RoSPA
The Royal Society for the Prevention of Accidents

Road Safety

Presented by: **Duncan Vernon**

Road Safety Manager (England)

Presentation Outline

- Context

Cycling is high on the policy agenda at the moment

Media:

- **The Times ‘Cities fit for cycling’ campaign**

Funding:

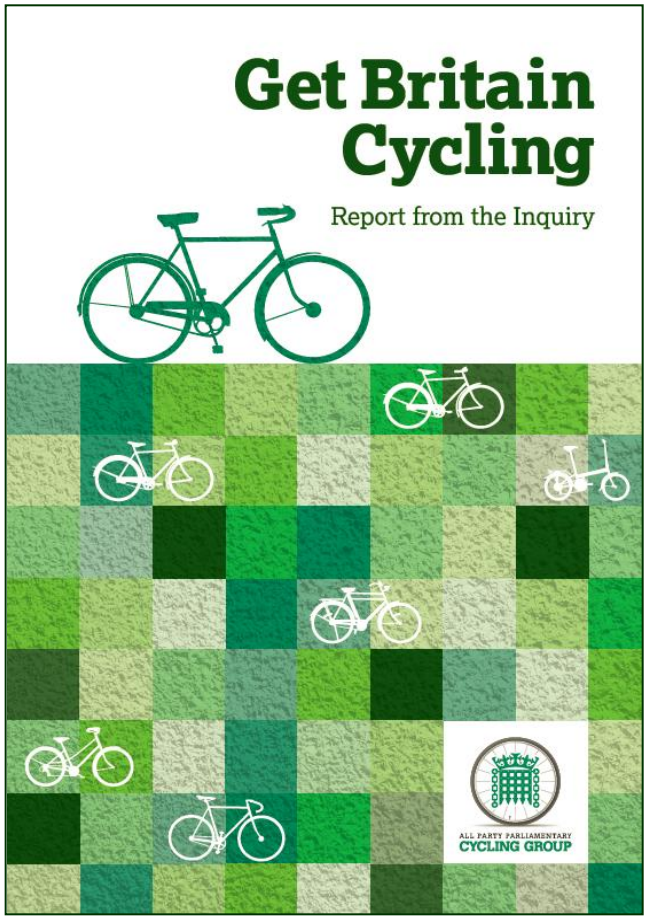
- **Local Sustainable Travel Fund**

Political:

- **Active Travel Act in Wales**
- **All Party Parliamentary Cycling Group**

Identified policy direction:

- **Get Britain Cycling Report**



Broad policy consensus

- **There is also a broad consensus over ideas like:**
  - → 10% of all trips to be by bike by 2025, and 25% by 2050
  - → a long-term cycling budget of at least £10 per British citizen per year, increasing to £20

These were supported by: Association of Directors of Public Health, Automobile Association, Brake, British Cycling, Chartered Institute of Environmental Health, Chartered Institution of Highways and Transportation, CTC, Faculty of Public Health, Parliamentary Advisory Council on Transport Safety, Play England, RoadPeace, RoSPA, Royal Society for Public Health, Sustrans, and many more

Reasons why there is such a consensus

- **Lack of physical exercise contributes to the prevalence of many of today's public health issues:**
  - → Circulatory diseases, such as coronary heart disease and stroke
  - → Cancers, such as breast and colon cancer
  - → Diabetes
  - → Mental health issues, such as depression, dementia and anxiety
  - → Injuries, such as falls in old age

Reasons why there is such a consensus

"For most people, the easiest and most acceptable forms of physical activity are those that can be incorporated into everyday life.

Examples include walking or cycling instead of travelling by car, bus or train."

- Start Active, Stay Active: A report on physical activity for health from the four home countries' Chief Medical Officers

