



Festival of Urbanism

"Equity and accessibility: lessons from the housing, health and transport nexus"

Room F4.40, Building F, on the Monash Caulfield campus

Melbourne, Australia

Wednesday 4th September 2019

Equity in transport and transport related social exclusion

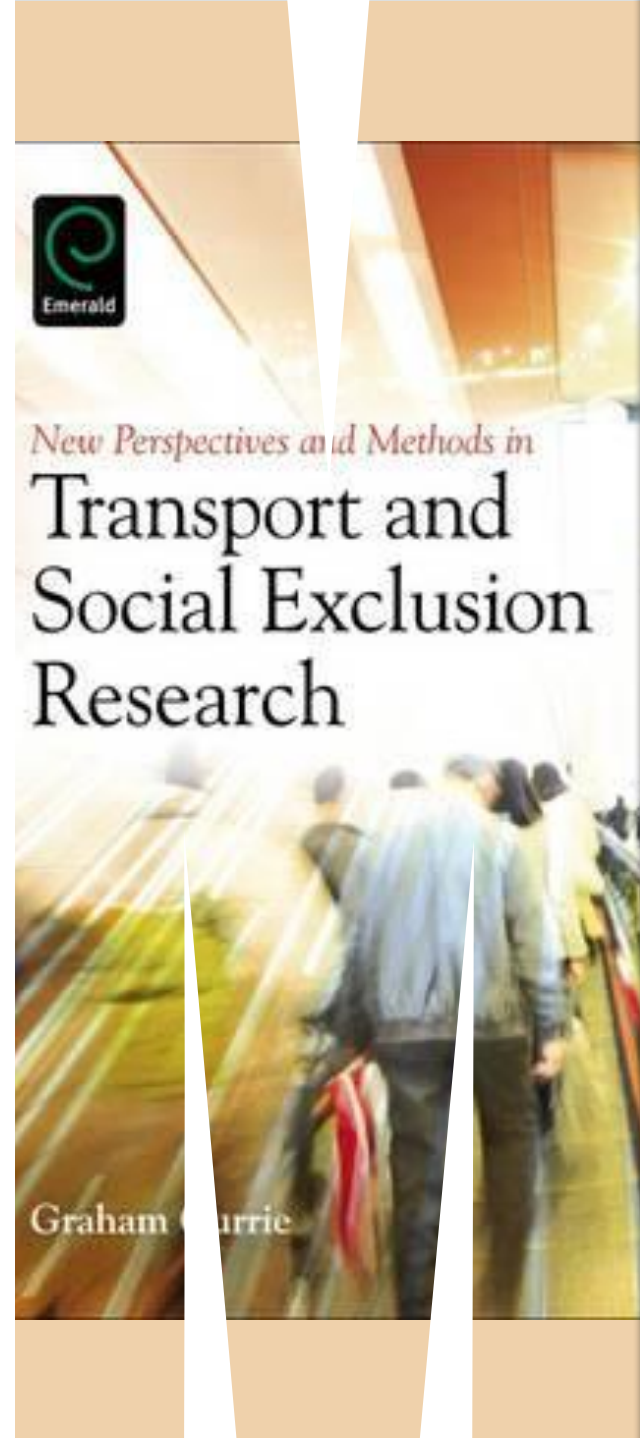
Professor Graham Currie FTSE
Public Transport Research Group
Institute of Transport Studies
Monash University



MONASH
INSTITUTE OF
TRANSPORT
STUDIES

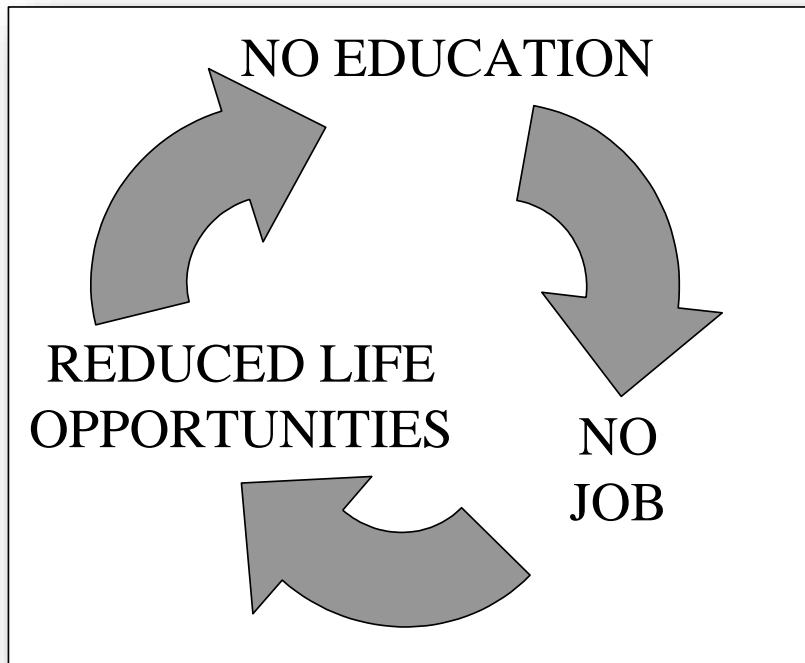
Institute of Transport Studies (Monash)

The Australian Research Council Key Centre in Transport Management

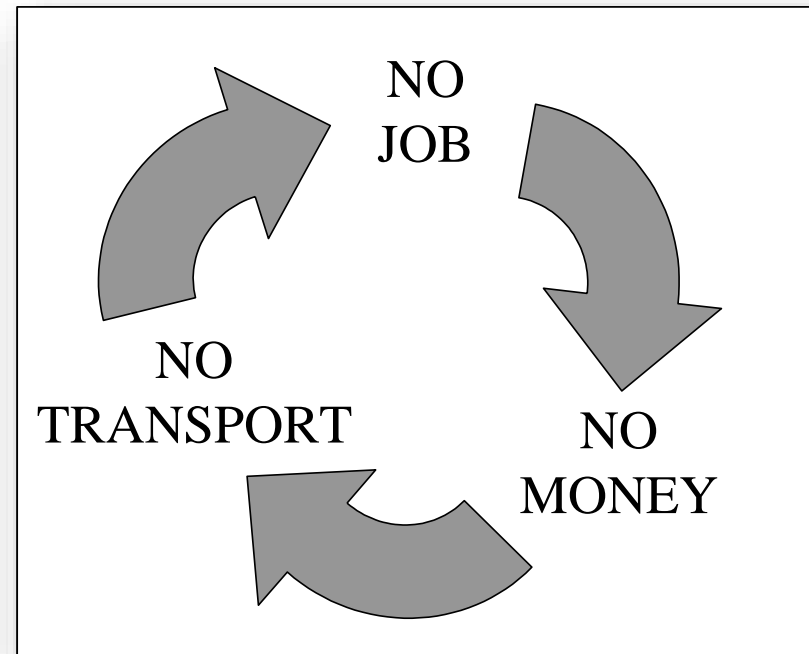


It is widely acknowledged that TRANSPORT PROBLEMS much like lack of education, can fundamentally limit life opportunities [but by how much?]

