

Hellenic National Technica inistry of Infrastructure University of and Transport Athens

Road Safety Strategic Plan Greece 2030



11th Technical Committee on Road Safety Belgrade, 6 October 2022

Setting Priority Measures to meet Targets and KPIs: The Greek National Road Safety Plan 2021-2030

> George Yannis, Dimitrios Nikolaou, Marianthi Kallidoni, Katerina Folla



Department of Transportation Planning and Engineering, National Technical University of Athens

Presentation Outline

- 1. National Road Safety Policy (2)
- 2. Road Safety in Greece (2)
- 3. Road Safety Targets for the decade 2021-2030 (2)
- 4. Road Safety Actions and Measures (11)
- 5. Concluding Remarks (2)

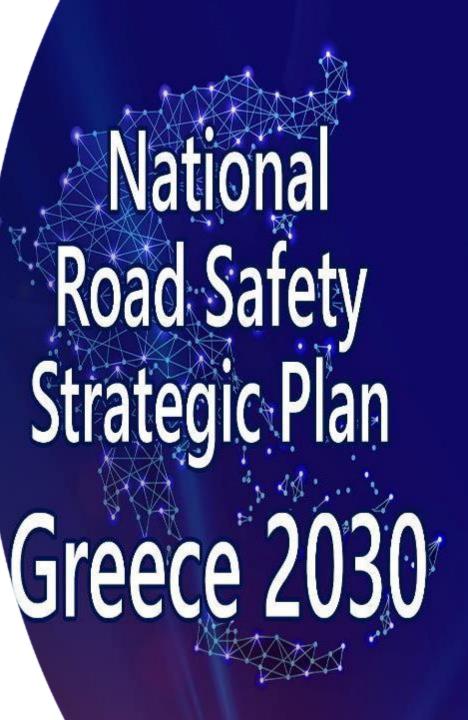
National Road Safety Policy



A Modern Strategic Plan

- The Hellenic Ministry of Infrastructure and Transport developed the National Road Safety Strategic Plan for the period 2021-2030, under the coordination of the Directorate of Road Traffic and Safety and with the scientific support of the Department of Transportation Planning and Engineering of the National Technical University of Athens.
- The National Strategic Plan concerns the definition, implementation and monitoring of the necessary actions to drastically reduce the number of persons killed and injured in road crashes.
- The development of the National Road Safety Strategic Plan was based on existing international experience, the detailed analysis of the Greek potential as well as on the systematic open consultation.



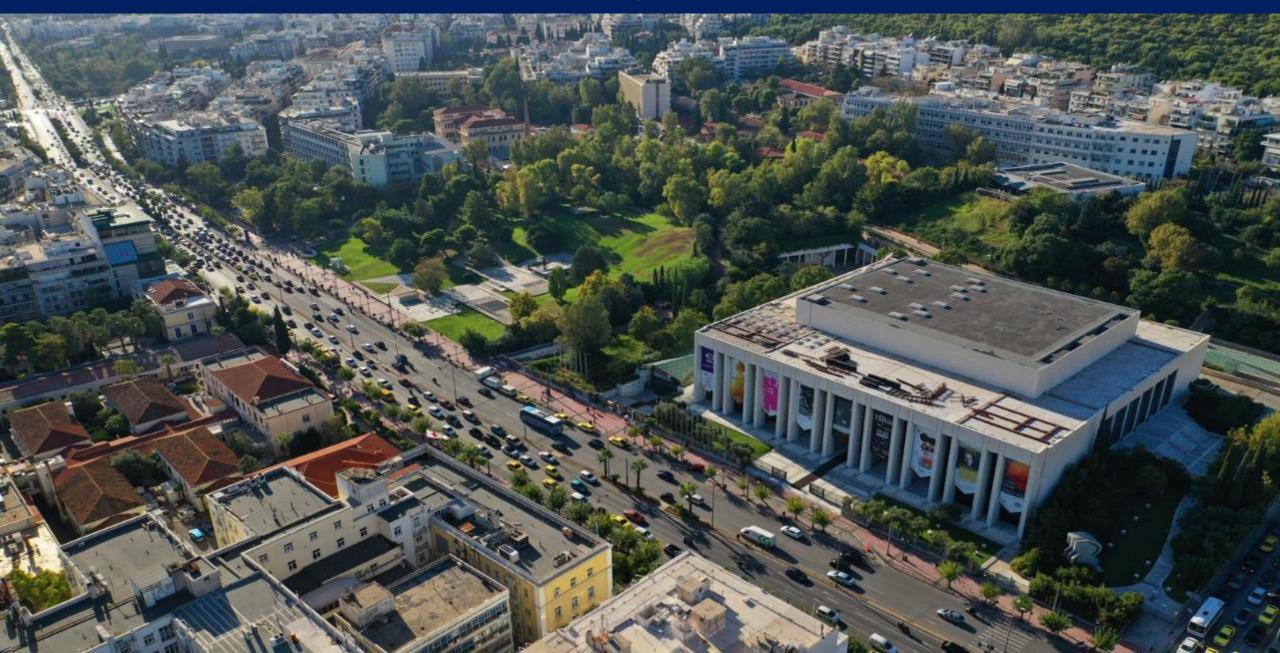


Strategic Plan Key Principles

Based on the principles of Vision Zero and Safe System Approach, a new holistic approach to road transport system's safety in Greece for the decade 2021-2030 has been adopted with the ultimate goal of achieving the ambitious vision zero fatalities by 2050.

