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Assessment of the evolution of road safety in Greece

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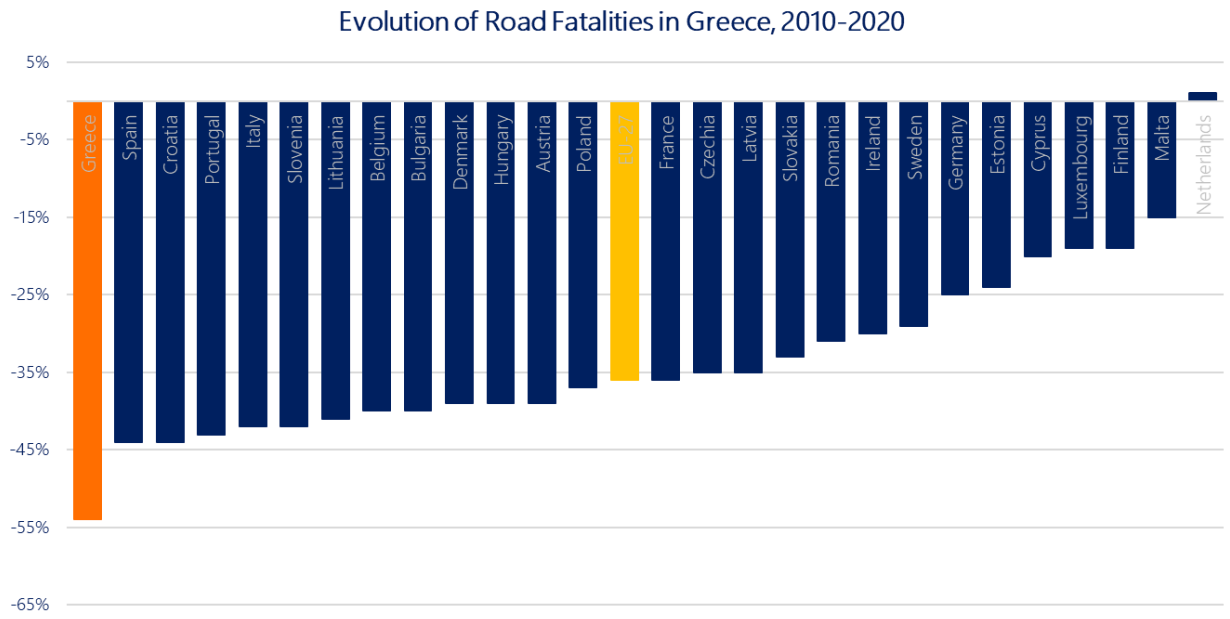
Road Safety Globally

- Road crashes are a major global social problem which the United Nations General Assembly has called "Global Road Safety Crisis"
- In 2016, it is estimated that around 1.35 million people lost their lives as a result of road traffic crashes (World Health Organization, 2018)
- More than half of all road traffic deaths are among vulnerable road users: pedestrians, cyclists, and motorcyclists
- Road traffic injury is currently the leading cause of death for children and young adults aged 5 – 29 years

Evolution of Road Fatalities in 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)
- Greece was the only EU country that achieved the decade 2010-2020 target of 50% road fatalities reduction
- 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
Processing: NTUA - Road Safety Observatory

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%
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%
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

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-gr9.pdf*
Sources: *Hellenic Statistical Authority (ELSTAT)*
Traffic Police
Processing: *NTUA - Road Safety Observatory*

Road Safety Measures in Greece

- Significant part of the fatalities reduction since 2010 is attributed to the economic crisis
- Several positive activities also contributed to this improvement:
  - great improvement of the main road network (from 750km of motorways in 2007 to 2.200 km in 2018)
  - several Local Authorities implemented city mobility and safety plans
  - implementation of all EU Directives and all procedures is always tighter
  - new traffic fines scheme (2018) based on infringement safety importance and offenders' income
  - introduction of vehicle control inspection run by private entities; very efficient against corruption
- As a result: the Greek drivers changed significantly their behavior, initially triggered by the crisis, but they maintain it also as a result of the constantly improving road safety culture

