



# **Congestion charging for roads: local pressures and international experience**

**Roads Australia Pricing Forum**

John Daley  
CEO, Grattan Institute  
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## Overview

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Congestion pricing would have many benefits:

- Congestion imposes large economic costs, congestion pricing could substitute for current fuel excise revenue, and the technology solutions are becoming cheaper
- The social costs of congestion are also very high, and individuals tend to underestimate the impact on their lives.

The Henry Tax Review recommended a congestion tax and heavy vehicle charging by mass and distance.

Winning public acceptance won't be easy, and needs to shape the policy directions:

- A substantial proportion of congestion pricing revenue should be devoted to public transport investments in order to meet equity concerns
- Public support may also be increased through trial periods, express lanes, and advocacy through non-government groups
- At the end of the day, some political courage may be required, but public support may well increase *after* congestion pricing is in place.

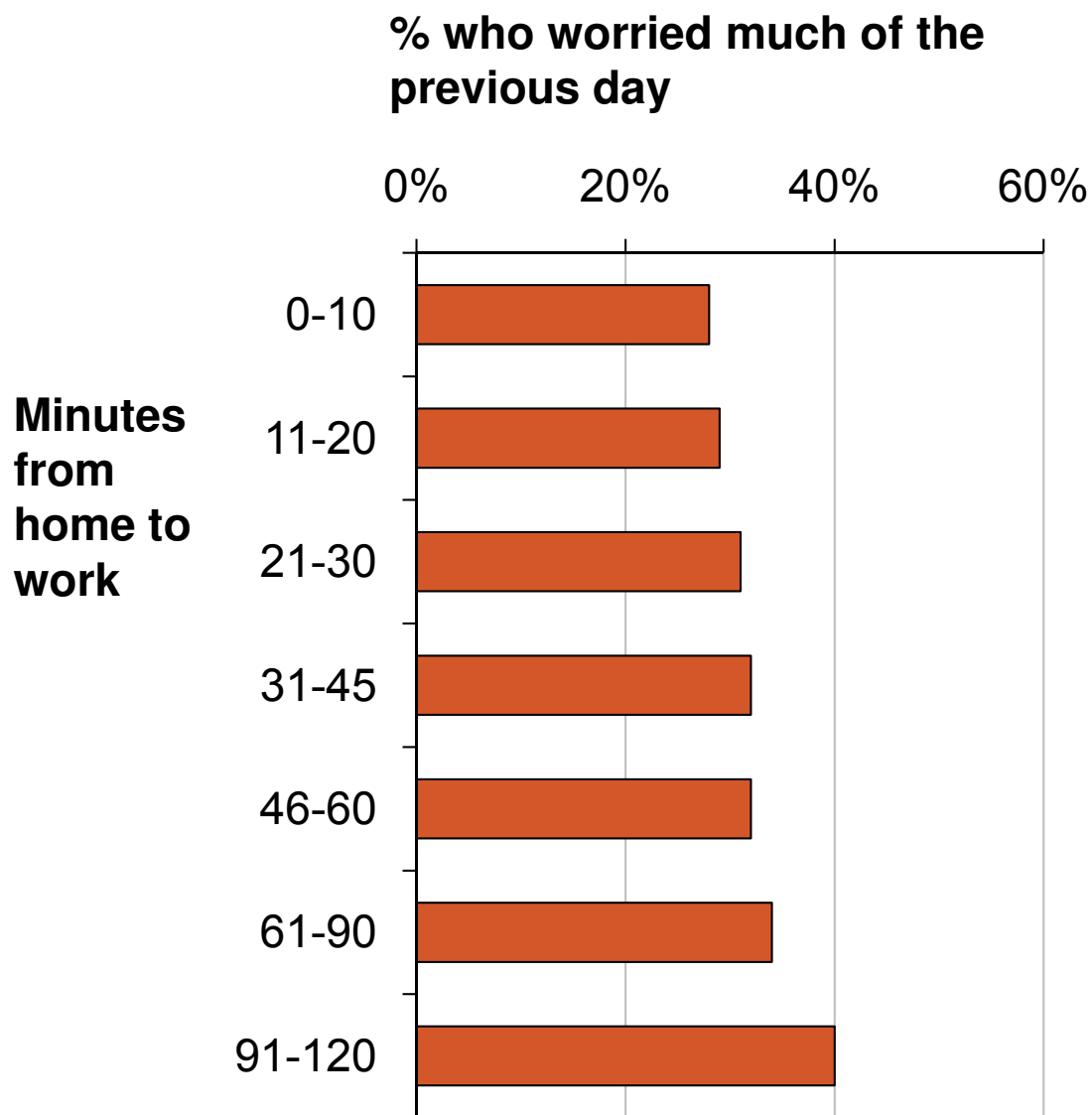
Congestion pricing is unlikely to substantially increase road funding, which has already increased over the last 5 years – indeed if this is the focus, congestion pricing is unlikely to win public support.

