

Promotion of Road Safety Culture International Workshop

Herakleio, Greece

May 29, 2017



T.E.I. of Crete



LaHeRS



The SafeCulture project – Results on safety culture in professional transport in Greece

Alexandra Laiou, George Yannis, Tor-Olav Naevestad



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

The SafeCulture project



SafeCulture - ***Safety culture in private and professional transport: examining its influence on behaviours and implications for interventions***

Aims to compare the safety culture in different transport modes and social contexts between Norway and Greece.

Land transport: Examination of car users, powered two-wheelers, HGV and bus drivers.

Funded under the “Transport 2025” program of the Norwegian Research Council.



Duration: 36 months (Jan 2016 – Dec 2018)

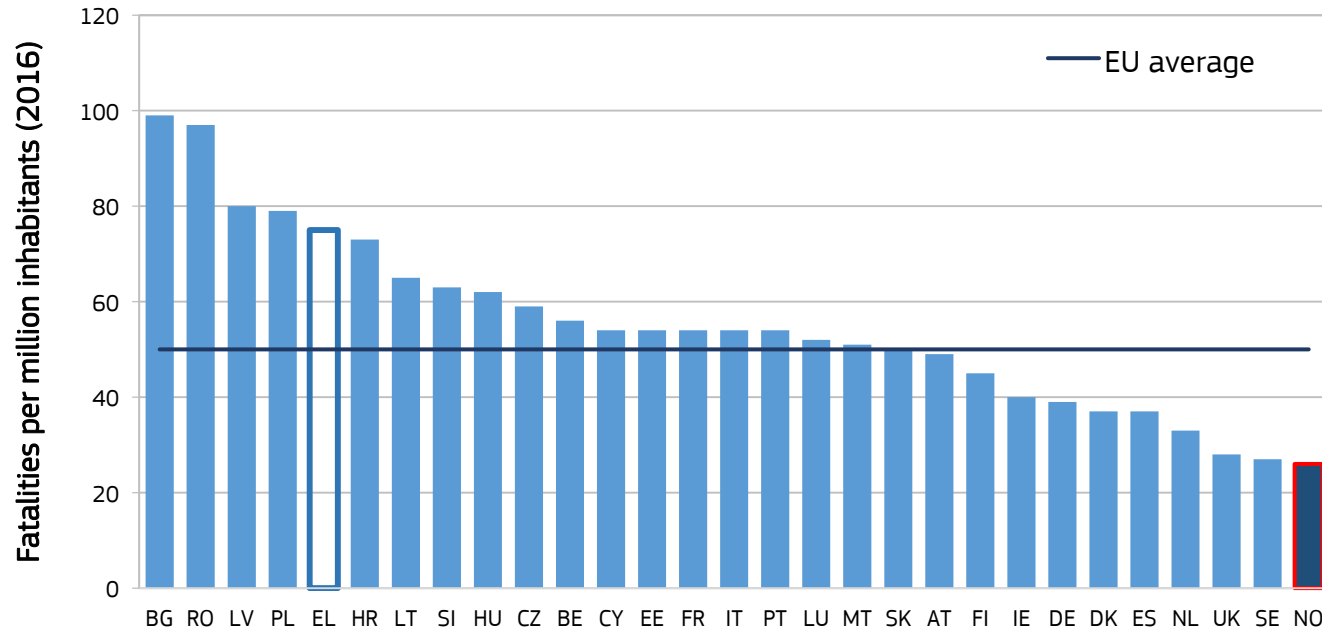
Partners:



