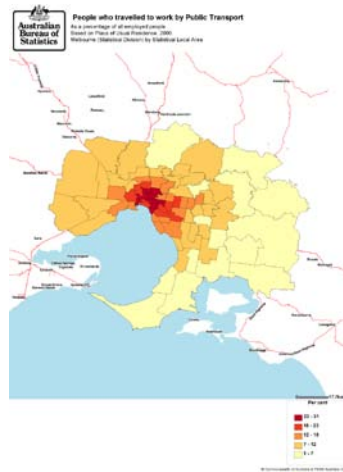
Source, State of Australian Cities, 2010, p 106 Major Cities Unit

- › The traditional role of density
 - Is there a relationship between density and public transport use for Australian cities?
 - Density also a major factor in successful public transport provision

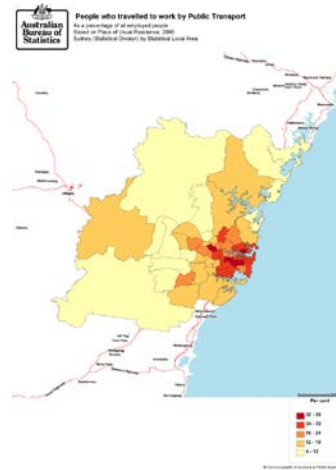
Public Transport Mode share for JTW and density



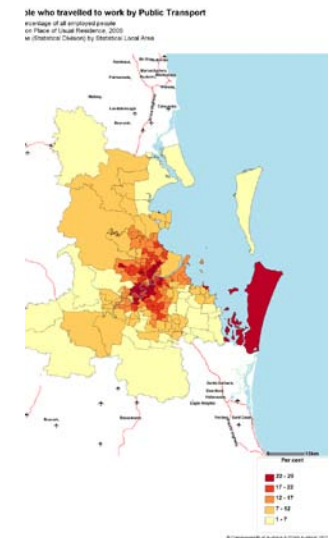
Adelaide:
627 people/km²
Max %: 12-15



Melbourne:
487 people/km²
Max %: 23-31



Sydney:
353 people/km²
Max %: 32-39



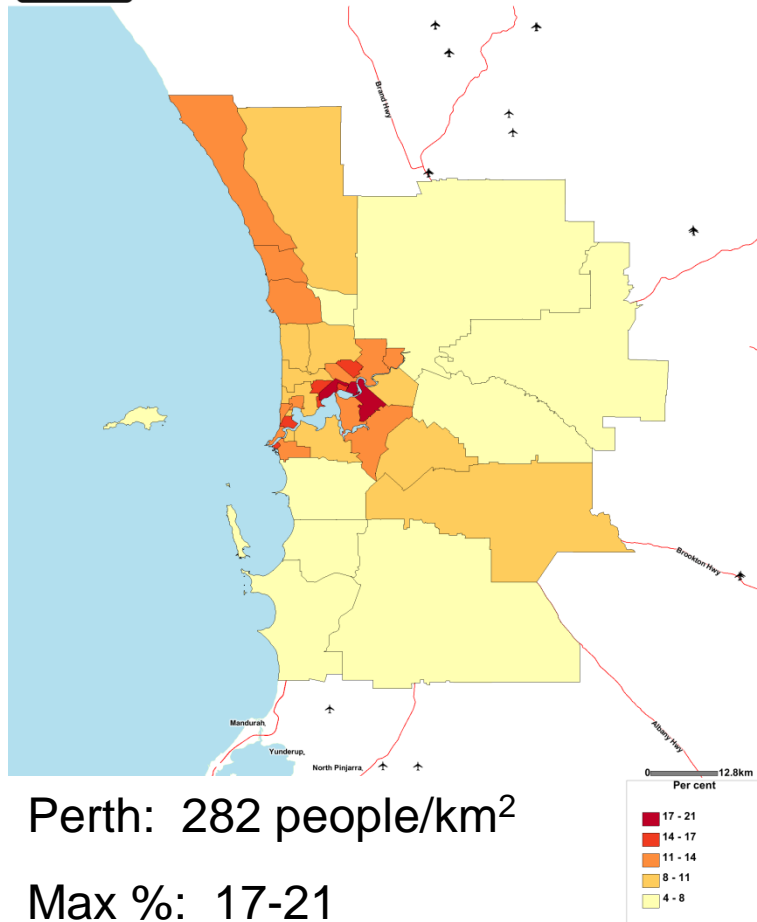
Brisbane:
308 people/km²
Max %: 22-29

Mode share for JTW and density



People who travelled to work by Public Transport

As a percentage of all employed people
Based on Place of Usual Residence, 2006
Perth (Statistical Division) by Statistical Local Area