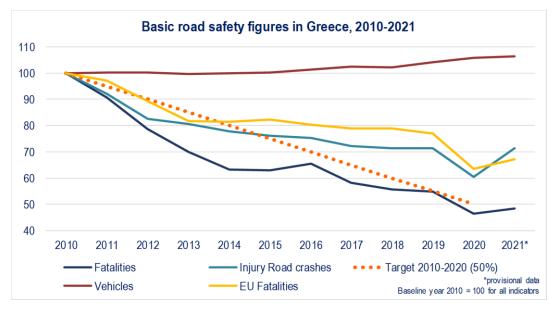


Road Safety in Greece



Constant Road Safety Improvement in Greece

- During the last decade (2010-2020), Greece presented the most significant road safety improvement among the EU countries, with a 54% reduction in the number of fatalities in road crashes, achieving the target of road fatalities' reduction by 50%.
- Moreover, a 39% reduction in road crashes and a 72% reduction in serious injuries were recorded.



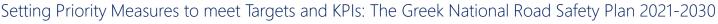




Key Crash Causes

- The comparison of Greek and EU road crash statistics reveals the most significant road safety problems in Greece.
- One of them is the particularly high rate of powered two-wheeler (motorcycles and mopeds) riders' fatalities (36%), which is twice as high as the respective EU average (18%).
- Greece also presents one of the highest rates (54%) of road fatalities inside built-up areas (EU average: 39%), mainly due to motorcycle road crashes.
- 41% of total road fatalities concerned singlevehicle road crashes (EU average 31%), mainly due to inappropriate high vehicle speeds.

	Greece		EU27
	2010-2019	2019	2019
2019	(%)	(%)	(%)
688	-45%	100%	100%
470	-44%	68%	65%
73	-70%	11%	15%
145	-19%	21%	20%
370	-38%	54%	39%
318	-52%	46%	61%
50	-43%	7%	9%
202	-63%	29%	44%
247	-55%	36%	18%
22	-4%	3%	9%
61	-54%	9%	8%
99	-24%	14%	15%
12	-60%	2%	2%
441	-43%	64%	55%
29	-52%	4%	8%
40	-61%	6%	13%
280	-44%	41%	31%
	6884707314537031850202247226199124412940	20192010-2019688-45%470-44%73-70%145-19%370-38%318-52%50-43%202-63%202-63%21-55%22-4%61-54%99-24%12-60%441-43%29-52%40-61%	20192010-2019 (%)2019 (%)688-45%100%470-44%68%73-70%11%145-19%21%370-38%54%318-52%46%50-43%7%202-63%29%247-55%36%22-4%3%61-54%9%99-24%14%12-60%2%441-43%64%29-52%4%



Source: CARE, ELSTAT, Processing: D.T.P.E., / NTUA.

Road Safety Targets for the decade 2021-2030



Targets for the Reduction of Road Crash Casualties

		Target		Targe	t (% reducti	on)	Lives to be save (annually)			
	Baseline year 2019	2025	2030	Baseline year 2019	2025	2030	2025	2030		
1. Fatalities	688 482 344				30%	50%	206	344		
2. Killed Motorcyclists	247	148	84	-	40%	66%	99	163		
3. Cities with zero fatalities*	9	40	49	-	-	-	85	105		
4. Killed on motorways	50	10	0	-	80%	100%	40	50		
5. Killed on Greek islands	124	74	50	-	40%	40%	40% 6	60%	50	74
6. Killed in single-vehicle crashes	280	152	95	51%**	40%**	35%**	128	185		
7. Road safety performance (fatality/population rate below EU average)	688	482***	344***	21 st position	16 th position	13 th position	206***	344***		
8. Serious injuries	652	456	326	-	30%	50%	196****	326****		

* Cities with population between 50,000 and 100,000 inhabitants

** Percentage of killed persons in single vehicle crashes in total number of killed occupants (drivers and passengers)

*** The estimation of the figures is based on population projections for Greece from the World Bank and the assumption that the same declining trend of road fatalities per population with that of the decade 2021-2030 remains for all EU countries, while Greece achieves the target of halving road fatalities in 2030

**** Seriously Injured road users to be saved (annually)



Targets for Improving Road Safety Performance Indicators

Key Performance Indicators	Baseline year 2022	Target 2025	Target 2030
1. Speeding	29%	<20%	<15%
2. Seat-belt use	71%	>85%	>95%
3. Helmet use	79%	>90%	>95%
4. Driving under the influence of alcohol	1,2%	0,8%	0,6%
5. Mobile phone use	7%	<5%	<2%
6. Percentage of new passenger cars with 5 Euro NCAP stars	89%**	95%	>99%
7. Percentage of TEN-T network (≥3 stars i-RAP/EC)	50%*	65%	80%
8. Emergency response time (minutes)	64**	51	42

*Estimation to be confirmed after the relevant Network-wide road safety assessment

** Baseline year 2020

Road Safety Actions and Measures



Road Safety Actions and Measures by Pillar

	Pillars	Actions	Measures
М	Road Safety Management	9	40
В	Road User Behaviour	8	40
I.	Road Infrastructure & Traffic	13	61
V	Vehicle	8	31
Ρ	Post-crash Care	6	28
	Total	44	200

Budget of Measures by Road Safety Pillar

	Pillars	Actions	Measures	Decade Budget (€)
Μ	Road Safety Management	9	40	101.600.000 €
В	Road User Behaviour	8	40	8.100.000 €
1	Road Infrastructure and Traffic	13	61	1.017.200.000 €
V	Vehicle	8	31	4.400.000 €
Р	Post-crash Care	6	28	2.600.000 €
	Total	44	200	1.133.900.000 €

Note: large-scale interventions such as the construction of motorways etc. are not included.

