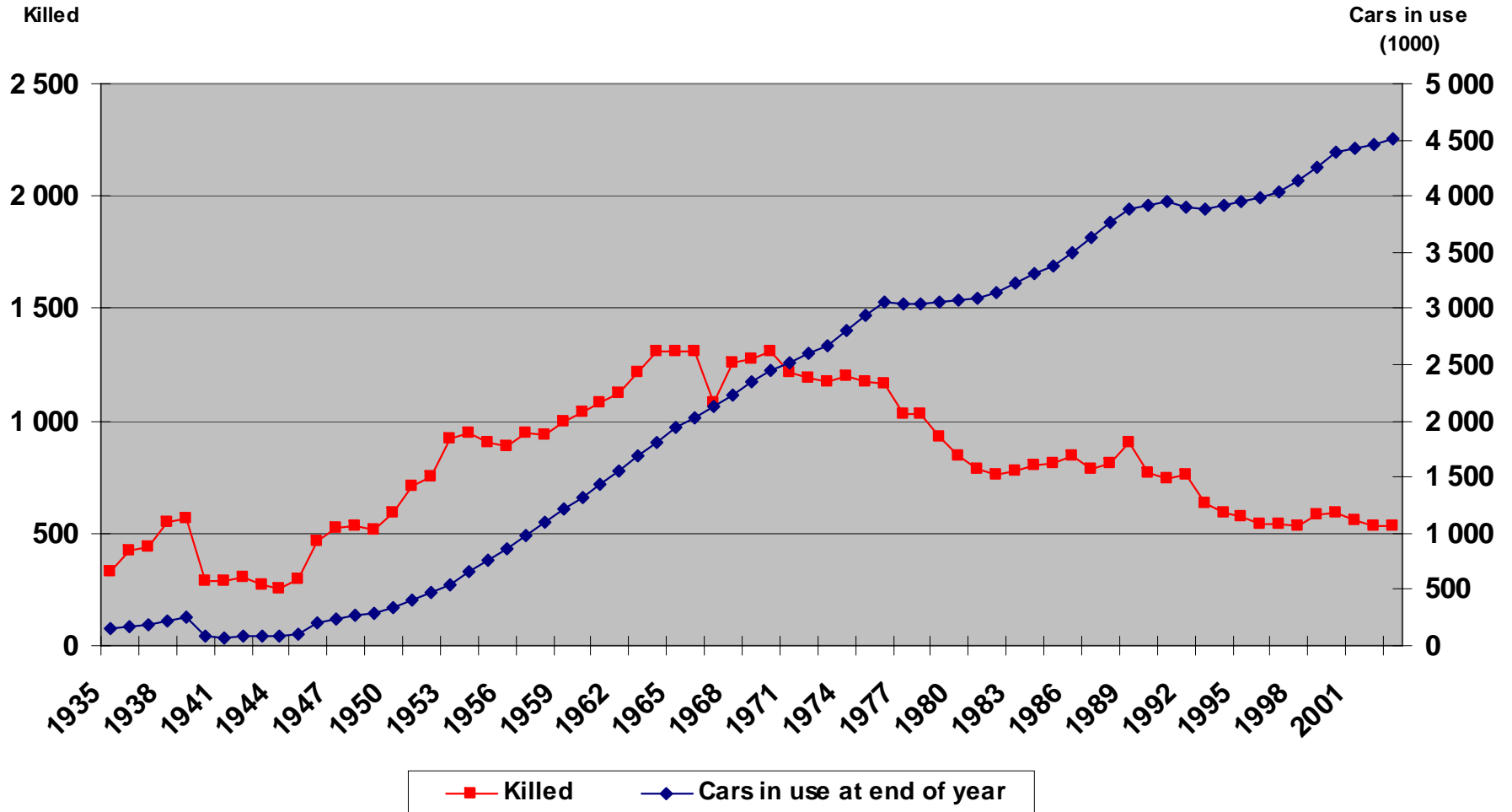


SWEDEN 2005



POPULAT. 9.0 MILJ
MOTORVEH. 4.7 MILJ
DRIVING LIC. 5.7 MILJ
FATALITIES ~ 440

Persons killed in road traffic and cars in use in Sweden 1935-2003

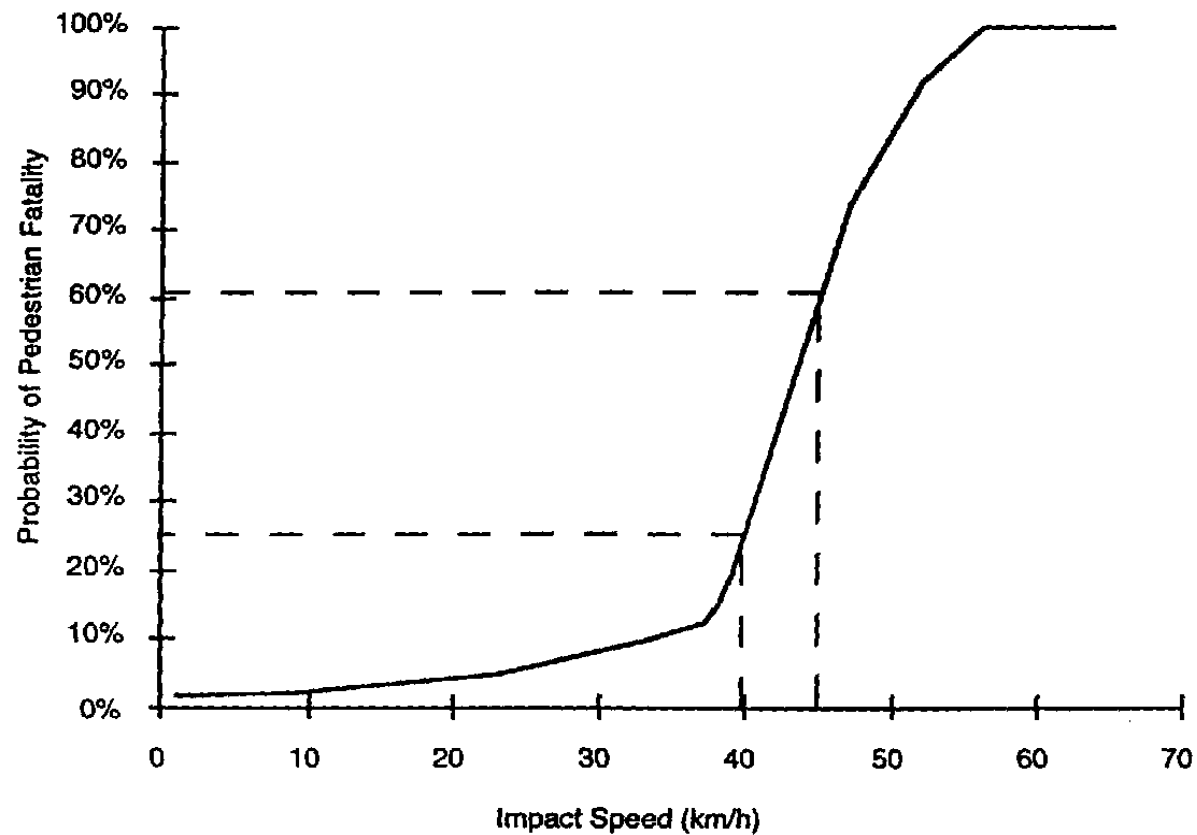


Disability adjusted life years lost

1998 Disease or Injury	2020 Disease or Injury
1. Lower respiratory infections	1. Ischaemic heart disease
2. HIV/AIDS	2. Unipolar major depression
3. Perinatal conditions	3. Road traffic Injuries
4. Diarrhoeal diseases	4. Cerebrovascular disease
5. Unipolar major depression	5. Chronic obstructive pulmonary disease
6. Ischaemic heart disease	6. Lower respiratory infections
7. Cerebrovascular disease	7. Tuberculosis
8. Malaria	8. War
9. Road traffic Injuries	9. Diarrhoeal diseases
10. Chronic obstructive pulmonary diseases	10. HIV/AIDS

Probability of Pedestrian Fatality by Impact Speed

Derived from the Interdisciplinary Working Group for Accident Mechanics (1986) and Watz, Hoefliger and Fehlmann (1983)





Is Vision Zero expensive?

