



NTUA Road Safety Update - April 2012



National Technical University of Athens Road Safety Update

April 2012

Transport Research Arena - Athens 2012



More than 1.600 transport scientists and professionals contributed to the works of the fourth Transport Research Arena (TRA) Conference, organised by the European Commission and the CEDR, ERTRAC, ERRAC, Hellenic Ministry of Infrastructure and took place with great success in Athens, Greece, from 23rd to 26th of April, 2012. The main theme of TRA 2012 was sustainable mobility through innovation. The road safety presentations of NTUA concerned:

- **Road Safety Choices and Evidence Based Decision Making**, at the Road Safety Strategic Session
- Investigating road safety management processes in Europe
- Needs for evidence-based road safety decision making in Europe
- Characteristics and causes of power two wheeler accidents in Europe
- Road safety in Greece
- State-space based analysis and forecasting of macroscopic road safety trends in Greece
- Road Safety Attitudes and Perceptions of Pedestrians in Europe
- Challenges and opportunities for the assessment of the effectiveness of road safety measures
- A review of international sources for road safety measures assessment
- Integrating real-time traffic data in road safety analysis
- Consolidating road safety data and knowledge to support decision making in Europe, at the DaCoTA Special Session

[LINK](#)

TRA DaCoTA Special Session, Athens 2012



A Special Session of the DaCoTA Research Project took place at the Transport Research Arena (TRA) Conference held in Athens, on April, 25th, 2012. In this DaCoTA Special Session, the stage of development of the **European Road Safety Observatory** has been presented and the following areas of interest for evidence based road safety policy making were highlighted:

- Developing the European Road Safety Observatory - current progress
- Road safety policy-making - identifying the characteristics of effective road safety management procedures
- In-depth accident investigations - developing a network of teams across EU Member States
- Web-based access to data - developing a safety data and knowledge system
- Accident forecasting and comparisons - comparing the development of road safety across countries - state of the art of road safety knowledge
- eSafety and accident data - identifying the new types of data needed to develop active safety collision prevention and mitigation measures
- Naturalistic driving protocols - methods to observe normal driving to identify ways to address safety needs.

[LINK](#)

IRTAD Road Safety Annual Report 2011



The International Road Traffic and Accident Database (IRTAD) of the International Transport Forum (ITF/OECD) published the Annual Report 2011, which comprises a **synthesis of the main trends and road safety indicators** for the year 2010 and preliminary data for the year 2011. It presents longer-term trends in order to better understand the developments taking place in the different countries. It also presents a summary of national road safety strategies and related targets that have been developed in IRTAD countries in the context of the UN Decade of Action for Road Safety. Recent safety measures implemented are highlighted together with detailed safety data by road user, location and age. Moreover, a report activity of the IRTAD Group for the year 2010 summarising the activities of the Group and detailed reports from 32 countries are presented. NTUA has contributed to the detailed report for Greece. [LINK](#)

ERF European Road Statistics 2011



The European Union Road Federation (ERF) released recently the ERF 2011 European Road Statistics. This annual publication contains all essential information on the **road transport sector** for the period 1990-2009 for the EU countries, but also for other countries in Europe and worldwide. These statistics concern the road network, infrastructure financing, road maintenance and investing, goods and passenger transport, road safety, taxation and environment. The road safety section contains road fatalities time series, country rankings, safety indicators and basic fatalities characteristics. [LINK](#)

A GIS-based methodology for identifying pedestrians' crossing patterns 2011



A paper titled "A GIS-based methodology for identifying pedestrians' crossing patterns" co-authored by S.Lassare, E.Bonnet, F.Bodin, E.Papadimitriou, G.Yannis and J.Golias is just published in the scientific journal: Computers, Environment and Urban Systems. The objective of this research is the development and testing of appropriate indicators of pedestrian crossing behavior along urban trips, and a methodology for collecting and processing the data required for the analysis of this behavior. The results suggest **specific patterns of pedestrian crossing behavior**, such as the tendency to cross at the beginning of the trip and the tendency to cross at mid-block locations when signalized junctions are not available. The results are further discussed in terms of urban planning and management implications. It is concluded that the proposed approach is very efficient for the analysis of pedestrian crossing behavior in urban areas. [DOI](#)

Investigation of the impact of road lighting on the frequency and the severity of road accidents 2010



A Diploma Thesis titled "Investigation of the impact of road lighting on the frequency and the severity of road accidents" was presented by Nikolaos Mitzalis in July 2010. This diploma thesis has been awarded with the Ecocity award 2012. Appropriately processed data were used from the database of the Department of Transportation Planning and Engineering of the National Technical University of Athens (NTUA) and **lognormal regression models** were developed. The application of these models led to the investigation of the influence of road lighting and other parameters such as weather conditions, accident type, vehicle type etc. on the number of casualties and injuries. It appears that road lighting contributes to the reduction of the number of accidents and their severity and that this influence increases with the increase of the severity of the accidents.

This Road Safety Update aims to support frequently the Greek and the International Road Safety Community with current key road safety knowledge and data, which is gathered, analysed and organised within the research activities of the Department of Transportation Planning and Engineering of the National Technical University of Athens.

If you do not wish to receive this Road Safety Update click here to [unsubscribe](#)

AcyMailing - Joomla!&A Newsletter System

About NRSO



The mission of the NTUA Road Safety Observatory (www.nrso.ntua.gr) is to support the Greek and the International Road Safety Community with current key road safety knowledge and data, which are gathered, analysed and organised within the research activities of the Department of Transportation Planning and Engineering of the School of Civil Engineering of the National Technical University of Athens, as well as within co-operations with various national and international road safety organisations.

The NTUA Road Safety Observatory has been developed within the framework of two European Union co-funded research projects, namely SAFETYNET - Development of the European Road Safety Observatory (2004-2009) and DACOTA - Road Safety Data Collection, Transfer and Analysis (2010-2012), with Scientific Responsible for NTUA, Professor George Yannis.