



Victorian Local Governance Association – Training // Engineers Australia – Transport Branch  
Social Inclusion Principles for Transport Engineers – skills sharing seminar  
Department of Transport Theatre, Friday May 7<sup>th</sup> 2010

# Social Inclusion Principles for Transport Engineers

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[www.monash.edu.au](http://www.monash.edu.au)



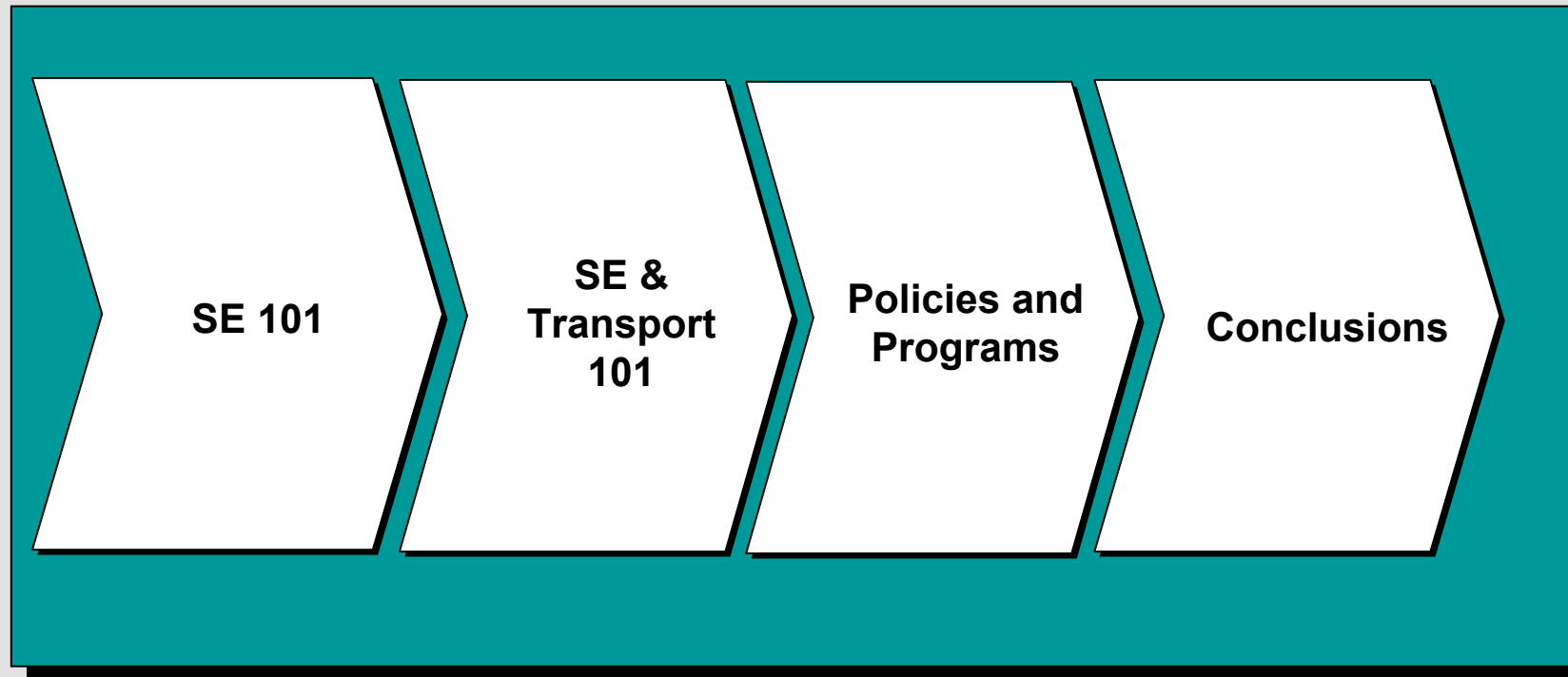
**Institute of Transport Studies (Monash)**

The Australian Research Council Key Centre in Transport Management

# Agenda

1. Introduction
2. SE 101
3. SE & Transport 101
4. Policies and Programs
5. Conclusions

# This paper considers social exclusion (SE) principles for transport engineers



# Agenda

1. Introduction

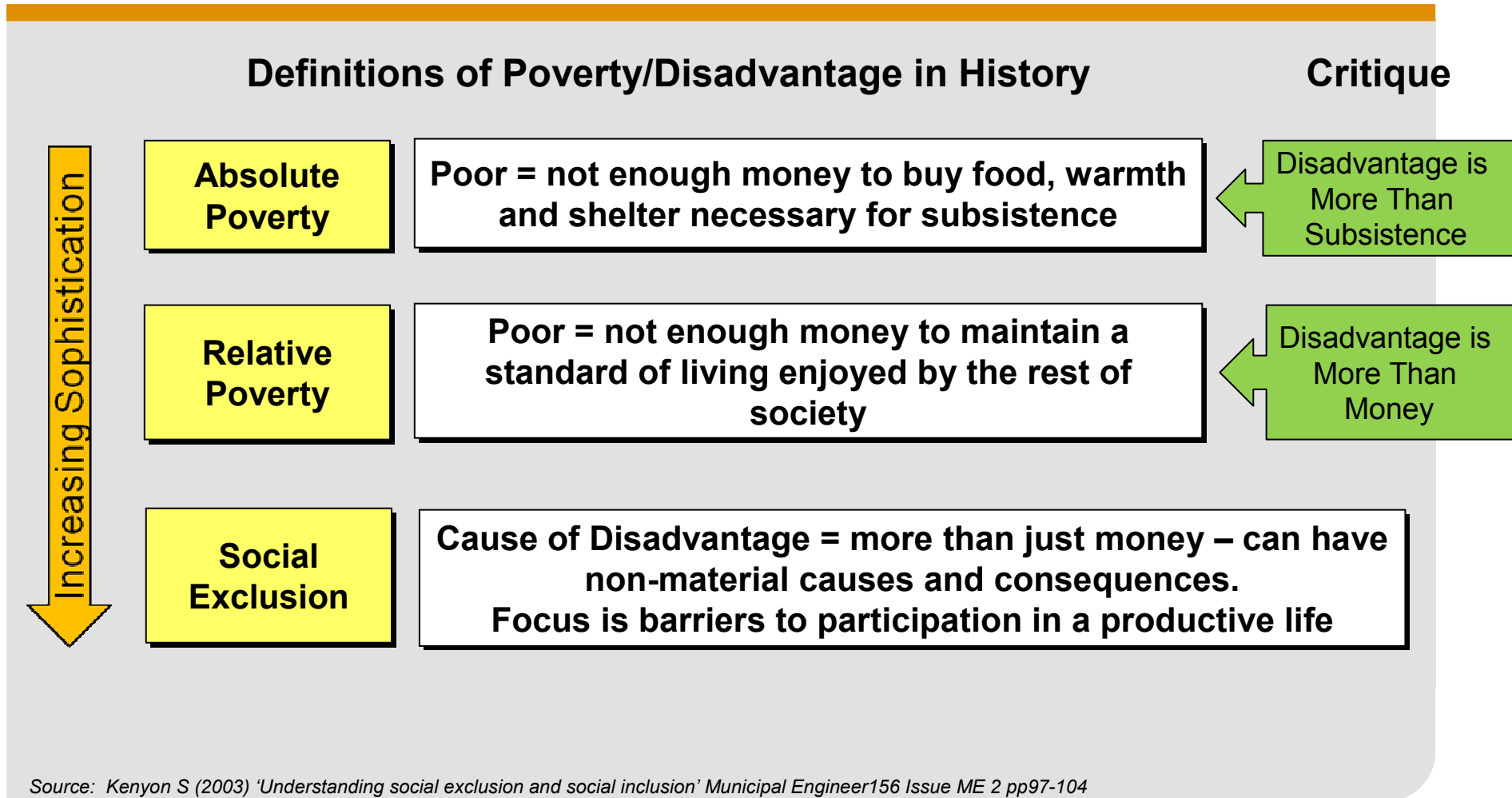
2. SE 101

3. SE & Transport 101

4. Policies and Programs

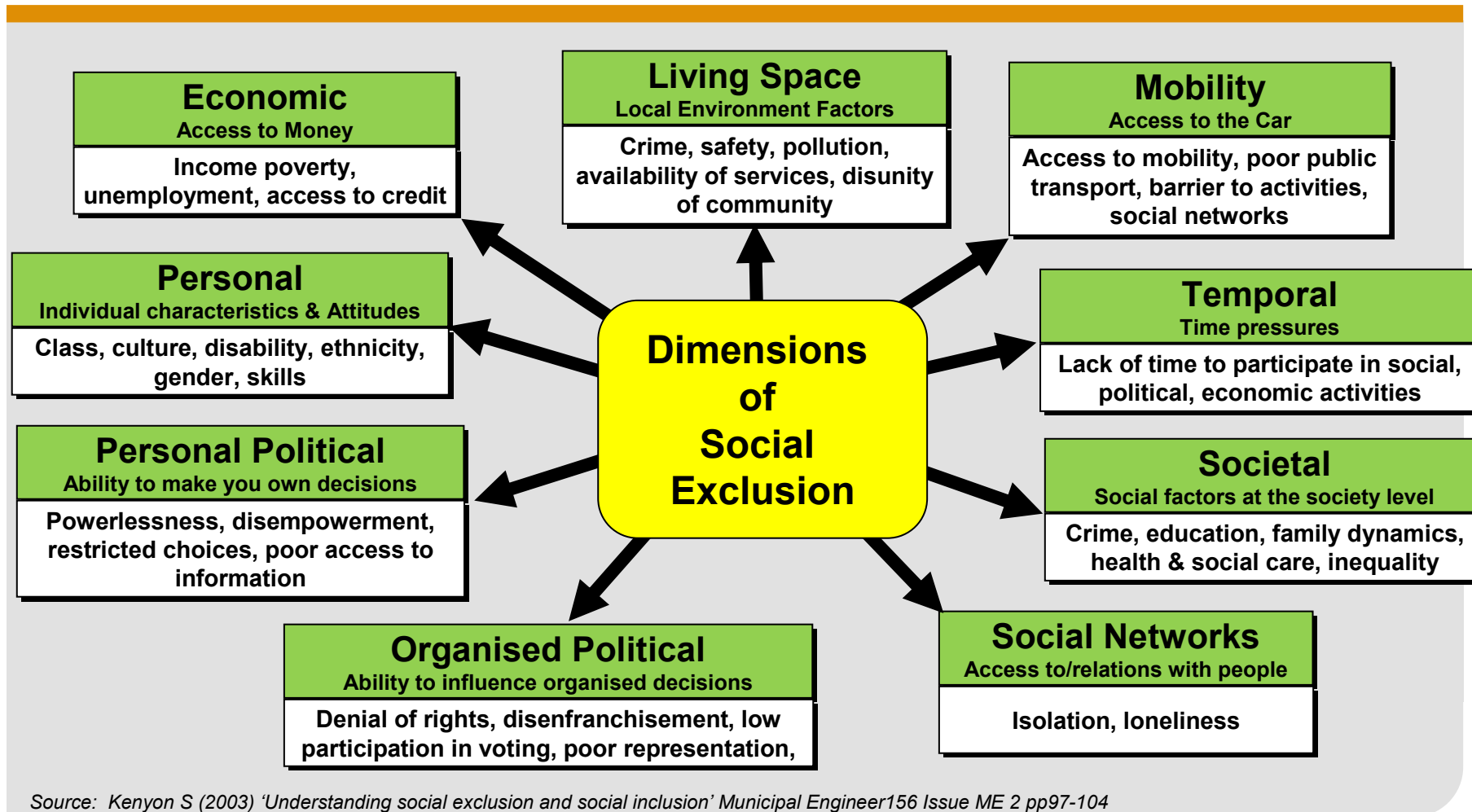
5. Conclusions

# SE is the next generation in a progression of concepts relating to poverty & disadvantage



Source: Kenyon S (2003) 'Understanding social exclusion and social inclusion' *Municipal Engineer* 156 Issue ME 2 pp97-104