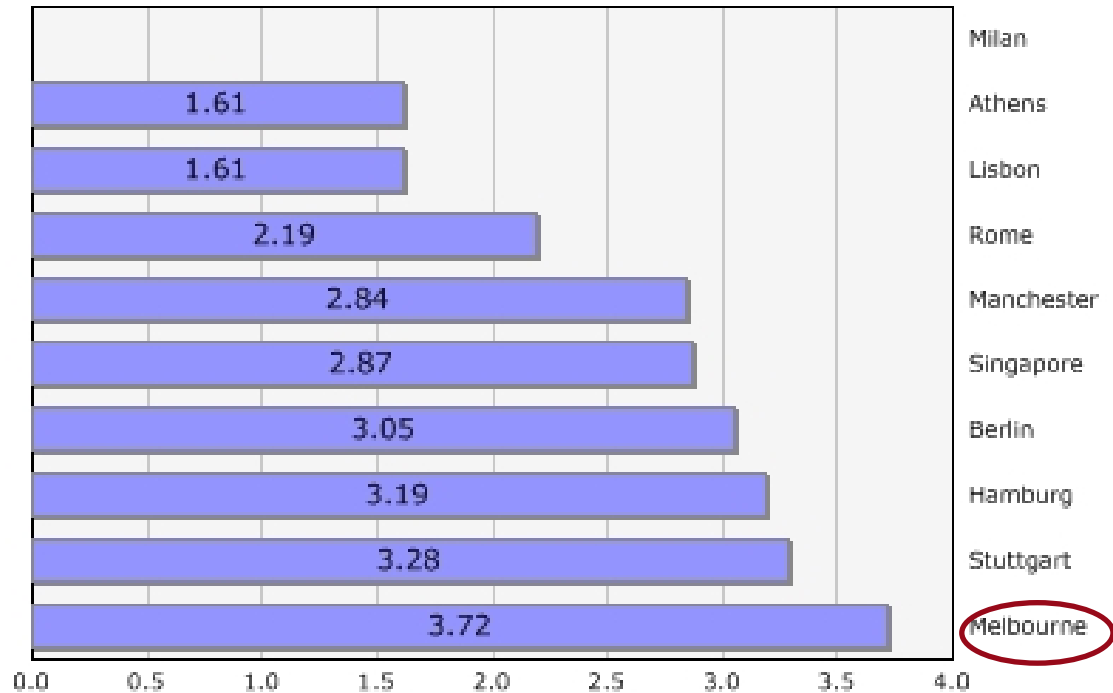
© Commonwealth of Australia & PSMA Australia 2007

Density clearly helps
in the supply of public
transport

BUT

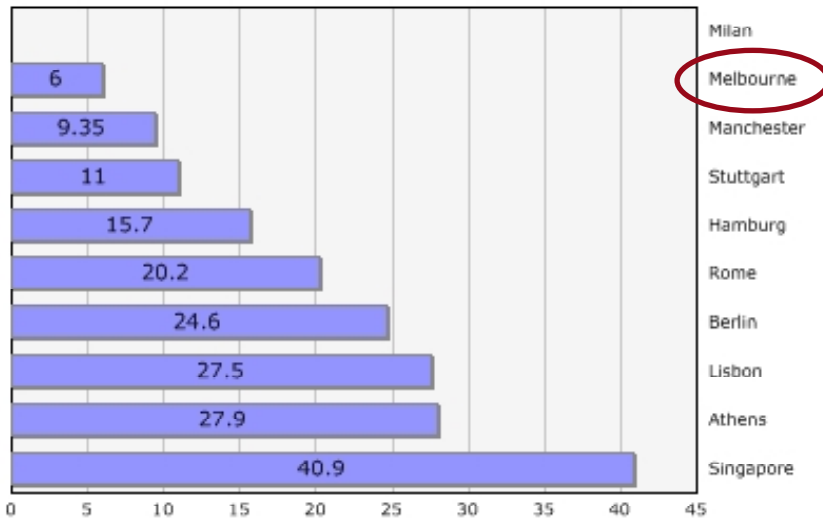
In Australia not a
clear link between
density and public
transport take-up

