How is public transport performing in Australia

CILTA Moving People – Thursday 17 March 2011

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Outline

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

Source: Parramatta Advertiser, 13 Jan 2009
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
Measuring performance

› 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

Densities

City

CBD share of employment

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: 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 role of density

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

Perth: 282 people/km²
Max %: 17-21

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

Source: UITP Mobility in Cities database
Modal information

Percentage of trips by public transport

Percentage of trips by private transport

Source: UITP Mobility in Cities database
Impact of supply

Percentage of trips by public transport

Source: UITP Mobility in Cities database
Performance – Total Costs in Sydney (2005/6)

(Poor) International comparison: costs of motoring

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

Source: UITP Mobility in Cities database
Congestion Costs

Source: State of Australian Cities, 2010, p 54
Major Cities Unit
Performance – Customer satisfaction

› 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
Public transport is highest priority issue for transport in Australia

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

Sydney users’ satisfaction with train over time

Satisfied = “always” or “mostly” satisfied

Source: Household Travel Survey 2008/09 Summary Report, 2010 release
Sydney users’ satisfaction with all modes over time
Improving public transport performance – short run

 › 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
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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