

9th INTERNATIONAL CONGRESS
ON TRANSPORTATION
RESEARCH



ICTR 2019

**October 24-25
Athens, Greece**

Tourism and Road Accidents in Greece

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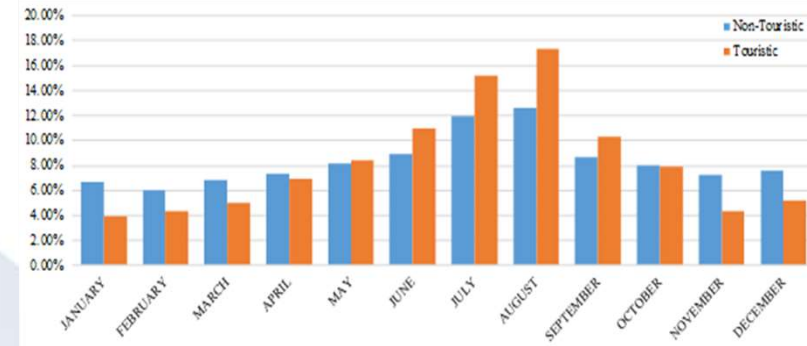
- Among the **worst performing countries** in road safety in EU28.
- Greece reached about **51%** road fatalities' reduction in the last decade (2009-2018).
- Among the **top-10** global powers in international tourist arrivals.
- Almost **30 million tourists** visited Greece in 2018 (3 times its population).



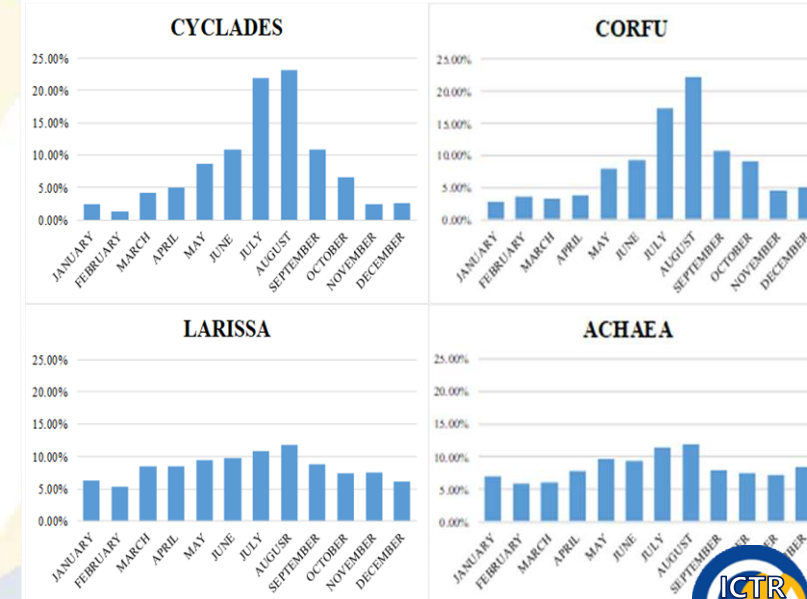
Road accident casualties in touristic and non-touristic regions

- In regions the proportion of killed or injured persons is higher during **summer months**.
- Highest rates during summer correspond to **touristic regions**.
- In touristic regions, the number of casualties **increases** during Spring, **peaks** in August and then **decreases** in September.
- A similar pattern is not observed in non-touristic regions, where the seasonal distribution of road accident casualties presents a quite **smoother fluctuation**.

Distribution of road accident casualties by month in touristic and non-touristic regions in Greece, 2011-2015 (Source: ELSTAT)



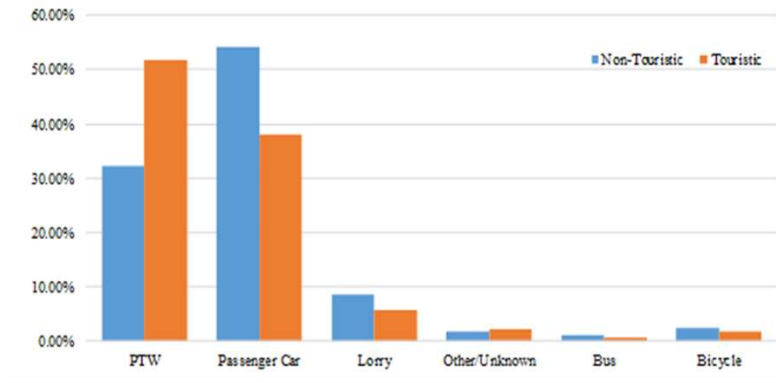
Distribution of road accident casualties by month in two touristic and two non-touristic regions in Greece, 2011-2015 (Source: ELSTAT)



