



Road safety in the Netherlands

Fred Wegman

Managing director SWOV Institute for Road Safety Research

Professor Delft University of Technology

The Netherlands



SWOV's mission statement

- We make a contribution to road safety improvements with knowledge from high-quality scientific research
- We are independent as regards content; our knowledge is public knowledge
- We cooperate with other research institutes and universities, both in the Netherlands and internationally
- Our target groups consist of 'road safety professionals' and road safety stakeholders



The Netherlands relatively safe, however we still wish to improve

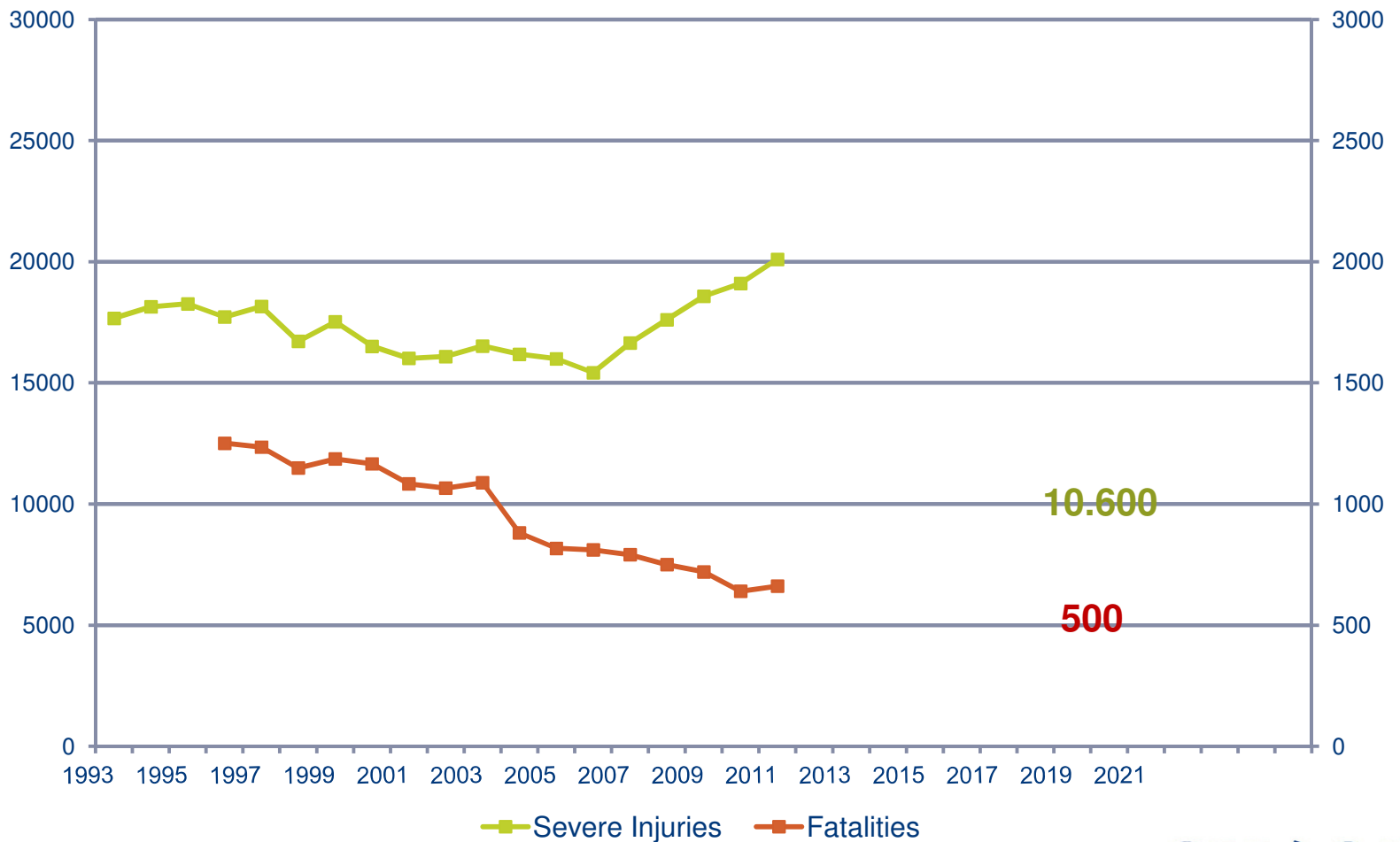
- Because
 - Costs to our society are (still) substantial
 - Economical costs: 12.5 billion euro per year (2.2 % of GDP)
 - It is a huge burden to the health system
 - We don't want to live with *preventable crashes*:
“we know the causes, we know how to cure/mitigate, with cost-beneficial investments”
- Road safety targets for 2020
- Results in the past are no guarantee for the future successes!!

