

Transport Research Arena Europe 2012

Strategic Session: Road Safety: A Decade for Action



# Road Safety Choices and Evidence Based Decision Making

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## Road safety choices

The high complexity of the transportation systems makes road safety choices a very difficult task, balancing the conflicting social needs and economical restraints, especially during the economic crisis.

- Traffic Efficiency (Speed) <u>Versus</u> Traffic Safety
- Vehicles <u>Versus</u> Vulnerable Road Users
- Expensive but safe <u>Versus</u> Cheap but unsafe (vehicle, infrastructure, management)
- Priorities in policies, measures, research, etc.



#### Road safety actors

#### The Decision Makers

(planning, implementation, operation) (local, regional, national level)

#### **The Society**

- Interest Groups
   (Vehicle, Road, Insurance Industries)
- Citizens

   (inhabitants, commuters, visitors)
   (class, privileged or not)
- Mass Media

All actors are supported by Scientists.

The voice of the few (well organised interest groups) is usually louder.



















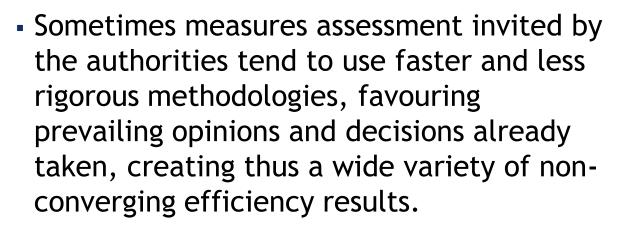
## Road safety is ideal for spending money for nothing

- Authorities and other stakeholders may fear that ex-post evaluation of measures may prove that important road safety investments had little or limited impact.
- Comparisons of measures effectiveness between different regions and between different countries may reveal high discrepancies not only in the unit cost of the measures but also in the implementation effort.



## Road safety is ideal for spending money for nothing

• The scientists' competition and quest for the "excellent" methodology, together with the inherent difficulties of measures efficiency assessment, puts in question any initiative.









### The need for evidence based decision making

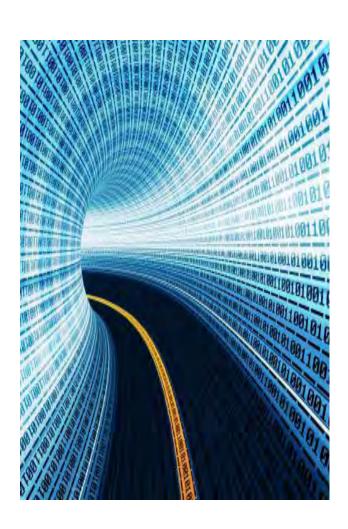
- Positive and negative aspects of each solution in the short and long term should be demonstrated allowing all road safety actors (society, decision makers) to realize the positive and negative consequences of their choices.
- On that purpose there is a clear need for publicly available high quality and impartial data and knowledge, with focus on the effectiveness assessment of road safety alternative solutions.
- Road safety research is the key to support evidence based decision making.





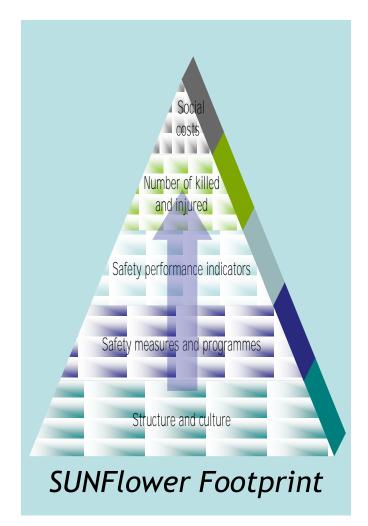
## Data challenges

- Road Accident Data
- Risk Exposure Data
- Performance Indicators
- Causation Indicators
- Behaviour/Attitude
- Measures Cost-Effectiveness
- Social Cost
- Health Indicators



### Knowledge challenges

- Level 1: Structural and cultural characteristics (i.e. policy input)
- Level 2: Programmes and measures (i.e. policy output, common practice)
- Level 3: Safety Performance Indicators (i.e. intermediate level) - the operational level of road safety in the country (speeding, drinking and driving, road network, vehicle fleet etc.)
- Level 4: Final outcomes expressed in terms of road casualties (Risk Indicators)



### Assessment of measures effectiveness

- The identification of the suitable measures for specific road safety problems is a key challenge, possible only through the application of scientific and impartial methodologies
- The social and economic benefits from a rigorous application of measures efficiency assessment can be very high.
- International cooperation can play a decisive role not only for the exchange of knowledge between all stakeholders but also for stimulating the systematic use of efficiency assessment.



### The European Road Safety Observatory

#### **Data**

- Annual Statistical Report
- Basic Fact Sheets
- Statistical tables
- Recent Trends
- Geographical distribution

#### **Knowledge**

- Syntheses on road safety key issues
- Policy
- Legislation
- Research results

#### www.erso.eu





Statistics: a compendium of reports, with CARE (the European road accidents data base) as the

Toolbox : manuals and best practice guides produced by various EU- funded projects.

primary source.







### Road safety challenges at the horizon 2020

## **Brave Road Safety Choices**

Vehicle Technology

Smart Infrastructure
Efficient Enforcement

**Driver Behaviour** 

Safety Culture

Power Two Wheelers

**Pedestrians** 

**Efficient Measures** 

Available Data & Knowledge

International Cooperation

Scientific Research

**Evidence Based Policy Making** 





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