


Success and Failure Factors in Road Charging Schemes: International Experience

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Study Objectives



International Examples

Auckland
Oregon, USA
UK
Sweden
Sydney



Comms

Success and
Failure Factors in
Communications



Applicability in NZ

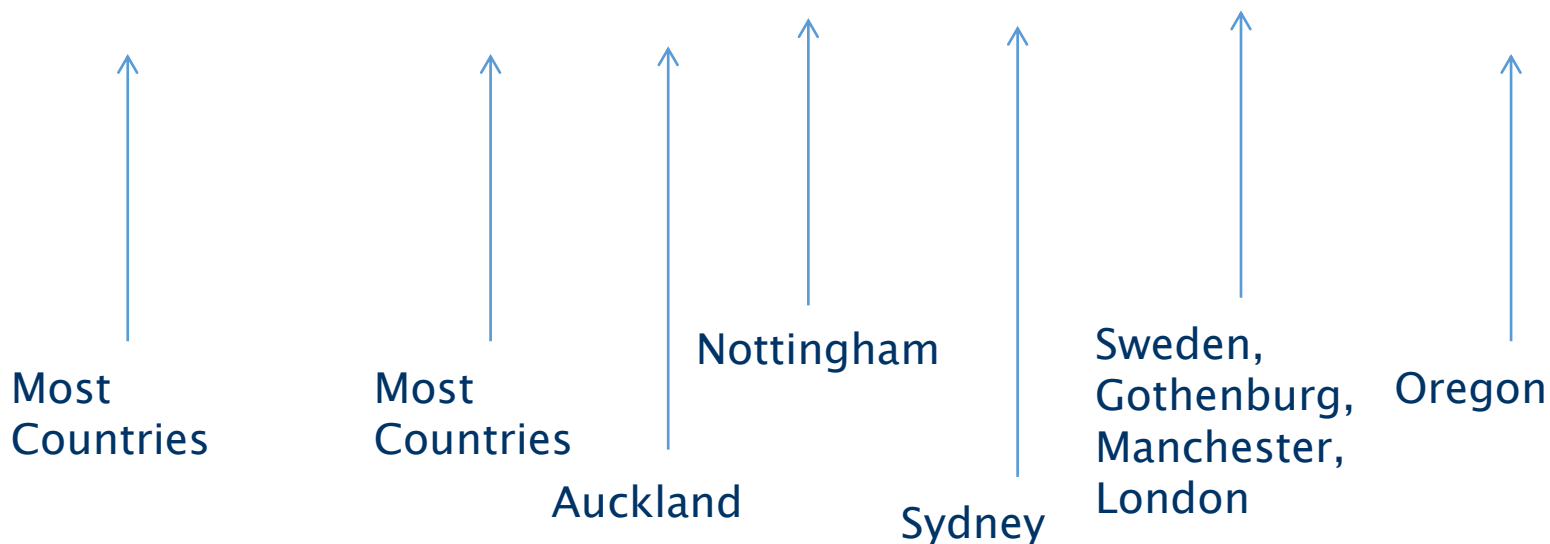
Future Trends
and their
applicability to
NZ