The sources of **Funding** of the Measures concern:

- the Public Investment Program
- the National Strategic Reference Framework (NSRF)
- the National Recovery and Resilience Plan (NRRP)
- other European resources (Connecting Europe Facility, EIB, etc.)
- various fees (Technical Inspections, Driving and Vehicle Licenses etc.)
- Road Traffic Code infringements' fines
- all types of sponsorships and donations from private sector

Socio-economic Analysis

Targets	NPV	IRR
Reduction of road crash casualties	5.741.302.000 €	97%
Reduction of motorcyclists' casualties	2.917.296.000€	70%
Reduction of casualties in Greek cities (50.000-100.000 pop.)	2.133.692.000€	63%
Reduction of casualties on motorways	1.049.735.000 €	47%
Reduction of casualties on Greek islands	1.419.189.000€	52%
Reduction of casualties in single-vehicle crashes	3.469.077.000 €	76%

- ➤ The total implementation cost of the 200 Road Safety Measures is €1.133.900.000
- The Analysis is conducted for each of the general and individual targets for the reduction of road casualties for the years 2025 and 2030
- For the calculation of the Net Present Value (NPV) a social discount rate equal to 0.8% is taken into account

Setting Priority Measures (1/2)

- The 200 Road Safety Measures were categorised based on their implementation priority (high, medium, low) that was determined through a Delphi survey among 21 road safety experts in Greece.
- The road safety experts evaluated the measures based on the following six criteria:
 - safety effect (high, medium, low),
 - safety effect (short-term, mid-term, long-term)
 - safety effect (permanent, temporary)
 - safety effect for the VRUs (high, medium, low),
 - implementation easiness (easy, medium, difficult)
 - implementation readiness (ready to start, medium, not ready)
- Two additional criteria were filled in for each measure by the project team:
 - whether they are prerequisites for the implementation of other measures (yes, no)
 - cost (to be funded) (low: 0-100k€, medium: 100k-1m €, high: >1m €)



Setting Priority Measures (2/2)

- The respondents of the survey were asked to fill in the weighting factor (0-100%) that they think each examined criterion should have in the weighting of the final results for highlighting the priorities, so that the sum of the weighting factors of all eight criteria had to be 100%.
- ➤ This methodology aimed to better organise the road safety actions over the decade 2021-2030, in order to achieve the maximum safety benefit and meet both the intermediate and final road safety and KPI targets by 2025 and 2030 respectively.
- After applying the specific methodological approach, the 200 Road Safety Measures are divided into:
 - 81 High Priority Measures
 - 61 Medium Priority Measures
 - 58 Low Priority Measures





Road Safety Management

Key Priority Actions

- ➢ New Road Safety Law
- Integrated System of Infringement Management
- ► National Road Safety Fund
- ► National Road Safety Observatory
- ➤Ten-year Communication Policy

