Public Transport & Socially Inclusive Communities

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Public Transport Research Group
Institute of Transport Studies
Monash University, Australia

PTV Division Meet 23-03-2016

Agenda

1. Introduction
2. The Problem
3. The Needs
4. Solutions

This paper outlines links between PT and socially inclusive communities

- Emphasis is on persons in the population with impairments. However also considers the wider population with transport difficulties
- Explores:
  - Problems
  - Needs
  - Solutions
- Also discusses new research undertaken by PTRG/PTV in the next few years in this field

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People with Impairments have a range of barriers to travel

Barriers to Travel

People with WALKING DISABILITIES may:	• have trouble negotiating steps and stairs • be able to move only very slowly • fatigue easily • have balance problems, especially in a moving vehicle	• require safe floor spaces • face risks in a moving crowd • find it difficult to walk over unstable surfaces • need a wider space to walk in
People with MANIPULATORY DISABILITIES may have difficulties such as:	• operating handles, switches or ticket machines • the placement and shape of handrails	
People with VISION IMPAIRMENT may have difficulty with:	• identifying changes in direction, level and hazards such as platform edges • distinguishing between road/pedestrian areas • projecting signs along the path of travel • the size, colour, contrast and illumination of signs	• knowing whether a lift has arrived at the right floor • negotiating steps safely • avoiding obstacles • sudden direction changes on pathways
HEARING problems may be:	• hearing announcements such as 'next train' or emergency announcements • detecting approaching vehicles • buying tickets, obtaining timetable information • making phone enquiries	
Those with INTELLECTUAL DISABILITIES may have trouble with:	• finding the way in an unfamiliar setting • interpreting signs and information • coping with unpredictable changes, such as cancelled trains • coping with complex instructions or timetables	
A person with a PSYCHIATRIC DISABILITY may have difficulties due to:	• stress or anxiety in crowded situations • unexpected changes • unpleasant interpersonal encounters • fatigue and confusion	
WHEELCHAIR USERS have difficulties associated with:	• uneven, bumpy or broken services • soft surfaces, such as sand • level changes where no ramps are provided	• negotiating kerbs • insufficient or badly designed parking spaces

Source: Evans and White, 1998 from Currie G and Allen J (2007) 'Transport Disadvantage and Australians with Disabilities' Book chapter in Currie G Stanley J and Stanley J (2007) 'No Way To Go - Transport and Social Disadvantage in Australian Communities' Monash University ePress
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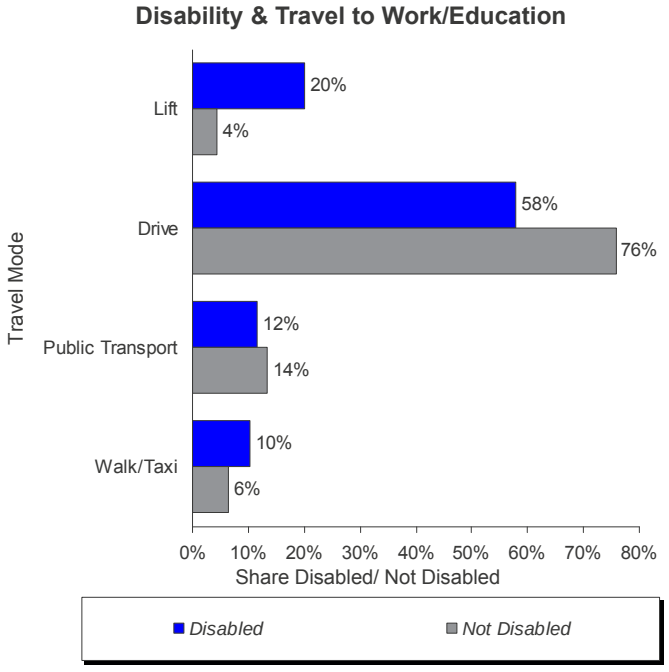
People with impairments use PT less and rely on lifts/ walk-taxi…



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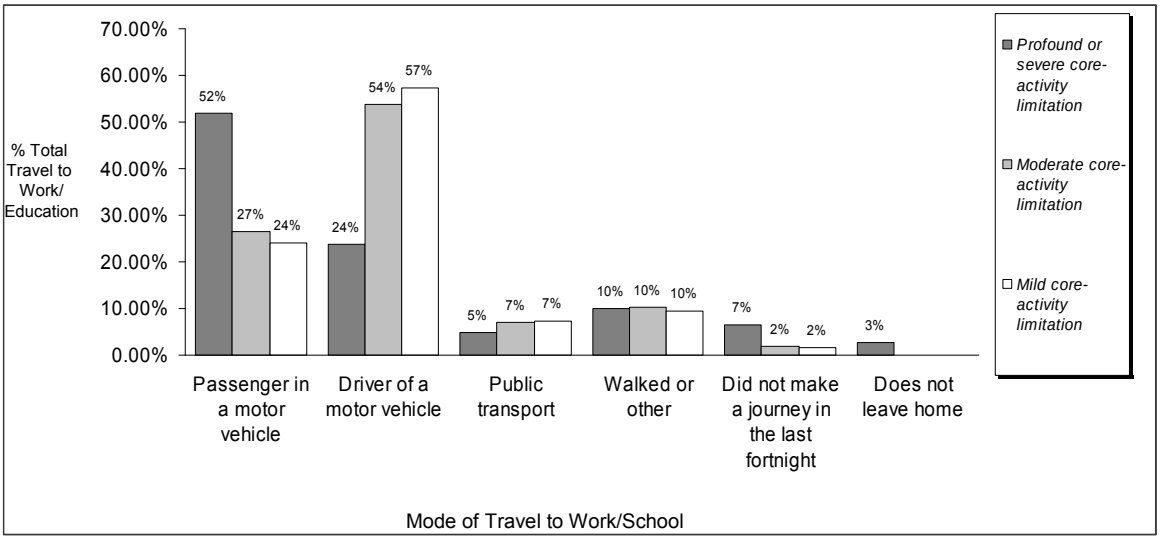
…mode participation depends on level of activity limitation