Education and Social Exclusion

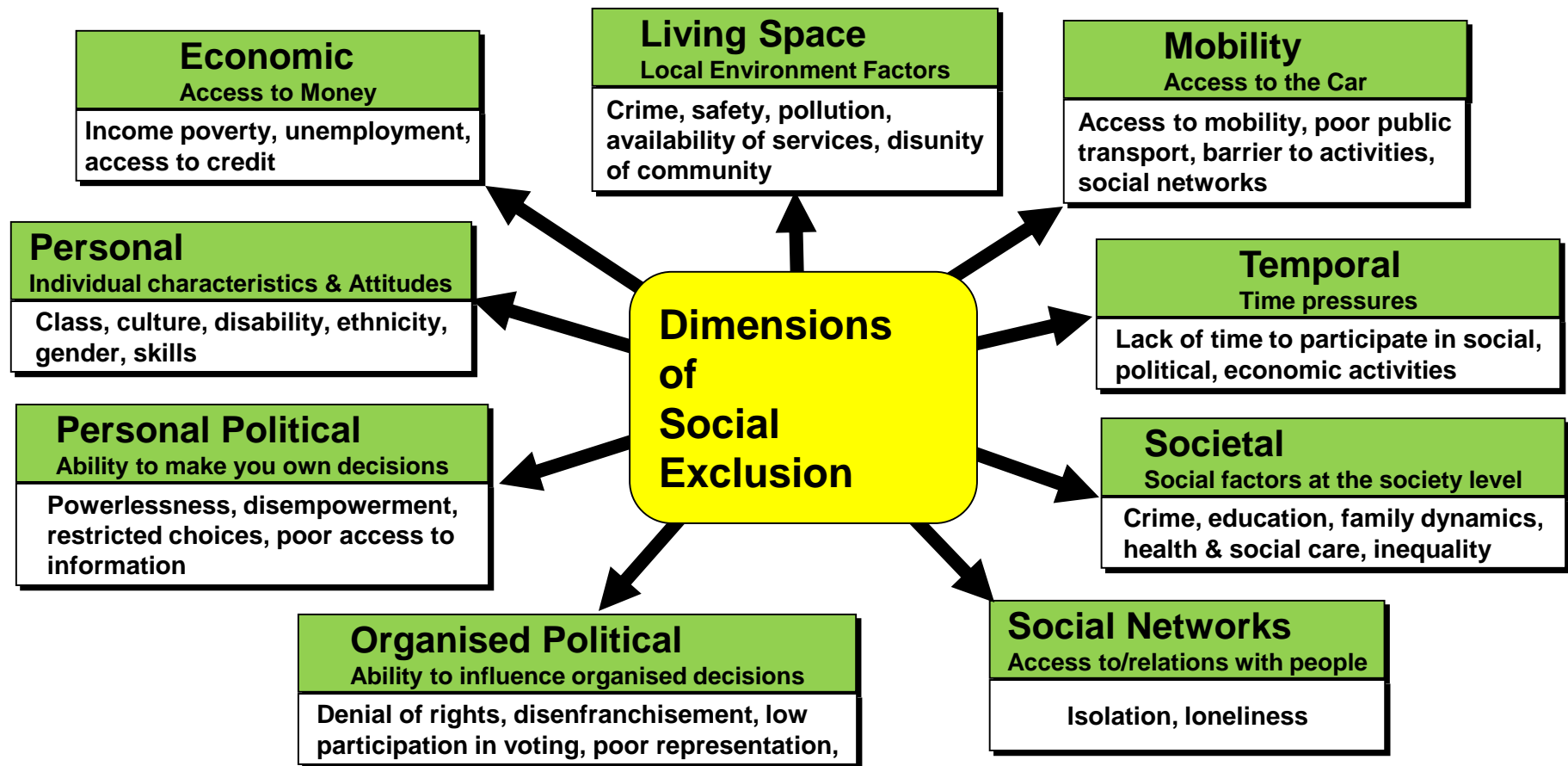


Transport and Social Exclusion



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

...SE is deliberately multi-dimensional to encapsulate barriers to participation and which might better relate transport problems to human life barriers



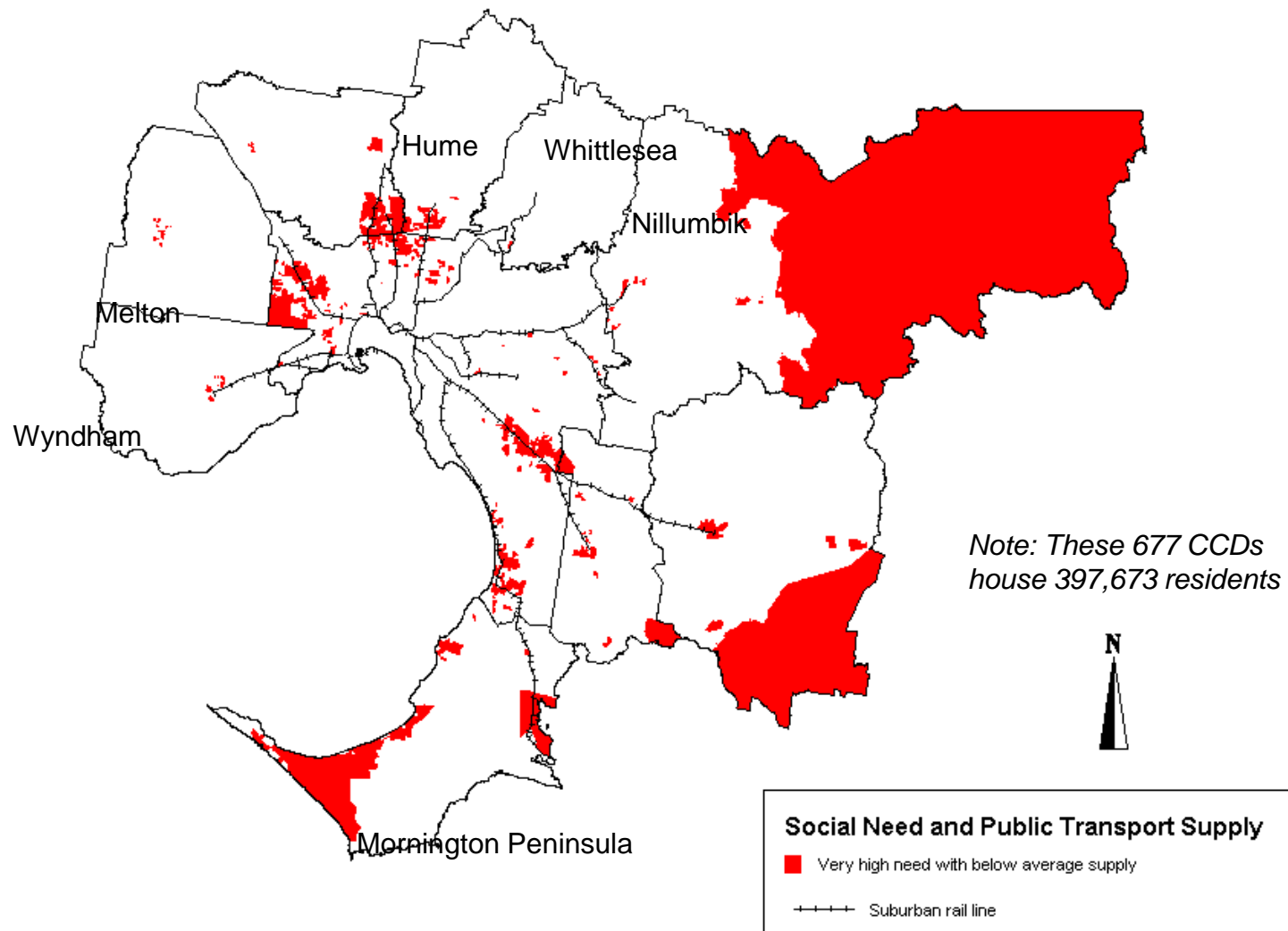
Source: Kenyon S (2003) 'Understanding social exclusion and social inclusion' Municipal Engineer 156 Issue ME 2 pp97-104

The transport disadvantaged are widely known as are types of transport exclusion [But who and what should get priority?]