Actions Measures	Munic	. Reg.	МСР	GSI	GST	МН	MI	MERA	MDG	Law			*
M1 Integrated Road Safety Management Structure													
M1.1 Governmental Committee	-	-	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		-	-
M1.2 National Road Safety Agency	-	-	$\overline{\mathbf{v}}$	$\overline{\mathbf{v}}$	$\overline{}$	$\overline{\mathbf{v}}$	$\overline{\mathbf{v}}$	$\overline{}$	$\overline{\mathbf{v}}$	$\overline{}$	$\overline{}$	-	-
M1.3 Organization of Road Safety Units	$\overline{\mathbf{v}}$								$\overline{}$	$\overline{}$	$\overline{}$	-	-
M1.4 National Road Safety Council	V	V		$\overline{\mathbf{v}}$		$\overline{}$	$\overline{\mathbf{v}}$		V	7	-	-	$\overline{\mathbf{v}}$
M1.5 ISO 39001 Certification	$\overline{}$	ti							V			-	V V
M2 Road Safety Law	<u> </u>	<u> </u>				<u> </u>	<u> </u>		<u> </u>		L		
M2.1 Institutionalization of responsibilities			\checkmark		\checkmark	V	\checkmark						· · · ·
M2.2 Institutionalization of accountability	<u> </u>	<u> </u>	-		$\sqrt{\frac{1}{\sqrt{2}}}$			<u> </u>	\vdash		1-i-	++	
M3 Road Safety Fund	L	1	<u> </u>	4)	L	ii	1)	1	د	L	L	ii	· /
M3.1 Function of Fund Management Authority	-	-	-	_	\checkmark	-	$\overline{\mathbf{A}}$	-	- 1				-
M3.1 Function of Fund Management Authonity M3.2 Road Safety Fund Revenue System	-	-	-	-	$\sqrt{\frac{1}{\sqrt{2}}}$	-	$\sqrt{1}$	-	-	$\overline{}$	$\frac{N}{}$	-	-
M3.2 Road Safety Fund Revenue System M3.3 Budget Allocation and Execution	-	-	-	-	$\frac{\gamma}{}$	-	$\frac{N}{}$	-	- N	$\frac{\gamma}{\sqrt{\gamma}}$	$\frac{\gamma}{}$	-	-
	L	1	<u> </u>	i		1	<u>i</u>	L	ii	LYI	<u> </u>	L	
M4 Road Safety Observatory M4.1 Collection of Crash data		1											·
M4.1 Collection of Crash data M4.2 Collection of Traffic data		-	 	-	-	-	-	-	N V			N -	-
	1				-ll							- 	
M4.3 Collection of Performance Indicators data	1	1	√	√	√	√	-	-		-		-	-
M4.4 Collection of Perception data	V	√	-	-		-	-	-			-	-	
M4.5 Technical Analyses	1	1	√	√	√	1	-	-	$\overline{\mathbf{v}}$		1	-	-
M4.6 Monitoring the progress of actions	√	\checkmark	1	\checkmark		\checkmark	\checkmark	\checkmark				-	-
M4.7 Publication of Statistics and Results	-	-	\checkmark	-		-	-	-		-	-	\checkmark	-
M4.8 International Rankings	-	-	\checkmark	-	\checkmark	-	-	-	\checkmark	-	-	-	\checkmark
M5 Road Traffic Code										,	,		
M5.1 Comprehensive penalty policy	-	-	\checkmark	- '	\checkmark	-	-	- '	-	\checkmark		- 1	L
M5.2 Settings for vulnerable road users	-	-	\checkmark	-	\checkmark	-	-	-	-	\checkmark	\checkmark	-	-
M5.3 Codification of Legislation	-	-	-	-	\checkmark	-	-	-	-	\checkmark	-	\checkmark	-
M6 Infringement System Management													
M6.1 Change of Legal Framework	-	-	\checkmark	-	\checkmark	-	-	-	\checkmark	\checkmark	\checkmark	-	-
M6.2 Digital recording of traffic infringements	-	-	\checkmark	-	\checkmark	-	-	-	\checkmark	\checkmark	\checkmark	-	-
M6.3 Organization of a Traffic Infringement Management Center	-	-	\checkmark	-	-	-	-	-	\checkmark	\checkmark	\checkmark	-	-
M6.4 Driver Behavior Control System Automation	-	-	\checkmark	-	\checkmark	-	-	-	\checkmark	\checkmark		-	-
M6.5 System for informing road users on violations	-	-	\checkmark	-	-	-	-	-	\checkmark	\checkmark	\checkmark	-	-
M7 National Road Safety Communication Policy	·····									k	L		
M7.1 Central ten-year road safety campaign	-	-	-	-	\checkmark	-	-	\checkmark	-	-	\checkmark		-
M7.2 Annual thematic road safety campaigns	-	-	-	-	\checkmark	-	-	\checkmark	-	-	\checkmark	-	-
M7.3 Special Communication Actions	-	-	-	-		-	-	-	-	-	-	\checkmark	-
M7.4 Information campaigns in touristic areas				-		-	-	-	-	-	-	V	-
M7.5 Collaboration with Mass Media	V	V	, √	\checkmark	, √	\checkmark	\checkmark	\checkmark	-	$\overline{\mathbf{v}}$	-	V	-
M8 Road Safety Action Plans	L								·	L	L		
M8.1 Road Safety Action Plans in Municipalities		-	-	-	\checkmark	-	-	-	-	\checkmark		-	-
M8.2 Road Safety Action Plans in Regions	-		-	-	, V	-	-	-	-		V	-	-
M8.3 National Road Safety Action Plan for Motorcycles	-	-	-	-		-	-	-	-	$\overline{}$	$\overline{}$	-	-
M8.4 National Speed Management Action Plan	-	-	-	-		-	-	-	-	$\overline{}$	$\overline{}$	-	-
M8.5 Road Safety Action Plan in Touristic Areas		-	-	-	$\overline{}$	-	-	-	-	$\overline{\mathbf{v}}$	-	1	-
M8.6 Action Plan for the Adaptation to Automated Traffic		-	-	-		-	-	-	-				-
M9 Road Safety Research		1	<u> </u>			<u> </u>	<u> </u>	<u> </u>		L	L		
M9 Road Safety Research	_	-			-	-	-		-	-		-	
M9.1 Interdisciplinary Road Safety Research M9.2 Research on automated traffic					-	++	-	$\frac{N}{}$	-			++	$\frac{N}{}$
	-	-	-	-	-	-	-	$\frac{N}{}$	-			-	
M9.3 Highlighting road safety research results	- 12	- 12	- 21	- 11	- 34	- 10	- 11	√ 13	- 20	- 25	- 25	- 8	√ 7
9 40	12	12	21	11	34	10	11	13	20	20	20	ŏ	1



*** High Priority, ** Medium Priority, * Low Priority

Road User Behaviour

Key Priority Actions

Systematic Enforcement (Priorities for Driver Behaviour Improvement, Protective Equipment Use)