Institute of Transport Economics
Norwegian Centre for Transport Research



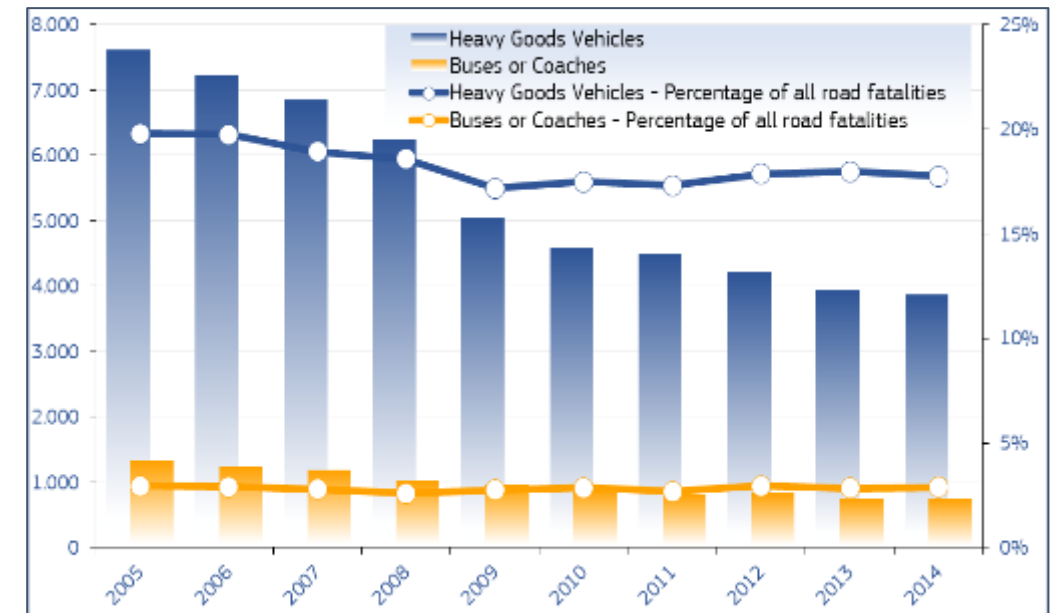
Key road safety facts



Source: CARE, 2017

The number of fatalities in accidents involving HGVs and buses/coaches in EU fell by nearly 50% between 2005 and 2014. However, the percentage of fatalities in accidents involving **HGVs and buses or coaches didn't decrease considerably.**

Norway and Greece were selected to be compared since their road safety status **differ significantly.**