	Clifton and Lucas 2004	Murray and Davis 2001	Dodson et al 2004	Wixey et al 2005	Hurni 2005	Currie 2004
No / limited car access	✓	✓				✓
Low income	✓		✓	✓		✓
Women	✓		✓		✓	
Elderly	✓	✓	✓	✓		✓
Single parents	✓				✓	
Minority ethnic groups	✓	✓	✓	✓		
Youth		✓	✓	✓		
Disabled		✓	✓	✓		✓
Unemployed			✓	✓	✓	✓
Beneficiaries			✓			
Outer-urban dwellers			✓			
Shift workers				✓		
Parents travelling with children				✓		
Students						✓

- Categories of transport exclusion (Wixey et al, 2005):
 - Spatial
 - Temporal
 - Personal
 - Financial
 - Environmental
 - Infrastructural
 - Institutional

There is a substantial Social Gap in transport in Melbourne (very high social need/ below average PT supply) is a fringe issue



Source: Currie, G. 2004. Gap Analysis of Public Transport Needs: Measuring spatial distribution of public transport needs and identifying gaps in the quality of public transport provision. Transportation Research Record, 1895, 137-146

PT is very unequal; 20% of the people get 70% of the service

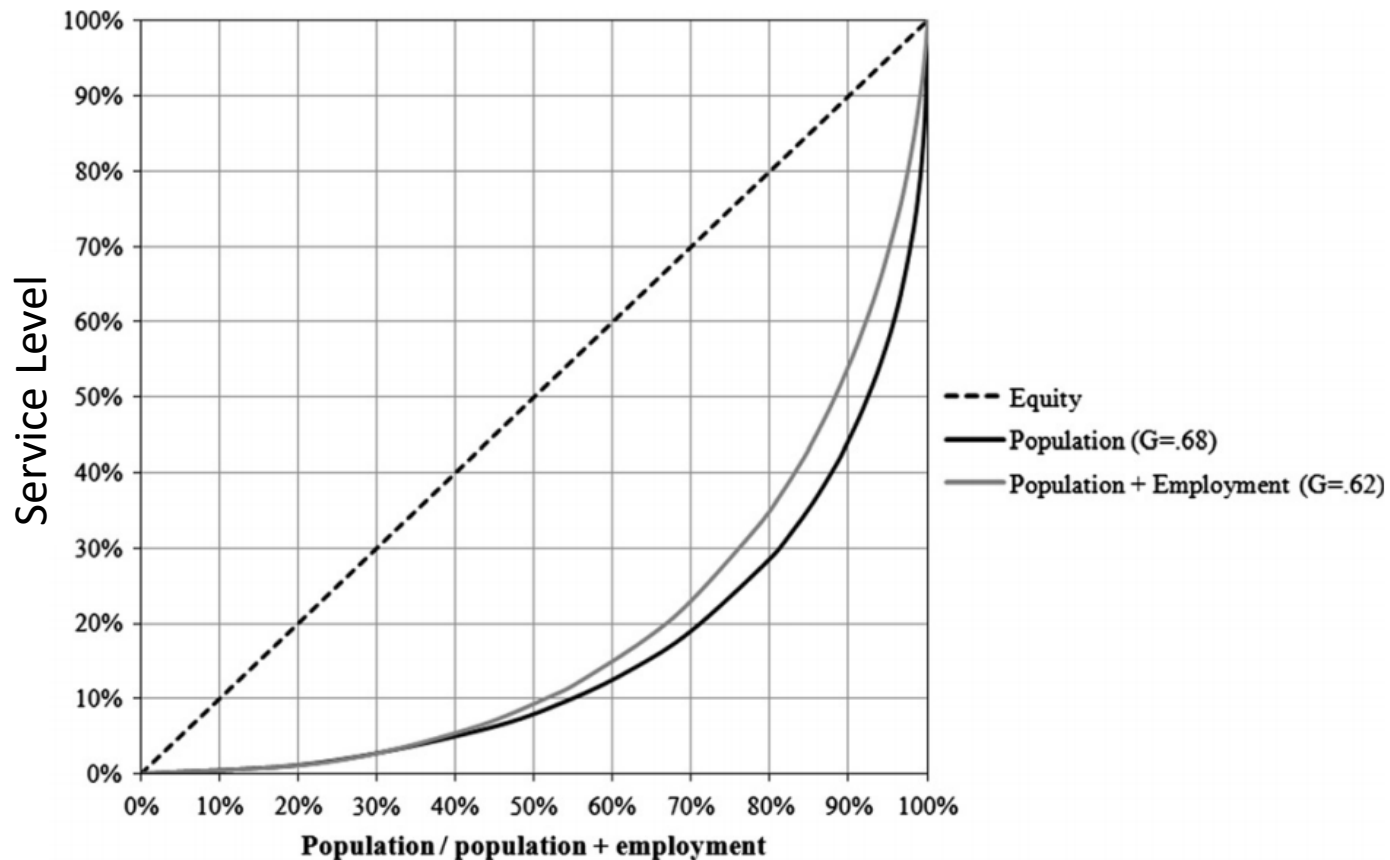
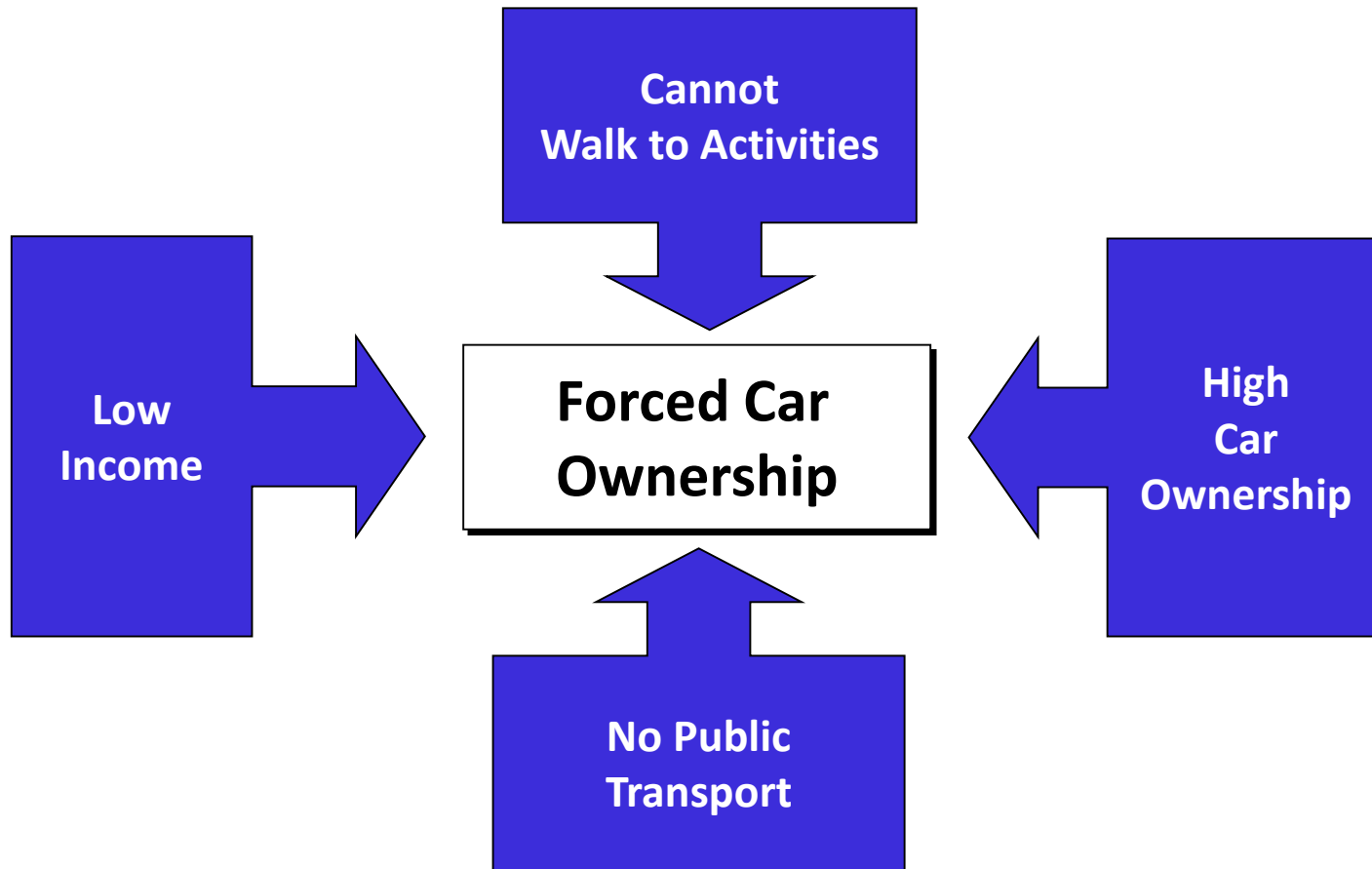


Fig. 4. Lorenz curves of population and employment.

