

Zaufajne Drogi

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Zwiększanie Potencjału Na Rzecz Bezpieczeństwa Ruchu Drogowego

Building Road Safety Capacity



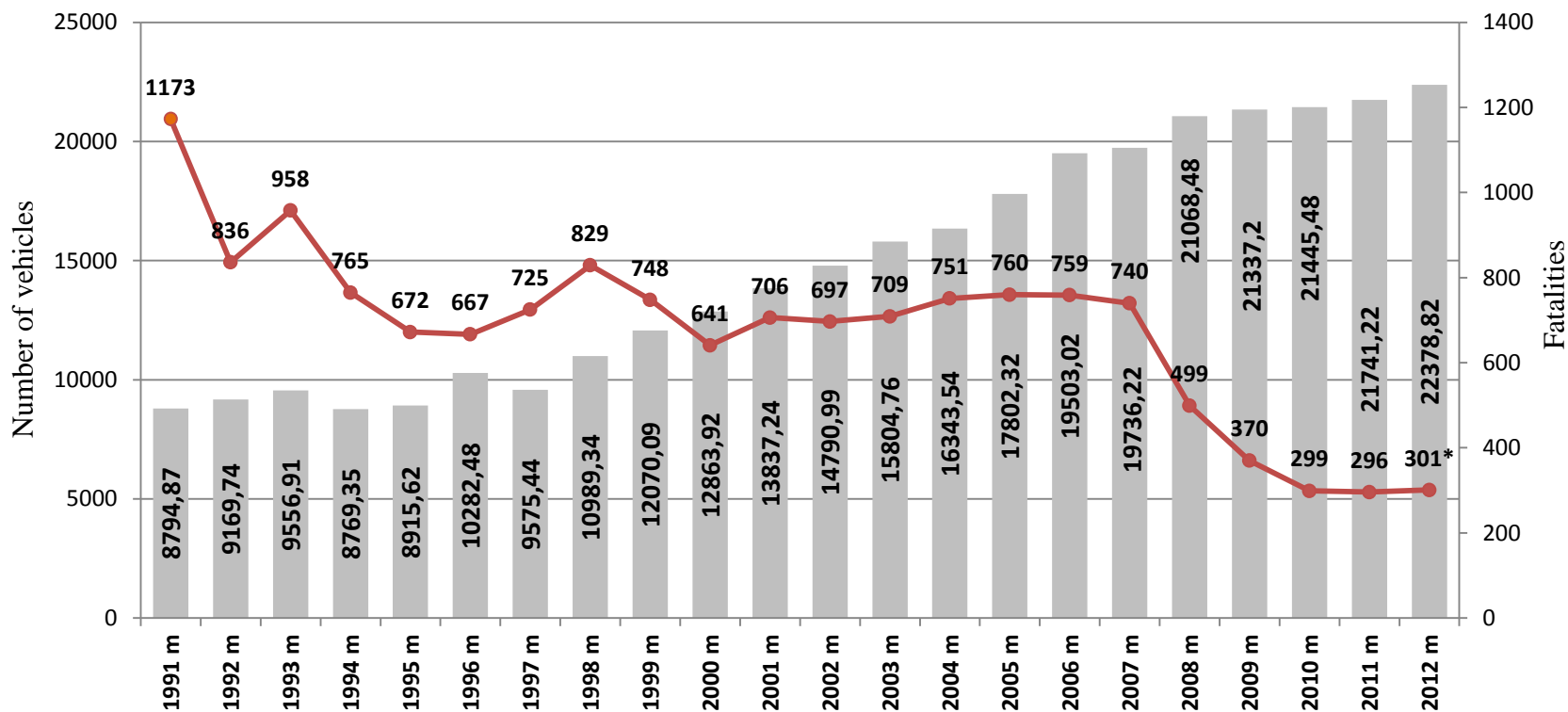
Drogi zaufania



ENGINEERING SOLUTIONS AND THEIR INFLUENCE ON EFFECTIVENESS. LITHUANIAN EXPERIENCE

Egidijus Skrodenis
Deputy Director
Lithuanian Road Administration

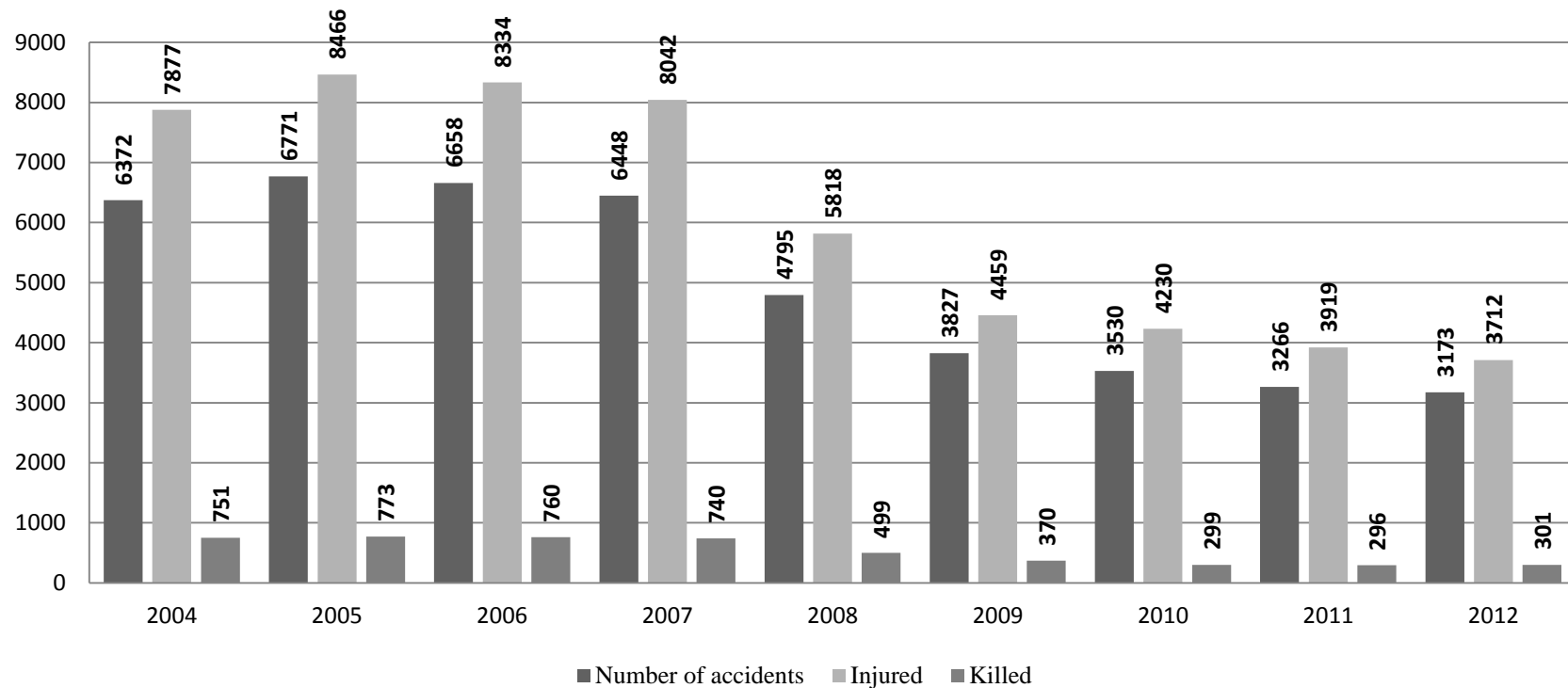
Number of Vehicles and Fatalities in 1991-2012



