European Road Safety Observatory

National Road Safety Profile - Lithuania

This document is part of a series of 30 country profiles: one for each member of the EU 27 and three EFTA countries (Iceland, Norway and Switzerland). The purpose of this series is to provide tables and figures that give an overview of the road safety situation in a specific country. The tables and figures are organized according to a pyramid of road safety information: (1) road safety outcomes, (2) road safety performance indicators, (3) road safety programmes and measures, and (4) structure and culture.

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1 Highlights

Road safety outcomes

- In 2019 a total of 186 people were killed in reported traffic accidents in Lithuania.
- Lithuania is 7th out of 27 EU countries in terms of the highest numbers of fatalities per million inhabitants.
- Compared to the EU average, the distribution of fatalities shows a relatively high proportion of pedestrians. The proportion of powered two-wheelers on the other hand is smaller than the EU average.
- Over the past ten years the number of fatalities decreased more than in the European Union.

Road safety performance indicators

- Road infrastructure in Lithuania is characterized by high road density, except for motorways.

Road safety policy and measures

- Enforcement is more widely perceived as effective in comparison to other EU countries.

2 Road Safety Outcomes

2.1 General risk in traffic

In Lithuania, a total of 186 people were killed in reported traffic accidents in 2019. In terms of mortality rate, there were 67 road fatalities per million inhabitants, which is well above the EU average (51). In the first decade of this century, the mortality rate in Lithuania showed an upward trend and was much higher than the EU average. From 2007 the mortality rate in Lithuania decreased sharply and became closer to the EU average. When the number of vehicles is taken into account, Lithuania still performs worse than most EU countries with a rate of 1.1 fatalities per 10,000 registered vehicles in 2019.

Over the past ten years the number of fatalities decreased by almost 40%, which is more than the overall EU trend. Especially between 2012 and 2018 fatalities dropped significantly in Lithuania, while they remained stable in the European Union.

Table 1. Number of road fatalities and serious injuries (2010 and 2019). Source: CARE

	Victims	2010	2019	Trend	EU 2010	EU 2019	EU trend
Fatalities	Fatalities	299	186	-38%	29611	22756	-23%

Figure 1. Number of road fatalities per million inhabitants (2019). Source: CARE & EUROSTAT
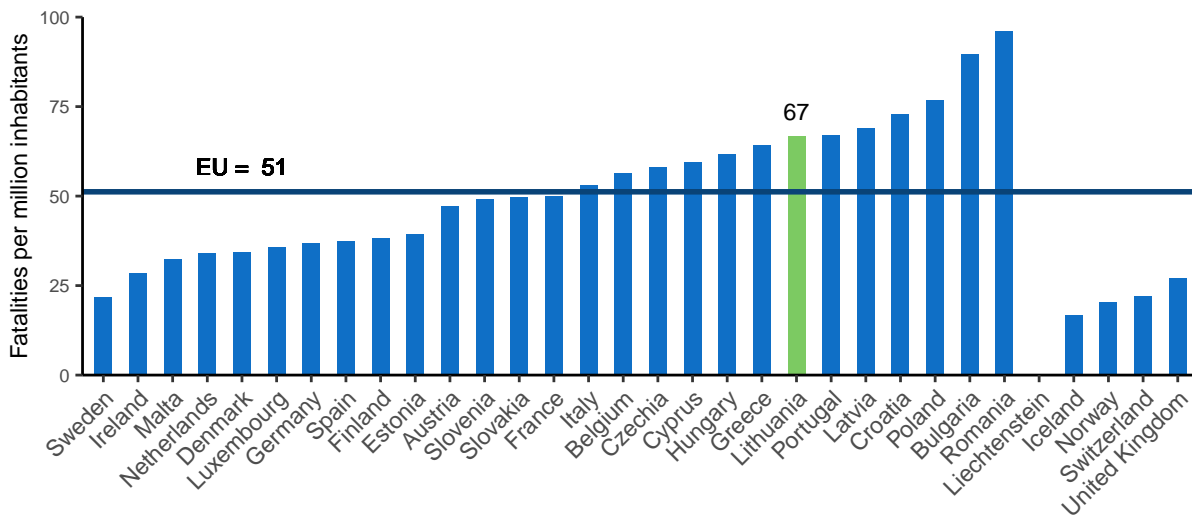
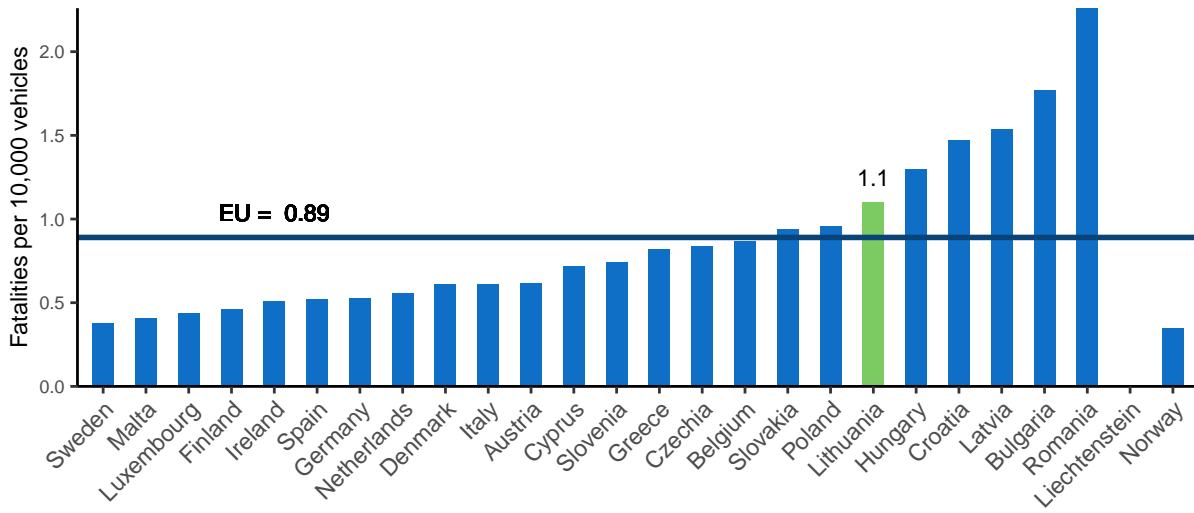**Figure 2.** Number of road fatalities per 10,000 registered vehicles (2019). Source: CARE & EUROSTAT

