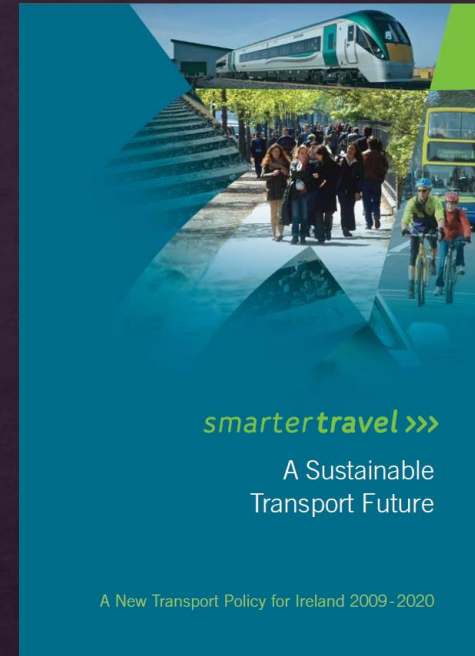
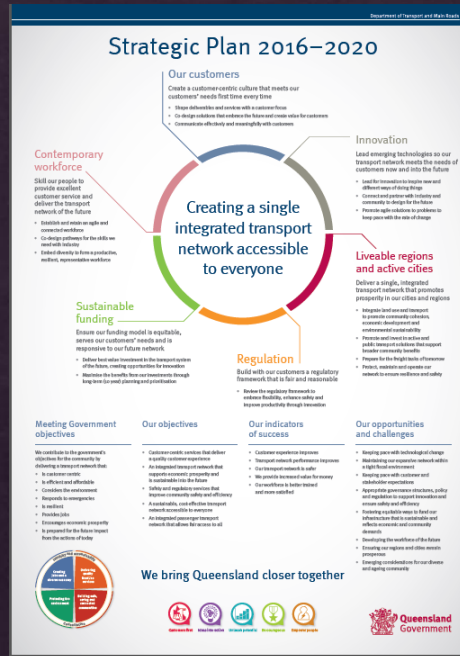
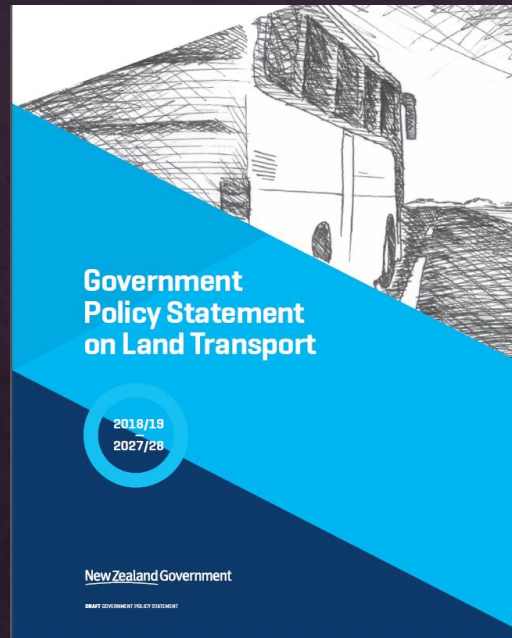


Investing for Sustainable Transport



Nadine Dodge

NZCSC seminar 15 June 2017



Acknowledgements

- ◆ Grant from MBIE (International Relationship fund)
- ◆ Grant focus: “Resilient urban mobility and climate change mitigation: engendering policy innovation”
- ◆ From budget – NZ-European Union ‘FRIENZ’ n-European research collaboration
- ◆ Partner in Europe: Wuppertal Institute, Berlin
- ◆ Grant leader A/Prof Ralph Chapman, VUW