Travel to Work/Education by Mode and Nature of Impairment



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Older Australians have similar concerns

Transport Issues and Older Australians

1. Communication and Information
- Information not accessible to people with visual impairments and other barriers (language etc)
- Lack of promotion of new services
- Lack of promotion of transport service options
- Lack of communication and information about available transport options for people with different needs
- Educating transport users to be more vocal about their needs
- Difficulties in using timetables and ticketing procedures

2. Security
- Concerns about safety

3. Responsive to Changing Needs
- Replacement of Bus Fleet with accessible buses
- Impact of fuel price rises (and future rises)
- Transport not responsive to needs of active healthy seniors
- Lack of door to door services

4. Lack of Fringe/Rural Services
- Inadequate relative to the city

5. Physical Accessibility to Transport
- Need to improve walking environment

6. Physical Accessibility onto Transport
- Vehicle and stop infrastructure

7. Timetabling/Connectivity
- Lack of integration between walk, cycle, community transport, public transport and taxis

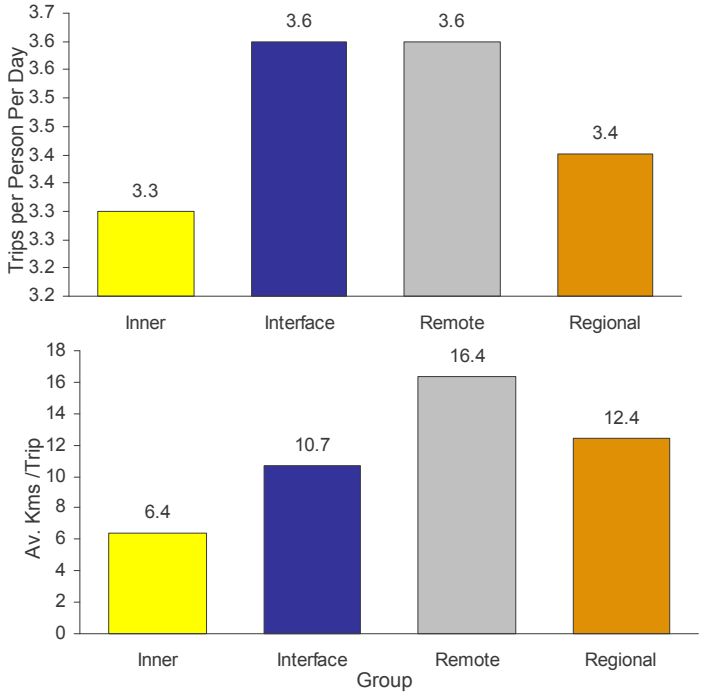
8. Staffing and Human Assistance
- Lack of staff training
- Lack of staff to support users

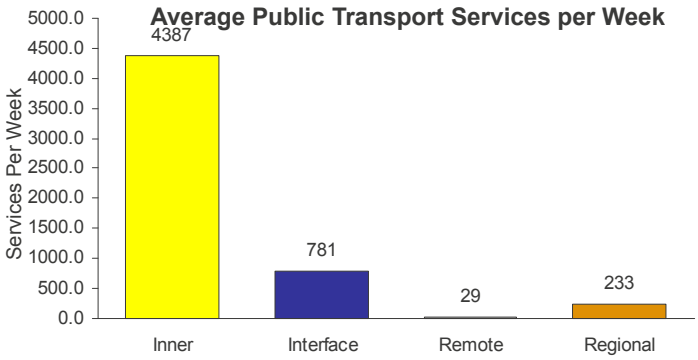
9. Community Perceptions
- Lack of understanding of the importance of accessible transport

10. Policy Planning
- Lack of integration between agencies/Govt
- Land use not coordinated
- Current solutions don't maintain independence

Source: Conference on Transport, Social Disadvantage and Well Being, Melbourne 2006 – Workshop on Older Australians and Those with Disabilities

Fringe/remote/ regional residents have a bigger transport task but far less Public Transport





Source: Vista (2008) Monash University Australian Research Council Project LP0669046 (2008-9)

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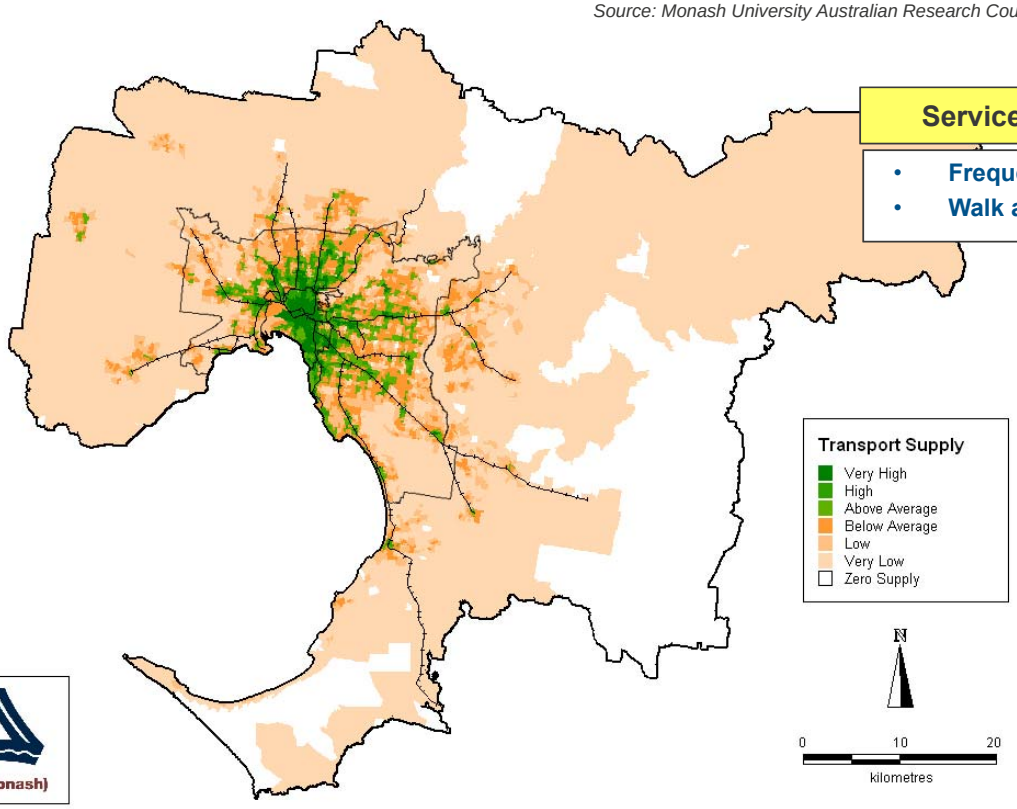
Fringe public transport supply is below average....