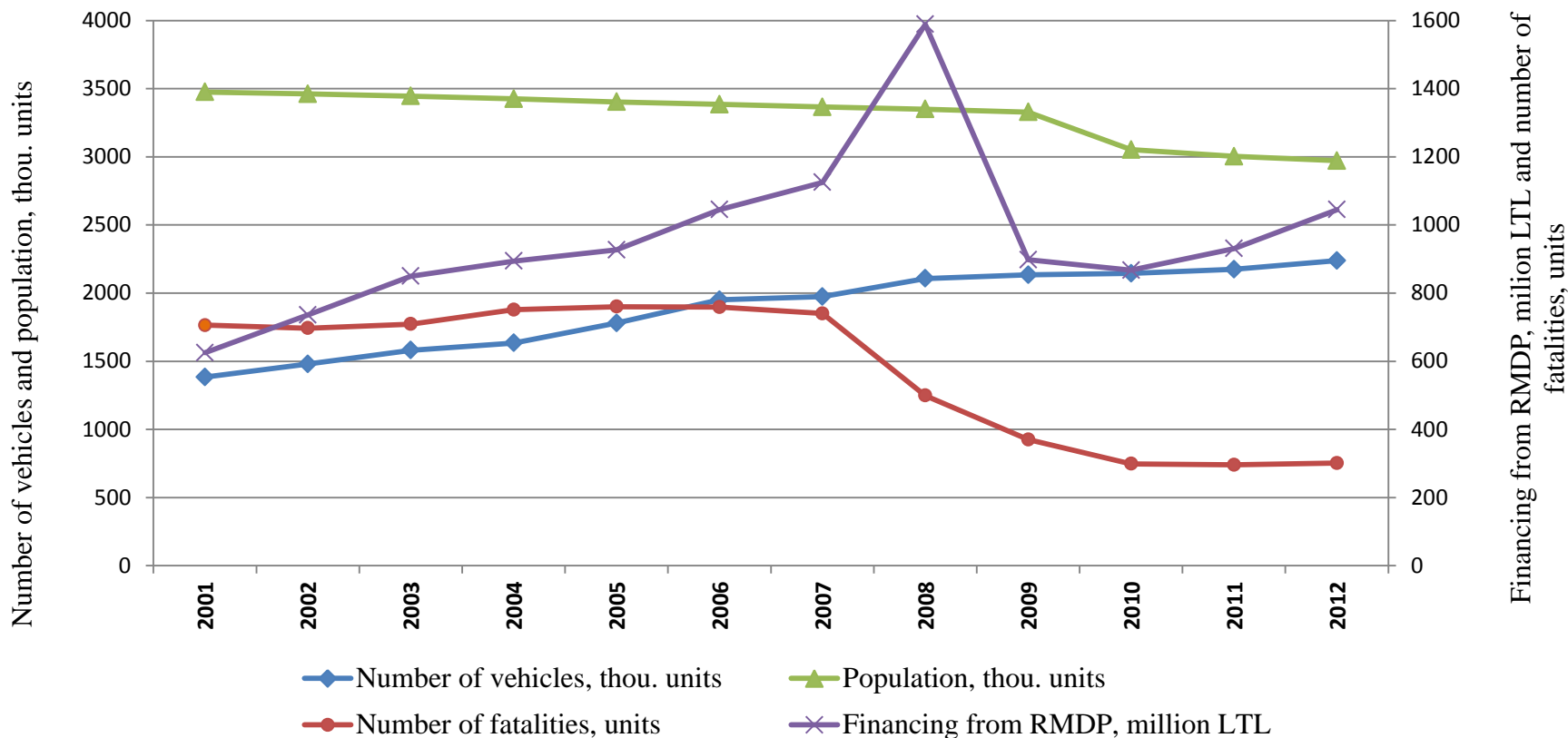
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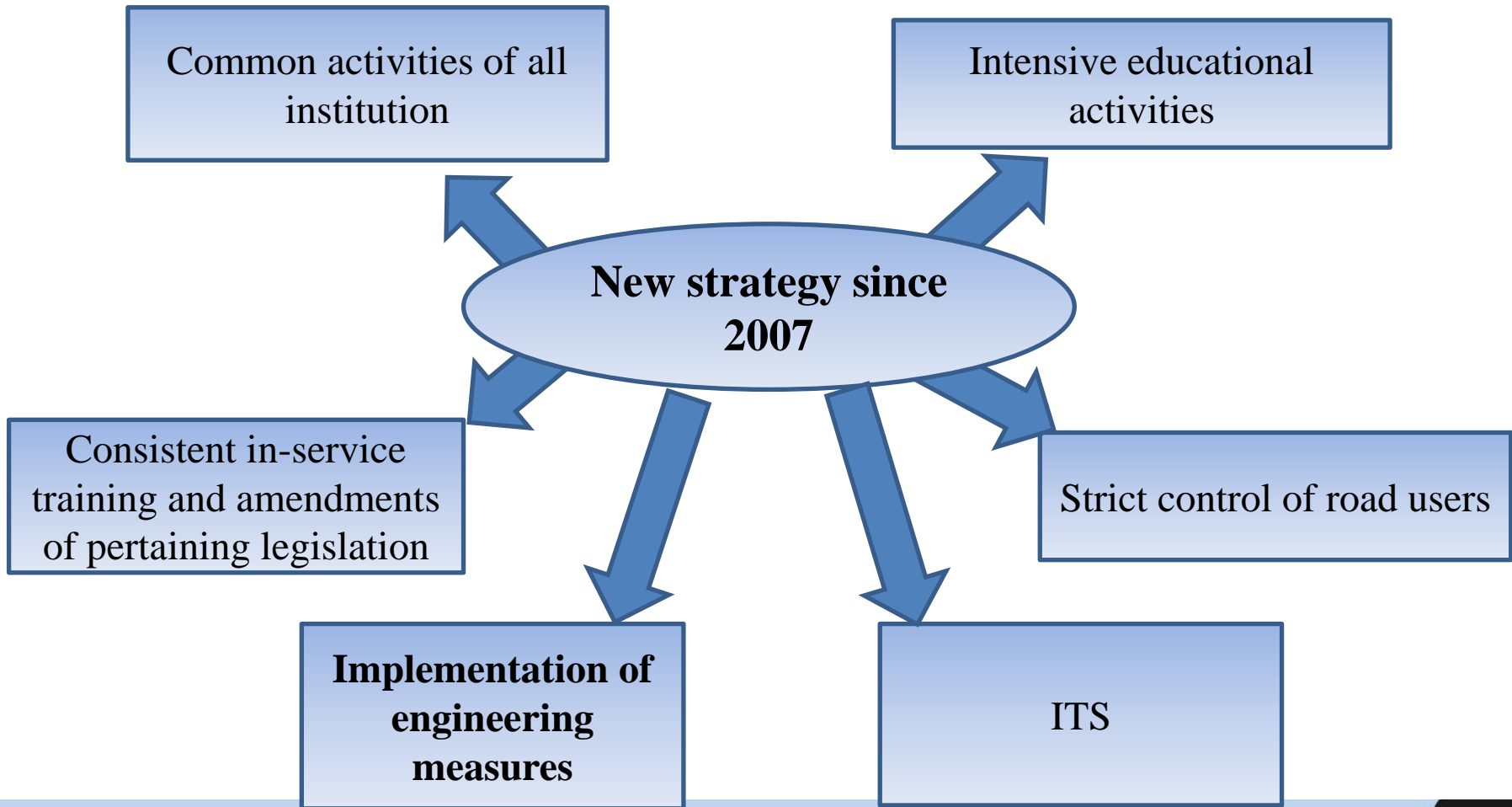
Number of accidents, persons injured and killed 2004-2012



