

29<sup>th</sup> Annual Conference of the  
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Department of  
Management  
Faculty of Social Sciences  
Bar-Ilan University



Bar-Ilan Center  
for Smart Cities

# Road Safety in Greece A success story?

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# NTUA Road Safety Observatory

- The NTUA Road Safety Observatory ([www.nrso.ntua.gr](http://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,
  - 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 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







	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020/2019	2020/2010	2016/2020
<b>Injury Road accidents</b>	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%
<b>Fatalities</b>	1,258	1,141	988	879	795	793	824	731	700	688	579	-15.8%	-54.0%	-29.7%
<b>Serious Injuries</b>	1,709	1,626	1,399	1,212	1,016	999	879	706	727	652	487	-25.3%	-71.5%	-44.6%
<b>Slight Injuries</b>	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%
<b>Vehicle Fleet (x1000)</b>	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%
<b>Fatalities per million vehicles</b>	156	141	122	109	99	98	101	88	85	82	68	-17.0%	-56.4%	-32.6%
<b>Speed infringements</b>	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%
<b>Drink &amp; drive infringements</b>	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%
<b>Seat belt infringements</b>	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%
<b>Helmet infringements</b>	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 accidents 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

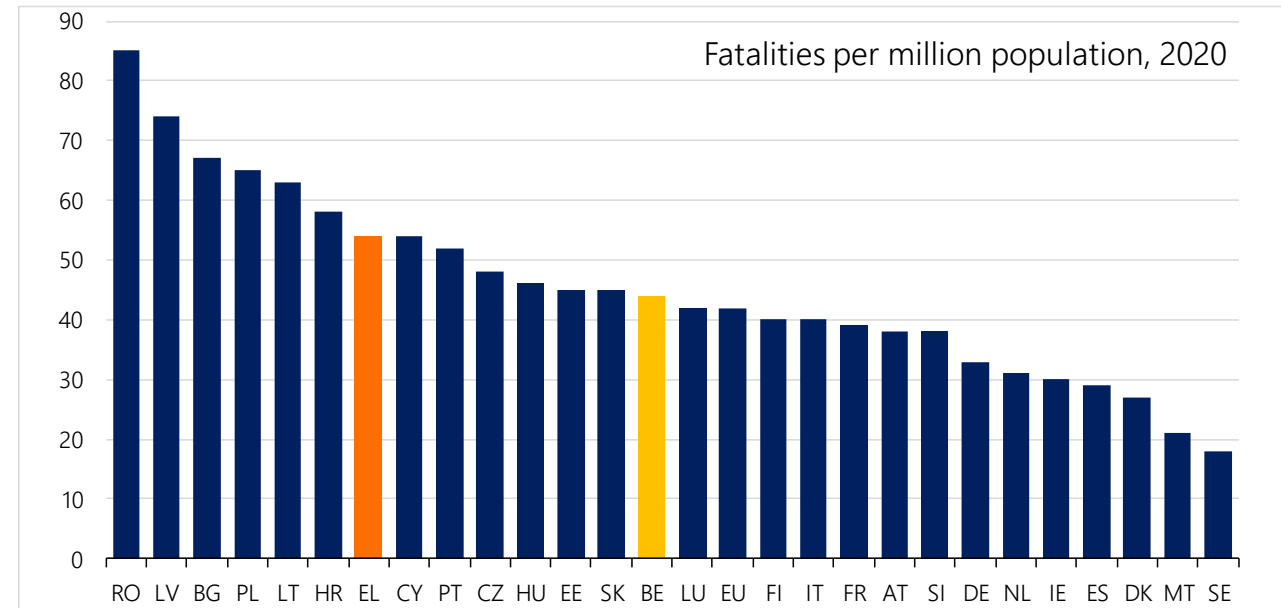
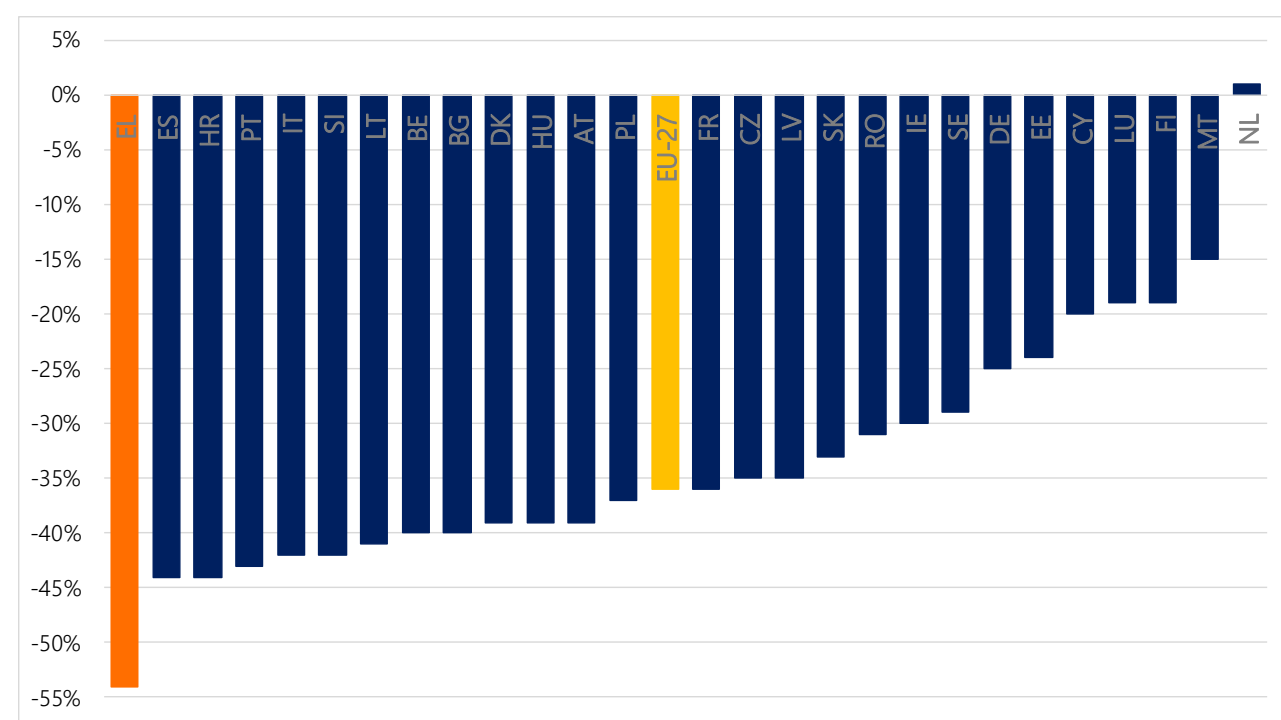


Notes: Figures in italics are based on provisional data  
 Issued: March 3rd, 2021  
 About the data: [www.nrso.ntua.gr/wp-content/uploads/nrso-data-gr5.pdf](http://www.nrso.ntua.gr/wp-content/uploads/nrso-data-gr5.pdf)  
 Sources: Hellenic Statistical Authority (ELSTAT)  
 Traffic Police  
 Processing: 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 (**54%**) in the EU (from position 27<sup>th</sup> in 2010 to position 20<sup>th</sup> 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%**



# 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%	38%
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 Crashes	52%	39%