Source: Monash University Australian Research Council Project LP0669046 (2008-9)



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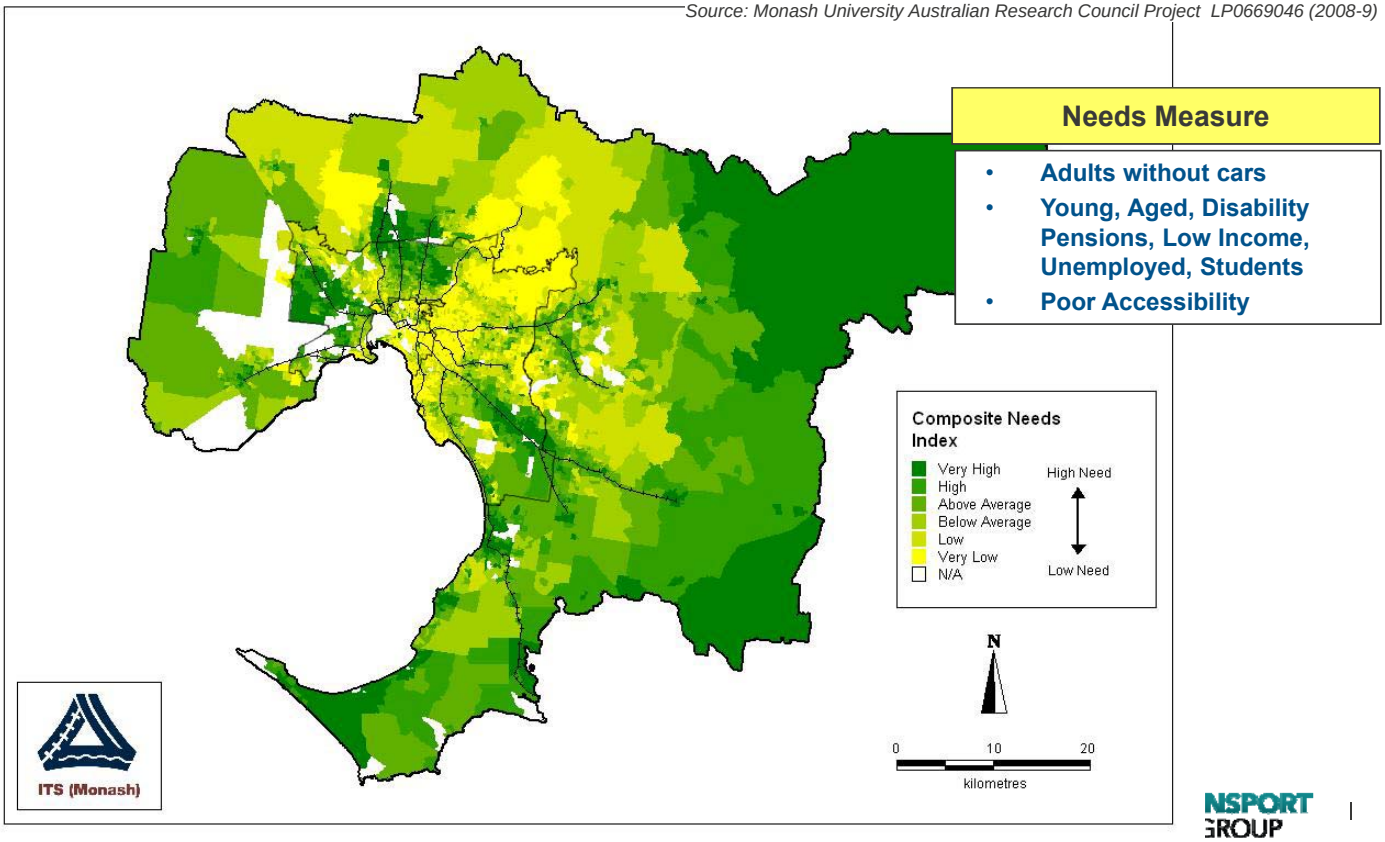
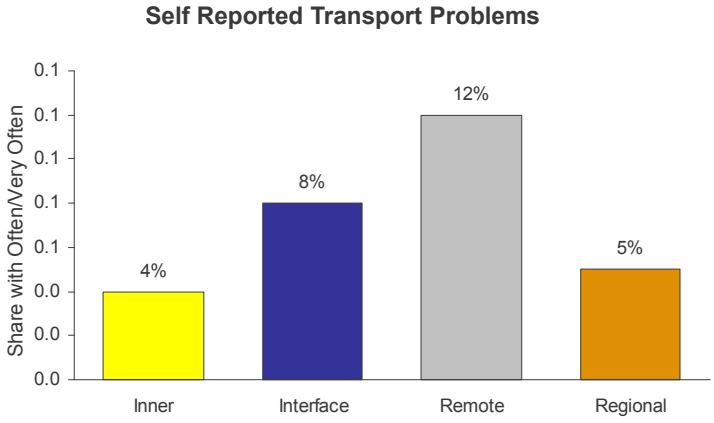
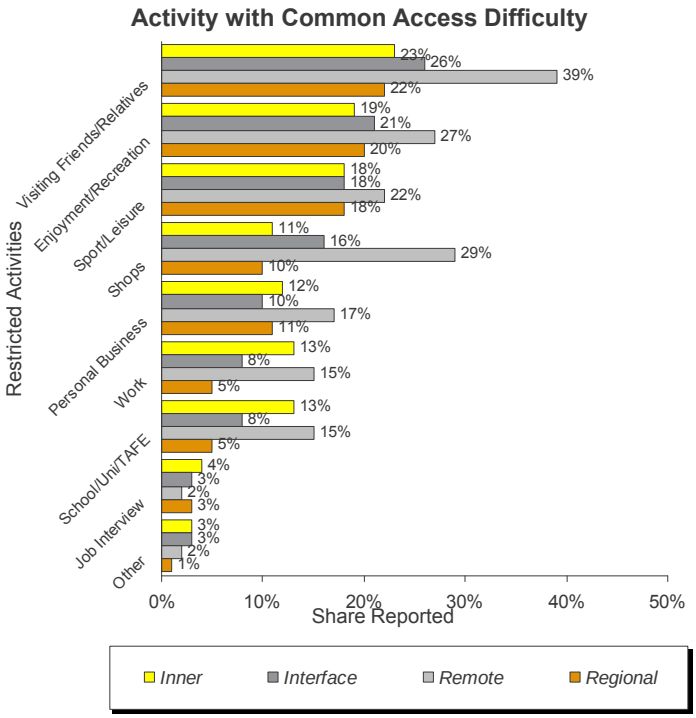
....yet transport related needs are above average to very high…