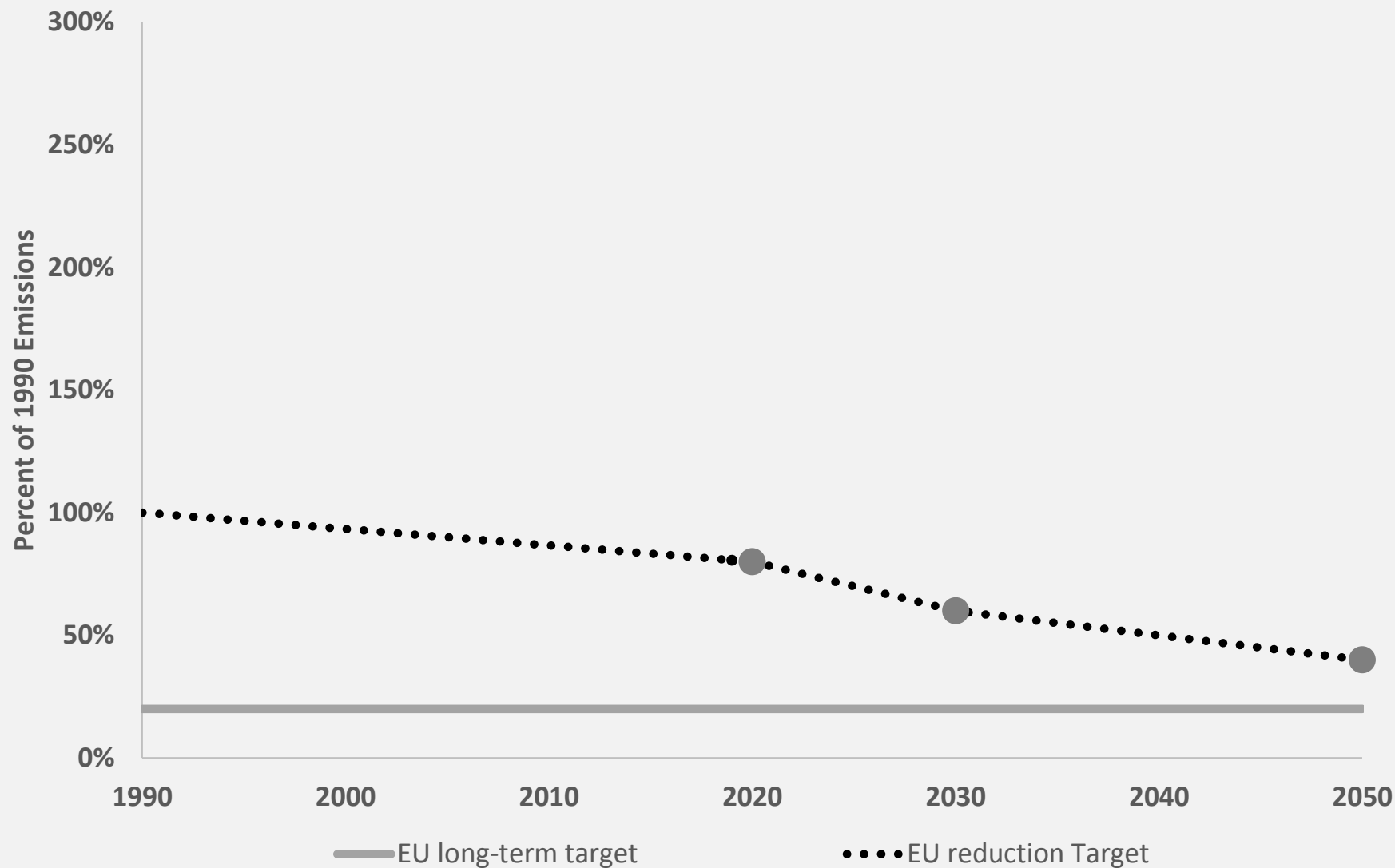
Outline

- ◇ Emission reduction goals for transport
- ◇ Emission trends
- ◇ Economic evaluation frameworks