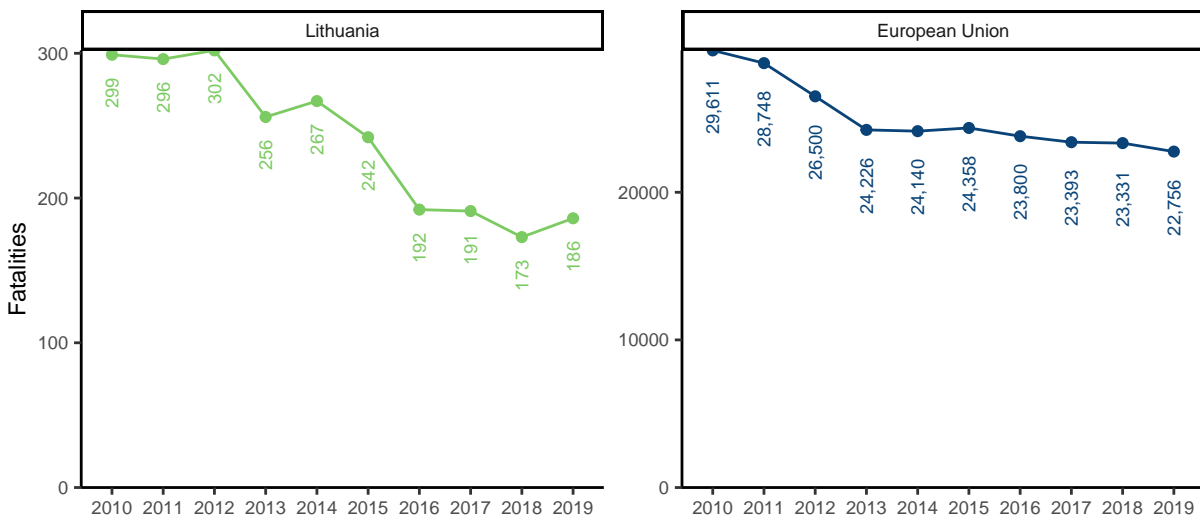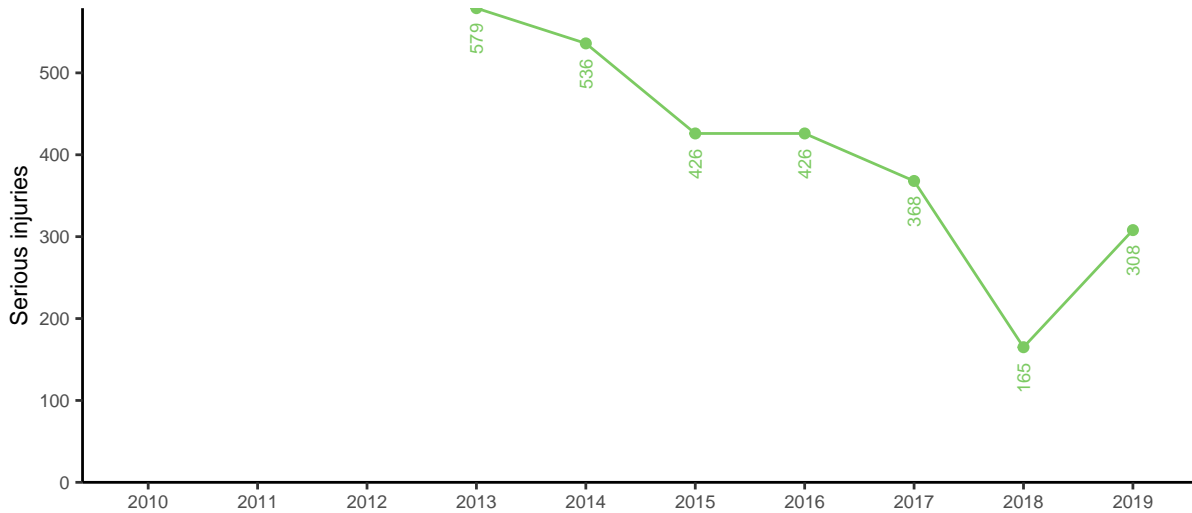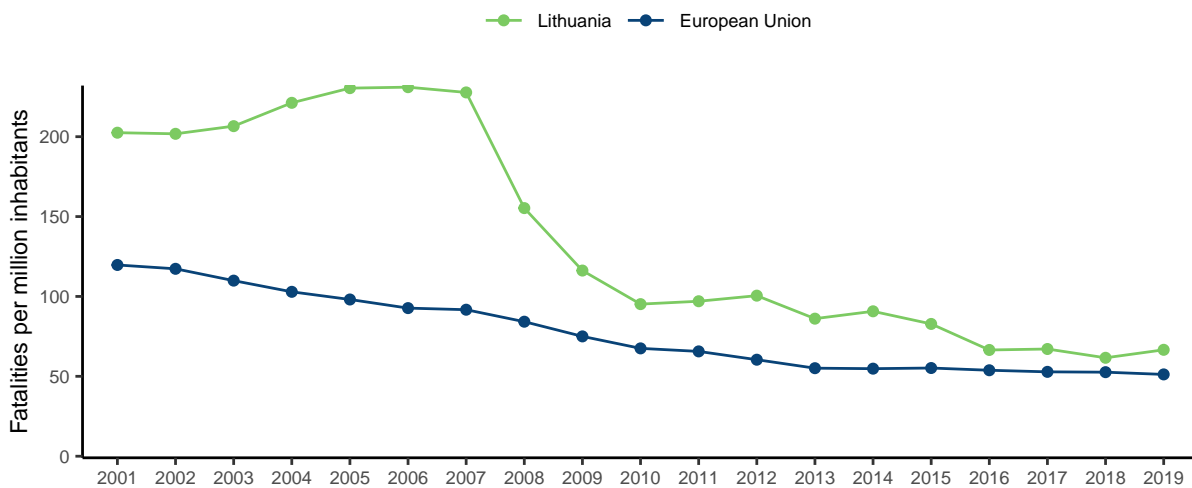**Figure 3.** Number of road fatalities (2010-2019). Source: CARE