Source: Monash University Australian Research Council Project LP0669046 (2008-9)



… & self reported transport problems & restricted activity access are significantly higher





Source: Monash University Australian Research Council Project LP0669046 (2008-9)

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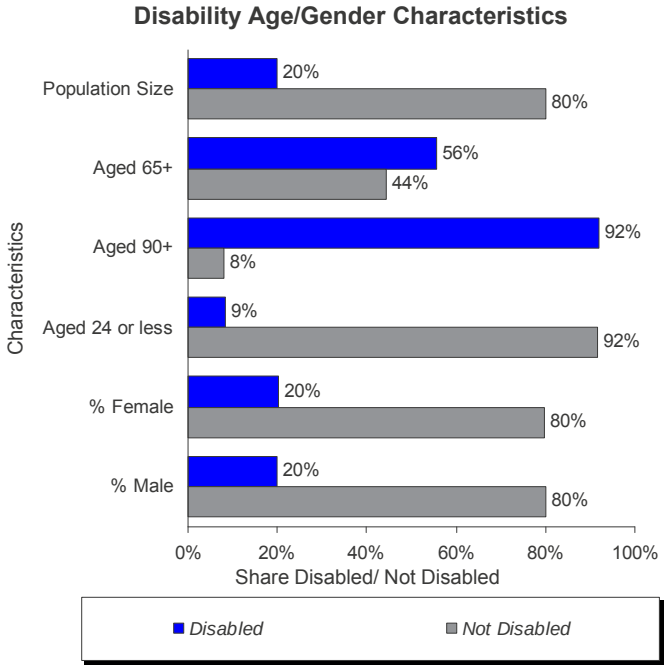
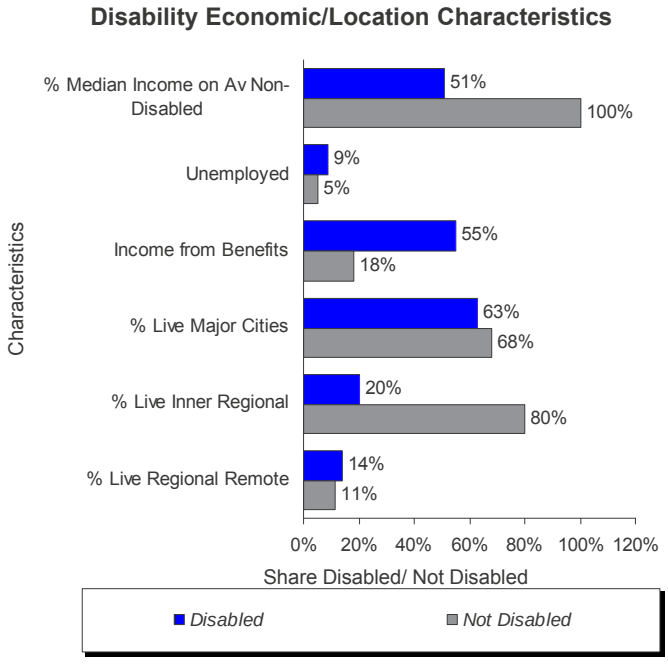
People with impairments represent 1 in 5 of the population