Theory of Road Charging

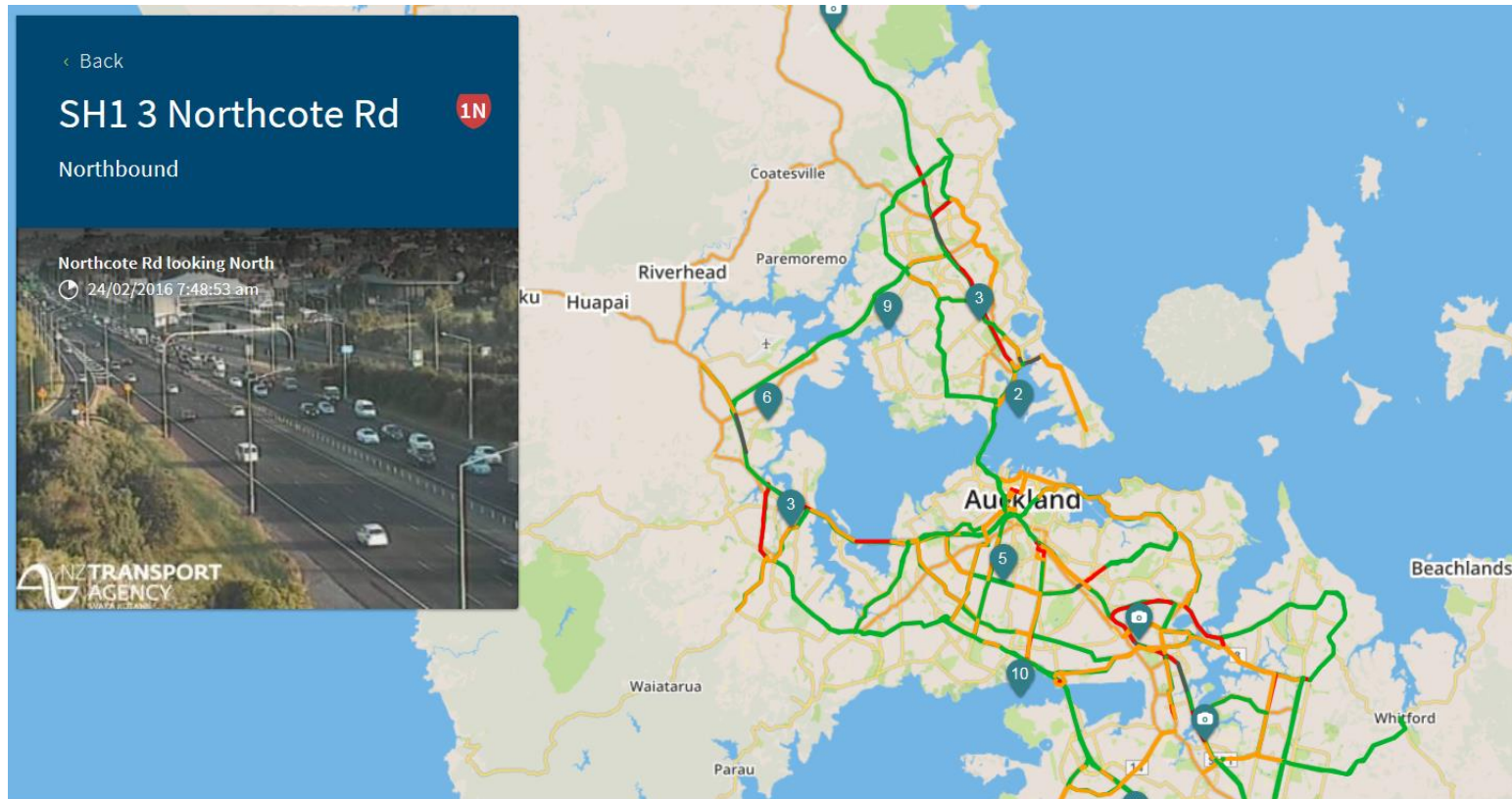
- Turnpike trusts were established in 1706
- Petrol taxation was established in Oregon, USA, in 1919
- Singapore Area Licensing Scheme set up in 1973
- Hypothecation
- Objectives of Road Charging Schemes
 - Revenue for infrastructure
 - General revenue
 - Congestion management

