

ESRA3 final event

23/06/2025, Brussels, Belgium
ESRA3 Steering Group Members

George Yannis, Dimitrios Nikolaou – National Technical University of Athens



Core tasks of NTUA in ESRA3

Contextual Data

Background Data

Basic data of Greece in relation to the Europe22³ mean.

Exposure	year	Greece
total length of roads (km)	2020	117,873
total length of motorways (km)	2020	2,110
vehicle kilometres (total in millions)	NA	NA
motorisation rate (motor vehicles/1000 inhab.)	2020	936.5

Source: JRC, Geneva, Switzerland; OECD

Persons killed in road crashes by age, gender and transport mode				
	Greece		Europe22*	
	absolute number	%	absolute number	%
0-14	6	1.0	398	2.1
15-17	13	2.1	424	2.3
18-24	86	13.8	2,361	12.7
25-49	229	36.7	6,166	33.2
50-64	122	19.6	3,969	21.4
≥65	153	24.5	5,122	27.6
unknown age	15	2.4	112	0.6
male	524	84.0	14,529	78.3
female	100	16.0	3,990	21.5
unknown gender	0	0.0	33	0.2
car (including taxi)	226	36.2	7,349	43.7
moped	21	3.4	464	2.8
motorcycle	214	34.3	3,103	18.5
bicycle	14	2.2	1,640	9.8
pedestrian	95	15.2	2,814	16.7
other	54	8.7	1,437	8.6
TOTAL	624	100.0		100.0
fatalities per 1,000,000 inhab.	58.6		39.1	

Data of Greece from 2021. Europe22* based on the most recent data available by country. Due to missing data not included in mean for gender and age: Bosnia and Herzegovina; for transport modes moped and motorcyclists also Ireland, United Kingdom. The mean for 'Fatalities per 1,000,000 inhab.' includes all countries. Source: [CARE database](#)

ESRA3 Country Fact Sheet: Greece (2023) - page 6

Moped riders & motorcyclists



Moped riders and motorcyclists

ESRA3 Thematic report Nr. 4



Infrastructure



Infrastructure

ESRA3 Thematic report Nr. 8



Contextual Data



Highlights from Contextual Data

- ▶ *Task:* Collected **accurate and harmonized contextual data** from all ESRA3 countries to build a comprehensive database, supporting the development of Country Fact Sheets and further analyses by the Steering Group (e.g., Thematic Reports)
- ▶ *Methodology:* Selected and assessed contextual data from **external sources**, including international databases and reports from organizations such as the World Bank, WHO, CARE, EUROSTAT, OECD, IRTAD, and IRF
- ▶ *Variable groups:* Demographic, Socioeconomic, Legislation, Exposure, Key Performance Indicators, Road Safety Outcomes



Moped riders & motorcyclists



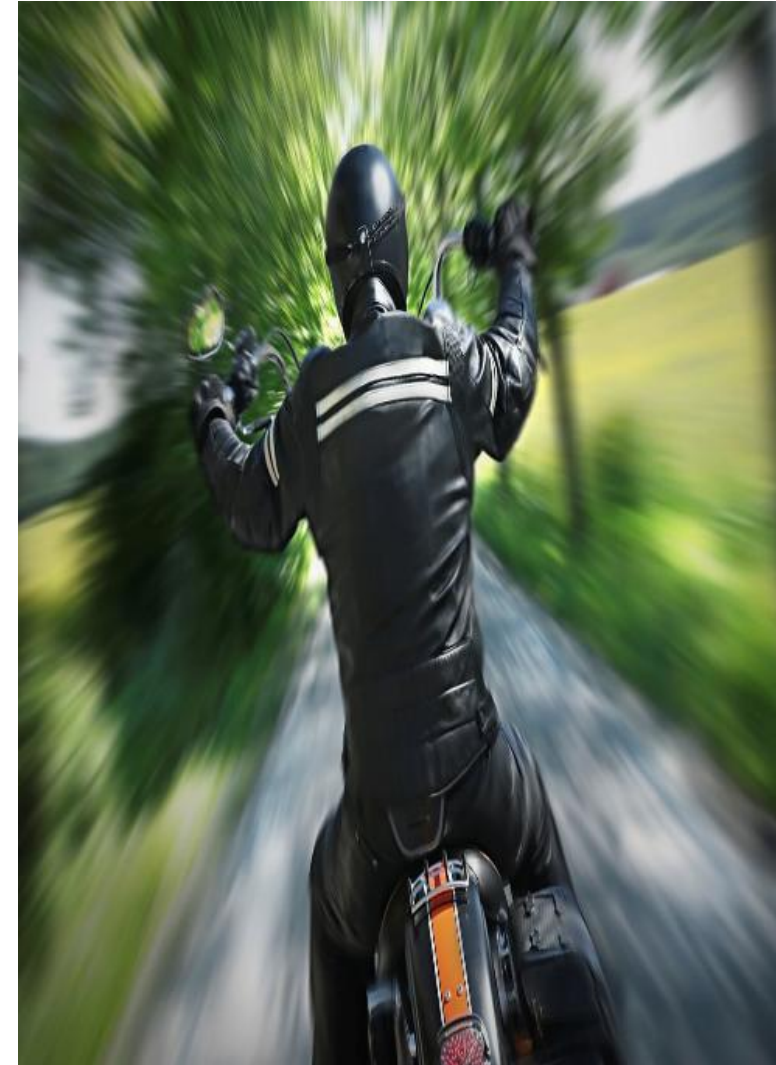
Highlights from Moped riders & motorcyclists (1/2)