Also tragedies at an individual/family/community level





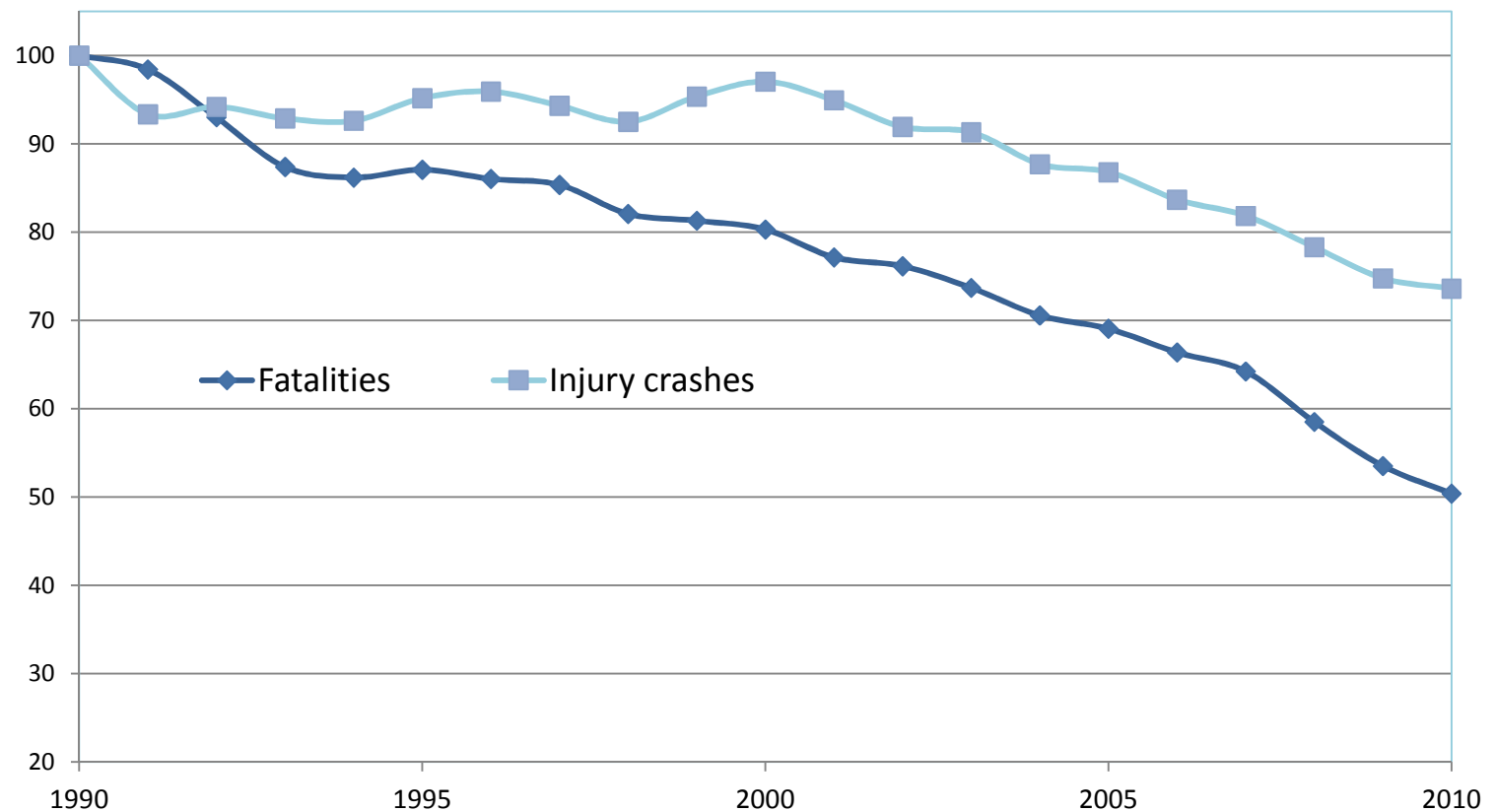
Developments of fatalities and serious injuries and targets 2020





