
Cost Benefit Analysis

A Proven Case?

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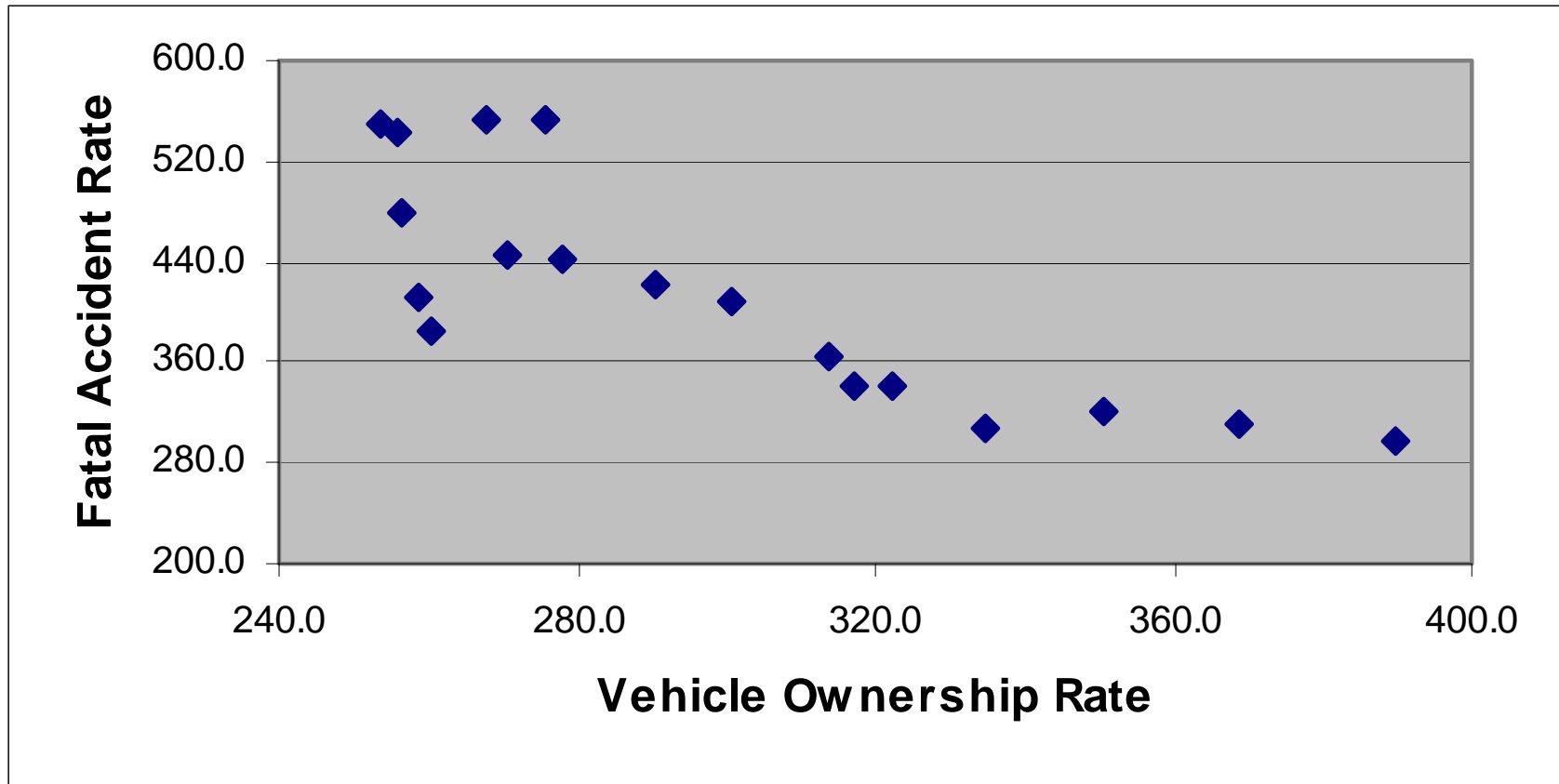
- Road Safety Countermeasures
- Impact of Countermeasures
- Value of Accident Savings
- Context of Road Safety Strategies 1998-2002 and 2004 - 2006
- Draws on Goodbody Evaluation of 1998-2002 Strategy

- Without Measures Scenario
- With Measures Scenario
- Econometric Modelling
- Smeed's Law

- Accidents per Vehicle decline as vehicles per capita rise
- Significant validation of the Law
- Explains (partly) low urban accident rates