# SE is deliberately multi-dimensional to encapsulate barriers to participation



# Social inclusion is the opposite of exclusion

**Social  
Exclusion**



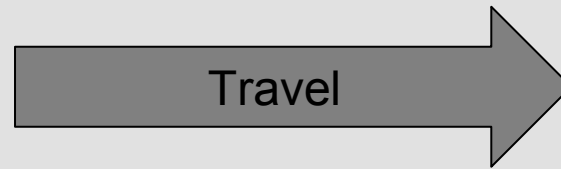
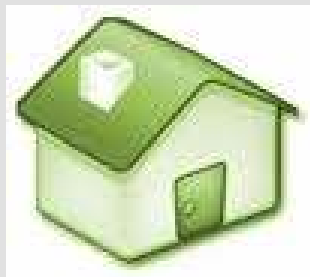
**Social  
Inclusion**



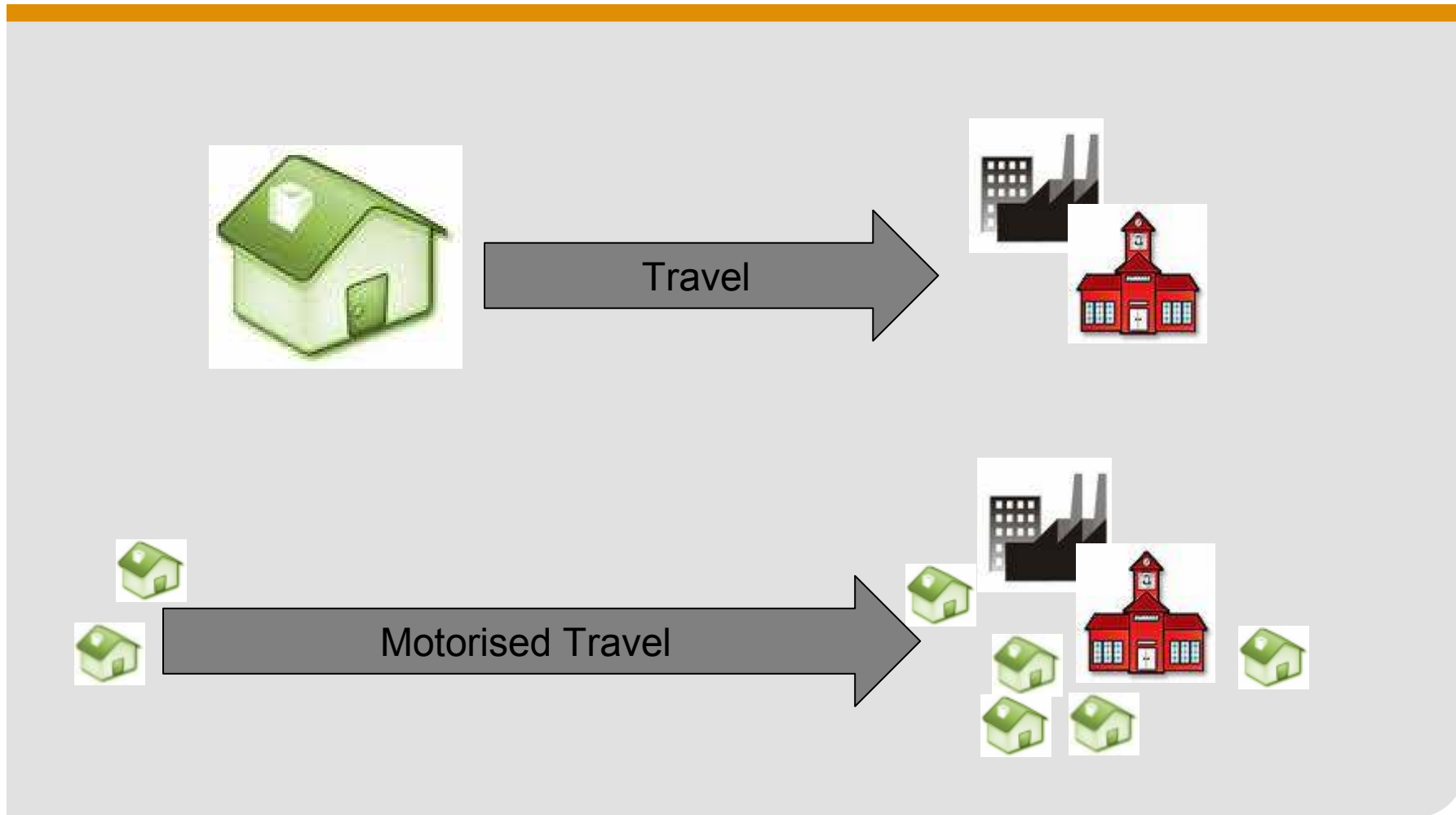
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# Travel is needed to undertake activities – if you cant travel this may limit participation



# Location reduces the need for motorised travel so bad location access can be a barrier

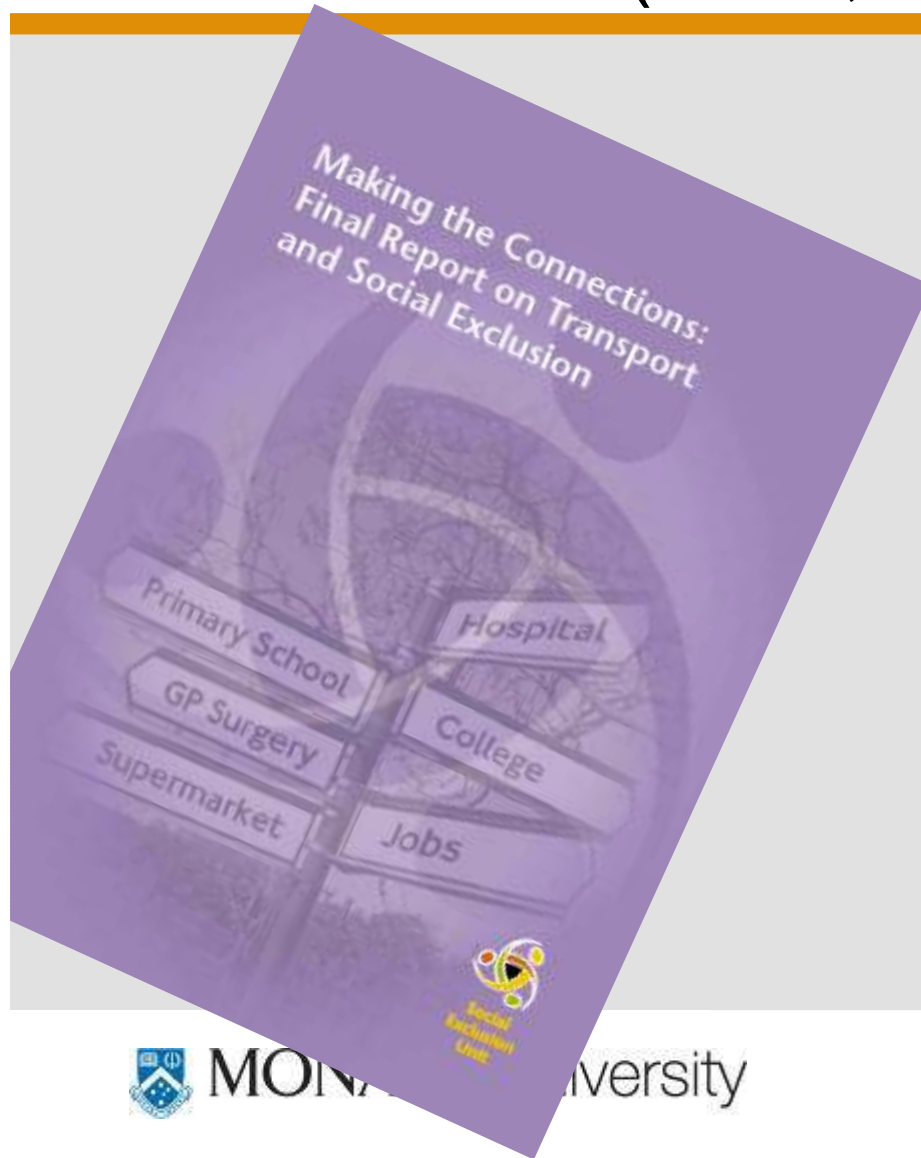


# Transport and Social Exclusion is said to have many dimensions

- **Transport and Social Exclusion:**
  - Physical exclusion
  - Geographical exclusion
  - Exclusion from facilities
  - Economic exclusion
  - Time-based exclusion
  - Fear-based exclusion
  - Space exclusion

*Source: Church, A., Frost, M., & Sullivan, K. (1999). Transport and social exclusion in London. Paper from The Association of European Transport Conference held in Cambridge, United Kingdom in 1999.*