- ◇ Investment trends
- ◇ Active transport
- ◇ Summary

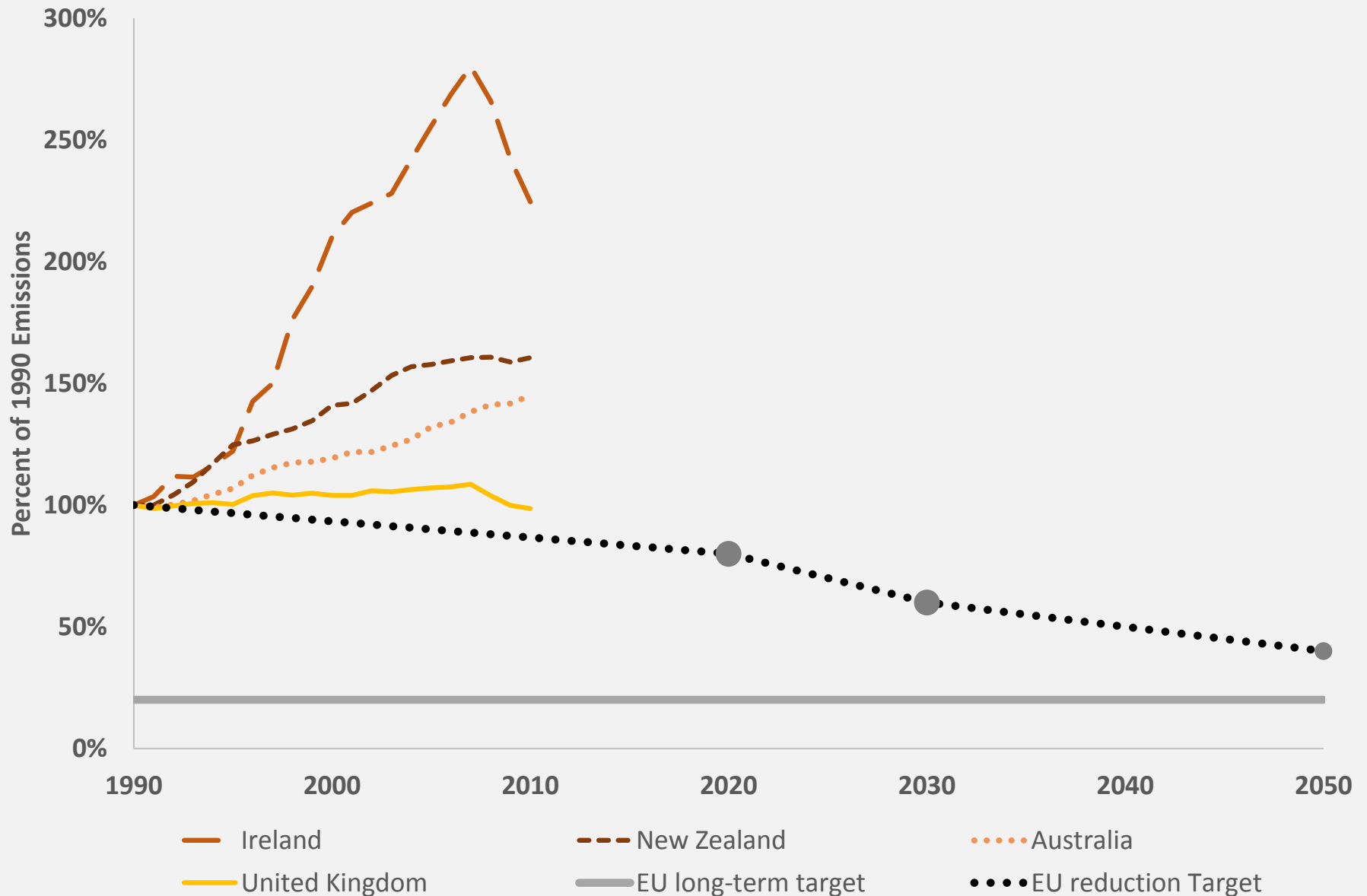
Central government & emission reductions from transport