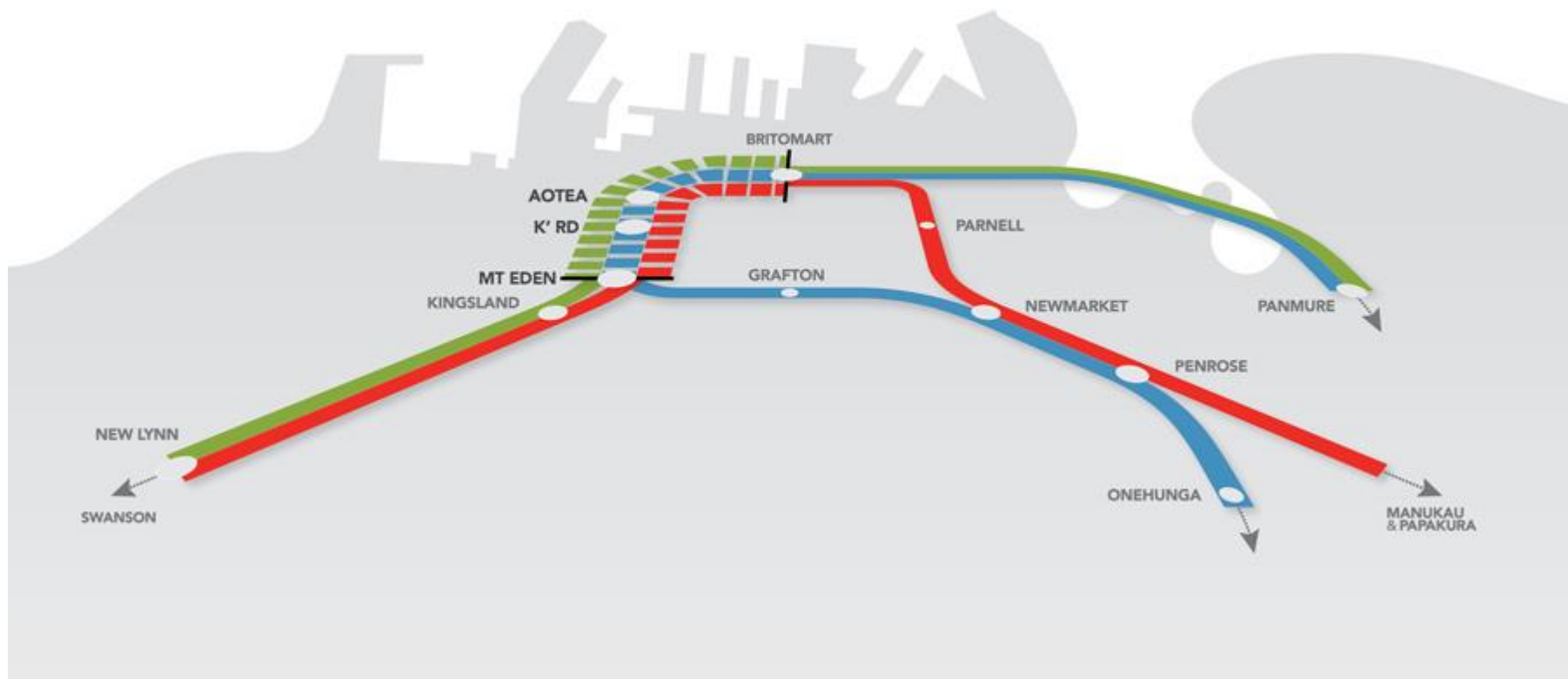
Registration Fees Bridge Tolls Fuel Tax Road Tolls Workplace Parking Charging Time Based Charging Congestion Charging Distance-Based Charging Intelligent Pricing

Ability to Accurately Charge for Transport Costs Increases



Auckland





Auckland Motorway Tolls

Goals

Goals made clear:

For the city to grow, more revenue needed

Choice

Hobson's choice

\$\$\$

All Income hypothecated

Comms

Work done to bring Aucklanders along for the ride.

Strong leadership

Legislative Change Required

Consistency

Public mandate for motorway charging to deliver infrastructure. Now need to deliver....

Nottingham



Nottingham Workplace Parking Charging

Goals

Goals made clear:

Line 2 of Tram

Choice

Consultation – but no referendum.

Tram now in place

\$\$\$

£379 per space.
Revenue Nottingham-based.

Road funding not currently hypothecated in UK.