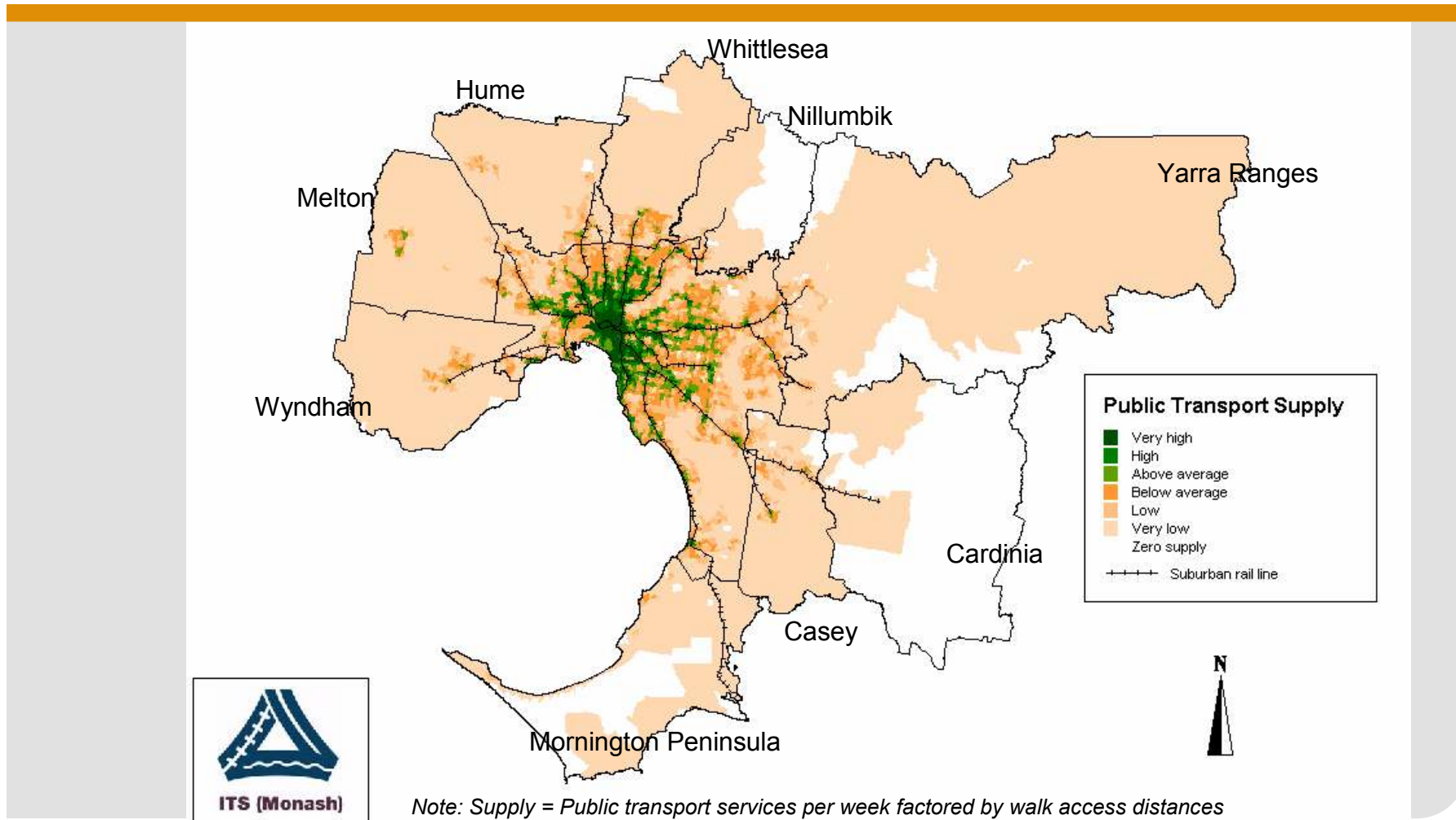
# A leading publication was Making the Connections (2003, UK)



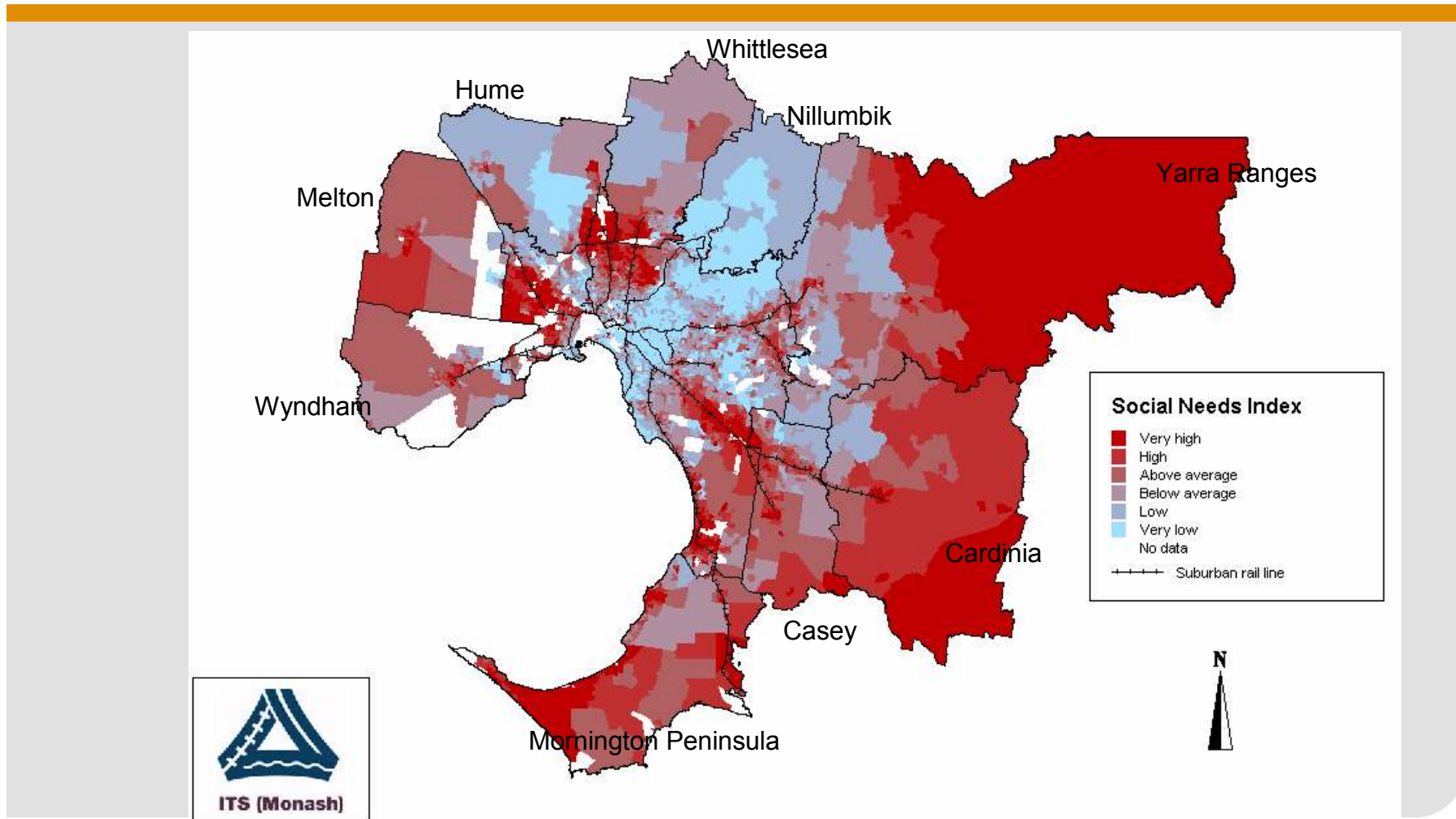
## Key Snapshots

- **Access to work:** Two out of five jobseekers say lack of transport is a barrier to getting a job.
- **Access to learning:** 16–18-year-old students spend on average £370 a year on education related transport, and nearly half of them experience difficulty with this cost.
- **Access to healthcare:** 31 per cent of people without a car have difficulties travelling to their local hospital, compared to 17 per cent of people with a car.
- **Access to food shops:** 16 per cent of people without cars find access to supermarkets difficult, compared to 6 per cent of the population as a whole.
- **Access to social, cultural, and sporting activities:** 18 per cent of people without a car find seeing friends and family difficult because of transport problems, compared with 8 per cent for car owners.

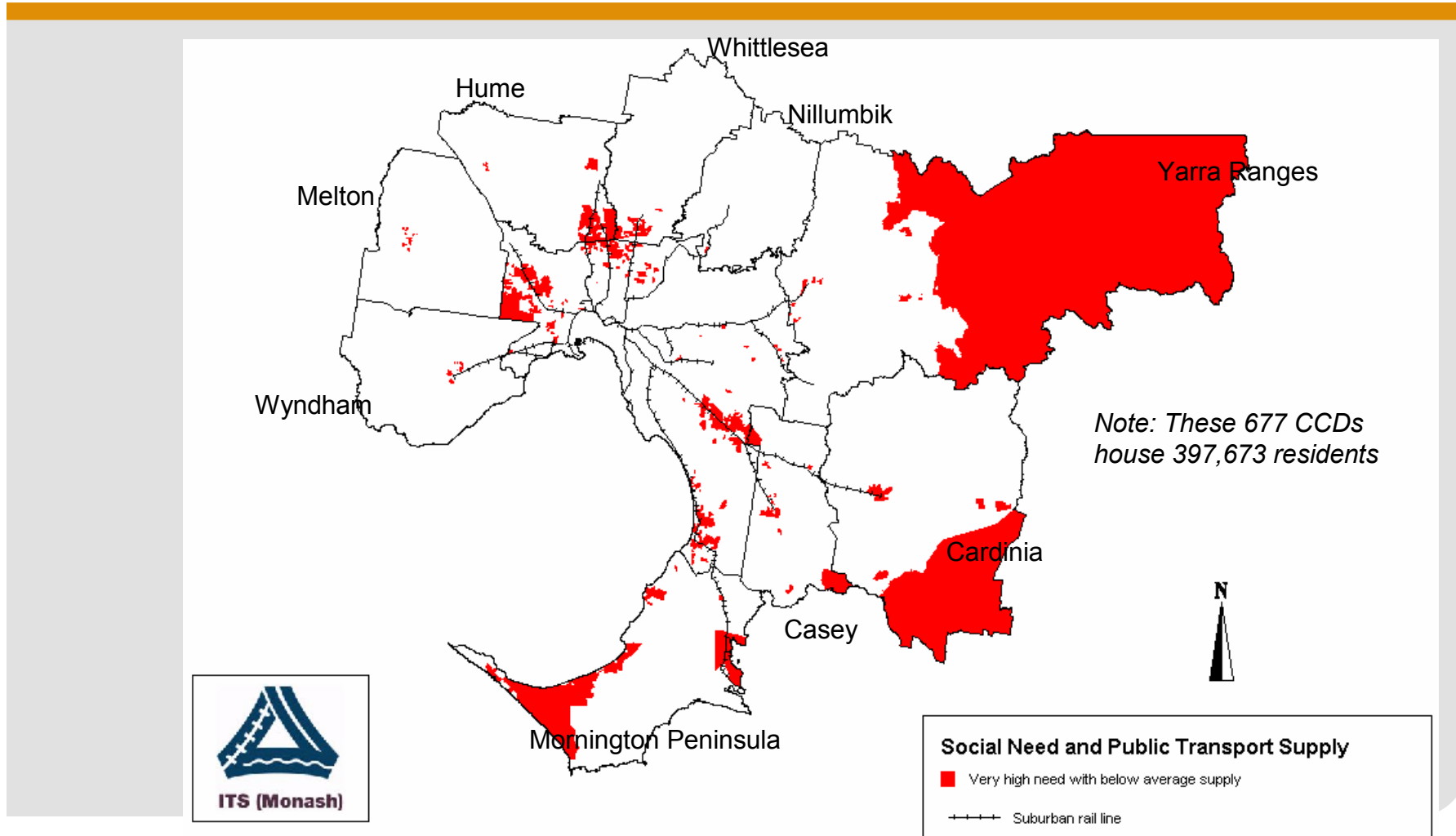
# In Melbourne PT supply is concentrated centrally