Figure 4. Number of serious injuries (2010-2019). Source: CARE

Figure 5. Number of road fatalities per million inhabitants (2001-2019). Source: CARE & EUROSTAT

2.2 Transport modes[1]

In 2019, vulnerable road users (pedestrians, cyclists and powered two-wheelers) accounted for almost half of road traffic fatalities in Lithuania. The greatest difference with the EU is found in the road user category of pedestrians, which represented a third of Lithuania's road fatalities, as opposed to 20% in the European Union. Powered two-wheelers on the other hand account for 10% of road fatalities, which is well below the proportion that is seen in the European Union (18%).

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[1]For more details about the categories used in this subsection, please see section 6.2 Definitions.

Figure 6. Number of road fatalities by transport mode (2019). Source: CARE
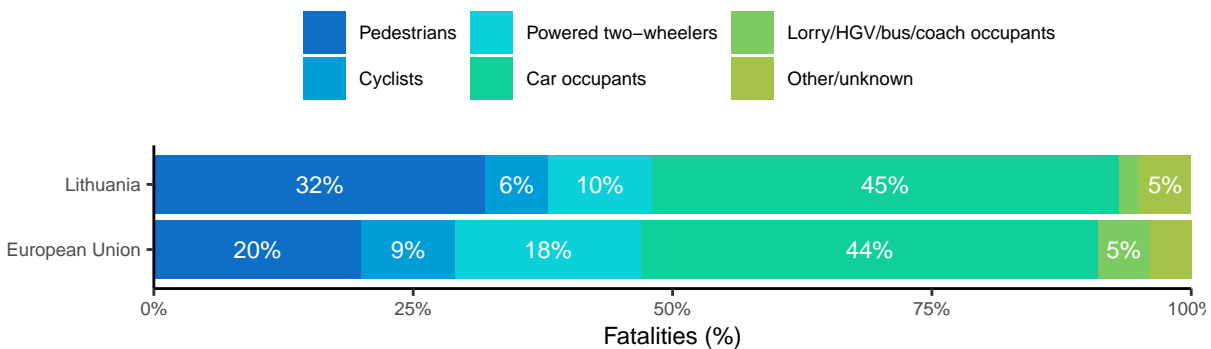
Table 2. Average number of road fatalities by transport mode (2017-2019). Source: CARE

	2017 - 2019	EU 2017 - 2019
Pedestrians	66	4,746
Cyclists	10	1,980
Powered two-wheelers	16	4,135
Car occupants	80	10,409
Lorries, under 3.5t	1	778
Heavy goods vehicles	3	408
Bus/coach occupants	0	107
Other/unknown	6	837
Total	*183*	*23,160*