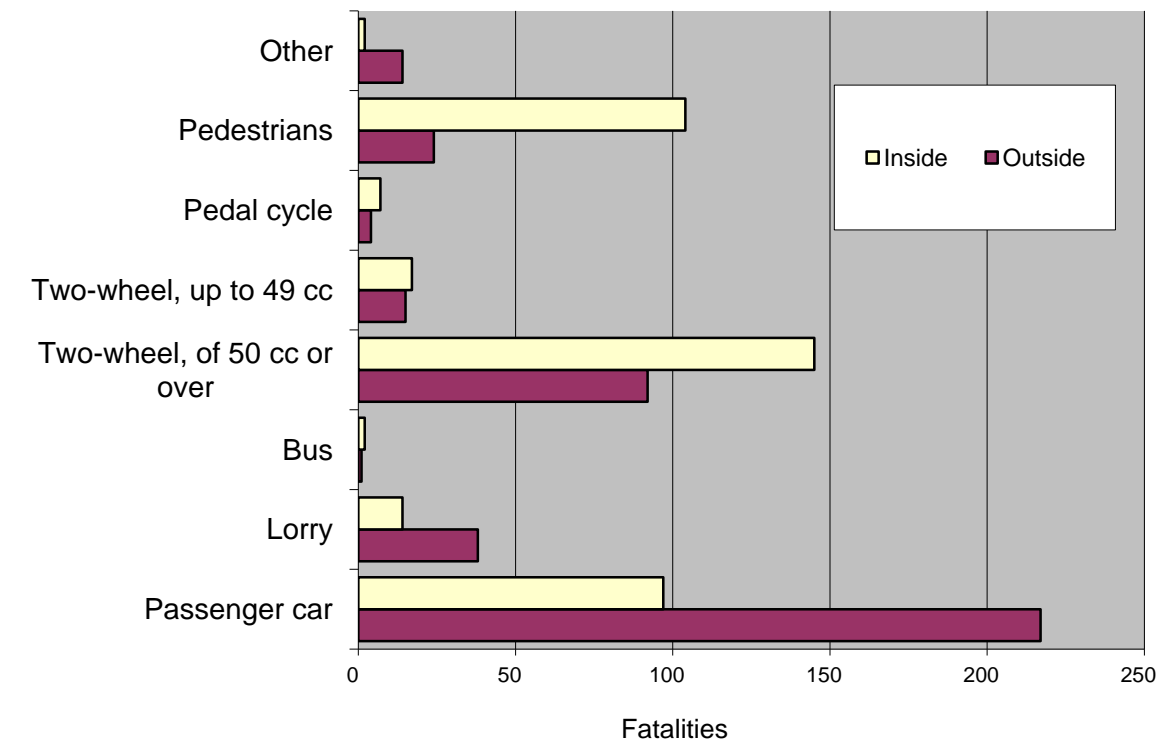


Source: ERSO, 2016

Key road safety facts

Road Fatalities in Greece, 2015				
	Inside	Outside		
Transport mode	built-up area	built-up area	Total	%
Passenger car	97	217	314	40%
Lorry	14	38	52	7%
Bus	2	1	3	0,4%
Two-wheel, of 50 cc or over	145	92	237	30%
Two-wheel, up to 49 cc	17	15	32	4%
Pedal cycle	7	4	11	1%
Pedestrians	104	24	128	16%
Other	2	14	16	2%
Total	388	405	793	100%
%	49%	51%	100%	

Source: Hellenic Statistical Authority (ELSTAT)



The number of fatalities in accidents involving HGVs in Greece in 2015 constitutes a non-negligible percentage of the total road fatalities.

More than **70%** of them occurred **outside built-up areas**.

Safety culture in transport

- The concept of safety culture is applied to an increasing range of sectors, including **professional and private transport**.
- Safety culture explains **considerable variation** in safety behaviour in various transport forms operated by private and professional drivers.
- Transport safety culture (TSC) is defined as:
“**shared norms** prescribing certain transport safety behaviours, shared **expectations** regarding the behaviours of others and shared **values** signifying what’s important (e.g. safety, mobility, respect, politeness)”.



Research questions

- How much does **membership in different sociocultural units** (e.g. nation, region, peer-groups, sector, organizations) influence individual transport safety behaviour in professional and private transport?
- How much does TSC influence safety behaviour and outcomes relative to **known risk factors** like gender, age, experience, technology and infrastructure?
- How can the knowledge on group membership influencing TSC and the relative importance of TSC as a **predictor** of transport safety **behaviour** and safety **outcomes** be used to increase transport safety?



The SafeCulture survey in Greece



- Conduct of personal **interviews** with transport professionals (10 Heavy Good Vehicles and 10 Bus drivers)
- **Survey** among transport professionals (100 Heavy Good Vehicles and 100 Bus drivers)

Main examined issues:

- ✓ **Working** conditions with safety implications
- ✓ **Organizational** safety culture
- ✓ Safety **behaviours**
- ✓ **National** transport safety culture
- ✓ **Sector** transport safety culture



Main findings - overall

- There is a relationship between national transport safety **culture**, transport safety **behaviour** and **accident involvement**.
- Aggressive violations are **predicted** by national transport safety culture (e.g. Bus drivers in Greece report more aggressive violations in traffic than Norwegian bus drivers) and **predict** accident involvement.
- **Organizational** safety culture contributes **negatively** to **aggressive** transport safety behaviours, meaning that a positive organizational safety culture may reduce aggressive violations in traffic.