- yes, to modify or compensate earlier mistakes is expensive
- no, to do things right from the beginning is not expensive





Typical costs

- if made right from the beginning

	Current costs in EURO	Costs for highest safety	Increase	Effectiveness
Road	1500	1,515 (barriers)	1%	90%
Vehicle	20,000	20,002 (SBR)	0.01%	20%
Vehicle	20,000	20,020 (alcohol)	0.1%	20%
Vehicle	20,000	20,200 (speed)	1%	20%



Summary



- A vision is helpful in guiding a modern society and an open system
- A vision for safety in the road transport system will challenge the professional view on ethics and responsibility
- A vision will turn the citizen into a subject that will put pressure on the professional society
- A vision can reduce costs and divide the responsibilities of the professional society and the citizen in a structured way

1998

**First 2+1 with cable
barrier opened**

2004

**1000 km (400 km semi-
motorway) opened**

2007

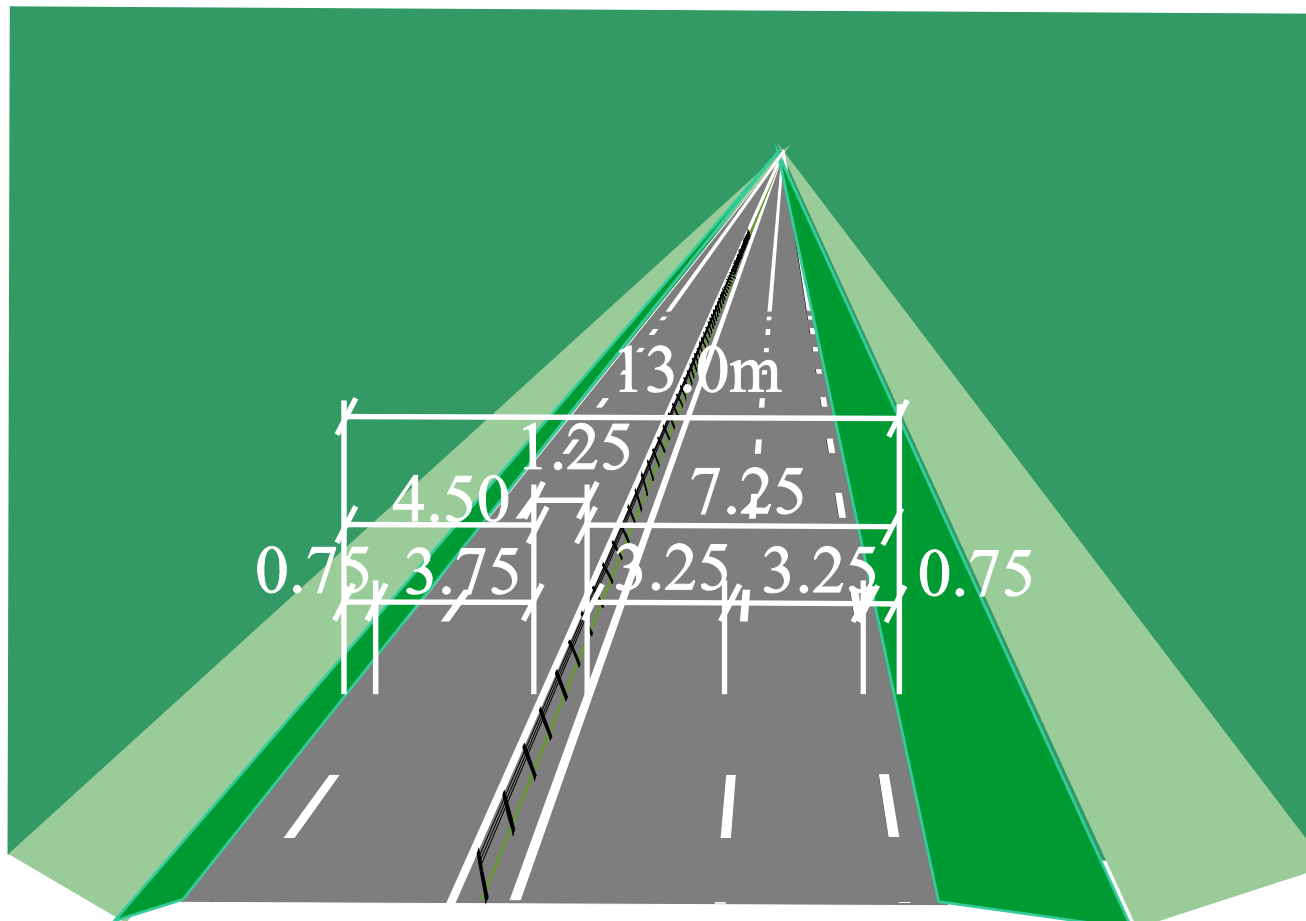
1800 km opened





Road design

The cross-section 2+1 on 13 m



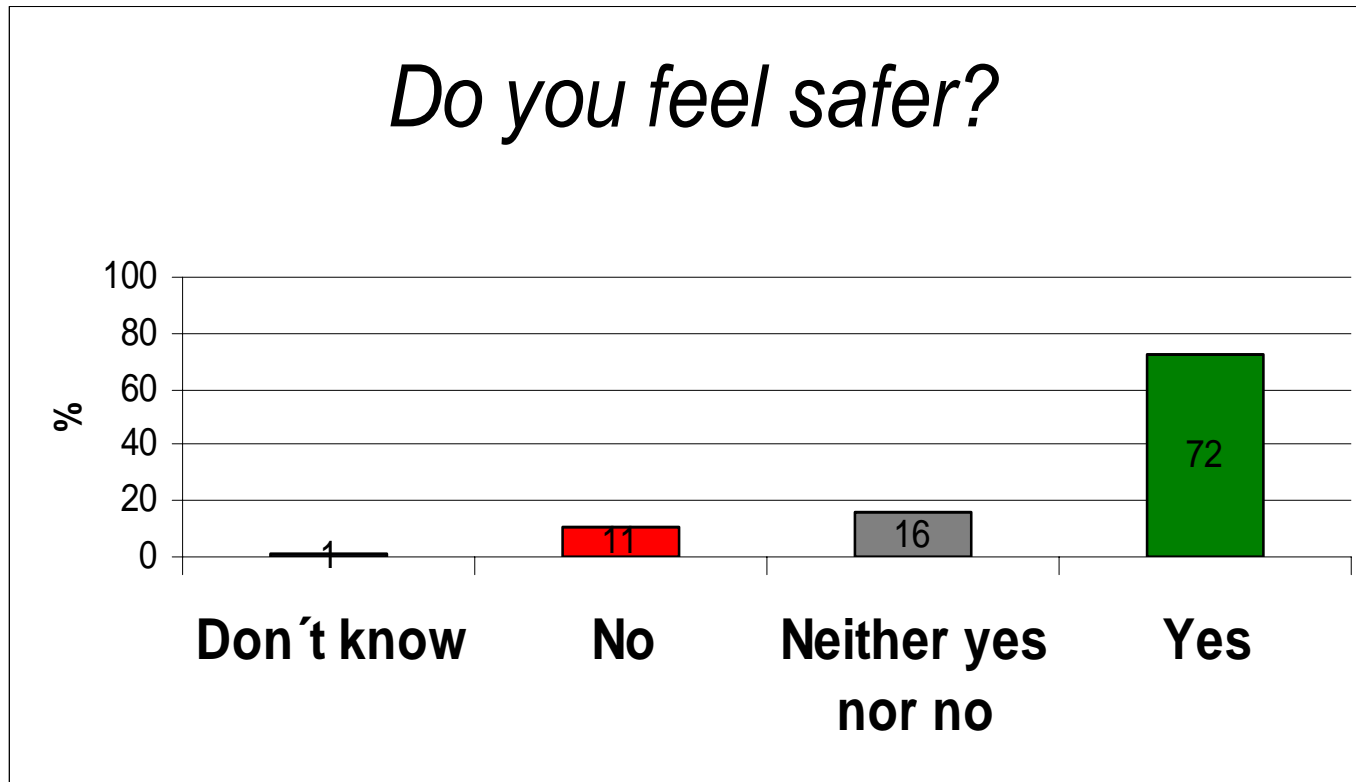


Road design

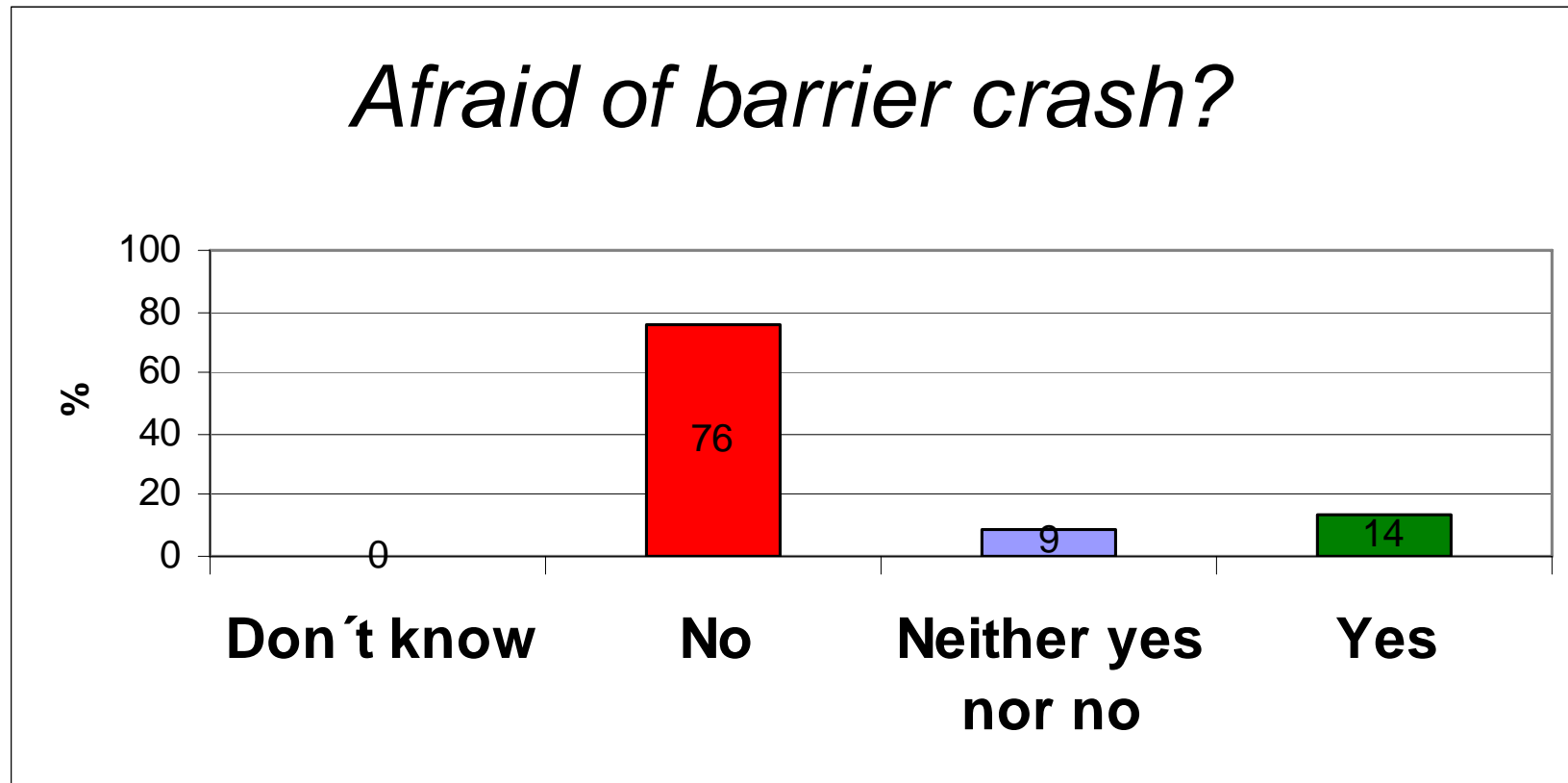
- Permanent emergency openings every 3 km



Driver attitudes



Driver attitudes







Maintenance costs



Work zone area safety is a major concern.

Motorcycles?

As yet 16 accidents:

- **2 fatalities**
- **9 severe injuries**
- **7 slight injuries**

Median cable barrier involved in 7:

- **1 fatality**
- **5 severe injuries**
- **2 slight injuries**

**No proof that the barrier
caused an accident or
made consequences worse**

Summary

- Level of service better than expected. Full hour maximum value is 1500-1550 v/h.
- Traffic safety better than expected. Ten fatalities and an estimated effect of about 40 – 60 % for severe injuries.
- Maintenance costs are increased.
- Work zone safety at cable repairs is a major problem.

Roadside area



Before



After



Speed cameras









Interesting?

Find out more on:

www.vv.se

or contact:

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