PARAMETERS AFFECTING ROAD FATALITIES URBAN AREAS



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Introduction

- ➤ More than 206.000 people were killed in traffic accidents on roads outside urban areas excluding motorways in 17 European Union countries between 2001 and 2010.
- Fatalities on roads outside urban areas ("ROU") almost halved between 2001 and 2010.
- On average, more than 32 people per million inhabitants died in accidents in "ROU" areas in 22 European Union countries in 2010.





Objectives

- Macroscopic analysis of basic road safety parameters related to road fatalities outside urban areas, using data from the EU CARE database with disaggregate data on road accidents, together with data from other international data files.
- Comparative analysis among countries will allow for drawing an overall picture of the safety level of road fatalities outside urban areas in Europe.
- ➤ Provide useful support to all decision makers working for the improvement of safety in the European road network

This work was carried out within DaCoTA project of the 7th framework programme on transport research of the European Commission.

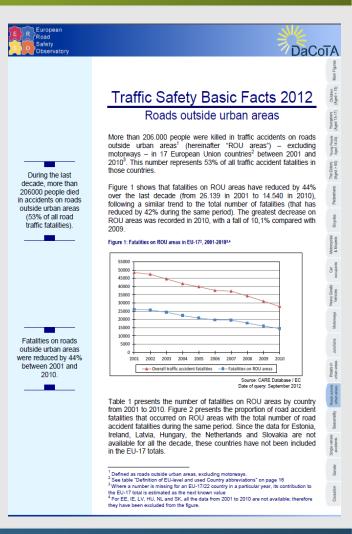




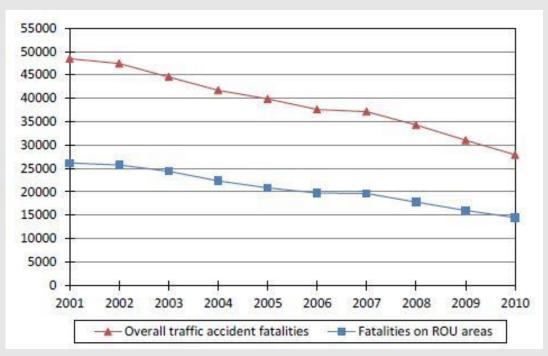


Methodology

- Road accident data from the EU-CARE database.
- > 22 EU countries (BE, CZ, DK, DE, EE, EL, ES, FR, IT, LV, LU, HU, NL, AT, PL, PT, RO, SI, SK, SE, FI, UK).
- Data for the period 2001- 2010.
- ➤ Road accident data on road fatalities outside urban areas correlated with basic safety parameters:
 - mode of transport
 - junction
 - lighting conditions
 - road surface conditions
 - age and gender
 - person class
- Available risk exposure data from other international data files (Eurostat, etc.).

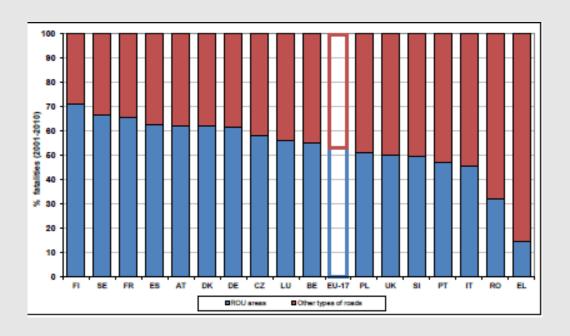


Overall Trends



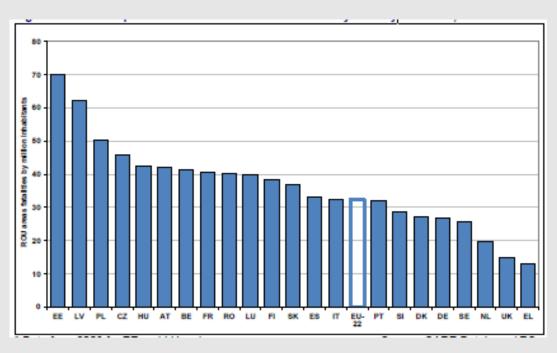
- Fatalities on "ROU" areas have reduced by 44% over the last decade, following a similar trend to the total number of fatalities (that has reduced by 42% during the same period).
- The greatest decrease on "ROU" areas was recorded in 2010, with a fall of 10,1% compared with 2009.

Fatalities on "ROU" areas as a percentage of total fatalities



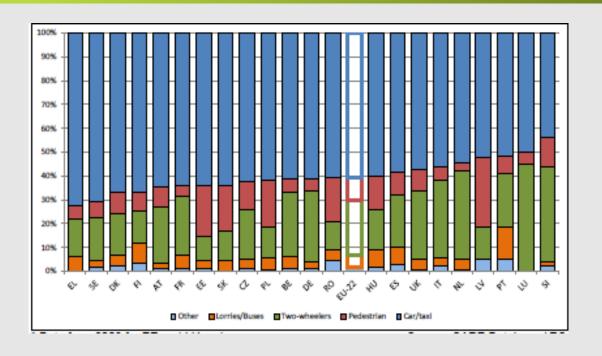
- During the last decade, 53% of all road traffic fatalities occur on "ROU" areas.
- In Finland, 71% of the road accident fatalities in the last decade (2001-2010) occurred on "ROU" areas.