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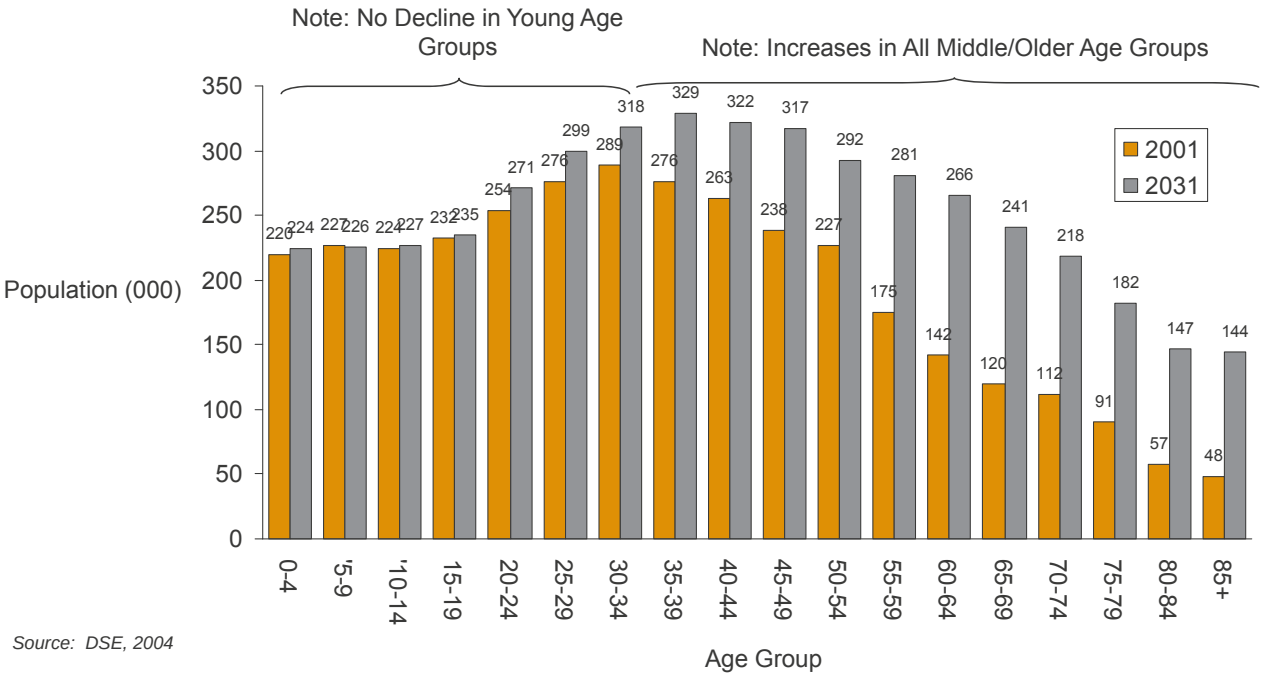
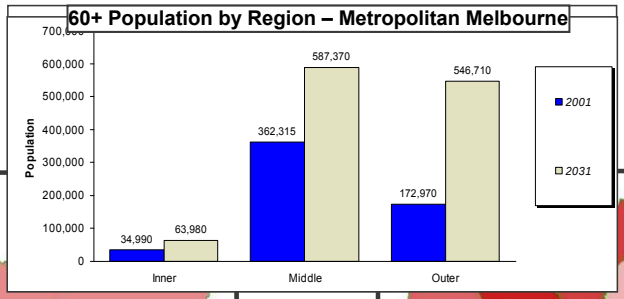
Impairment links with the aged – a growing cohort…