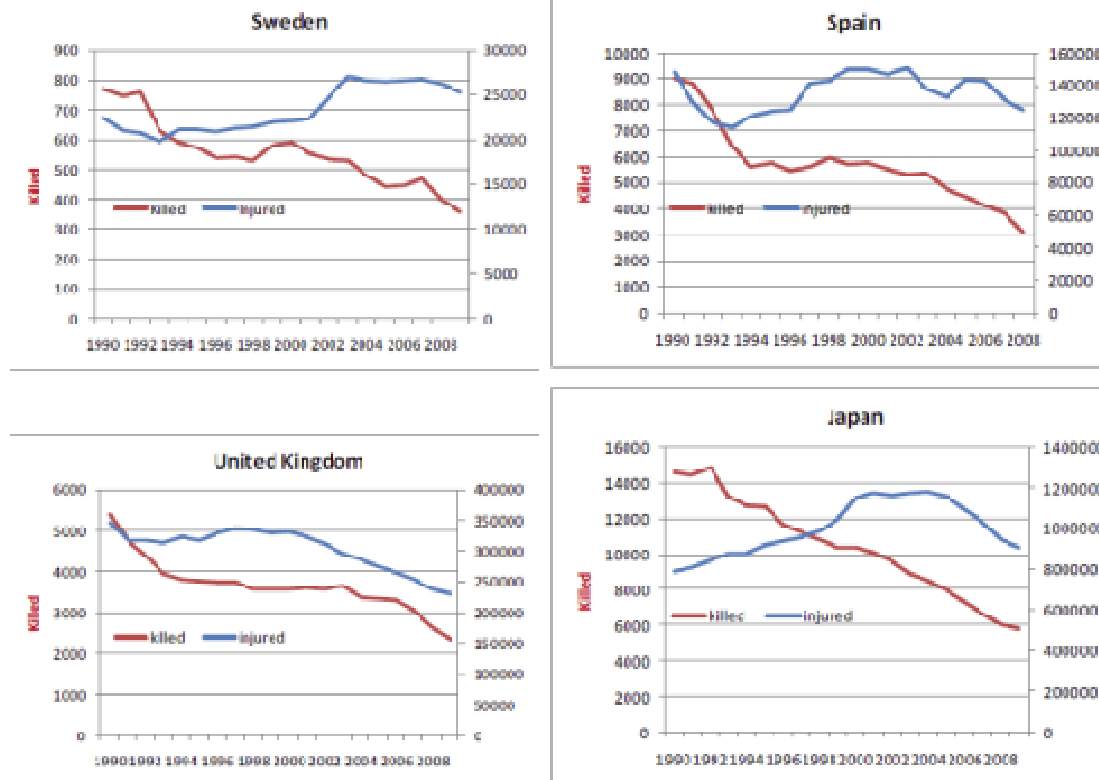
Reduction in number of injury and fatal crashes (IRTAD)