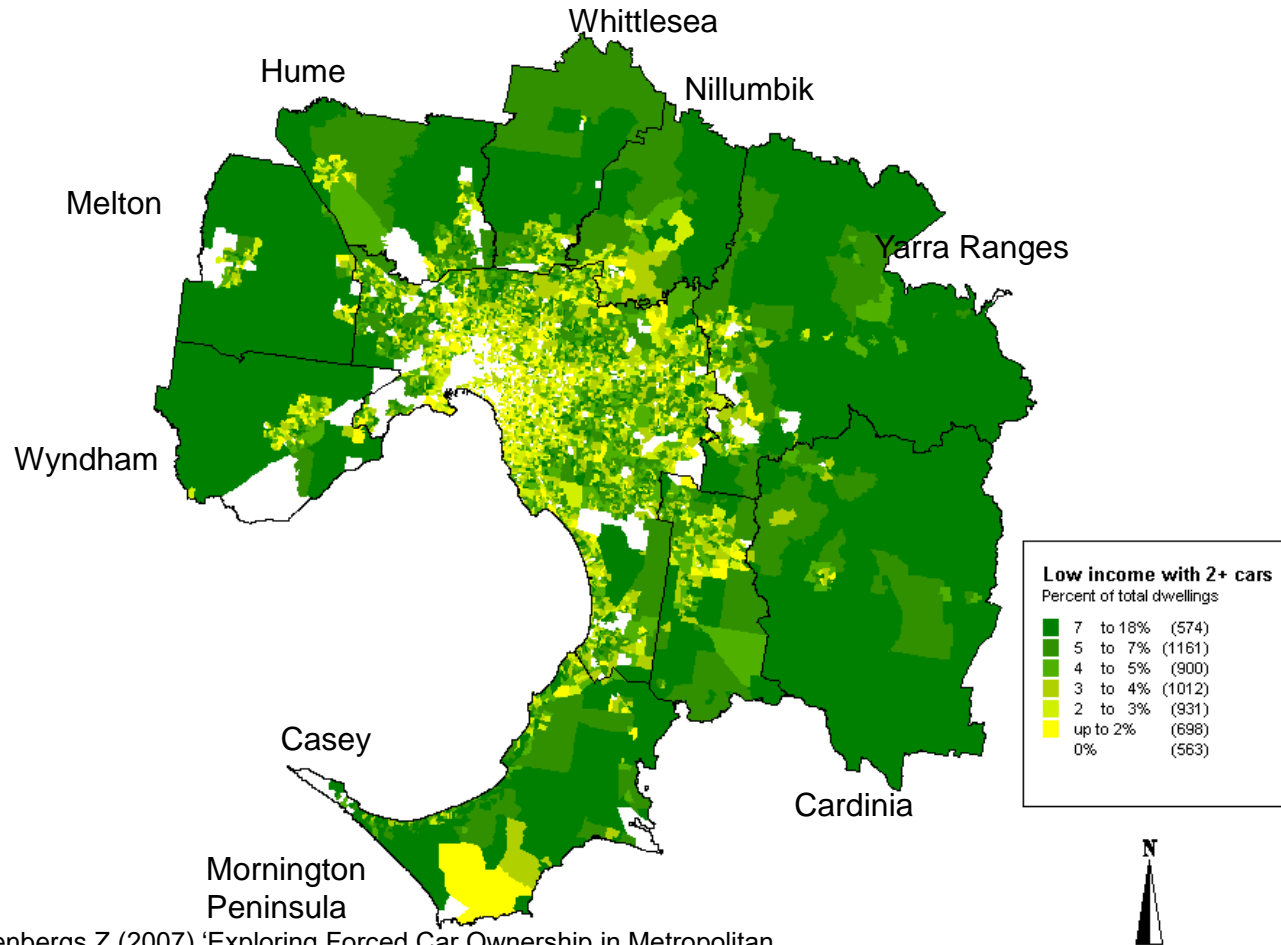
Source: Delbosc A and Currie, G. (2011) 'Using Lorenz Curves to Assess Public Transport Equity' JOURNAL OF TRANSPORT GEOGRAPHY Volume 19, Issue 6, November 2011, Pages 1252-1259

Resulting in Forced Car Ownership; high car ownership on low income



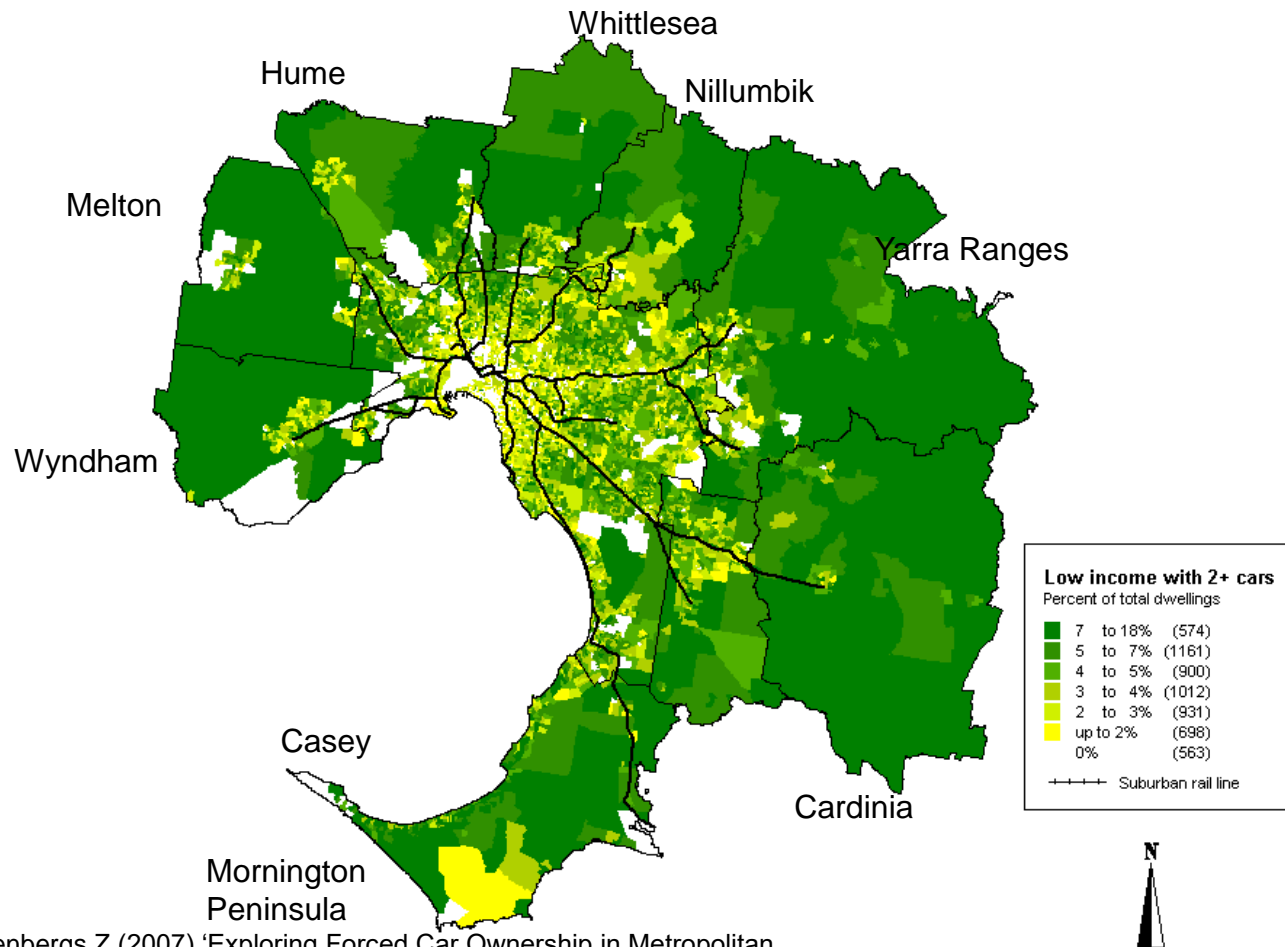
Source: Currie G and Senbergs Z (2007) 'Exploring Forced Car Ownership in Metropolitan Melbourne' Australasian Transport Research Forum 2007

Which is concentrated in outer suburbs.....



