



MonRAS – Monash Research for an Ageing Society Forum”

‘Creating an environment for an ageing society: recent Monash and international work’

Tuesday 11 May, 2010 - Monash Club Clayton Campus, Seminar Rooms 2&3

Transport Perspectives on ageing, social exclusion and well being

Professor Graham Currie
Institute of Transport Studies,
Monash University

Agenda

1. Introduction
2. Context for Ageing and Transport
3. Decomposing Transport Disadvantage
4. The Spatial Distribution of Transport Needs
5. Conclusions

This presentation outlines new findings from Monash Research relative to Ageing and Transport...

- **Focus is preliminary results:**
 - Australian Research Council funded project ‘Investigating Transport Disadvantage, Social Exclusion and Well Being in Metropolitan, Regional and Rural Victoria’ (RMO 2006/1020 LP0669046). Social Exclusion (Social Policy)
- **Project is run by the Institute of Transport Studies, Monash University**
 - Principal Chief Investigator is Prof G. Currie
 - Research Fellow is Alexa Delbosc
- **Industry Partners are:**
 - Department of Transport (Victoria)
 - Bus Association of Victoria
 - Brotherhood of St Laurence
 - Interface Councils of Melbourne



... and is structured as follows

**Context for
Ageing and
Transport**

**Decomposing
Transport
Disadvantage**

**The Spatial
Distribution
of Transport
Needs**

Conclusions

Agenda

1. Introduction

2. Context for Ageing and Transport

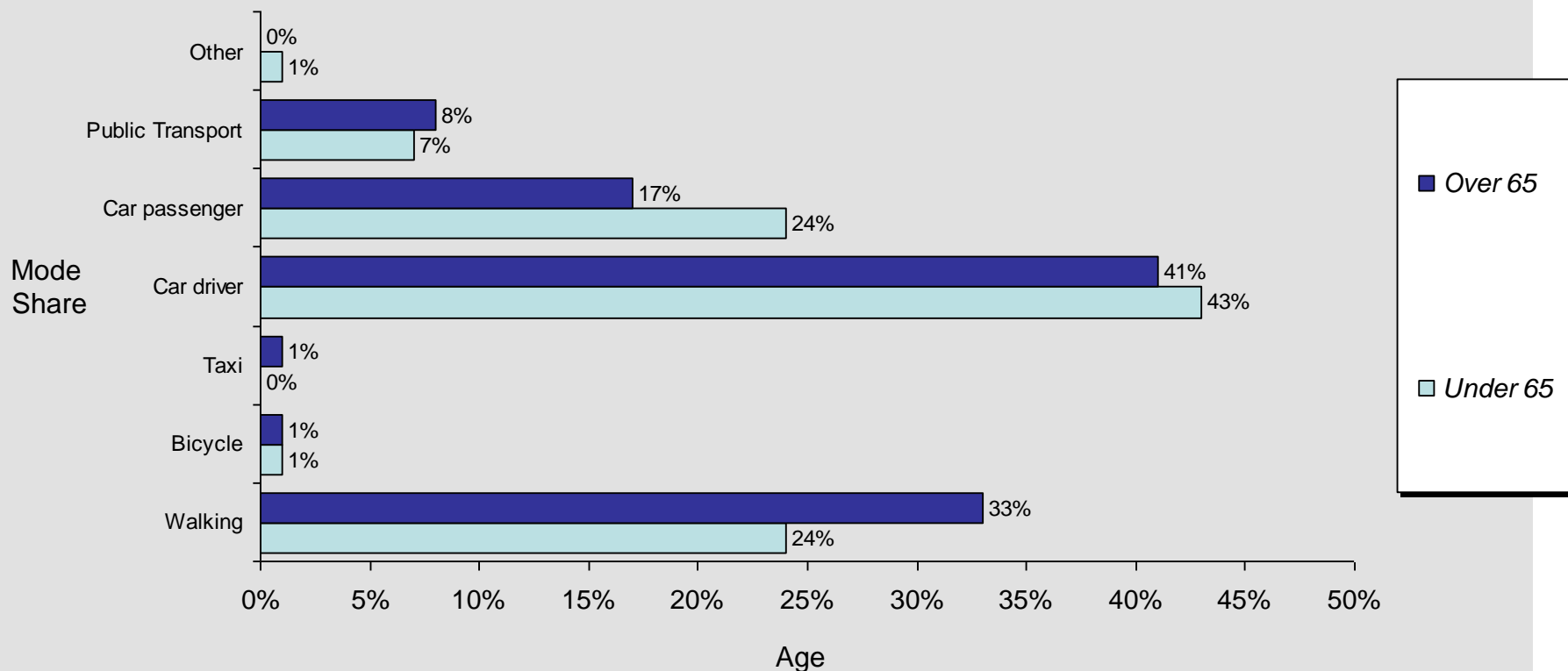
3. Decomposing Transport Disadvantage

4. The Spatial Distribution of Transport Needs

5. Conclusions

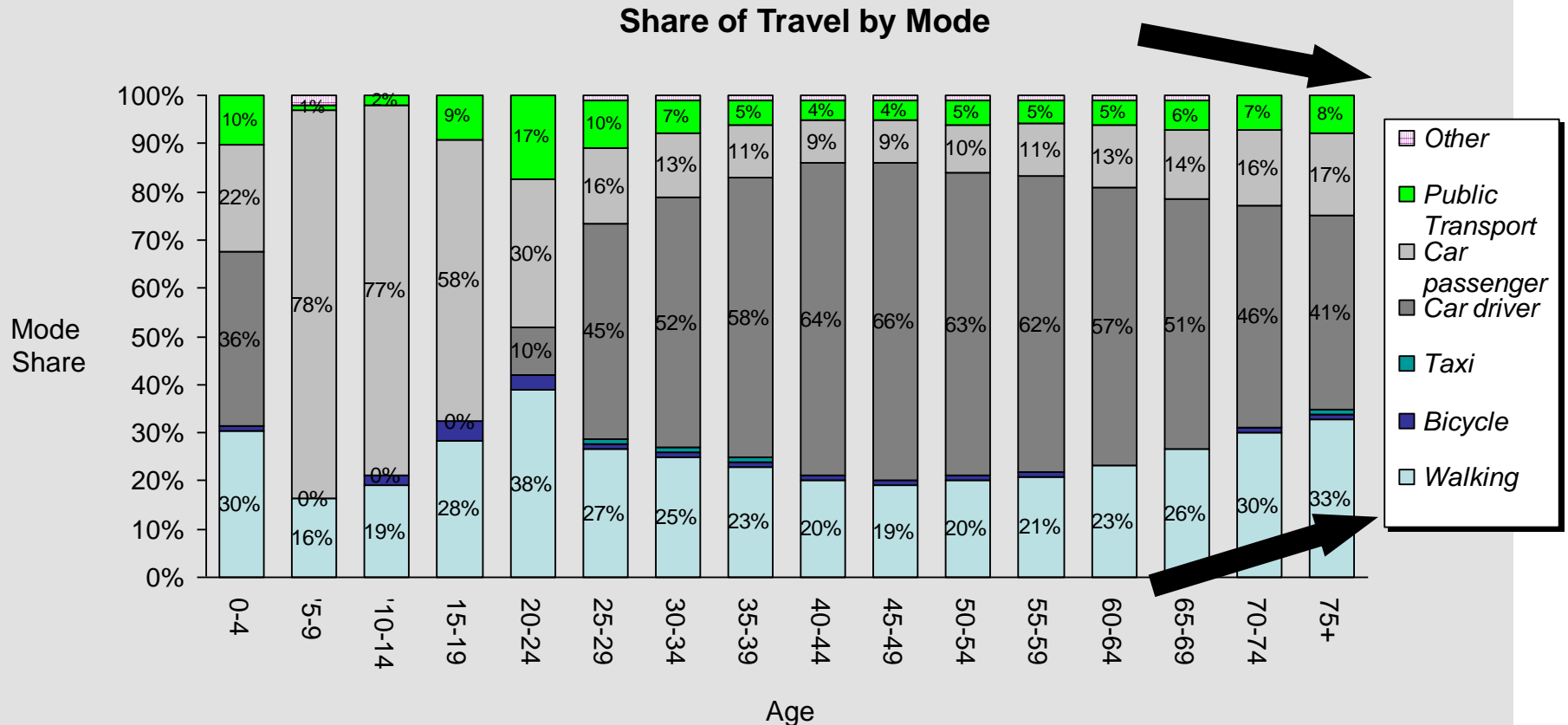
Today's older generation are car dependent but use PT/walk more than the rest of us

