

EVALUATION OF ROAD SAFETY PERFORMANCES IN URBAN AREAS

Șerban Raicu, Dorinela Costescu, Mircea Augustin Rosca
s_raicu@rectorat.pub.ro, dorinela.costescu@upb.ro, augustin.rosca@gmail.com

*University "Politehnica" of Bucharest,
Splaiul Independentei 313, 060042, Bucharest,
ROMANIA*

Key words: *road safety, safety performance function, urban transport network modelling*

Abstract: *Urban road safety directly affects whole city area and all its inhabitants. Therefore traffic safety constitutes a constant objective in development and management of transport regulation. The state of road accident in Romania presented in statistical reports at national and European level underlines the needs of research on identifying the appropriate measures for road safety enhancement. Our proposed goal is to develop a set of functions for evaluation of the road safety for different traffic intensity pattern and for estimating various traffic management schemes.*

In the first part of the paper we present the state of road accident recorded in Bucharest and we classify the main causes of the urban road accident. In the second part of the paper we describe a macroscopic model developed for estimating of safety performance based on physical characteristics of network, traffic intensity and recorded data on road accidents. The resulted macroscopic digital network model has to be base for assigning the traffic flows and further, inputs of the model for estimating the traffic safety performances. The main objective of the presented model is to identify practical solutions that lead to traffic safety enhancement.