Evolution in the number of fatality and injury crashes for 22 OECD countries



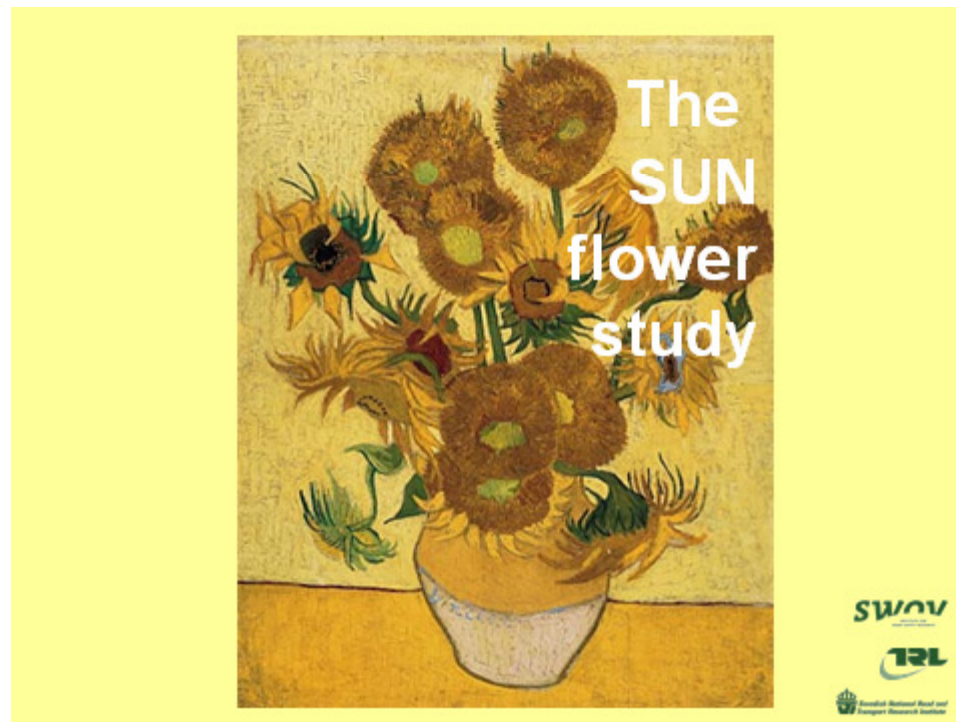


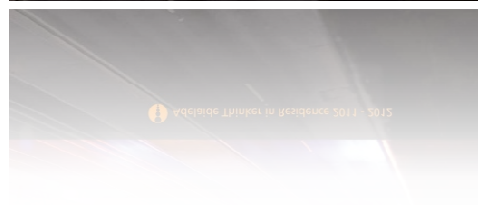
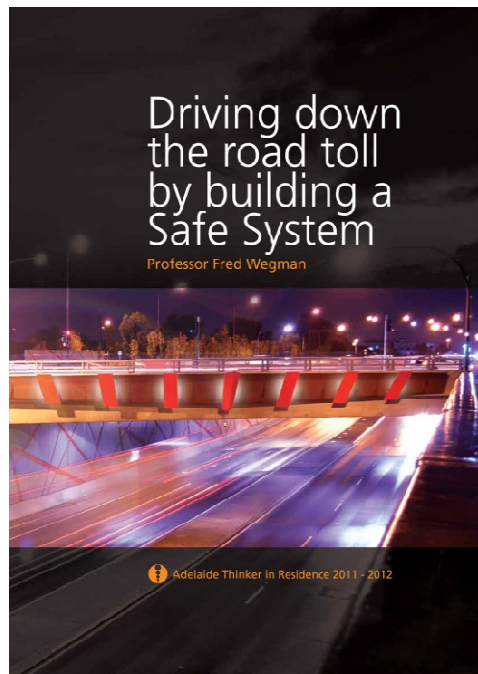
Trends in the number of fatal and injury crashes in 4 countries (IRTAD, 2012)



SUNflower revisited: for serious injuries

Proposal for a study for comparing SUNcountries and to learn from each other





Government
of South Australia



ADELAIDE
thinkers
IN RESIDENCE

SWOV
INSTITUTE FOR
ROAD SAFETY RESEARCH



Research from South Australia

Data source	Extreme behaviour (%)	Illegal system failure (%)	System failure (%)
Fatal crashes 2008	43.4%	22.9	33.7
Non-fatal metropolitan injuries 2002-2005	3.3	9.9	86.8
Non-fatal rural crashes 1998-2000	9.4	16.6	74.0

Lisa Wundersitz & Matthew Baldock: The relative contribution of system failures and extreme behaviour in South Australian crashes (2011)



Injury crashes

- Quite a proportion of road crash costs are injury-related (NL > 50%)
- Quite a number of countries set targets for (serious) injuries and develop their own definitions
- European Union works on a common ‘injury reduction target’
- However, injury crashes are *underreported* in official (Dutch) statistics and moreover costs of these crashes are *underestimated*



Not only fatalities....

- Fatal crashes are not telling the whole story
- Fatal crashes and injury crashes are not telling the *same* story; they are coming from a different type of crash (*we don't use KSI!!*)
- So,
- Greater emphasis on road traffic injuries in road safety strategies and research is justified
- It seems to be a wrong assumption to expect a reduction in injuries if reducing fatalities
- To reduce injury crashes requires another strategy than to reduce fatal crashes