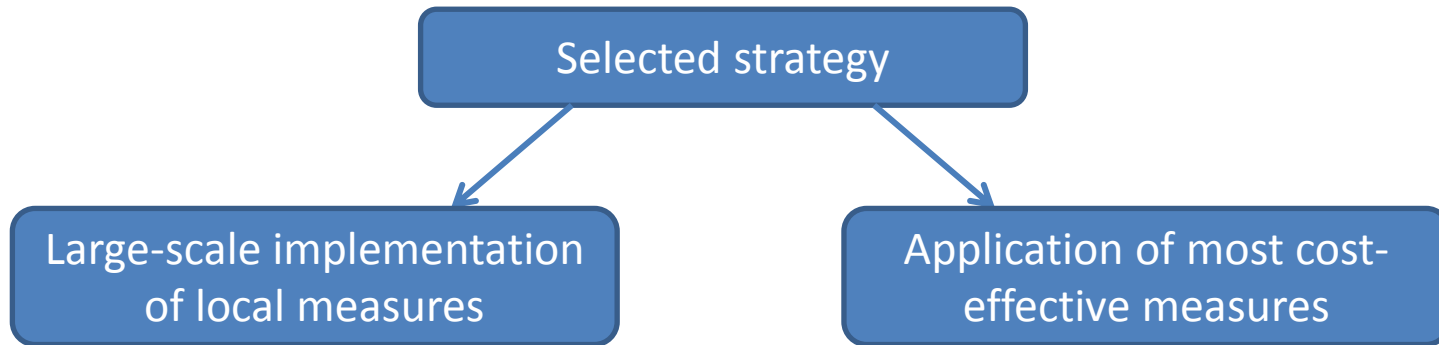
Impact of Road Sector Financing on Accident Rate



Factors Influencing on Accident Rate Reduction

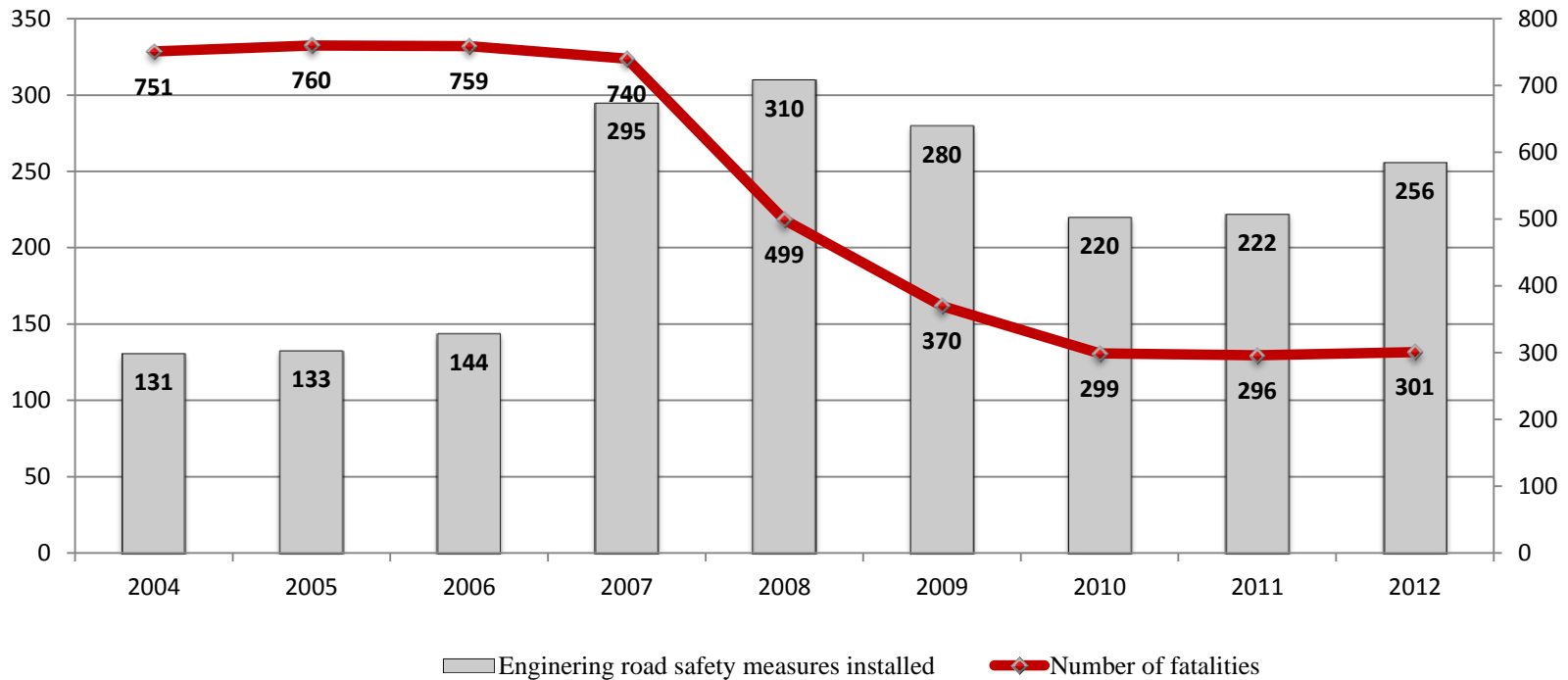


Type and strategy of engineering activities in Lithuania since 2007:



- Implementation of cheaper measures enabled to implement engineering activities in almost all accident-prone and dangerous localities;
- Implementation of minor measures enabled to reduce design and installation time;
- Extremely large dissemination of engineering measures was ensured;
- Significant improvement of general traffic safety conditions was achieved;
- Significant economic effect was obtained.