Discussion

- **What impact might this have on traffic injuries?**

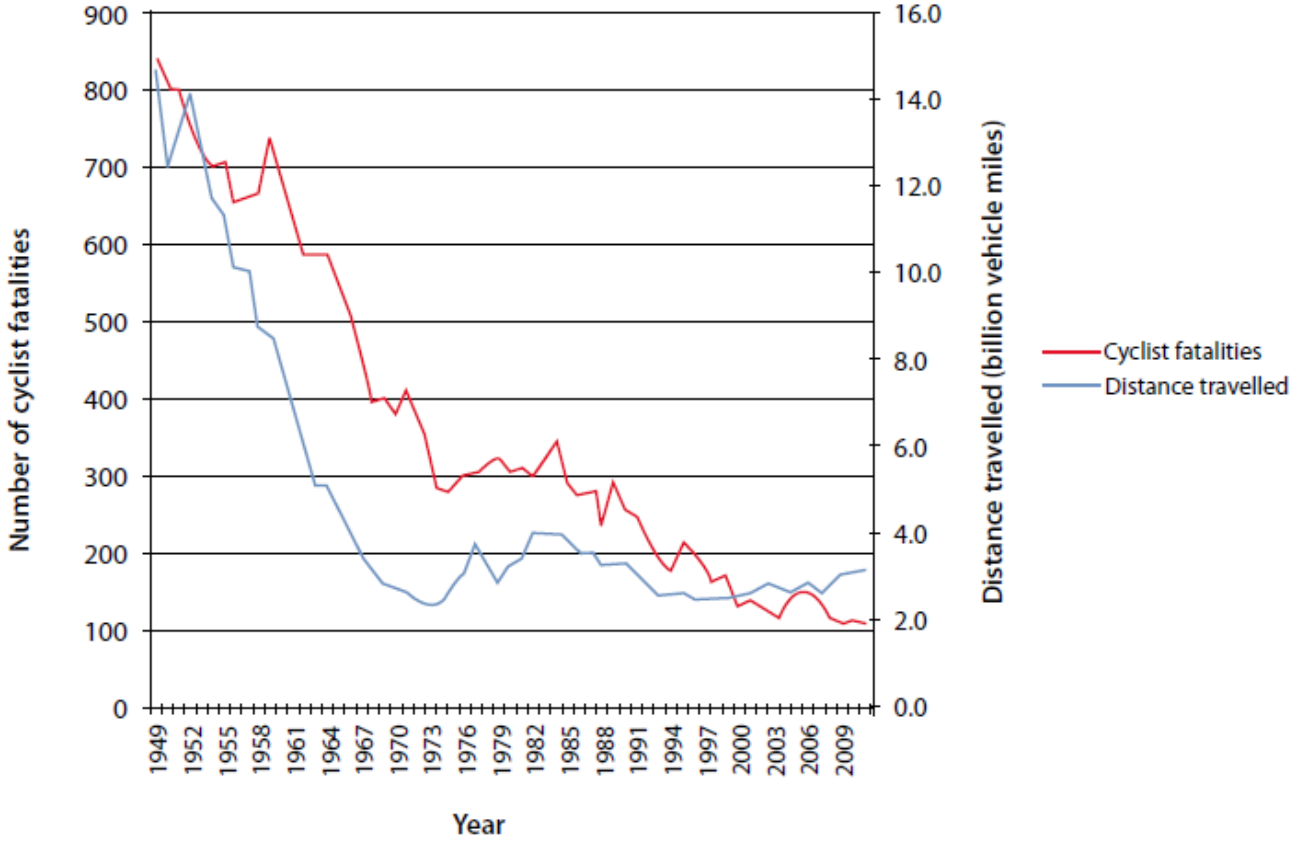
What effect would an increase in cyclists have?

- We can look at what *has* happened before
- We can model what *might* happen
- We can look at what has happened in other countries