(Poor) International comparison: daily trips per inhabitant



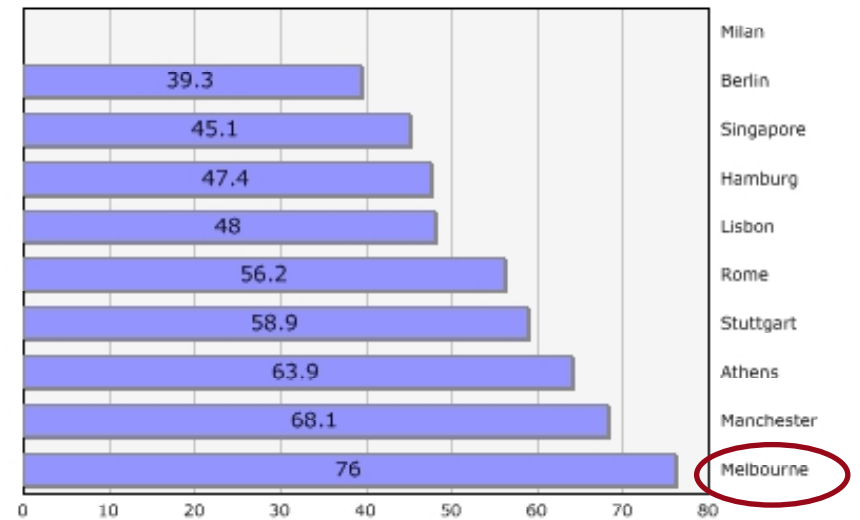
©2006 UITP

Source: UITP Mobility in Cities database



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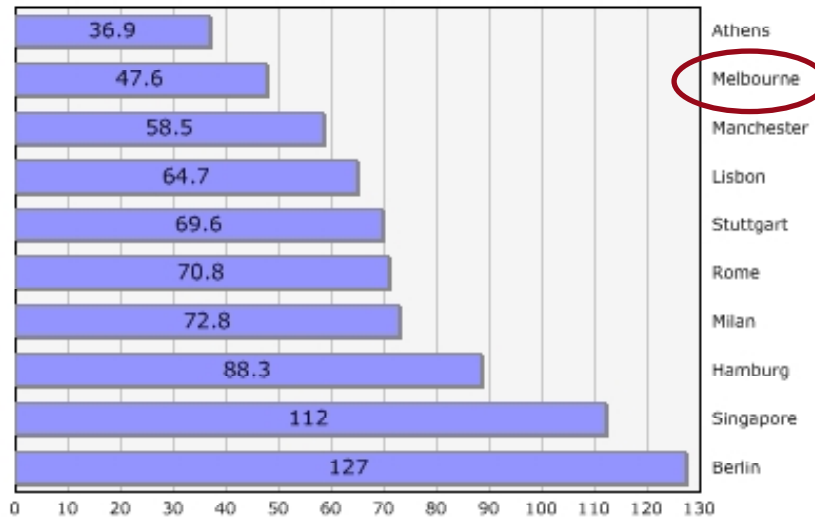
Percentage of trips by public transport



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Percentage of trips by private transport

Source: UITP Mobility in Cities database

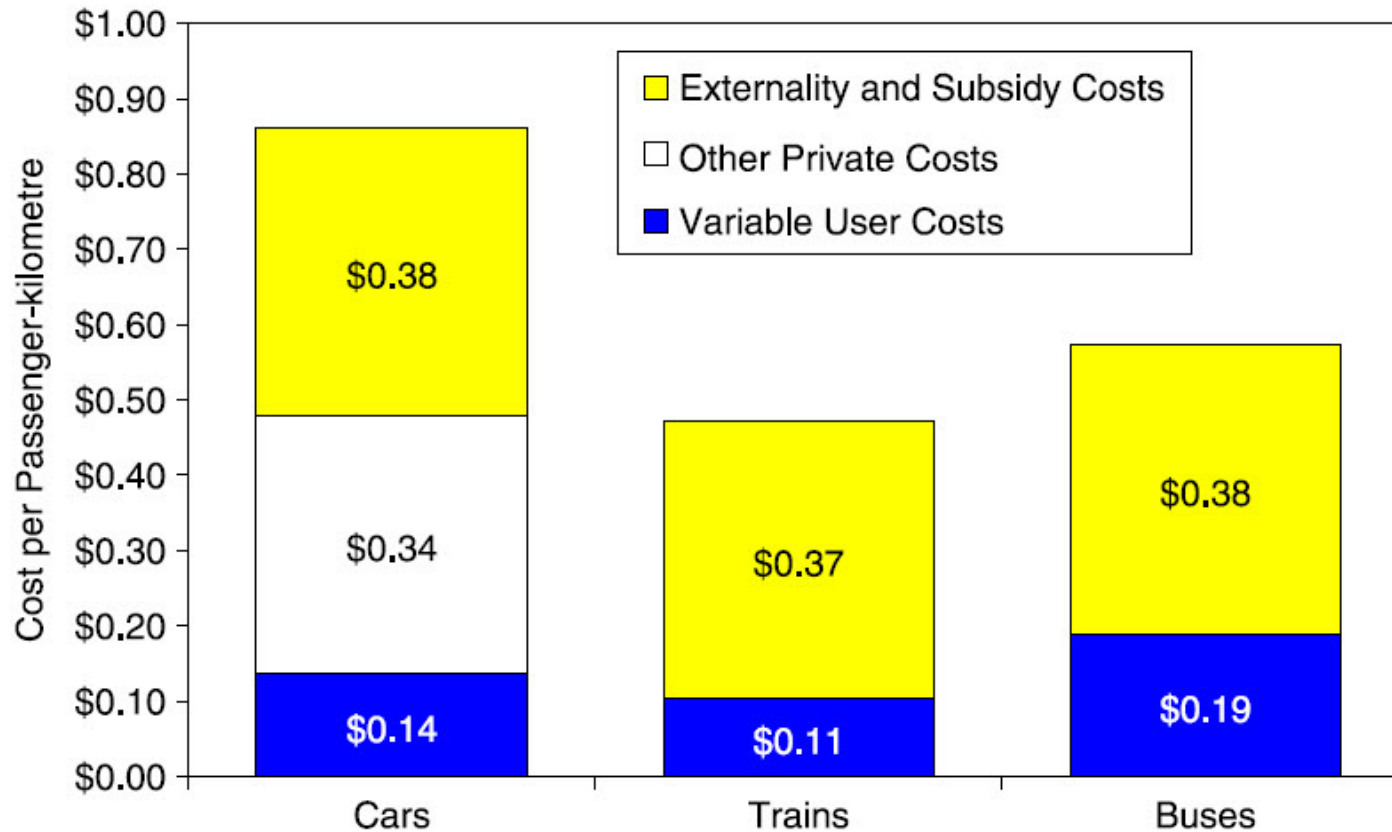


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Percentage of trips by public transport