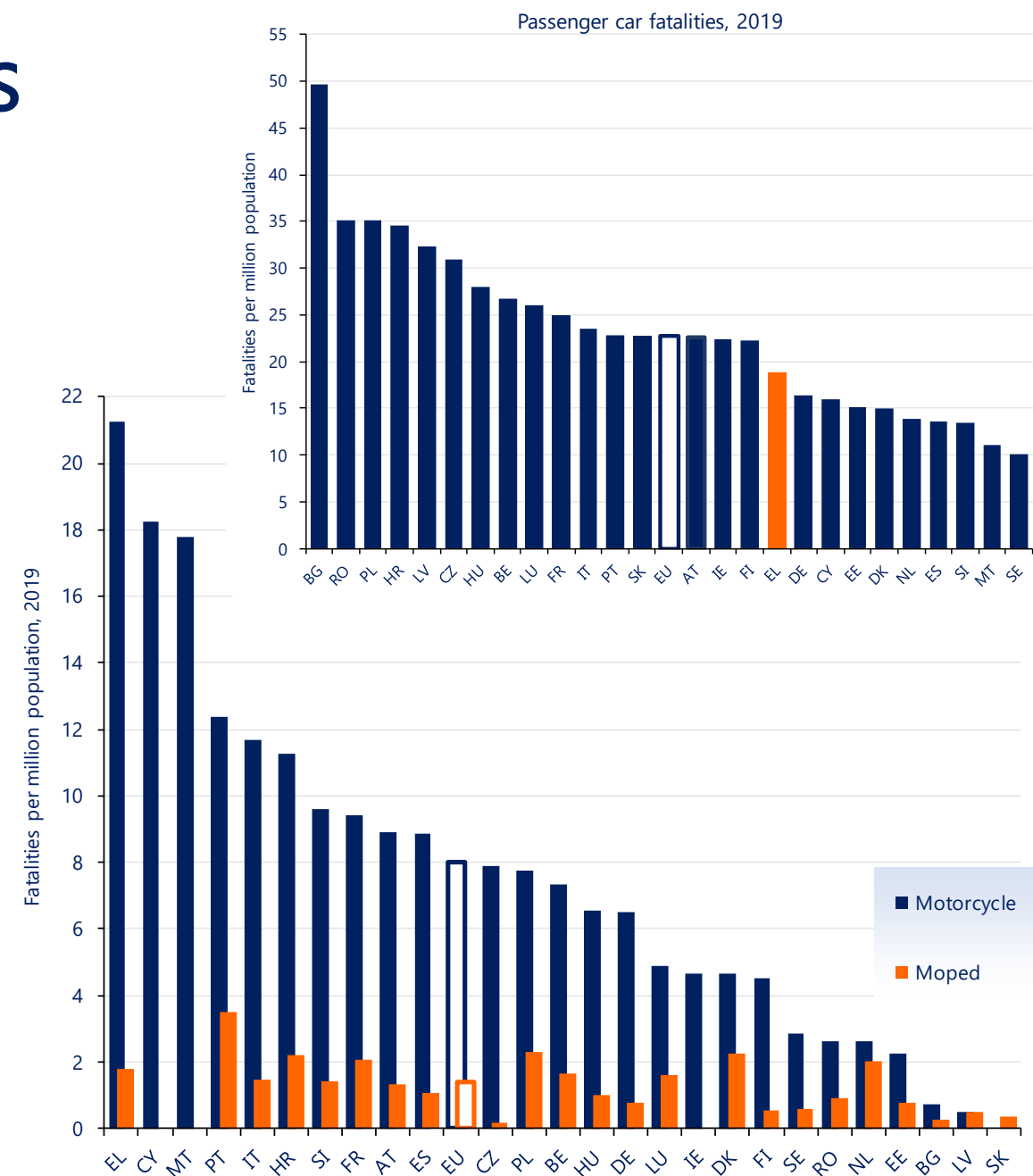
Fatalities in Passenger Cars (2019)		
Seat belt use	No seat belt use/ not recorded	Total
53	149	202
26%	74%	100%

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



# PTW vs Passenger Car Fatalities in Greece

- 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





# 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 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<sup>st</sup> lockdown) and **37%** (2<sup>nd</sup> lockdown) for people driving and walking compared to the period before
- **Increase in average speed** by 10% (1<sup>st</sup> lockdown) and 3% (2<sup>nd</sup> 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