- ◆ Set goals and strategic direction
- ◆ Define business case and economic evaluation frameworks
 - ◆ Increasing emphasis on side effects and co-benefits of particular transport modes
- ◆ Investor – to varying degrees

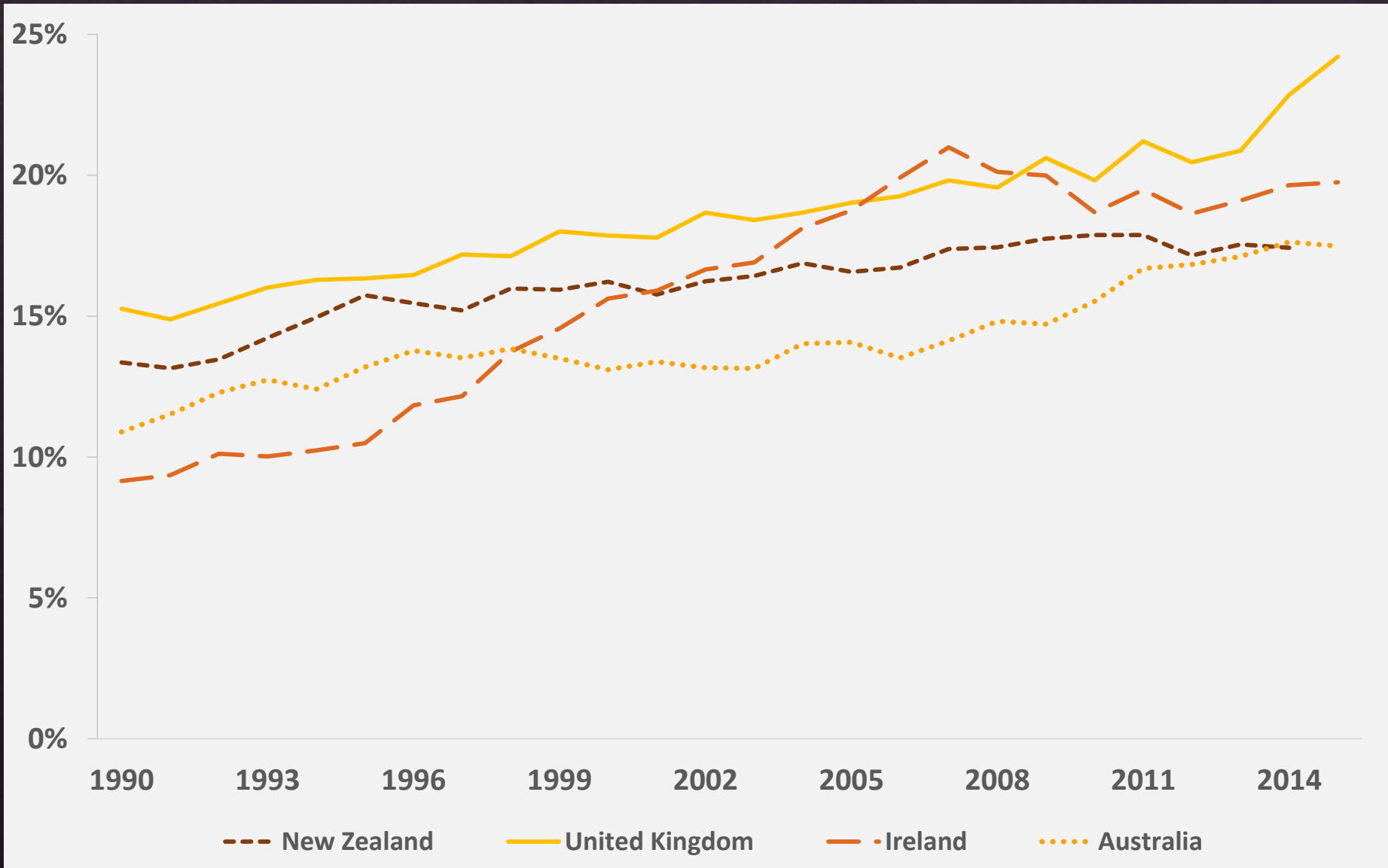
EU reduction goals for transport sector



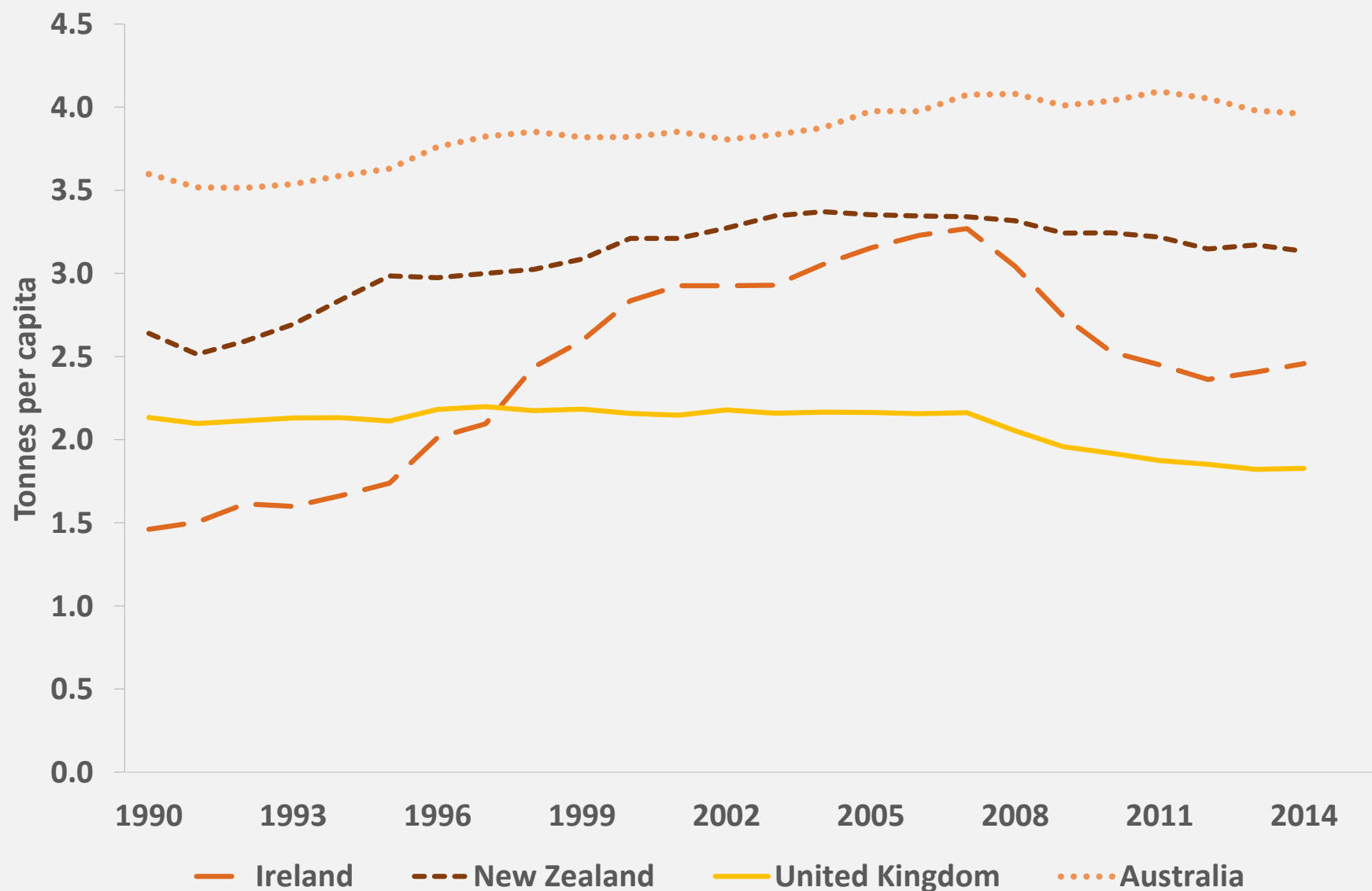
Emission reduction progress



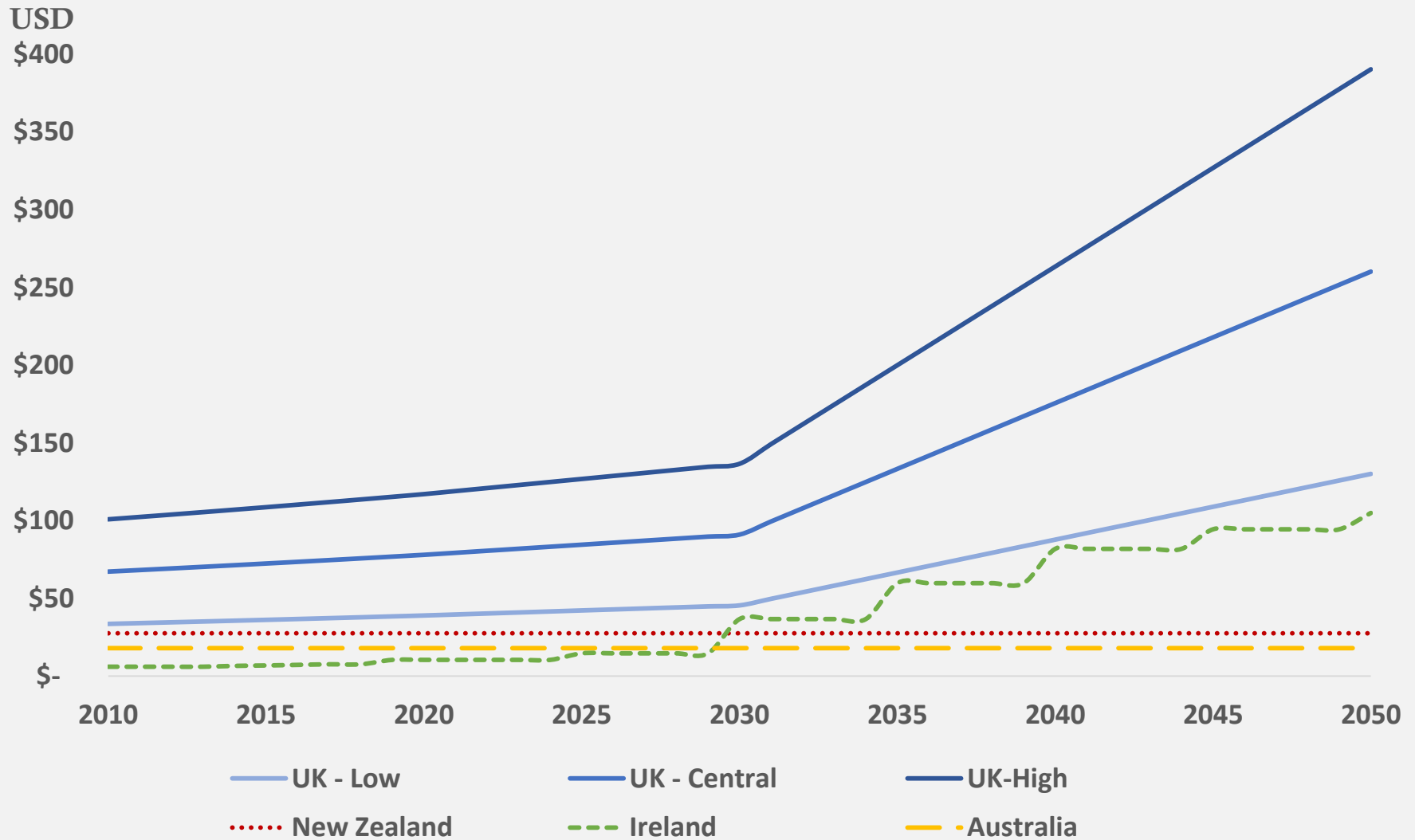
% of emissions from transport



Emissions per capita



Carbon prices used in transport appraisal



Cycling benefit values

Country	Mortality Reduction	Morbidity Reduction	Health Care Cost Saving	Absenteeism Benefit
New Zealand	\$1.30 per km	n/a	n/a	n/a
Australia (QLD)	n/a	n/a	n/a	n/a
Ireland	Reduce by 22%	n/a	n/a	Reduce by 6%
UK (England)	Reduce by 22%	n/a	n/a	Reduce by 6%

Primary transport objectives



New Zealand



United Kingdom



Ireland



Australia (QLD)

Transport objectives - roads

New Zealand

- Direct funding towards priority initiatives, particularly the Roads of National Significance.
-

United Kingdom

- Tackle longstanding problems on road network.
 - Maintain and renew the strategic road network.
-