Table 3. Average number of serious injuries by transport mode (2017-2019). Source: CARE

Transport mode	2017 - 2019
Pedestrians	83
Cyclists	18
Powered two-wheelers	25
Car occupants	131
Lorries, under 3.5t	5
Heavy goods vehicles	2
Bus/coach occupants	8
Other/unknown	9
Total	*280*

Table 4. Average number of road fatalities in urban areas by transport mode (2017-2019). Source: CARE

	Transport mode	2017 - 2019	EU 2017 - 2019
Pedestrians	Pedestrians	39	3,384
Cyclists	Cyclists	4	1,143
Powered two-wheelers	Powered two-wheelers	9	1,644
Car occupants	Car occupants	24	2,223
Lorries, under 3.5t	Lorries, under 3.5t	0	136
Heavy goods vehicles	Heavy goods vehicles	1	32
Bus/coach occupants	Bus/coach occupants	0	36
Other/unknown	Other/unknown	4	271
Total	*Total*	*81*	*8,925*

2.3 Age

The distribution of road fatalities across age groups in Lithuania is similar to that for the European Union, with a slight underrepresentation of the oldest age group. People aged 50 to

64 on the other hand, represent 25% of road fatalities in Lithuania while they are only 21% in the European Union. Also the share of people aged 18 to 24 is slightly higher in Lithuania compared to the EU.

Figure 7. Number of road fatalities by age group (2019). Source: CARE

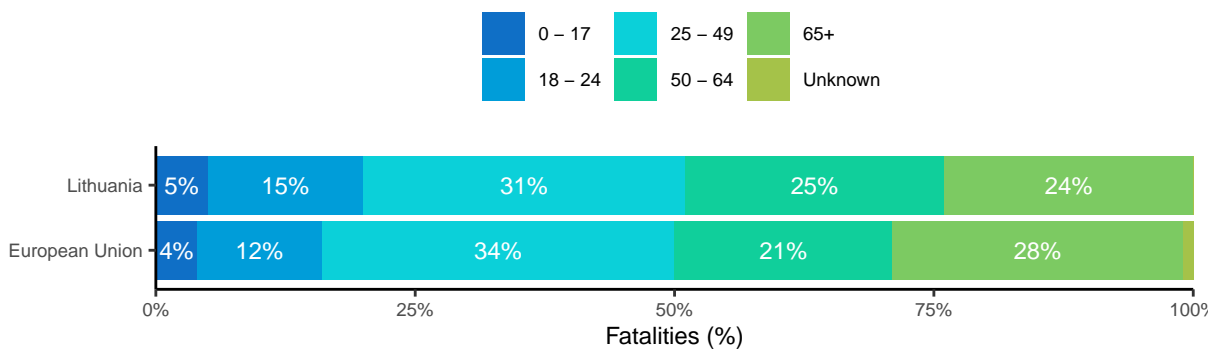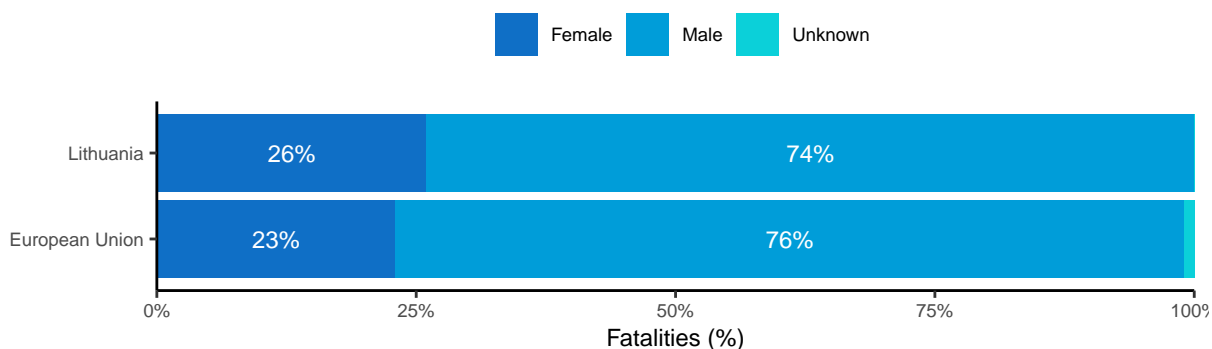**Table 5.** Average number of road fatalities by age group (2017-2019). Source: CARE

	2017 - 2019	EU 2017 - 2019
<15	6	502
15 - 17	2	488
18 - 24	23	2,750
25 - 49	60	7,885
50 - 64	46	4,882
65+	45	6,545
Unknown	1	295
Total	*183*	*23,160*

Table 6. Average number of serious injuries by age group (2017-2019). Source: CARE

Age	2017 - 2019
<15	22
15 - 17	12
18 - 24	42
25 - 49	100
50 - 64	62
65+	42
Unknown	0
Total	*280*

2.4   Gender

The high proportion of males among total road fatalities in Lithuania (74%) is similar to the EU average. This gender pattern apparent throughout the EU can be explained by differences in relation to frequency of transport use and to behaviour.