## Forces are converging to change road pricing

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- **Increasing congestion costs** due to population growth and car growth (2% GDP)
  - \$13b/yr in 2010, \$20b in 2020 (BTRE 2007): vehicle operating costs, lost productivity, reduced
  - Reduced long-run employment growth - 4% impact on Los Angeles
  - Reduced air quality and higher carbon emissions
- **Fuel excise revenue** at risk (improved fuel efficiency, potential switch to electric cars)
  - \$10b fuel excise (Cth)
  - \$6b vehicle registration, stamp duty on transfer, parking space levies (Vic)
  - About 5% of total tax revenue
  - Similar to total road spending \$12b (2006-7) + policing (\$1b) + accidents (\$15b)
- **Technology** enabling cost-effective congestion charging
- Increasing understanding of **social costs** of congestion
- Some people want to increase **revenue for road funding**

# The social costs of commuting and congestion may be even higher than the economic costs



## Similar deterioration in

- Overall wellbeing
- Health
  - Recurrent neck or back pain
  - High cholesterol
  - Propensity to heart attacks
  - Obesity
- Wellbeing
  - Overall
  - Not feeling rested
  - Negative moods
  - Social connection
  - Volunteering
- Productivity
  - Absenteeism
  - Cognitive performance
  - Motivation
  - Confidence

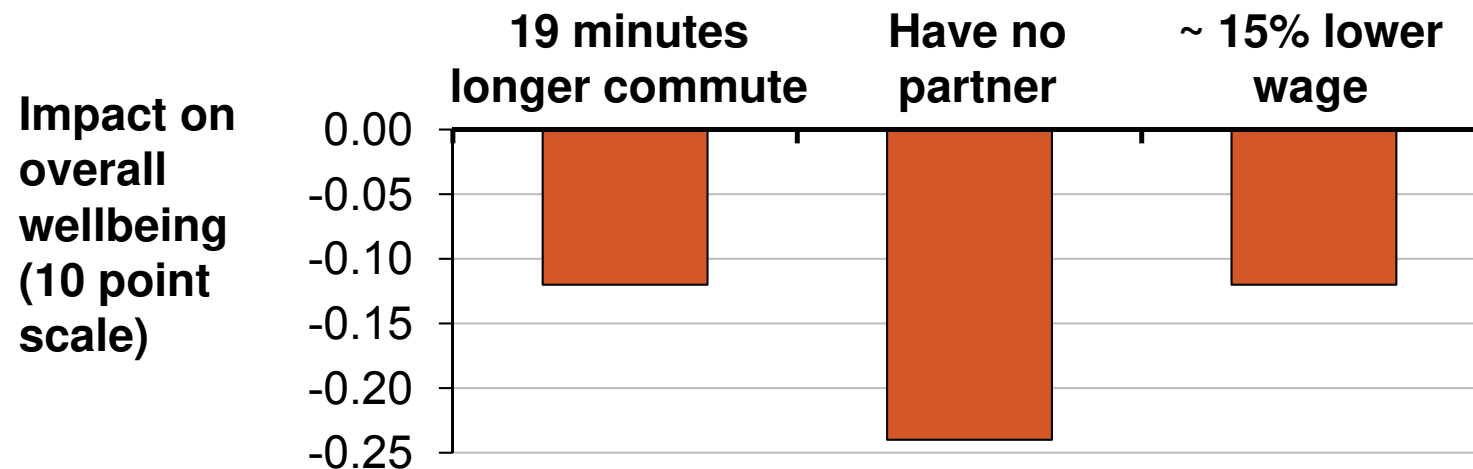
**Exacerbated by crowded commutes (i.e congestion)**