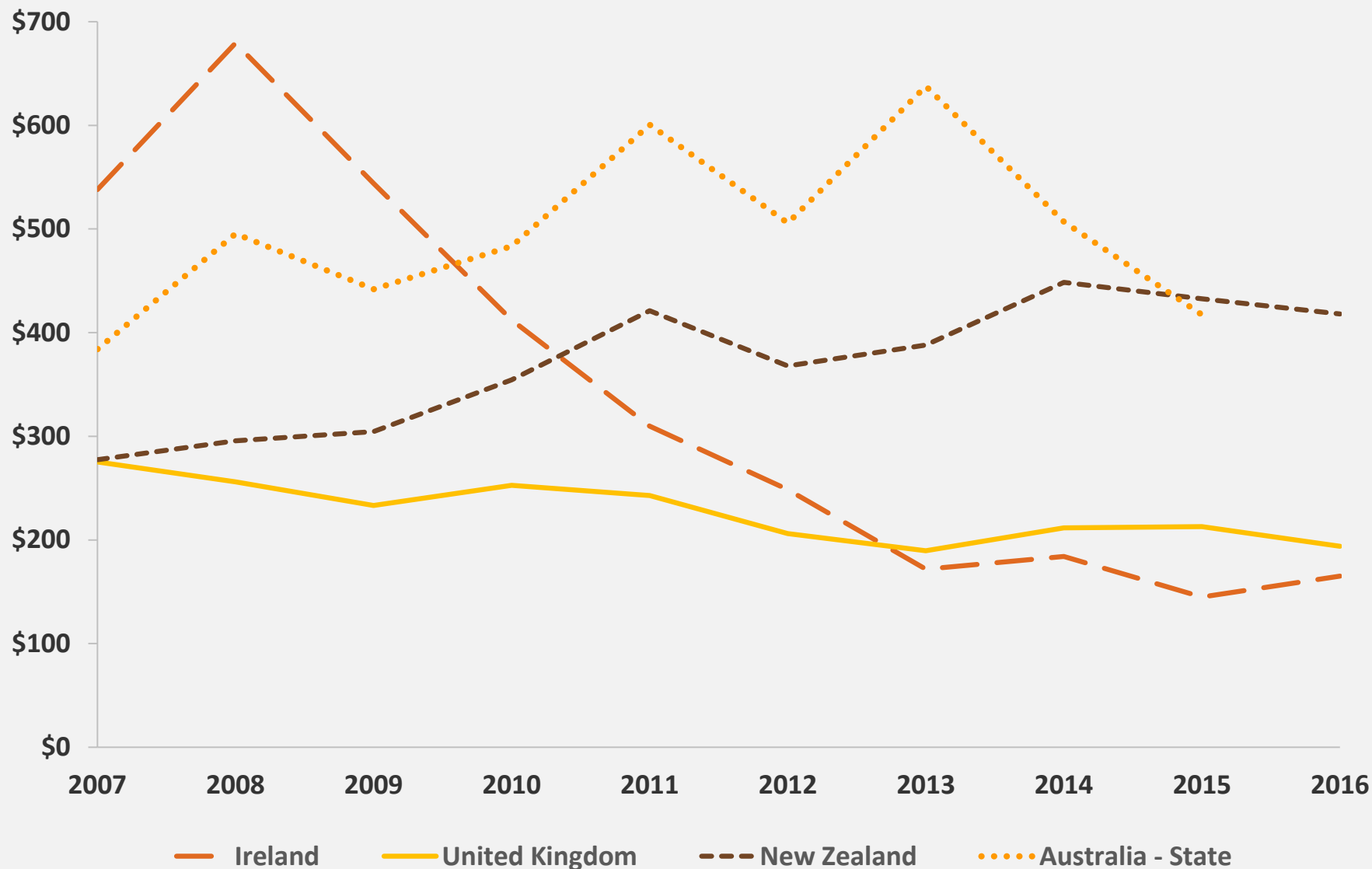
Ireland

- Car commuting to reduce from 65% to 45% by 2020.
 - Total kilometres travelled by car not to increase significantly.
-

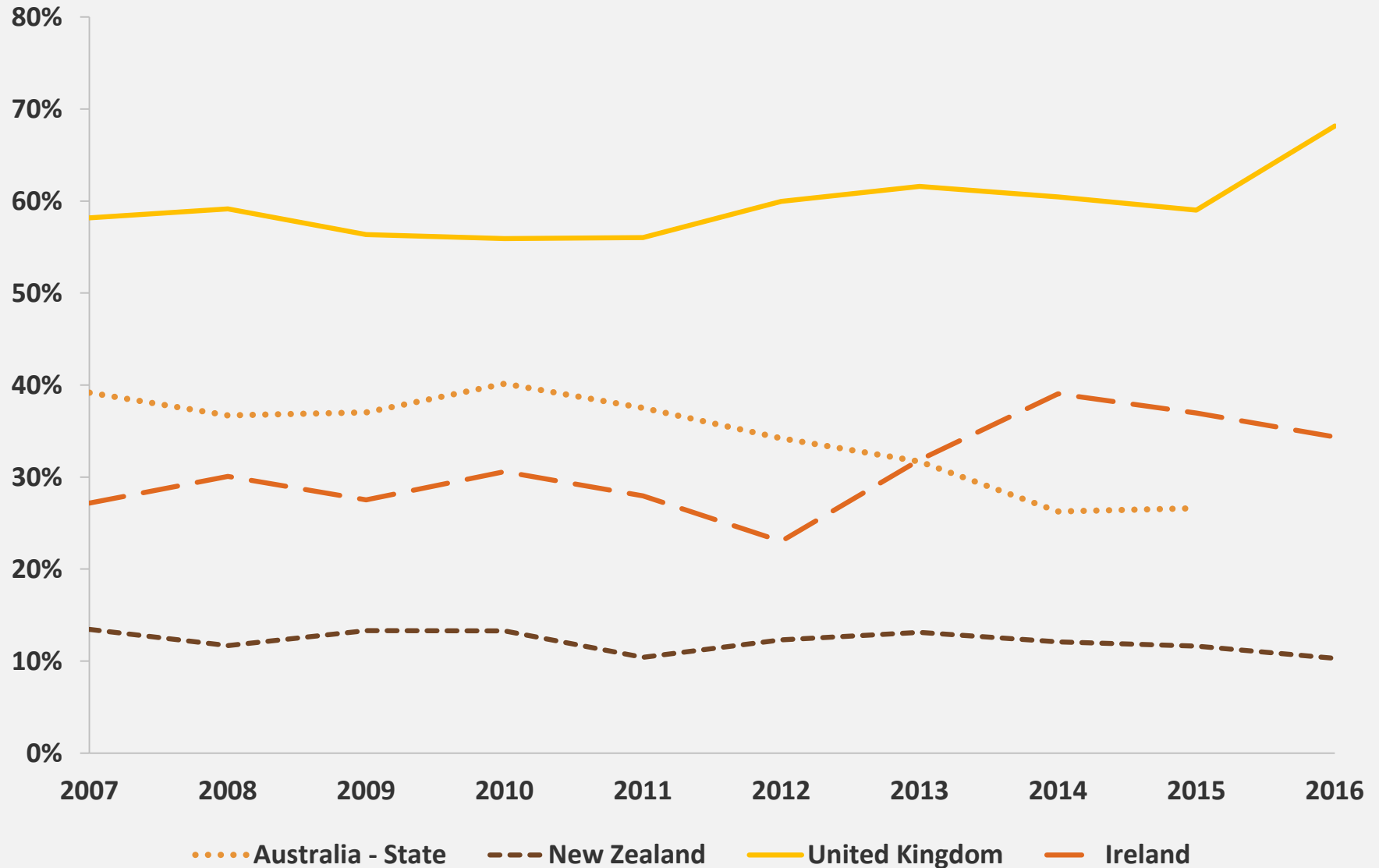
Australia (QLD)