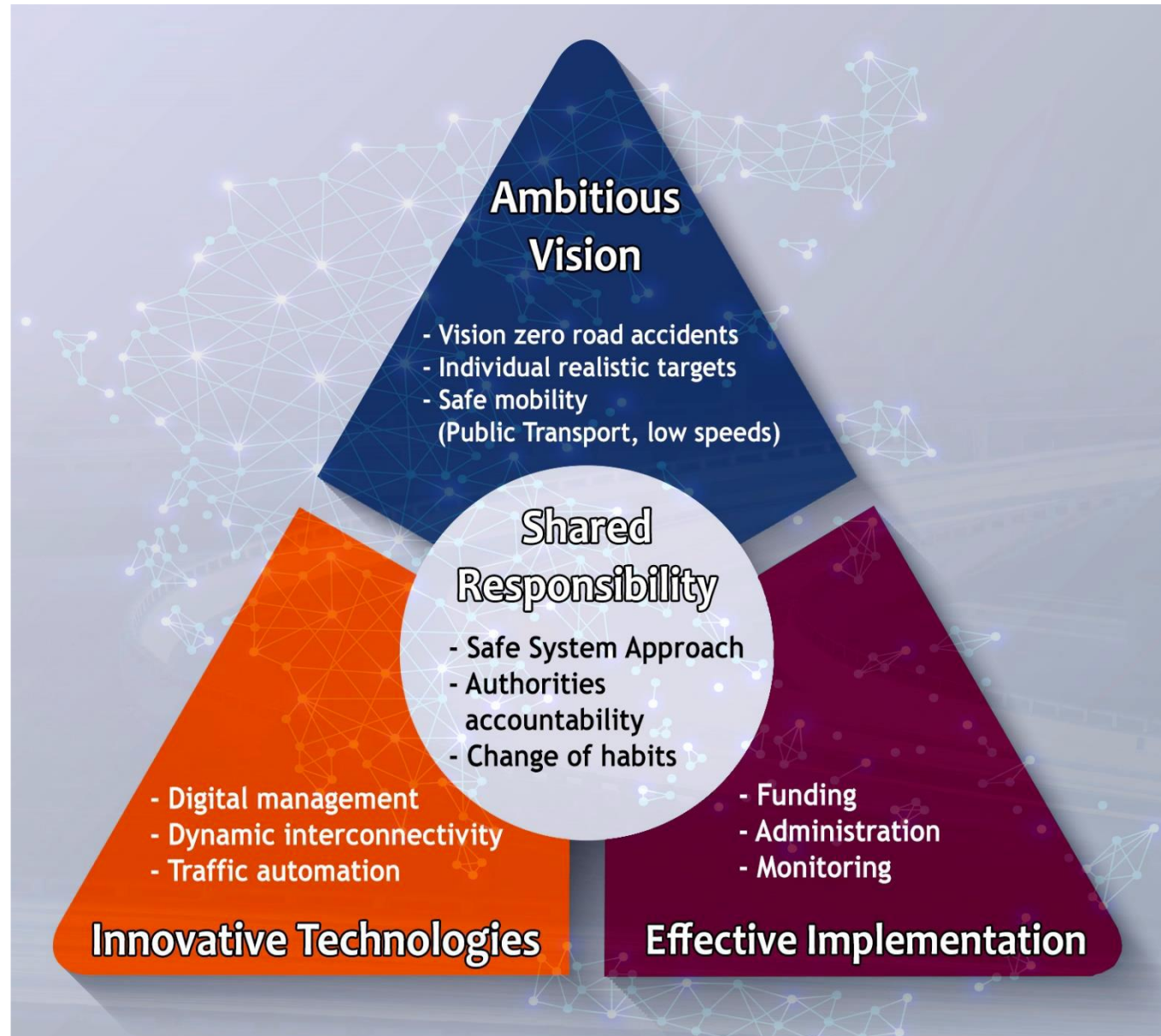
drafted by NTUA

- 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 crashes **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