Actual Age Distribution (2001) and Forecast (2031) – Metropolitan Melbourne



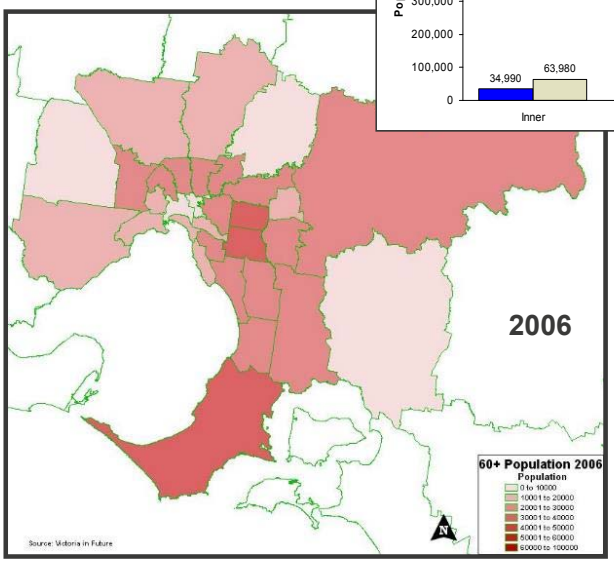
Source: DSE, 2004

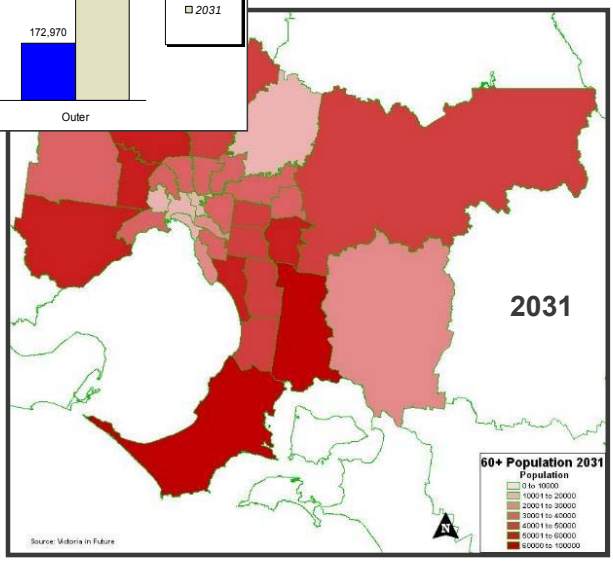
…in Middle Fringe Melbourne



Victoria

+910,000 people aged over 65 by 2036



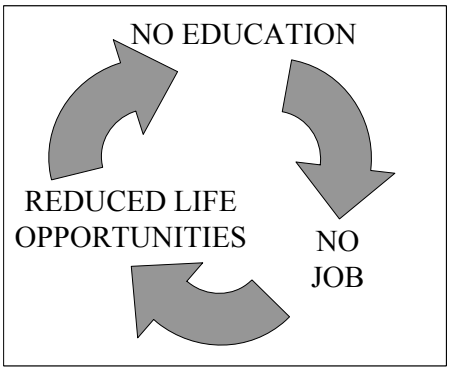


Source: DSE, 2004 Victoria in Future 2008

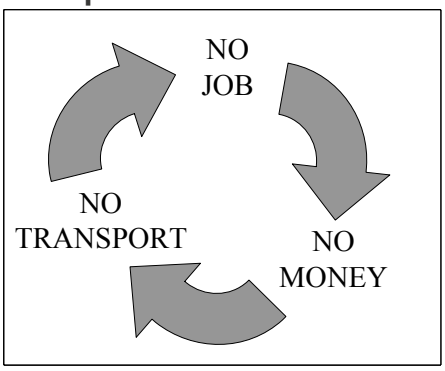
Social Exclusion (SE) links poor access to lower life opportunities

- Social Exclusion (Lenoir, 1974)
  - Limitations on social/economic participation from a (systematic) combination of unemployment, poor skills, low income, poor housing, poor health and lack of transport

Education and Social Exclusion



Transport and Social Exclusion

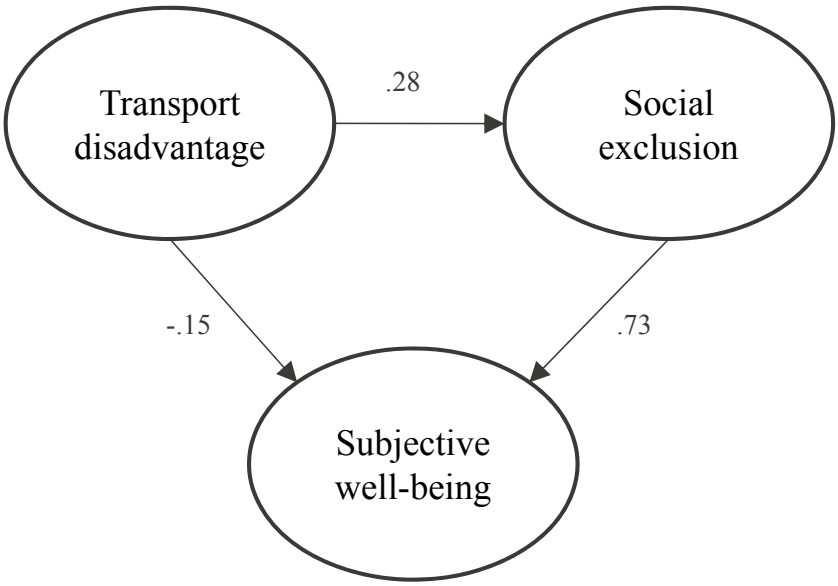


(Source: Based on Wheels to Work in Shropshire UK sourced from "Transport for Young People in Rural Areas" Community Transport Association UK March 2002

Victoria led the world in a research project to explore links between SE transport and quality of life

ARC AUSTRALIAN RESEARCH COUNCIL
Victoria The Place To Be
Brotherhood of St Laurence Working for an Australia free of poverty
BusVic
MONASH University
THE UNIVERSITY OF MELBOURNE
UNIVERSITY OF OXFORD
UNIVERSITY of ULSTER
INTERFACE COUNCILS

Modelling results show strong TD/Well-being links



Source: CURRIE, G. & DELBOSC, A. 2010 Modelling the social and psychological impacts of transport disadvantage. *Transportation,* 37, pp953–966

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A range of options to cater for the needs of people with impairments are provided

Travel Assistance for People with Disabilities

Nature of Assistance/Mode	Details
Private Transport	
Mobility Allowance	• assistance to people with disabilities who are in paid employment, voluntary work, vocational training, undertaking independent living/life skills training or a combination of paid work and training and who are unable to use public transport without substantial assistance • $Aust 74.30- 104.00 per fortnight (2007). A lump sum advance equal to 26 weeks allowance may be paid once a year.
Community Transport	
Community Transport	• Range of local small scale services operated by voluntary and self help groups for the specific needs of disadvantaged groups • Much funding from the Federal Home and Community Care program for vehicles
Taxis	
Taxi User Subsidy Schemes	• Provision of subsidies to reduce fares for a limited number of taxi trips. Number of trips and level of subsidy varies by measured degree of disability. Policies vary between states.
Public Transport	
Concession Fares	• Fare reductions ranging between free to half fares for people with disabilities of various types for travel on public transport services
General Services	• Under the requirement of the Federal Disability Discrimination Act (DDA) all new public transport services and infrastructure commencing since 2002 are to be made fully accessible to persons with disabilities. Excludes school buses. • Public transport in all states and territories have implemented a program for retro-fitting existing infrastructure to meet the requirements of the legislation within a generally 20 year timeframe.
Specialist Services	• A small number of specialist bus services are available for persons with disabilities in some states.

Source:Currie G and Allen J (2007) 'Transport Disadvantage and Australians with Disabilities' Book chapter in Currie G Stanley J and Stanley J (2007) 'No Way To Go - Transport and Social Disadvantage in Australian Communities' Monash University ePress www.epress.monash.edu/nwtg

PTV have an implementation program including new infrastructure and services

Travellers Aid – Southern Cross Station

Accessible taxis are important to disabled workers – but service is at risk due to Uber