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Figure 8. Number of road fatalities by gender (2019). Source: CARE

Table 7. Average number of road fatalities by gender (2017-2019). Source: CARE

	2017 - 2019	EU 2017 - 2019
Female	51	5,444
Male	131	17,714
Unknown	1	190
Total	*183*	*23,160*

Table 8. Average number of serious injuries by gender (2017-2019). Source: CARE

Gender	2017 - 2019
Female	105
Male	175
Unknown	0
Total	*280*

2.5 Area

Almost half of road fatalities in Lithuania occur on rural roads and another half occurs on urban roads. Very few fatalities occur on motorways.
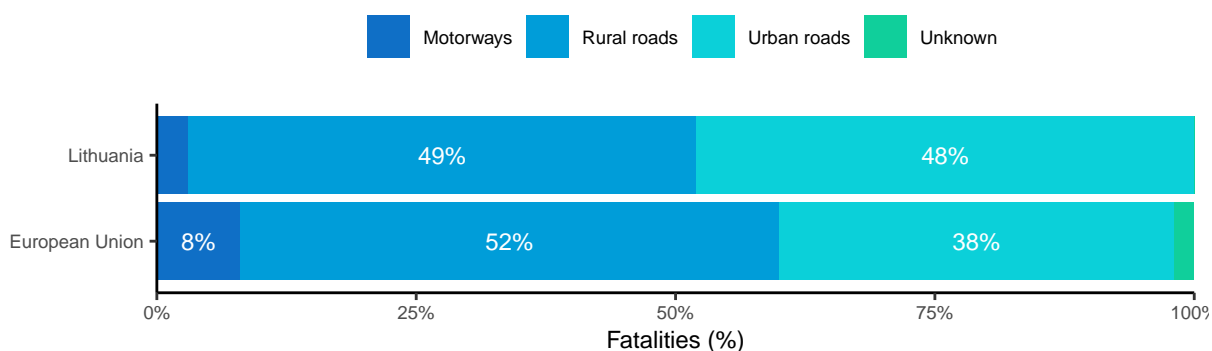
Figure 9. Number of road fatalities by road type (2019). Source: CARE

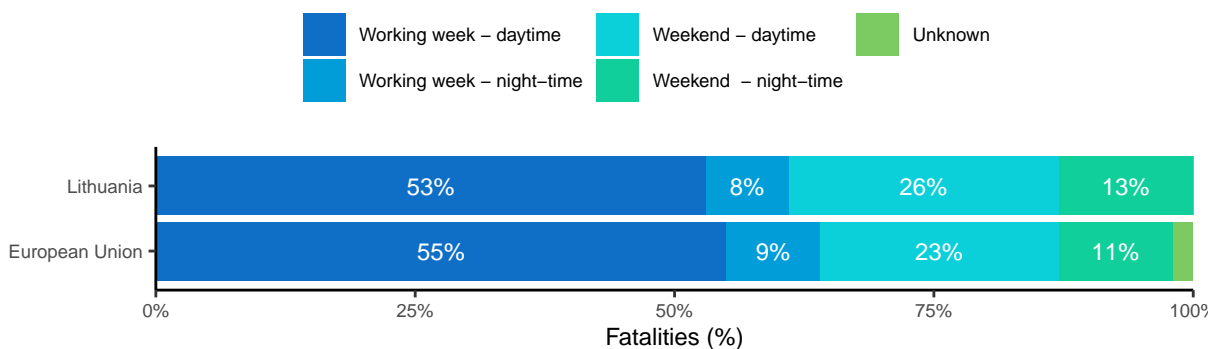**Table 9.** Average number of road fatalities by road type (2017-2019). Source: CARE

	Road type	2017 - 2019	EU 2017 - 2019
Motorway	Motorway	7	1,978
Rural	Rural	95	12,283
Urban	Urban	81	8,925
Unknown	Unknown	/	477
Total	*Total*	*183*	*23,160*

Table 10. Average number of serious injuries by road type (2017-2019). Source: CARE

	Road type	2017 - 2019
Motorway	Motorway	9
Rural	Rural	114
Urban	Urban	158
Unknown	Unknown	/
Total	*Total*	*280*

2.6   Time [2]

The distribution of fatalities by day of the week is slightly different from the EU average: the country shows a higher proportion of fatalities that occur during the weekends (39%), both in the day as during the night.

Figure 10. Number of road fatalities by period of time (2019). Source: CARE

Table 11. Average number of road fatalities by period of time (2017-2019). Source: CARE

	2017 - 2019	EU 2017 - 2019
Working week - daytime	106	13,244
Working week - night-time	13	1,984
Weekend - daytime	43	5,350
Weekend - night-time	21	2,583
Unknown	0	509
Total	*183*	*23,160*

2.7   Road conditions

As in the rest of the European Union, the majority of road fatalities in Lithuania occur on dry roads. Wet roads account for 28% of road fatalities, which is higher than in the European Union

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[2]For more details about the time periods used in this subsection, please see section 6.2 Definitions.

as a whole. Regarding light conditions, 38% of fatalities occur when it is dark, which is more compared to the EU average.