Share of Travel by Mode



Source: Victorian Activity Travel Survey 1994-1999

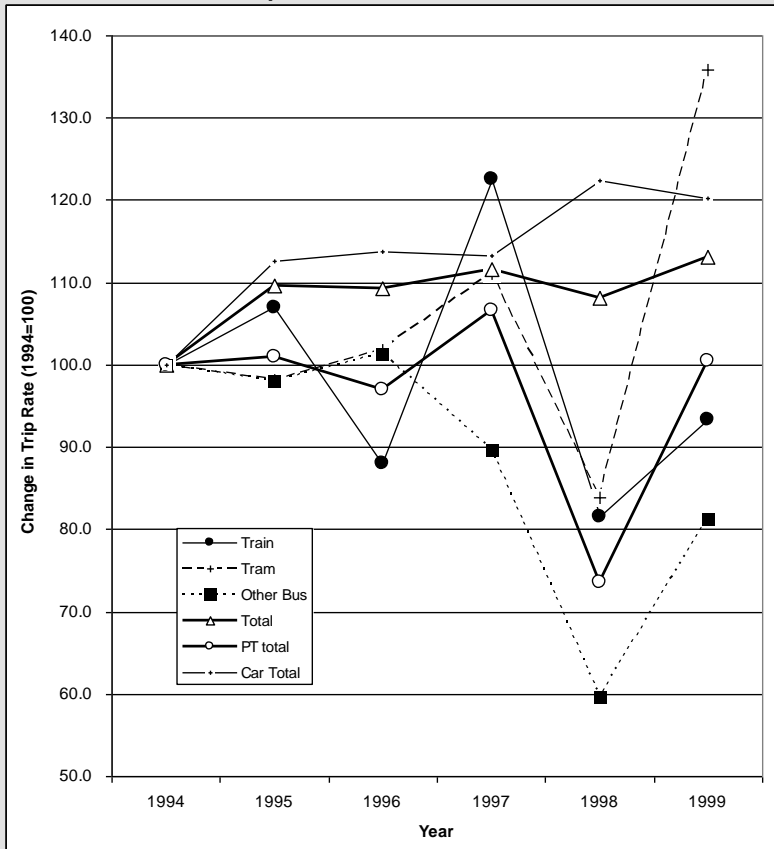
As people age there is a declining rate of car driving and more walk/lift and PT



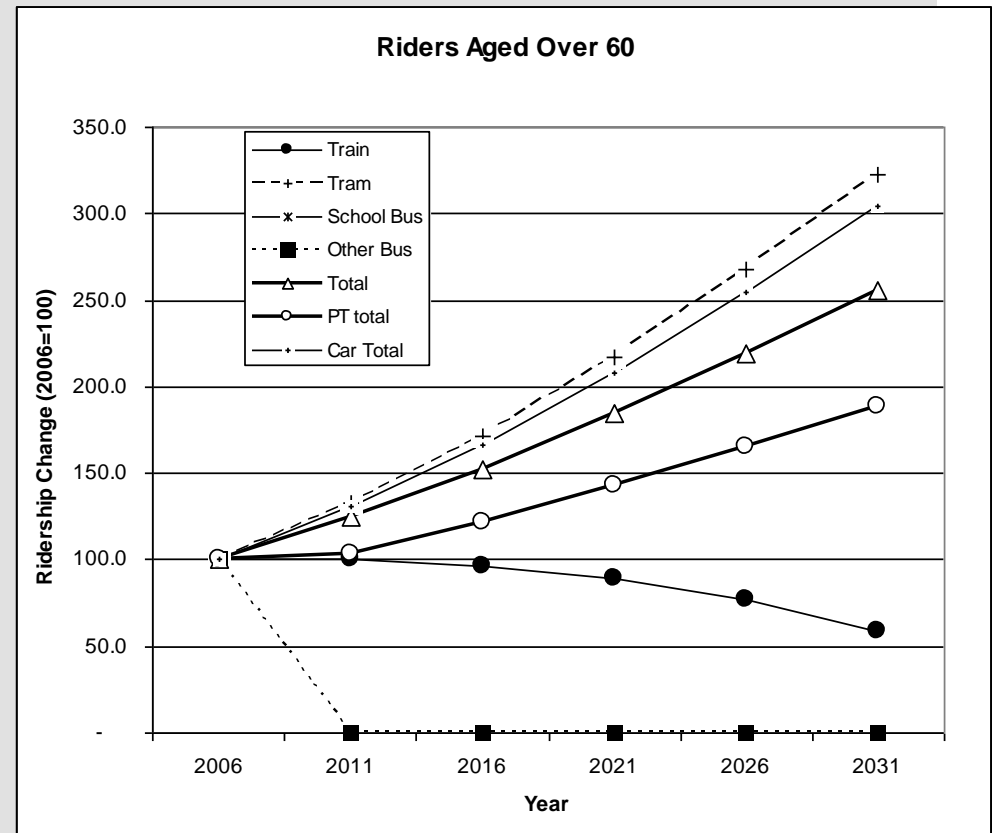
Source: Victorian Activity Travel Survey 1994-1999

Recent published ITS research found evidence of transit trip rate increases in elderly groups

