

George Yannis

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Category: Road

Country: Greece

George Yannis is an expert in Traffic and Safety Engineering with particular focus on data management and analysis. Increasingly during the last 15 years Professor Yannis has played a leading role in the design, implementation and operation of Open Road Safety Decision Support Systems (ORS-DSS) in collaboration with other experts and Road Safety Research Institutes. He has put an emphasis on collecting, processing and analysing reliable detailed safety data, and also organising extensive scientific knowledge and the related high-end analysis tools. The work was mostly funded by the European Union but also by other international organisations (i.e. UNECE, CEDR). The most recent EU funded projects are BeOpen (European forum and oBsErvatory for OPEN science in transport, 2019-21) and Levitate (Societal Level Impacts of Connected and Automated Vehicles, 2018-22).

The Open Road Safety Decision Support Systems make publicly available a wealth of scientific evidence in terms of detailed quality data and scientific knowledge and high-end analysis tools in the multi-disciplinary field of road safety, which cannot be found in any other international road safety system. They are among the very few global key management tools, not only providing scientific evidence but also monitoring efforts, developing capacity and engaging stakeholders.

The ORS-DSS developed have achieved global recognition and have received key scientific awards (ERSO, SafetyCube, SaferAfrica). Furthermore, these systems inspired the recent development of Regional Road Safety Observatories across the globe (ERSO and SaferAfrica being the first two).

Efforts for the further improvement and more efficient operation and broader global coverage of these Open Road Safety Decision Support Systems are under way by Prof. Yannis and his collaborators, with emphasis on new Big Data, Artificial Intelligence and Machine Learning Analysis Tools and covering also Connected and Automated Mobility.

Key research themes


Traffic and Safety Engineering; data management and analysis



The SafetyCube DSS is the European Road Safety Decision Support System, which has been produced within the European research project SafetyCube, funded within the Horizons 2020 Programme of the European Commission, aiming to support evidence-based policy making. The SafetyCube Decision Support System provides detailed interactive information on a large list of road accident risk factors and related road safety countermeasures. The SafetyCube DSS fact-sheet is available for download [here](#). A Quick Guide on using the SafetyCube DSS, with instructions on how to browse the system, make a search and further refine the results, is available for download [here](#). A full webinar on the SafetyCube DSS is available [here](#).

Introductory Video:





George Yannis is Professor of Traffic and Safety Engineering at the Transportation Planning and Engineering Department, National Technical University of Athens. He specialises in data management and analysis and has contributed to 157 research projects and published over 200 journal papers. He contributes to numerous international scientific organisations.