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Road Safety in Greece
A success story?

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NTUA Road Safety Observatory

- 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 35+ 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, Road Safety in Greece - A success story?
Presentation Outline

1. Basic Road Safety Figures in Greece (4)

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>
<tr>
<th>Year</th>
<th>Injury Road Accidents</th>
<th>Fatalities</th>
<th>Serious Injuries</th>
<th>Slight Injuries</th>
<th>Vehicle Fleet (x1000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>15,032</td>
<td>1,258</td>
<td>1,709</td>
<td>17,399</td>
<td>8,062</td>
</tr>
<tr>
<td>2011</td>
<td>13,849</td>
<td>1,141</td>
<td>1,626</td>
<td>15,633</td>
<td>8,087</td>
</tr>
<tr>
<td>2012</td>
<td>12,398</td>
<td>988</td>
<td>1,399</td>
<td>14,241</td>
<td>8,070</td>
</tr>
<tr>
<td>2013</td>
<td>12,109</td>
<td>879</td>
<td>1,212</td>
<td>13,963</td>
<td>8,035</td>
</tr>
<tr>
<td>2014</td>
<td>11,690</td>
<td>795</td>
<td>1,016</td>
<td>13,548</td>
<td>8,048</td>
</tr>
<tr>
<td>2015</td>
<td>11,440</td>
<td>793</td>
<td>999</td>
<td>13,097</td>
<td>8,076</td>
</tr>
<tr>
<td>2016</td>
<td>11,318</td>
<td>824</td>
<td>879</td>
<td>12,946</td>
<td>8,173</td>
</tr>
<tr>
<td>2017</td>
<td>10,848</td>
<td>731</td>
<td>706</td>
<td>12,565</td>
<td>8,263</td>
</tr>
<tr>
<td>2018</td>
<td>10,737</td>
<td>700</td>
<td>727</td>
<td>12,422</td>
<td>8,237</td>
</tr>
<tr>
<td>2019</td>
<td>10,712</td>
<td>688</td>
<td>652</td>
<td>12,350</td>
<td>8,402</td>
</tr>
<tr>
<td>2020</td>
<td>9,105</td>
<td>579</td>
<td>487</td>
<td>10,130</td>
<td>8,519</td>
</tr>
</tbody>
</table>

### Notes:
- Figures in italics are based on provisional data.
- Sources: NRSA (National Road Safety Authority)
- Processing: NTUA - Road Safety Observatory

### Road fatalities in Greece:

### Observations:
- The rate of fatalities per number of vehicles has decreased by 56% since 2010.
- 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 Crashes</td>
<td>52%</td>
<td>39%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>PTW Fatalities (2019)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Helmet use</td>
<td>No helmet use/ not recorded</td>
<td>Total</td>
</tr>
<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
PTW vs Passenger Car Fatalities in Greece

- High rates of PTWs are one of the key road crash factors in Greece

- The proportion of motorcycles in the total vehicle fleet was 19% in 2019, while mopeds represented another 12%

- In 2019, Greece had the highest motorcyclist fatality rate in the EU (21 fatalities per million population), while the EU average was about 8

- Passenger car fatality rate in Greece (19) was below the EU average (23) in 2019

*2018 data for MT, 2016 data for IE
Source: CARE database
Processing: NTUA - Road Safety Observatory
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% (1st lockdown) and 37% (2nd lockdown) for people driving and walking compared to the period before

- Increase in average speed by 10% (1st lockdown) and 3% (2nd 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)
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 crashes by 50% by 2030 with 2019 as the baseline year (according to EU decisions)
Ambitious Vision – Shared Responsibility

- Ambitious Vision
  - 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) EIB funding
- Introduction of automated electronic procedures for monitoring traffic violations
- Action plan for motorcycle safety
- Action plan for speed management
Key Lessons

- Greece is a **success story** of significant road safety improvement by shock therapy.

- The economic crisis was the main trigger for Greek Authorities and Greek drivers to **change their road safety behaviour**, which was maintained when the economy picked up again.

- The challenge is to continue the efforts and the culture change with emphasis on **motorcycle safety and speeding**, with interventions at all levels:
  - urban and interurban road infrastructure
  - systematic enforcement and campaigns
  - efficient road safety management
Key Opportunities

- 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, exploiting current **opportunities**:
  - social responsibility
  - teleworking
  - active travelling
  - 20m/h urban speed limits
  - new recovery and resilience funds
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