Figure 11. Number of road fatalities by surface conditions (2019). Source: CARE
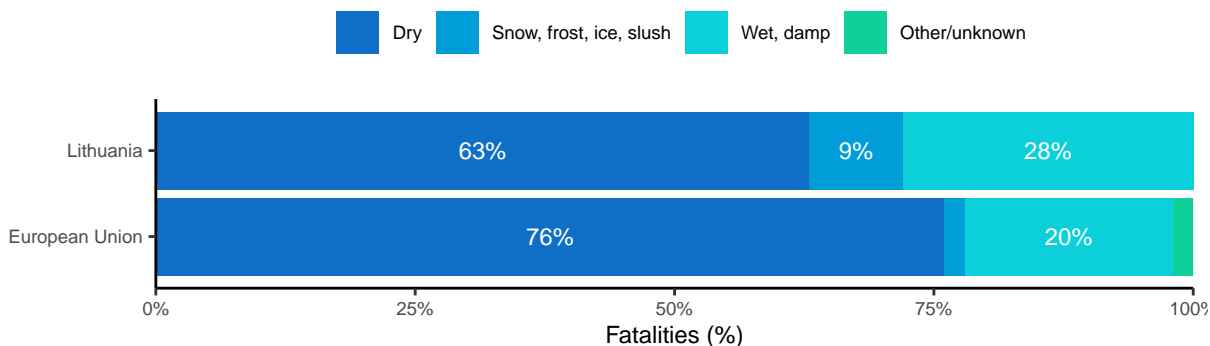

Table 12. Average number of road fatalities by surface conditions (2017-2019). Source: CARE

	2017 - 2019	EU 2017 - 2019
Dry	110	17,671
Snow, frost, ice, slush	15	447
Wet, damp	58	4,633
Other/unknown	/	598
Total	*183*	*23,160*

Figure 12. Number of road fatalities by light conditions (2019). Source: CARE

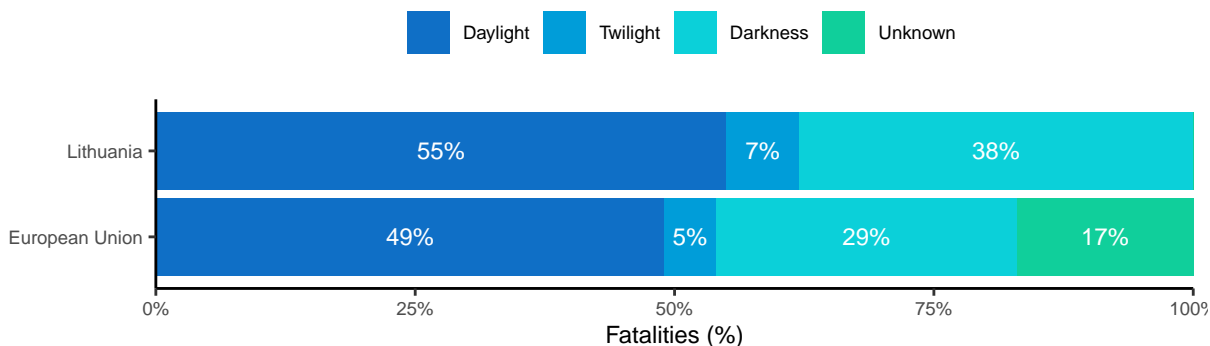**Table 13.** Average number of road fatalities by light conditions (2017-2019). Source: CARE

	Light conditions	2017 - 2019	EU 2017 - 2019
Darkness	Darkness	71	6,756
Daylight	Daylight	101	11,891
Twilight	Twilight	11	1,228
Unknown	Unknown	/	4,058
Total	*Total*	*183*	*23,160*

3 Road safety performance indicators

3.1 Behaviour of road users

For Lithuania there is no data available about behaviour in traffic that is comparable with other EU countries.

3.1.1 Speeding

Table 14. Observed speeding. Source: ETSC (2012)

	Mean speed (km/h)	Percentage offenders
Motorways (110km/h)	100	33%
Motorways (130km/h)	110	19%

3.1.2 Use of protective systems

Table 15. Observed seatbelt wearing rate. Source: IRTAD (2019)

	Seatbelt wearing rate
Car drivers on urban roads	97%
Car drivers on rural roads	96%
Car drivers on motorways	97%
Car drivers	97%
Front seat passengers	92%

3.2 Infrastructure

The overall road network in Lithuania shows relatively high road density in comparison with the EU average. Motorway density on the other hand is much lower compared to the EU average. The indicator for the quality of road infrastructure is based on the judgements made by road users themselves. For Lithuania, a score of 4.7 (on a value scale from 1 to 7) is given, which is average compared to other countries.

