



MONASH University

Public Transport Progress and Failures - Keeping up with Growth in Australian Cities

Engineers Australia Seminar
15th April 2014
Engineering House
Level 2, 21 Bedford Street
North Melbourne VIC 3051

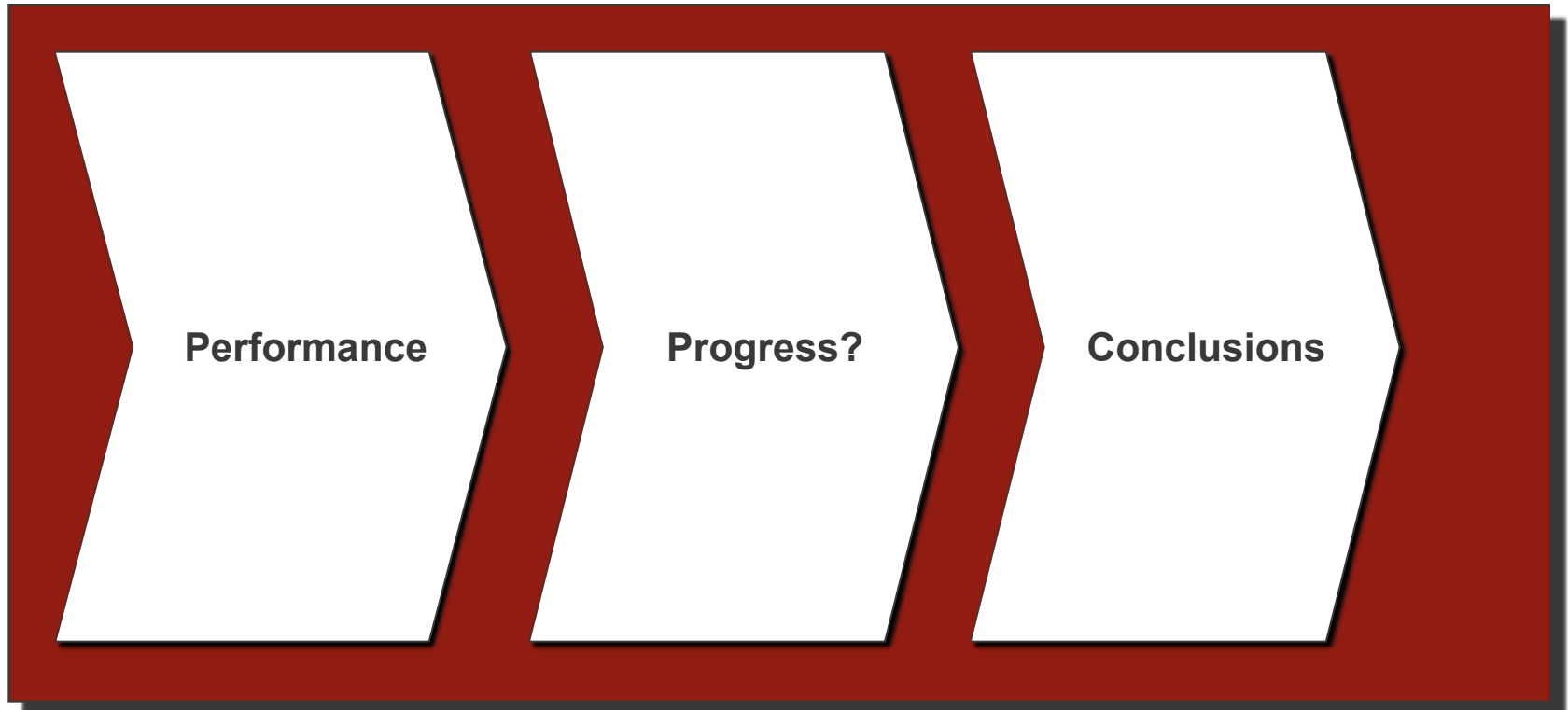
Professor Graham Currie
*Institute of Transport Studies
Monash University*



Institute of Transport Studies (Monash)

The Australian Research Council Key Centre in Transport Management

This paper looks at Australian urban public transport progress in keeping up with population growth