Greece 1991 - 2019

Road Fatalities Basic Characteristics

www.nrso.ntua.gr

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2019	Change 2010 - 2019
Total road fatalities	2,112	2,158	2,159	2,253	2,411	2,157	2,105	2,182	2,116	2,037	1,880	1,634	1,605	1,670	1,658	1,657	1,612	1,553	1,456	1,258	1,141	988	879	795	793	824	731	700	688	100%	-45%
Pedestrians killed	473	464	498	479	481	422	409	417	399	375	338	279	257	293	234	267	255	248	202	179	223	170	151	125	128	149	118	146	145	21%	-19%
Motorcyclists killed	316	316	320	367	391	419	392	455	453	406	426	341	310	379	399	440	420	394	405	367	305	282	271	278	237	240	216	190	228	33%	-38%
Moped riders killed	177	185	211	205	237	122	114	114	108	90	77	55	53	55	58	57	43	41	28	36	34	35	25	20	32	25	32	27	19	3%	-47%
Cyclists killed	24	27	37	28	34	28	32	34	23	22	29	14	21	24	18	21	16	22	15	23	13	21	15	19	11	18	11	12	22	3%	-4%
Killed in crashes with HGV	210	196	188	185	233	184	186	210	208	148	174	175	188	154	134	133	116	114	91	102	68	49	65	62	50	61	46	60	40	6%	-61%
Young drivers killed (18-24)	277	308	301	319	295	273	268	270	268	241	263	188	202	198	225	221	186	186	171	134	109	94	74	82	72	67	72	60	61	9%	-54%
Older drivers killed (65+)	74	81	104	107	136	117	140	160	148	153	158	127	126	128	128	130	138	132	124	130	97	124	116	93	117	114	99	103	99	14%	-24%
Children killed (0-14)	73	68	72	81	70	75	71	56	54	40	47	47	45	43	44	36	42	35	43	30	22	21	17	10	6	19	12	10	12	2%	-60%
Men drivers killed	1,066	1,142	1,158	1,191	1,299	1,133	1,137	1,181	1,157	1,122	1,064	921	958	951	986	1,021	945	956	919	778	661	618	538	505	514	509	481	420	441	64%	-43%
Women drivers killed	47	41	50	65	60	73	60	77	69	70	65	56	50	65	65	53	64	64	44	60	52	33	44	35	31	39	26	30	29	4%	-52%
Non national drivers killed	50	63	85	86	91	94	109	100	124	129	136	112	109	111	116	127	118	129	131	109	107	76	53	69	49	55	53	47	55	8%	-50%
Non national riders killed	19	14	18	24	30	40	41	59	71	67	77	57	40	58	58	73	48	59	56	51	49	33	25	40	34	27	24	24	26	4%	-49%
Inside built up areas	971	933	977	956	999	915	678	746	748	694	830	718	716	766	758	774	724	744	646	593	559	499	464	401	388	427	340	367	370	54%	-38%
Outside built up areas	1,141	1,225	1,182	1,297	1,411	1,242	1,427	1,436	1,368	1,343	1,050	916	889	904	900	883	888	809	810	665	582	489	415	394	405	397	391	333	318	46%	-52%
In junctions - Inside built up areas	-	-	-	-	-	337	268	283	271	262	272	244	201	209	210	222	191	196	151	169	140	154	139	132	107	127	120	128	92	13%	-46%
In junctions - Outside built up areas	-	-	-	-	-	142	240	224	211	190	163	112	101	96	93	101	78	69	83	77	54	65	35	51	49	28	50	29	35	5%	-55%
On motorways	-	-	1	2	1	148	72	61	105	61	86	69	58	116	111	147	140	120	108	87	81	57	79	56	53	45	54	61	50	7%	-43%
When raining	302	256	191	316	293	317	258	259	245	194	187	176	204	174	192	146	163	138	181	149	119	99	68	103	82	64	63	62	47	7%	-68%
During daylight	1,075	1,029	1,074	1,115	1,146	1,059	1,113	1,131	1,116	1,049	983	873	782	832	875	870	882	825	789	675	609	527	473	431	418	448	419	408	395	57%	-41%
During nightime	922	1,018	963	1,001	1,100	976	878	943	897	872	793	676	714	741	701	715	649	632	608	523	484	402	366	311	335	339	277	260	261	38%	-50%
Killed in single vehicle crashes	661	702	655	728	775	672	696	738	730	728	658	542	570	602	632	637	613	571	551	499	446	431	381	308	336	322	301	274	280	41%	-44%
Annual change of total fatalities		2.2%	0.1%	4.3%	7.0%	-10.5%	-2.4%	3.7%	-3.0%	-3.7%	-7.7%	-13.1%	-1.8%	4.0%	-0.7%	-0.1%	-2.7%	-3.7%	-6.2%	-13.6%	-9.3%	-13.4%	-11.0%	-9.6%	-0.3%	3.9%	-11.3%	-4.2%	-1.7%		
Severity	10.2	9.8	9.7	10.1	10.6	9.1	8.7	8.8	8.7	8.9	9.6	9.7	10.2	10.7	9.8	10.3	10.4	10.3	9.8	8.4	8.2	8.0	7.3	6.8	6.9	7.3	6.7	6.5	6.4		

Notes: *Severity: fatalities / 100 injury accidents*
Issued: *April 15th, 2021*
About the data: *www.nrso.ntua.gr/wp-content/uploads/nrso-data-gr9.pdf*
Sources: *Hellenic Statistical Authority (ELSTAT)*
Processing: *NTUA - Road Safety Observatory*

