









2nd Meeting of Western Balkans Road Safety Observatory
Role of the Traffic Safety Agency and Importance of reliable data in Policy Making
Skopje, 6 December 2021

Road Safety in Greece A decade of improvements

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NTUA Road Safety Observatory

- ➤ The NTUA Road Safety Observatory (<u>www.nrso.ntua.gr</u>) 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-ofthe 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 4.500+ road safety experts in Greece (1.000+) and worldwide (3.500+)
- 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,
 - ➤ International Cooperations: European Commission, UN/ECE, OECD/ITF, WHO, World Bank, EIB, CEDR, FEHRL, ERF, IRF, UITP, ETSC, WCTR, TRB, decades of Universities and Research Centers.



George Yannis, Road Safety in Greece - A decade of improvements

Presentation Outline

- Basic Road Safety Figures in Greece (4)
- 2. Overview of the decade 2011-2020 (5)
- 3. Next Steps for the decade 2021-2030 (3)
- Key Lessons and Opportunities (2)



Basic Road Safety Figures in Greece



Greece 2010 - 2020

Basic Road Safety Figures



www.nrso.ntua.gr

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2020/2019 | 2020/2010 | 2016/2020 |
|---------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------------|---------------|-----------|
| Injury Road crashes | 15,032 | 13,849 | 12,398 | 12,109 | 11,690 | 11,440 | 11,318 | 10,848 | 10,737 | 10,712 | 9,105 | -15.0% | -39.4% | -19.6% |
| Fatalities | 1,258 | 1,141 | 988 | 879 | 795 | 793 | 824 | 731 | 700 | 688 | 579 | -15.8% | -54.0% | -29.7% |
| Serious Injuries | 1,709 | 1,626 | 1,399 | 1,212 | 1,016 | 999 | 879 | 706 | 727 | 652 | 487 | - 25.3 % | -71.5% | -44.6% |
| Slight Injuries | 17,399 | 15,633 | 14,241 | 13,963 | 13,548 | 13,097 | 12,946 | 12,565 | 12,422 | 12,350 | 10,130 | -18.0% | -41.8% | -21.8% |
| Vahiala Floot (v4000) | 0.062 | 0 007 | 9 070 | 0.035 | 0 040 | 9.074 | 0 173 | 0 2/2 | 0 227 | 9 400 | 0 510 | 1 40/ | E 7 0/ | 4 30/ |
| Vehicle Fleet (x1000) | 8,062 | 8,087 | 8,070 | 8,035 | 8,048 | 8,076 | 8,173 | 8,263 | 8,237 | 8,402 | 8,519 | 1.4% | 5.7% | 4.2% |
| Fatalities per million vehicles | 156 | 141 | 122 | 109 | 99 | 98 | 101 | 88 | 85 | 82 | 68 | -17.0% | -56.4% | -32.6% |
| | | | | | | | Y | | | | | Y | | |
| Speed infringements | 263,382 | 238,033 | 186,675 | 178,816 | 156,892 | 173,476 | 176,592 | 208,190 | 213,333 | 234,169 | 206,554 | -11.8% | -21.6% | 17.0% |
| 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 | -39.5% | -49.8% | -42.5% |
| 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 | - 12.8 % | -39.3% | -13.4% |
| Helmet infringements | 51,526 | 47,250 | 47,736 | 58,122 | 54,354 | 52,783 | 63,971 | 59,405 | 52,706 | 52,089 | 46,394 | -10 .9 % | -10.0% | -27.5% |

Road

fatalities in

Greece have decreased by

54% since 2010,

however injury road crashes

decreased only by 39%

The rate 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

Road fatalities, Greece 2010-2020 **Fatalities** Vehicles 9,000 2,200 8,500 2,000 8,000 Vehicle Fleet (x1000) 1,800 7,500 1,600 7,000 1,400 6,500 1,200 6,000 1,000 5,500 **Road Fatalities** 800 5,000 600 4,500 4,000 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Notes: Figures in italics are based on provisional data Issued: March 3rd, 2021

About the data: www.prso.ptua.ar/wp-content/uploads/prso-data-ar

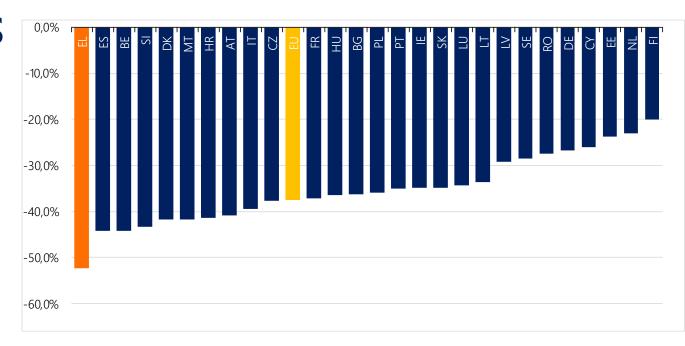
About the data: www.nrso.ntua.gr/wp-content/uploads/nrso-data-gr9.pd
Sources: Hellenic Statistical Authority (ELSTAT)