Actions	Measures	Munic	. Reg.	МСР	GSI	GST	МН	МІ	MERA	MDG	Law	***	**	*
B1 Enfo	rcement													
B1.1	Systematic and targeted enforcement for road safety	-	-	\checkmark	-	-	-	-	-	-	-		-	-
B1.2	Monitoring and publication of monitoring results	-	-			-	-	-	-		-		-	-
B1.3	New Patrol Vehicles	-	-		-	-	-	-	-	-	-	-	-	
B1.4	Surveillance cameras	-	-	V		-	-	-	-	-	-	-		-
B1.5	Equipment for alcohol and substances tests	-	-	, V	-	-	-	-	-	-		-	,	-
B1.6	Violation and crash recording equipment	-	-	, V	-	-	-	-	-	-	-	-	v	-
B1.7	Cross-border enforcement of sanctions	-	-	V	-		-	-	-		$\overline{\mathbf{v}}$	-		
1	ng Licenses	L	1						<u> </u>			L	LL_	
B2.1	Upgrading of driver training and examination system	-	-	-	-		-	-	-	- 1		-		-
B2.2	Training and examination in hazard perception	-	-	-	-	, V	-	-	-	-	$\overline{\mathbf{v}}$	-	-	
	Accompanied driving	-	-	-	-	v	-	-	-	-	$\overline{\mathbf{v}}$	-		-
	Continuous training of professional drivers		-		-	$\overline{}$	-	_	-		-		, V	-
3	er Education/Training	L	L	L		L					[]	L	L	l
B3.1	Continuing driver training programs	_	-		_		_	-	_				V	-
B3.2	Training in new driver support systems	_	-		_		-	-	-	-	$\overline{}$	-		-
B3.3	Training and performance assessment of professional drivers		-	-	-		-	-	-	-	V		v √	-
B3.4	Diagnostic (traffic-psychological) evaluation of offenders			_	-		√	-	-		$\overline{}$		V	-
B3.4 B3.5	Re-education of recidivist offenders	-	-	-	-		- V	-	-	-	$\overline{}$	-		-
B3.6	Training through simulation		-	-	-		-	-	-		$\overline{}$	-	v	
1	bol Education		-	-	-	V	-	-	-	-		-	-	
	Education programs for children (<12 years old)				_			_	\checkmark	_				_
B4.1 B4.2		-	-	V	-	$\sqrt{\frac{v}{\sqrt{v}}}$	-	-		-			-	-
	Education programs - adolescent education	-	-	 √	-	$\sqrt{\frac{1}{\sqrt{2}}}$	-	-	$\sqrt{\frac{N}{2}}$		-		-	-
B4.3	Train the trainer programs			· · · · · · · · · · · · · · · · · · ·	-	·····				-			N	
B4.4	Education programs for parents		-	1	-	\checkmark	-	-		-			-	1
B4.5	Introduction of Traffic Education in Pedagogical Schools	-	-	-	-	-	-	-	1	-		-	-	
B4.6	Traffic Education Parks	√	-	-	-		-	-	<u>√</u>	-	-	-	-	
B4.7	Modernization of the e-drive academy operation	-	-	-	-	\checkmark	-	-	\checkmark	-	-	-	-	\checkmark
	mation Campaigns	[1			, , ,					[]			
B5.1	Coordination of information campaigns of Public and Private Bodies	-	-	-	-	1	-	-	-	-	-	-	-	-
	Systematic information campaigns			1	1	1			1		-	-	-	-
	Public-Private Partnerships			1			\checkmark		1	-	-	-	-	
B5.4	Coordinated campaigns with enforcement and infrastructure actions	V	\checkmark	N		\checkmark	-	-	-	-	-	-	\checkmark	-
	ities for Driver Behaviour Improvement		1		1	3 / 1			8 / 1			E /		
B6.1	Speed management	-	-		-		-	-	V	-	-		-	-
B6.2	Driver distraction	-	-		-		-	-		-	-		-	-
B6.3	Driving under the influence of alcohol	-	-		-	1	-	-		-	-		-	-
B6.4	Driving under fatigue	-	-		-		-	-		-	-		-	-
B6.5	Violation of priority	-	-	\checkmark	-	\checkmark	-	-	\checkmark	-	-		-	-
	ective Equipment Use		·,····	,		,			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				,	
B7.1	Helmet	-	-		-	\checkmark	-	-		-	-		-	-
B7.2	Safety belt	-	-	\checkmark	-	\checkmark	-	-		-	-		-	-
B7.3	Child restraint systems	-	-	\checkmark	-	\checkmark	-	-	\checkmark	-	-		-	-
B7.4	Safety equipment for cyclists	-	-	\checkmark	-	\checkmark	-	-	\checkmark	-	-	-	\checkmark	-
B8 Teler	natics													
B8.1	Promoting driver behavior monitoring using telematics	-	-	-	-	\checkmark	-	-	-	-	-	-	\checkmark	-
B8.2	Compulsory insurance with telematics for specific categories of drivers	-	-	-	-		-	-	-	-	\checkmark	-	\checkmark	-
B8.3	Telematics in fleet safety management	-	-	-	-		-	-	-	-	-	-	\checkmark	-
8 40	· · · · · · · · · · · · · · · · · · ·	4	3	23	5	33	3	2	18	2	13	12	18	10



*** High Priority, ** Medium Priority, * Low Priority

Road Infrastructure & Traffic

- **Key Priority Actions**
- Integrated Management of Mobility
- > Interurban Roads Improvements
- Interventions in Cities
- > 30 km/h Zones in cities
- ➢Road Works Management

