



TALLINNA TEHNIKAÜLIKOOL  
TALLINN UNIVERSITY OF TECHNOLOGY

# Road users' behavior in Estonia: what has changed in 2001 – 2015

Juri Ess

Dago Antov

# Shortly about ESTONIA

**Re-independence:** 1991

**Population (2015):** 1.3 M

**GDP per inhabitant (2015\*):**

EE: 13 300 €

EU: 26 500 €

**Motorization rate:**

EE: 503 (2015)

EU: 491 (2014)

**Road fatalities per M (2015):**

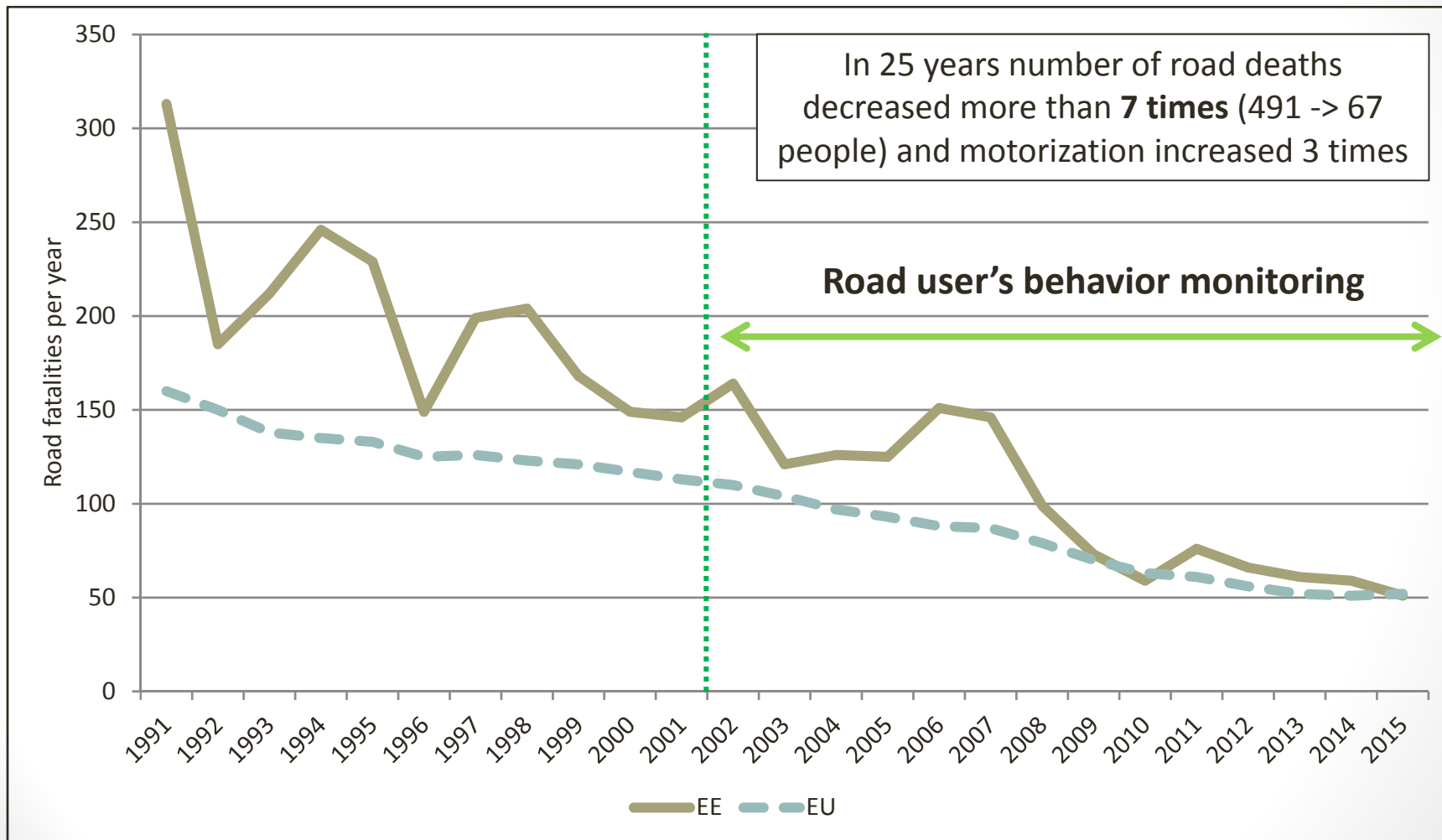
EE: 51,1

EU: 51,5

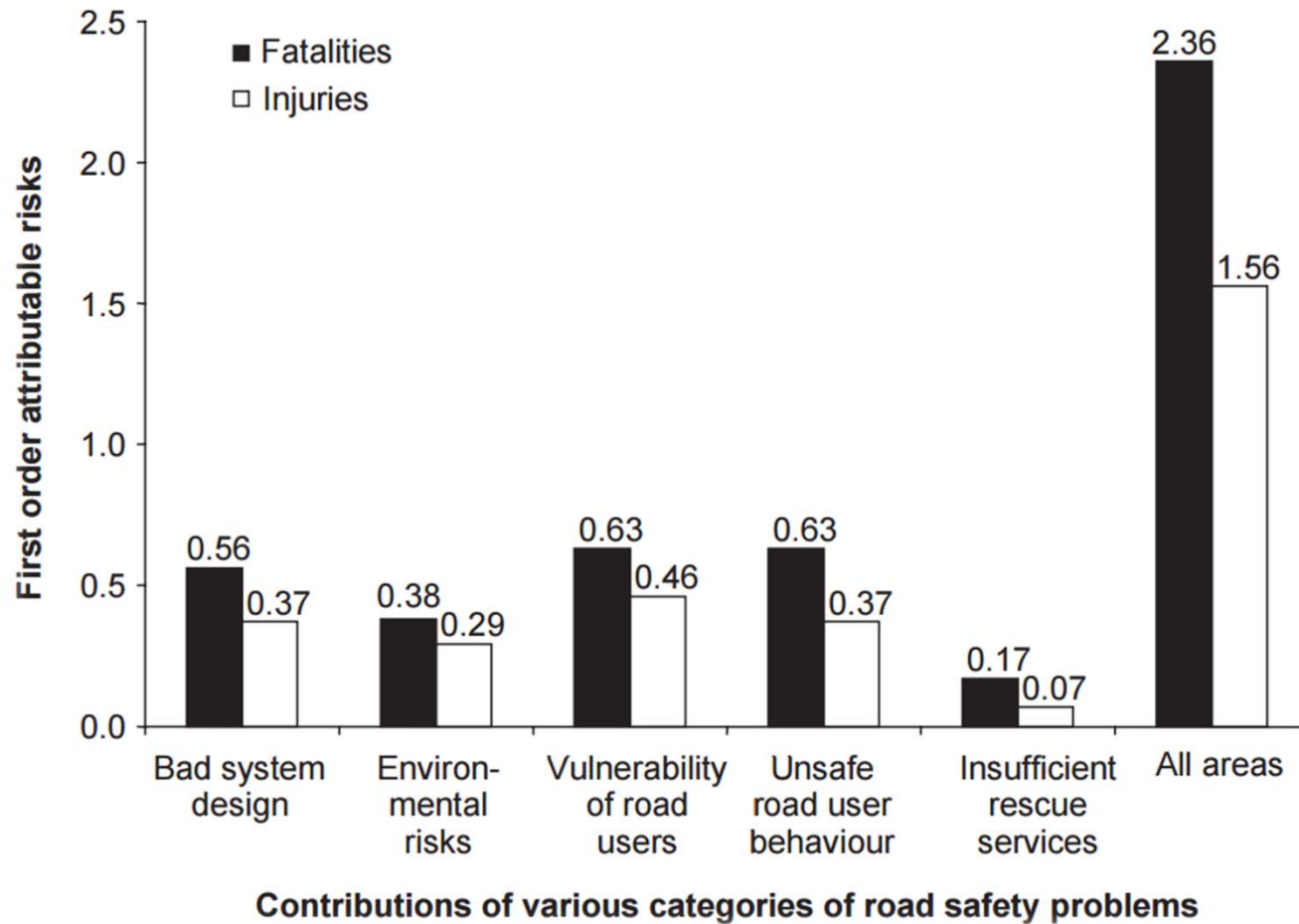


\* in 2010 prices

# Road fatalities per million population

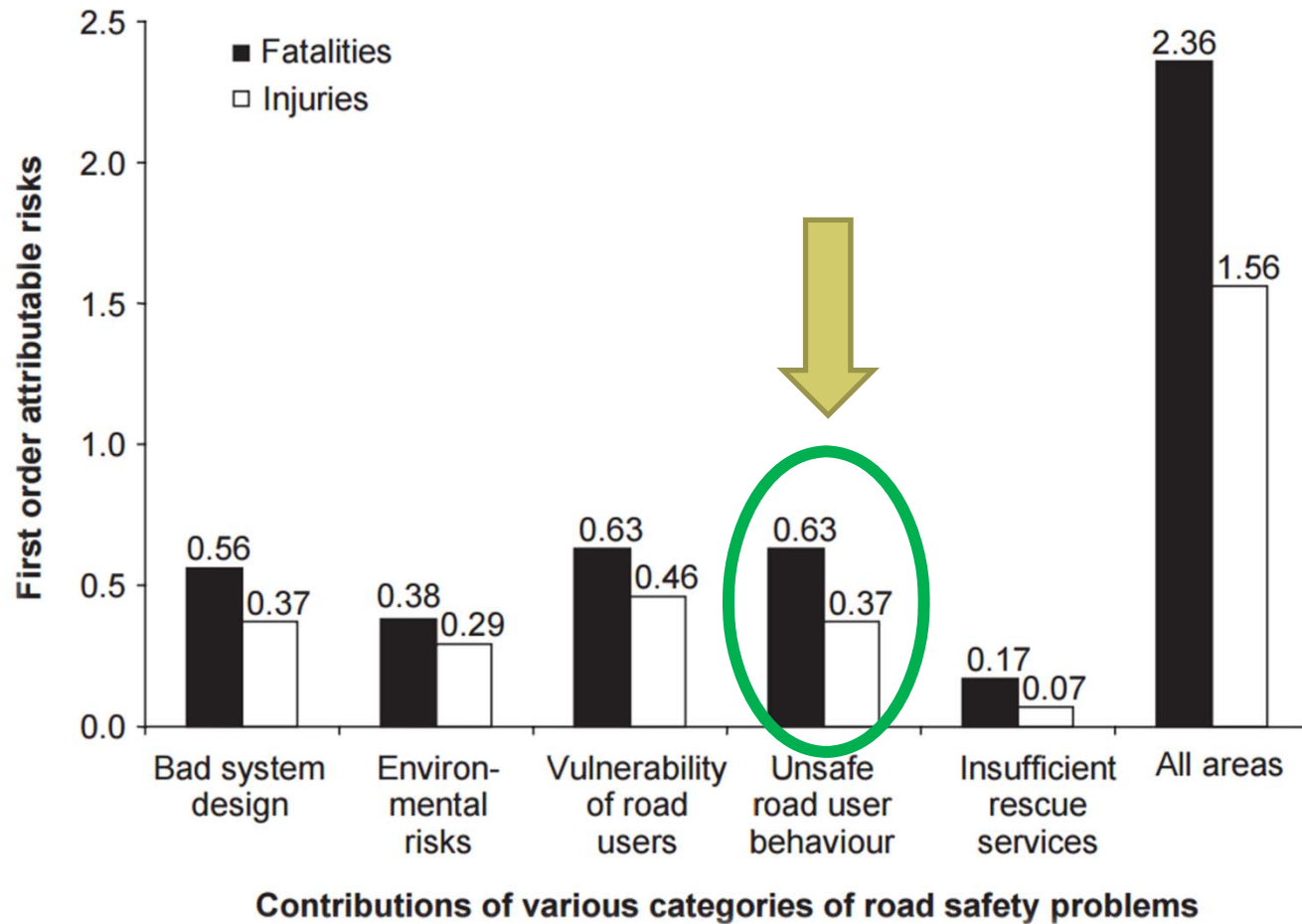


## Importance of risk factors in contributing to accidents and injuries



Source: Elvik Rune. The Handbook of Road Safety Measures

If violations of road traffic law did not occur,  
the number of fatalities could be reduced by 63%



Source: Elvik Rune. The Handbook of Road Safety Measures

# Traffic behaviour monitoring 2001 - 2015

## Key points:

- main objective - to **monitor behavioral changes**
- statewide observation study
- different safety performance indicators
- over 100 fixed observation places
- standardized data collection methods



