Road Safety in Greece on the way to Vision Zero

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The NTUA Road Safety Observatory (www.nrso.ntua.gr) is a Center of Research and Innovation Excellence on Road Safety, with global recognition [ranked: 2nd in Europe and 6th worldwide (AAP 2018)]

A Team of 25+ Scientists: internationally recognized Professors, Senior Transportation Engineers, PostDoc, PhD Candidates and other scientists

An international reference website - information system with state-of-the-art road safety data and knowledge:
- more than 100.000 visits per year
- 100+ electronic newsletters since 2007
- tens of tweets and social media posts annually (160.000 post views)
- network of more than 4.000+ road safety experts in Greece (1.000+) and worldwide (3.000+)

An excellent research activity:
- More than 100 Diploma Theses & 6 PhD Theses,
- More than 100 road safety research projects, mostly highly competitive,
- More than 500 road safety publications (> 200 in scientific Journals),
- More than 100 scientific commissions,

George Yannis, Greece – on the way to Vision Zero
Presentation Outline

1. Basic Road Safety Figures in Greece (3)

2. Overview of the decade 2011-2020 (5)

3. Next Steps for the decade 2021-2030 (3)

4. Key Lessons and Opportunities (2)
Basic Road Safety Figures in Greece
# Basic Road Safety Figures

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>Injury Road accidents</td>
<td>15,032</td>
<td>13,849</td>
<td>12,398</td>
<td>12,109</td>
<td>11,690</td>
<td>11,440</td>
<td>11,318</td>
<td>10,848</td>
<td>10,737</td>
<td>10,712</td>
<td>9,105</td>
<td>-15.0%</td>
<td>-39.4%</td>
</tr>
<tr>
<td>Fatalities</td>
<td>1,258</td>
<td>1,141</td>
<td>988</td>
<td>879</td>
<td>795</td>
<td>793</td>
<td>824</td>
<td>731</td>
<td>700</td>
<td>688</td>
<td>579</td>
<td>-15.8%</td>
<td>-54.0%</td>
</tr>
<tr>
<td>Serious Injuries</td>
<td>1,709</td>
<td>1,626</td>
<td>1,399</td>
<td>1,212</td>
<td>1,016</td>
<td>999</td>
<td>879</td>
<td>706</td>
<td>727</td>
<td>652</td>
<td>487</td>
<td>-25.3%</td>
<td>-71.5%</td>
</tr>
<tr>
<td>Slight Injuries</td>
<td>17,399</td>
<td>15,633</td>
<td>14,241</td>
<td>13,963</td>
<td>13,548</td>
<td>13,097</td>
<td>12,946</td>
<td>12,565</td>
<td>12,422</td>
<td>12,350</td>
<td>10,130</td>
<td>-18.0%</td>
<td>-41.8%</td>
</tr>
<tr>
<td>Vehicle Fleet (x1000)</td>
<td>8,062</td>
<td>8,087</td>
<td>8,070</td>
<td>8,035</td>
<td>8,048</td>
<td>8,076</td>
<td>8,173</td>
<td>8,263</td>
<td>8,237</td>
<td>8,402</td>
<td>8,519</td>
<td>1.4%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Fatalities per million vehicles</td>
<td>156</td>
<td>141</td>
<td>122</td>
<td>109</td>
<td>99</td>
<td>98</td>
<td>101</td>
<td>88</td>
<td>85</td>
<td>82</td>
<td>68</td>
<td>-17.0%</td>
<td>-56.4%</td>
</tr>
</tbody>
</table>

**Speed infringements**

- 263,382
- 238,033
- 186,675
- 178,816
- 156,892
- 173,476
- 176,592
- 208,190
- 213,333
- 234,169
- 206,554

**Drink & drive infringements**

- 38,033
- 34,992
- 30,707
- 30,853
- 29,597
- 29,191
- 33,192
- 32,964
- 33,394
- 31,557
- 19,096

**Seat belt infringements**

- 49,703
- 37,120
- 33,722
- 35,478
- 34,526
- 29,611
- 34,831
- 31,510
- 33,380
- 34,594
- 30,174

**Helmet infringements**

- 51,526
- 47,250
- 47,736
- 58,122
- 54,354
- 52,783
- 63,971
- 59,405
- 52,706
- 52,089
- 46,394

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Road fatalities in Greece have decreased by **56%** since 2010, however injury road accidents decreased only by **39%**. A significant annual decrease by **16%** in road fatalities was recorded in 2020, also due to the pandemic and related traffic restrictions.
Evolution of Road Fatalities
Greece, 2010-2020

- Over the last decade, Greece recorded the highest decrease in road fatalities per million population (54%) in the EU (from position 27th in 2010 to position 20th in 2020)

- At EU level, road fatalities per million population were decreased by 36% over the same period

- Only 8 EU countries recorded a decrease in road fatalities per population over 40%

Source: European Commission
Road Crash Factors in Greece

- Driving at high speeds
- High rates of motorcyclists
- Low rates of seat belt and helmet use, especially for passengers
- Unorganised and unprotected traffic of vulnerable road users
- Driving under the influence of alcohol and using a mobile phone
- Aggressive driving

<table>
<thead>
<tr>
<th>% Fatalities (2019)</th>
<th>Greece</th>
<th>EU (27)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inside built up areas</td>
<td>54%</td>
<td>38%</td>
</tr>
<tr>
<td>Drivers</td>
<td>68%</td>
<td>64%</td>
</tr>
<tr>
<td>Passengers</td>
<td>11%</td>
<td>15%</td>
</tr>
<tr>
<td>Pedestrians</td>
<td>21%</td>
<td>20%</td>
</tr>
<tr>
<td>Powered Two Wheelers</td>
<td>36%</td>
<td>18%</td>
</tr>
<tr>
<td>Young Drivers (18-24) (% drivers)</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Elderly Drivers (64+) (% drivers)</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td>Single Vehicle Accidents</td>
<td>52%</td>
<td>39%</td>
</tr>
</tbody>
</table>