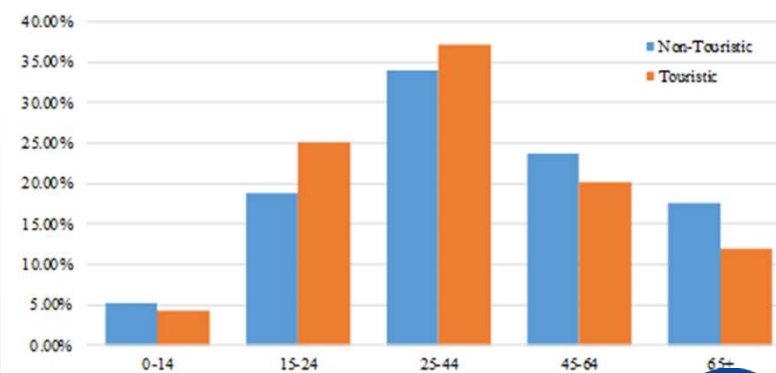
Road accident casualties by transport mode and by age group

- In touristic regions, the highest rates of injuries concern **Power Two Wheelers** (52%).
- In non-touristic regions, the highest percentages of road accident injuries are recorded for **passenger cars** (54%).
- This may be due to the quite **higher use of PTWs** in touristic regions.
- In touristic regions more killed or injured road users at the age of **15-24** and **25-44**.
- In non-touristic regions killed or injured road users at the age of **45-64** and **65+** are more than the respective figures in touristic regions.
- This may be due to the increased traffic of **younger people** in touristic periods and regions.

Distribution of road accident casualties by transport mode in touristic and non-touristic regions in Greece, 2011-2015 (Source: ELSTAT)



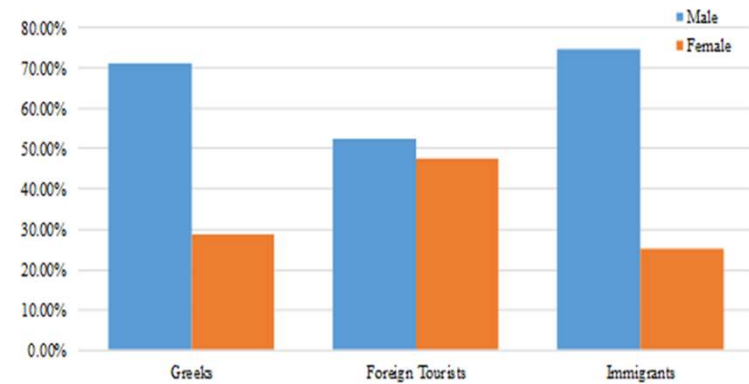
Distribution of road accident casualties by age group in touristic and non-touristic regions in Greece, 2011-2015 (Source: ELSTAT)



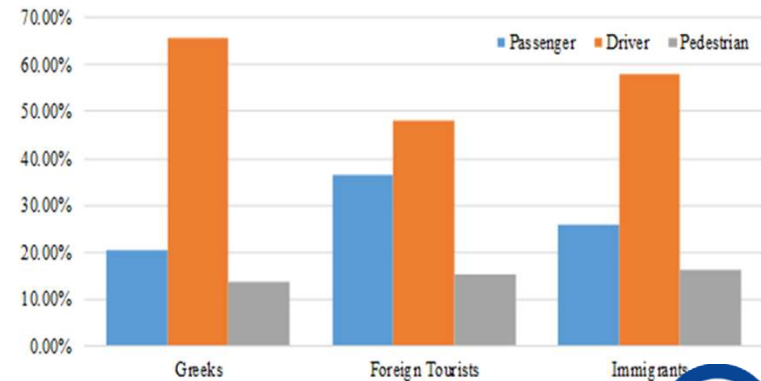
Road accident casualties by nationality and gender, by nationality and road user type

- Among the Greek killed or injured road users, **males** are over-represented.
- Among foreign tourists the percentages of male and female casualties are **almost equal**.
- The residents' higher percentages for male casualties observed might be explained by the **higher percentage of traffic kilometers** driven by male drivers.
- For all nationalities the highest percentage of killed or injured persons concerns **drivers**.
- However, for foreign tourists, the difference between killed or injured **drivers and passengers** is not that important.
- Perhaps it could be explained by the fact that in touristic regions the **occupancy of vehicles** is higher than that of vehicles in non-touristic regions.

Distribution of road accident casualties by nationality and gender in Greece, 2011-2015 (Source: ELSTAT)



Distribution of road accident casualties by nationality and road user type in Greece, 2011-2015 (Source: ELSTAT)



Accident Risk per driver's nationality

- **Greek drivers have lower fault risk** than foreign tourists and immigrants (0.99 ratio), suggesting that in the examined category they cause fewer accidents than the ones they get caught up in.
- Among the three categories of drivers, **Foreign Tourists** drivers appear to have **higher accident risk** than the others.
- **Greek drivers risk remains lower** both in Touristic and Non-Touristic Regions compared to the other nationality categories.
- There is **no significant difference** between Greeks and Immigrants mainly in Touristic Regions.
- A **significant difference** in driver fault risk between Touristic and Non-Touristic Regions can be identified for Foreign Tourists.

