Road Safety in The Netherlands
Context, Strategy, Challenges

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SWOV.nl
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**SWOV mission today:**

- Contribute to road safety improvements with knowledge from high-quality scientific research
- Independent research institute
- SWOV cooperates with other research institutes and universities, both in the Netherlands and internationally
- Target groups consist of ‘road safety professionals’ and road safety stakeholders
The Netherlands: A ‘decentralised unitary state’

- Divided and shared responsibilities
- State and provinces: coordinating powers
Traffic fatalities 1996 - 2013
Vision on road safety and on road safety research

- **Ethical**
  - Human and economical reasons
  - A proactive approach: ‘prevention is better than cure’

- **An integral approach**
  - Integrate infrastructure, man and vehicle into one safe system
  - Encompasses the entire system: all roads, all road users, all means of transportation
  - Align with other policy areas: spatial planning, health policy, sustainability, societal values and norms

SWOV: “Prevent crashes, reduce injury, save lives”
Sustainable Road Safety

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

Report downloadable from www.sustainablesafety.nl
Sustainable Road Safety: Leading Principles

*Original:*
- Mono-functionality of roads: access, ‘unlocking’ (opening up) or transit
- Homogeneity of mass and/or speed and direction
- Predictability of road course and road user behaviour

*Since 2005:*
- Physical and social forgivingness
- Context and capability Awareness
Predictable roads and traffic behaviour as basis for safe traffic

• Preventing errors by:
  – Recognizable situations: consistency in road design
  – Predictable road course: continuity in road design

• Anticipated result:
  – More routine traffic behaviour: fewer errors
  – More predictable behaviour of other road users
Safe speeds, credible speeds

• Accelerators:
  – Open road environment
  – Wide road
  – Straight road stretches
  – High quality road surface

• Decelerators:
  – Dense road environment
  – Narrow roads
  – Short road stretches
  – Physical speed reducers
  – Low quality road surface
Man is the measure of all things...

- Forging roads and infrastructure: it is inevitable that road users make mistakes and sometimes violate the law (and crashes occur)

- Design the road system to expect and accommodate human error:
  - tailor roads, roadsides, vehicles, and legislation to human characteristics
  - prepare road users for traffic tasks (training, education)

- In a crash, the physical forces between vehicle, roadway, and the human body must be managed in such way that the occurrence of serious injury is minimized

- Enforcement is not an isolated activity but should be an integral part of the system
Sustainable safety in NL: an assessment

• Many measures implemented:
  – 41,000 km of 30 km/h road and over 33,000 km of 60 km/h road constructed (= ca 50% of total length)
  – Regional traffic enforcement teams
  – Education for specified target groups

• Estimated 1,600-1,700 fatalities saved 1998-2007
  – About 33% fewer than expected without these measures

• Cost beneficial: BC ratio = 3.6 : 1
Transferability of knowledge: high

• Fundamentals are true all over the world
  – Human being is fallible/vulnerable and makes errors
  – Risk increasing factors
  – Road transport system is inherently unsafe

• Evidence based interventions
  - Monitoring & Evaluation
  - Knowledge transfer, capacity building & partnerships
The Netherlands: relatively safe, improvements needed

• Urgency:
  – 570 lives lost, > 19,000 seriously injured
  – Economical costs exceed 12 billion euro per year
  – Investing in *preventable crashes*: evidence based policy & cost beneficial investments
  – Safety Performance Indicators

• Road safety targets for 2020: difficult
• Results in the past are no guarantee for the future
Challenges anno 2015

- Infrastructure: budget restraints
- Ageing population
- Distraction by smartphones
- Cyclists’ vulnerability
- Slow mopeds
- Government priorities
GOAL ZERO
NO INCIDENTS
NO INJURIES

TOWARDS ZERO TOGETHER
Safer Roads - Safer People - Safer Vehicles

SAMEN NAAR VERKEERSDODEN
0 DODEN
GO FOR ZERO

Vision Zero Initiative
TRAFFIC SAFETY BY SWEDEN

Samen richting Nul!
Zet de trend, als veilige Drent

zero Fatalities
Drive Safe Nevada

maak van de nul 0 een punt

HELP BRABANT MEE OP WEG NAAR NUL VERKEERSDODEN
Safety Performance Indicators: Fuel for benchmarking and a proactive approach

SPIs:

• not only crashes, deaths, and injuries
• indicators representing core issues: alcohol and drugs; speed; protective systems; daytime running lights; vehicles (passive safety); roads, and trauma management
• Objective: meaningful indicators that have a solid theoretical basis and can be applied
Success factors of road safety in the Netherlands

• High political interest (Parliament) and society participation
• Key stakeholders act together: Transport and Justice Ministries, provinces, municipalities, police forces, interest groups
• Sustainable Road Safety
• Road safety targets (SPIs) + targeted programs
• Facing new challenges

SWOV offers support:
www.swov.nl
Road Safety in The Netherlands

Thank you!

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