# Individuals tend to make bad choices about commuting – they under-estimate its impact

**Classical economic theory:** negatives of commuting are compensated by

- lower housing costs (so more money for other activities)
- better job (more rewarding, better salary)

**Reality:** longer commutes leave people less well off



After controlling for marital status, education, gender, age, employment

## Robust result

- Same outcome when analysing people who change commuting times
- Not because low income people have longer commute – high income have marginally longer average commutes
- Result holds at household level – partners of long commuters have lower wellbeing

# Henry Tax Review recommended a congestion tax and heavy vehicle charging by mass and distance

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## Core recommendation

- Congestion charging varied by time of day
- Revenue initially used to finance public transport

## Related recommendations

- Heavy vehicle charging at real cost based on mass and distance traveled
  - reduce game-playing around route choices, vehicle configurations
  - recover costs of road-wear: 32% to 100% of maintenance costs
  - ensure comparability with rail freight
- Rationalise compulsory 3<sup>rd</sup> party insurance – relate to distance travelled, accidents
- Abolish stamp duty, taxi licensing

# Overseas experience of congestion pricing suggests that reinvesting revenue to public transport is crucial to meeting equity concerns and winning public acceptance

City	Reduced congestion	Reduced accidents	Revenue investment	Public opinion after implementation
London 2003/2007	30%	2% to 5%	11,000 new bus seats	Supported
Singapore 1975/1998	40%	N/A	None	Accepted
Stockholm 2006	19%	5% to 10%	197 new buses, reinvestment in trains	Supported in centre, opposed by surrounds
Oslo	None	N/A	None	Opposed, but political party consensus
San Diego 1996/1998	N/A	N/A	New buses for tolled corridor	Supported
Minnesota 2005	N/A	N/A	More buses for tolled corridor	Supported
Edinburgh 2003	Not implemented		Promised, but not believed	Opposed – seen as “big new tax”
New York 2007	Not implemented		Mass transit improvements	Opposed – seen as inequitable for suburbs

Source: Albalade & Bl, “What local policy makers should know about urban road charging: lessons from worldwide experience, *Public Administration Review*, Sept 2009; Bipartisan Policy Commission, “How fair is road pricing? Evaluating equity in transportation pricing and finance 29/9/2010

# It will also be easier to win support for road pricing through trial periods, express lanes, and advocacy through non-government groups

## Issues

## Implications

Efficiency arguments struggle for support

- Hard to communicate – the invisible hand is invisible
- Congestion charging seen to “benefit the rich” and increase inequity

- Devote funds to **public transport**
  - Easier argument to understand
  - Perceived as improving equity

Roads seen as a “free right” – always hard to take vested benefit away

- Run a **trial period** to create vested interest in reduced congestion
- Consider **express lanes** rather than cordon pricing – higher support because “paying for something extra”