Total wheelchair taxi trips declined by 44% between March 2013 to July 2014

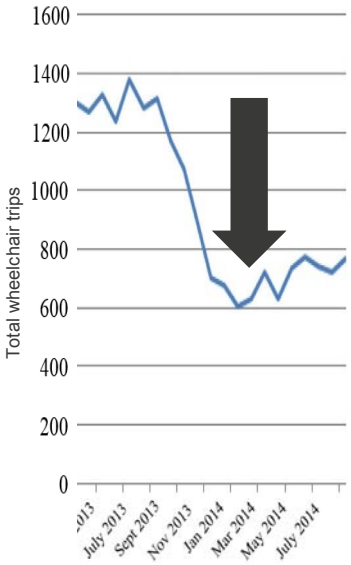


Figure 4 – Total wheelchair pick up by ramp taxi in San Francisco

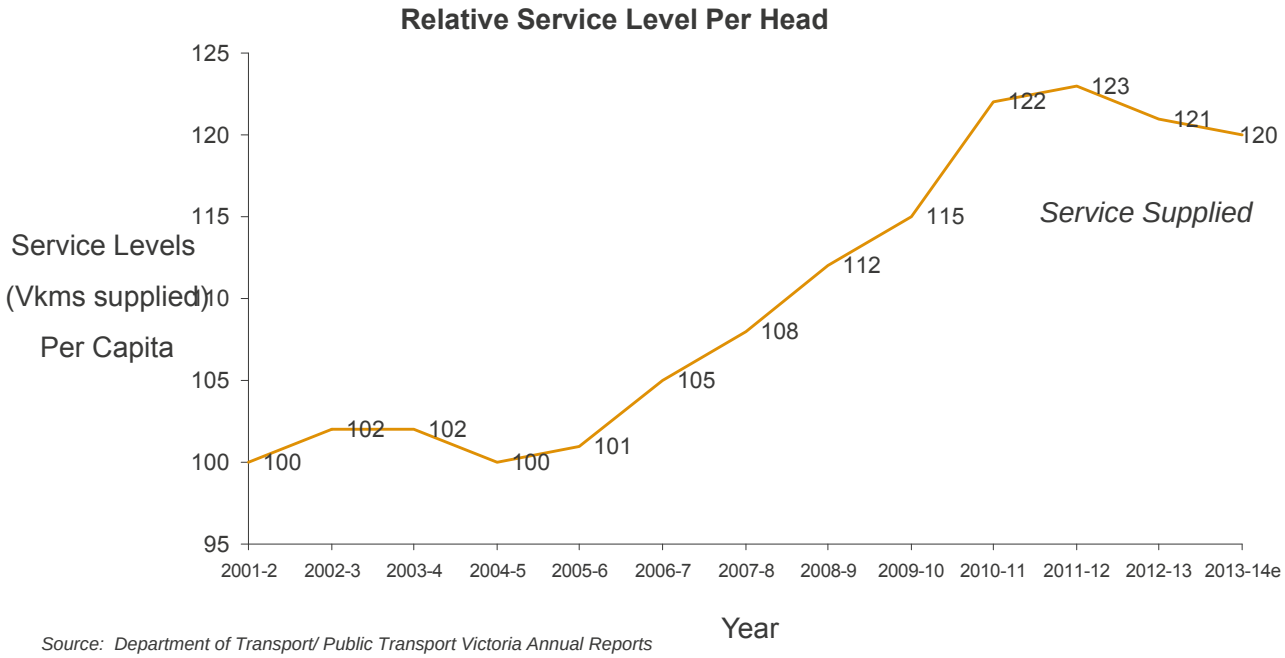
Source: SFMTA TAB Meeting Sept 2014

In 2006 'Meeting Our Transport Challenges' (MOTC) invested $1.4B in new bus services…

Key Commitments
Bus Service Development

- **$1.4 billion to develop better cross town public transport network.**
- **The expansion of the existing SmartBus program ($660M)**
- **Improvements to local metropolitan bus services ($650M).**
  - more than 250 existing routes will be upgraded featuring:
    - > Services at least hourly between 6am and 9pm on weekdays;
    - > Services at least hourly between 8am and 9pm on Saturdays;
    - > Services at least hourly between 9am and 9pm on Sundays;
    - > and
    - > Higher frequencies on selected routes.
- **Doncaster Area Rapid Transit Project.**

…per head of population, service has grown but declined in recent years



Source: Department of Transport/ Public Transport Victoria Annual Reports

..also the 'Transport Connections Program' to find accessibility options for passengers

Transport Connections program

Aims:=

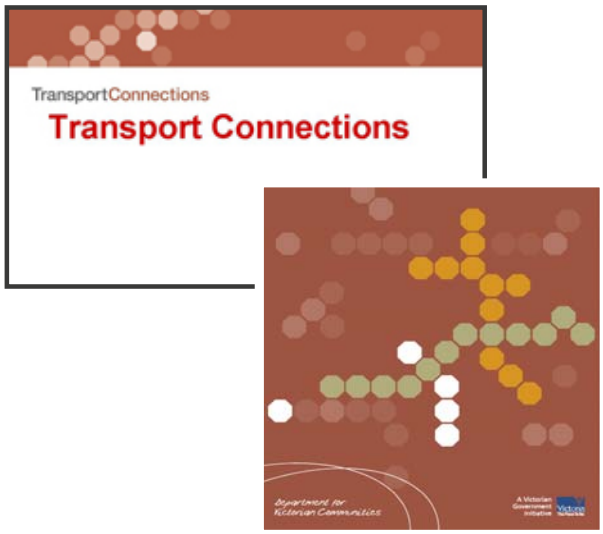
- **Improved access to services**
- **Innovative solutions to transport disadvantage**
- **Strong partnerships to deliver services**
- **Ongoing community participation in decision-making**
- **Enduring Outcomes**

Transport Connections grant program

- **$14.15m over 3 years (2007-2010) Managed by DPCD**

Transport Connections Flexible Fund'

- **$4.19m over 4 years Managed by DOI**



Future Research - SEPT-GRIP PTV & partners supporting a major research initiative