- Meet 'towards zero deaths on Queensland's Roads' targets.
 - Develop inland freight corridor and move freight from road to rail.
-

National capital spending on road transport (USD per capita)



% of capital expenditure on sustainable modes



Transport objectives - Active

New Zealand

- Increased safe cycling through improvement of cycle networks.
-

United Kingdom

- Double the number of journeys made by bicycle by 2025.
 - Reduce rate of cyclists killed or seriously injured
 - Reverse the decline in walking per person
-

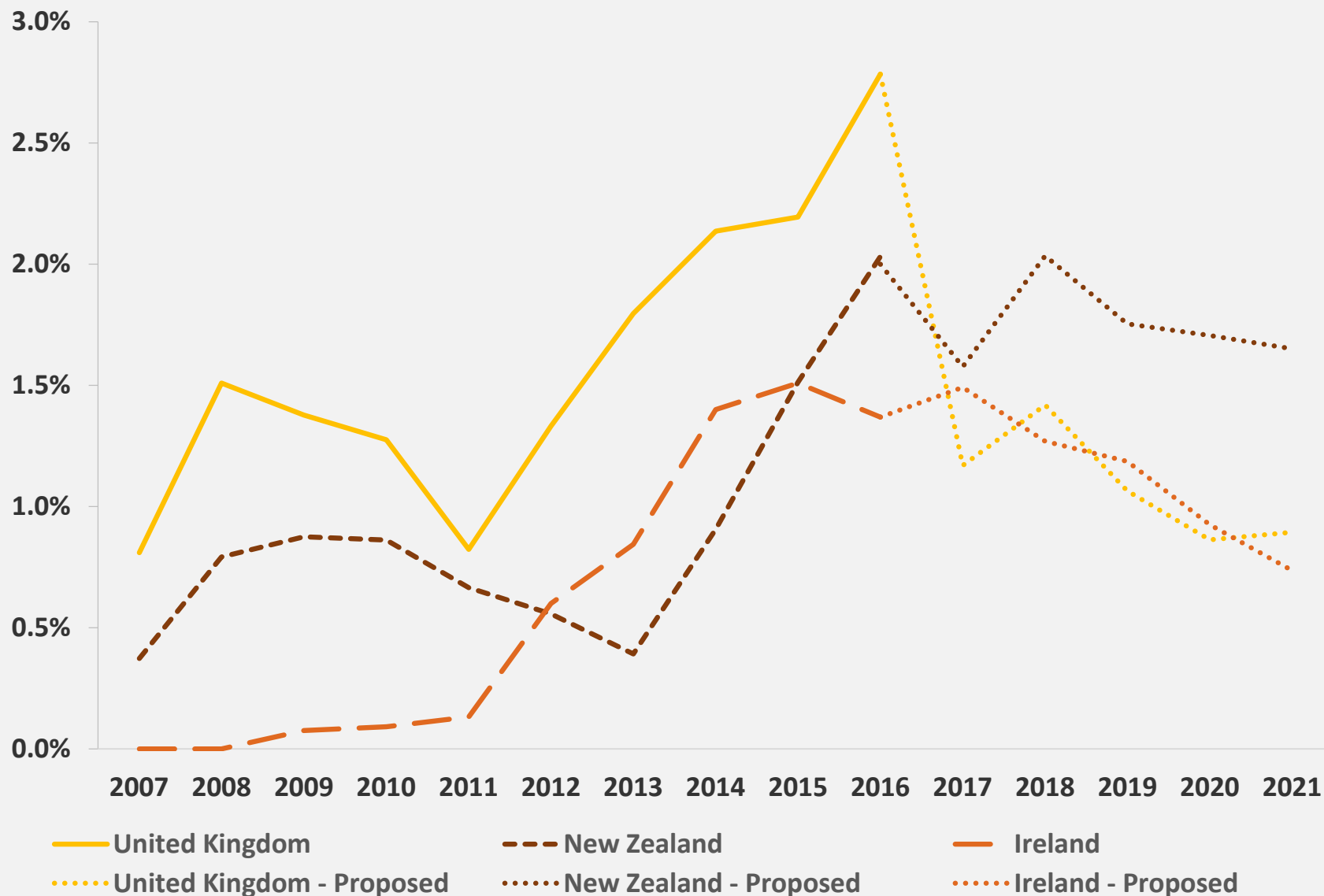
Ireland

- Cycling commuting to more than quadruple.
 - Cycling to increase from 2% to 10% of all trips by 2020.
-