Trends in Trip Rates – Over 60 1994-1999



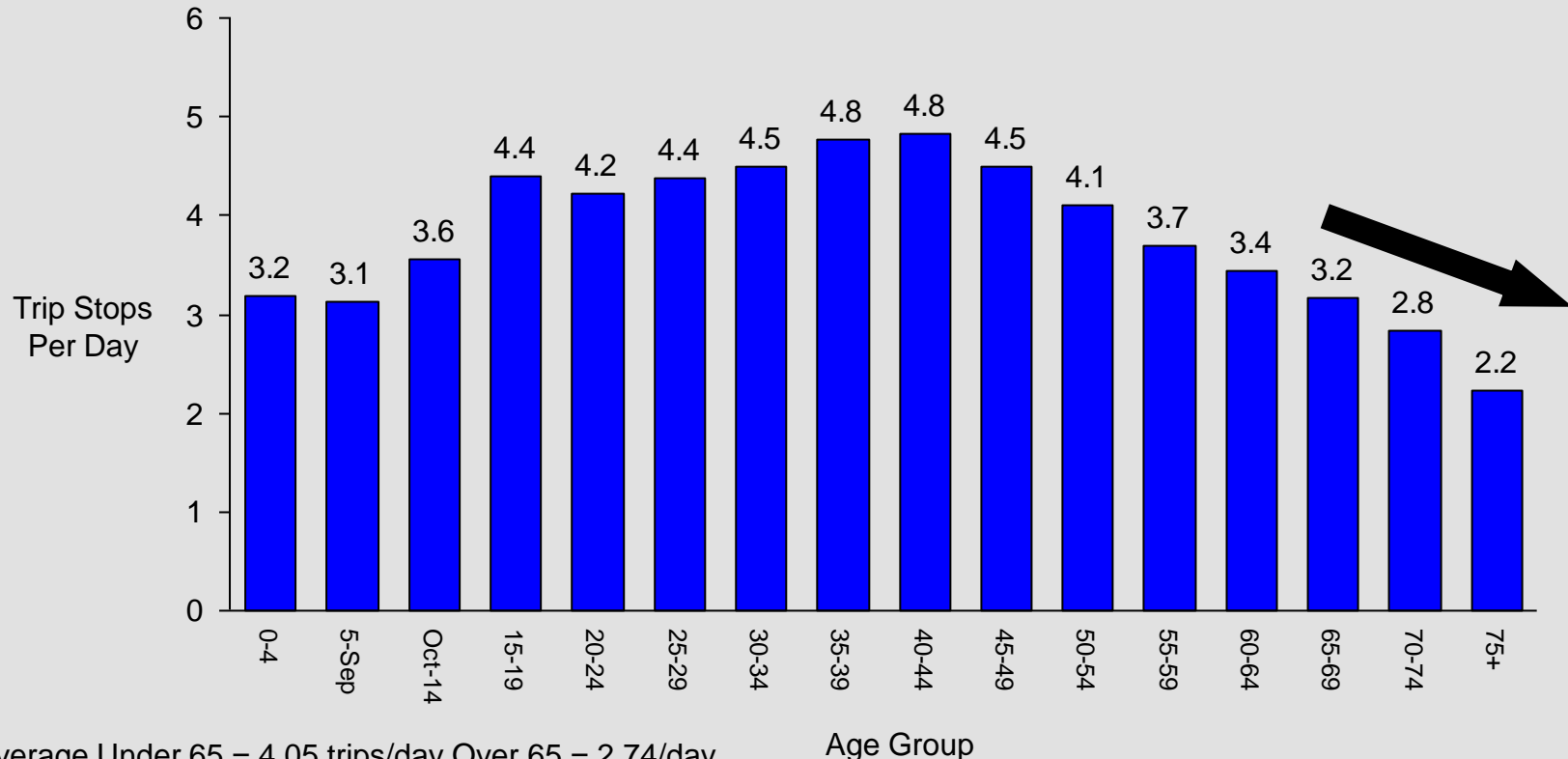
Forecast Ridership Based on Trend – Over 60 to 2031



Source: Currie G and Delbosc A (2010) 'Exploring Public Transport Usage Trends in an Ageing Population' Transportation Vol 37 pp 151-164

In addition daily trip rates decline in later years

Daily trip rate per person by age group



Source: Victorian Activity Travel Survey 1994-1999

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

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

Overseas research highlights the concerns of older people with transport

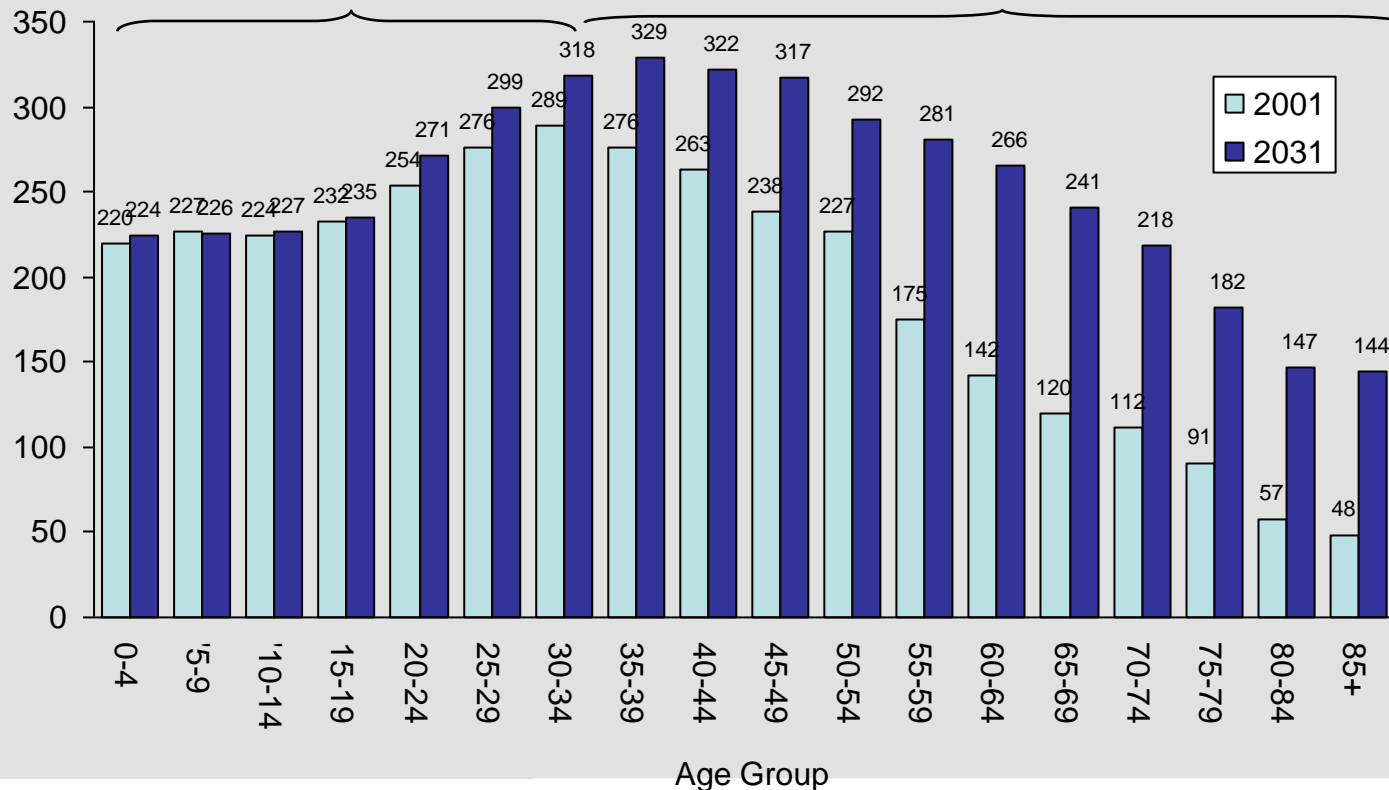
- **2004 Survey by American Public Transport Association**
 - 87% strongly agreed that “As I get older maintaining my independence and ability to get around is extremely important”
 - 89% of seniors who reported that public transport was not available to them agreed that “ many seniors worry that they will be stranded and unable to get around when they are no longer able to drive”
 - 83% agreed that “public transportation provides me the mobility and freedom to do what I most want to do.”
 - 83% agreed that “ public transportation provides easy access to things older adults need in everyday life such as doctor’s appointments, entertainment, shopping and visits with friends and family”

Growth is expected in all age groups but will be higher in older age groups...