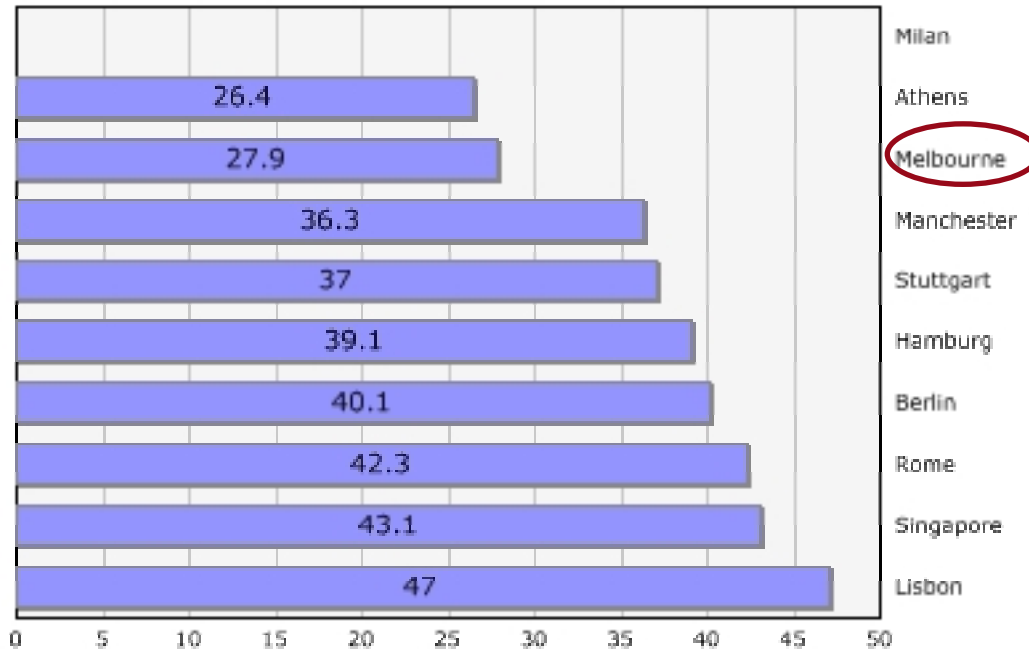
Source: UITP Mobility in Cities database

Performance – Total Costs in Sydney (2005/6)



Source, Glazebrook, G (2009) **Taking the Con Out of Convenience: The True Cost of Transport Modes in Sydney**, Urban Policy and Research, Volume 27