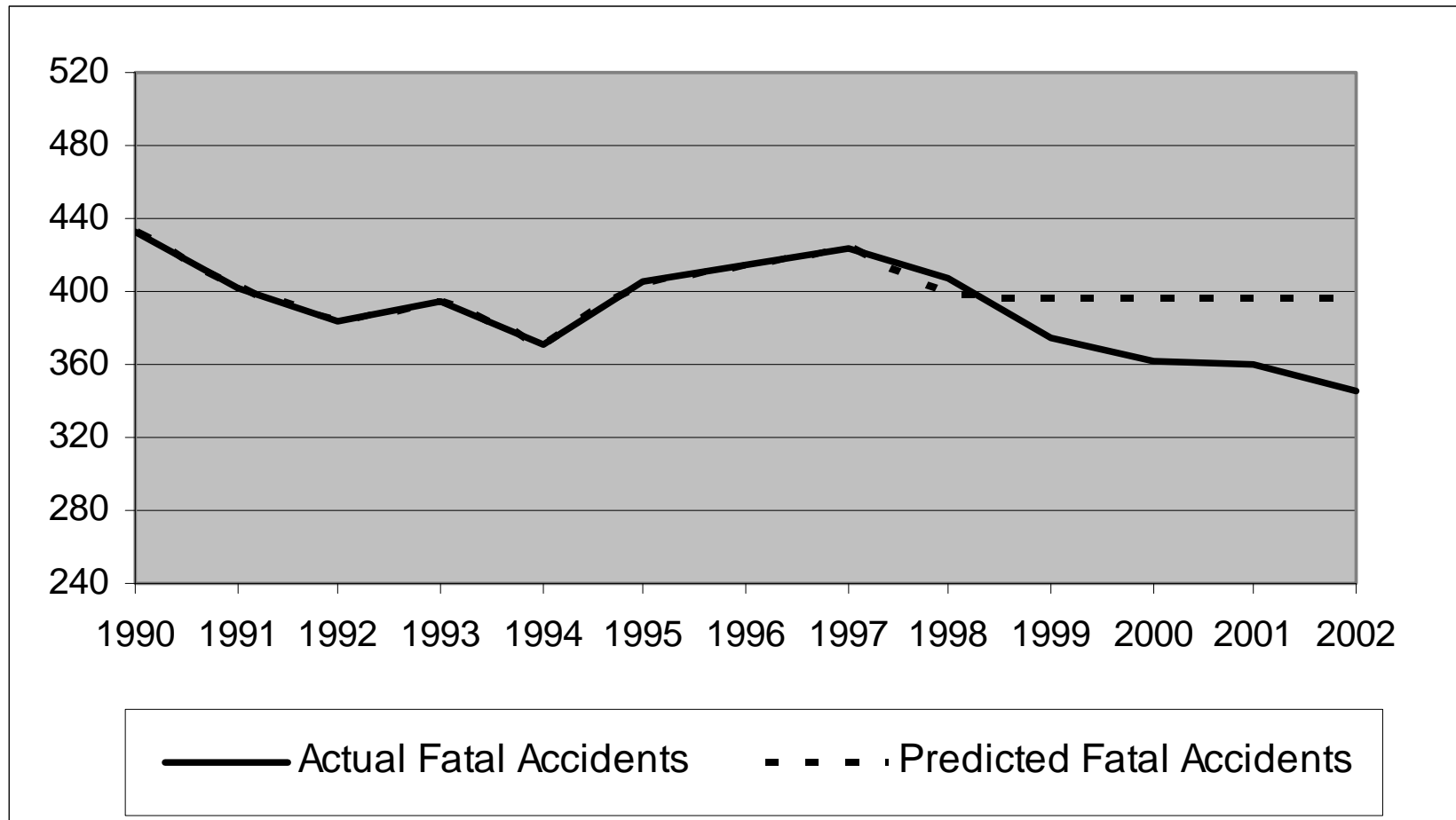
Fatal Accident Rate by Vehicle Ownership Rate, 1980-1997

Ireland



Fatal Accidents: Actual (1990-2002) and Predicted (1998-2002)