# While Social Needs have a fringe spread

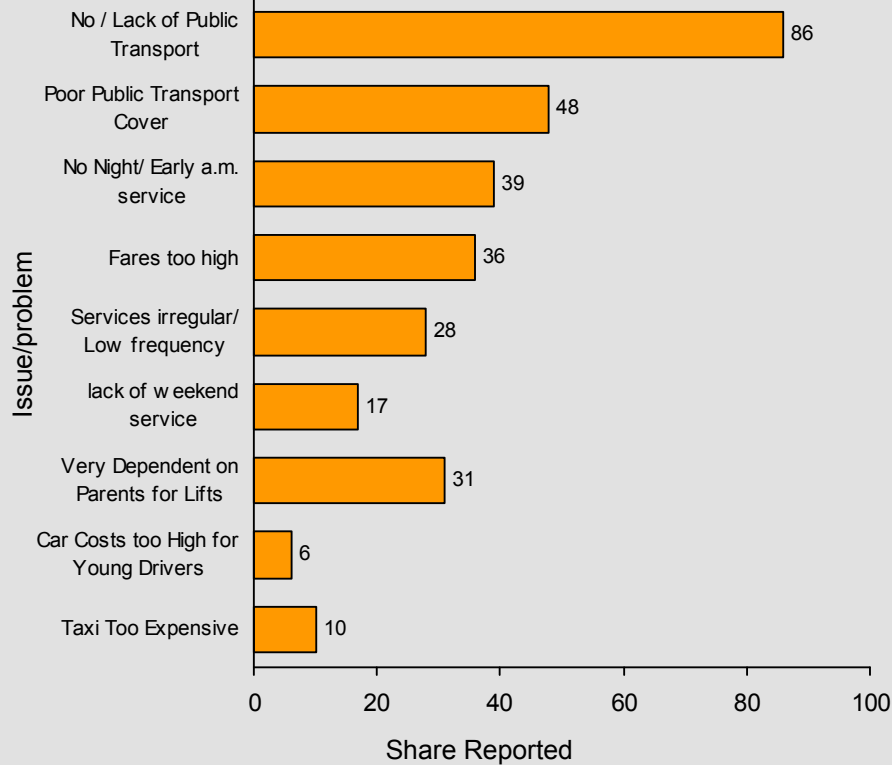


# The “Gap” (very high social need/ below average PT supply) is a fringe issue

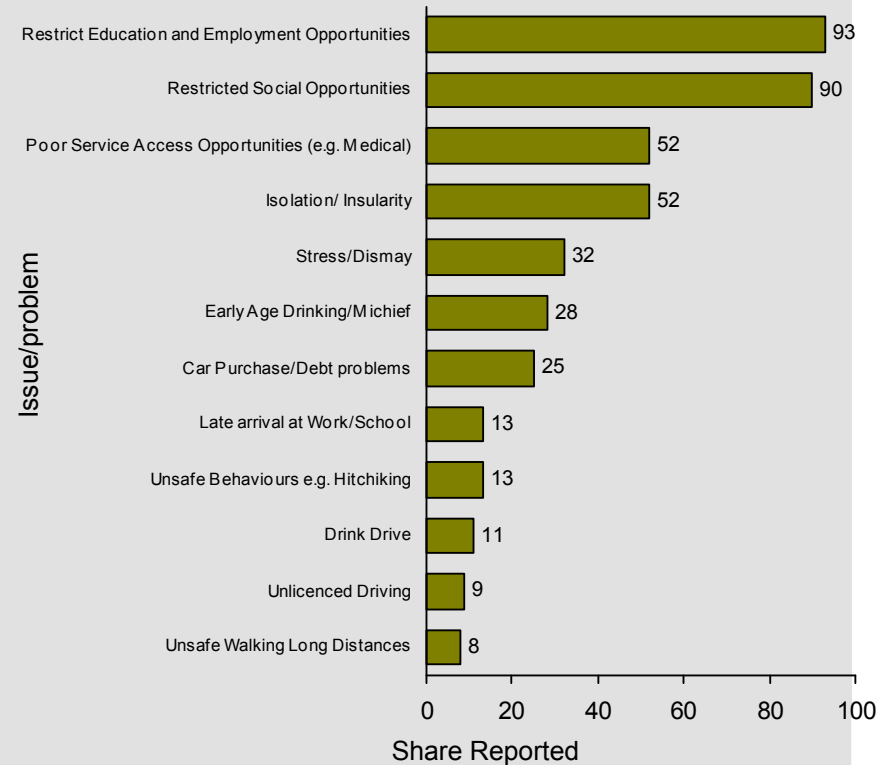


# Young people have high travel difficulties and lower participation rates

### Young People Common Transport Difficulty



### Young People Common Access Difficulty



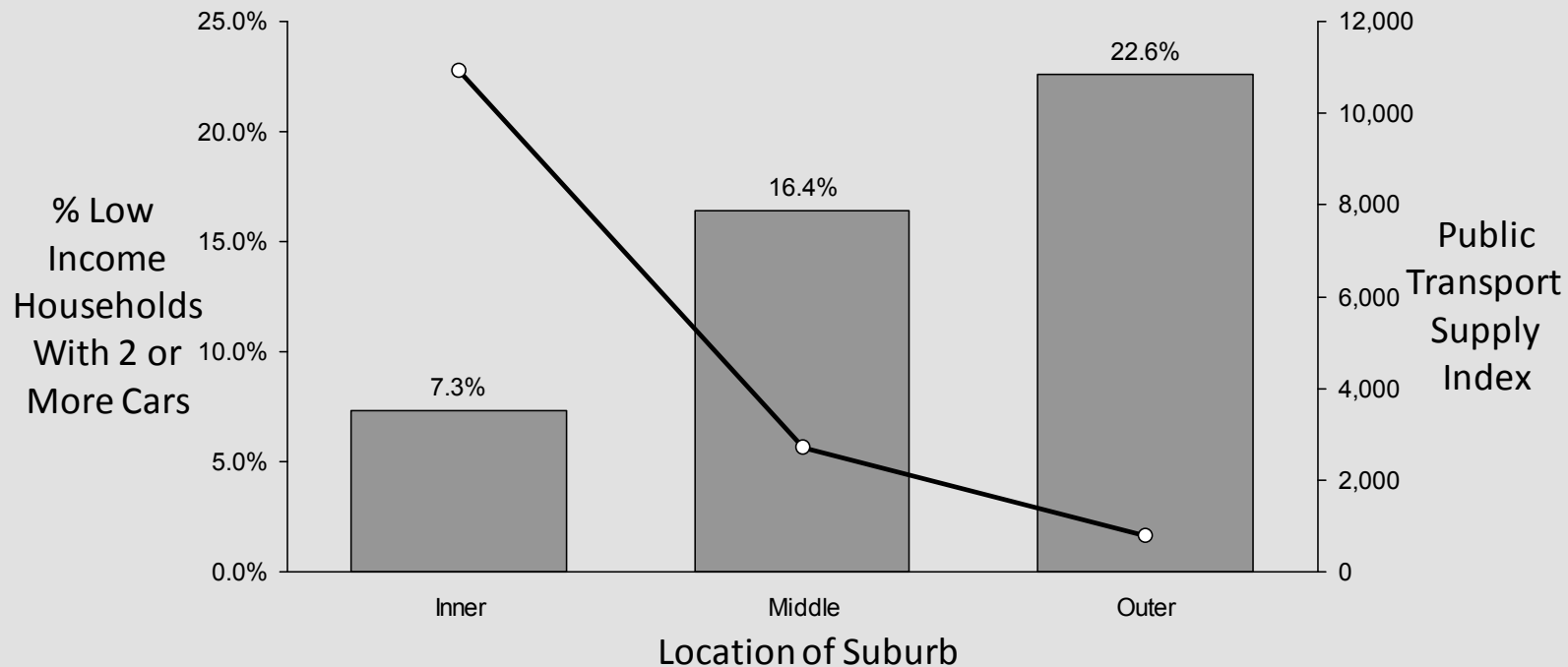
# Older Australians have a wide range of concerns about existing transport options

## Transport Issues and Older Australians

<p><b>1. Communication and Information</b></p> <ul style="list-style-type: none"> <li>Information not accessible to people with visual impairments and other barriers (language etc)</li> <li>Lack of promotion of new services</li> <li>Lack of promotion of transport service options</li> <li>Lack of communication and information about available transport options for people with different needs</li> <li>Educating transport users to be more vocal about their needs</li> <li>Difficulties in using timetables and ticketing procedures</li> </ul>	<p><b>2. Security</b></p> <ul style="list-style-type: none"> <li>Concerns about safety</li> </ul>	<p><b>7. Timetabling/Connectivity</b></p> <ul style="list-style-type: none"> <li>Lack of integration between walk, cycle, community transport, public transport and taxis</li> </ul>
	<p><b>3. Responsive to Changing Needs</b></p> <ul style="list-style-type: none"> <li>Replacement of Bus Fleet with accessible buses</li> <li>Impact of fuel price rises (and future rises)</li> <li>Transport not responsive to needs of active healthy seniors</li> <li>Lack of door to door services</li> </ul>	<p><b>8. Staffing and Human Assistance</b></p> <ul style="list-style-type: none"> <li>Lack of staff training</li> <li>Lack of staff to support users</li> </ul>
	<p><b>4. Lack of Fringe/Rural Services</b></p> <ul style="list-style-type: none"> <li>Inadequate relative to the city</li> </ul>	<p><b>9. Community Perceptions</b></p> <ul style="list-style-type: none"> <li>Lack of understanding of the importance of accessible transport</li> </ul>
	<p><b>5. Physical Accessibility to Transport</b></p> <ul style="list-style-type: none"> <li>Need to improve walking environment</li> </ul>	<p><b>10. Policy Planning</b></p> <ul style="list-style-type: none"> <li>Lack of integration between agencies/Govt</li> <li>Land use not coordinated</li> <li>Current solutions don't maintain independence</li> </ul>
	<p><b>6. Physical Accessibility onto Transport</b></p> <ul style="list-style-type: none"> <li>Vehicle and stop infrastructure</li> </ul>	

