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

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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.

Source: European Commission
# Youth’s road safety in Greece

## Road fatalities by age, gender, road user type

<table>
<thead>
<tr>
<th>Age</th>
<th>Drivers Male</th>
<th>Drivers Female</th>
<th>Passengers Male</th>
<th>Passengers Female</th>
<th>Pedestrians Male</th>
<th>Pedestrians Female</th>
<th>Drivers</th>
<th>Passengers</th>
<th>Pedestrians</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>%</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0.0%</td>
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</tr>
<tr>
<td>5-14</td>
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<td>0</td>
<td>0</td>
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<td>0</td>
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<td>0</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0.0%</td>
<td>0.7</td>
</tr>
<tr>
<td>15-24</td>
<td>79</td>
<td>7</td>
<td>21</td>
<td>18</td>
<td>3</td>
<td>3</td>
<td>86</td>
<td>39</td>
<td>6</td>
<td>103</td>
<td>28</td>
<td>131</td>
<td>17%</td>
<td>4.4</td>
</tr>
<tr>
<td>25-34</td>
<td>86</td>
<td>10</td>
<td>10</td>
<td>11</td>
<td>5</td>
<td>2</td>
<td>96</td>
<td>21</td>
<td>7</td>
<td>101</td>
<td>23</td>
<td>124</td>
<td>16%</td>
<td>2.8</td>
</tr>
<tr>
<td>35-44</td>
<td>94</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>7</td>
<td>4</td>
<td>97</td>
<td>10</td>
<td>11</td>
<td>110</td>
<td>13</td>
<td>115</td>
<td>18%</td>
<td>2.7</td>
</tr>
<tr>
<td>45-54</td>
<td>75</td>
<td>6</td>
<td>3</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>81</td>
<td>10</td>
<td>11</td>
<td>84</td>
<td>18</td>
<td>102</td>
<td>13%</td>
<td>2.8</td>
</tr>
<tr>
<td>55-64</td>
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<td>2</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>65</td>
<td>10</td>
<td>8</td>
<td>73</td>
<td>10</td>
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<td>3.5</td>
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<tr>
<td>65+</td>
<td>114</td>
<td>3</td>
<td>11</td>
<td>16</td>
<td>53</td>
<td>28</td>
<td>117</td>
<td>27</td>
<td>81</td>
<td>178</td>
<td>47</td>
<td>225</td>
<td>28%</td>
<td>7.6</td>
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<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>1%</td>
<td></td>
</tr>
</tbody>
</table>

- **Total fatalities**: 793 (100%)
- **Severity**: 3.1 (4.4, 6.2, 4.0, 2.4)

### Notes:
- **Severity**: Number of fatalities / Number of road accidents
- **Issued**: April 29th, 2017
- **Source**: Hellenic Statistical Authority (ELSTAT)
- **Processing**: NTUA - Road Safety Observatory

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Panagiotis Papantoniou, “Problems and solutions for youth’s road safety in Greece and Europe”
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).
Youth road fatalities by gender in the EU

- **72%** of the fatalities among youngsters were boys in the EU in 2015.

- **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 transport mode in the EU

- 40% of **youngsters** died while travelling by a car or taxi and 34% while riding a motorized two-wheeler.

- 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.
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 younger fatalities and 7% of young people fatalities occurred.

- Belgium and Spain are the only EU countries where more than 10% of younger fatalities occurred on motorways.

- 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.
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 single-vehicle accidents** (mostly due to loss of control) and head-on collisions.
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

- 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.
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