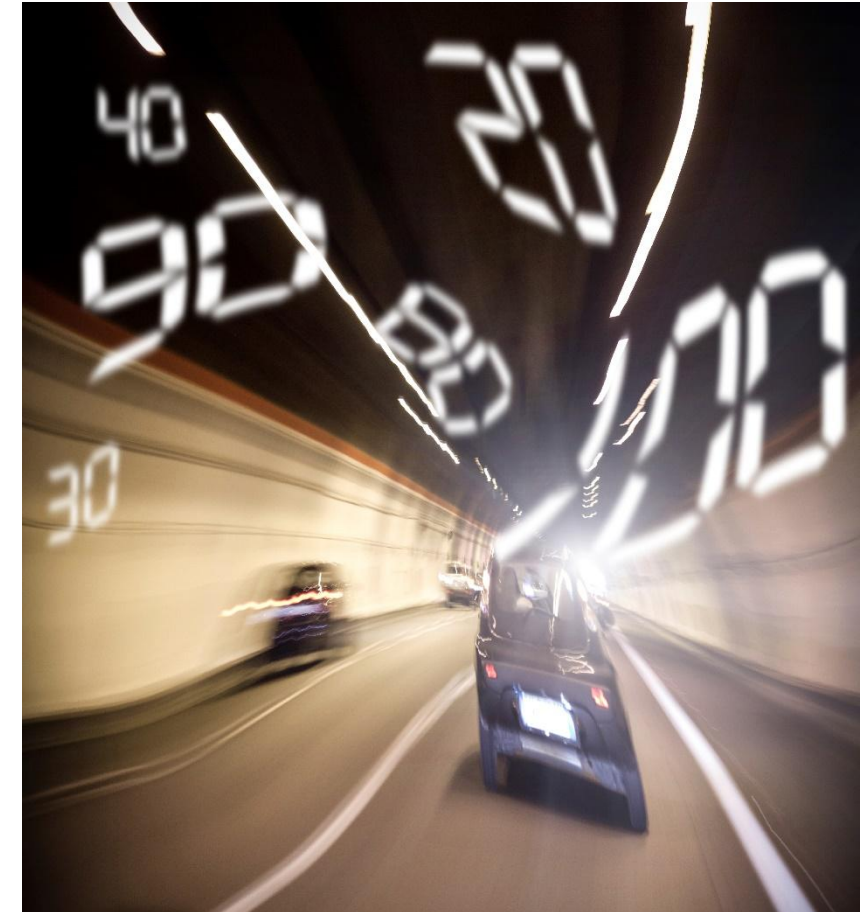
Main findings - speeding

- Professional drivers generally drive at **speeds lower than the speed limits** not necessarily by choice but also due to technical restrictions (e.g. tachograph, difficult urban environments).
They admit speeding up while driving on the highway.
- Choosing speed depends on the **pressure** upon the driver for a delivery, from a client or from the management.
When in struggle to meet timelines, there is considerable disregard of road safety rules (e.g. signage violations -stop sign and traffic lights, honking and verbal abuse).



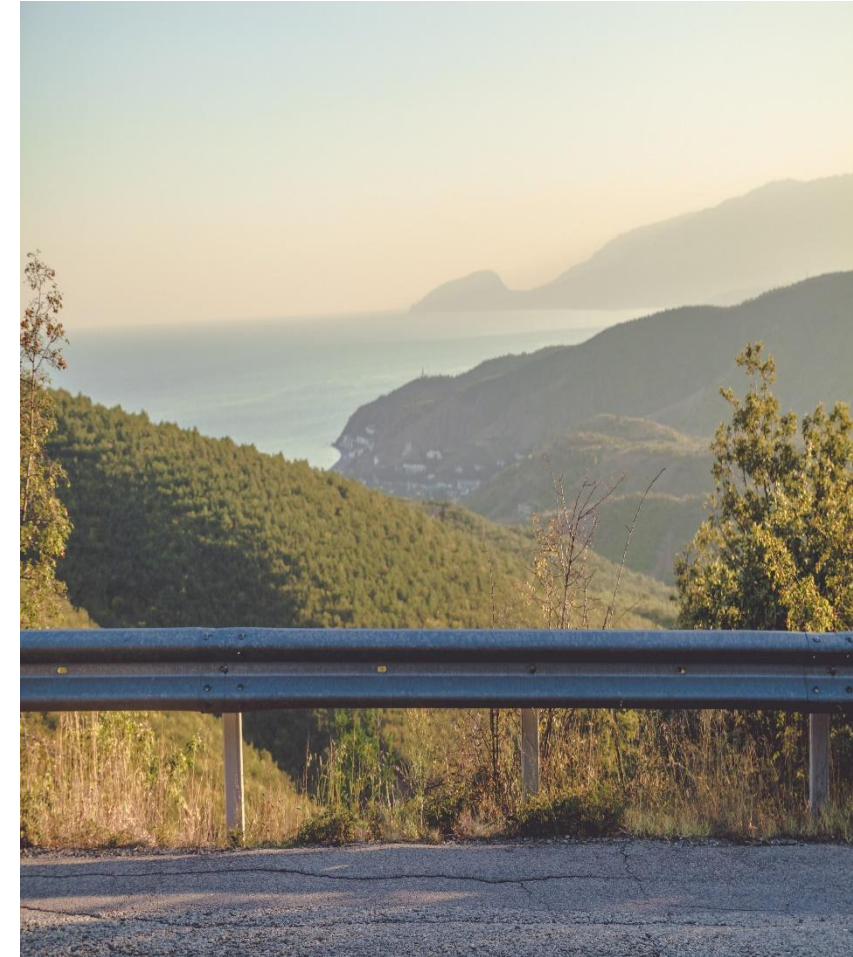
Main findings - speeding

- Avoiding speed violations and tickets in fear of loosing their jobs is also common.
- Professional bus drivers consider **speeding and outdated speed limits** the most common factors for aggressive driving and for the violation of the Traffic Code and disrespect towards other drivers respectively.
- Overall, professional drivers are **supportive** of measures to prevent speeding.