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

# There is a clear link between lack of PT and high car use on low income

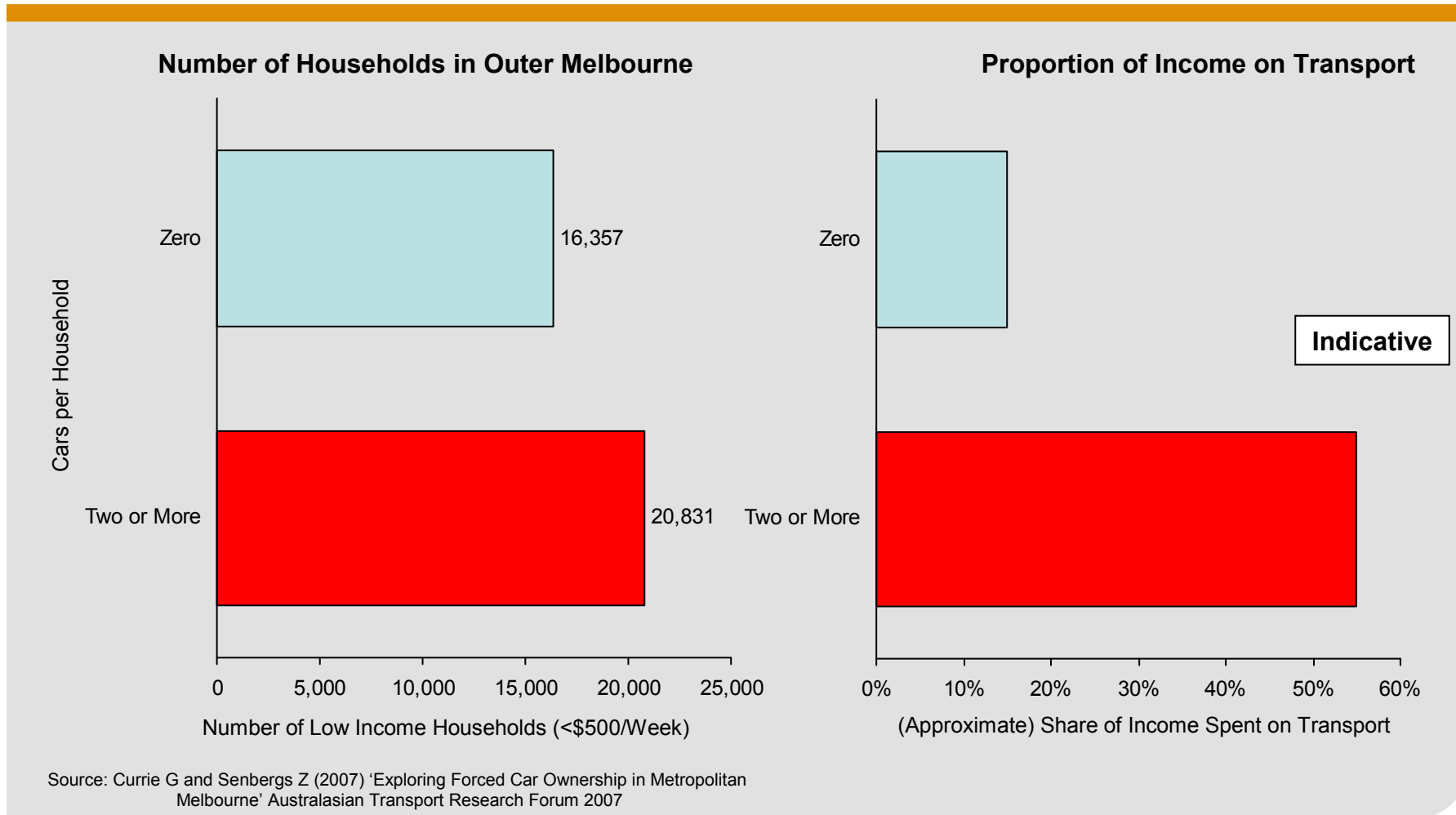


Source: Based on Currie and Senbergs (2007)

Note: PT Supply Index score is based on number of services per week factored by the spatial coverage of the areas by public transport.  
Higher values imply greater supply and coverage of areas by Public Transport

Source: Johnson, V Currie G Stanley J (2008) 'Disadvantage and prosperity: is car ownership really a good indicator?' Australasian Transport Research Forum 2008

# Research suggests fringe car ownership may be a bigger problem than zero car ownership



# Not having a car on the fringe may be an advantage

## High Car Ownership on Low Income

- **20,831 HH - low income and high car ownership**
- **Zero/very low walk access to local activities and limited public transport**

- **Most like the mobility and life on the fringe**
- **But 65% agree they have no choice**

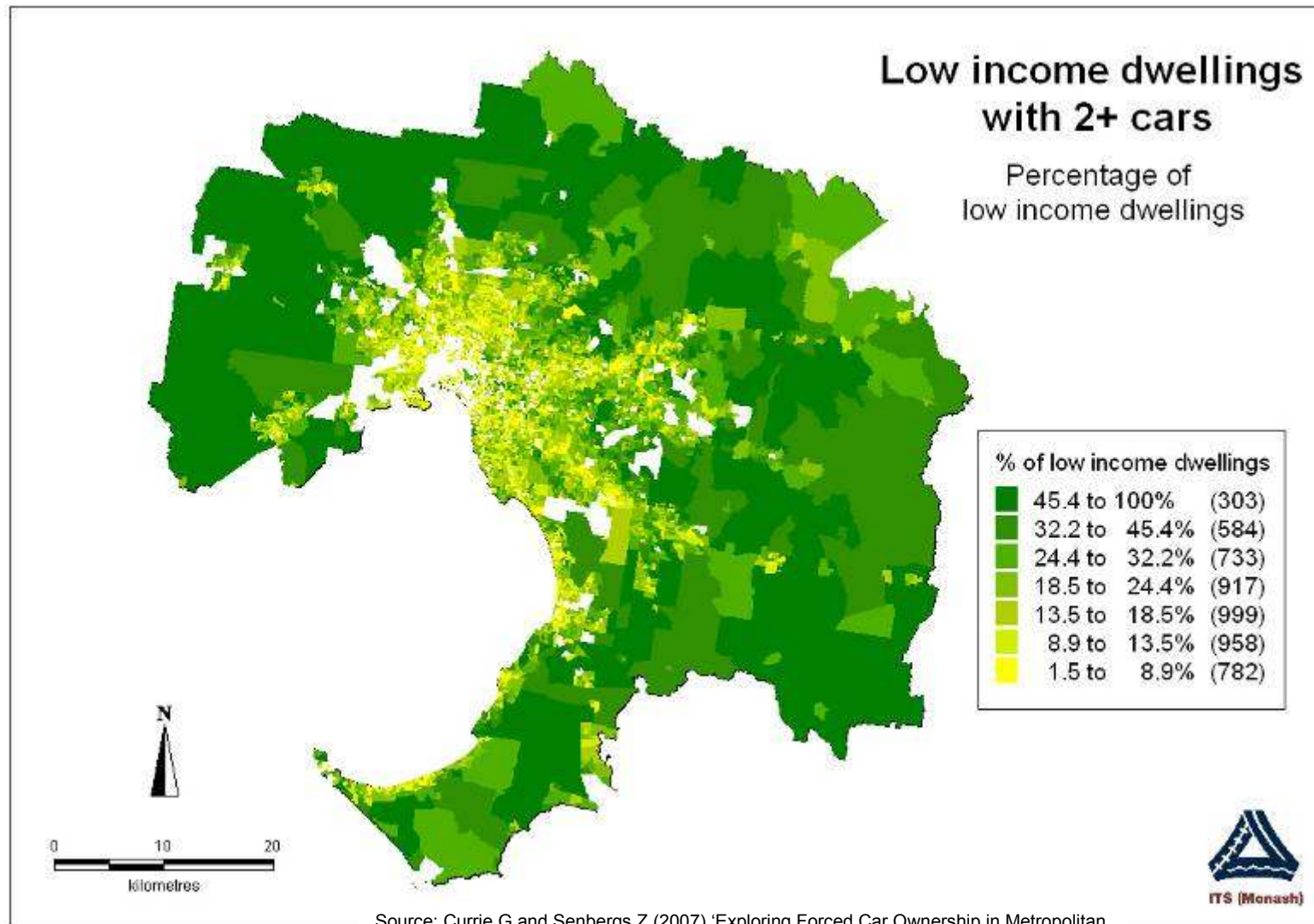
## Zero Car Ownership on Low Income

- **16,357 HH without a car**
- **Better off ? :**
  - live close to activity centres
  - Walk and use public transport
  - do not have to spend a high share (over 50%) of income on running a car
  - can walk to activities
  - can access public transport

- **Higher reported access problems**
- **68% say they do MORE activities because they have no car costs**

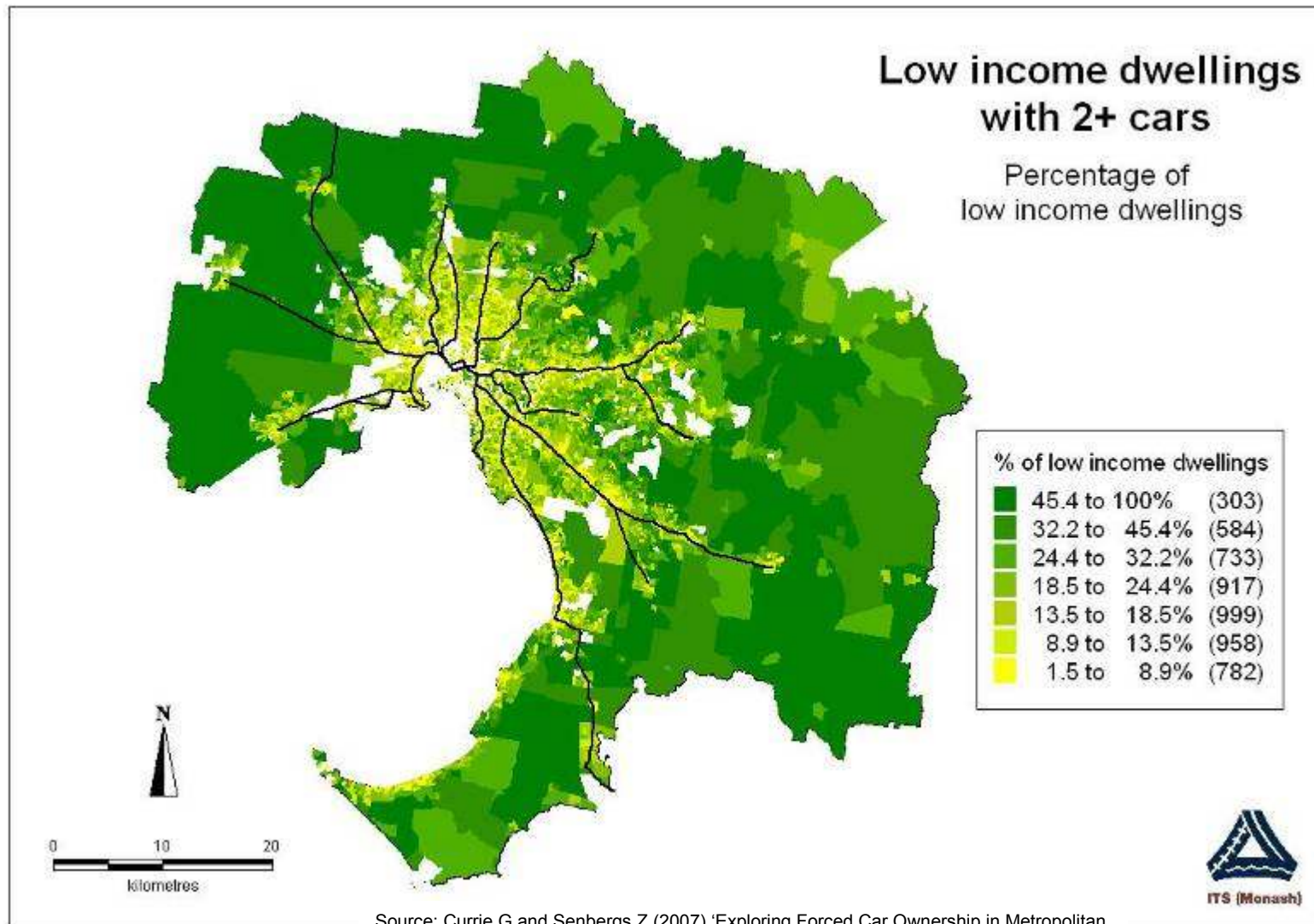
Source: Johnson, V Currie G Stanley J (2008) 'Disadvantage and prosperity: is car ownership really a good indicator?' Australasian Transport Research Forum 2008 : Monash University Australian Research Council Project LP0669046 (2008-9)