PUBLIC TRANSPORT VICTORIA

PTRG (Industry) Reference Group

PTRG PUBLIC TRANSPORT RESEARCH GROUP

Core Research Team

PTRG Research Associates
- DCE /Monash University
- International Universities

PTRG SEPT-GRIP
(Graduate Research Interdisciplinary Program)
- 18 PhD students
- 6 Faculties plus MUARC

- **World First joint Authority/Uni. Research and Training Initiative**
- **SEPT-GRIP starts April 18th 2016**

There are 18 major projects…

1. Personal Safety on Public Transport
2. Mining Big Data and Visualisation
3. Improving Network Synchronisation in Melbourne
4. PTV as a "Shared Mobility" Agency
5. Changing Travel Behaviour to Reduce Car Use Including Increased PT Use
6. Tourism and Public Transport
7. Exploring Reliability Engineering Approaches between Melbourne and Best Practice Railways
8. Understanding & Improving Gender Diversity in the PT Workforce
9. Future Train Design
10. Designing the Urban Rail Environment to Reduce Vandalism and its Impacts on Service Reliability and Customer Experience
11. A New Model for SMART Bus and Tram Priority Implementation
12. Simulating Bus and Tram Priority in Traffic Flows
13. Best Practices in Placemaking and Street Redesign as Part of Tram Modernisation
14. Older People and Falls in Trams
15. Transit Network Design with Consolidated High Frequency Fixed Routes plus Demand Responsive 'Last Mile' Service Patterns
16. Future Bus - a Multi-Purpose Bus for Changing Needs and Roles
17. The New Bus Rider – An in-depth synthesis of motivations, influences impacts
18. Exploring the Road Safety Impacts of Bus Safety Inspections

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…with 6 Industry Partners…

1. Personal Safety on Public Transport
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9. Future Train Design
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METRO

vicroads

11. A New Model for SMART Bus and Tram Priority Implementation
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14. Older People and Falls in Trams

yarra trams

transdev

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BusVic

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…including a research on an Aging Population

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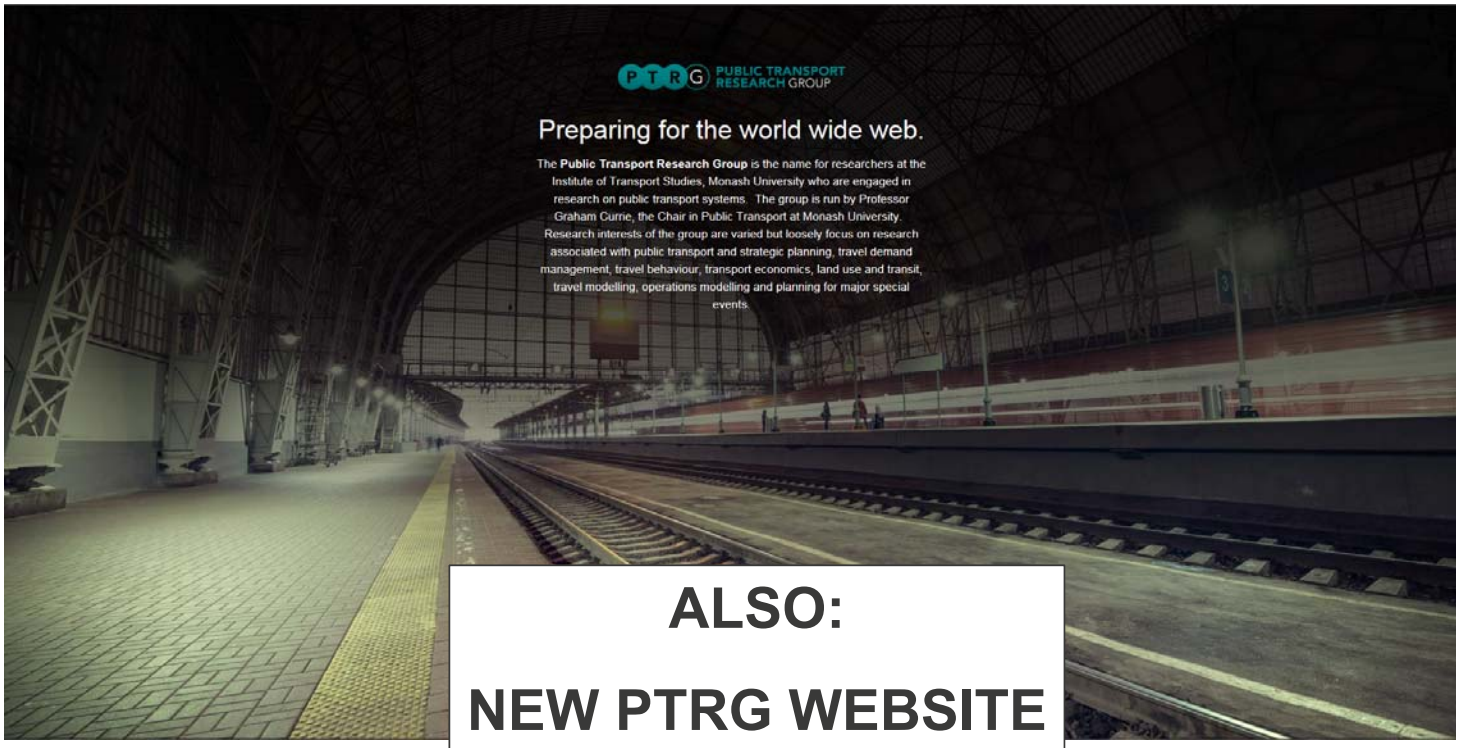
2025=PTx2

Showcase Award Winner



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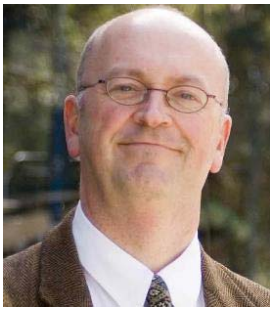
Contact details



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