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

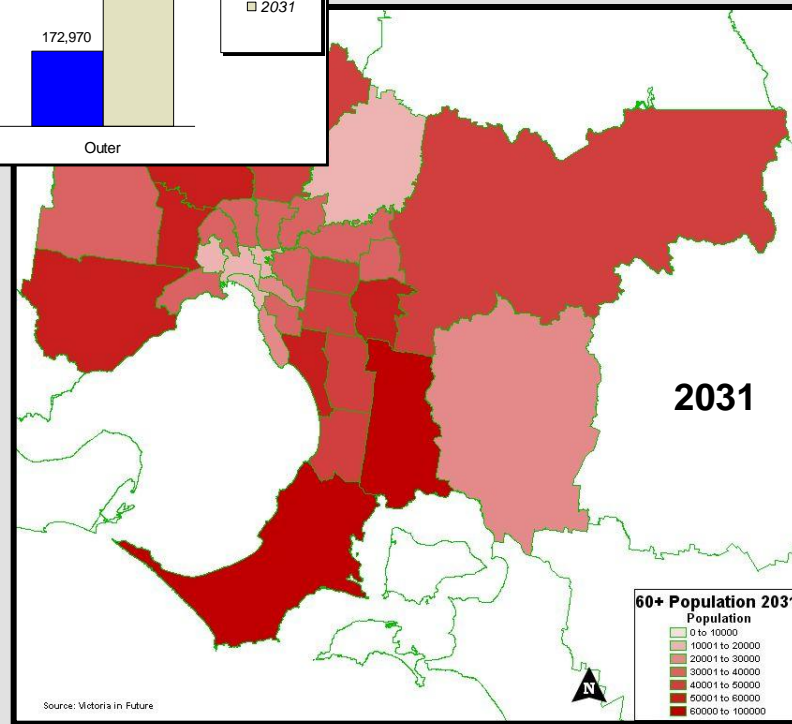
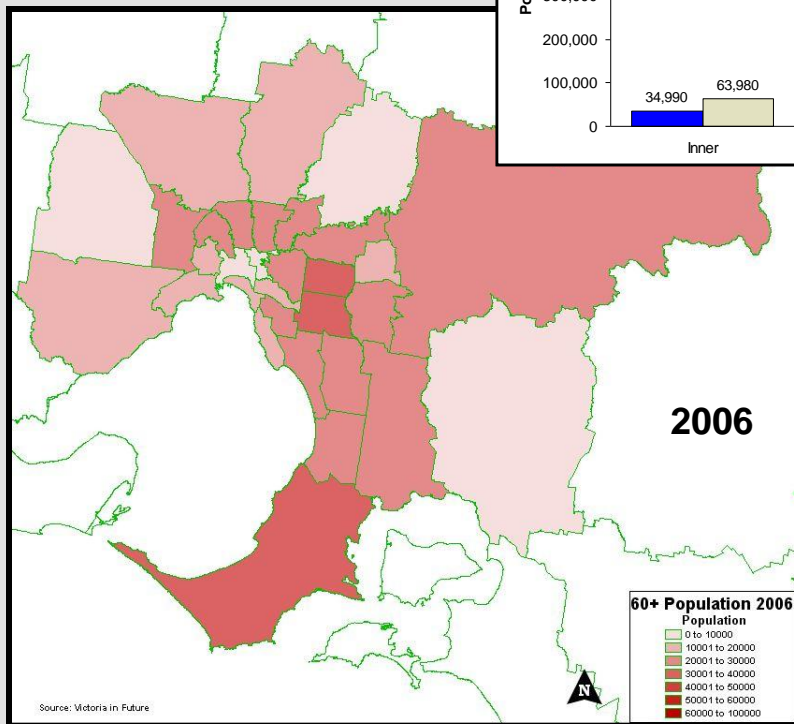
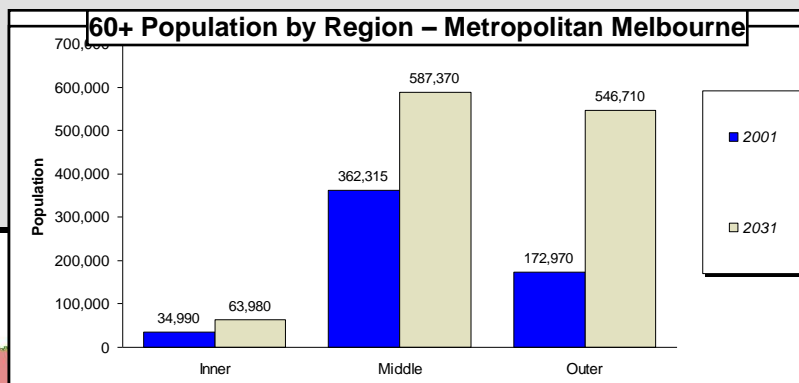
Note: No Decline in Young Age Groups