Fatality dependence of Engineering

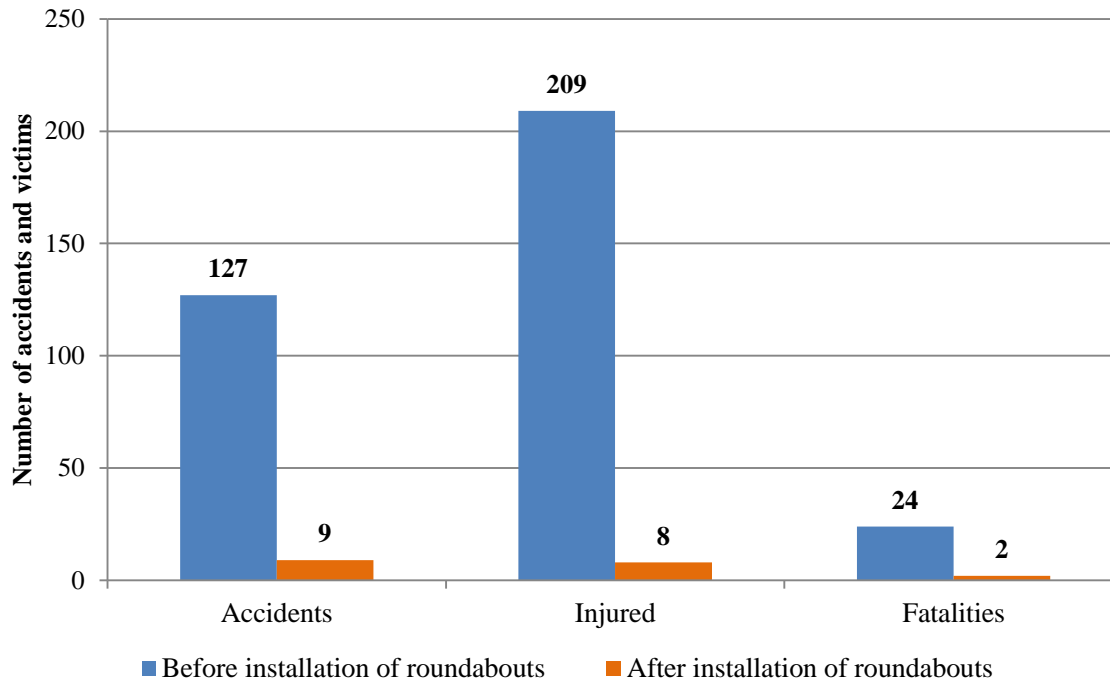


Engineering Solutions and Their Influence on Effectiveness



- Roundabouts;
- Engineering upgrading of dangerous junctions;
- Infrastructure for vulnerable road users;
- Improvement of lighting conditions;
- Safety islands, traffic calming, speed bumps;
- Speed management;
- Additional road safety measures;
- Improving safety of road sides.