Agenda

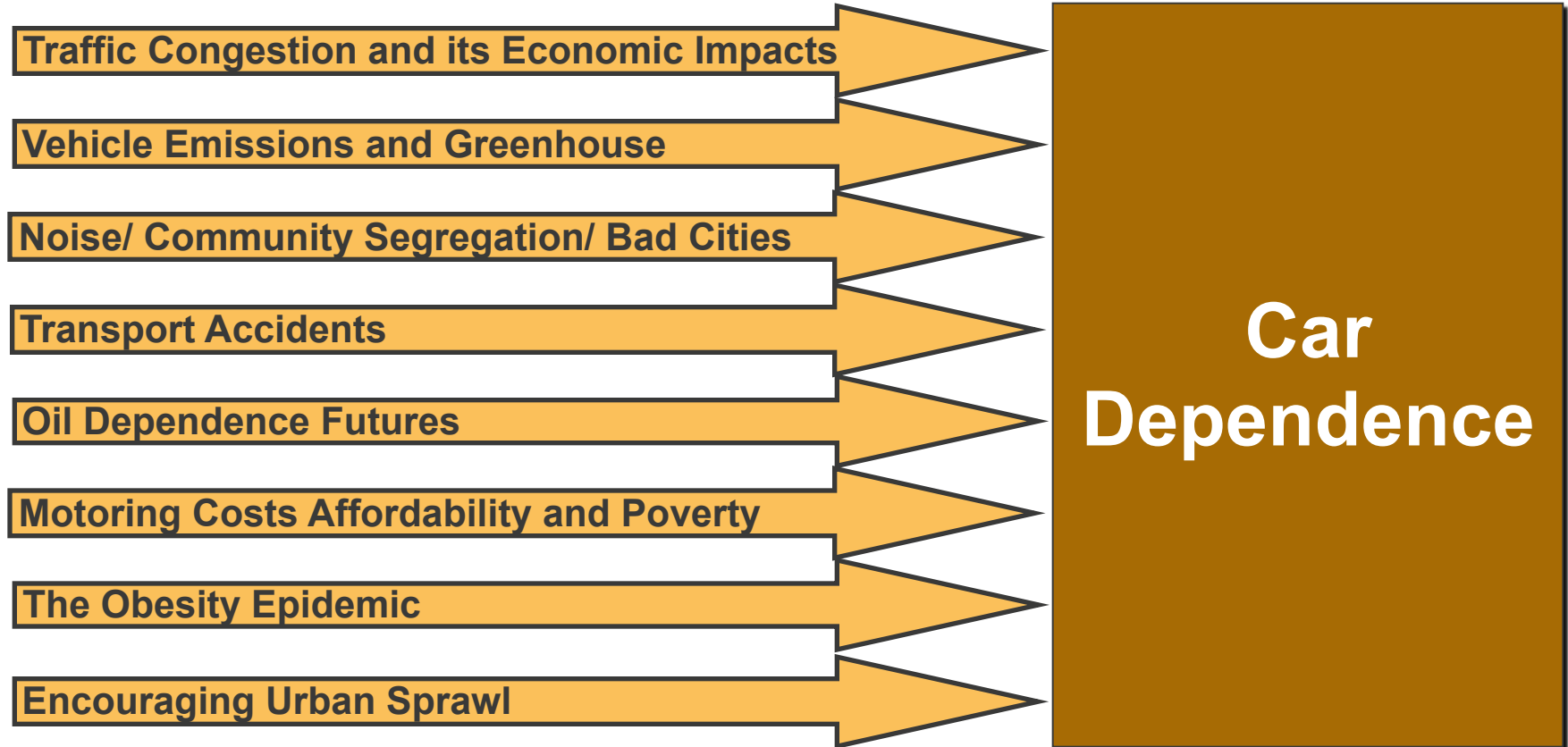
1. Introduction

2. Performance

3. Progress?

4. Conclusions

There are many reasons why Australia should encourage urban public transport as an alternative to the car



The problem is that we don't have much public transport in Australian cities

BUSES Melbourne – PT for 2/3rds of residents

Weekday Service Frequency (2006)