(Poor) International comparison: costs of motoring

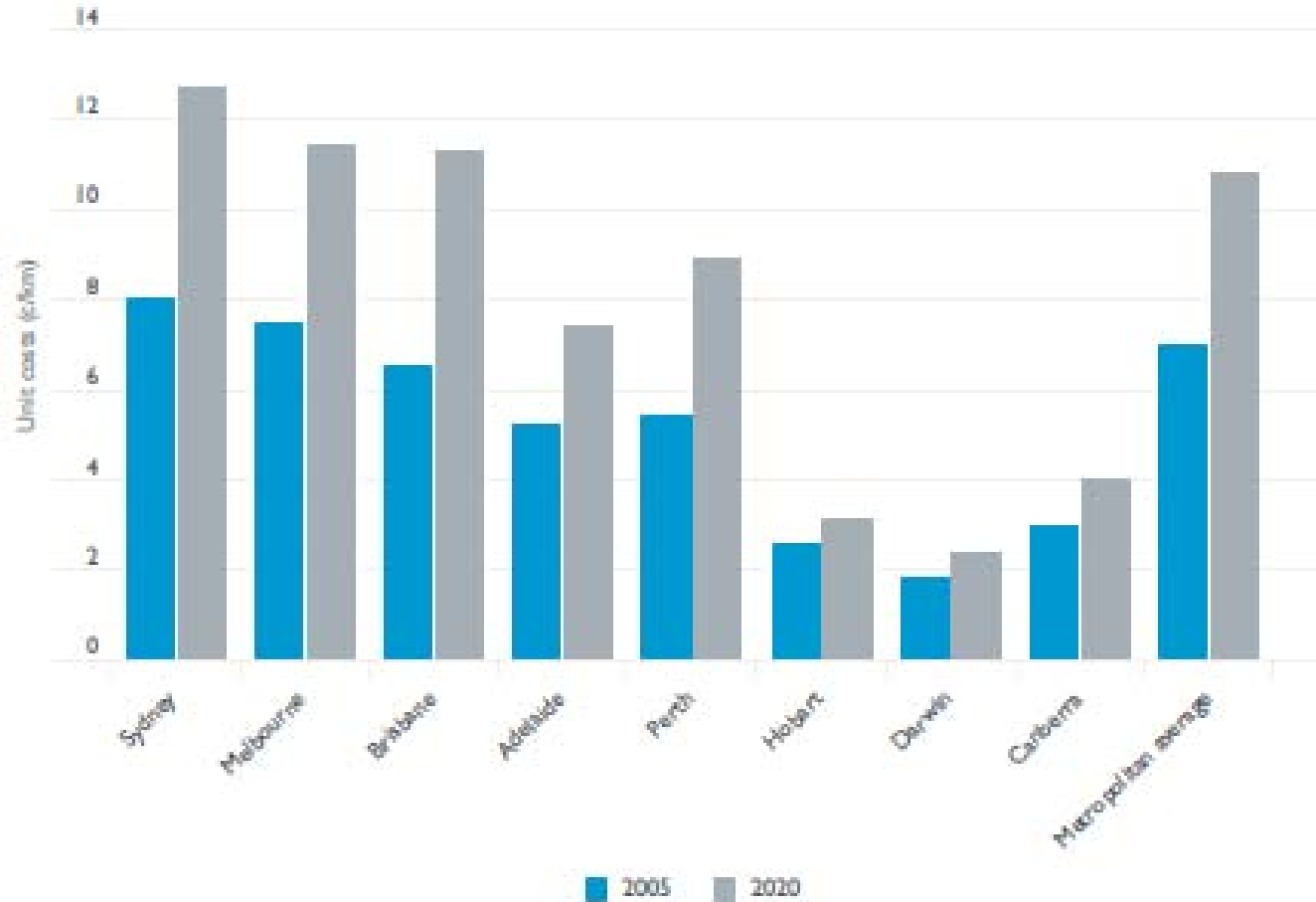


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Cost (\$) of one private motorised passenger kilometre for the traveller

Source: UITP Mobility in Cities database

Congestion Costs



Source: BTRE 2007

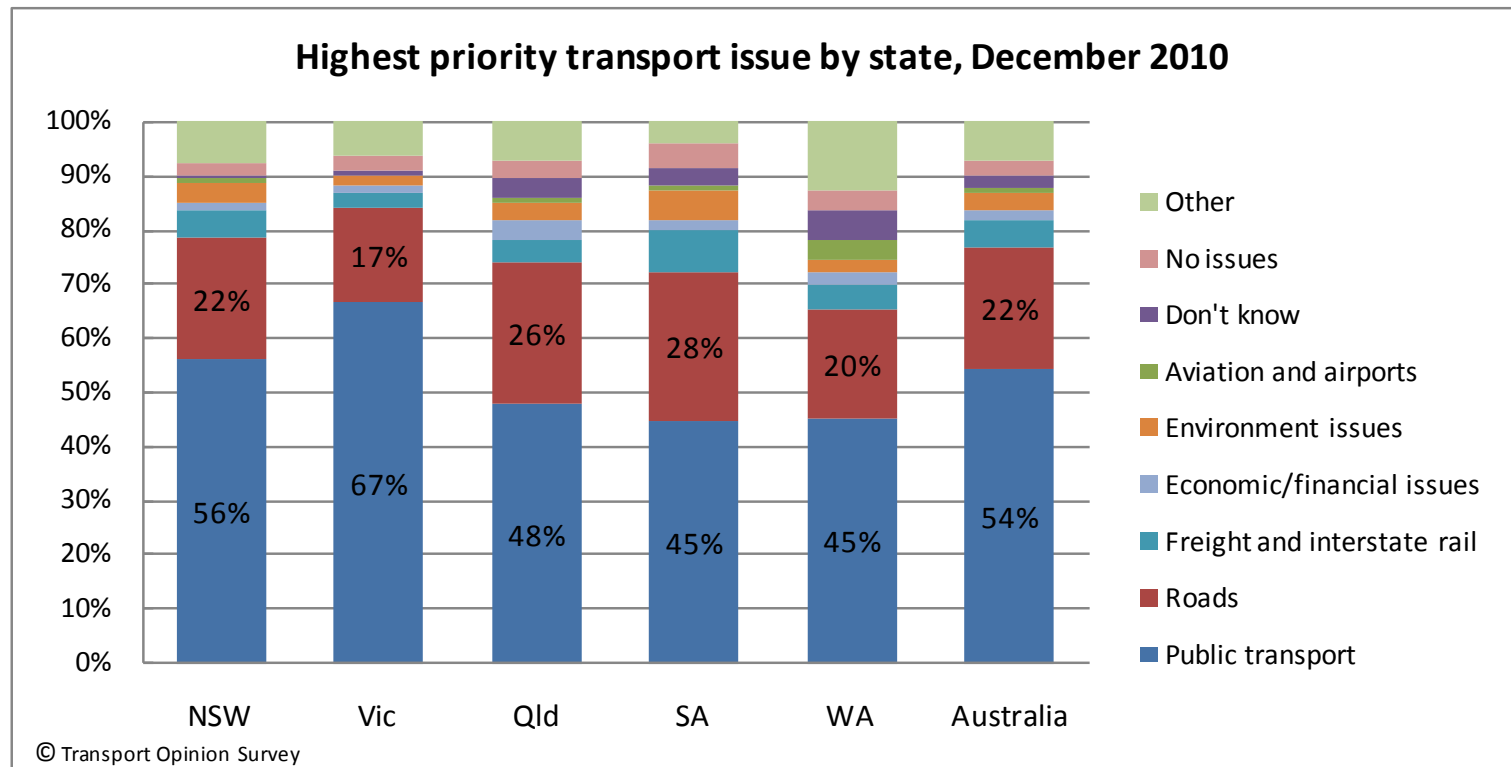
Source, State of Australian Cities, 2010, p 54
Major Cities Unit