<p>| Fatalities in Passenger Cars (2019) | | |</p>
<table>
<thead>
<tr>
<th>Seat belt use</th>
<th>No seat belt use/ not recorded</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>53</td>
<td>149</td>
<td>202</td>
</tr>
<tr>
<td>26%</td>
<td>74%</td>
<td>100%</td>
</tr>
</tbody>
</table>

<p>| PTW Fatalities (2019) | | |</p>
<table>
<thead>
<tr>
<th>Helmet use</th>
<th>No helmet use/ not recorded</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>84</td>
<td>163</td>
<td>247</td>
</tr>
<tr>
<td>34%</td>
<td>66%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Sources: ELSTAT, EC CARE Database
Data Processing: NTUA
Road Safety Management

- The National Road Safety Strategic Plan 2011-2020 guided policy, programmes, measures and interventions

- The Inter-Ministry Committee on Road Safety was re-established in 2010 and under the chairmanship of the Prime Minister since 2014, assisted by the National Road Safety Council

- The Ministry of Transport has properly implemented all EU Directives (vehicles, driving licences, etc.) and all procedures concerning road safety are always tighter than those of the EU Directives

- Quite a lot of the reforms imposed by the EU, resulted in a more serious implementation of rules (vehicle insurance, driving licenses, etc.)
Road Infrastructure

- Great improvement of the main road network (from 750km of motorways in 2007 to 2,200 km in 2018), with traffic from unsafe interurban roads having been shifted to new motorways, safest roads by design

- Several Local Authorities developed and implemented city mobility and safety plans focusing on infrastructure but often also on campaigns

- The detailed specifications for cycling infrastructure were officially adopted, whereas in 2018 several provisions for cycle traffic were also officially adopted

- The Road Infrastructure Safety Management Directive has been in application since 2012 and all new major road projects have been road safety audited
Road User Behaviour

- Local police often do enforce safe behaviour. Traffic police statistics indicate a **steady number of checks and infractions** during the last decade.

- **New traffic fines scheme** was introduced (2018) based on infringement safety importance and offenders’ income.

- Introduction of **vehicle control inspection** run by private entities; more efficient against corruption.

- Massive and very efficient **campaigns**, training and other safety promotion activities.
Economic Crisis
A Shock Therapy for Road Safety

- A significant part of the fatalities reduction over the last decade was initially attributed to the deep **economic crisis** (less veh-km, less speeding, etc.)

- An **average annual decrease of 11%** in road fatalities was recorded over the period 2010-2014

- Greek **drivers changed significantly their safety behaviour**, initially triggered by the economic crisis but maintained it also well after
COVID-19 Impact

- A **significant annual reduction** (16%) was recorded in traffic fatalities in 2020, mostly due to the pandemic.

- Total number of trips and **distance travelled reduced** by **70%** (1\textsuperscript{st} lockdown) and **37%** (2\textsuperscript{nd} lockdown) for people driving and walking compared to the period before.

- **Increase in average speed** by 10% (1\textsuperscript{st} lockdown) and 3% (2\textsuperscript{nd} lockdown) compared to the period before.

- Promotion of **pedestrian and cycle traffic** with new infrastructure, in several cities (including the Athens Great Walk major urban regeneration project).
Next Steps for the Decade 2021-2030

Road Safety Strategic Plan

Greece 2030
Road Safety Strategy 2021-2030
drafted by NTUA

➢ Adoption of:
   ➢ Safe System Approach
   ➢ Vision Zero by 2050

➢ Alignment with the European Strategy aiming to reduce the number of fatalities and serious injuries in road accidents by 50% by 2030 with 2019 as the baseline year (according to EU decisions)
Ambitious Vision – Shared Responsibility

- Vision zero road accidents
- Individual realistic targets
- Safe mobility
  (Public Transport, low speeds)

Shared Responsibility
- Safe System Approach
- Authorities
  accountability
- Change of habits

Innovative Technologies
- Digital management
- Dynamic interconnectivity
- Traffic automation

Effective Implementation
- Funding
- Administration
- Monitoring
Action Plan for Road Safety

- New **National Road Safety Law**
- New **National Road Safety Fund**
- Revision of **Road Traffic Code**
- New **National Observatory for Road Safety**
- A large **road safety interventions program** (intervention at 7,000 high risk sites) funded by the EIB
- Introduction of automated electronic procedures for **monitoring traffic violations**
Key Lessons and Opportunities
Key Lessons

- The **Covid-19 Pandemic** led to major behavioural changes which might stay after the pandemic (as it happened with the economic crisis in Greece)

- The society might embrace the **new road safety culture** and will not get back to previous unsafe behaviours

- Covid-19 Pandemic might be more the **trigger for safety change** than just an unusual year

- **Authorities** should exploit the new opportunities with consistent actions targeting all levels of road safety (behaviour, infrastructure, vehicles)
Key Opportunities

- New patterns of **social responsibility** (triggered by the pandemic) – better respect of the others than before the pandemic

- **Teleworking** with less mobility miles per road user (especially longer distance commuters)

- **Active travelling** increase (walking, cycling) brings up safety in numbers for the Vulnerable Road Users and leads to safer speeds in cities

- Widespread urban zones with **20m/h speed limits** will also lead to safer speeds

- New **recovery and resilience funds** directed also to road safety (infrastructure, vehicles, etc.)
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