AV. MELBOURNE

Peak Off Peak

40m 50m

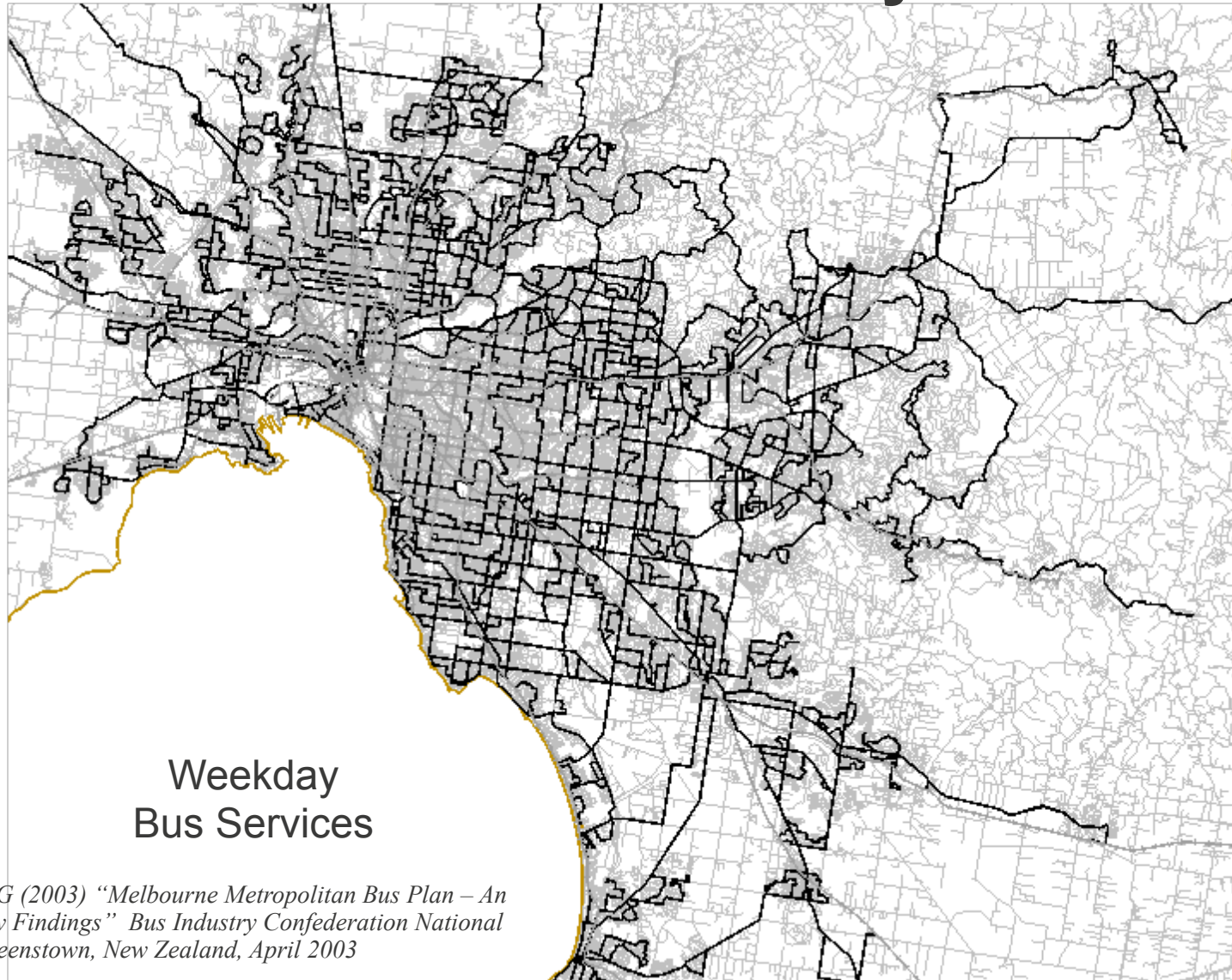
Weekday Service Span

AV. MELBOURNE

Weekday

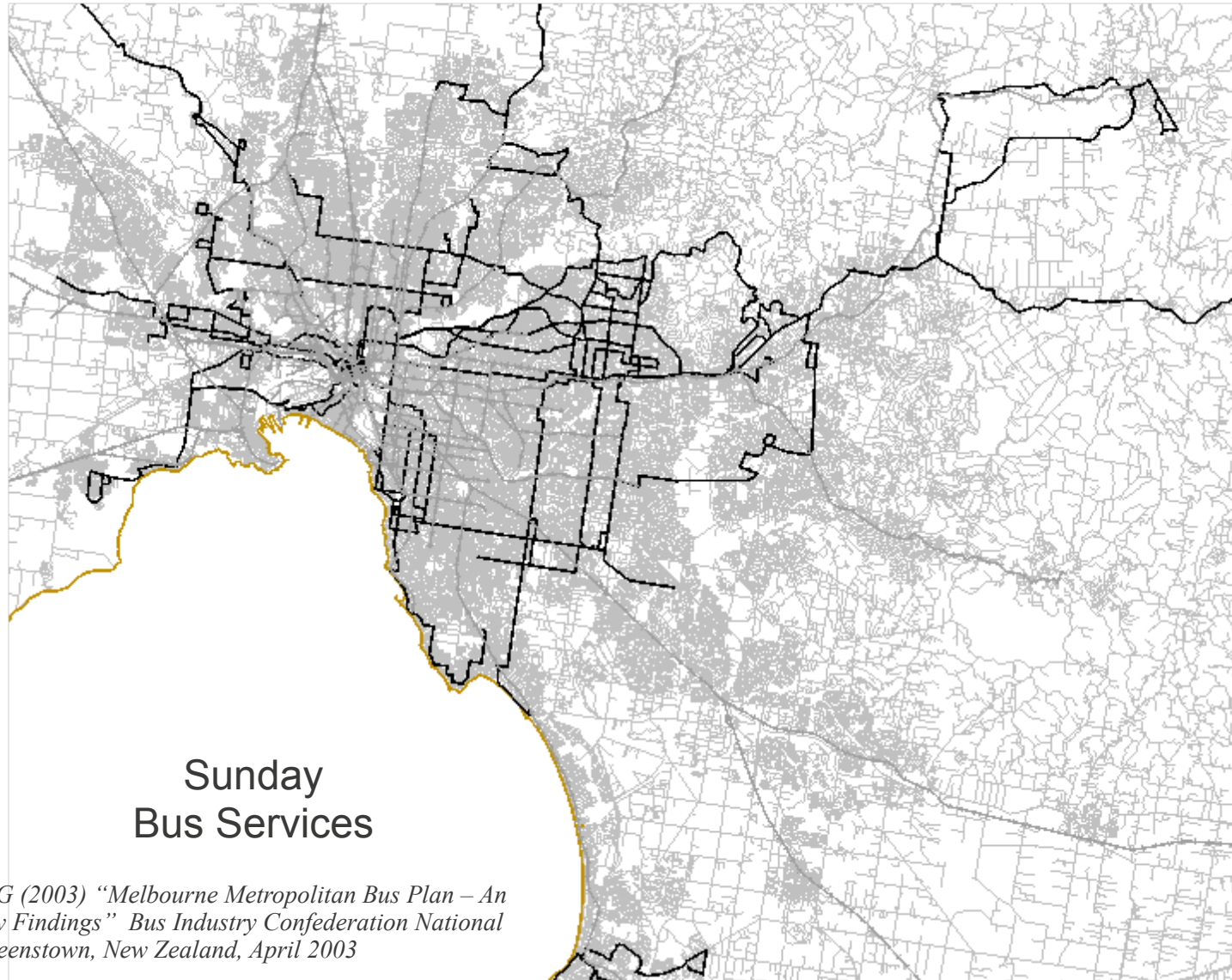
06:46-18:53

The bus network on weekdays..



Source: Currie G (2003) "Melbourne Metropolitan Bus Plan – An Overview of Key Findings" Bus Industry Confederation National Conference, Queenstown, New Zealand, April 2003

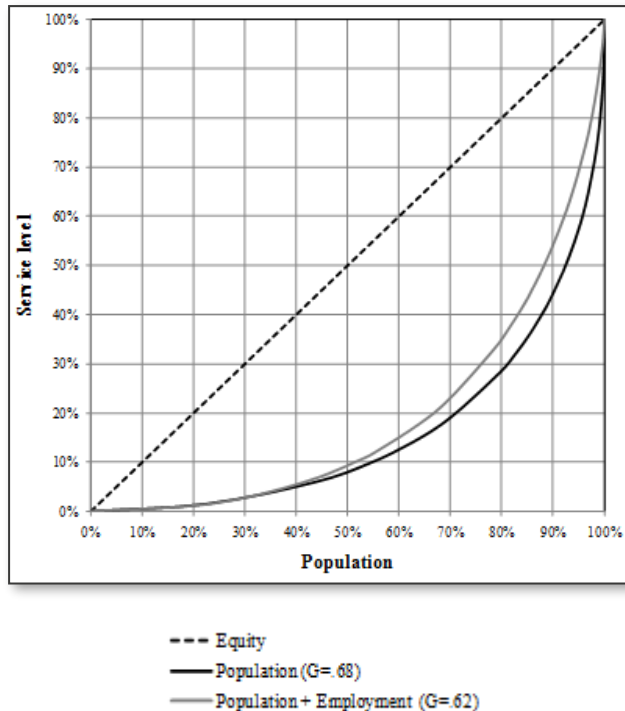
contrasts somewhat with weekends



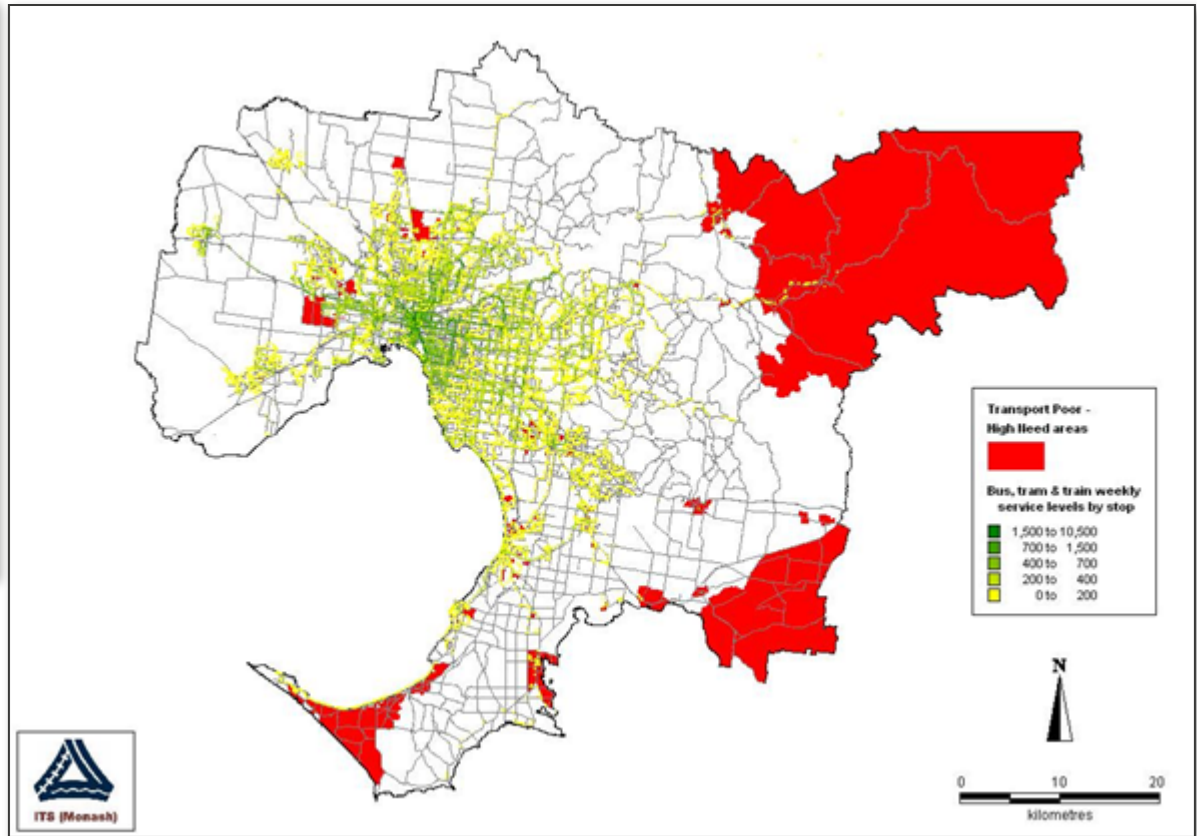
Source: Currie G (2003) "Melbourne Metropolitan Bus Plan – An Overview of Key Findings" Bus Industry Confederation National Conference, Queenstown, New Zealand, April 2003