# Safety performance indicators (2001 – 2015)

- Drivers' compliance with traffic signals
- Pedestrians' compliance with traffic signals
- Giving way to pedestrians at zebra crossings
- Using turn indicators
- Using seat belts and child restraints

## **Additional topics studied:**

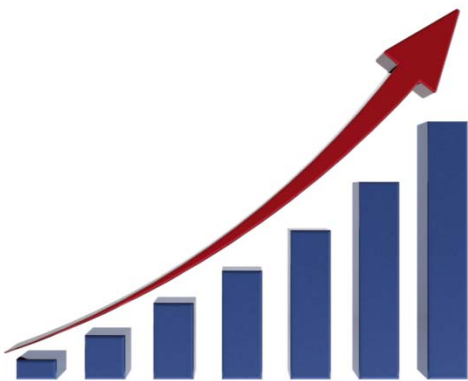
- Speeding
- Drinking and driving
- Safety reflectors
- Railroad crossings
- Longitudinal gaps
- Mobile phones



# Long-term trends in traffic behavior

## Significant changes:

- Seat belts
- Giving way to pedestrians



## Minor or no changes:

- Traffic signal infringement
  - drivers
  - pedestrians
- Turn indicators



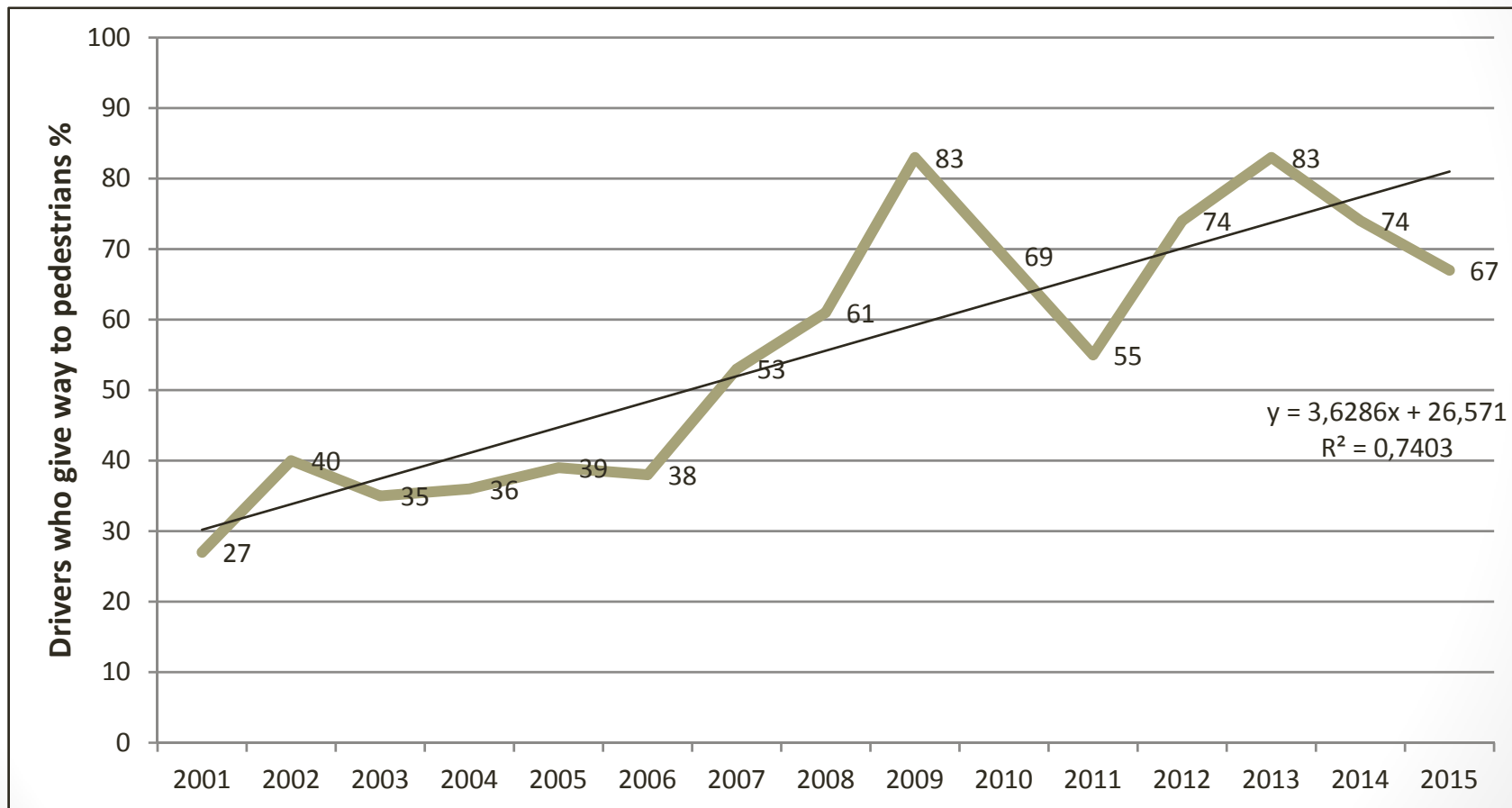


# Seat belt use rate in Estonia 2001 - 2015



Between 2010 and 2015, **10% to 12%** of injured drivers didn't wear seat belt at the moment of crash

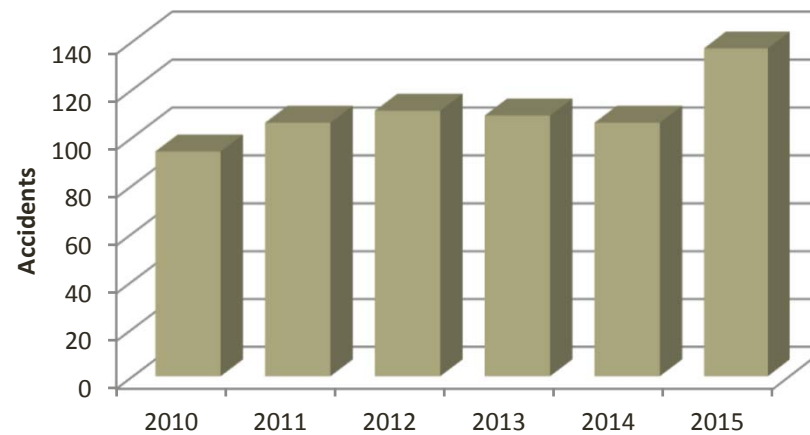
# Share of drivers who give way to pedestrians on non-regulated crossings 2001 - 2015



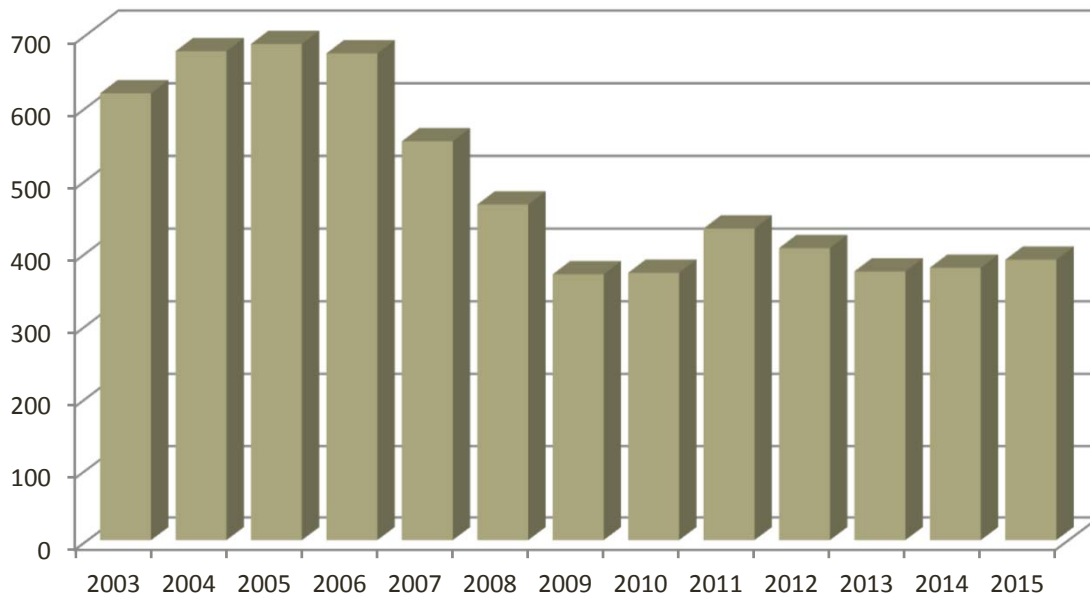
Between 2010 and 2015 share of pedestrians in all the road fatalities was 18 – 36%