Background:

- ▶ Mopeds and motorcycles form an **important component of the transport system**, as they offer increased mobility at a reduced cost and a special sense of pleasure
- ▶ Mopeds and motorcycles accounted for **19%** of overall road fatalities in 2022 across EU countries (EC, 2024)
- ▶ Globally, users of motorised two- and three-wheelers represent **21%** of all road fatalities (WHO, 2023)
- ▶ **Behavioural issues** play a major role in moped or motorcycle crashes

Key Results:

- ▶ The use of mopeds and motorcycles as a transport mode is more **widespread in America** when compared to Europe and Asia-Oceania
- ▶ In all ESRA countries, the safety perception scores for mopeds and motorcycles do not exceed 8 points, indicating that road users **do not consider these transport modes to be safe enough**



Highlights from Moped riders & motorcyclists (2/2)

Key Results:

- ▶ Risky behaviours are more common among **male** moped riders and motorcyclists
- ▶ The most frequent unsafe behaviours reported by moped riders and motorcyclists are **riding faster** than the speed limit outside built-up areas (but not on motorways) and riding too fast for the road/traffic conditions at the time

Key Recommendations:

- ▶ Targeted measures should address all riders, but especially **target the male riders**
- ▶ **Awareness campaigns** should highlight the vulnerability of these users and promote a culture of safety and mutual respect
- ▶ **Enforcement** must be systematic, well-structured, and clearly visible
- ▶ **Road infrastructure** should be adapted to riders' needs for a safer, more forgiving environment



Infrastructure



Highlights from Infrastructure (1/2)

Background:

- ▶ Most road crashes occur due to human error. However, other factors that should not be ignored are environmental issues and the **road infrastructure**.
- ▶ Road infrastructure should be designed and operated to **eliminate or reduce risks** for all road users.

Key Results (Infrastructure Use):

- ▶ Car drivers mostly use **rural roads**, especially in Europe.
- ▶ **City thoroughfares are heavily used** across all regions.
- ▶ Cyclists prefer urban roads **with cycle lanes**, especially in Europe.
- ▶ Pedestrians most often use urban roads **with sidewalks**.
- ▶ Moped riders and motorcyclists commonly use **city thoroughfares**, particularly in America and Europe.



Highlights from Infrastructure (2/2)

Key Results (Safety Perception):

- ▶ Car drivers see inter-city **motorways** as safest, especially in Europe
- ▶ Cyclists feel safest on **urban roads with cycle lanes**, notably in Europe
- ▶ Pedestrians feel safest on **urban roads with sidewalks**
- ▶ Motorcyclists feel safer on **city thoroughfares** in America than in Asia-Oceania
- ▶ Rural and inter-city roads are perceived as **moderately safe** across regions

Key Recommendations:

- ▶ **Motorways:** Regular maintenance, Advanced traffic warning systems
- ▶ **City Thoroughfares:** Speed cameras and enforcement, Lighting and signage for better visibility
- ▶ **Rural Roads:** Upgrade roads for safer speeds and vulnerable user separation, Promote defensive driving through awareness campaigns
- ▶ **Urban Streets:** Designated cycle lanes, Accessible sidewalks



ESRA3 final event

23/06/2025, Brussels, Belgium
ESRA3 Steering Group Members

George Yannis, Dimitrios Nikolaou – National Technical University of Athens