Ireland



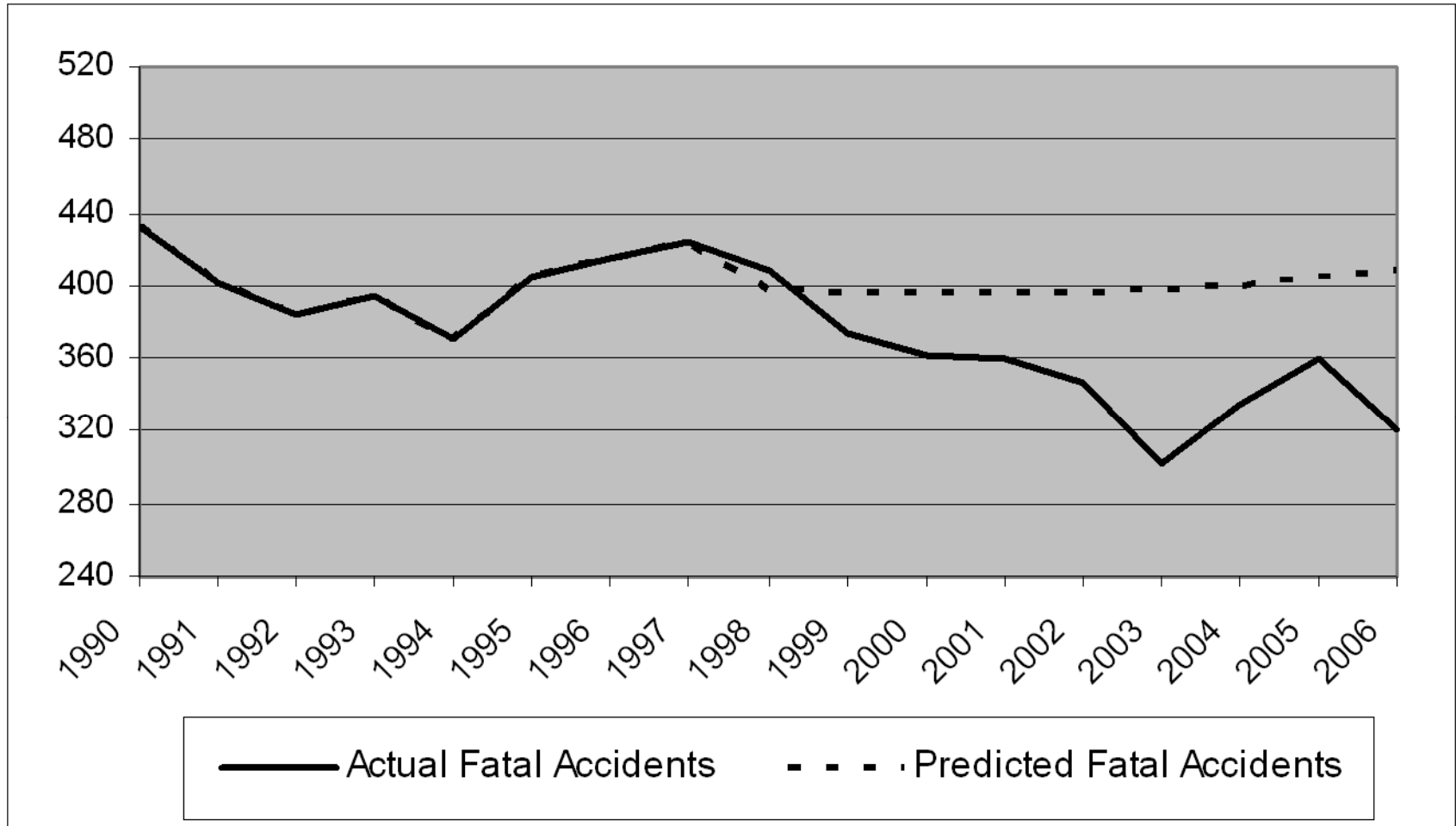
Predicted and Actual Fatal Accidents, 1998-2002

Ireland

Year	Predicted Fatal Accidents	Actual Fatal Accidents	Difference
1998	398	408	+10
1999	396	374	- 22
2000	396	362	- 34
2001	396	360	- 36
2002	396	346	- 50
Total	1,981	1,850	- 131

Fatal Accidents: Actual (1990-2006) and Predicted (1998-2006)

Ireland



Predicted and Actual Fatal Accidents, 1998-2006

Ireland

Year	Predicted Fatal Accidents	Actual Fatal Accidents	Difference
1998	398	408	10
1999	396	374	-22
2000	396	362	-34
2001	396	360	-36
2002	396	346	-50
2003	398	301	-97
2004	399	334	-65
2005	404	360	-44
2006	408	321	-87
Total	3,591	3,166	-425

- Casualty Related Costs
 - Lost Output
 - Human Costs
 - Medical Costs

- Accident Related Costs
 - Damage to Property
 - Insurance/Administration
 - Policing Costs

- Cost per fatal accident €2.3m at 2002 prices
- Rising to €3m at 2008 prices

- Road Safety Strategy 1998-2002
 - 131 fatal accidents saved
 - €298m in savings (2002 prices)
 - €60m in savings per annum
 - Strategy cost €169m (2003 prices)
 - Benefit-cost ratio: 1.8

- Road Safety Strategy 2003-2006
 - 293 fatal accidents saved
 - €879m in savings (2008 prices)
 - Savings are €220m per annum

- Accident reductions extremely large
- Benefits to society now averaging €220m per annum
- Road safety strategies tend to be relatively low cost
- Cost benefit return must be substantial