# High car ownership on low income is linked to PT availability & walk access...



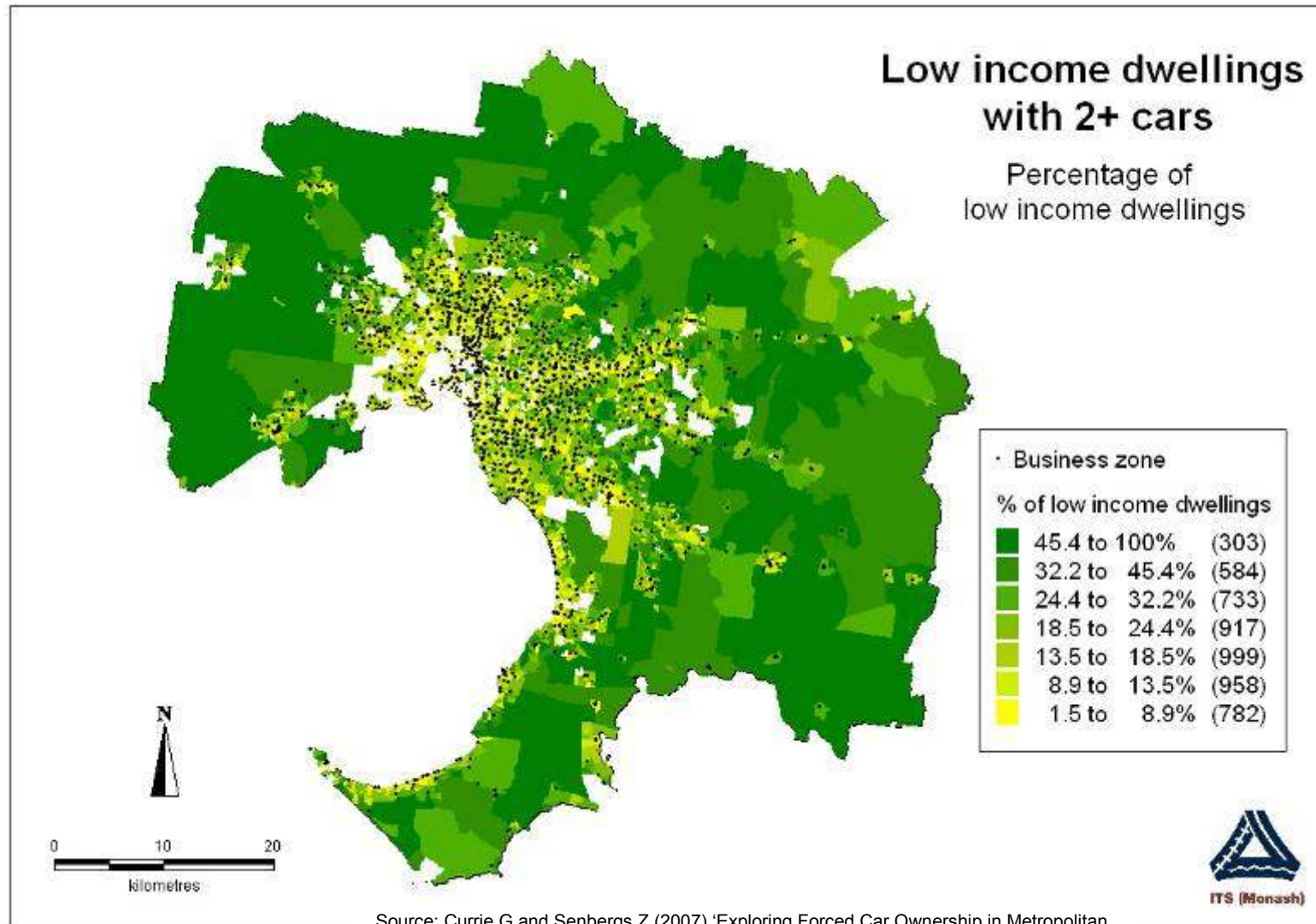
Source: Currie G and Senbergs Z (2007) 'Exploring Forced Car Ownership in Metropolitan Melbourne' Australasian Transport Research Forum 2007

# High car ownership on low income is linked to PT availability & walk access...



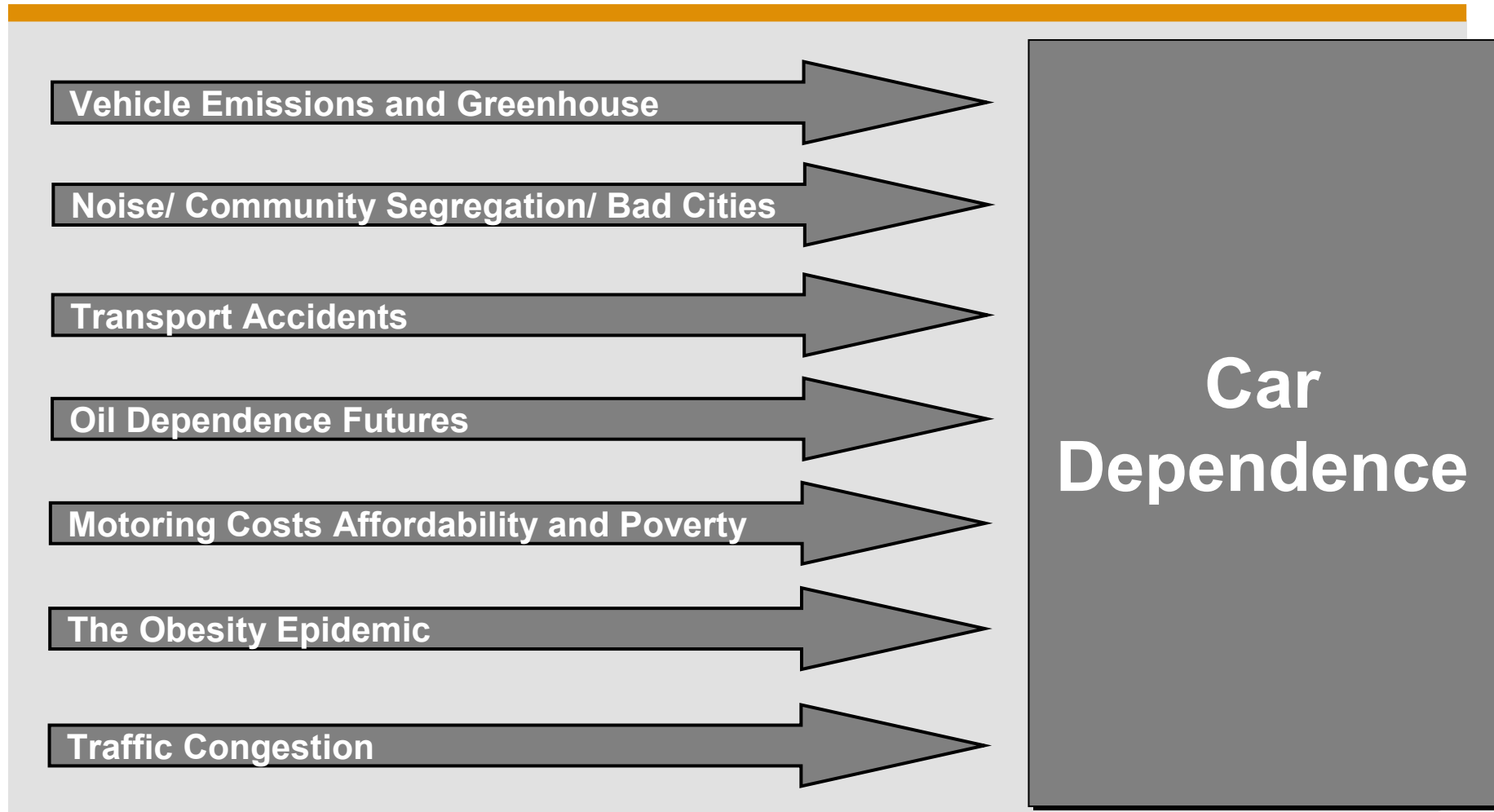
Source: Currie G and Senbergs Z (2007) 'Exploring Forced Car Ownership in Metropolitan Melbourne' Australasian Transport Research Forum 2007

# High car ownership on low income is linked to PT availability & walk access...



Source: Currie G and Senbergs Z (2007) 'Exploring Forced Car Ownership in Metropolitan Melbourne' Australasian Transport Research Forum 2007

# Many factors suggest SE will grow as pressure is put on Car dependence in future



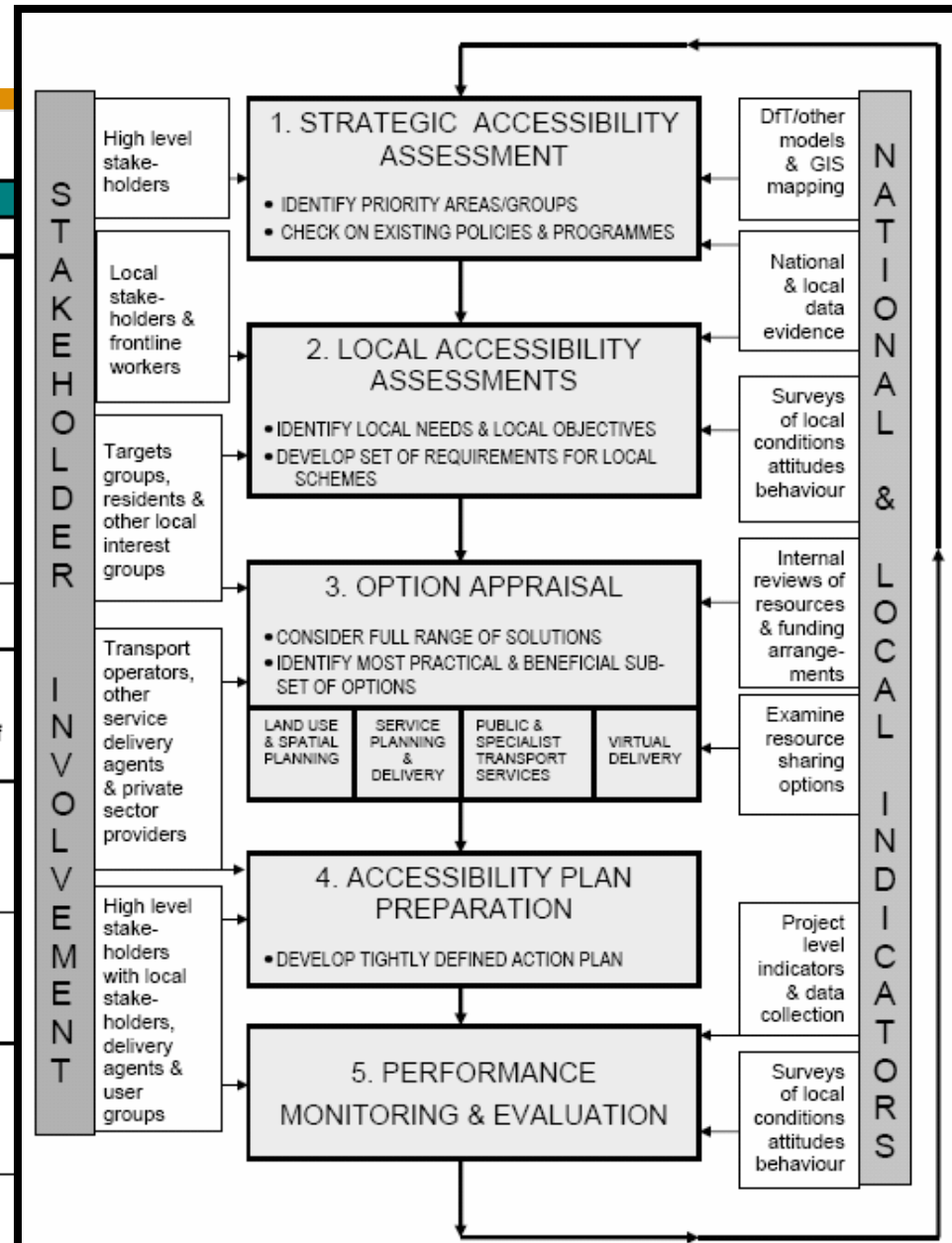
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# Accessibility planning is a UK tool to target Transport & SE gaps