Australian cities have numerous PT equity problems – many high need/no service areas

Service Supplied (Green) – Highest Social Need Areas (Red)



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



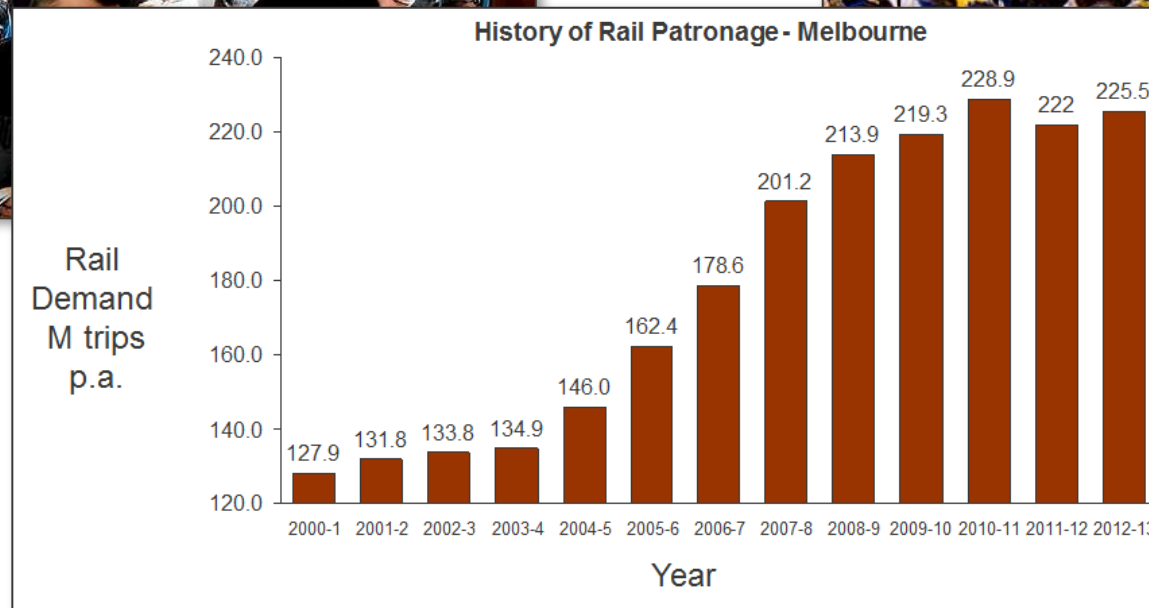
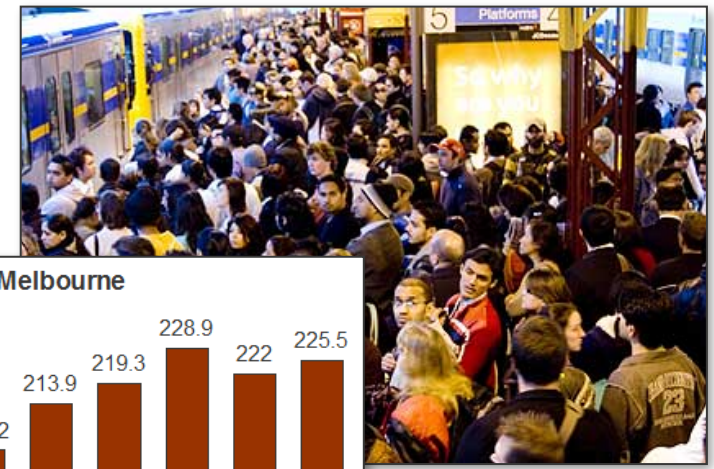
Source: Currie, G. (2010) Quantifying spatial gaps in public transport supply based on social needs, JOURNAL OF TRANSPORT GEOGRAPHY 18 (2010) 31-41

Other Australian cities have similar issues

Coverage of Metropolitan Areas Without 'Good' Public Transport

City	Service Level Benchmark	Source	Population BELOW Benchmark
Perth	<ul style="list-style-type: none">• 20min pk 60min off peak headway• 500m access distance	PTA WA (2005)	29%
Sydney	<ul style="list-style-type: none">• 30 min headway• 8:30a.m. to 15:30• 800m access distance	Hurni (2005)	54%
Melbourne	<ul style="list-style-type: none">• 30 min headway• 5 a.m. to midnight	Cheal (2003)	83%

The other key PT problem is that the little we have is highly overcrowded



PT expansion is clearly needed for:

1. existing needs and 2. growing needs

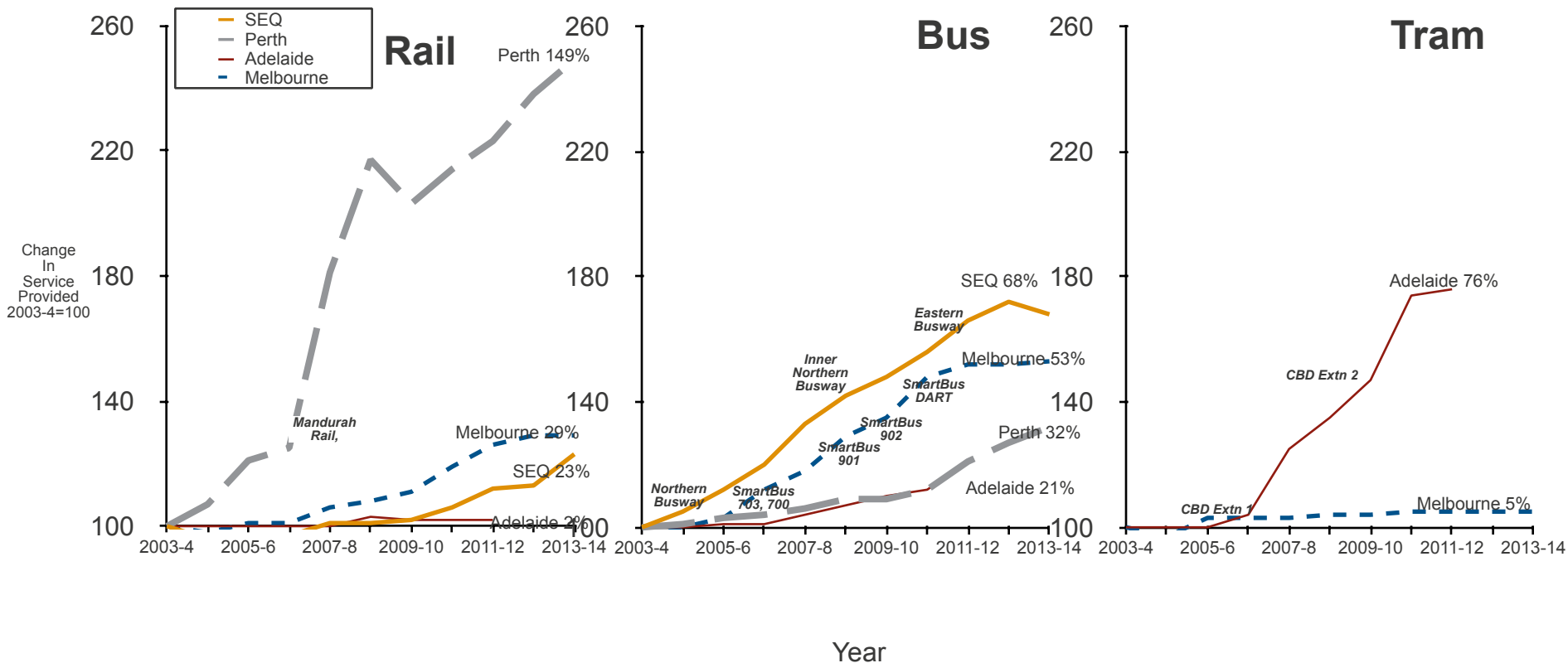


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Since 2003-4 all urban PT grew led by Perth rail (+149%), Adelaide tram (+76%) and SEQ/Mel Bus (+68%/53%)

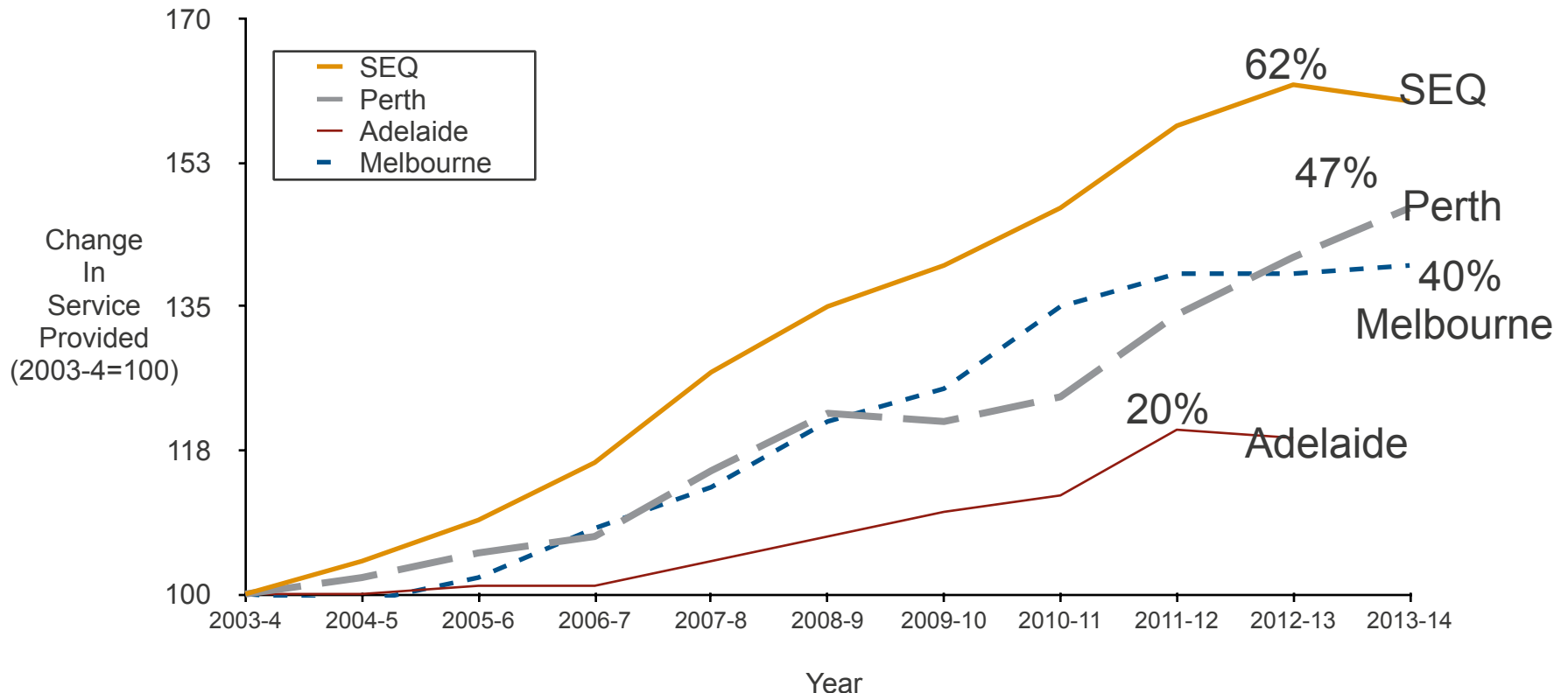
Change in SERVICE SUPPLIED by Mode (Vkms p.a.) – SEQ, Perth, Melbourne, Adelaide since 2003-4



Source: Department of Transport/ Public Transport Victoria Annual Reports, Translink, Transperth and DPTI Adelaide Data Request

Since 2003-4 all PT SERVICE increased 62% SEQ, 47% Perth, 40% Melbourne and 20% Adelaide...

