





YEARS Event Greece Young Europeans Acting for Road Safety

Problems and solutions for youth's road safety in Greece and Europe

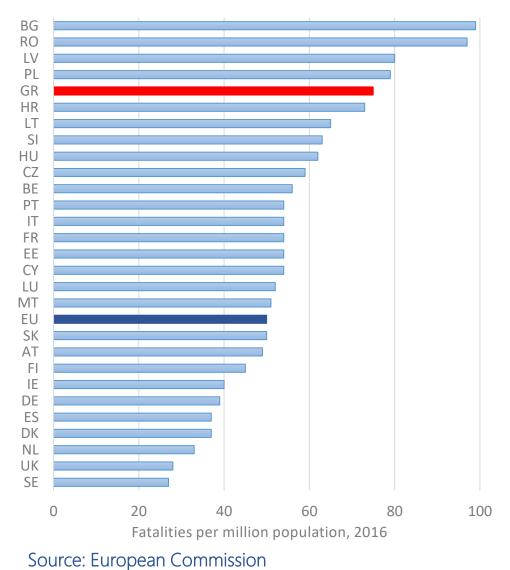


George Yannis, Professor Panagiotis Papantoniou, Research associate Katerina Folla, PhD Candidate

Athens, 12 May 2017

Road Safety in the EU

- In 2016, about 25.500 people were killed and 135.000 were seriously injured in road accidents in the EU.
- In 2016, road accident fatalities were reduced by 2% after two years of stagnation and by 19% since 2010.
- The number of road fatalities per million population was 50 in 2016 and was reduced by 43% compared to 2007.
- Only 9 countries have a better performance than the EU average.





Youth's road safety in Greece







Objective - Methodology

- The macroscopic analysis of **basic road safety parameters related to young people** as road users, using disaggregate data from the EC CARE database (www.erso.eu).
- Three types of young road users are examined:
 - Youngsters, aged 15-17 years old
 - Young people, aged 18-24 years old
 - Novice drivers
- **Time-series data were used** from 28 EU countries for the period 2006-2015.
- Data for population come from Eurostat.

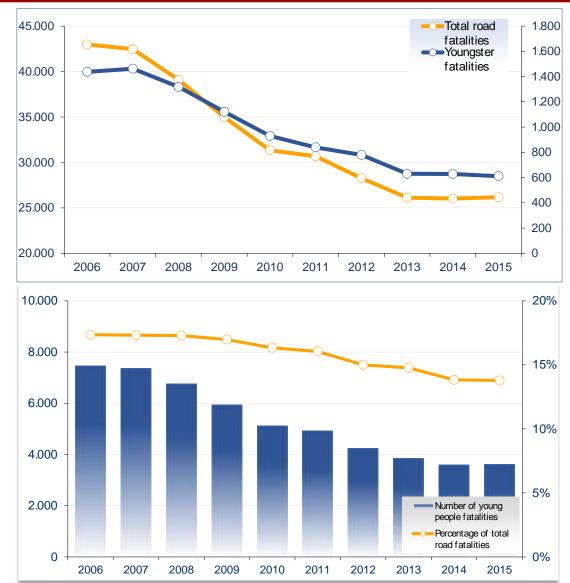




Overall trends in the EU

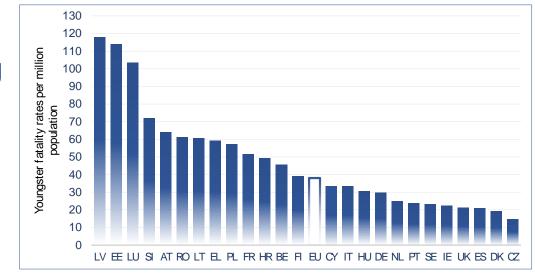


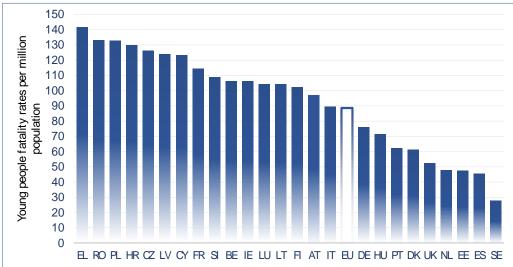
- In 2015, **617 youngsters** and **3.607 young people** were killed in road accidents in the EU.
- The youngster fatalities represented **2,3%** of total road fatalities, while young people fatalities accounted for almost **14%** of all fatalities.
- The number of **young people fatalities more than halved** in 2015 compared to 2006, while the total number of fatalities was reduced by 40% during this decade.
- Youngster fatalities recorded **a notable decrease of 57%** over this period.