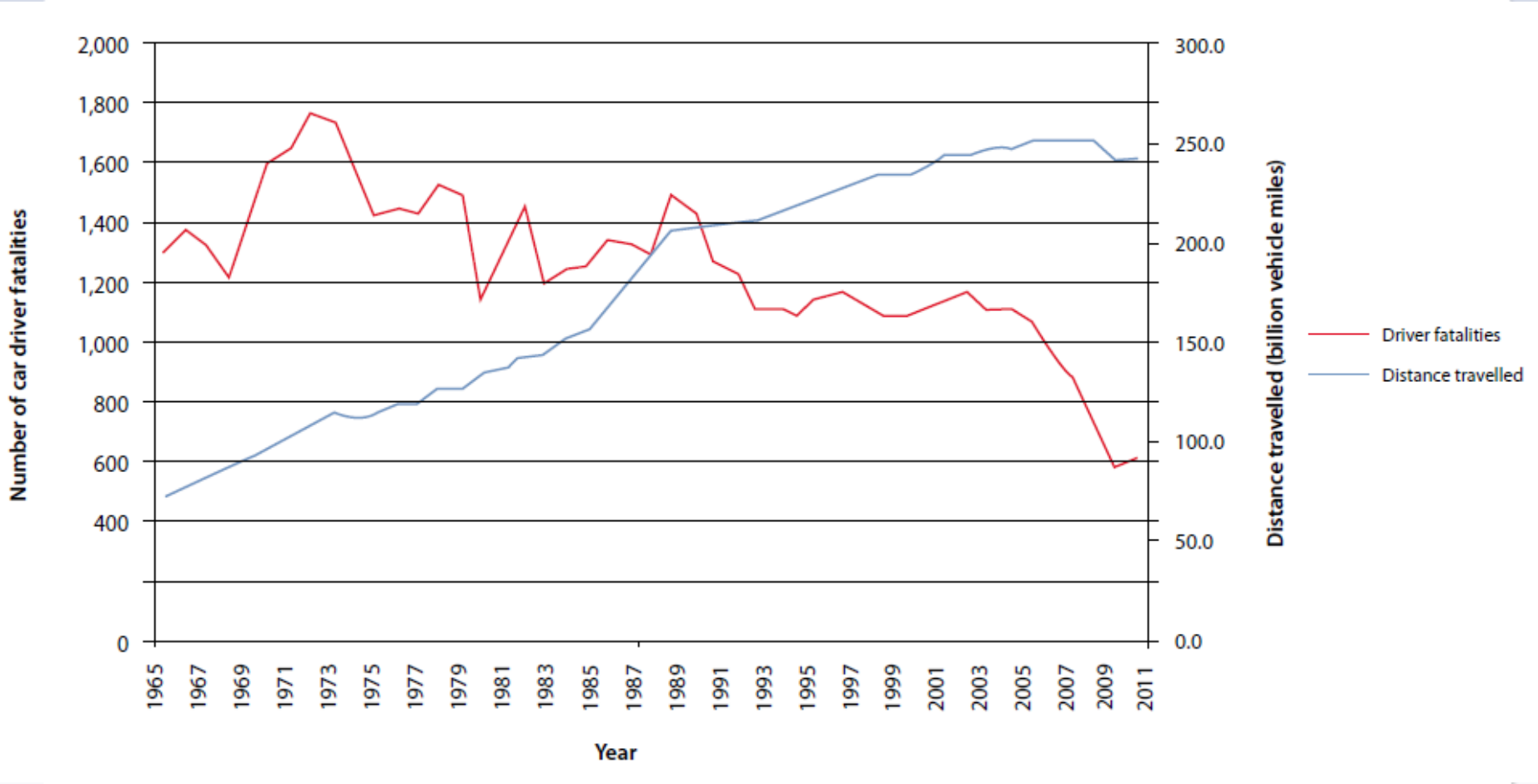
Cycle use in the UK

- **In 1949: collectively we travelled 14.7 billion miles by bicycle in the UK.**

  In 2011: we travelled 3.1 billion miles



Car use in the UK



What predictions have been made?

- **Models can estimate the impact of modal shift on injuries**

Annual average daily traffic			Relative number of accidents
Motor vehicles	Pedestrians	Cyclists	
2000	200	100	1
5000	200	100	2.4
10,000	200	100	4.72
20,000	200	100	9.33
30,000	200	100	13.95

Source: Elvik R. The non-linearity of risk and the promotion of environmentally sustainable transport. Accid Anal Prev. 2009 Jul;41(4):849-55.

What predictions have been made?

- **Reducing vehicles by 25%, corresponding increase in walking/cycling**

Annual average daily traffic			Relative change in the number of accidents
Motor vehicles	Pedestrians	Cyclists	
1500	530	270	0.842
3750	1030	520	0.882
7500	1860	940	0.918
15,000	3530	1770	0.957
22,500	5200	2600	0.981

What predictions have been made?

- **Reducing vehicles by 50%, corresponding increase in walking/cycling**

Annual average daily traffic			Relative change in the number of accidents
Motor vehicles	Pedestrians	Cyclists	
1000	870	430	0.621
2500	1870	930	0.662
5000	3530	1770	0.697
10,000	6870	3430	0.734
15,000	10200	5100	0.757

- **Important to mention that some alternative models show an increase in cyclist injuries. Single vehicle cyclist injuries not included.**

Win-win

- **Some interventions that increase cycling:**
  - → Bike lanes, cycle tracks, car free zones, traffic calming, cycle parking, 20mph limits, signed bike routes

Source: various, but see Pucher J et al. Infrastructure, programs, and policies to increase bicycling: An international review. Preventive Medicine 50 (2010) S106–S125.

- **Some interventions that make cycling safer*:**
  - → Clearly-marked, bike-specific facilities (i.e. cycle tracks at roundabouts, bike routes, bike lanes, and bike paths), 20mph limits, street lighting

Source: various, but see Reynolds C et al. The impact of transportation infrastructure on bicycling injuries and crashes: a review of the literature. Environ Health. 2009; 8: 47. Forthcoming Cochrane review.

- **This is all infrastructure, but what about safety education?**

Discussion

- What is the wider impact of safety education interventions?
- Where are the win-wins in safety education?
- Are there circumstances in which safety education can have a negative impact?

How do the LASER principles apply to cycling?

1. Encourage the adoption of, or reinforce, a whole school approach, within the wider community
2. Use active approaches to teaching and learning (including interactive and experiential learning)
3. Involve young people in real decisions to help them stay safe
4. Assess children and young people's learning needs
5. Teach safety as part of a comprehensive personal social and health curriculum

How do the LASER principles apply to cycling?

6. Use realistic and relevant settings and resources
7. Work in partnership
8. Address known risk and protective factors
9. Address psychosocial aspects of safety e.g. confidence, resilience, self-esteem, self-efficacy
10. Adopt positive approaches which model and reward safe behaviour, within a safe, supportive environment

Thank you

www.rospa.com

Duncan Vernon
dvernon@rospa.com
0121 248 2078