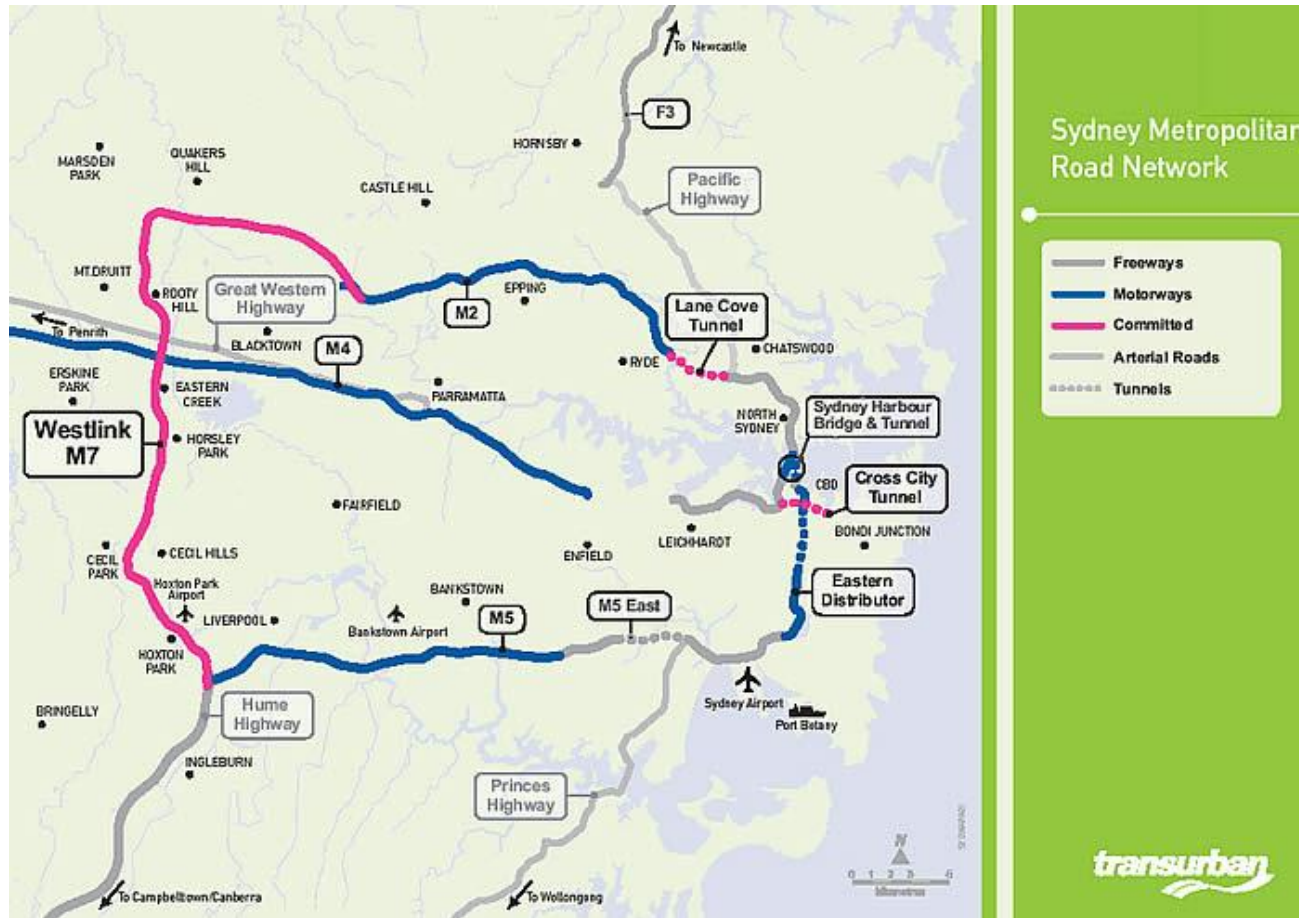
Comms

Clearly linked to phase 2 of Tram

Leadership

Strong lead from Nottingham Council.
History of innovation

Sydney



Sydney Time-Based Charging

Goals

Managing
Peak
Spreading

Choice

No choice
(and no
alternative)
offered

\$\$\$

Revenue to
state. Price
varies from
\$2.50 – \$4.