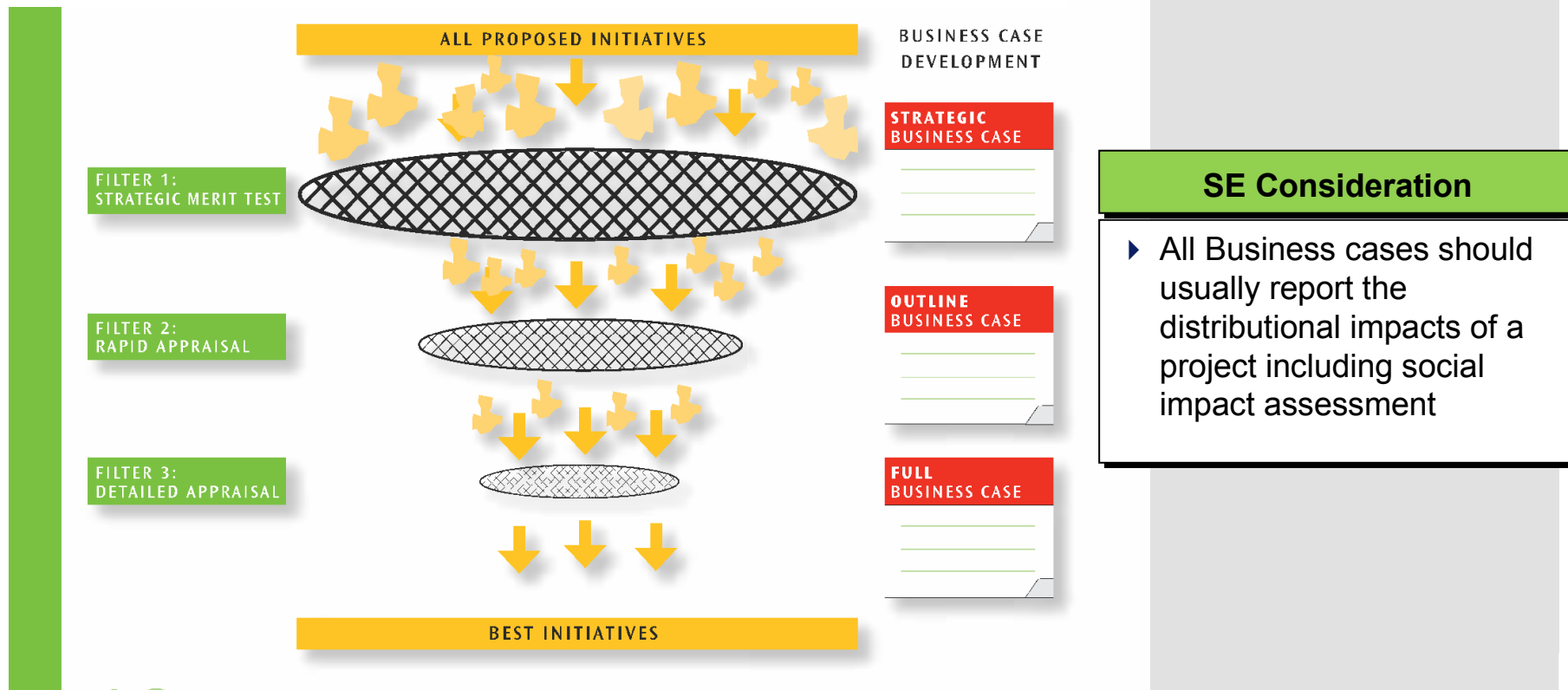
Table 4.1: UK Core Accessibility Indicators

Category	Indicators and Associated Upper and Lower Thresholds
Accessibility to school education (assessed separately for primary and secondary schooling):	<p>Primary:</p> <ul style="list-style-type: none"> <li>▶ % of pupils of compulsory school age within 15 and 30 minutes of a primary school by public transport; and</li> <li>▶ % of pupils of compulsory school age <i>in receipt of free school meals</i> within 15 and 30 minutes of a primary school by public transport.</li> </ul> <p>Secondary:</p> <ul style="list-style-type: none"> <li>▶ % of pupils of compulsory school age within 20 and 40 minutes of a secondary school by public transport; and</li> <li>▶ % of pupils of compulsory school age <i>in receipt of free school meals</i> within 20 and 40 minutes of a secondary school by public transport.</li> </ul>
Accessibility to further education	<ul style="list-style-type: none"> <li>▶ % of 16-19 year olds within 30 and 60 minutes of a further education establishment by public transport.</li> </ul>
Accessibility to work <sup>11</sup>	<ul style="list-style-type: none"> <li>▶ % people of working age (16-74) within 20 and 40 minutes of work by public transport; and</li> <li>▶ % of people <i>in receipt of Jobseekers' Allowance</i><sup>12</sup> within 20 and 40 minutes of work by public transport.</li> </ul>
Accessibility to a hospital	<ul style="list-style-type: none"> <li>▶ % of households within 30 and 60 minutes of a hospital by public transport; and</li> <li>▶ % of households <i>without access to a car</i> within 30 and 60 minutes of a hospital by public transport.</li> </ul>
Accessibility to a doctor	<ul style="list-style-type: none"> <li>▶ % of households within 15 and 30 minutes of a GP by public transport; and</li> <li>▶ % of households <i>without access to a car</i> within 15 and 30 minutes of a GP by public transport.</li> </ul>
Accessibility to a supermarket (reflecting access to food shopping)	<ul style="list-style-type: none"> <li>▶ % of households within 15 and 30 minutes of a supermarket by public transport; and</li> <li>▶ % of households <i>without access to a car</i> within 15 and 30 minutes of a supermarket by public transport.</li> </ul>



# Aust. national transport project appraisal guides include social impact assessment

## National Guidelines for Transport System Management in Australia



Source: Australian Transport Council (2006) 'National Guidelines for Transport System Management in Australia'

# Four key types of Transport option can address needs

**IMPROVEMENTS TO EXISTING TRANSPORT SERVICES**

**COMMUNITY TRANSPORT SERVICES**

**TRANSPORT POLICY AND FUNDING PROPOSALS**

**OUTREACH – BRINGING ACTIVITIES TO PEOPLE**

# Many existing service improvements are possible

## Public Transport

- ▶ New Bus Services
- ▶ Higher Service Frequency
- ▶ Longer Service Spans
- ▶ Lower Fares
- ▶ More Operation at Nights/Weekends
- ▶ Fund using School Buses when available
- ▶ Provide better targeted information to Youth

## Walking

- ▶ Walking school bus

## Cycle

- ▶ Safe cycle routes/paths
- ▶ Cycle trains
- ▶ Shared/free bike schemes

## Car Driver

- ▶ Car/Moped grants/ subsidy schemes e.g. wheels to work
- ▶ Improved training programs/license testing (for safety)

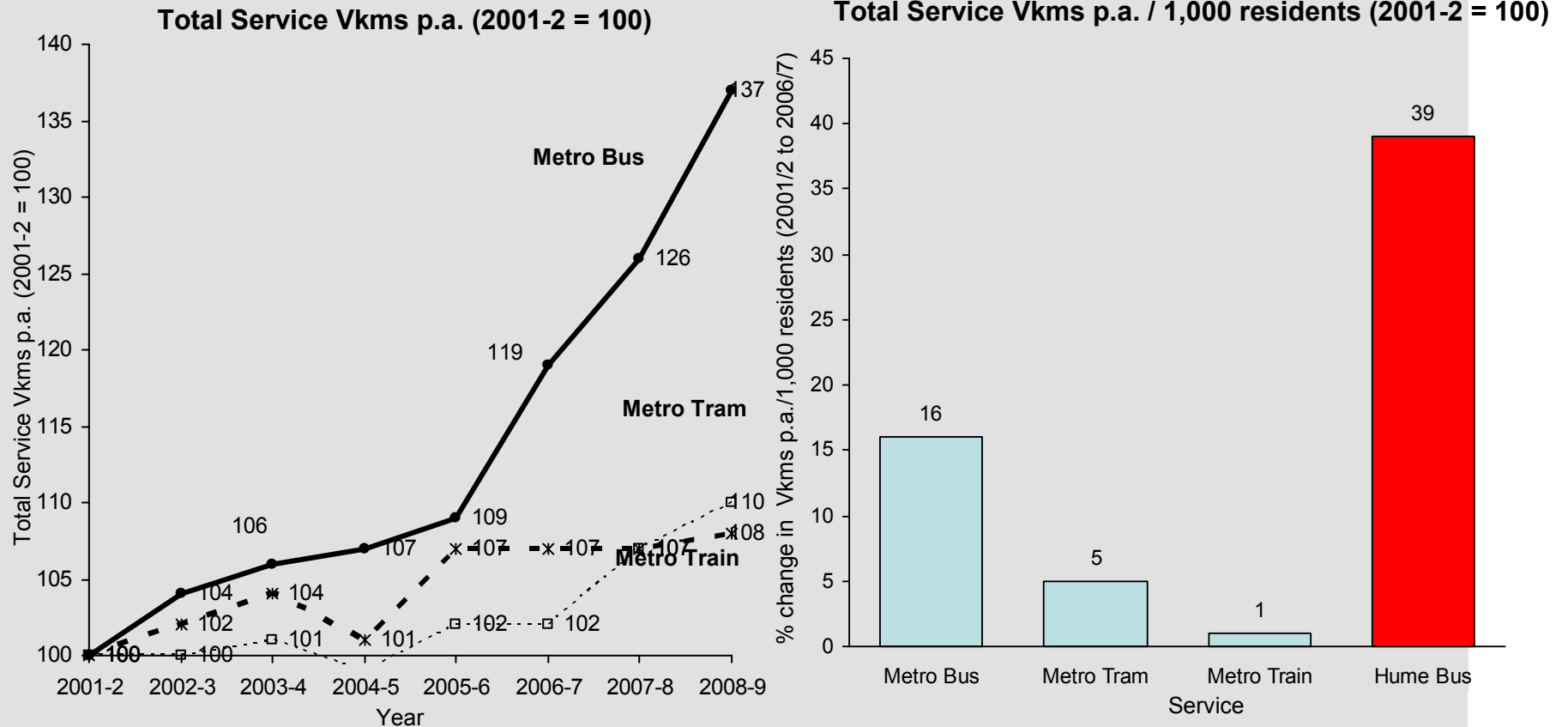
## Ride Sharing

- ▶ Community car schemes
- ▶ Modify post/delivery vehicles to take passengers
- ▶ Private lift advertisers (voluntary)