Boundary resident opposition

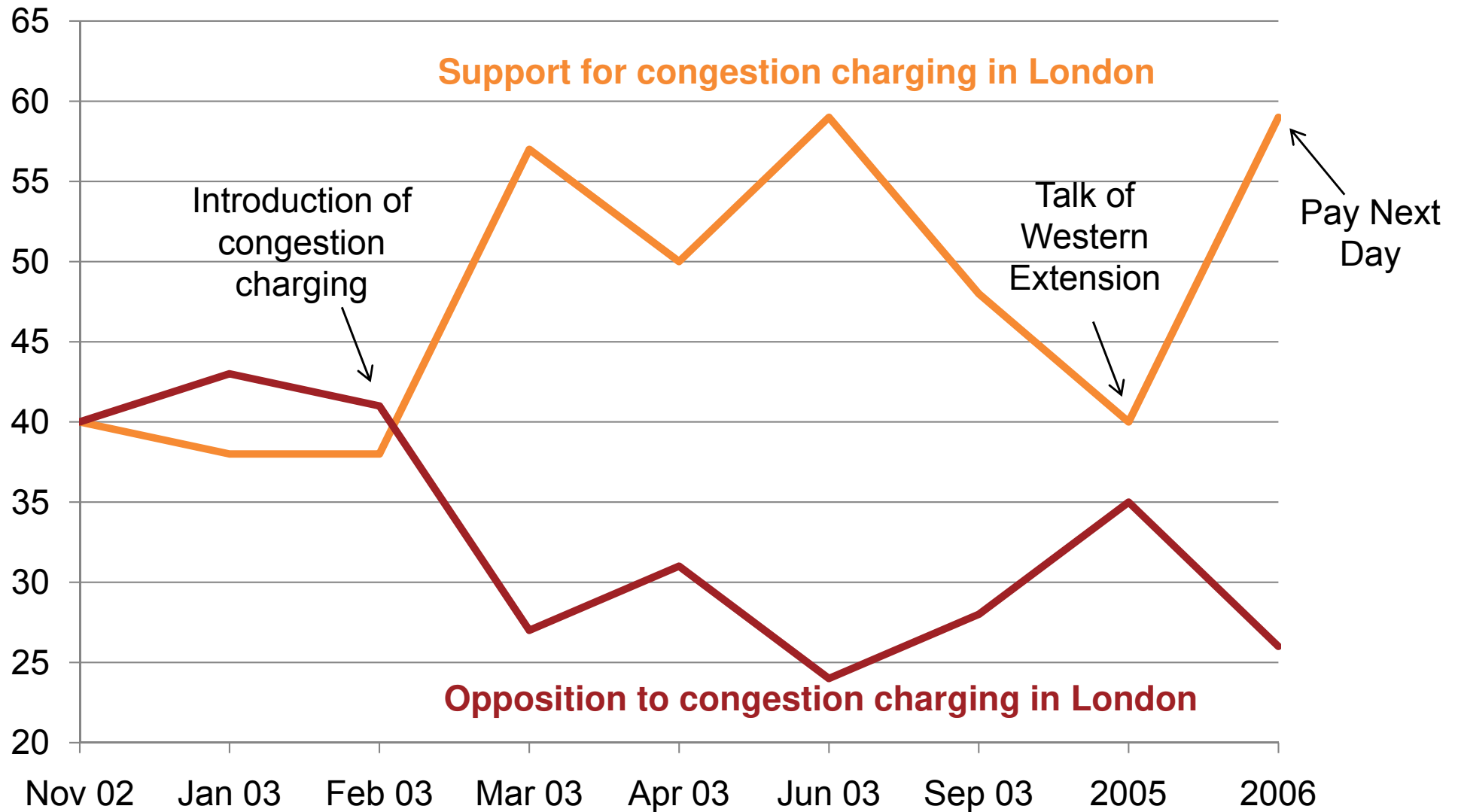
- **Focus pricing** on congested areas/times (consistent with efficiency analysis)
- Dedicate some revenue to “**suburban**” roads
- Analyse trial: suburban drivers probably pay less

Suspicion of a “big new tax”

- Advocate through **trusted sources** – academics, traffic engineers, RACV, hospitals, **not** gvt
- Modify design in response to consultation