3.2.1 Road density

Table 16. Road density. Source: EUROSTAT (2019)

	Lithuania	European Union
Inside built-up areas	101 km road/1000 km²	150 km road/1000 km²
Outside built-up areas	1196 km road/1000 km²	609 km road/1000 km²
Motorways	6 km road/1000 km²	15 km road/1000 km²
Total	1303 km road/1000 km²	942 km road/1000 km²

3.2.2 Road quality

Figure 13. Perceived quality of the road infrastructure (1 = extremely poor, 7 = among the best in the world). Source: World Economic Forum, Executive Opinion Survey (2017-2018)
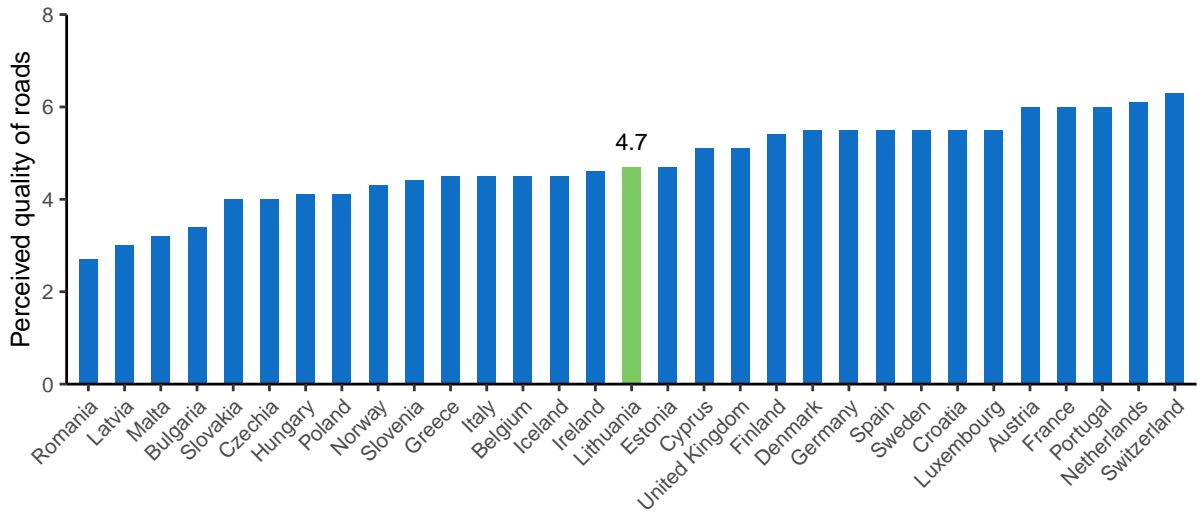
4 Road safety policy and measures

4.1 Legislation

National road safety legislation in Lithuania reflects the situation in the majority of EU countries with some exceptions. The legislation regarding drink driving is somewhat stricter than in most EU countries: the alcohol limit for the general population is 0.4 g/l while in most countries the limit is 0.5 g/l. There is also a zero-percent alcohol limit for novice drivers and professional drivers.

Table 17. National road safety legislation. Source: WHO (2018)

	Lithuania	EU countries
Speed limits for passenger cars		
Urban roads	50 km/h	50 km/h: 26; 65 km/h: 1
Rural roads	90 km/h	110 km/h: 2; 100 km/h: 3; 90 km/h: 17; 80 km/h: 4
Motorways	130 km/h	No limit1; 140 km/h: 2; 130 km/h: 14; 120 km/h: 6; 100 km/h: 1
Allowed BAC (blood alcohol concentration) levels		
General population	0.4 g/l	0 g/l: 3; 0.2 g/l: 3; 0.3 g/l: 0; 0.4 g/l: 1; 0.5 g/l: 19; 0.8 g/l: 1
Novice drivers	0 g/l	0 g/l: 8; 0.1 g/l: 1; 0.2 g/l: 12; 0.3 g/l: 1; 0.5 g/l: 4; 0.8 g/l: 1
Professional drivers	0 g/l	0 g/l: 7; 0.1 g/l: 1; 0.2 g/l: 10; 0.3 g/l: 1; 0.5 g/l: 7; 0.8 g/l: 1
Seatbelt requirement		
Drivers	Yes	Yes: 27; No: 0
Front passengers	Yes	Yes: 27; No: 0
Rear passengers	Yes	Yes: 27; No: 0
Transport of children		
Child restraint required	Up to 135 cm	Up to 150 cm: 13; Up to 135 cm: 12; Up to 10 yrs: 1
Children in front seat of passenger cars	Allowed in a child restraint	Prohibited under 10 yrs: 1; Prohibited under 12 yrs or 135 cm: 1; Prohibited under 150 cm: 1; Prohibited under 135 cm: 1; Allowed in a child restraint: 22; Not restricted: 1
Children passengers on motorcycles	Prohibited under 12 yrs	Not restricted: 9; Prohibited under certain age/height: 18
Motorcycle helmets		
Applies to driver	Yes	Yes: 27; No: 0
Applies to passengers	Yes	Yes: 27; No: 0
Applies to all roads	Yes	Yes: 27; No: 0
Applies to all engines	Yes	Yes: 25; No: 2
Helmet fastening required	Yes	Yes: 19; No: 8
Standard referred to and / or specified	No	Yes: 19; No: 8
Mobile phone restriction		
Applies to hand-held phone use	Yes	Yes: 26; No: 1
Applies to hands-free phone use	No	Yes: 0; No: 27

4.2 Enforcement

According to an international respondent consensus, in which the effectiveness of road safety enforcement is measured on a ten-point scale, Lithuania scores above average for almost all legislation surveyed.