Actions	Measures	Munic.	Reg.	МСР	GSI	GST	MH	MI	MERA	MDG	Law			
11 Integr	ated Management of Mobility													
11.1	Metropolitan Agency for Mobility in Athens	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	-	-		-		-	-
11.2	Integration of Road Safety in Sustainable Urban Mobility Plans (SUMP)		\checkmark	-	-	\checkmark	-	-	-	-			-	-
11.3	Upgrade and staff public transport	\checkmark	\checkmark	-	-	\checkmark	-	-	-	-	-		-	-
11.4	Ensuring priority in public transport		\checkmark		-	\checkmark	-	-	-	-	-		-	-
l2 Spee	d Limits Revision	L							·		L	L		
12.1	Speed limit suitability check			-	\checkmark	-	-	-	-	-	-	-		-
12.2	30 km/h zones in urban centers		\checkmark		-	\checkmark	-	-	-	-	\checkmark		-	-
12.3	Reduction of speed limit to 80km/h in the rural network		\checkmark	\checkmark	-	\checkmark	-	-	-	-	\checkmark	-		-
12.4	Introduction of variable speed limits on motorways	-	-			-	-	-	-	-	\checkmark	-	-	\checkmark
13 Speed	I Management													
13.1	Infrastructure adaptation	\checkmark		-	\checkmark	-	-	-	-	-	-	\checkmark	-	-
13.2	Section control	-	-	\checkmark	\checkmark	-	-	-	-	-	\checkmark	-	-	\checkmark
13.3	Dynamic speed signs	\checkmark	\checkmark	-	\checkmark	-	-	-	-	-	\checkmark	-	-	\checkmark
	Safety Audit													
14.1	Digital Road Register	-	-	-		-	-	-	-	-	-	-		-
14.2	Road network safety assessment	-	-	-	\checkmark	-	-	-	-	-	-	-		-
14.3	Road Safety Audit on the Existing Rural Network	-	\checkmark	-	-	-	-	-	-	-	-	-	\checkmark	-
14.4	Road Safety Audit on the Existing Urban Network	\checkmark	-	-	-	-	-	-	-	-	-	-	-	\checkmark
14.5	Road Safety Audit on New Road Works	\checkmark	\checkmark	-	\checkmark	-	-	-	-	-	-	-	\checkmark	-
	vements in High Risk Sites on the Rural Road Network													
15.1	Marking	\checkmark	\checkmark	-	-	-	-	-	-	-	-		-	-
15.2	Safety barriers	\checkmark	\checkmark	-	-	-	-	-	-	-	-	\checkmark	-	-
15.3	Improvement of electric lighting	\checkmark	\checkmark	-	-	-	-	-	-	-	-	\checkmark	-	-
15.4	Roadside treatment	\checkmark	\checkmark	-	-	-	-	-	-	-	-	\checkmark	-	-
15.5	Assessment and improvement of visibility	\checkmark	\checkmark	-	-	-	-	-	-	-	-	\checkmark	-	-
15.6	Road pavement maintenance	\checkmark	\checkmark	-	-	-	-	-	-	-	-	\checkmark	-	-
15.7	Upgrading of signage, safety barriers, electric lighting, vegetation	\checkmark	\checkmark	-	-	-	-	-	-	-	-	\checkmark	-	-
15.8	Interventions at level train crossings	\checkmark	\checkmark	-	-	-	-	-	-	-	-	-	\checkmark	-
16 Interv	entions on the Rural Road Network													
16.1	Road redesign	\checkmark	\checkmark	-	-	-	-	-	-	-	-	-		-
16.2	Modification of road cross-section	\checkmark	\checkmark	-	-	-	-	-	-	-	-	-	\checkmark	-
16.3	Redesign of intersections	\checkmark	\checkmark	-	-	-	-	-	-	-	-	\checkmark	-	-
16.4	Roundabouts	\checkmark	\checkmark	-	-	-	-	-	-	-	-		-	-
16.5	Leveling of intersections	\checkmark	\checkmark	-	-	-	-	-	-	-	-	-	\checkmark	-
	Scale Infrastructure Projects													
17.1	Upgrading roads to motorways	-	-	-		-	-	-	-	-	-	-	-	\checkmark
17.2	Creation of bypass roads of settlements	\checkmark		-	-	-	-	-	-	-	-	-	-	\checkmark
17.3	Preparation and implementation of tunnel safety plans	-	-	-	\checkmark	-	-	-	-	-	-	-	-	\checkmark
17.4	Undergrounding of railway lines in cities	-	-	-	\checkmark	-	-	-	-	-	-	-	-	

Road Infrastructure & Traffic

- **Key Priority Actions**
- Integrated Management of Mobility
- > Interurban Roads Improvements
- Interventions in Cities
- > 30 km/h Zones in cities
- ➢Road Works Management

ACI	lions	measures	Muni	c. Reg.	WICP	631	651	MH	IVI I	WERA	WDG	Law			
18	nterver	ntions in the Urban Road Network													
	18.1	Redesign of intersections			-	-	-	-	-	-	-	-	\checkmark	-	-
	18.2	Roundabouts		\checkmark	-	-	-	-	-	-	-	-	\checkmark	-	-
	18.3	Widening of sidewalks		\checkmark	-	-	-	-	-	-	-	-	\checkmark	-	-
	18.4	Road pavement maintenance		\checkmark	-	-	-	-	-	-	-	-	\checkmark	-	-
	18.5	Upgrading of signage, safety bariers, electric lighting, vegetation		\checkmark	-	-	-	-	-	-	-	-	\checkmark	-	-
19 1	Fraffic (Calming Measures	20060340006000												
	19.1	Traffic Calming Measures		-	-	-	-	-	-	-	-	-	\checkmark	-	-
	19.2	20 km/h limit outside schools		-	-	-		-	-	-	-		\checkmark	-	-
	19.3	Upgrading of pedestrian crossings		-	-	-	-	-	-	-	-	-	\checkmark	-	-
	19.4	Creation of pedestrian roads		-	-	-	-	-	-	-	-	-	-	\checkmark	-
10	Pedes	trian, Bicycle and e-Scooter Traffic	,		,		,	,	,		,		,		
	110.1	Creating infrastructure for bicycle traffic		-	-	-	-	-	-	-	-	-	-	\checkmark	-
	110.2	Configuration of intersections		-	-	-	-	-	-	-	-	-	-		-
	110.3	Special pedestrian crossing signage		-	-	-	-	-	-	-	-	-	-	-	\checkmark
	110.4	Update bicycle traffic rules		-	-	-		-	-	-	-		-	\checkmark	-
11		Safety Traffic Regulations					~~~~~~								
	111.1	Improvement of signaling		\checkmark	-	-	-	-	-	-	-	-	\checkmark	-	-
	111.2	One-way roads		\checkmark	-	-	-	-	-	-	-	-	-	-	
	111.3	Parking management		\checkmark	-	-	-	-	-	-	-	-	-	-	
	111.4	Acess control on highways	-	-	-	-		-	-	-	-	-	-	-	
	111.5	Heavy vehicle traffic restrictions	-	-	-	-		-	-	-	-	-	-	-	
	111.6	Creating overtaking lanes		\checkmark	-	-	-	-	-	-	-	-	-	-	
	111.7	Management of adverse weather conditions		\checkmark	-		-	-	-	-	-	-	-	-	
12	Road	Works Management					~~~~~~				······································				
	112.1	Application of appropriate marking and signage		\checkmark	\checkmark		-	-	-	-	-	\checkmark	\checkmark	-	-
	112.2	Reduction of road works duration		\checkmark	-	-	-	-	-	-	-	-	\checkmark	-	-
	112.3	Proper restoration of road pavement		\checkmark	-	-	-	-	-	-	-	-	\checkmark	-	-
	112.4	Proper restoration of horizontal and vertical markings	V	\checkmark	-	-	-	-	-	-	-	-	\checkmark	-	-
	112.5	Driver information campaigns	V	\checkmark	\checkmark	\checkmark	-	-	-	-	-	-	-	-	
13	Regula	ations													
	113.1	Updating and supplementing instructions and regulations	-	-	-		-	-	-	-	-		-		-
	113.2	Land use management	\checkmark	\checkmark	-	-	-	-	-	-	-	-	-	\checkmark	-
	113.3	Updating and supplementing urban planning regulations	\checkmark	\checkmark	-		-	-	-	-	-		-	\checkmark	-
13	61		4	8 40	7	16	8	0	0	0	0	10	28	17	16
					dested		<u> </u>	•.			-	,		- ·	