# Public support is likely to increase *after* congestion charging is introduced

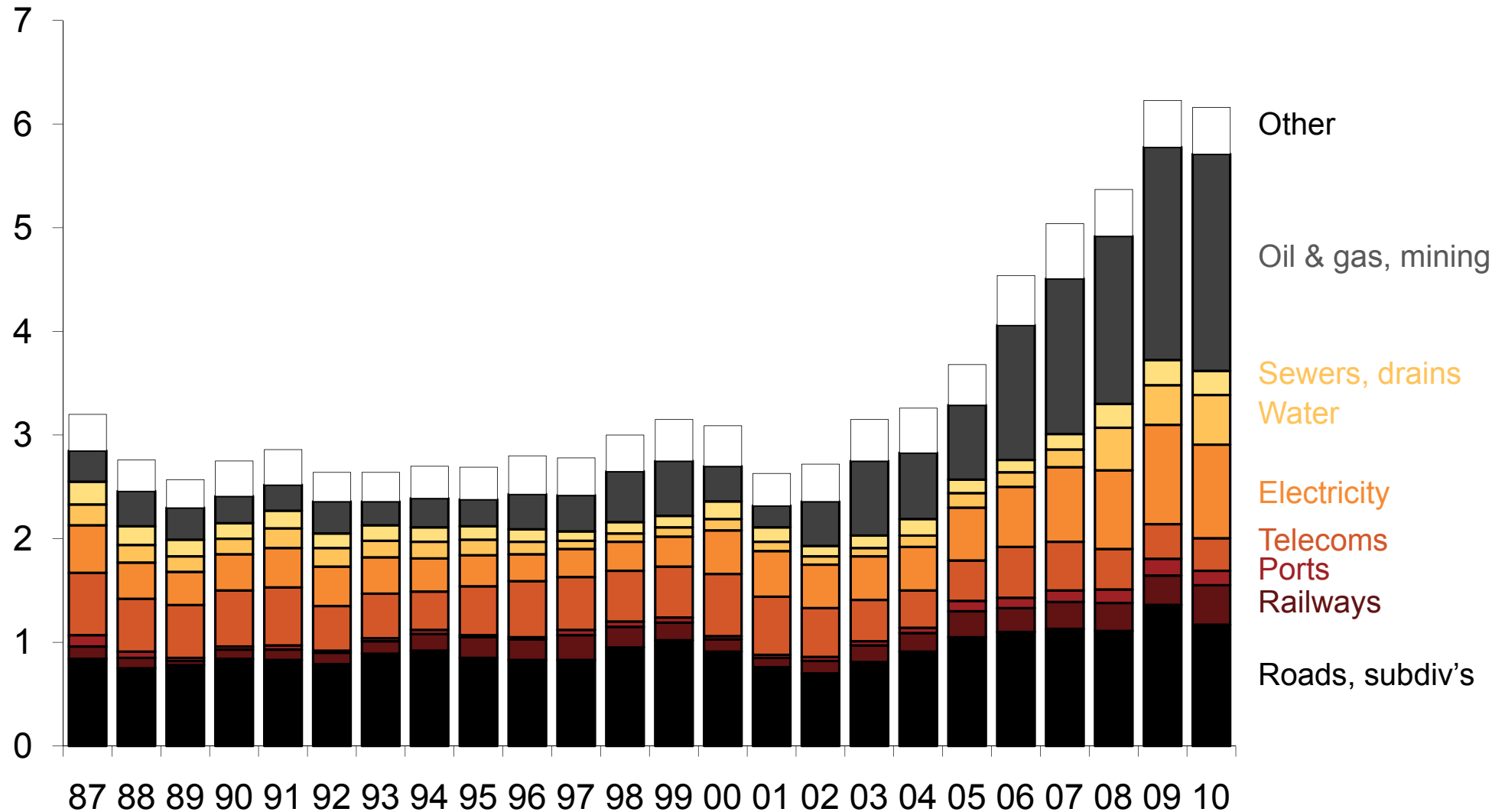


Source: IPSOS Mori, "Political Commentary - Public: Government Should Intervene On Climate Change ... Just Don't Tax Us", 6 August 2007

# Congestion pricing may not lead to further increases in road and rail spending, which have already expanded over the last 5 years

## Engineering construction work done – all sectors

% of GDP, year ended 30 June



Source: ABS

## Conclusions

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Congestion pricing would provide many benefits, particularly its impact on individual **well-being**.

A large proportion of congestion pricing revenue should be dedicated to **public transport**, and perhaps some “**border area**” road improvements.

It will be easier to win public acceptance through **trial periods** coupled with bona fide consultation and commitments to reverse if there is no public support after trial.

An **alliance** of non government groups is required to build public support.

Even with all these refinements some **political courage** may be required – but history suggests that courageous politicians will ultimately be rewarded.

Congestion pricing is unlikely to lead to substantial increases in **road funding** – indeed if this is the focus, it is unlikely to win public support.