Fatalities per million inhabitants



- In 2010, more than 60 people per million inhabitants died in accidents in "ROU" areas in Estonia and Latvia.
- This rate is more than twice as high as the EU-22 rate (32,5) and more than 4 times higher than the Greek rate (the lowest).

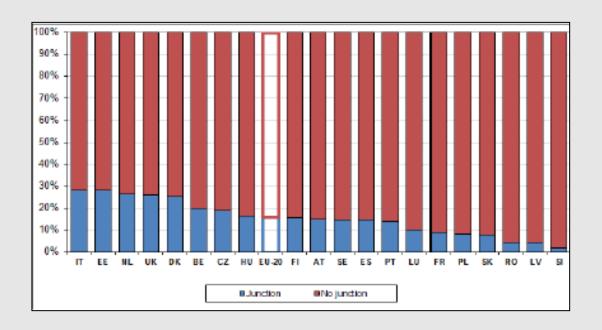
Distribution of fatalities by mode of transport



- ➤ 61% of fatalities on "ROU" areas across the EU-22 countries in 2010 were car or taxi occupants.
- > 23% of EU-22 fatalities on "ROU" areas were riders of two-wheeler vehicles (motorcycle, moped or pedal cycle users).
- > 9% of EU-22 fatalities on "ROU" areas were pedestrians.



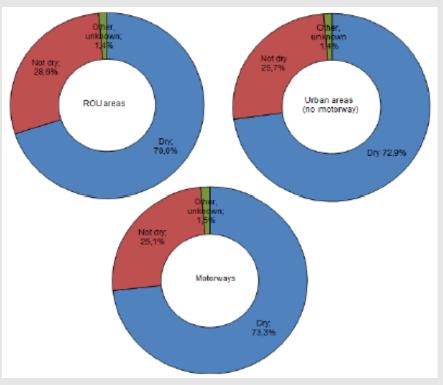
Fatalities on junction/no junction



- In Italy, Estonia, the Netherlands, the United Kingdom and Denmark more than a quarter of fatalities on "ROU" areas occur at junctions.
- While 84% of the total of the "ROU" areas fatalities did not occur at junctions, this percentage is higher in Slovenia (98%), Latvia (96%) and Romania (96%).



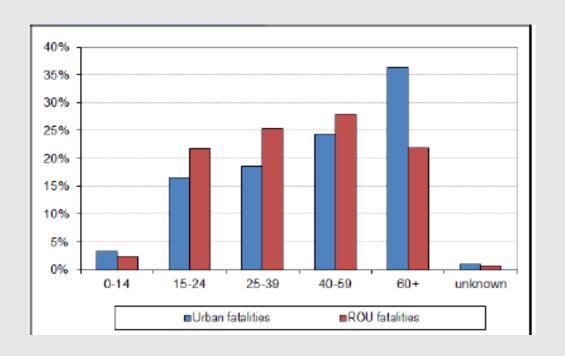
Fatalities by road type and by road surface conditions



- More than 28% of the fatalities on "ROU" areas occurred on non-dry road surface conditions.
- > This percentage is lower on urban areas and on motorways.



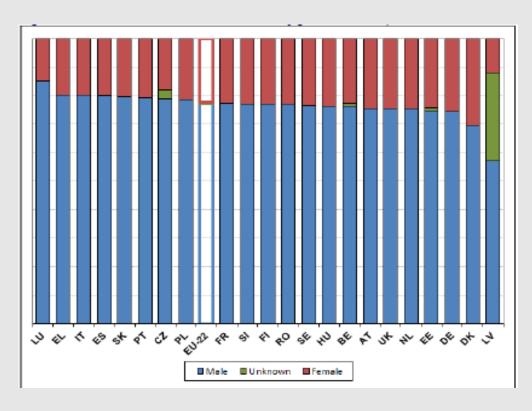
Distribution of fatalities in accidents inside/outside urban areas by age group



- > 37% of the fatalities on urban areas are elderly people. On "ROU" areas, this percentage is reduced to almost half of it (22%).
- More than half of the fatalities on "ROU" areas were aged 25-59.



Distribution of fatalities by gender



- Luxembourg is the country with the highest percentage of male fatalities (85%).
- In Denmark and Germany, more than one quarter of the fatalities on "ROU" areas are women.



Conclusions & Recommendations

- The results of the analysis allow for an overall picture of the safety level of fatalities on "ROU" areas in Europe, providing thus useful support to all decision makers working for the improvement of safety in the European road network.
- The effort of data-collection is an on-going challenge and there are additional data, like exposure data, that could help shed light to the problem of road safety on ROU.
- More than 225.000 people were killed in traffic accidents on roads outside urban areas in 17 European Union countries between 2001 and 2010. This number represents 55% of all traffic accident fatalities in those countries.
- Latvia, followed by Estonia, has the highest fatality rate per million inhabitants on roads outside urban areas in EU-22 countries in 2009
- The reduction of fatalities outside urban areas over the last decade follows a similar trend to the total number of fatalities.

PARAMETERS AFFECTING ROAD FATALITIES OUTSIDE URBAN AREAS IN EUROPE



