

Transport Research Arena Europe 2012



Consolidating road safety data and knowledge to support decision making in Europe

<u>George Yannis</u>, Associate Professor <u>Petros Evgenikos</u>, Research Associate <u>National Technical University of Athens, Greece</u>







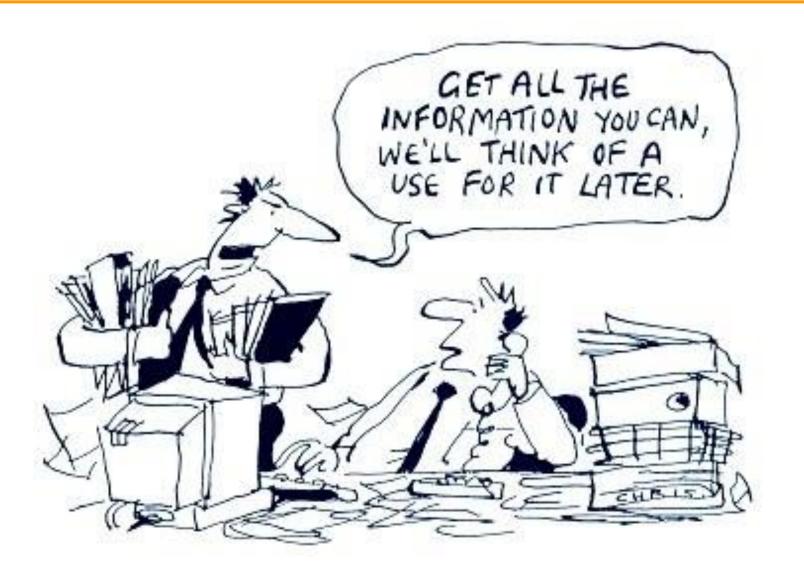








Need for an assembly of useful data/information to support road safety decision making



Need for an assembly of useful data/information to support road safety decision making

- Facilitate policy making at EU and national level
- Support the road safety analyses, country overviews, country benchmarking
- Make available to the wide public a wide range of road safety data assisting any type of road safety activity

Data and **Information** collected and organised in a way to allow for their combined processing.





















Methodology

- Processing of all data and knowledge took place within the <u>Dacota</u> EU co-funded research project (2010-2012)
- These results are regularly updated and are also published at the European Road Safety Observatory of the European Commission (<u>www.erso.eu</u>).
- Data used in this research were extracted from:
 - the <u>CARE</u> database of the European Commission with disaggregate data on road fatalities,
 - in depth road accident investigation surveys carried out within the <u>SafetyNet</u> EU-co-funded research project (2004-2008)



National Knowledge

- Road safety programs
 - Data on basic road safety programs in
 - 29 European countries
- Road safety measures
 - 655 safety measures identified for
 - 34 different measures sub-categories
- Traffic rules
 - 46 different traffic rules into 4 main groups
 - for all 29 European Countries
- Road user behaviour/attitude
 - Issues related to driver behaviour (self-reported): Speeding, Drink driving, etc.
 - Attitudes towards risk taking regarding: Alcohol and drugs, Speeding, etc.
- Road accident cost



National Data - Dacota Master Tables

Road accident data

73 road accident elements from existing CARE variables and values.

Risk-Exposure data

• 73 Risk-Exposure elements on population, vehicle fleet, motorization level, person-kms, vehicle-kms, etc.

Safety Performance Indicators

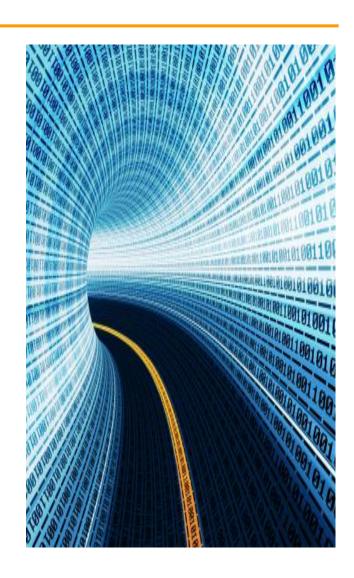
 39 elements related to SPI on alcohol and drugs, protective systems, speeding, enforcement, DRL and vehicle safety.

Accident Causation Indicators

 Harmonised in-depth data for 1006 cases in 6 EU countries collected in SafetyNet.

Health Indicators

Indicators based on hospital data from the Health IDB



DaCoTA Master Tables

- Comprehensive Tables for all types of national data and information.
- 263 data elements identified and filled-n for 30 European countries.
- Verification by national experts.



Meta-data

- Meta data: background information necessary for properly using the data.
- Collection of all related meta-data (sources, information, definitions, data quality and reliability, processes, etc.).
- 21 main elements for each type of collected data.



Basic Fact Sheets

17 BFSs with data for the decade 1999-2008.

Main Figures Pedestrians

Motorcycles & Mopeds Cyclists

Junctions Urban areas

Children (aged <15) Youngsters (aged15-17)

Car occupants Single vehicle accidents

Young People (aged 18-24) Seasonality

Heavy Goods Vehicles &

Buses

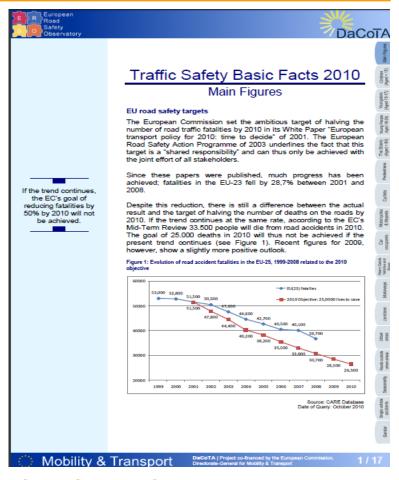
Roads outside urban areas

Gender

The Elderly (aged >65)

Motorways

- Highlights of interesting issues.
- In-depth accident causation data & maps.



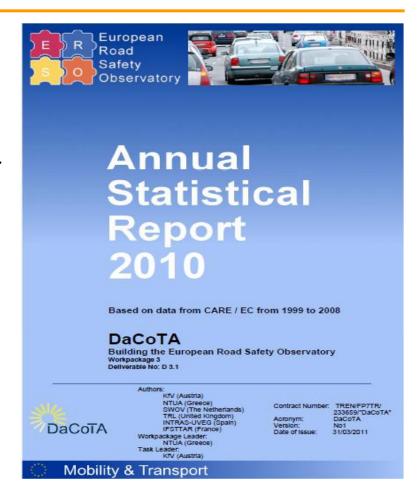
DOWNLOAD IT NOW

http://www.europa.eu.int/comm/transport/
care/studies



Annual Statistical Report

- Data of 27 European countries for the period 1999-2008.
- Selection of basic characteristics of fatal road accidents.
- 56 Tables and 29 figures with the most interesting combination of road accident data.



DOWNLOAD IT NOW

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care/studies



DaCoTA Pilot System

A web-based information system (Dacota Pilot System) is developed, in which all knowledge and data produced within the Dacota project are organised and presented through a user-friendly interface:

- Statistics (crash, exposure, RSPI, etc.)
- Interactive Statistics
- Knowledge (syntheses)
- Tools (forecasts, country overviews/benchmarking)
- Links (more than 1000 stakeholders in Europe)

After the test phase, this pilot system will be incorporated at the **European Road Safety Observatory**.







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