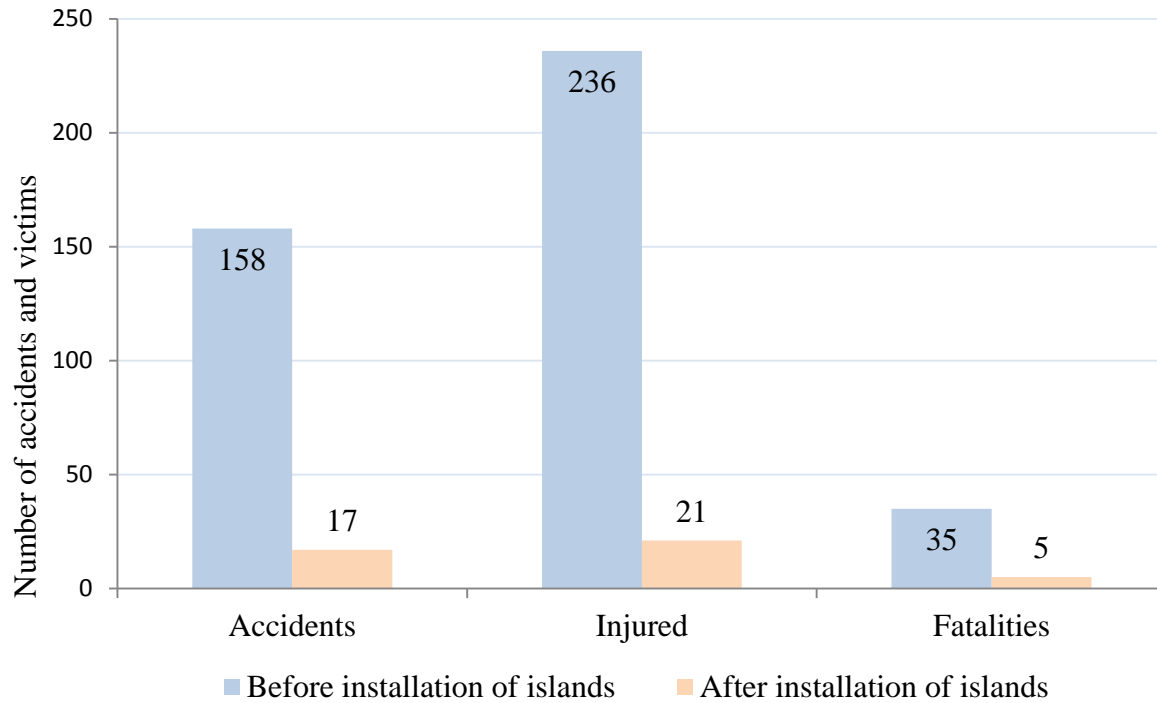
Roundabouts



	Change, %
Injury accidents	-92,91
Injured	-91,67
Fatalities	-96,17

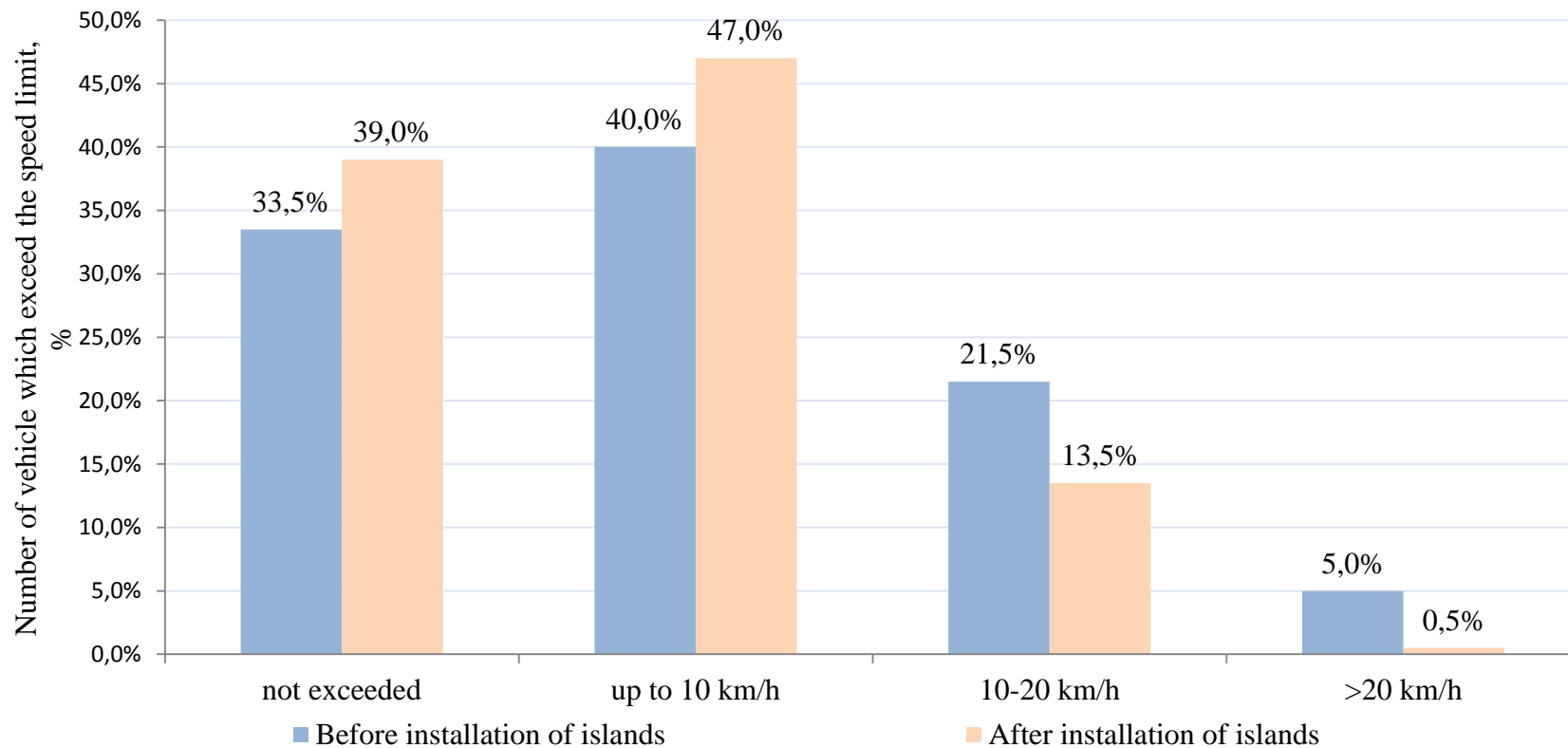


Safety Islands



	Change, %
Injury accidents	-89,2
Injured	-91,1
Fatalities	-85,7

Driving Speed Changes on Intersection Zones Before and After Installation of Road Safety Islands



Zaufajmy Drogi

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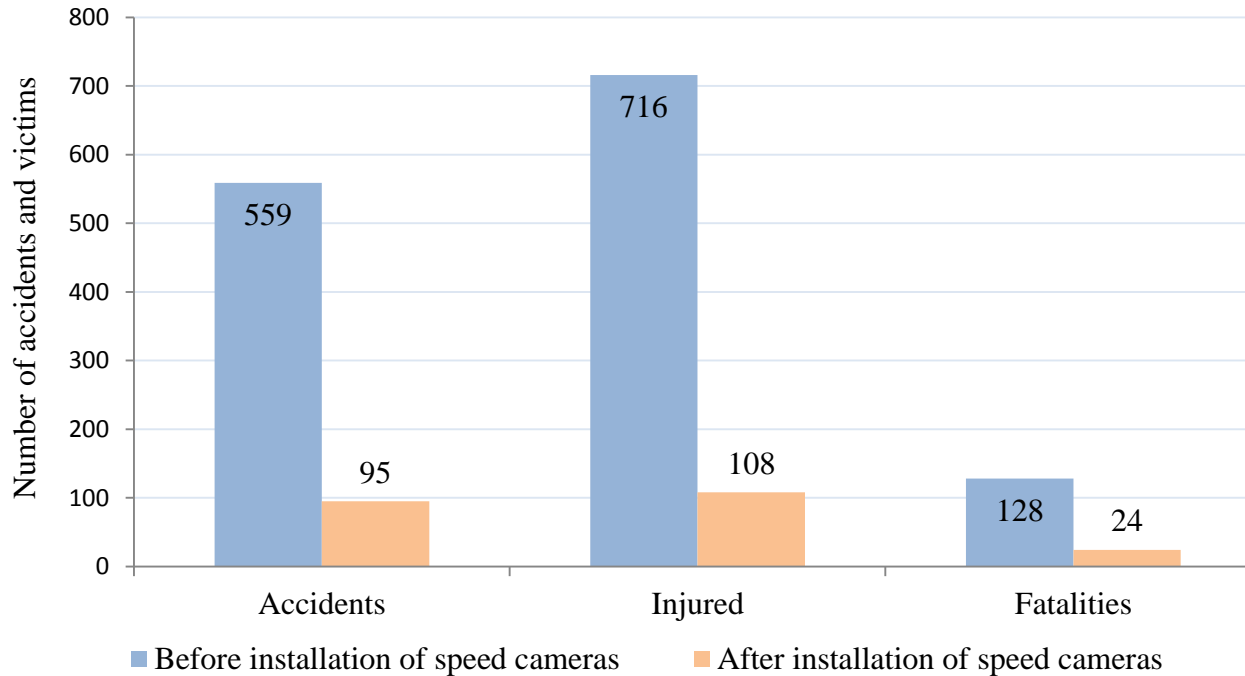
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NARODOWA STRATEGIA SPÓJNOŚCI

 Generalna Dyrekcja
Dróg Krajowych i Autostrad

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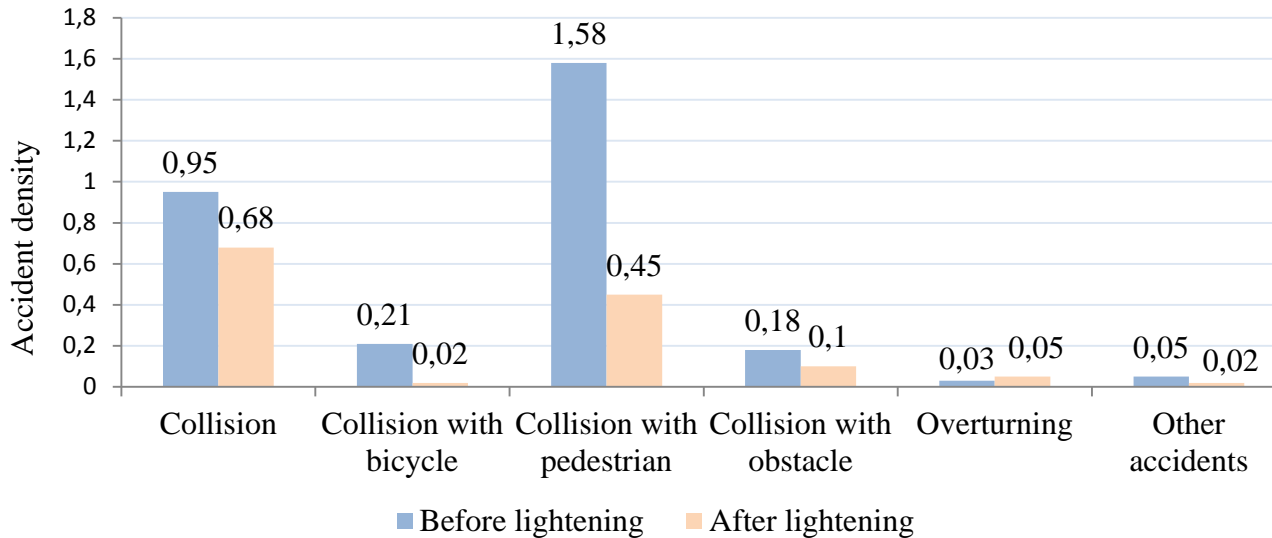
Speed Cameras