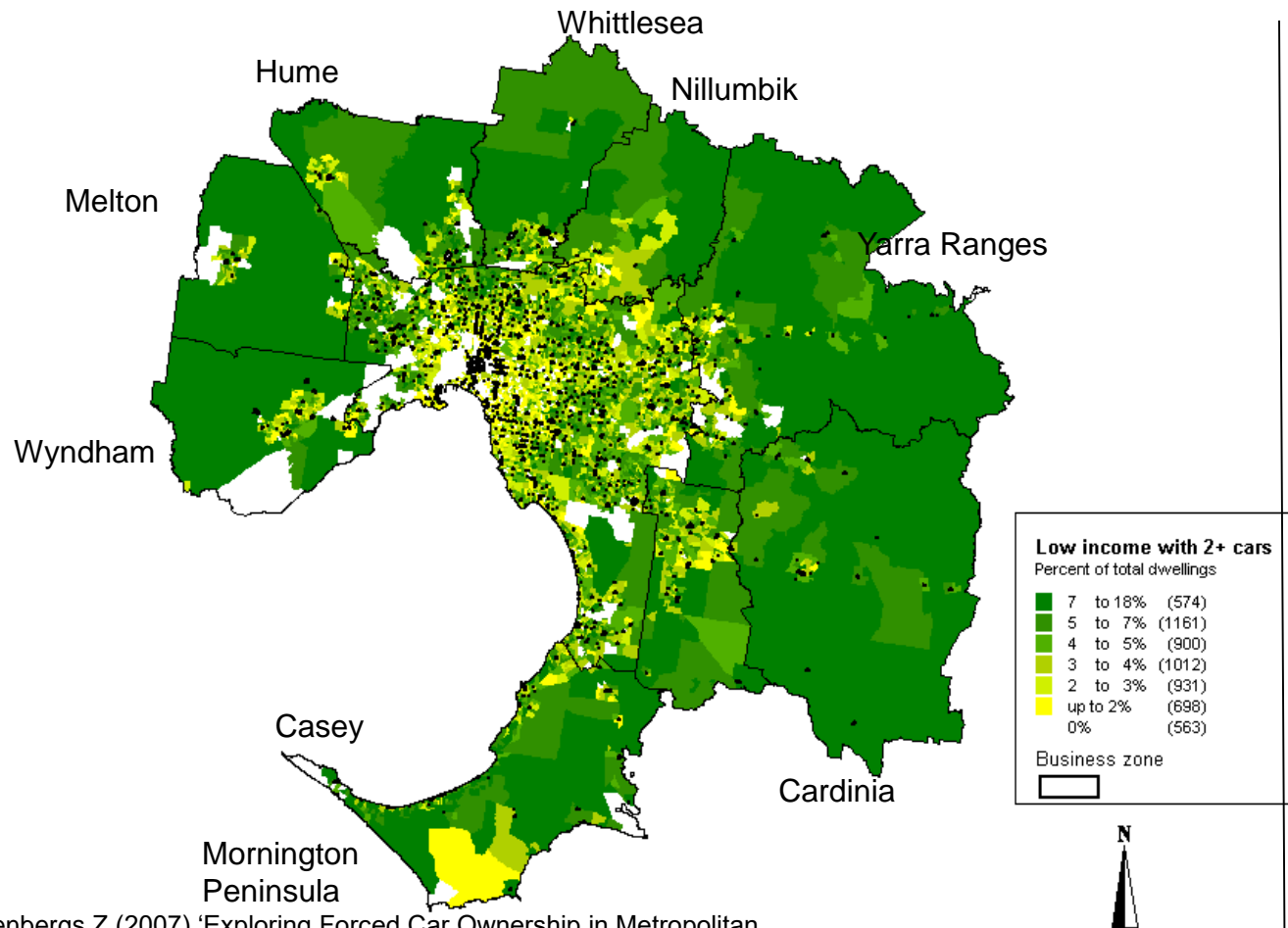
Source: Currie G and Senbergs Z (2007) 'Exploring Forced Car Ownership in Metropolitan Melbourne' Australasian Transport Research Forum 2007

....remote from public transport.....and...



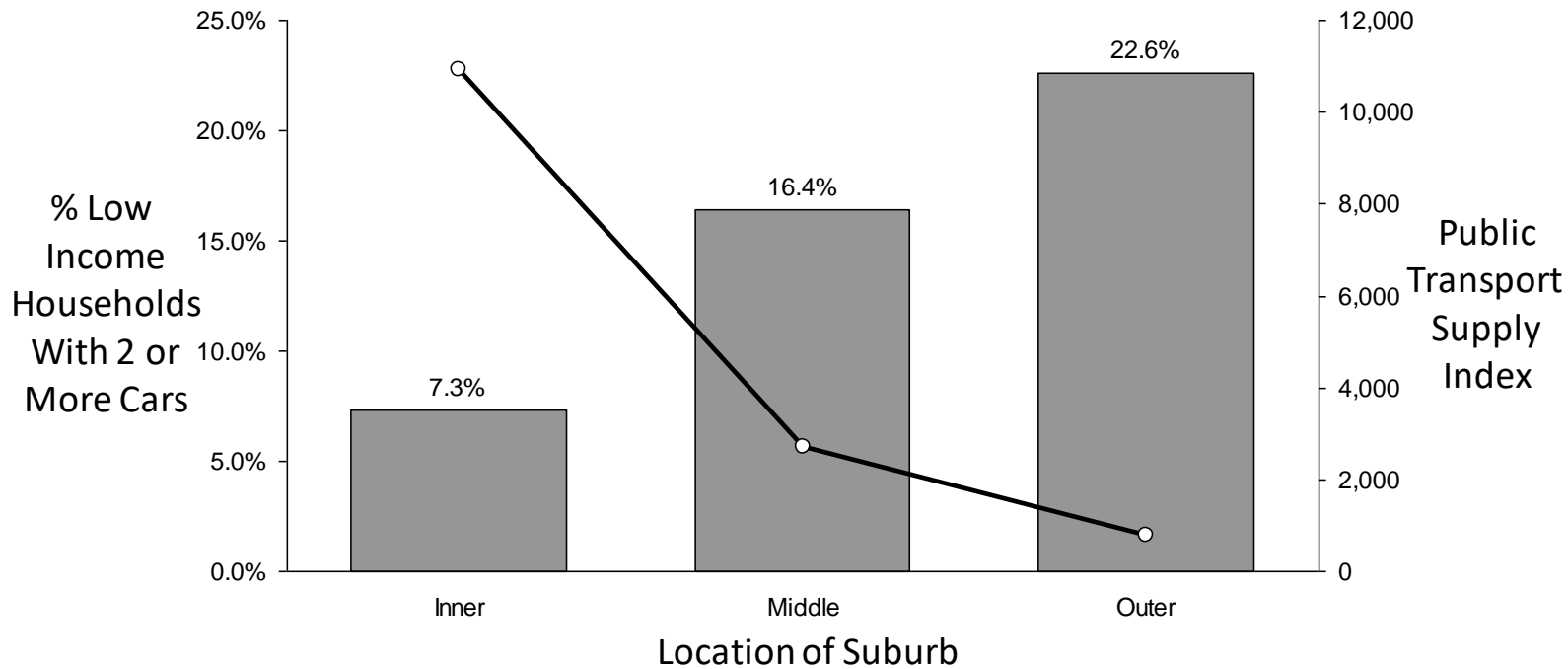
Source: Currie G and Senbergs Z (2007) 'Exploring Forced Car Ownership in Metropolitan Melbourne' Australasian Transport Research Forum 2007