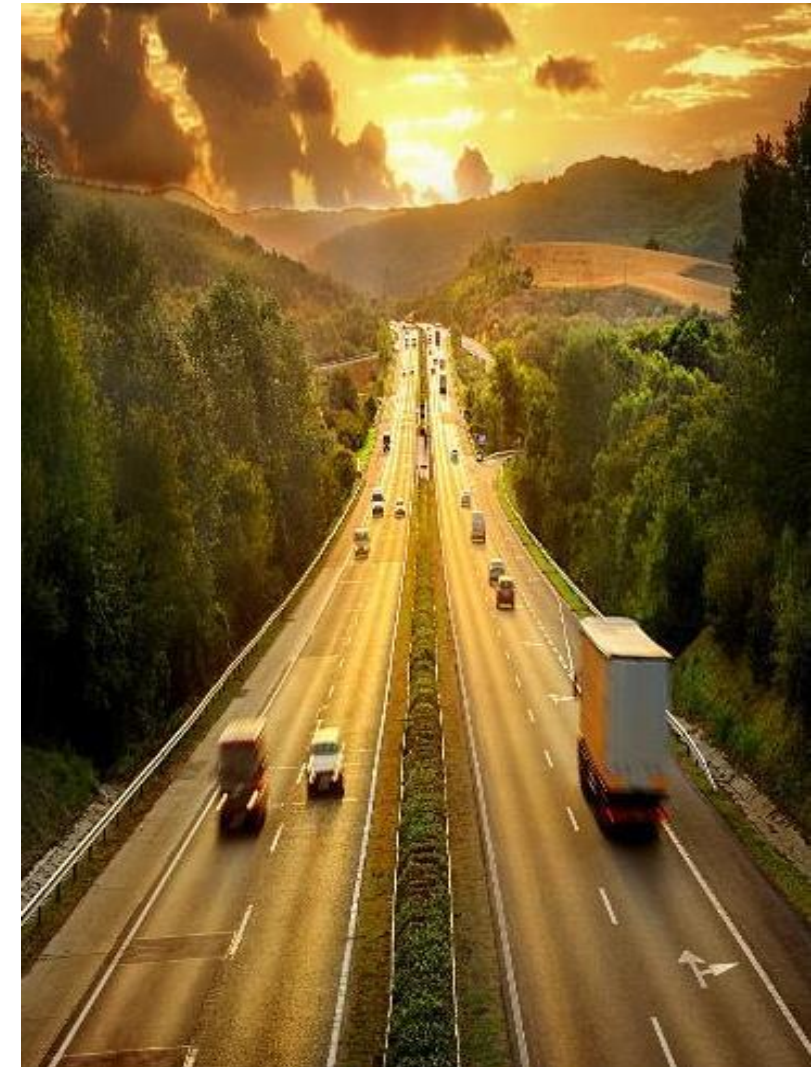
Next steps

- Study safety culture, actual safety behaviour and safety relevant outcomes (accidents, incidents) among **private car and PTW drivers** in Norway and Greece.
- Sample stratified according to region (i.e. islands). The **Greek islands** may provide a “natural experiment” with respect to the development of a safety culture through interaction of locals and tourists.
- The hypothesis will be that on touristic areas the **interaction between tourists** in rental cars and PTW and the Greek driving population will result in a different traffic culture than in the usual Greek traffic.



Future challenges

- The **importance** of transport safety culture (TSC) in understanding and influencing transport safety behaviour and safety outcomes is very high (as it is in hazardous industries) and more quantitative research is needed.
- **Linking quantified metrics of TSC with road safety metrics** (performance indicators and outcomes) is a great challenge, which might reveal important hidden parameters influencing road safety.
- There is need to study large driver samples and different nationalities in order to identify links between road safety and **organizational and tourist safety culture** across Europe.



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