Accident fault risk distribution per driver nationality in Greece, 2011-2015 (Source: ELSTAT)

	Greeks	Foreign Tourists	Immigrants	Total
At-fault	8,157	439	734	9,330
	87%	5%	8%	
Not at-fault	8,167	352	702	9,221
	89%	4%	8%	
Accident risk	0.99	1.23	1.03	
Relative risk	1.00	1.25	1.05	

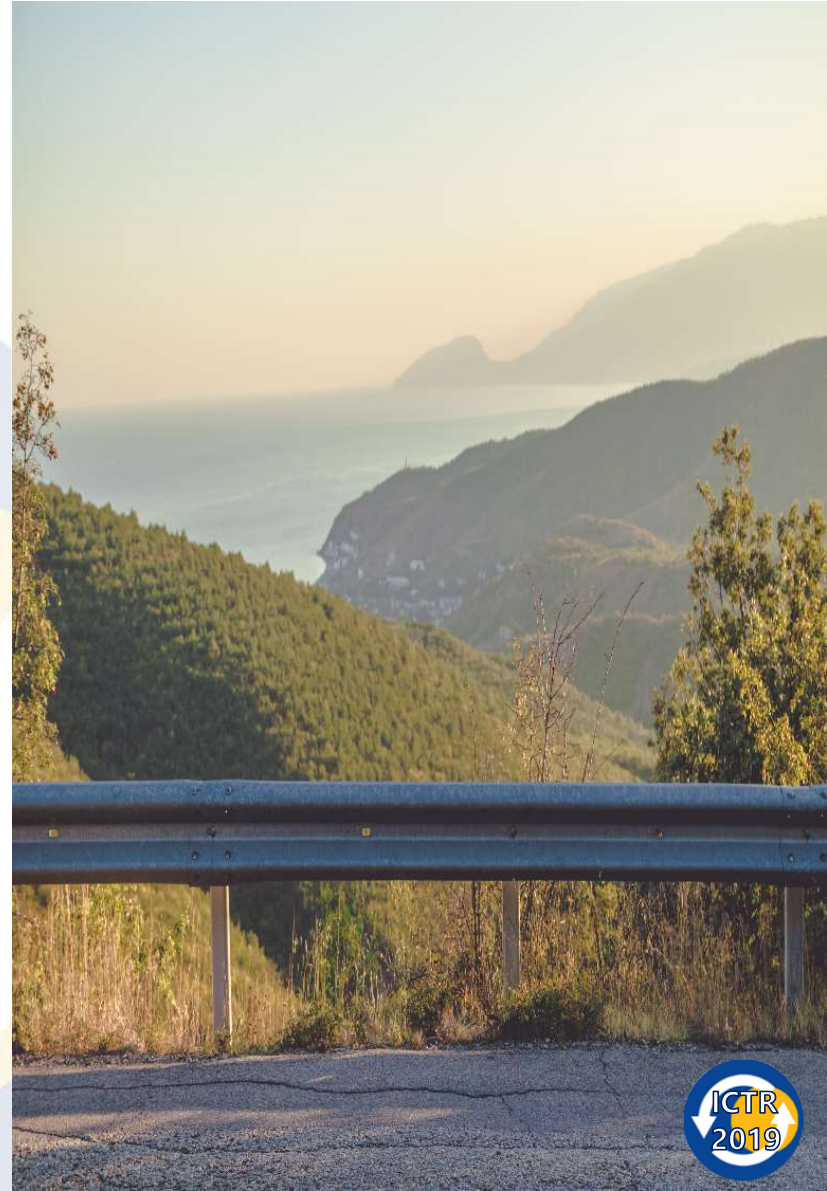
Accident fault risk distribution per driver nationality and region in Greece, 2011-2015 (Source: ELSTAT)

	Greeks	Foreign Tourists	Immigrants	Total
At-fault				
Touristic Regions	2,258	305	241	2,804
	81%	11%	9%	
Non-Touristic Regions	5,899	134	493	6,526
	90%	2%	8%	
Not at-fault				
Touristic Regions	2,259	260	239	2,758
	82%	9%	9%	
Non-Touristic Regions	5,908	92	463	6,463
	91%	1%	7%	
Accident risk				
Touristic Regions	0.98	1.15	0.99	
Non-Touristic Regions	0.99	1.44	1.05	
Relative risk				
Touristic Regions	1.00	1.17	1.01	
Non-Touristic Regions	1.00	1.46	1.07	



Overall Remarks

- Road accidents and related casualties are increasing **during touristic periods**.
- In touristic regions, the highest percentages of road accident casualties concern **PTWs**.
- In the touristic regions there are **more young people** killed or injured.
- Among foreign tourists the percentages of male and female casualties are **almost equal**.
- Tourists have **higher accident fault risk** (25%) than Greeks and immigrants.



Recommendations

- Development of **national road safety strategy** and **regional action plans** that take into account tourism.
- These plans should include a **combination of actions** on road user behaviour, road infrastructure and vehicles.
- Adequate accident and traffic **data** that could be used in **serious studies** are essential for the documentation of decisions.
- The ultimate goal is the development of **road safety culture** in Greece.



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