...remote from local activity centres



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

There is a link between lack of PT & high car ownership on low income



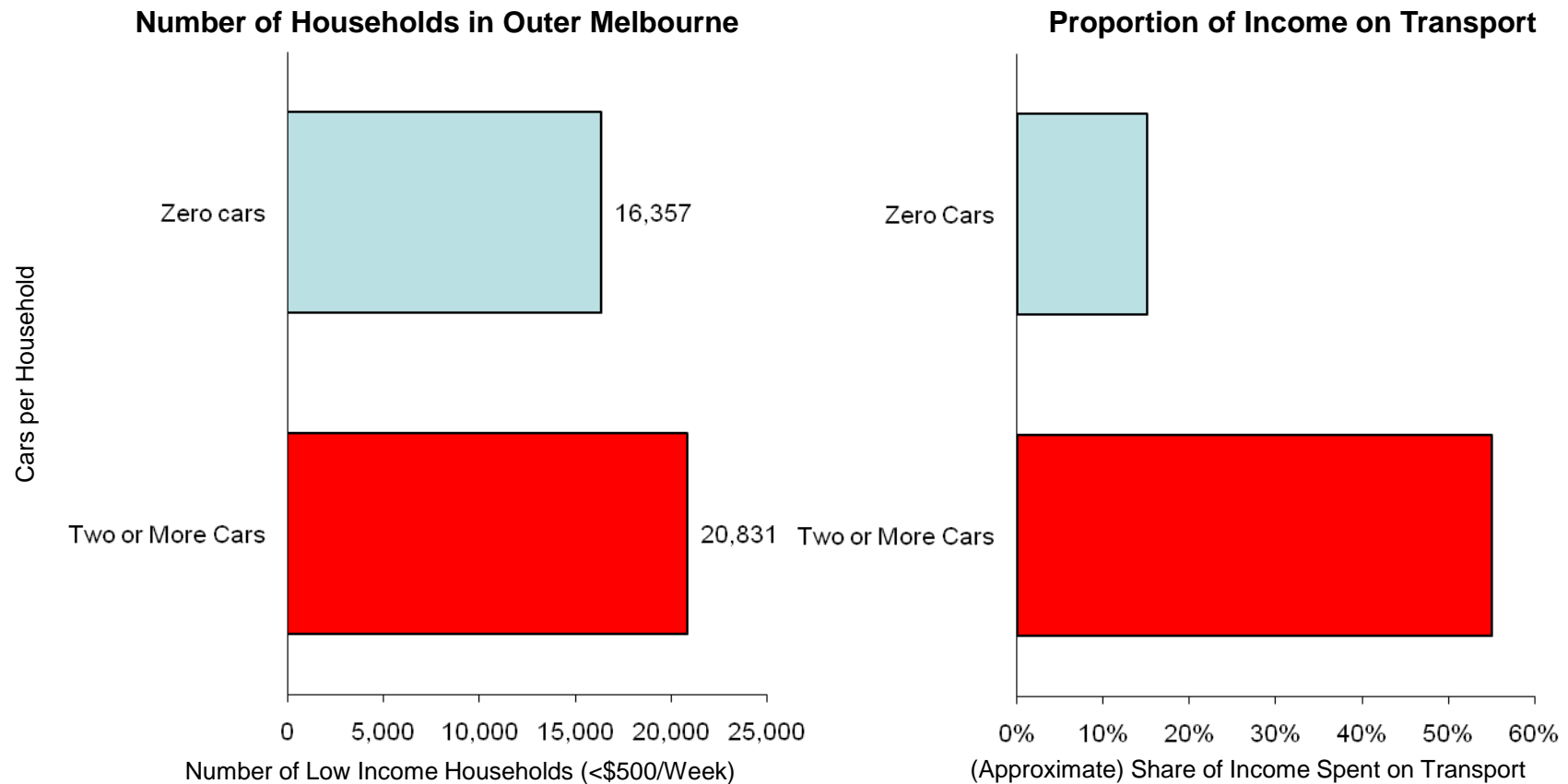
Source: Based on Currie and Senbergs (2007)

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

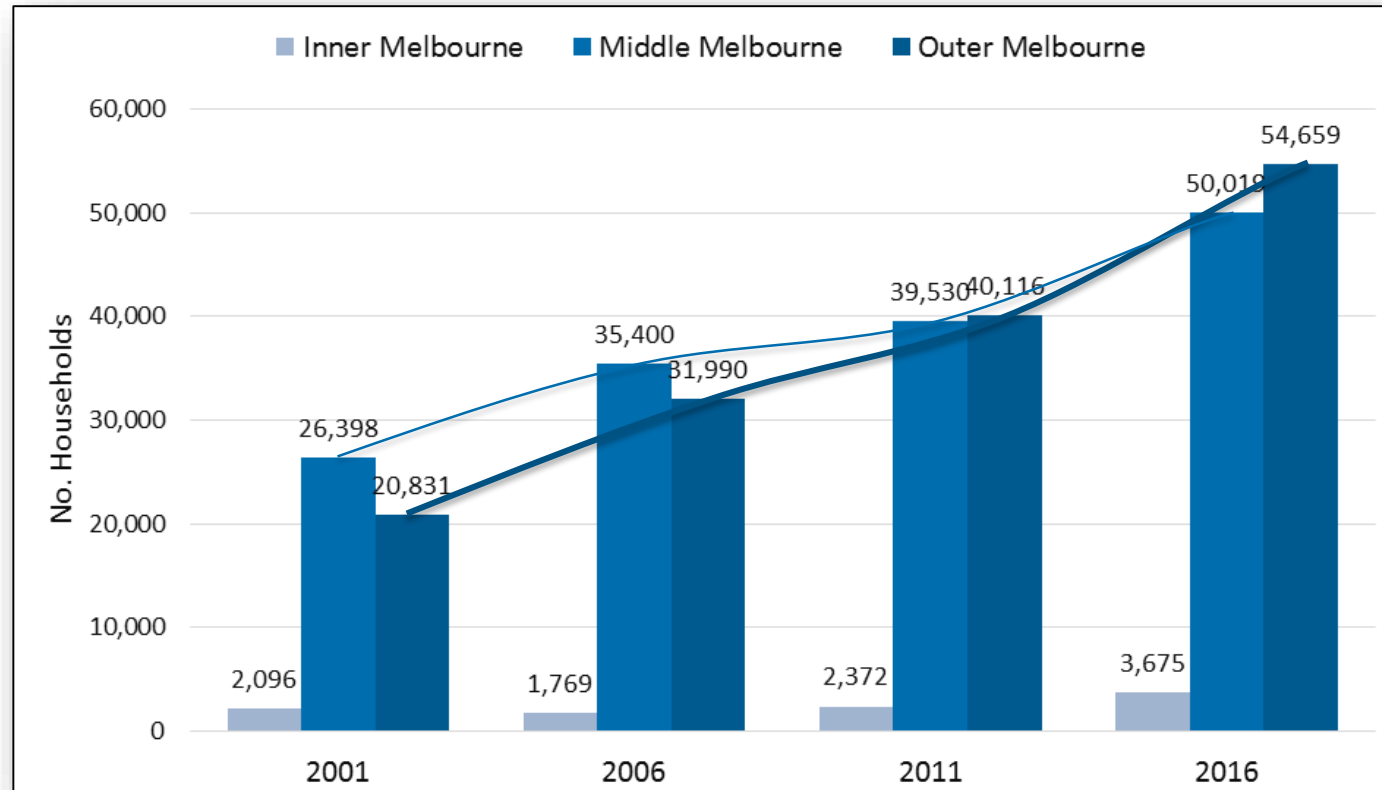
Source: Johnson V Currie G and Stanley J (2010) 'A critique of Zero Car ownership as a Measure of Disadvantage' Social Indicators Research: Volume 97, Issue 3 (2010), Page 439.