Road Crash Factors in Greece, 2019

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

% Fatalities (2019)	Greece	EE
Inside built up areas	54%	38%
Drivers	68%	64%
Passengers	11%	15%
Pedestrians	21%	20%
Motorcyclists/Moped (PTW) riders	36%	18%
Young drivers (18-24) (% drivers)	13%	13%
Older drivers (64+) (% drivers)	21%	23%
Single vehicle crashes (% drivers and passengers)	52%	39%

Passenger Car Occupants' Fatalities (2019)		
Seat belt use	No Seat belt use/ not recorded	Total
53	149	202
26%	74%	100%

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

Source: ELSTAT, Care
Processing: NTUA - Road Safety Observatory

Passenger Car Occupants' Fatalities, 2019

- 29% of fatalities were passenger car occupants (202 out of 688)
- Only 23% (18 out of 79) of passenger car occupants used their seat belt inside built-up areas
- The proportion of passenger car occupants used their seat belt outside built-up areas was 28% (35 out of 123)
- No significant difference was observed between urban and rural areas

Passenger Car Occupants' Fatalities (2019)

Inside built-up areas		
Seat belt use	No Seat belt use/ not recorded	Total
18	61	79
23%	77%	100%

Outside built-up areas		
Seat belt use	No Seat belt use/ not recorded	Total
35	88	123
28%	72%	100%

Source: ELSTAT
Processing: NTUA - Road Safety Observatory

PTW Riders' Fatalities, 2019

- The proportion of motorcyclists in the total number of fatalities was 33% (228 out of 688), while moped riders represented another 3% (19 out of 688)
- Only 28% (41 out of 149) of PTW riders used their helmet inside built-up areas
- Approximately 44% (43 out of 98) of PTW riders used their helmet outside built-up areas

PTW Riders' Fatalities (2019)

Inside built-up areas		
Helmet use	No Helmet belt use/ not recorded	Total
41	108	149
28%	72%	100%

Outside built-up areas		
Helmet use	No Helmet belt use/ not recorded	Total
43	55	98
44%	56%	100%

Source: ELSTAT
Processing: NTUA - Road Safety Observatory

Single Vehicle Crashes, 2019

- 62% (125 out of 202) of passenger cars' fatalities and 45% (111 out of 247) of PTWs' fatalities occurred in single vehicle crashes
- Almost 65% (51 out of 79) of passenger cars' fatalities occurred in single vehicle crashes inside built-up areas
- Lastly, 52% (51 out of 98) of PTWs' fatalities occurred in single vehicle crashes outside built-up areas

Passenger Cars' Single Vehicle Crashes (2019)		
Single Vehicle	Total	%
125	202	62%
Inside built-up areas		
51	79	65%
Outside built-up areas		
74	123	60%

PTWs' Single Vehicle Crashes (2019)		
Single Vehicle	Total	%
111	247	45%
Inside built-up areas		
60	149	40%
Outside built-up areas		
51	98	52%

Source: ELSTAT
Processing: NTUA - Road Safety Observatory

Main Causes

Main causes of the high number of road crashes in Greece:

- Inadequate enforcement that is not perceived by the driver
- Road infrastructure and overall organization of urban space and traffic oriented to accommodate private cars and speed
- Interurban roads with inadequate maintenance and defects making dangerous surprises to drivers while they also do not forgive driver mistakes
- Inadequacies of Authorities – a bad example for citizens
- Indifference of the Authorities and its citizens to respect the rules and the correct traffic behaviour
- Promotion of poor driving behaviour patterns

Institutional Road Safety Problems

Key institutional road safety problems in Greece:

- Inefficient organization of the Public Administration
- Lack of organized State structures with priority to the problem of road crashes and lack of accountability for the implementation of their actions
- Lack of a centralized structure with substantial road safety responsibility and authority on State agencies and accountability for its actions
- Insufficient funding for road safety
- Failure to understand that road safety is a science

Key Challenges

- The significant reduction of road casualties during the last decade, mainly attributed to the economic crisis and the significant upgrade of the road network indicates that there is a great potential for further improvements

- The consistent and continuous implementation of the priority measures by all parties involved at national, regional and local level is not only a tool for the achievement of the targets, but also a challenge for citizens and authorities to work together for a significant improvement of road safety level in Greece

Key Suggestions

- Strong political will at the highest political level and financial support in order to activate the necessary mechanisms for the efficient implementation of the Strategic Planning
- Intensification of enforcement by the Traffic Police with emphasis on the most dangerous behavioural offenses (speeding, seat belt, helmet)
- Systematic monitoring of the implementation of actions and of the factors affecting the road safety level (through KPIs)
- Development and implementation of an effective road infrastructure safety management system
- Design and implementation of an integrated policy to promote safe driving behaviour

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