Key players in road safety in NL



Ministerie van Infrastructuur en Milieu



Vereniging van
Nederlandse Gemeenten



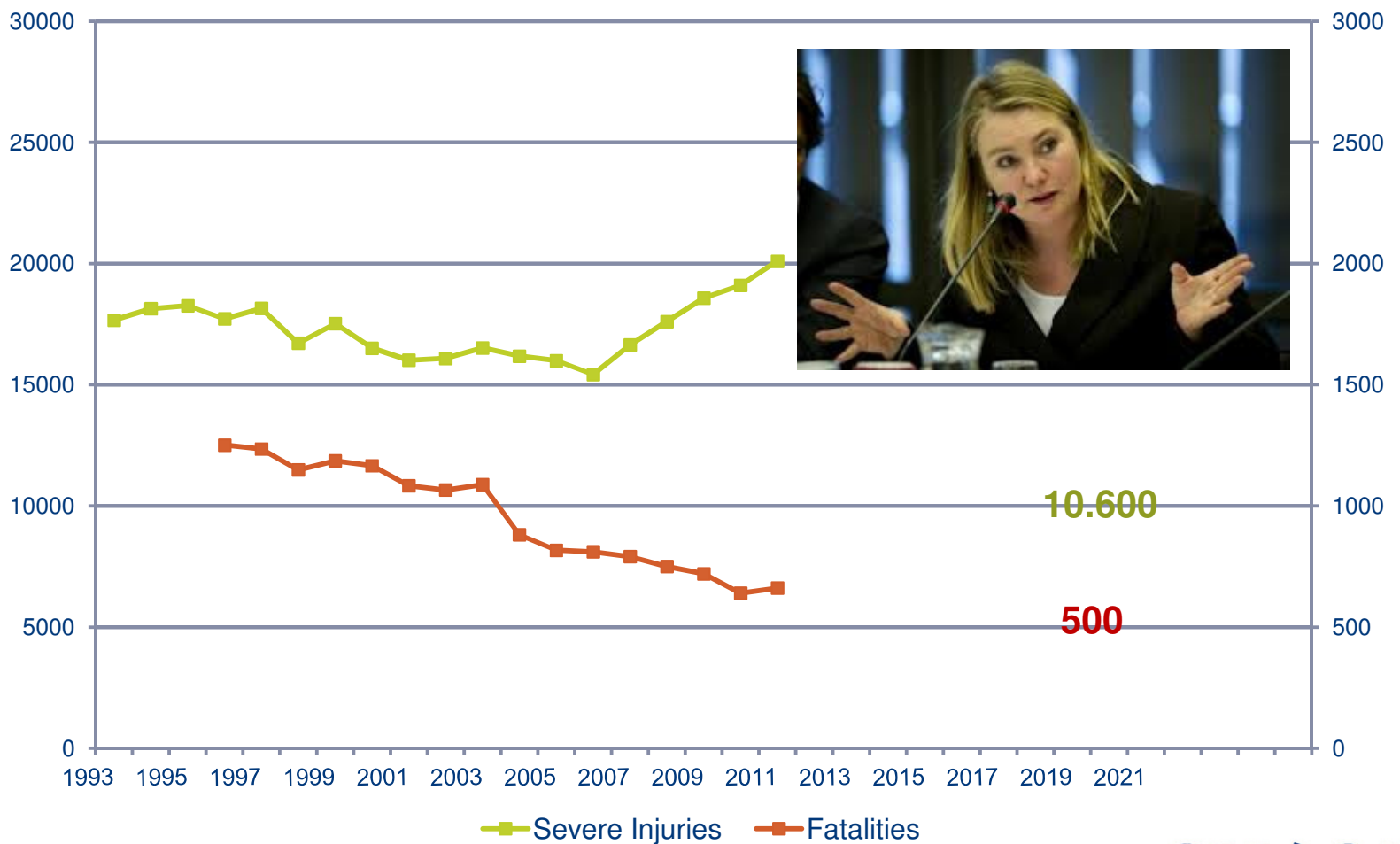


Context of road safety policy today

- Reducing governmental budgets
- Decentralising power (and budgets) [localism]
- Other priorities (e.g. capacity of main road network)
- Downward trend in fatalities for decades
- Negative development on serious injuries 'came by surprise and is a real shock'
- However, we have our buoy: 2000/2010-targets and we have 2020-targets