Research suggests fringe car ownership may be a bigger problem than zero car ownership – Transport Poverty is a bigger issue than Transport Disadvantage



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

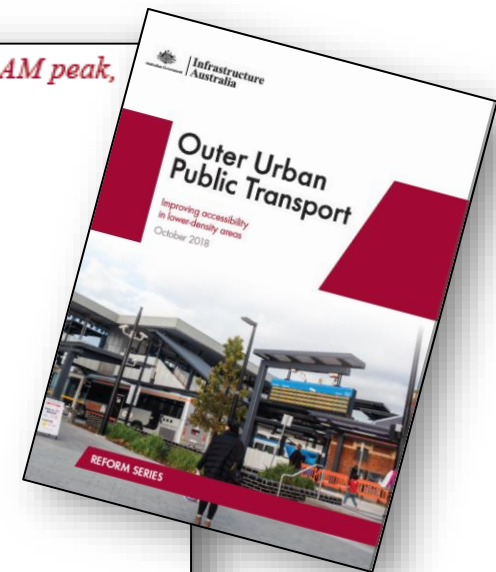
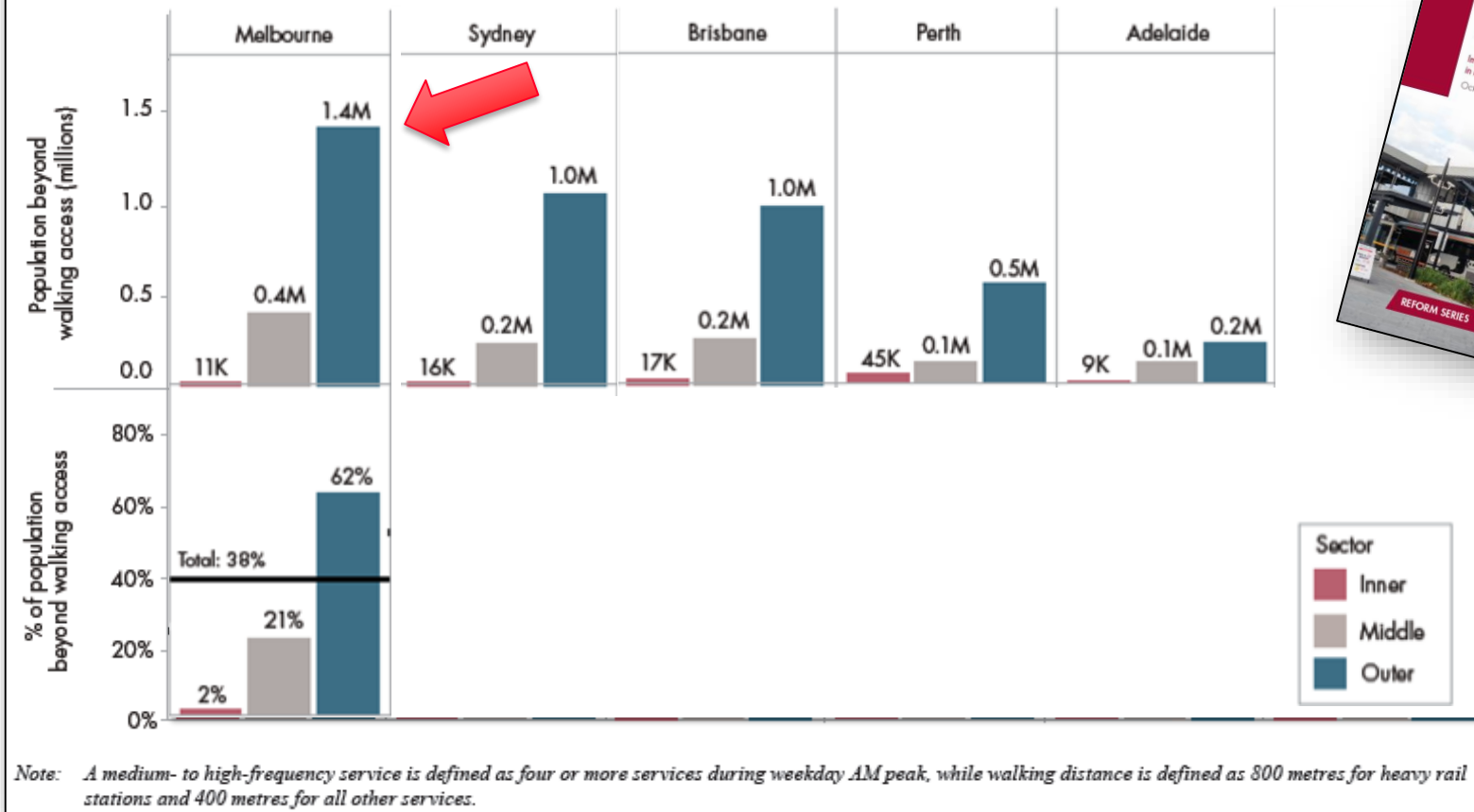
FCO is growing; indeed the rate of growth is increasing



Source: Currie G Delbosc A and Pavkova K (2018) 'Alarming Trends in the Growth of Forced Car Ownership in Melbourne' Australasian Transport Research Forum 2018

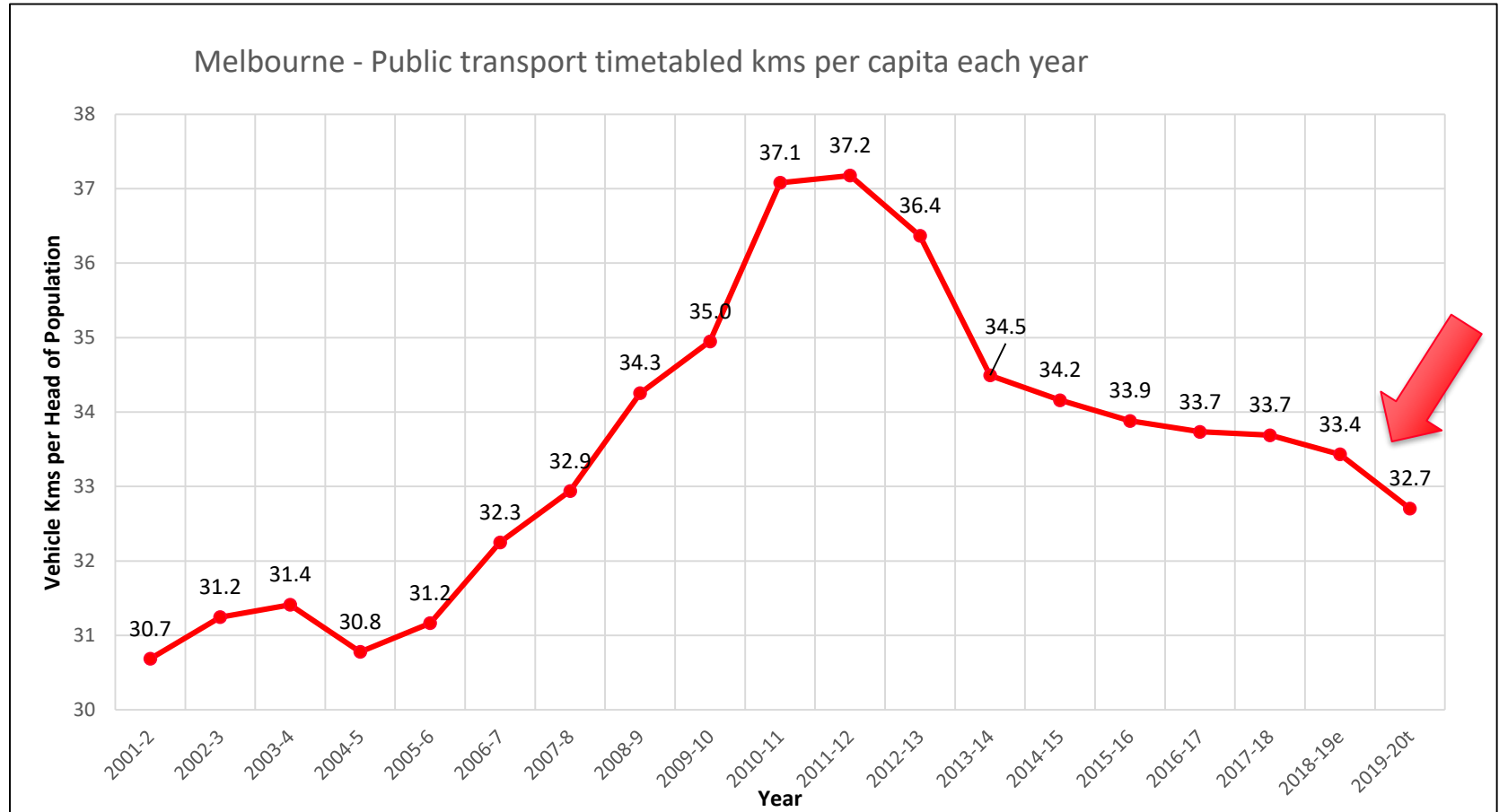
New data - Infrastructure Australia says Melbourne has the biggest problem in Australia