Comms

Many toll
roads already
in place – Big
“step” needed
to effect
change

Legacy

Introduced
2009. Bigger
step may now
need to be
introduced

Manchester



Potential Manchester Charging Area



Manchester Congestion Charging

Goals

Mixed message – congestion and revenue for public transport improvements

Choice

Binding Referendum Failed

\$\$\$

Cost was to be around £5. Road funding not currently hypothecated in UK.

Comms

Penalty– focussed.

Legacy

After failed referendum, tram network was extended anyway

London



Western Extension 2007–2011



London Congestion Charging

Goals

Clear –
congestion
related,
revenue
channelled to
public
transport

Choice

Consultation.
No choice
offered.

\$\$\$

Cost raised
from original
£5 to £11.50
by 2014.
Road funding
not currently
hypothecated
in UK.

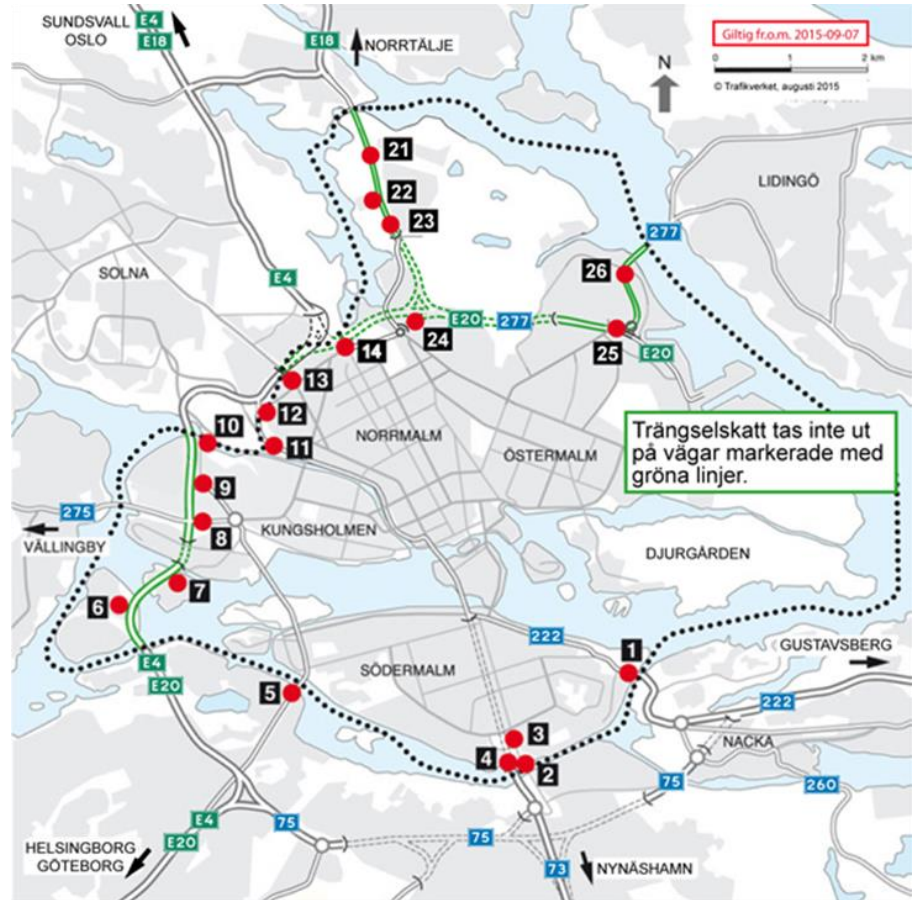
Comms

Penalty–
focussed.

Legacy

Western
Extension was
removed
following
governmental
change

Stockholm



Stockholm Congestion Tax

Goals

Clearly about environmental outcomes.

Choice

Referendum after implementation. Vote in favour, but not binding.

\$\$\$

10–20 SKR or around NZD \$1.80–\$3.50 depending on time.

Road funding not currently hypothecated in Sweden.