Setting Priority Measures to meet Targets and KPIs: The Greek National Road Safety Plan 2021-2030

*** High Priority, ** Medium Priority, * Low Priority

Vehicle

Key Priority Actions

- Vehicle Digital Identity
- New active safety systems

Actions	Measures	Munic.	Reg.	MCP	GSI	GST	MH	MI	MERA MDG	Law			
V1 Vehic	cle Fleet Renewal												
V1.1	Incentives for car fleet renewal	-	-	-	-	\checkmark	-	-		$\overline{\mathbf{v}}$	-	√ -	
V1.2	Incentives for commercial fleet renewal	-	-	-	-	\checkmark	-	-		\checkmark	-	- V	\int
V1.3	Privileges for safe vehicles	-	-	-	-	\checkmark	-	-			-	- V	\square
V1.4	Systematic updating of EuroNCAP results	-	-	-	-	\checkmark	-	-		-	-	- V	\int
V2 Vehic	cle Digital Identity	-								I harmonia			
V2.1	Vehicle Technical Inspection Centers (KTEO) interconnection system	-	-	-	-	\checkmark	-	-	- 1	\checkmark			
V2.2	Integrated vehicle information system	-	-	-	-	\checkmark	-	-	- 🗸	\checkmark	\checkmark		
V2.3	Driver information system	-	-	-	-	\checkmark	-	-	- V	\checkmark	\checkmark		
V3 Vehic	cle Technical Inspection										~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		000000
V3.1	Systematic vehicle inspections	-	\checkmark	-	-	\checkmark	-	-		-	\checkmark		
V3.2	Special technical inspection of vehicles for tourism	-	\checkmark	-	-	\checkmark	-	-		\checkmark	-	√ -	
V3.3	Reliability check of vehicle technical inspection	-	\checkmark	-	-	\checkmark	-	-	- 🗸	-	-	√ -	
V4 New	active safety systems											1000	
V4.1	Driver warning systems	-	-	-	-	\checkmark	-	-		\checkmark	-	√ -	
V4.2	Driver support systems	-	-	-	-	\checkmark	-	-		\checkmark	-	√ -	.]
V4.3	Electronic Tachograph	-	-	-	-	\checkmark	-	-	- 🗸	\checkmark	-	√ -	
V4.4	Alcohol detector-key system	-	-	-	-	\checkmark	-	-		\checkmark			
V4.5	Installation of black box in all vehicles	-	-	-	-	\checkmark	-	-		\checkmark	-	- 🗸	
V4.6	Blind spot mirrors on trucks	-	-	-	-	\checkmark	-	-		\checkmark	\checkmark		
V4.7	Pedestrian / bicyclist detection sensors in trucks	-	-	-	-	\checkmark	-	-		\checkmark	\checkmark		
	passive safety systems												
	New child restraint systems	-	-	-	-	\checkmark	-	-		\checkmark	-	√ -	
	Pedestrian protection systems	-	-	-	-	\checkmark	-	-		\checkmark	-	√ -	
V5.3	Motorcycle protection systems	-	-	-	-	\checkmark	-	-		\checkmark	-	√ -	
V6 Regu	lations										-		
	Implementation of European Directives and Regulations	-	-	-	-	\checkmark	-	-		\checkmark	\checkmark		
V6.2	Vehicle communication with other vehicles, infrastructure and users (V2X)	-	-	-	-	\checkmark	-	-		\checkmark	-	- 1	
V6.3	Implementation of Regulation for Transport of Dangerous Goods	-	-	-	-	\checkmark	-	-		\checkmark	-	- V	
V6.4	Vehicle insurance check	-	-	-	-	\checkmark	-	-	- 1	V	-	√ -	
200000000000000000000000000000000000000	safety management												
	Establishment of a vehicle fleet safety certification body	-	-	-	-	\checkmark	-	-		\checkmark	-	- 1	
V7.2	Promoting fleet safety systems in companies	-	-	-	-	\checkmark	-	-		\checkmark	-	√ -	
la l	Public Procurement only with certified companies	\checkmark		-			-	-		\checkmark	-	- 1	\square
V8 Conn	nected & Automated Vehicles												
V8.1	Legislative adjustments for automated vehicles	-	-	-	-	\checkmark	-	-		\checkmark	-	√ -	
V8.2	Development of technological infrastructure for automated vehicles	-	-	-	-	\checkmark	-	-		\checkmark	-	- V	
V8.3	Vehicle - Road Infrastructure (V2I) Communication	-	\checkmark	-	\checkmark	\checkmark	-	-		-	-	√ -	
V8.4	Automated Traffic Organization	-	-	-	-	\checkmark	-	-		\checkmark	-	- 1	
8 31		1	5	0	2	31	0	0	06	27	8	13	10