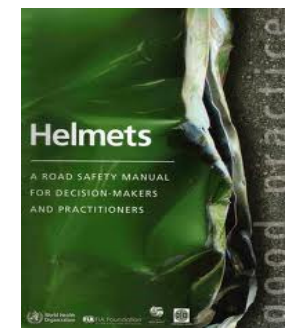
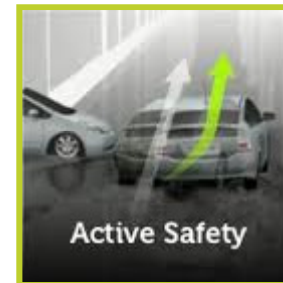


Discussion in Dutch Parliament on road safety, Wednesday, 30th January 2013



Business as usual

- Safer roads
- Safer vehicles
- Safer behaviour





New draft road safety strategy

SWOV: most probably not reaching 2020-targets

Impact of Measures in 2012 Road Safety Policy Stimulus

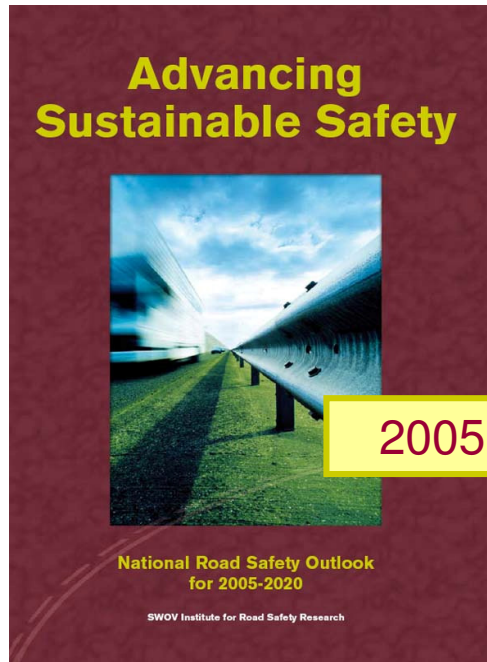
Activity Policy Stimulus	Indication possible reduction in 2020	
	Fatalities	Serious road injuries
Differentiation of premiums according to road behaviour	20	200 – 300
Safe cycling routes	10	400 – 1,900
Improving cyclist visibility	< 10	300
Road safety improvement programme for senior road users	< 10	< 100
Total (corrected for overlap)	< 50	900 – 2,500



Road traffic today is still *inherently* dangerous



Sustainable Safety: the first example of a Safe System Approach



- Aims
 - Prevention of serious crashes by eliminating conditions/circumstances where serious crashes *can* occur
 - Reduction/elimination of probability of serious injury when a crash occurs



Copies are downloadable from
www.sustainablesafety.nl



Results of ten years of implementation

- Based on a Dutch version of a Safe System Approach (Sustainable Safety), actions and packages of measures were implemented (1998-2007)
- A new vision energized the professional community, resulted in more action, gave more focus to actions and improved efficiency of interventions
- Safety improvements observed in infrastructure, human behaviour and vehicles
- Cost beneficial ($b/c = 4$) interventions with 30% fatality reduction over 10 years

A challenging road ahead

- Parliament invited key actors last week; Minister of Infrastructure agreed to develop additional actions
- Further implementation Sustainable Safety

Impact of Potential Extra Measures

Possible extra action/measure	Indication possible reduction in 2020	
	Fatalities	Serious road injuries
Full sustainably safe bicycle infrastructure	100 – 130	3,500 – 4,100
Everybody wears a bicycle helmet	10 – 20	1,200 – 1,400
Nobody drinks alcohol and participates in traffic	100 – 120	1,400 – 1,700
No speeding offences	150 – 190	2,100 – 2,500

- Implementation? Costs? Effects? Public acceptance?



Improving road safety is a shared responsibility, but ...

- Share passion and vision
- Make stakeholders co-owners of a strategy
- Top level commitment is needed to commit organisations
- Make it attractive for organisations to cooperate and to be coordinated
- Share responsibility between road users and stakeholders, and don't 'just blame the driver'



Fabrics of success of road safety in the Netherlands so far

- High political interest (Dutch Parliament)
- Road Safety Vision: 'Sustainable Safety'
- Road safety targets + targeted programmes
- Sometimes a real champion
- Key stakeholders act and 'deliver': Transport and Justice Ministries, provinces, municipalities, police forces, interest groups, communities, etc.
- 'Trusted' road safety knowledge (esp. SWOV)
- Advocacy work by many, such as ngo's
- Create media support

‘If crashes can occur, they will occur’