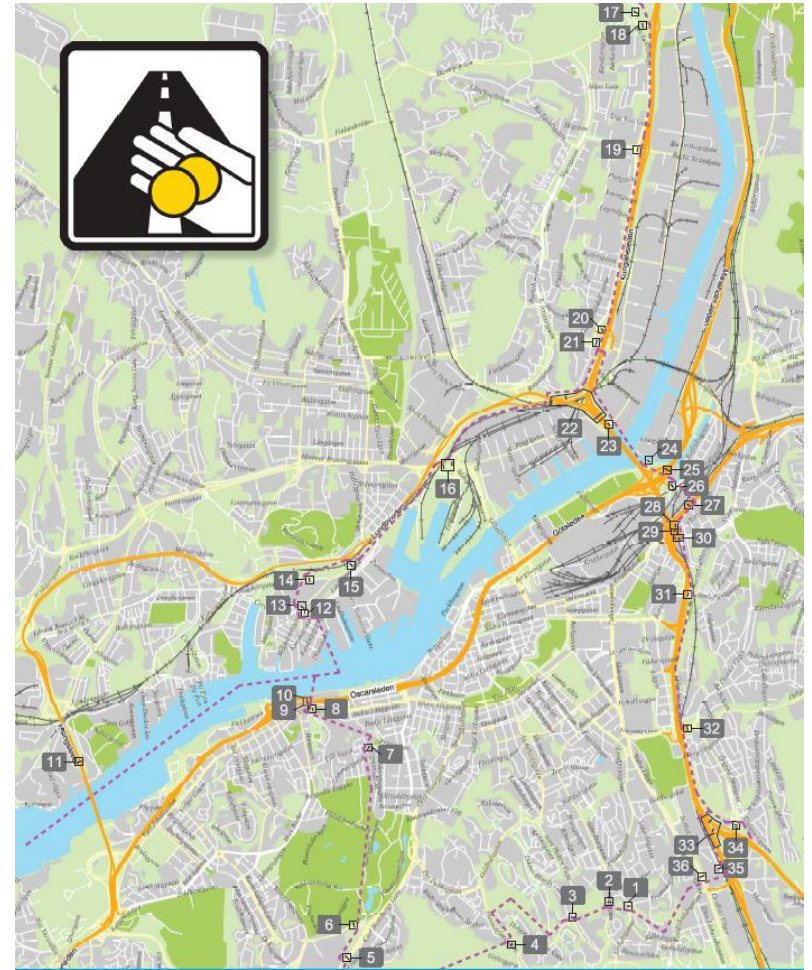
Comms

Personalised. Focussed on outcomes.

Legacy

Congestion is increasing again, will need to raise tolls.

Gothenburg





Göteborg Congestion Tax

Goals

Linked to the Western Swedish infrastructure agreement, shared congestion and revenue goals

Choice

Referendum after implementation. Vote in opposition, but not binding.

\$\$\$

9–22 SKR or around NZD \$1.50 – \$3.80.

Road funding not currently hypothecated in Sweden.

Comms

Personalised and reward focussed.

Background work

Stockholm had paved the way with taxation. Significant investment in infrastructure

Oregon





Oregon Distance-Based Charging Trial

Goals

Clearly linked to revenue only.

Choice

Completely optional

\$\$\$

Funding Hypothecated.

Comms

Personalised and comprehensive, leveraging off innovation and appealing to fairness.
Visionary leadership.

Legacy

New technology developed.
Big Brother mitigation
13 states are investigating the same trial