*** High Priority, ** Medium Priority, * Low Priority

Post-crash Care

Key Priority Actions

Intervention Time Reduction

	induction of the second s													
Interv	vention Time Reduction													
P1.1	Promotion of the eCall system	-	-	\checkmark	-	-		-	-	-		\checkmark	-	-
P1.2	Promotion of the 112 call	-	-	\checkmark	-	-		-	-	-			-	-
P1.3	Response time performance indicators	-	-	\checkmark	-	-		-	-	-	-		-	-
P1.4	Emergency Lane assurance	-	-	\checkmark	-	-	-	-	-	-	-	\checkmark	-	-
P1.5	Organization of emergency vehicles in Motor Service Stations	-	-		-	-		-	-	-	-	\checkmark	-	-
P1.6	Plans for the location of emergency intervention units	-	-	\checkmark	-	-		-	-	-	-	-		-
P1.7	Development of a network of special rescue means	-	-	-	-	-		-	-	-	-	-	-	\checkmark
P1.8	Air transport system organization	-	-	-	-	-		-	-	-	-	-	-	\checkmark
Enha	ncing Emergency Response Units													
P2.1	Adequate staffing of units with rescuers	-	-	\checkmark	-	-		-	-	-	-	\checkmark	-	-
2.2	Training of emergency response executives	-	-	\checkmark	-	-		-	-	-	-	-	-	\checkmark
2.3	New Fire Brigade Vehicles	-	-	\checkmark	-	-	-	-	-	-	-	-	-	\checkmark
P2.4	New Fire Brigade Equipment	-	-	\checkmark	-	-	-	-	-	-	-	-	-	
P2.5	New Ambulances	-	-	-	-	-		-	-	-	-	-		-
P2.6	New Ambulance Equipment	-	-	-	-	-		-	-	-	-	\checkmark	-	-
2.7	Creation of Mobile Medical Units	-	-	-	-	-		-	-	-	-	-		-
First	Aid Driver Training													
P3.1	Training of candidate drivers in first aid	-	-	-	-		-	-	-	-		-		-
P3.2	Lifelong education of all citizens in first aid	-	-	-	-		-	-		-	\checkmark	-	-	\checkmark
23.3	Driver training in crash management	-	-	-	-		-	-	-	-		-	-	
Hosp	ital Care Improvement		.,						,					,
P4.1	Organization of emergency care units	-	-	-	-	-		-	-	-	-	-	-	
P4.2	Creation of Trauma Centers	-	-	-	-	-		-	-	-		-	-	
P4.3	Organization of a network of care centers	-	-	-	-	-		-	-	-	-	-	-	\checkmark
	Multi-Injury Care Protocols (triage)	-	-	-	-	-		-	-	-	-	\checkmark	-	-
P4.5	Blood Bank for the injured in road crashes	-	-	-	-	-		-	-	-	-	-		-
	olishment of Trauma Registry								,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,	,
P5.1	Development of an Electronic Trauma Register	-	-	-	-	-		-	-	-		-	-	
P5.2	Application of MAIS3+ protocol	-	-	-	-	-		-	-	-		-	-	
and the second	oort of Road Crash Victims			,				,	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ç			~~~~~	
P6.1	Establishment of rehabilitation centers for the injured	-	-	-	-	-		-	-	-		-	-	
P6.2	Psychological support for road crash victims	-	-	-	-	-	V	-	-	-	-	-	-	
P6.3	Training of judicial officers	-	-	-	-	-		-	-	-	-	-	-	
28		0	0	10	0	3	22	0	1	0	9	8	5	15

Concluding Remarks



Conclusions (1/2)

With the Road Safety Plan for the decade 2021-2030, Greece has adopted the Safe System Approach and the Vision Zero by 2050

- Alignment with the EU Road Safety Strategy aiming to halve road fatalities and serious injuries by 2030 (compared to 2019)
- The New National Road Safety Plan for Greece proposes 16 targets for 2030, with intermediate targets for 2025

 8 targets concern crash casualties reduction
8 targets concern road safety performance improvement

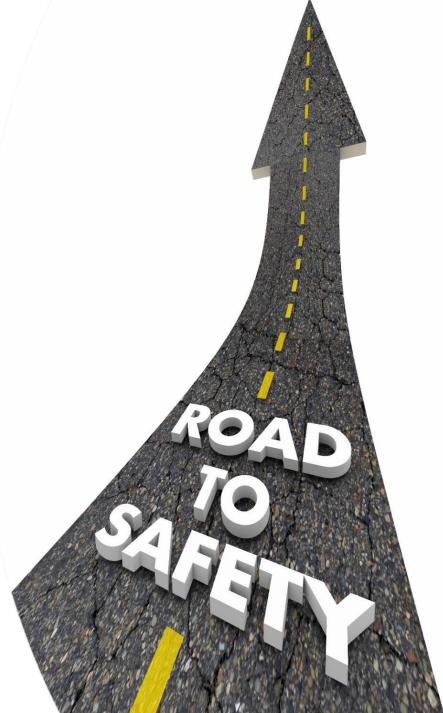




Conclusions (2/2)

- > A complete list of 200 Measures within 44 Actions within the 5 UN Pillars (Management, Road User, Infrastructure, Vehicle, Post-crash care) is set.
- \succ A Delphi survey was conducted among 21 road safety experts in Greece aiming to better organise and prioritize the road safety measures over the decade 2021-2030, in order to achieve the maximum safety benefit and meet both the intermediate and final road safety and KPI targets by 2025 and 2030 respectively.
- > The Socio-Economic Analysis of the implementation of the 44 Actions and 200 Road Safety Measures in Greece with a time horizon up to the year 2030 demonstrated particularly high profitability of the National Road Safety Plan







Hellenic National Technica inistry of Infrastructure University of and Transport Athens

Road Safety Strategic Plan Greece 2030



11th Technical Committee on Road Safety Belgrade, 6 October 2022

Setting Priority Measures to meet Targets and KPIs: The Greek National Road Safety Plan 2021-2030

> George Yannis, Dimitrios Nikolaou, Marianthi Kallidoni, Katerina Folla



Department of Transportation Planning and Engineering, National Technical University of Athens