Youth fatality rates per million population in the EU

- The number of fatalities per million population was 38 for the youngsters and 89 for the young people in the EU.
- In the EU countries, the fatality rate per million population for the **youngsters** fell by 52% between 2006 and 2015.
- The respective rate for young people **fell by 47%** in the EU.
- In 2015, **Latvia** had the highest number of youngster fatalities per population in the EU (118), while **Greece** recorded the highest number of young people fatalities per population (142).





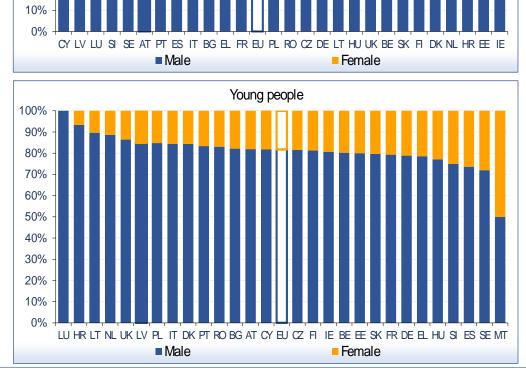


40% 30%

- 82% of the fatalities among young people were men in the EU in 2015.
- This can possibly be attributed in part to young men tending to take **longer trips** than young women and **different risk** taking behaviour.

Youth road fatalities by gender in the EU

• 72% of the fatalities among youngsters 80% 70% were boys in the EU in 2015. 60% 50% 20%



Youngsters

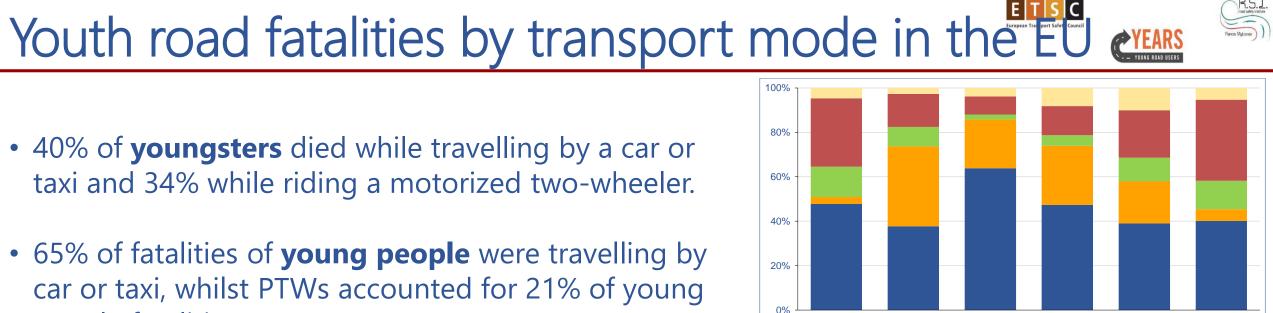
100%





taxi and 34% while riding a motorized two-wheeler. 60% 40%

- 65% of fatalities of **young people** were travelling by car or taxi, whilst PTWs accounted for 21% of young people fatalities.
- The motorized two-wheelers share is much higher for the youngsters than for the other age groups.
- The driver and passenger fatality rates per million population for young people are significantly higher than those of other age groups.



18 - 24

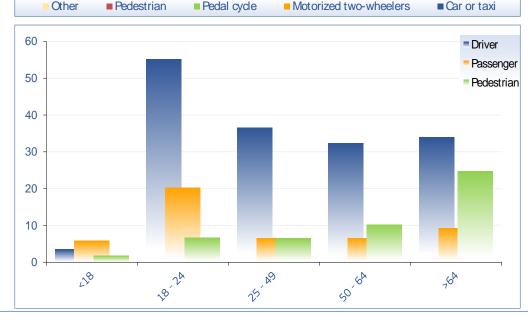
25 - 49

50 - 64

65+

<15

15 - 17



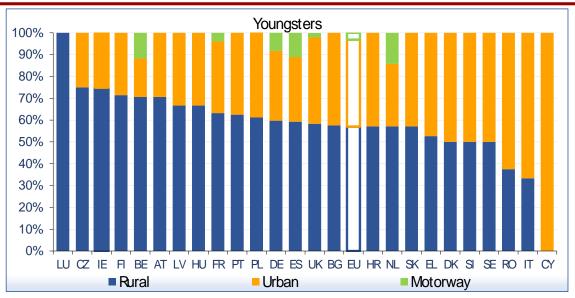


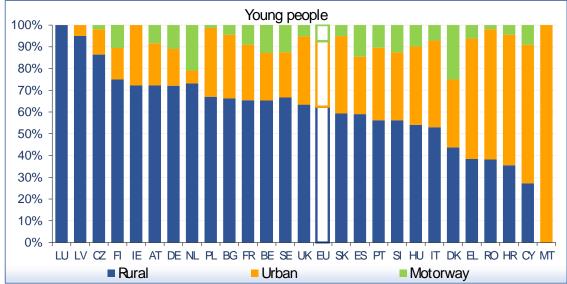
• Belgium and Spain are the only EU countries 100%

 Latvia had the lowest percentage of young people fatalities inside urban areas (5%), whereas Croatia and Romania had the highest percentages (60%) amongst the EU countries.