	Change, %
Injury accidents	-83,0
Injured	-84,9
Fatalities	-83,3



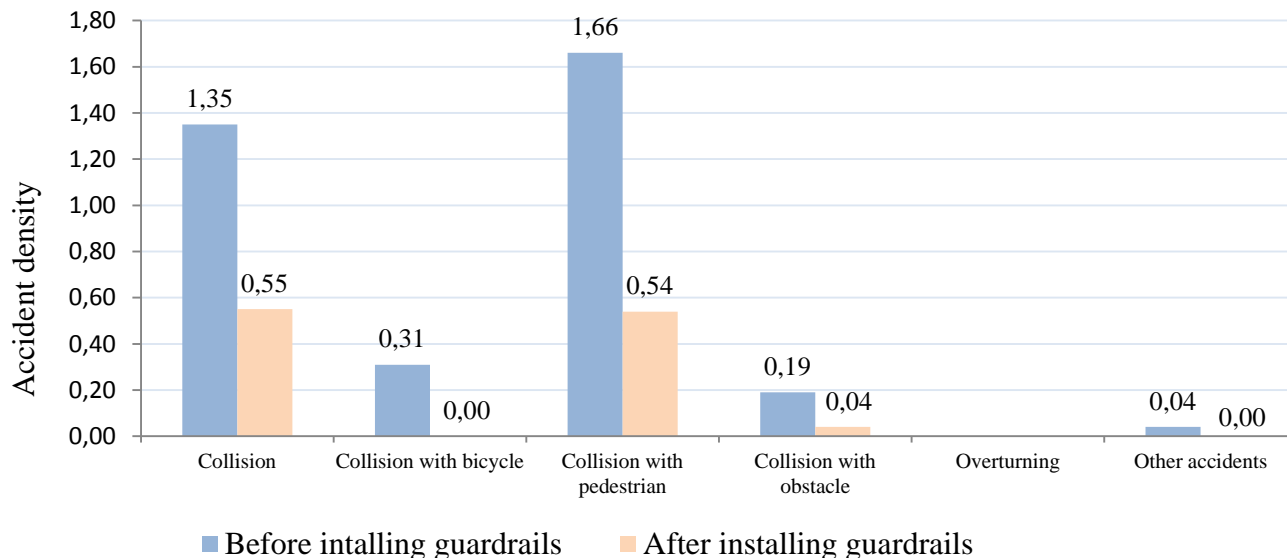
Accident Density by Accident Type Before and After Road Lightening



Accident type	Before lightening	After lightening
Collision	0,95	0,68
Collision with bicycle	0,21	0,02
Collision with pedestrian	1,58	0,45
Collision with obstacle	0,18	0,1
Overturning	0,03	0,05
Other accidents	0,05	0,02

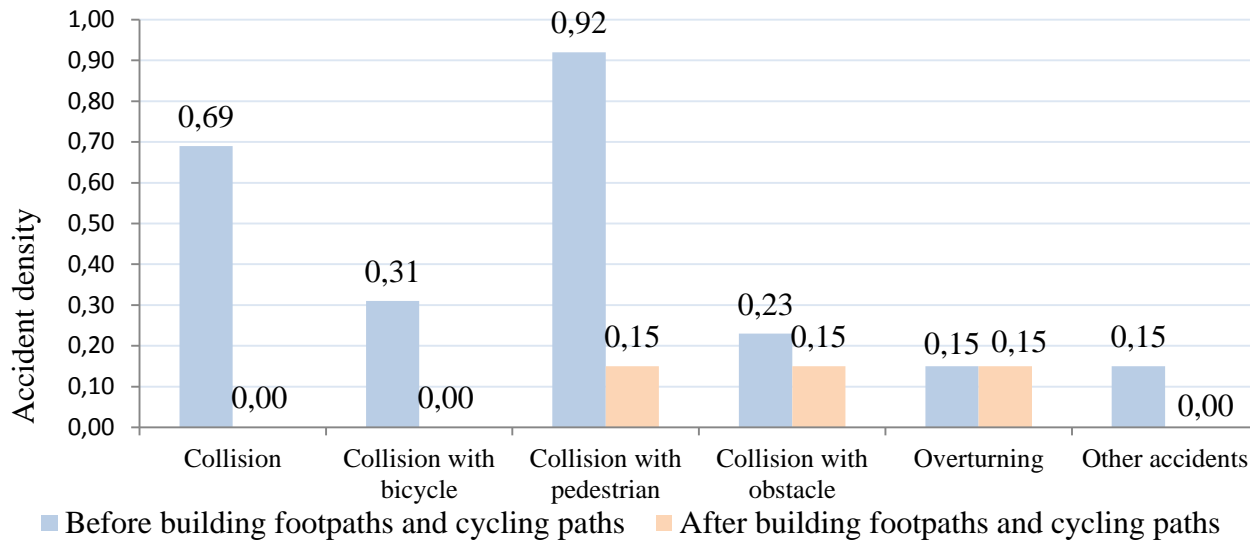


Accident Density by Accident Type Before and After Installing Guardrails



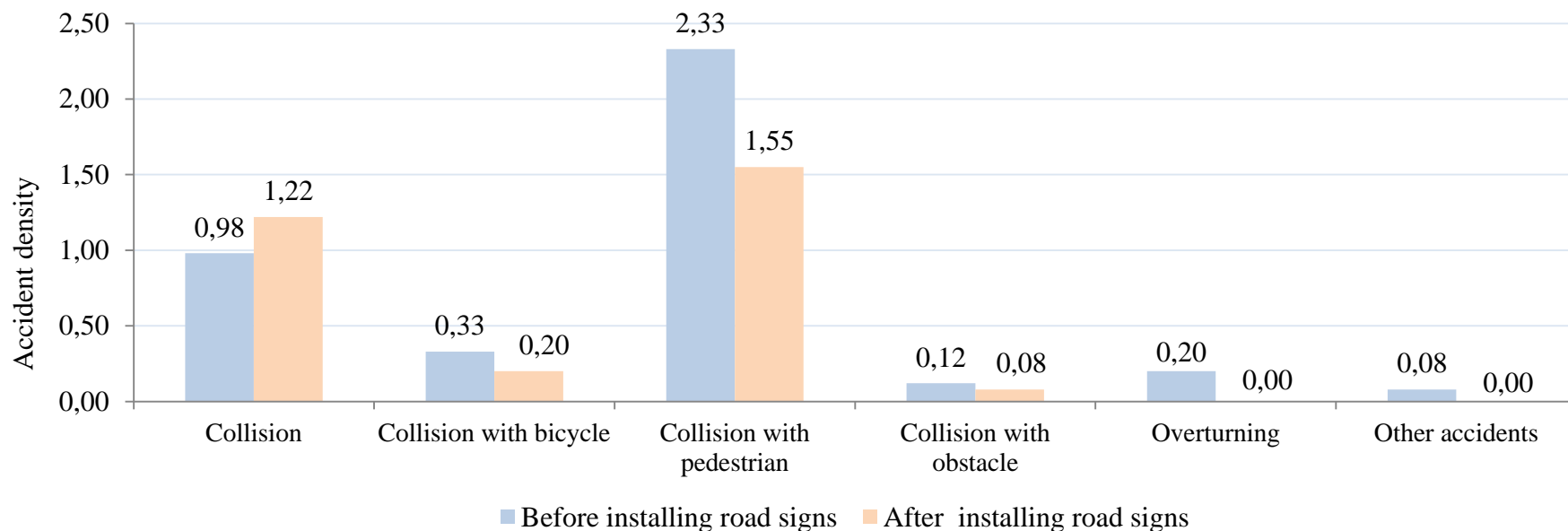
Accident type	Before installing guardrails	After installing guardrails
Collision	1,35	0,55
Collision with bicycle	0,31	0,00
Collision with pedestrian	1,66	0,54
Collision with obstacle	0,19	0,04
Overturning	1,4	0,01
Other accidents	0,04	0,00

Accident Density by Accident Type Before and After Building Footpaths and Cycling Tracks



Accident type	Before building footpaths and cycling tracks	After building footpaths and cycling tracks
Collision	0,69	0,00
Collision with bicycle	0,31	0,00
Collision with pedestrian	0,92	0,15
Collision with obstacle	0,23	0,15
Overturning	0,15	0,15
Other accidents	0,15	0,00