## Taxi

- ▶ Subsidised taxi services (lower fare)
- ▶ Taxi Voucher systems
- ▶ Shared taxis/ more taxis

e.g.: Melbourne bus services have grown 37% in 7 years – part of the social transit agenda policy



Source: ITS Analysis - Updated April 2010 timetable vs Bus Plan January 2002 bus timetables  
 Analysis of annual reports for the Department of Itransport – ABS Population estimates for Melbourne CD and City of Hume

# Community transport is an important option in rural as well as urban settings

## Community Transport

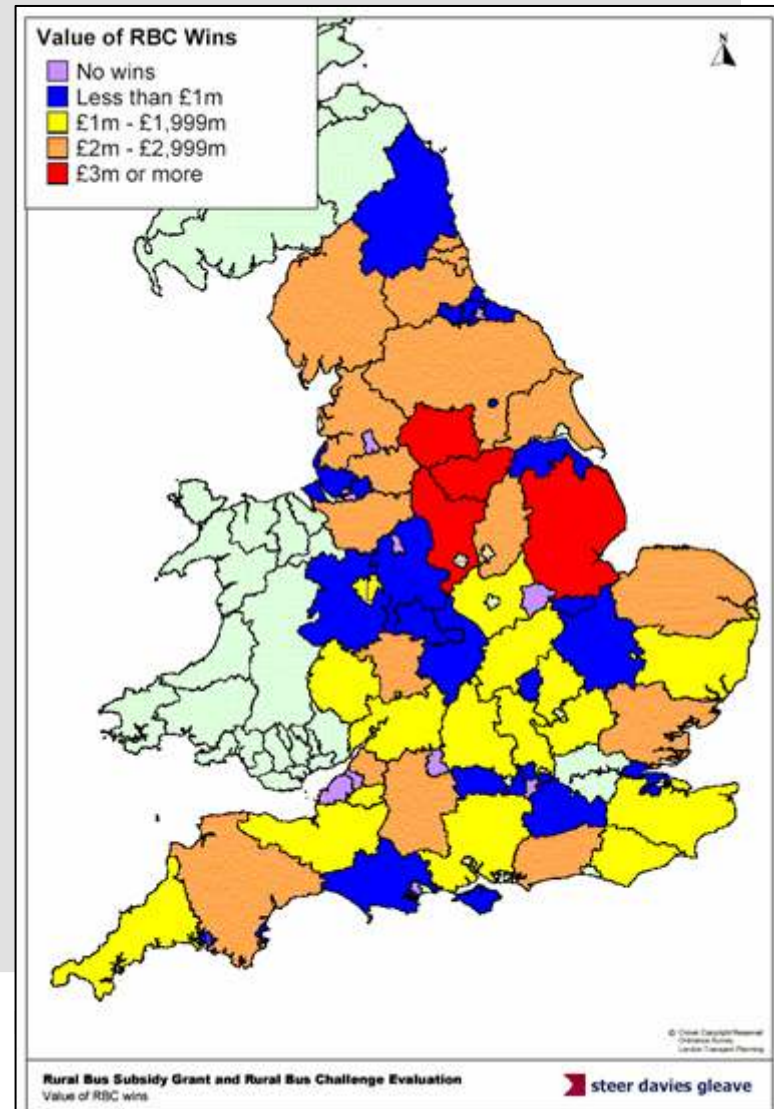
- **New Community Bus Services (group travel, many to one services)**
- **Demand responsive bus services (dial a ride)**
- **Community car sharing schemes/ volunteer driving schemes**
- **Community Bus Brokerage (sharing vehicles/ providing centralised insurance, financial technical and maintenance assistance to ensure participation/ acting as a central agent between user demand and vehicle supply)**



# Several policy and funding proposals have been used to address SE issues

## Example Funding Options

- **Community transport funded as part of the states public transport system (as in NSW)**
- **Human Services transport part of US Transit Funding**
- **Seed funding schemes:**
  - UK rural bus challenge (£175M)
  - UK rural bus grant/subsidy
  - UK rural transport partnership
- **Transport Connections Program (Victoria)**



# Outreach is another option for mainly rural contexts

## Example Outreach Programs

- **Playbus**
- **Training Bus**
- **Mobile Libraries**
- **Health Care Van**
- **Mobile Cyber Café**
- **The Bank Bus (Radobank Netherlands)**

Radobank in Holland operate a 'bank bus' to increase rural banking access

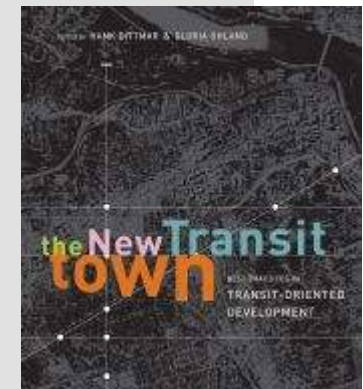


Murrundindi Cyber Bus



# An additional pro-active long term solution would good land use development & design

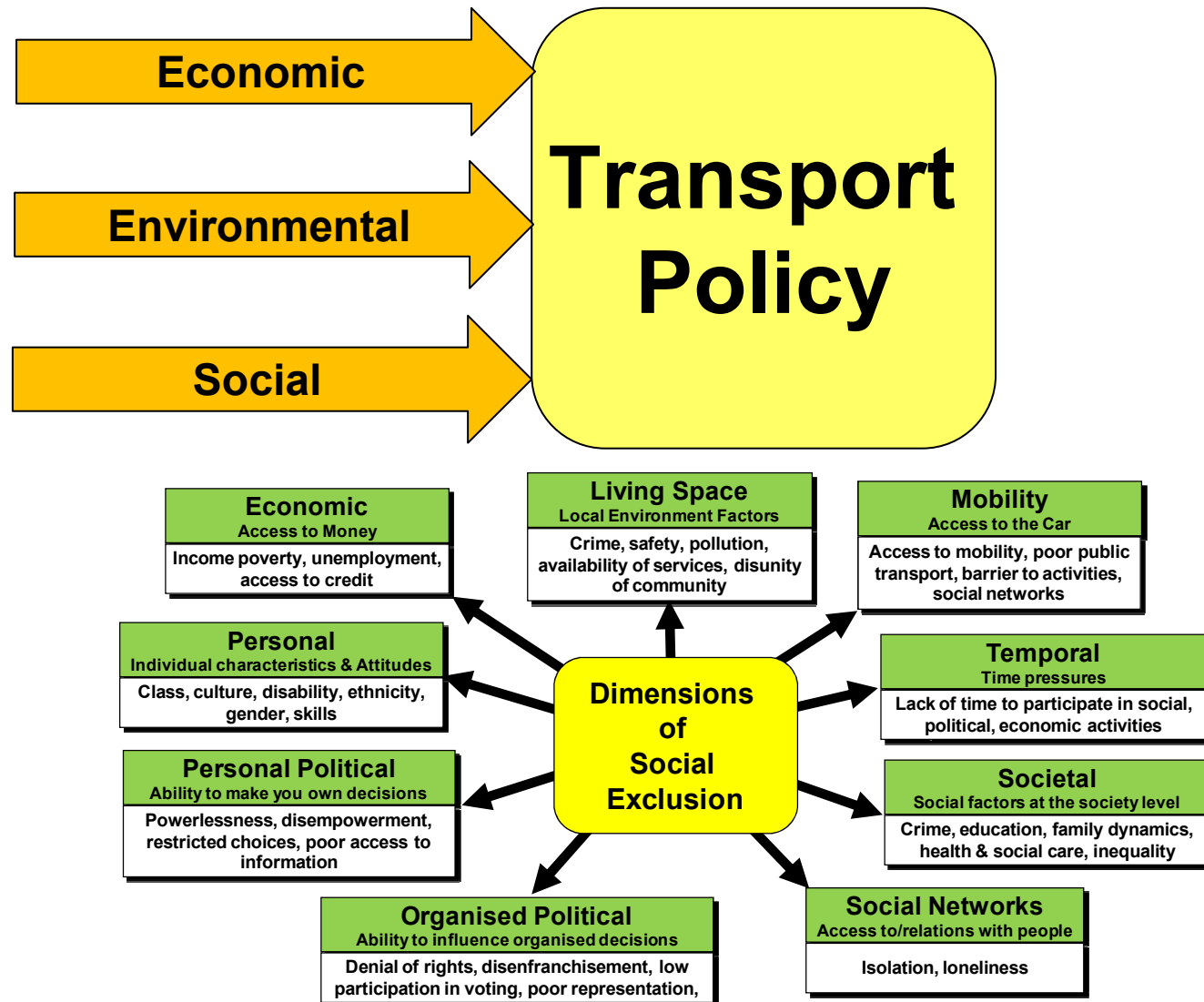
- **Social housing**
- **Local access to amenities**
- **Good walkability/bike access**
- **Higher density near active**
- **Smaller footprint**
- **High quality close proximity to transit**



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# The social objective is one of the major drivers of transport policy – SE guides this



# Lastly a PLUG....and....



**NO WAY TO GO**  
TRANSPORT AND SOCIAL DISADVANTAGE IN AUSTRALIAN COMMUNITIES

Edited by **Graham Currie, Janet Stanley and John Stanley**

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**Latest additions**

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**News & events**

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# Also to participate in the Transport and Social Inclusion Committee (TASIC) Events

## Transport and Social Inclusion Committee (Victoria)

- DoT, Monash Uni, BAV, Brotherhood of St Lawrence, VCOSS, VCTA, RACV
- Regular seminar topics
- Annual National Conference (2006, 2007, 2009)
- Web Sites:
  - <http://www.monash.edu.au/cmo/Transport2006/index.html>
  - <http://www.monash.edu.au/cmo/Transport2007/>
  - <http://www.monash.edu.au/cemo/Transport2009/>

## Transport, Social Disadvantage and Well-Being Forum: Progress

Melbourne, Australia

2009