- › Surveys of users and non-users
 - TOPS
 - Auspoll (Property Council)
- › Surveys of users
 - Sydney
 - HTS questions on satisfaction
 - ITSR survey of bus and rail users with 10 elements relating to
 - Reliability
 - User cost
 - Travel time
 - Physical accessibility etc

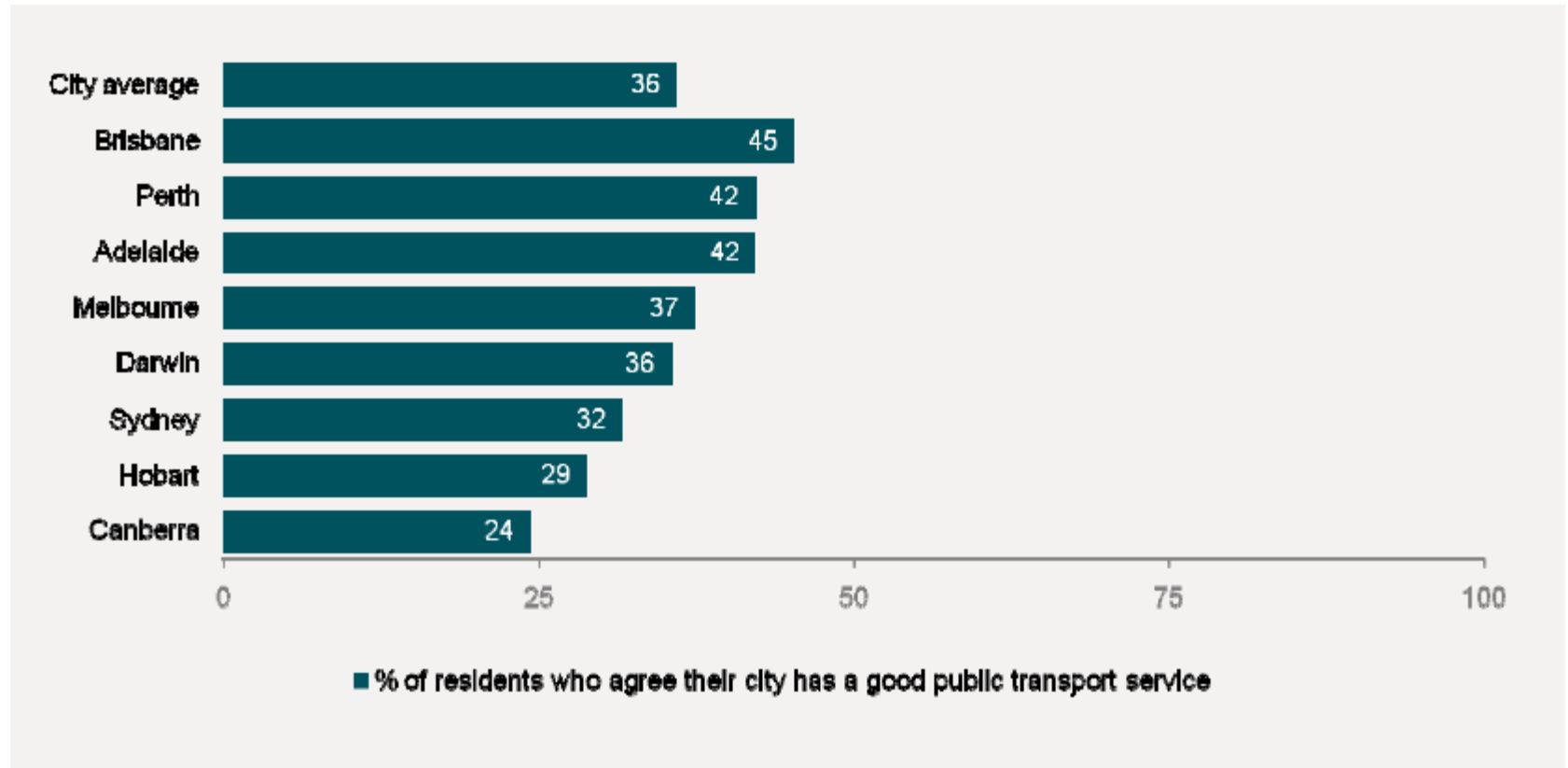
ITLS-Interfleet Transport Opinion Survey