Note: Increases in All Middle/Older Age Groups



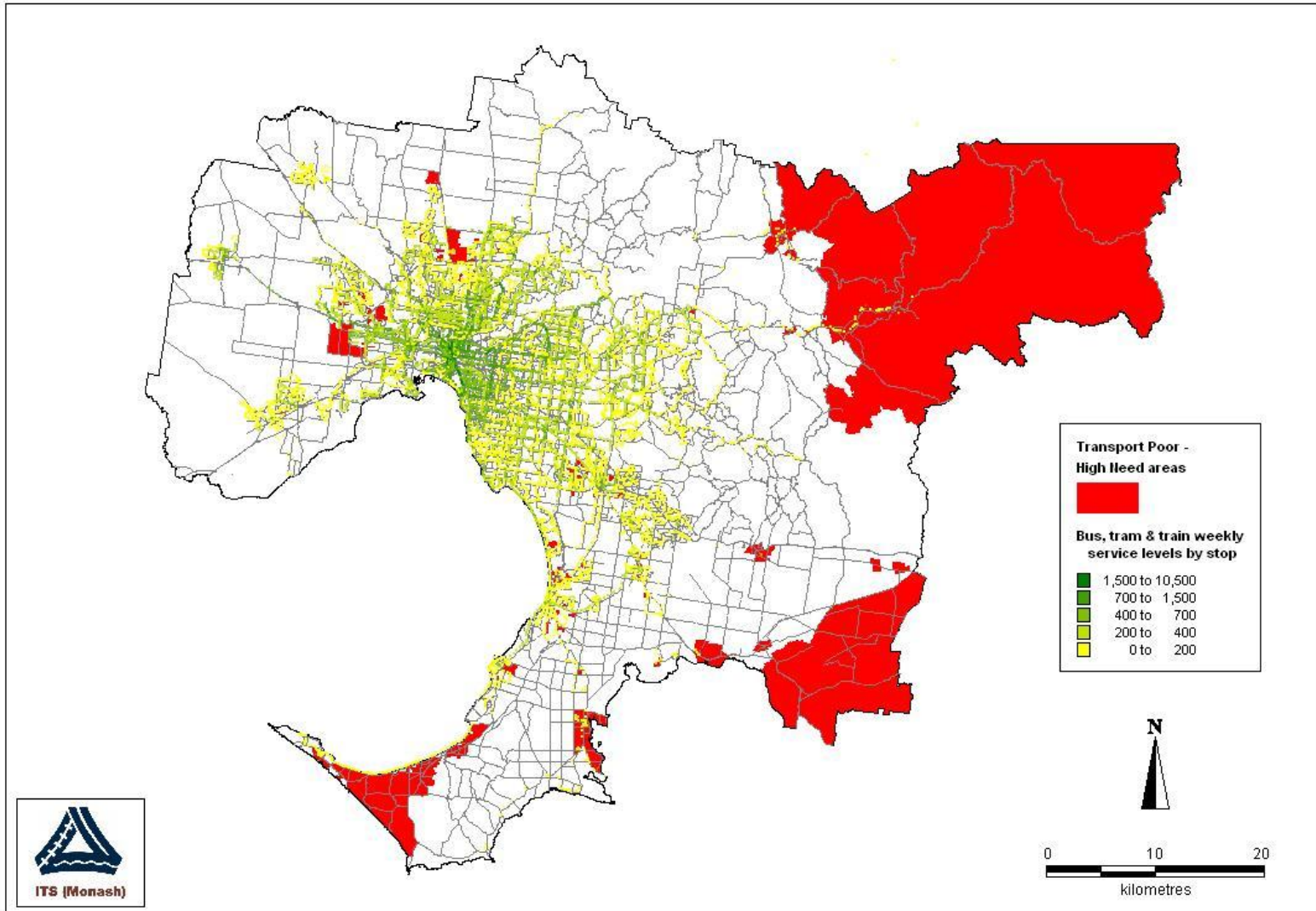
Source: DSE, 2004

...and is focussed on the fringe/ middle suburbs....



Source: DSE, 2004

.... where PT access is very poor



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Research concerns social exclusion and well being related to transport disadvantage in Victoria

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One analysis explores transport disadvantage – do people share similar concerns?

Modelled Factors for Degree of Difficulty with Transport

Degree of difficulty with travel attribute	Factors			
	Transit Disadvantage	Transport Disadvantage	Vulnerable / Impaired	Rely on Others
Buses/trains/trams being available at night	.788			
Buses/trains/trams being available at weekends	.787			
Buses/trains/trams operating frequently	.687			
Being able to make bus/train/tram connections	.617			
Being able to get to bus/train/tram stops/stations	.428	.417	.420	
Being able to travel when you want to		.744		
Finding transport so you can travel		.688		
Being able to get around reliably		.685		
Getting to places quickly		.634		
Finding the time to travel when you need to		.585		
Being able to physically get onto/off buses/trains/trams			.682	
Needing help to get around on your own			.609	
Being able to understand where to go		.439	.584	
Feeling safe from theft/attack when travelling on your own			.514	
Having to rely on others for transport				.674
Finding someone to provide assistance when transport is available				.659
Covering the costs of your transport				.607

Note: Bold variables were used to formulate that factor for further analyses

Source: Delbosc A and Currie G (2010) 'Transport Problems That Matter – Social and Psychological Links to Transport Disadvantage' *Jnl of Transport Geography*

The analysis came up with 4 factors explaining 57% of variance

Factor	% of variance (rotated)	Cumulative %
1	18%	18%
2	17%	36%
3	11%	47%
4	10%	57%

57% of variance is explained by these four factors

All relate to fringe areas but only one relates to specific older groups

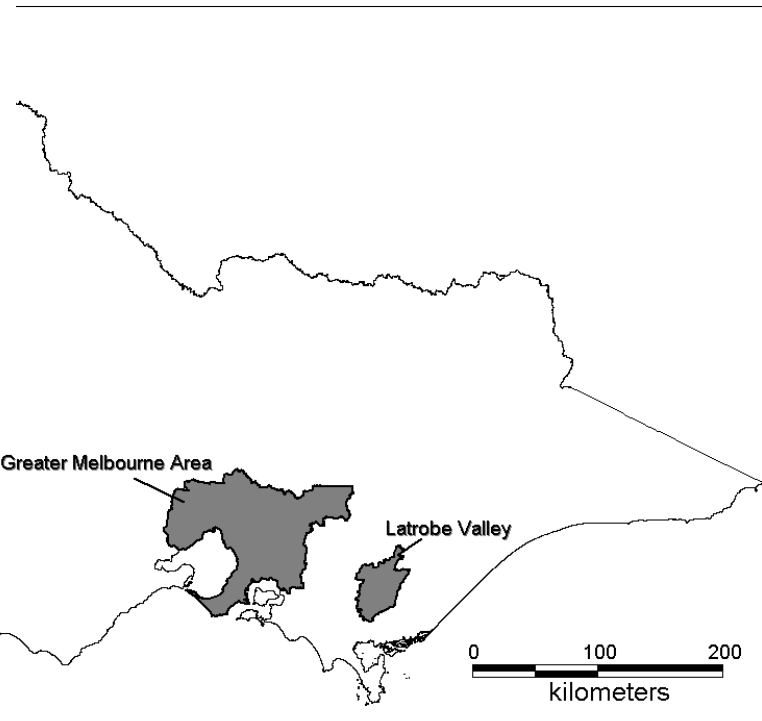
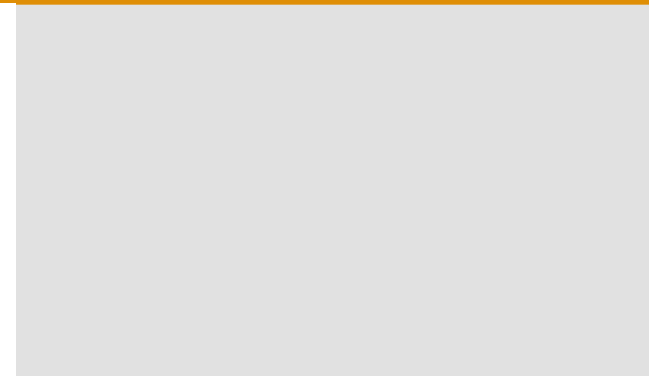
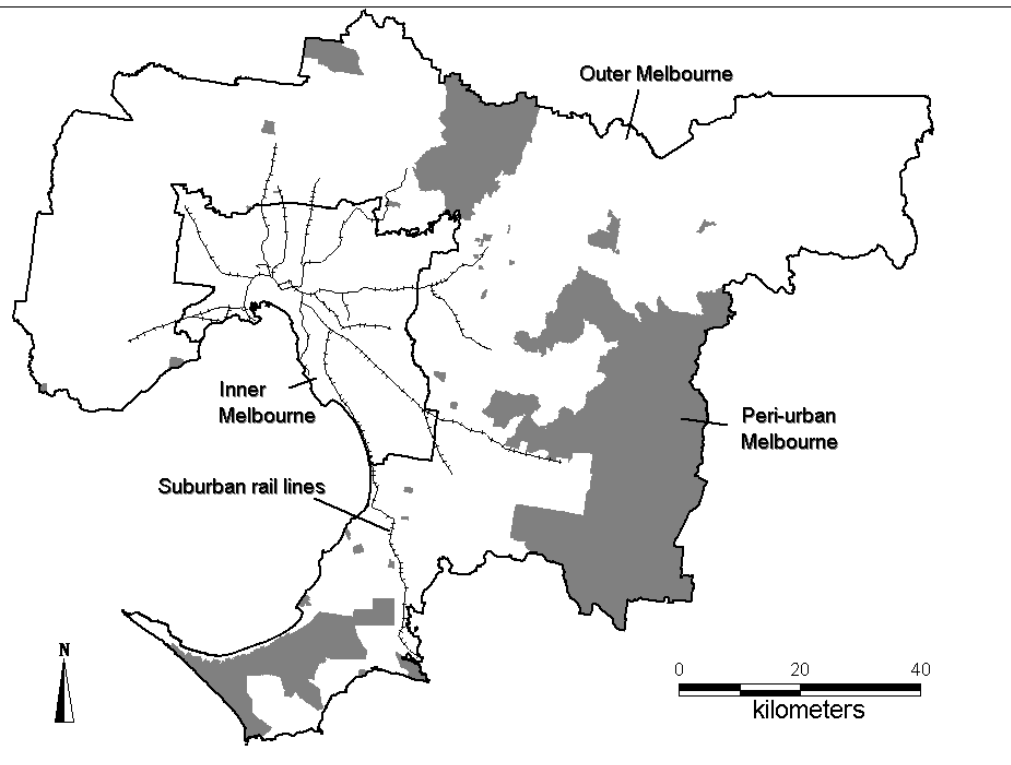
Modelled Degree of Difficulty Factors – Access, Segment Type and SE/WB