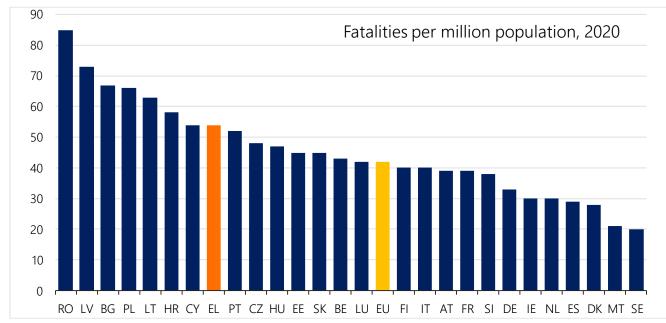
Traffic Police

Processing: NTUA - Road Safety Observatory

Evolution of Road Fatalities Greece, 2010-2020

- Over the last decade, Greece recorded the highest decrease in road fatalities per million population (52%) in the EU
- ➤ At EU level, road fatalities per million population were decreased by 37,5% over the same period
- ➤ With 54 fatalities per million population, Greece is ranked 20th in 2020 (from position 26th in 2010)







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

| % Fatalities (2019) | Greece | EU (27) |
|-----------------------------------|--------|---------|
| Inside built up areas | 54% | 39% |
| Drivers | 68% | 64% |
| Passengers | 11% | 15% |
| Pedestrians | 21% | 20% |
| Powered Two Wheelers | 36% | 18% |
| Young Drivers (18-24) (% drivers) | 13% | 13% |
| Elderly Drivers (64+) (% drivers) | 21% | 23% |
| Single Vehicle Accidents | 52% | 39% |

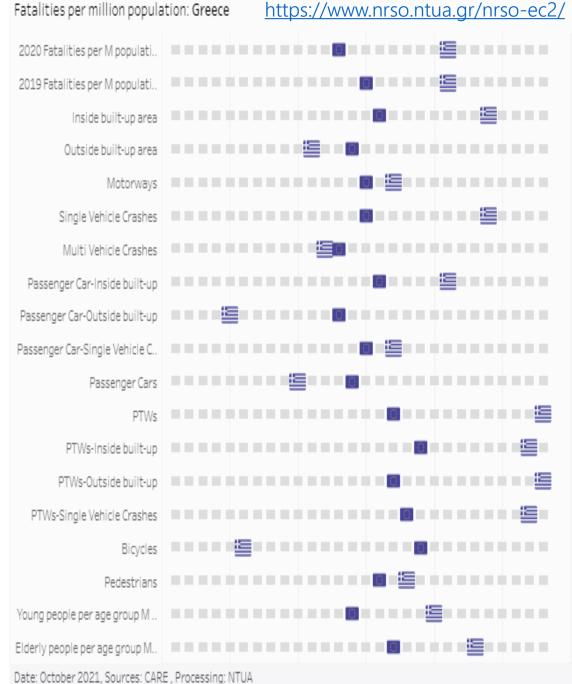
| Fatalities in Passenger Cars (2019) | | | | | | |
|-------------------------------------|--------------------------------|-------|--|--|--|--|
| Seat belt use | No seat belt use/ not recorded | Total | | | | |
| 53 | 149 | 202 | | | | |
| 26% | 74% | 100% | | | | |

| PTW Fatalities (2019) | | | | | |
|-----------------------|-----------------------------|-------|--|--|--|
| Helmet use | No helmet use/ not recorded | Total | | | |
| 84 | 163 | 247 | | | |
| 34% | 66% | 100% | | | |



PTW vs Passenger Car Fatalities in Greece

- > Greece ranked 20th among the EU countries in terms of road fatalities per million population
- > Greece had the highest PTW fatality rate in the EU (27th) with 23 fatalities per million population, while the EU average was about 9
- > Concerning passenger car fatalities, Greece is ranked in 10th position, with 19 fatalities per million population (the EU average is 23)





2019 data for all EU countries except for Malta (2018) and Ireland (2016)

Overview of the Decade 2011-2020



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 reestablished 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

- Major 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



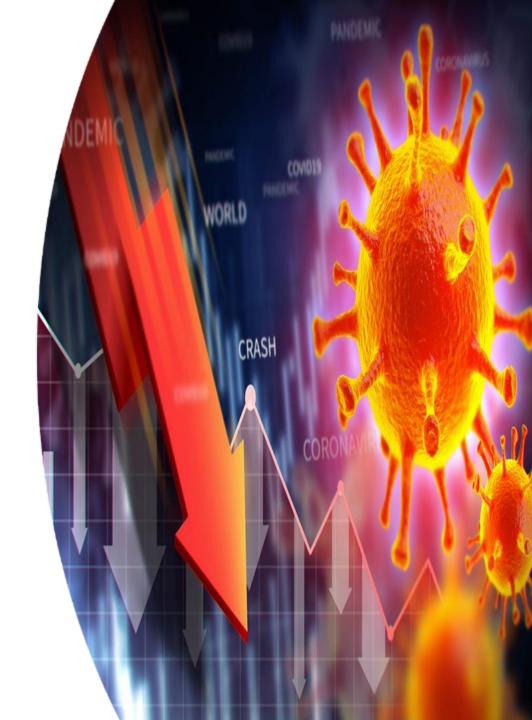
Economic Crisis A Shock Therapy for Road Safety