# Pedestrians suffered in road accidents

Accidents on non-regulated pedestrian crossings 2010 - 2015



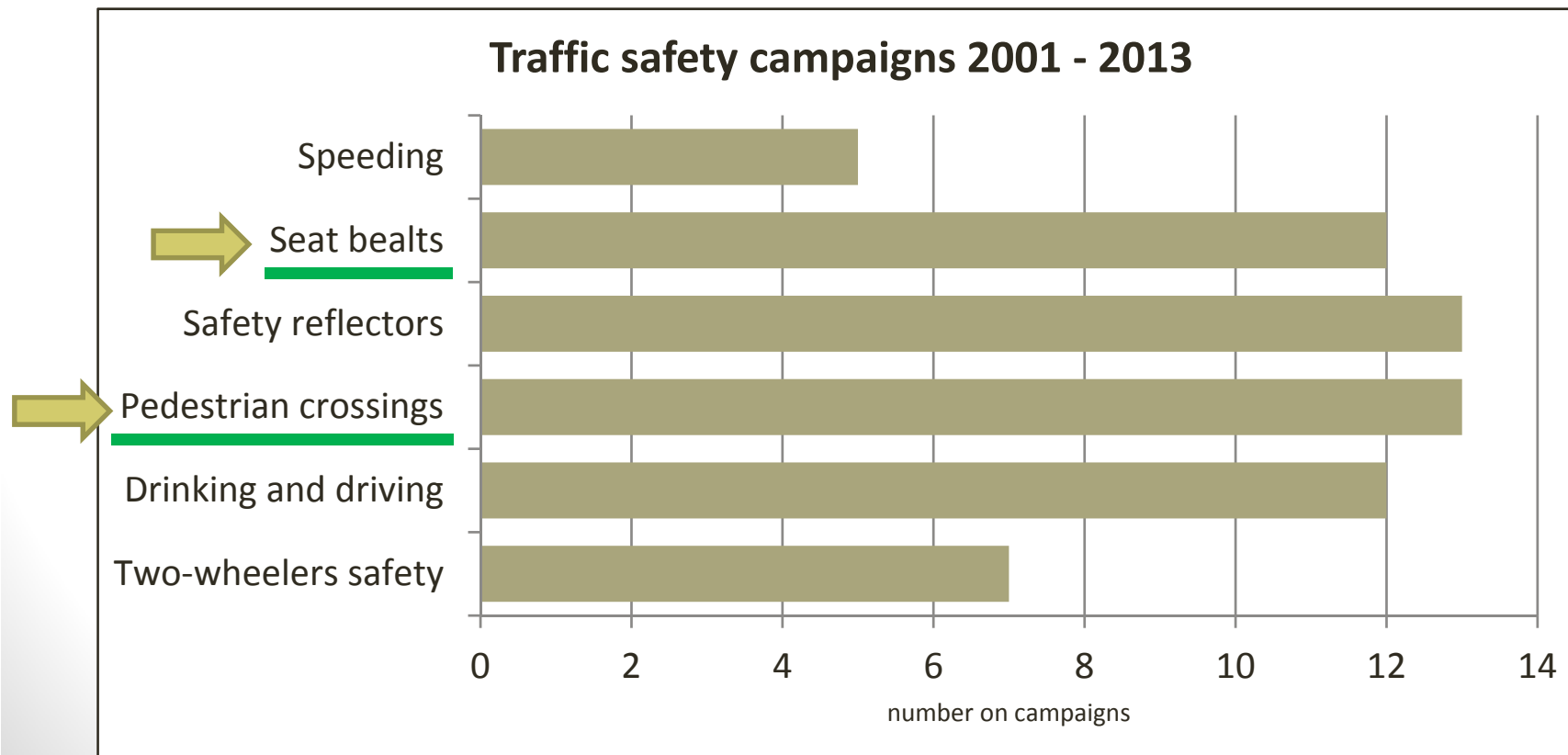
Pedestrians suffered in road accidents



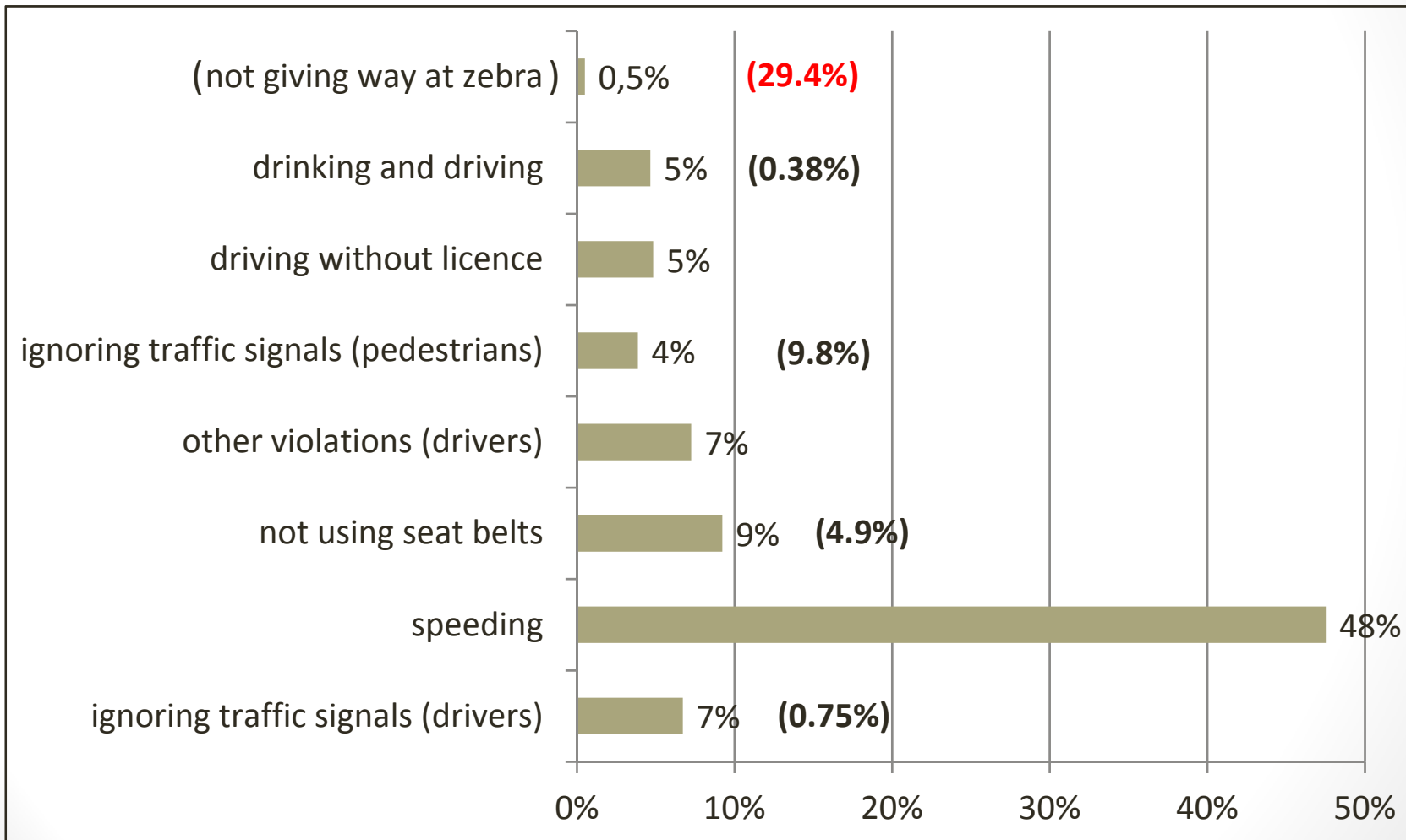
# Road administration activities

Estonian National Road Traffic Safety Program 2003 – 2015:

- 196 activities applied totally or partly
- 59 (or 23%) activities were not applied



# Top 7 traffic violations and share of violators in traffic (2011 – 2015)



# To sum up

1. Estonia has reached a medium level of road safety in EU
2. One can admit that seat belt use played an important role
3. There are still issues with pedestrian safety
4. One of the options is increasing enforcement at zebra crossings



# Thank you for attention!

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