Transit Disadvantage	Transport Disadvantage	Vulnerable / Impaired	Rely on Others
<p><u>38% of sample</u></p> <ul style="list-style-type: none"> ▶ Working adults ▶ Mid age, income ▶ Av. public transport use <p><u>Access</u></p> <ul style="list-style-type: none"> ▶ Outer/remote ▶ Low PT Supply <p><u>Self Reported Difficulties</u></p> <ul style="list-style-type: none"> ▶ Lack of Time ▶ Moderate Travel Difficulties ▶ High Activity Barriers ▶ High Fuel Price Impact 	<p><u>18% of overall sample</u></p> <ul style="list-style-type: none"> ▶ Busy working adults ▶ Lowest public transport supply but highest use <p><u>Access</u></p> <ul style="list-style-type: none"> ▶ Outer/remote ▶ Lowest PT Supply <p><u>Self Reported Difficulties</u></p> <ul style="list-style-type: none"> ▶ Lack of Time ▶ High Travel Difficulties ▶ Very High Activity Barriers ▶ High fuel Price Impact 	<p><u>10% of sample</u></p> <ul style="list-style-type: none"> ▶ Older females ▶ Low income ▶ Poor health, disability pension ▶ Feel unsafe on transit and in home <p><u>Access</u></p> <ul style="list-style-type: none"> ▶ Outer/remote ▶ Low/Av. PT Supply <p><u>Self Reported Difficulties</u></p> <ul style="list-style-type: none"> ▶ Low Travel Difficulties ▶ Very High Activity Barriers 	<p><u>25% of sample</u></p> <ul style="list-style-type: none"> ▶ Av. age and household ▶ Unemployed ▶ Lower income ▶ Poor health, disability pension ▶ Feels unsafe ▶ Lack of trust <p><u>Access</u></p> <ul style="list-style-type: none"> ▶ Outer/remote ▶ Average PT Supply <p><u>Self Reported Difficulties</u></p> <ul style="list-style-type: none"> ▶ Lack of time ▶ Moderate Travel Difficulties ▶ High Activity Barriers ▶ V. High Fuel Price Impact
<p><u>Social Excluded</u> Low <u>Well Being</u> Slightly Low</p>	<p><u>Social Excluded</u> Low <u>Well Being</u> Slightly Low</p>	<p><u>Social Excluded</u> High <u>Well Being</u> Low</p>	<p><u>Social Excluded</u> Some (Social Support) <u>Well Being</u> Low</p>

Agenda

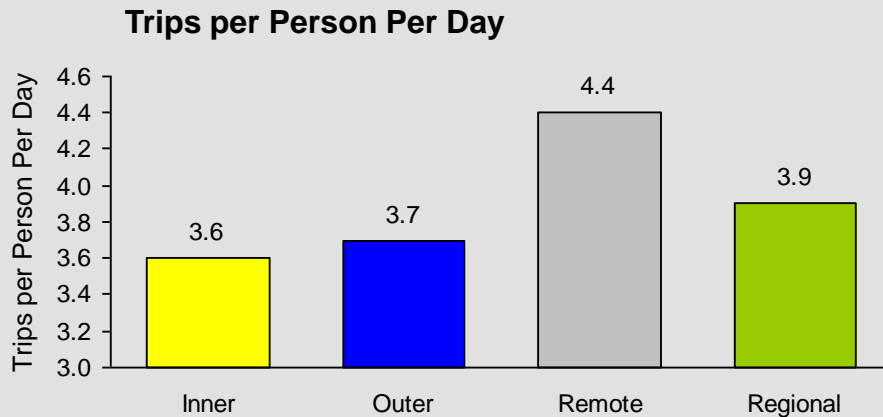
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New results focus on contrasting issues between areas