- 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)



Next Steps for the Decade 2021-2030

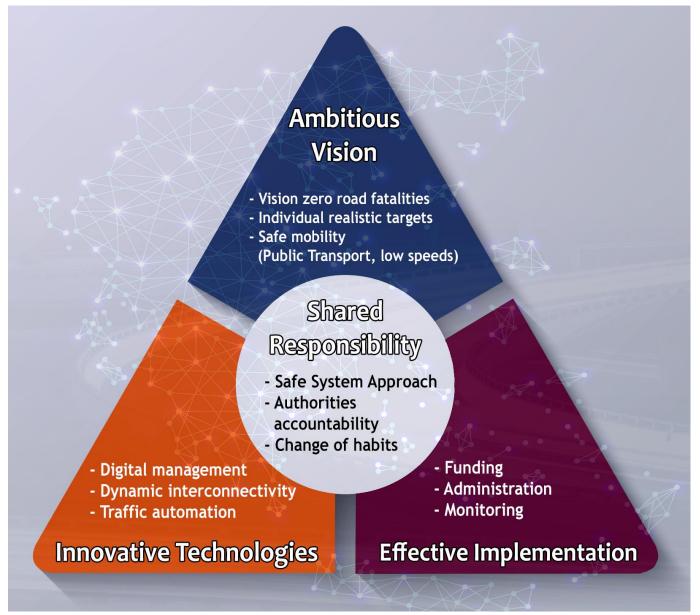


Road Safety Strategy 2021-2030 drafted by NTUA

- > 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

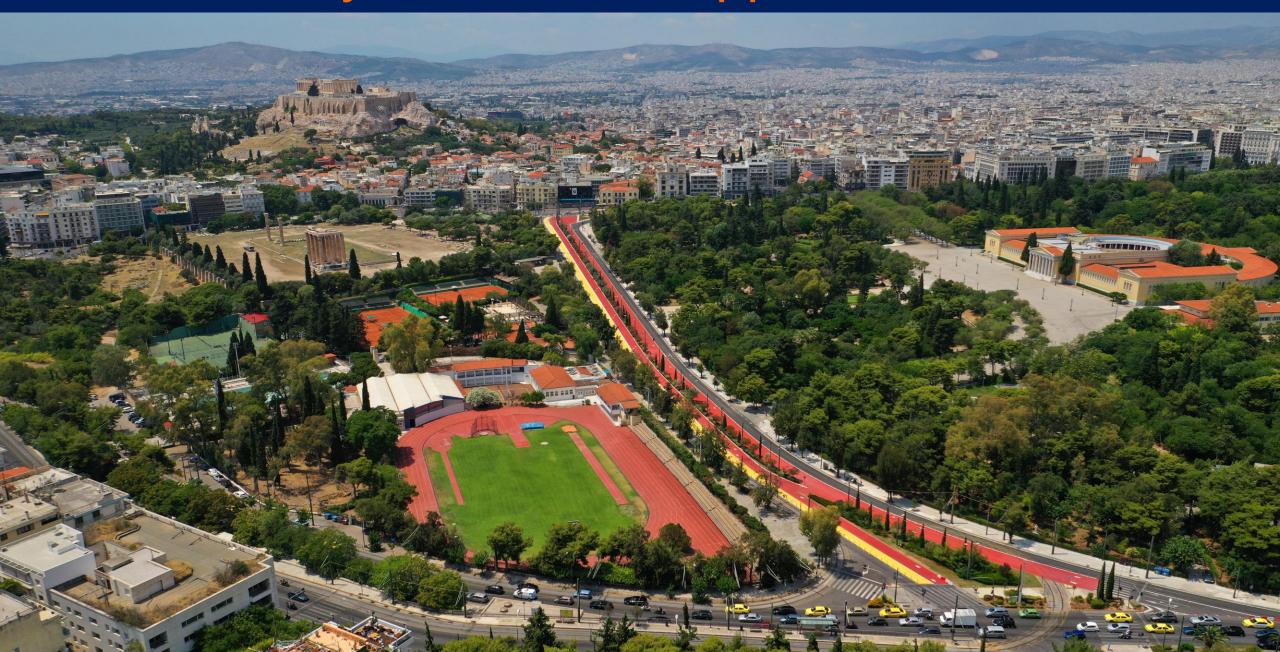


Action Plan for Road Safety

- 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 and Opportunities



Concluding Remarks

- 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
 - > 30km/h speed limits
 - > new recovery and resilience funds













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