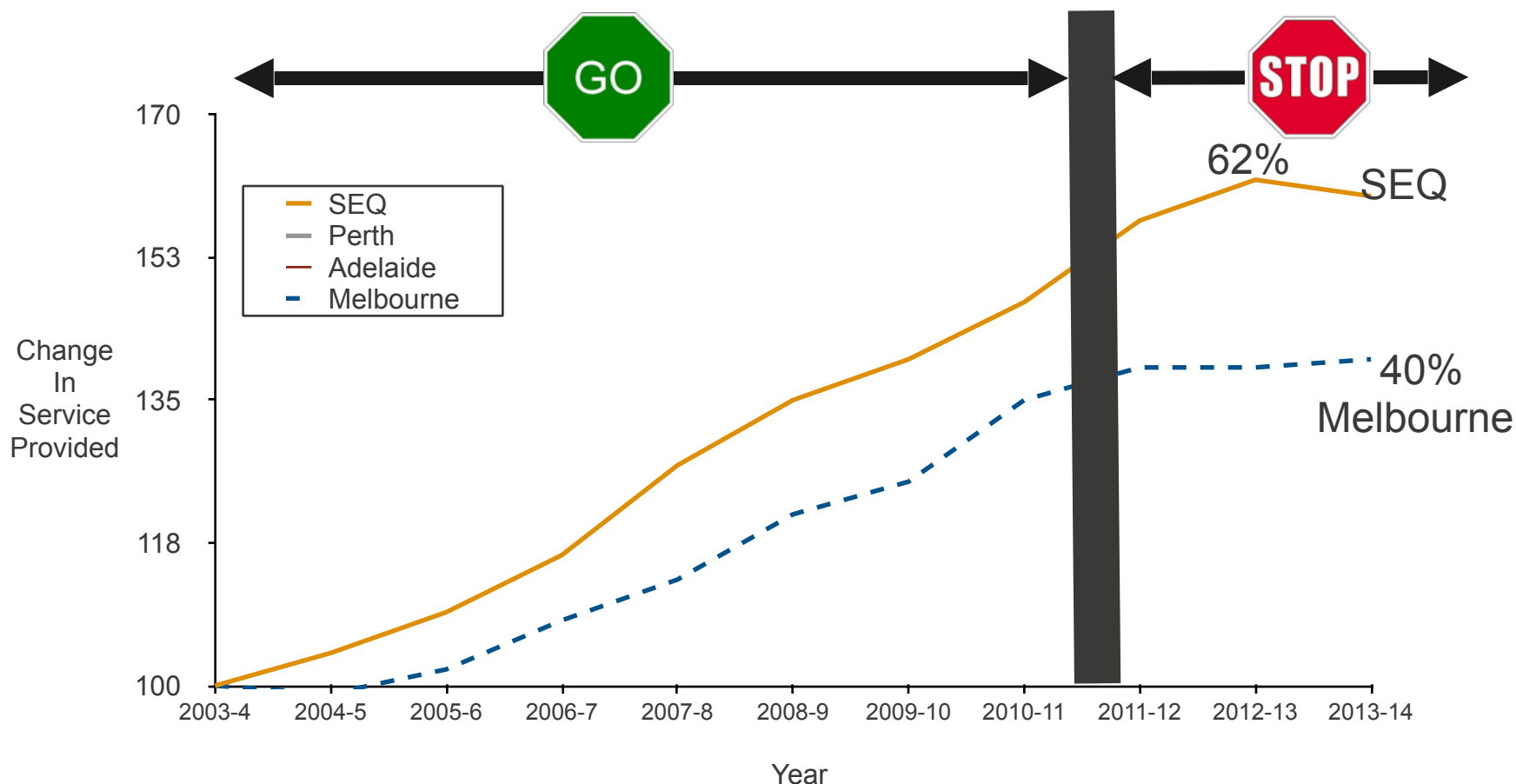
Change in total SERVICE SUPPLIED (Vkms p.a.) – SEQ, Perth, Melbourne, Adelaide since 2003-4



Source: Department of Transport/ Public Transport Victoria Annual Reports, Translink, Transperth and DPTI Adelaide Data Request

...but in SEQ and Melbourne the growth trend has stalled

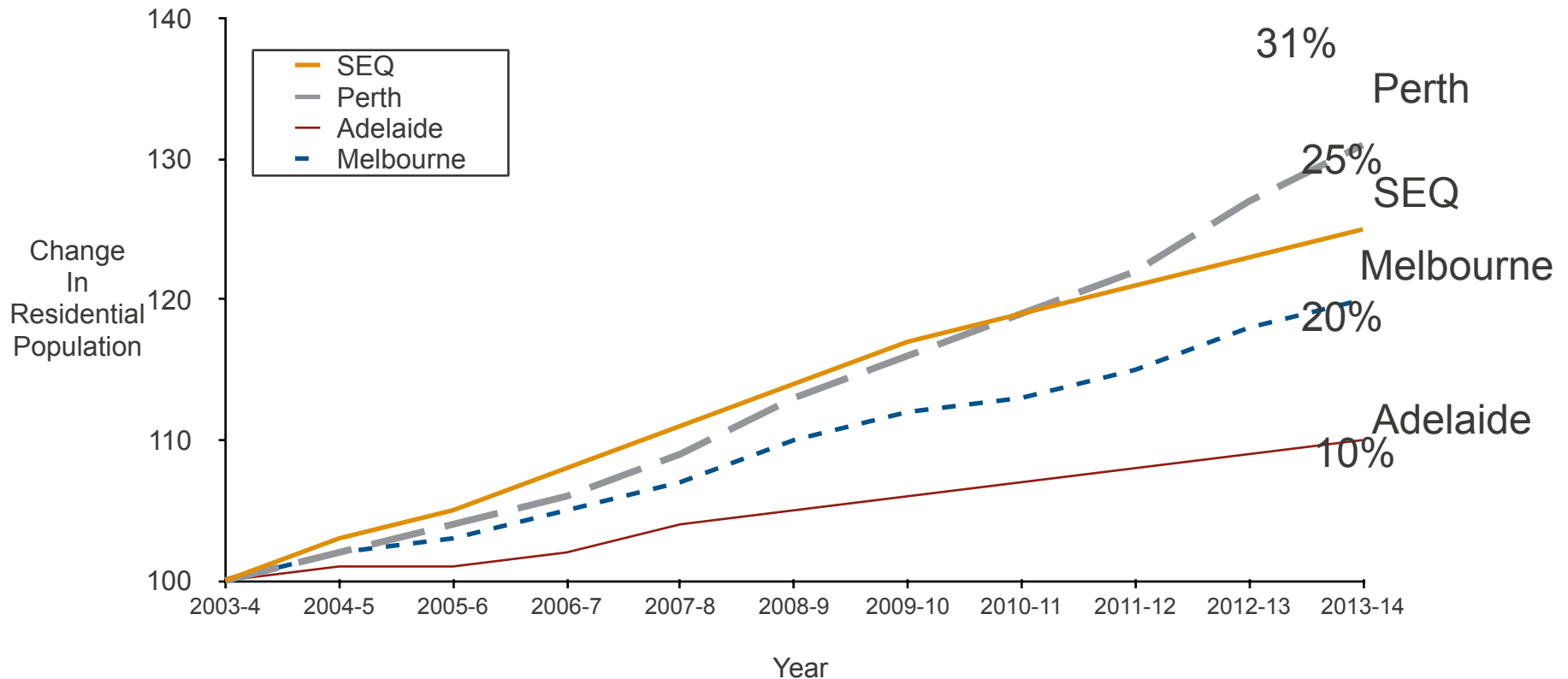
Change in total SERVICE SUPPLIED (Vkms p.a.) – SEQ, Melbourne since 2003-4



Source: Department of Transport/ Public Transport Victoria Annual Reports, Translink, Transperth and DPTI Adelaide Data Request