Youth road fatalities by type of road in the EU

- In 2015, most of the fatal road accidents took place for both age groups on **rural roads**; 57% for the youngsters and 62% for the young people.
- On **motorways**, only 3% of youngster fatalities and 7% of young people fatalities occurred.
- where more than 10% of youngster fatalities occurred on motorways.







Novice drivers' characteristics

- **Drivers aged 16 24** are greatly over-represented in road accident and fatalities statistics, with 2 to 3 times the risk of more experienced drivers.
- Young drivers' high accident rates primarily result from **immaturity**, **lack of experience**, **impairment**, and lifestyles associated with their age and their gender.
- They drive more frequently in **high-risk circumstances**, such as night-time driving, speeding, carrying peer passengers, less frequent use of seat belts and driving older cars with fewer safety features.
- Young novice drivers have relatively **more singlevehicle accidents** (mostly due to loss of control) and head-on collisions.





Panagiotis Papantoniou, «Problems and solutions for youth's road safety in Greece and Europe»

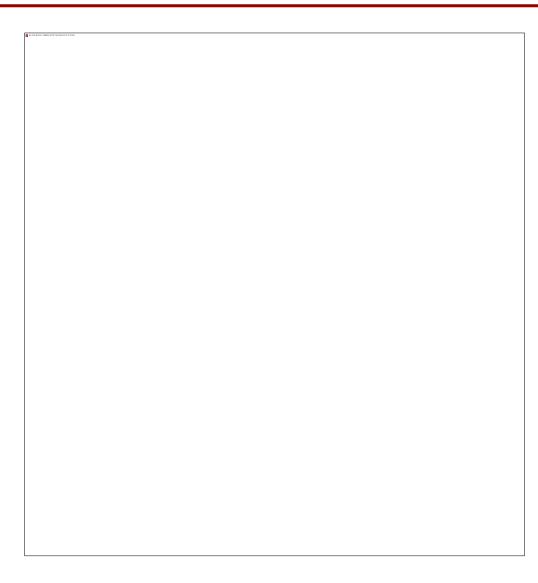
Main causes for novice drivers' accident involvement

Biological and social aspects

- At the age of 18, areas of the **human brain** which are responsible for the integration of information and impulse control are still developing.
- Alcohol consumption in low quantities has a greater impact on young people than on experienced drivers.
- Youngsters are still maturing not only in physiological terms, but also in **social terms**.

Lack of driving experience

- The **driving task** is determined by the demands of the road environment, the presence and manoeuvres of other road users and traffic rules, as well as by personal choices of driving speeds, following distances and position.
- The members of this age group, and the young male in particular, tend to **overestimate their skills** and to **underestimate the complexity of the traffic situation**.





Countermeasures



- A **higher driving age** is likely to save lives by preventing young and inexperienced drivers from solo driving.
- **Graduated driver licensing** (GDL) allows learner drivers to acquire driving experience under low-risk conditions.
- Well-educated instructors possessing the necessary knowledge and teaching skills are vital for a well-functioning system.
- The **driving test** needs to be reliable, valid and legitimate.
- Post license measures, such as advanced training to improve driver attitudes and skills, protective measures to reduce exposure to high-risk conditions and in-car monitors rewarding safe driving and / or discouraging risky driving.
- Special attention should be paid to **unlicensed driving** and to most frequent **violations** that are speeding, drink-driving, drugged driving.
- Technology based interventions: smart card access systems preventing unlicensed or unauthorised driving, alcolocks, seat belt reminders, driving data storage units, Electronic Stability Control (ESC), Advanced Driver Assistance Systems (ADAS), Intelligent Speed Adaptation (ISA)





Conclusions

E T S C European Transport Safety Council

- People aged between 16-24 years old are a special group of road users, with different needs and characteristics than other road users.
- **617 youngsters and 3.607 young people** were killed in road accidents in the EU in 2015.
- **Significant reductions** in youngster and young people fatalities were recorded during the decade 2006-2015.
- A variety of measures is available which specifically target **increased accident risk among novice drivers**, including changes in their exposure to driving.
- Due to its multi-faceted nature, a package of countermeasures is required, taking into account new licensing regimes, pre-license and post-license measures, enforcement and use of ITS applications.











YEARS Event Greece Young Europeans Acting for Road Safety

Problems and solutions for youth's road safety in Greece and Europe



George Yannis, Professor Panagiotis Papantoniou, Research associate Katerina Folla, PhD Candidate

Athens, 12 May 2017