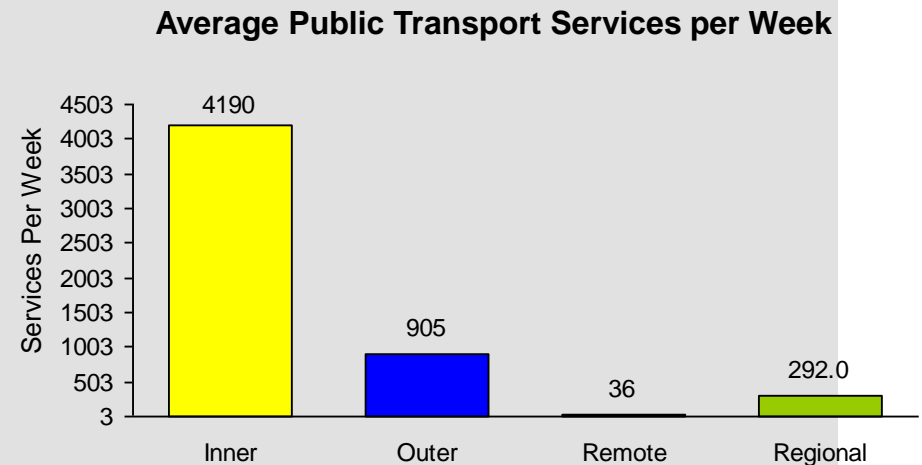
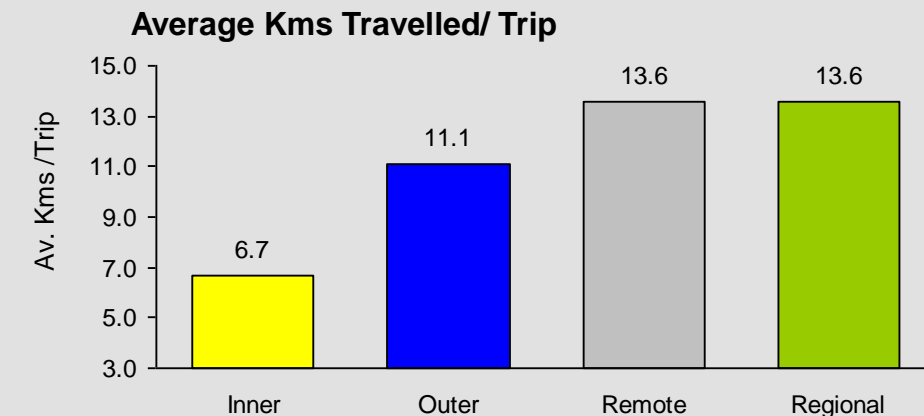


Source: Currie G and Delbosc A (2010) 'Exploring Transport Disadvantage, Social Exclusion And Well-Being In A Spatial Context' World Conference on Transport Research Lisbon July 2010 Under Review

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



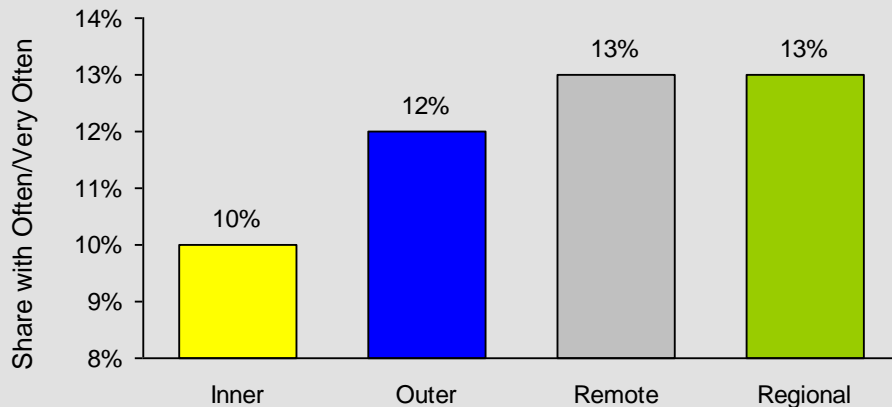
“Remote” = outer areas with no or nearly no public transport supply



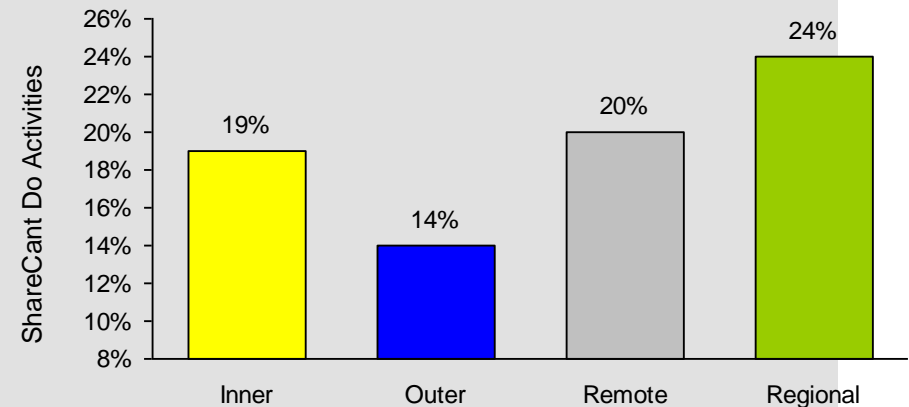
Source: Currie G and Delbosc A (2010) 'Exploring Transport Disadvantage, Social Exclusion And Well-Being In A Spatial Context' World Conference on Transport Research Lisbon July 2010 Under Review

...and report more transport problems & restricted activity access

Self Reported Frequency of Transport Problems



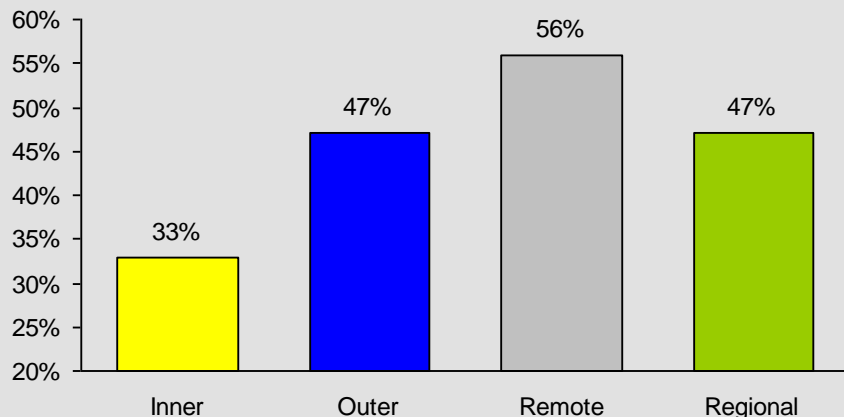
Activities Cannot Do Due to Transport Problems



Source: Currie G and Delbosc A (2010) 'Exploring Transport Disadvantage, Social Exclusion And Well-Being In A Spatial Context' World Conference on Transport Research Lisbon July 2010 Under Review

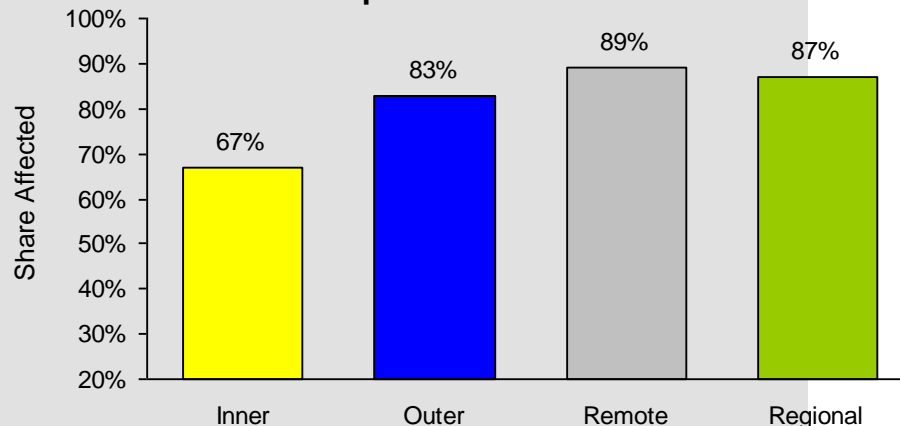
Fuel price increases have bigger impact in fringe remote areas