This is a pity because POPULATION growth has boomed in all cities; no stalled Pop growth in SEQ/Mel growth 2011-13

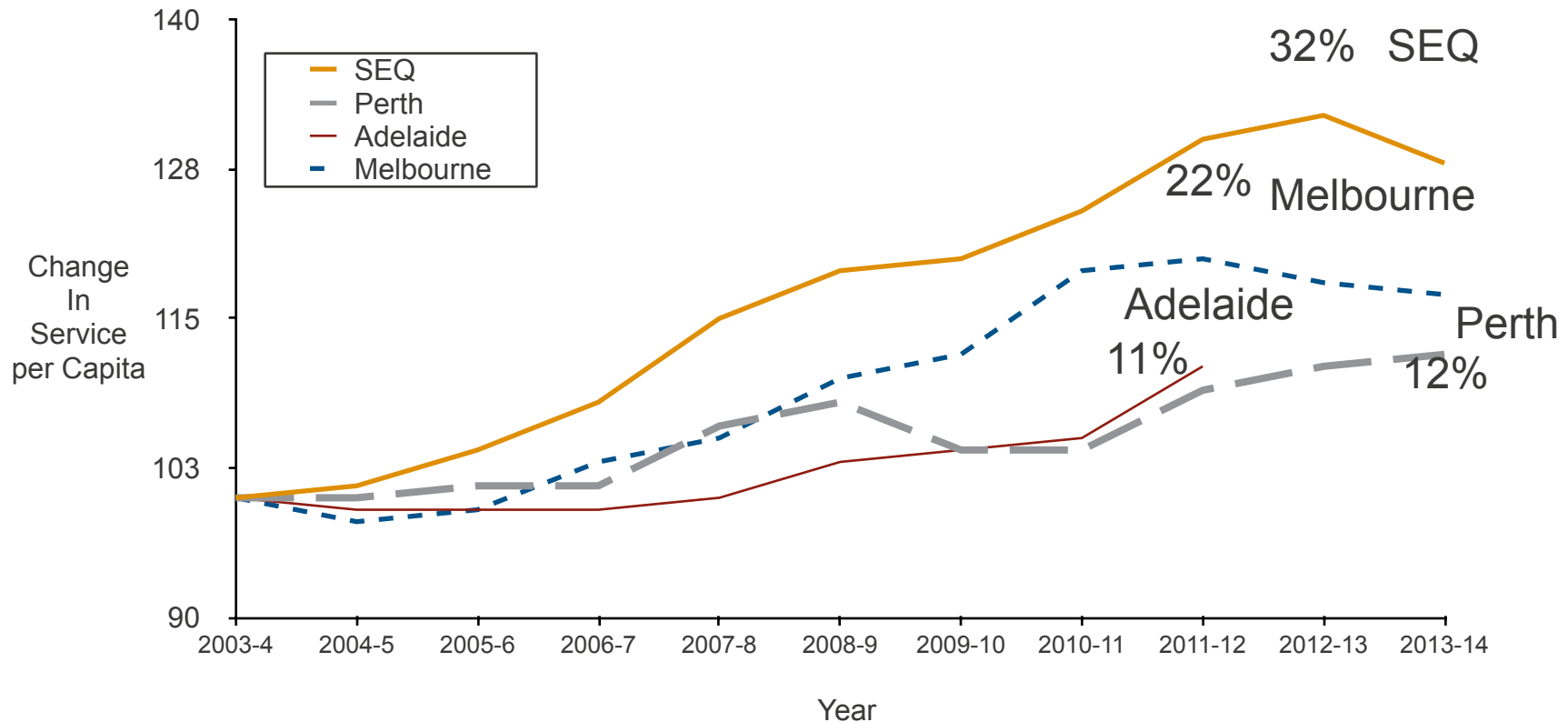
Change in POPULATION – SEQ, Perth, Melbourne, Adelaide since 2003-4



Source: ABS

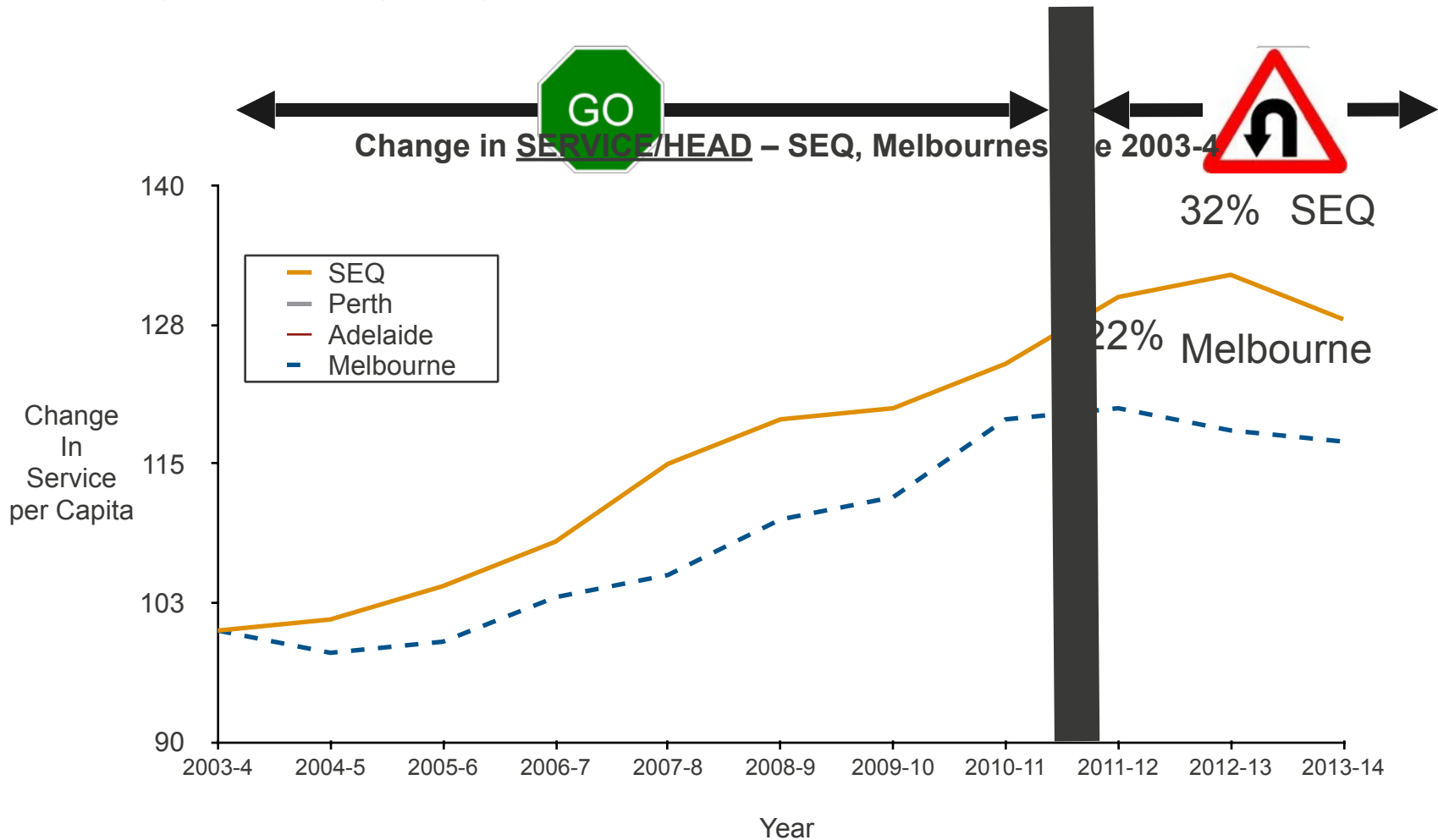
SERVICE/HEAD has increased; real progress in all cities...