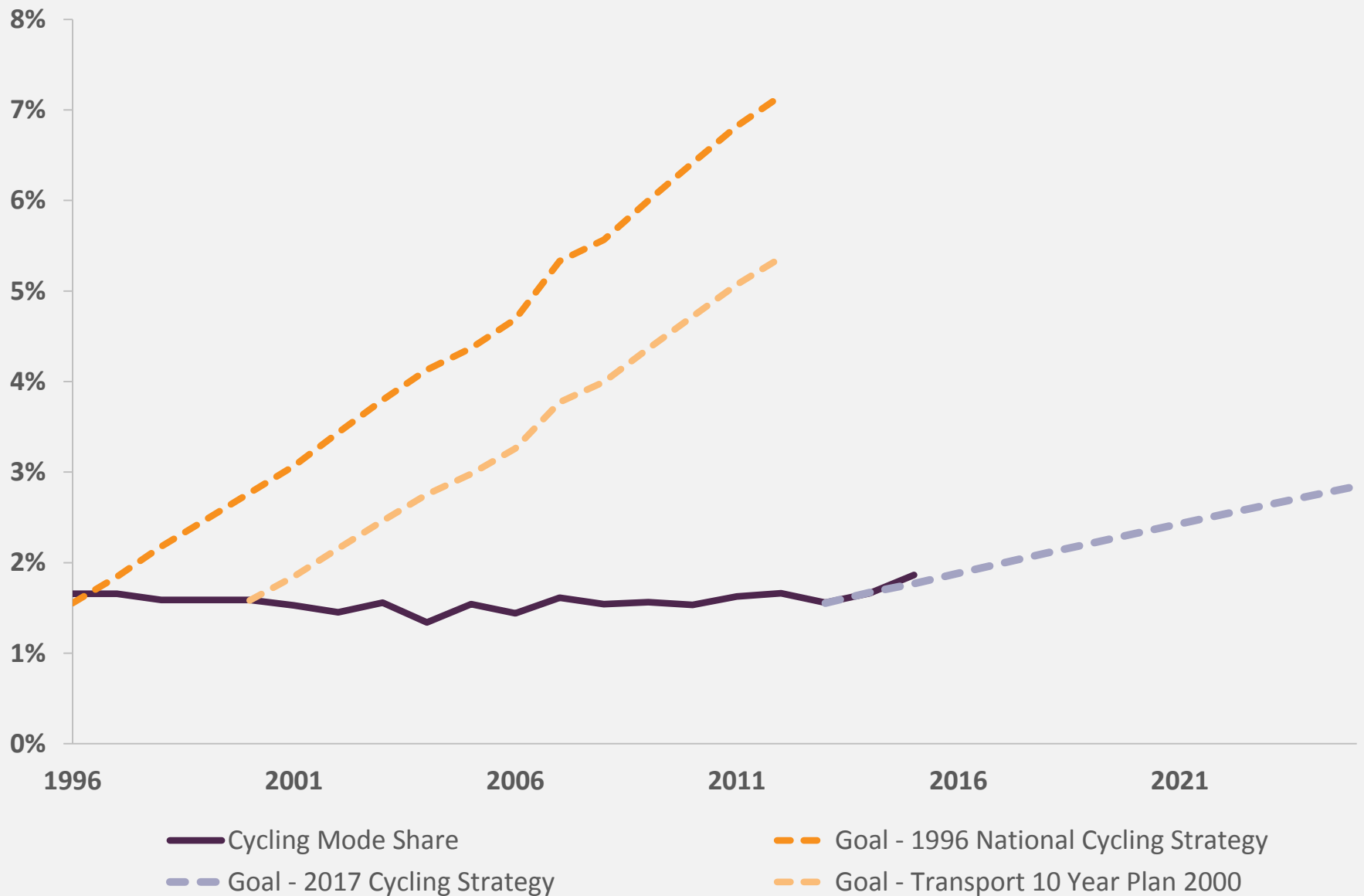
Australia (QLD)

- Cycling's share of commute trips doubles by 2021 and triples by 2031.
 - Improve the accessibility of active transport.
-

Active transport - % of spending



UK – cycling mode share & goals



Transport objectives – PT

New Zealand

- Increased provision of public transport to increase productivity, if justified by demand.

United Kingdom

- Improve access to public transport.
- Improve journeys so that they are simpler, faster, cheaper, and more reliable.

Ireland

- Public transport commuters to increase by 230,000 by 2020.

Australia (QLD)

- Improve the accessibility of public transport.
 - Improve access to real-time transport information.
-

Summary

- ◆ Transport emissions are a significant challenge for developing countries
- ◆ Transport objectives vary widely
- ◆ In case study countries, AT investment has increased but remains relatively low
- ◆ NZ is an outlier – high roading investment
- ◆ UK offers useful case study for transition towards sustainable modes
 - ◆ Goals can be difficult to achieve

Thanks.
Questions?