Accident Density by Accident Type Before and After Installing Road Sign



Accident type	Before installing road signs	After installing road signs
Collision	0,98	1,22
Collision with bicycle	0,33	0,20
Collision with pedestrian	2,33	1,55
Collision with obstacle	0,12	0,08
Overturning	0,20	0,00
Other accidents	0,08	0,00



Impact of Traffic Safety Measures on Road Accidents and Consequences

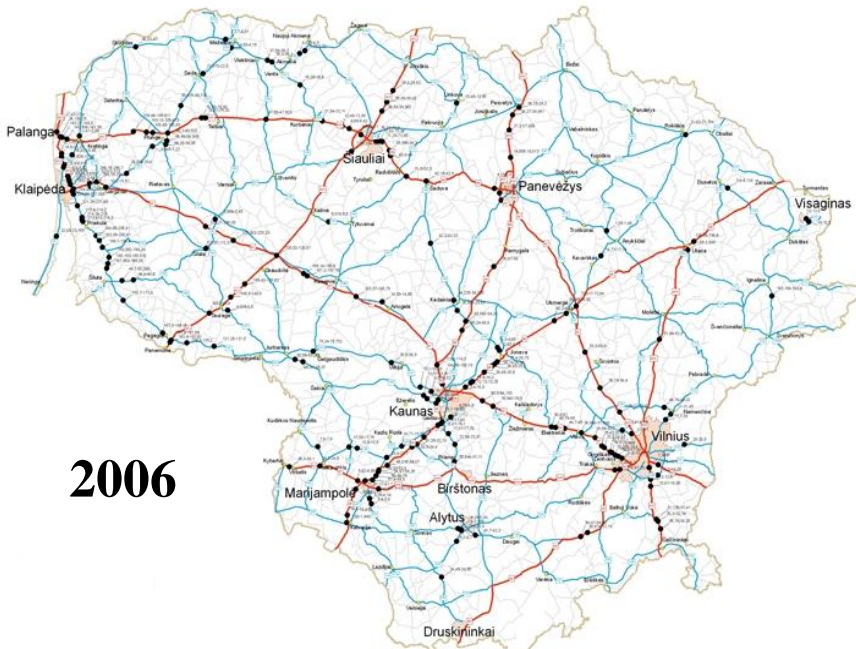
Measure	Change, %		
	Accidents	Fatalities	Injured
Lightning	-55,8	-73,0	-42,6
Guardrails	-68,1	-33,0	-72,6
Footpaths and cycling tracks	-81,0	-93,8	-87,2
Road signs	-24,0	-14,3	-7,6



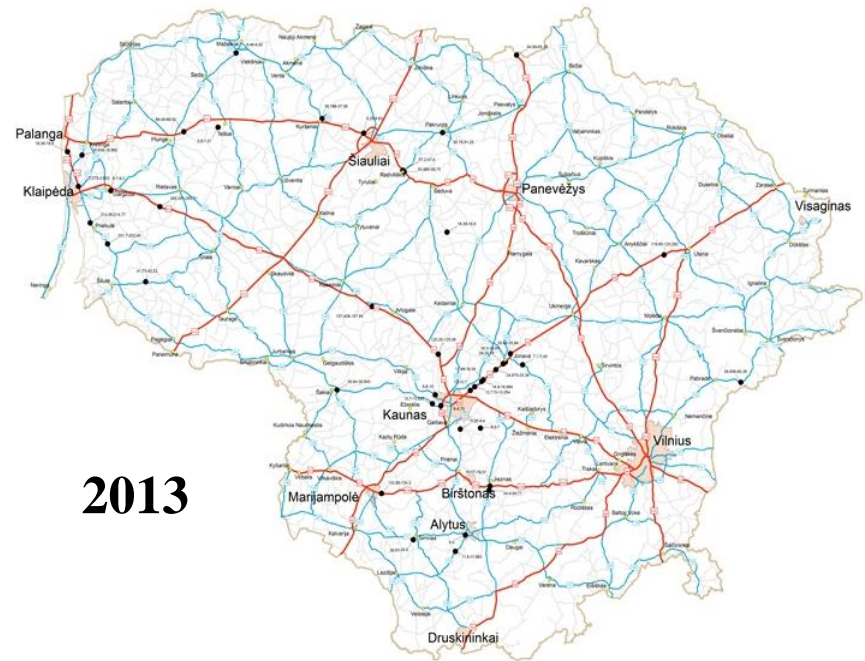
Impact of Traffic Safety Measures on Different Types of Accidents

Measure	Accident type	Change in the number of accidents, %
Lighting	Collisions	-28,1
	Accidents with pedestrians and cyclists	-73,7
	Collisions with obstacles	-44,3
Guardrails	Collisions	-59,1
	Collisions with obstacles	-80,0
	Accidents with pedestrians and cyclists	-72,5
Footpaths and cycling tracks	Accidents with pedestrians and cyclists	-87,5
Road signs	Collisions	25,0
	Accidents with pedestrians and cyclists	-33,8
	Collisions with obstacles	-33,3
	Overturnings	-100,0