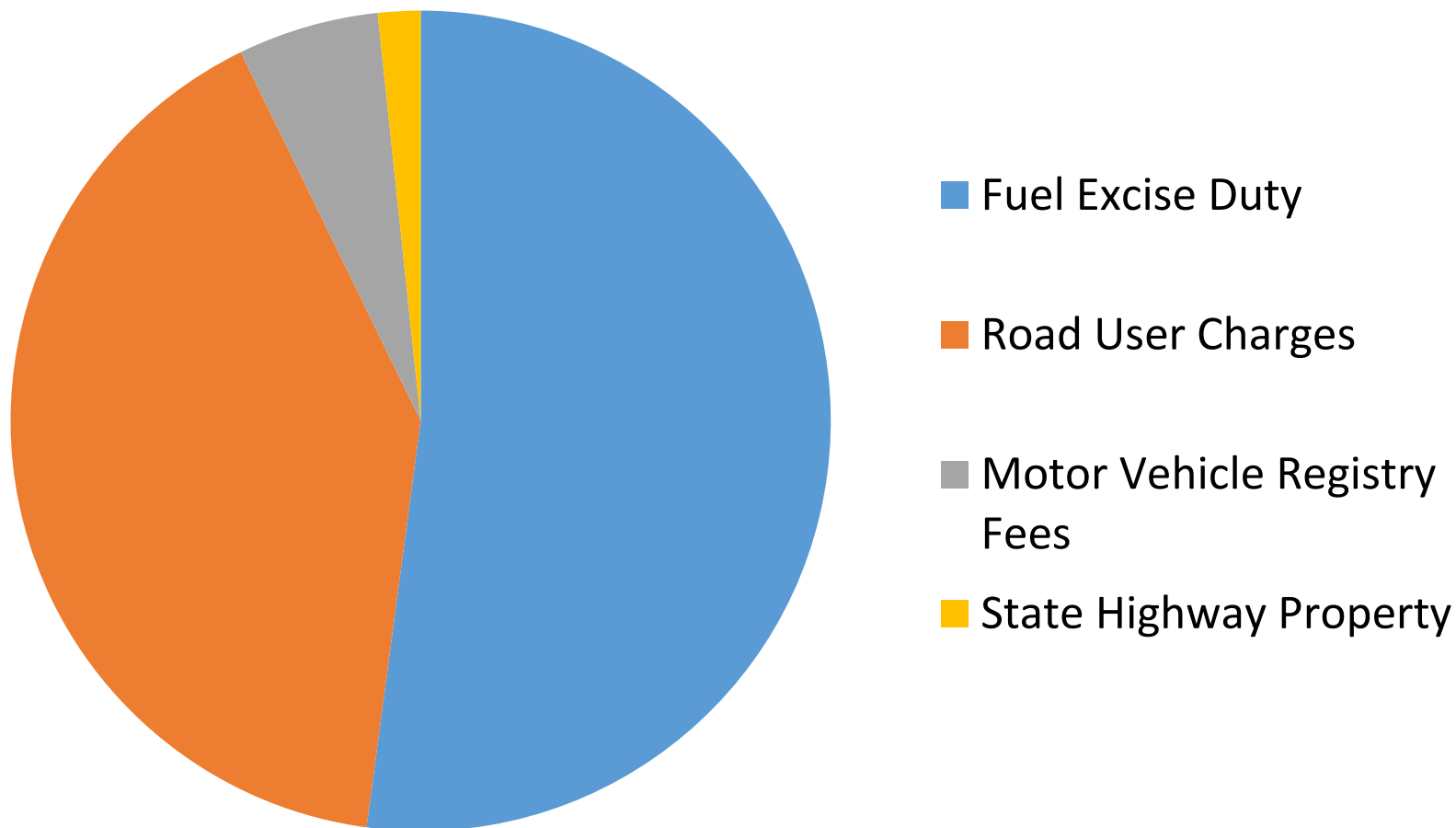
Communications Strategy

		Personalised	Reward Focussed	Penalty Focussed
Motivation	Revenue	Gothenburg*	Oregon Auckland*	Manchester Nottingham
	Congestion	Stockholm	Sydney*	London

		Choice Offered	
		Yes	No
Motivation	Revenue	Manchester Oregon	Nottingham Gothenburg Auckland*
	Congestion		London Stockholm Sydney