Change in SERVICE/HEAD – SEQ, Perth, Melbourne, Adelaide since 2003-4



Source: ITS (Monash) Analysis

...but SEQ and Melbourne have stalled and **SERVICE/HEAD** is now declining; we are going backwards

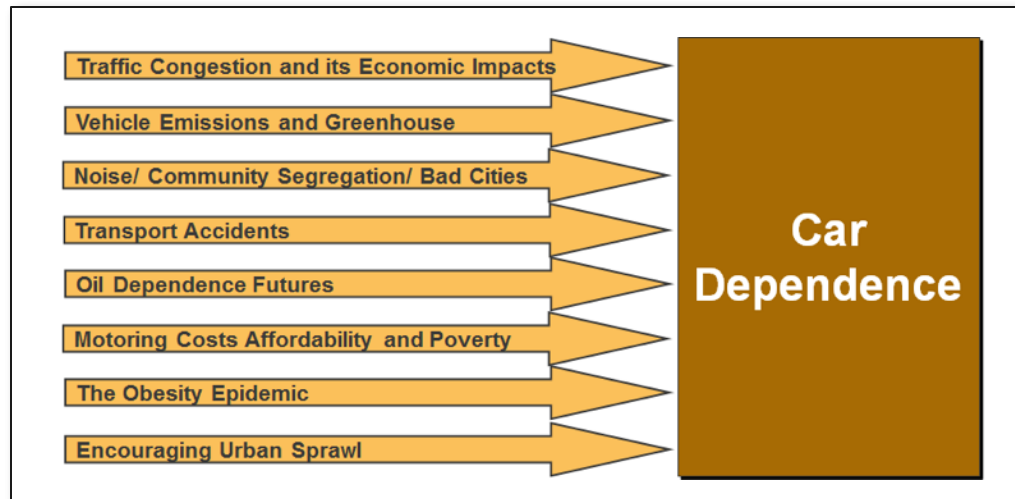


Source: ITS (Monash) Analysis

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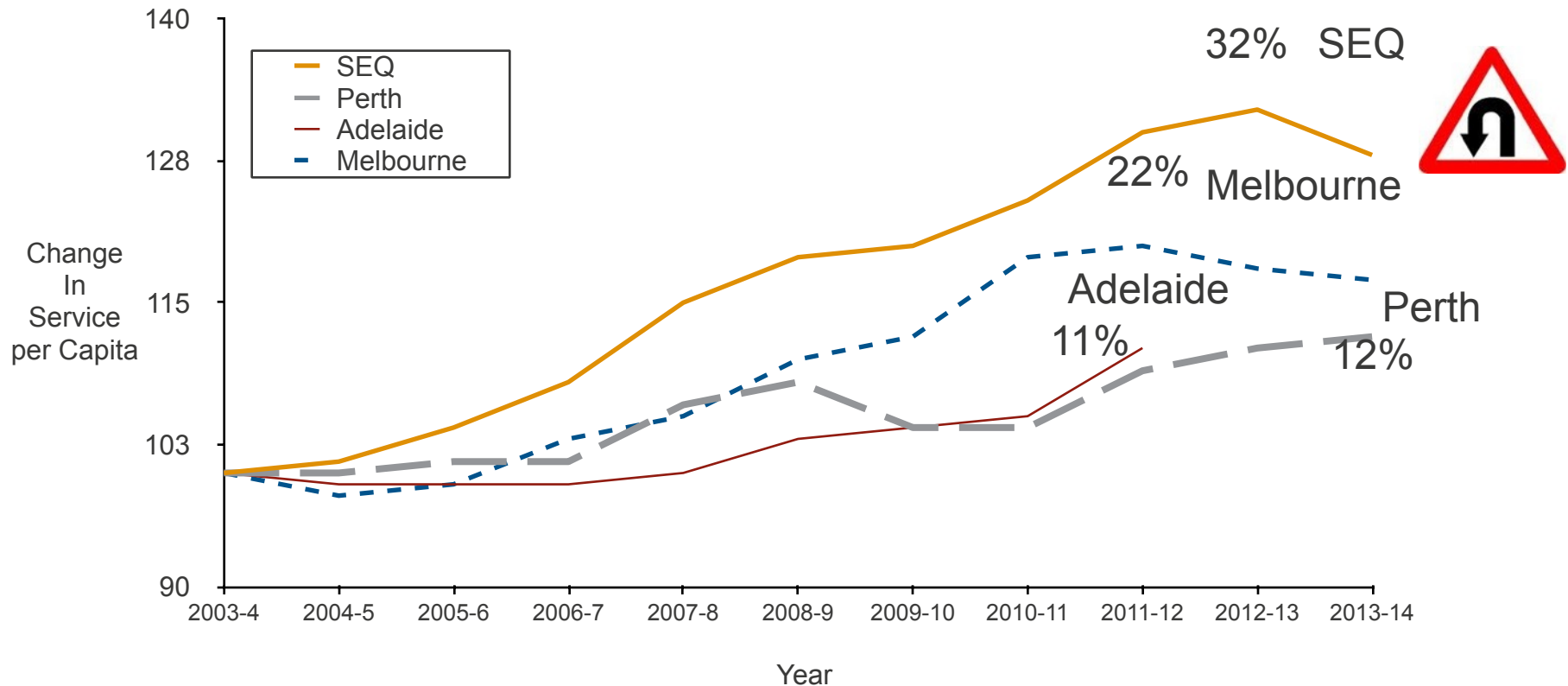
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There are strong rationales to increase Australian urban PT supply to fill existing needs and to grow with population



Real net progress has been made in all cities but SEQ and Melbourne are now going backwards

Change in SERVICE/HEAD – SEQ, Perth, Melbourne, Adelaide since 2003-4



Source: ITS (Monash) Analysis