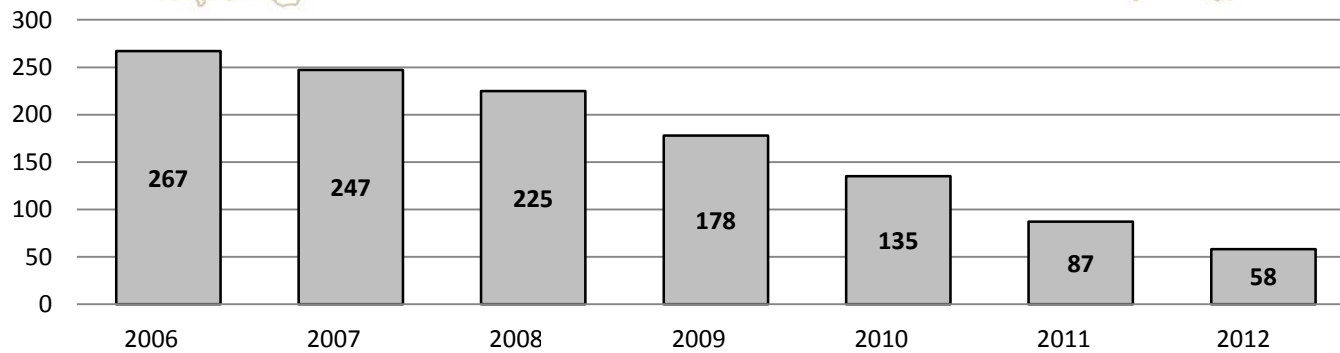
Black spots in Lithuanian roads



2006



2013



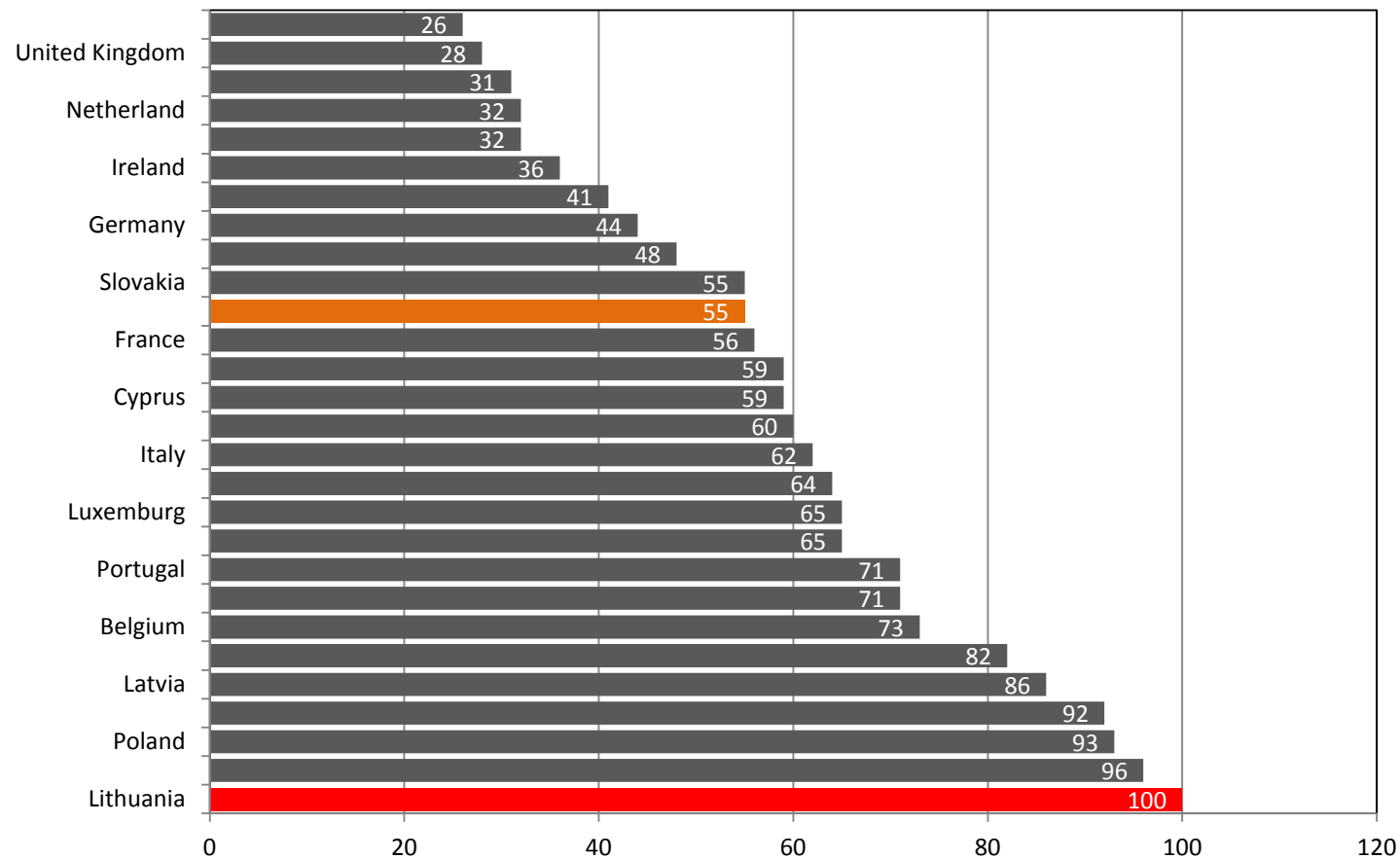
Lithuania and Sweden Receives PIN Road Safety Awards 2011



Road deaths cut by more than 60% in Lithuania since 2001

Number of Fatalities per 1 Million Inhabitants in 2012

Number of people killed per 1 million inhabitants



Zaufajcie Drogi

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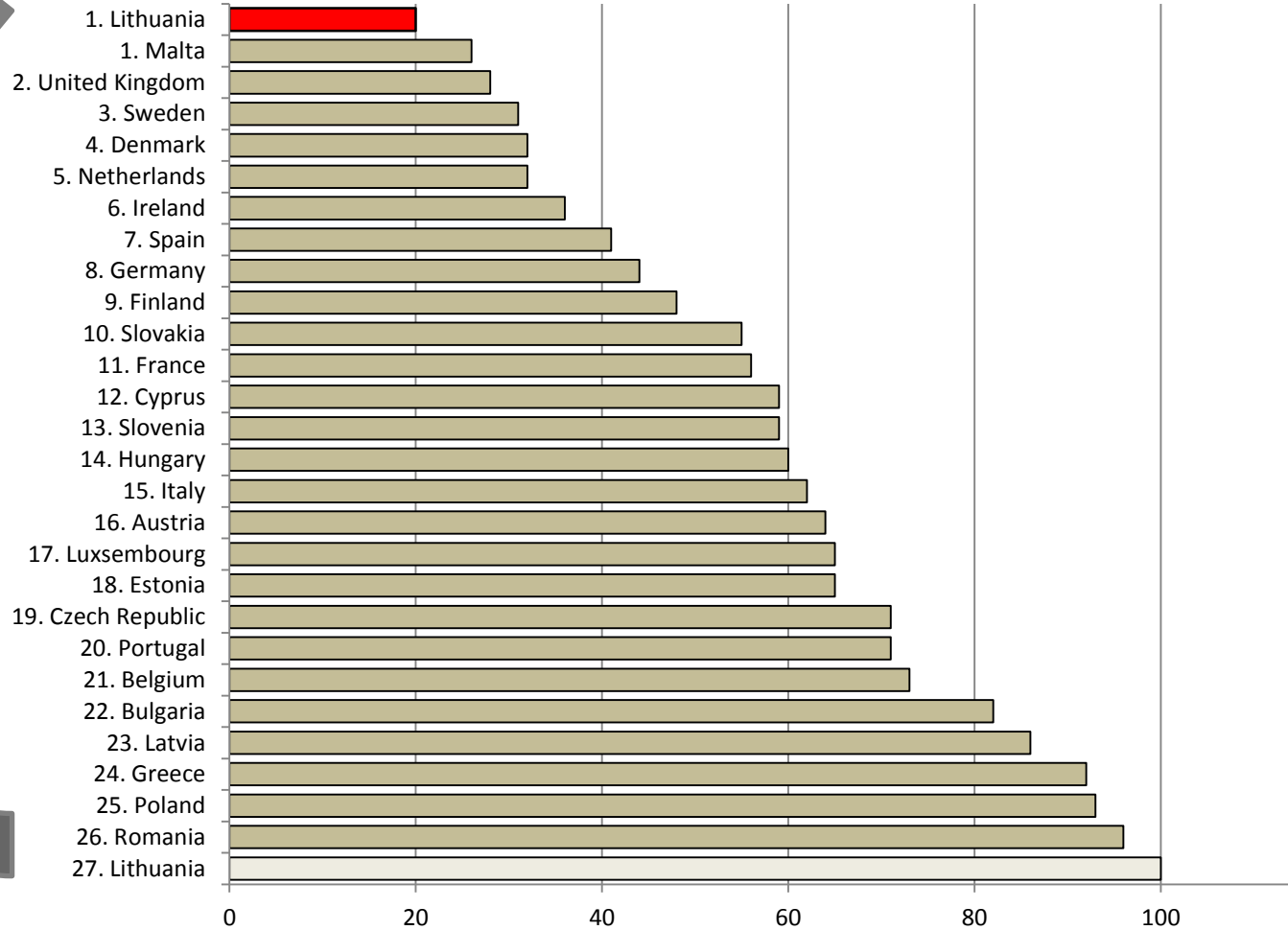
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Future challenges...



THANK YOU FOR YOUR ATTENTION