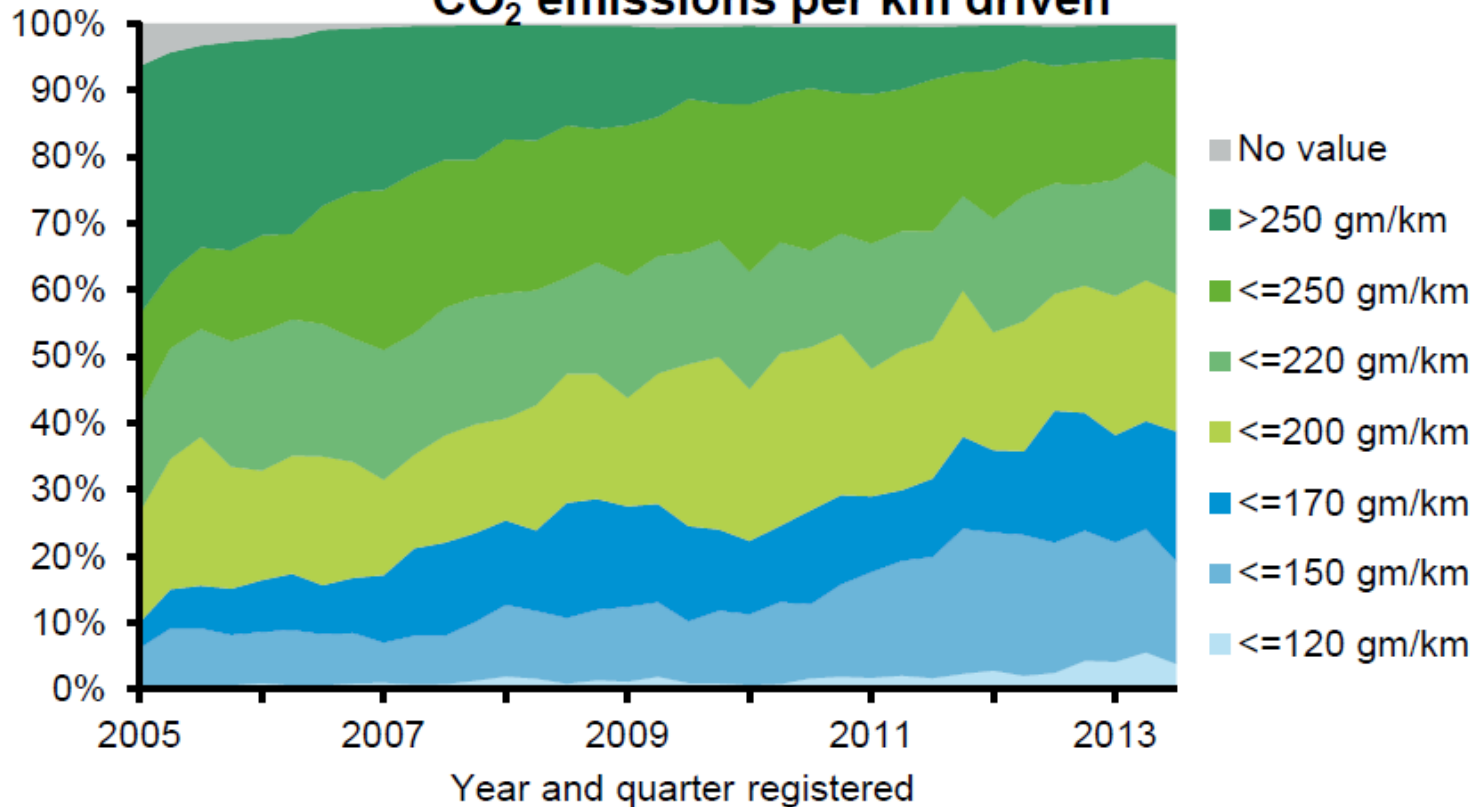
*Hobson's choice

Contributions to NLTF



Vehicle Efficiency

Figure 9.1a : New light vehicle registrations
CO₂ emissions per km driven



Conclusions

- No substitute for comms time
- Is voting a good idea?
- Reward, Penalise or Personalise?
- The importance of Vision and Leadership
- Link between cause and effect (and the value of hypothecation)
- Electric vehicles and what they mean for road charging
- Does this city have an appetite for innovation?