Public transport is highest priority issue for transport in Australia

› Highest priority in every quarter of TOPS and in every state



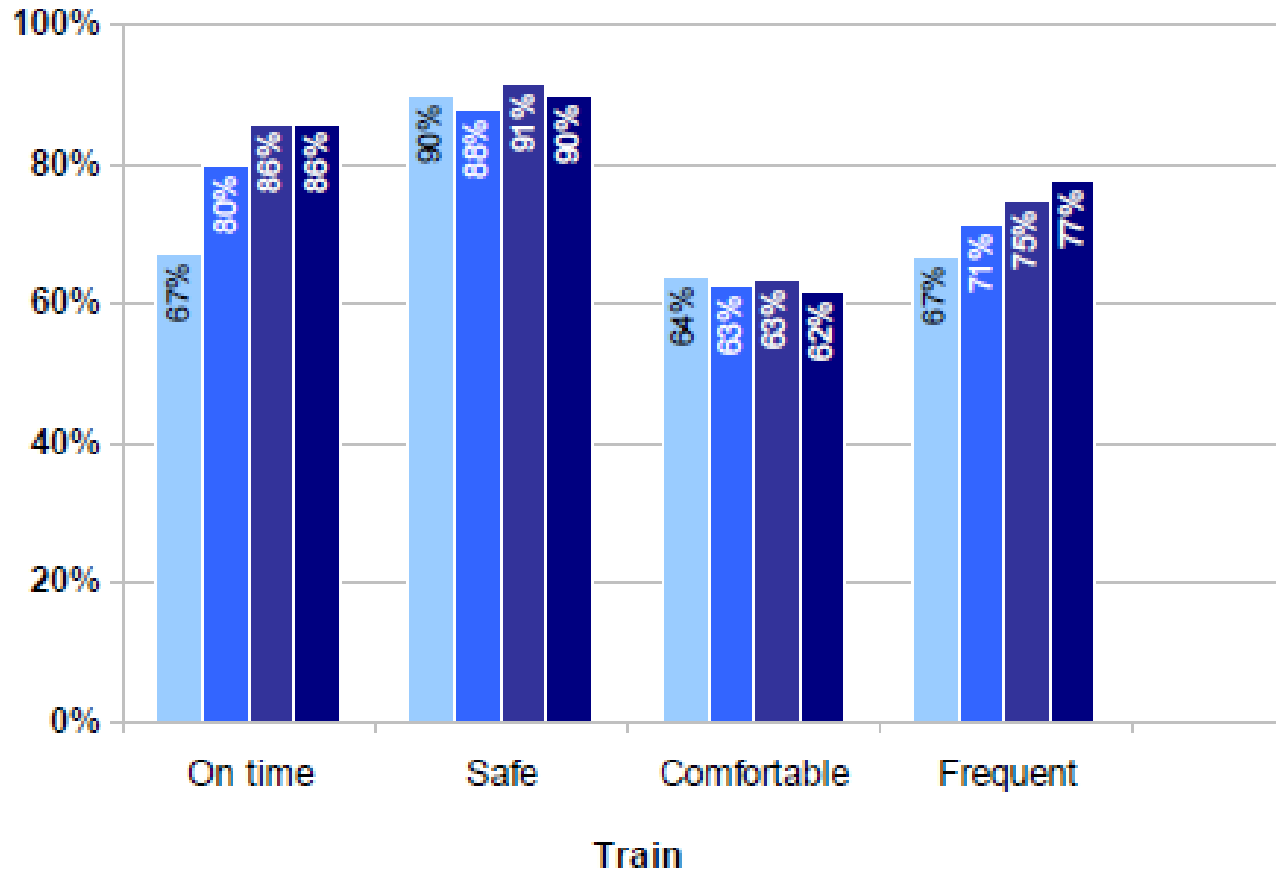
Property Council Auspoll



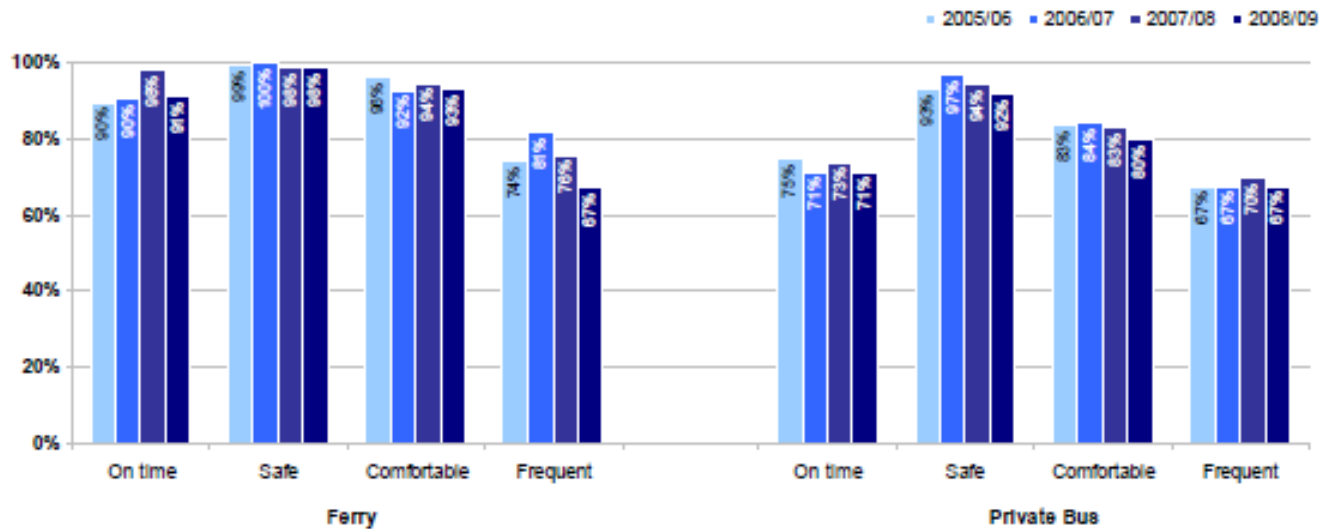
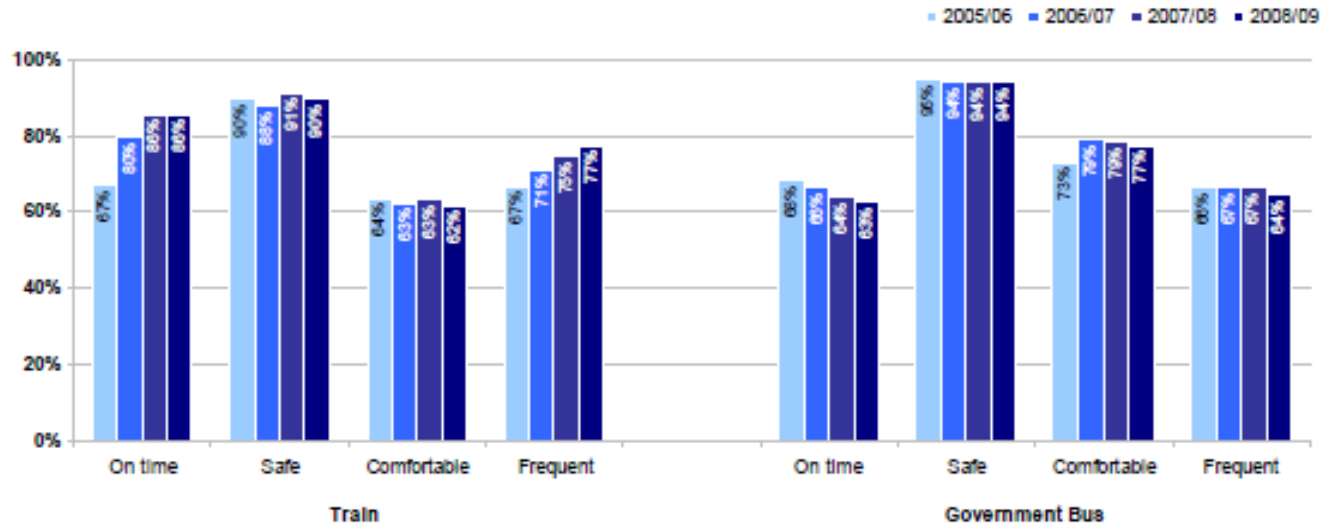
Source: The Property Council of Australia (2011), *My City: The People's Verdict*
Available from http://www.propertyoz.com.au/library/110122_Auspoll_My%20City%20The%20Peoples%20Verdict_FINAL.pdf

Sydney users' satisfaction with train over time

Satisfied = "always" or "mostly" satisfied



Sydney users' satisfaction with all modes over time



- › Australia has to ‘live’ with the urban form/low density cities it has, at least in the short run
- › Improving public transport in the short run is not about doing the big things – eg creating new links - but making sure money is well spent
 - Network planning, co-ordination and integration with high frequency being the key to encouraging public transport use
 - Measure and address inequities in spatial access (accessibility planning)
 - Ensure access to public transport is not thwarted by physical features such as footpaths, shelters, lighting, information
 - Fares have a role – particularly integrated fares – in maintaining passengers
 - Supportive policies: eg transport/land use integration, taxation, parking policy
 - Innovative – flexible transport services for low density areas to provide accessibility
 - TravelSmart - targeted action has shown mode shift is indeed possible

Improving public transport performance – long run

- › In the longer run, transport and land use planning must be done together to try and influence the location of density to help make public transport more accessible at high frequency and viable

Lead in to workshop discussion

- › What are the things holding us back from achieving better performance, growth and development?



Questions?

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