Figure 9: Walking access to medium- to high-frequency public transport by city and by sector during weekday AM peak, as count and proportion of city population, all five cities, 2017



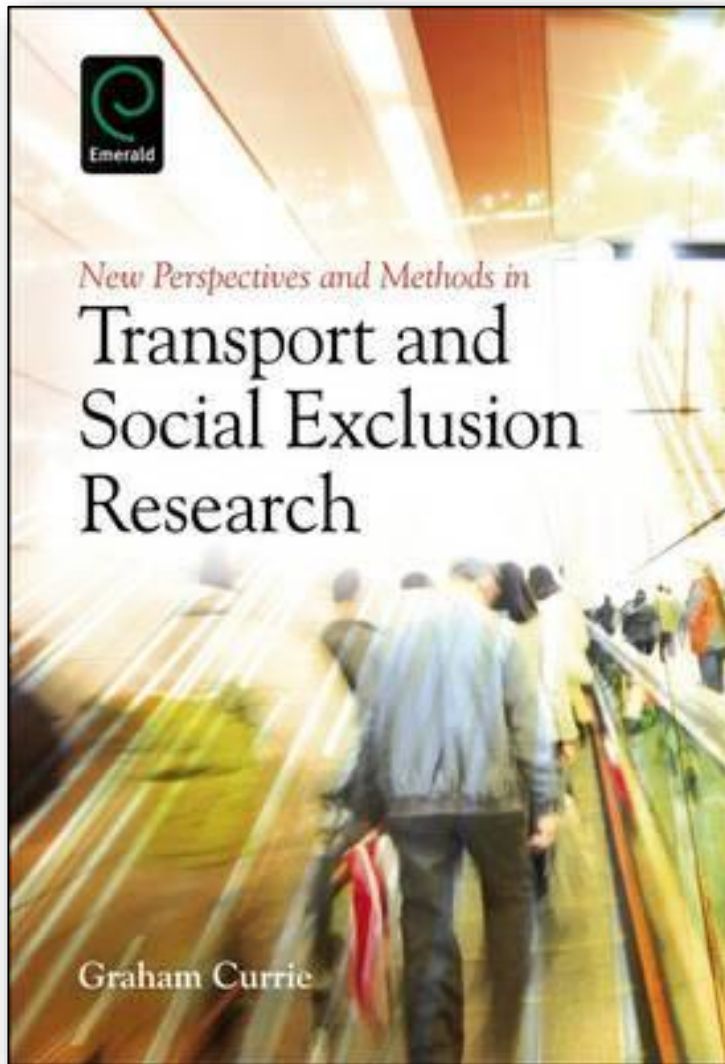
Our current policy acts to reduce public transport per capita service levels which will exacerbate the problems

Relative Service Level Per Head



Source: PTRG analysis of Department of Transport/ Public Transport Victoria Annual Reports

Get the books!

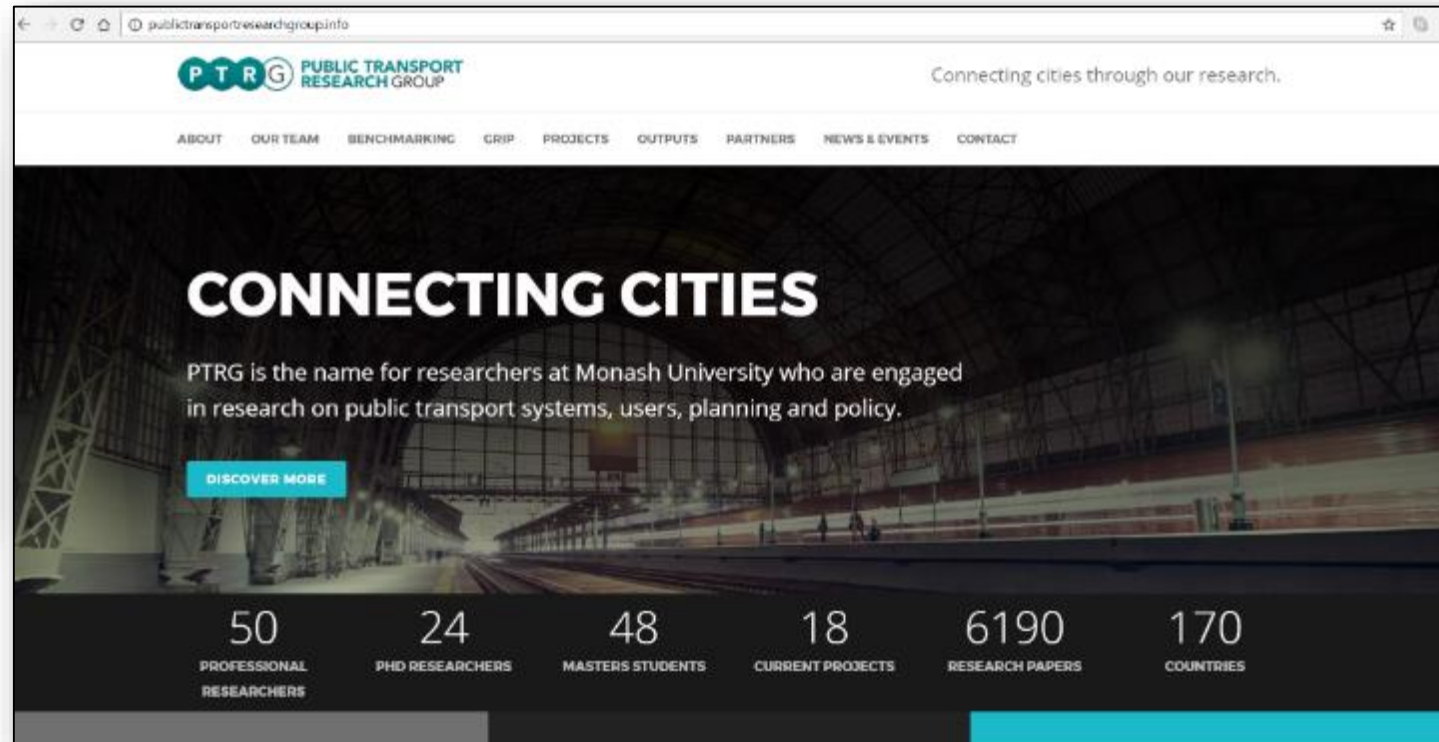


Contact us via our website PTRG.INFO, LinkedIn or Twitter

Professor Graham Currie FTSE
Director, SEPT-GRIP, PTRG



Connect with us on
LinkedIn 



www.ptrg.info