# Key Lessons

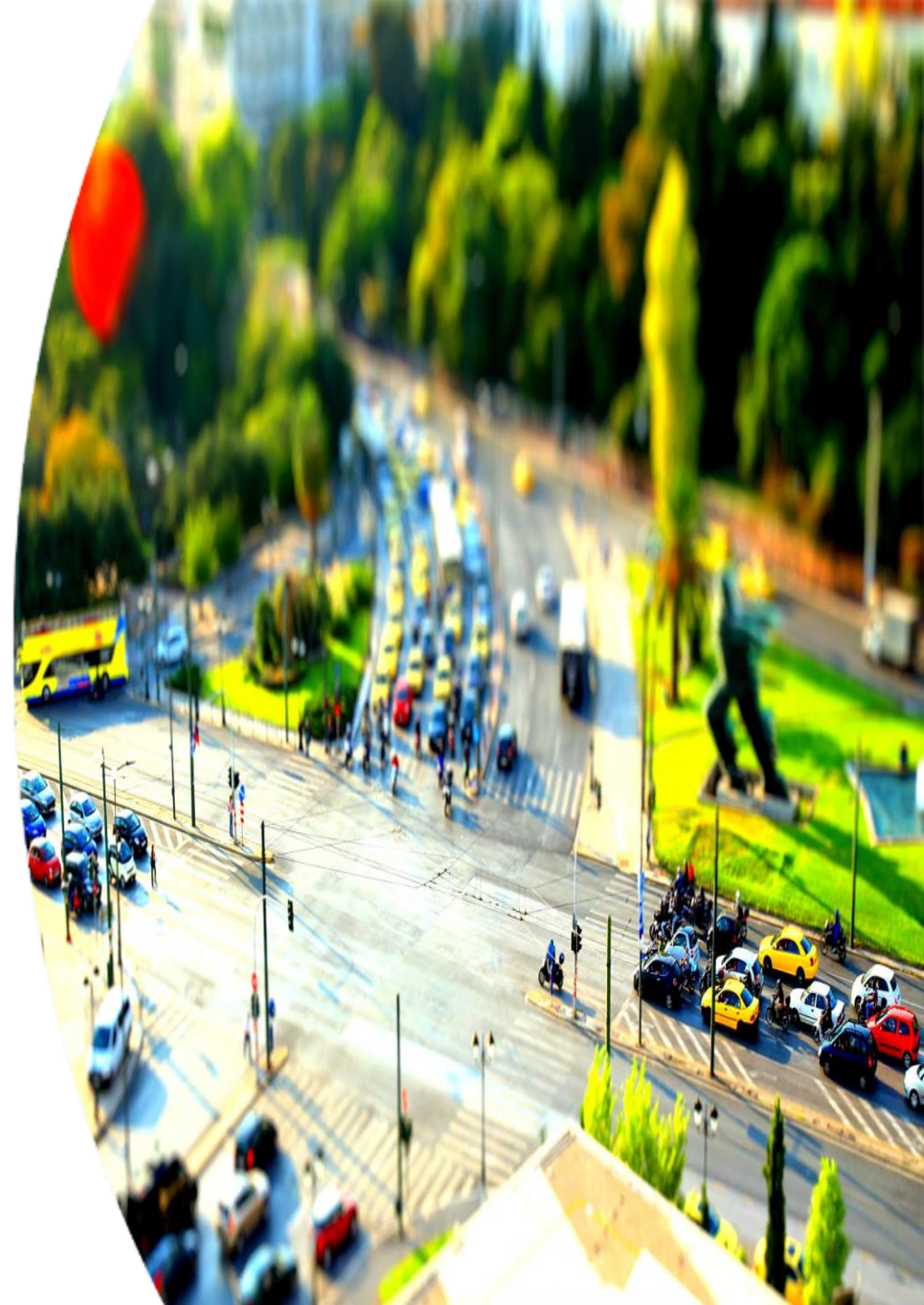
- Greece is a **success story** of significant road safety improvement by shock therapy
- The economic crisis was the main trigger for Greek Authorities and Greek drivers to **change their road safety behaviour**, which was maintained when the economy picked up again
- The challenge is to continue the 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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