Travel Affected by Higher Fuel Prices

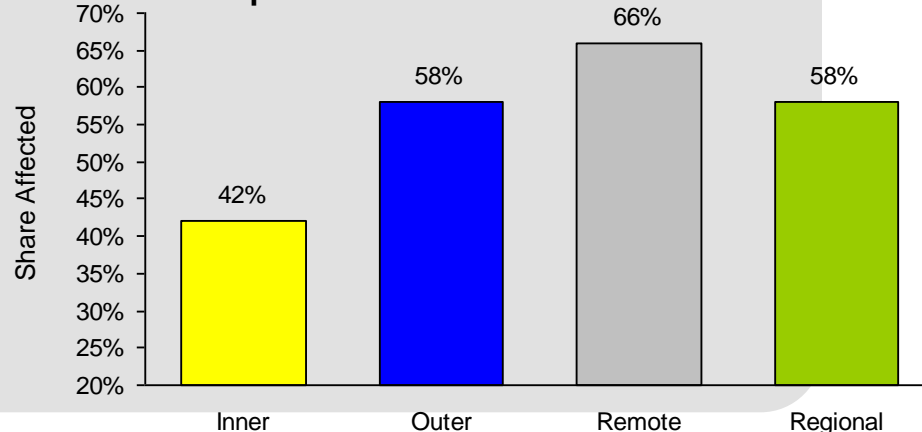


RESPONSE TO HIGHER FUEL PRICES

Made Less Trips Overall



Participate in Activities Less



Source: Currie G and Delbosc A (2010) 'Exploring Transport Disadvantage, Social Exclusion And Well-Being In A Spatial Context' World Conference on Transport Research Lisbon July 2010 Under Review

SE/WB links to transport are mixed but hint at a bigger WB issue in fringe/remote areas

Table 5: Links Between Social Exclusion, Well Being and Transport Disadvantage by Region

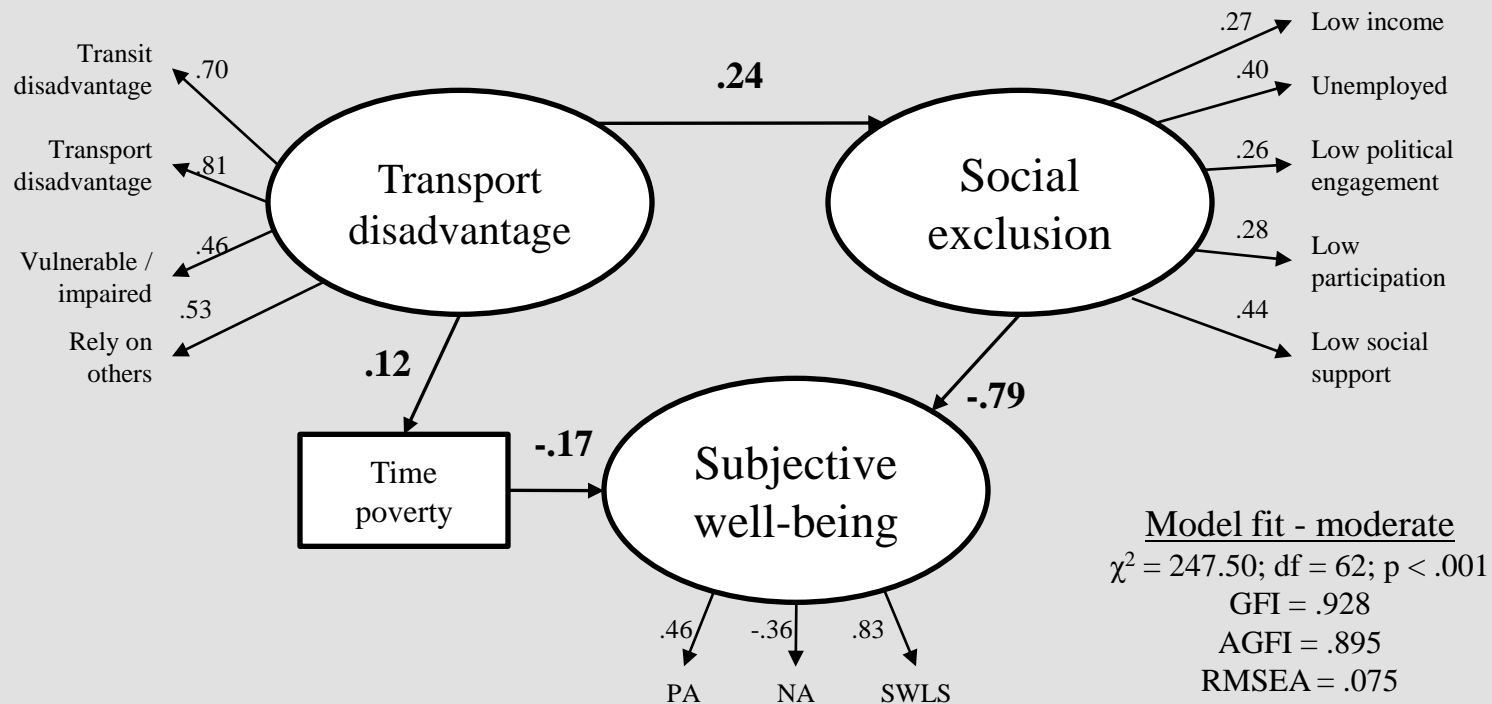
	Metro overall	Inner Melb	Outer Melb	Peri-Urban	Regional
SOCIAL EXCLUSION AND TRANSPORT DISADVANTAGE					
Correlation between “Frequency of difficulties accessing activities due to transport problems” and social exclusion score					
Social exclusion score	.08*	.15*	.05	.12	.20**
Correlation between “Number of activities cannot do due to transport problems” and social exclusion score					
Social exclusion score	.01	.12	-.02	.11	.12
WELL BEING AND TRANSPORT DISADVANTAGE					
Correlation between “Frequency of difficulties accessing activities due to transport problems” and Well-being					
Personal Well Being Index	-.21**	-.29**	-.18**	-.33**	-.44**
Correlation between “Number of activities cannot do due to transport problems” and Well-being					
Satisfactions With Life Scale	-.14**	-.10	-.15**	-.32**	-.30**

*p < .05; **p < .01

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Overall results suggest transport is a significant influence on social exclusion



Source: Currie G and Delbosc A (Under Review) "Modelling the Social and Psychological Impacts of Transport Disadvantage" Transportation (Submitted Sept 2009)

Major conclusions – transport and ageing



- **Older isolated women are a priority for policy – fringe/regional areas a priority concern**
- **Need to provide alternatives to the car in later life/ consider location relative to activities and ease of access to transport alternatives**

Lastly.....an invitation to use SORT (Social Research in Transport) Clearinghouse

Social Research in Transport (SORT) Clearinghouse - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.sortclearinghouse.info/



SOCIAL RESEARCH IN TRANSPORT (SORT) CLEARINGHOUSE

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About SORT

The Social Research in Transport (SORT) Clearinghouse aims to increase awareness of social issues in transport by making it easier to access research in this area. The Clearinghouse is a repository of research reports, research abstracts and links to research findings.

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Gudrun Haindl and Ralf Risser

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