Table 18. Effectiveness of enforcement according to an international respondent consensus (scale = 0-10). Source: WHO (2018)

	Lithuania	European average
Speed legislation	7	6.8
Drink-driving legislation	8	7
Seatbelt legislation	7	7
Child restraint system legislation	8	7
Motorcycle helmet legislation	9	8

4.3   Road infrastructure

Table 19. Infrastructure-related policy. Source: WHO (2018)

	Lithuania	EU countries
Audits or star rating required for new road infrastructure	Partial	Yes: 10 Partial: 17
Inspections / star rating of existing roads	Yes	Yes: 26 No: 1
Design standards for the safety of pedestrians / cyclists	Yes	Yes: 25 Partial: 2 No: 0
Investments to upgrade high risk locations	Yes	Yes: 20 No: 7
Policies & investment in urban public transport	Yes	Yes: 23 No: 4
Policies promoting walking and cycling	Yes	Yes: 21 Subnational: 3 No: 3

4.4   Post-crash care

Table 20. Policy related to post-crash care. Source: WHO (2018)

	Lithuania	EU countries
Trauma registry	National	National: 13 Subnational: 4 Some facilities: 0 None: 7
National assessment of emergency care system	No	Yes: 9 No: 18
Provider training and certification - Prehospital providers - Formal certification pathway	No	Yes: 19 No: 6
Provider training and certification - Nurses - Post graduate courses in emergency and trauma care	Yes	Yes: 21 No: 5
Provider training and certification - Specialist doctors - Emergency medicine	Yes	Yes: 21 Subnational: 0

5 Structure and culture

5.1 Country characteristics

Population density in Lithuania is much lower than the EU average, and its population is mainly settled in cities and rural areas. Its GDP per capita is below that of the European Union, but the percentage of GDP that is dedicated to road spending is higher than the EU average (1%).

Table 21. Country characteristics. Source: EUROSTAT and IRTAD

	European Union	Lithuania
Population-related data (2020)		
Population (2020)	447319916	2794090
Population density (inhabitants/km²)	106	43
% Children (0-14)	15%	15%
% Adults (15-64)	64%	65%
% Elderly (65+)	21%	20%
Urbanization (2019)		
% living in cities	38%	43%
% living in suburbs and towns	34%	2%
% living in rural areas	28%	55%
Economic data		
GDP per capita (EUR, 2020)	29768.3	17511.9
Unemployment rate (2020)	7%	8%
% GDP dedicated to road spending (2019)	0.6%	1%

5.2 Structure of road safety management

Table 22. Road safety management structure. Source: National sources

Key functions	Key actors
Formulation of national road safety strategy	Ministry of Transport and Communications
	Lithuanian Road Administration
Monitoring of the road safety development	Traffic Safety Commission (The Commission approved by the Government consists of governmental/state administration and municipal administration bodies and representatives of NGOs)
Improvements in road infrastructure	The Lithuanian Road Administration (LRA) under the Ministry of Transport and Communications
Improvement in vehicles	The State Road Transport Inspectorate under the Ministry of Transport and Communications
Improvement in road user education	The State Road Transport Inspectorate under the Ministry of Transport and Communications
	Ministry of Education
	LRA
Publicity campaigns	Traffic Safety Commission
Enforcement of traffic laws	Police
Other relevant actors	Lithuanian National Association Helping Traffic Victims (NPNAA)
	Universities and research institutes

6 Notes

6.1   Data sources

CARE

(Community database on Accidents on the Roads in Europe) All information in part 1 of this document (road safety outcomes) is based on data in the CARE database. The European average is based on the average of the 27 EU countries. Date of extraction: 15th of November, 2021. There may be small discrepancies between the CARE data presented in the report and the accident data published in national reports.

ESRA (E-Survey of Road Users' Attitudes)

The European average is the average of 20 European countries (Austria, Belgium, Czechia, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Portugal, Serbia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom) https://www.esranet.eu/en/

ETSC (European Transport Safety Council)

Car safety data was retrieved from https://etsc.eu/wp-content/uploads/PIN-Flash-30-Final.pdf Data about speeding was retrieved from https://www.etsc.eu/pinflash36

IRTAD (International Traffic Safety Data and Analysis Group)

Data is retrieved from the OECD database: https://stats.oecd.org/ Date of extraction: 7th of August 2020

WHO (World Health Organization)

The data are retrieved from the WHO Global Status Report on Road Safety that was published in 2018. The European average is based on the average of the 27 EU countries. https://www.who.int/violence_injury_prevention/road_safety_status/2018/en/

World Economic Forum

Data is retrieved from http://reports.weforum.org/pdf/gci-2017-2018-scorecard/WEF_GCI_2017_2018_Scorecard_EOSQ057.pdf

6.2   Definitions

Accident / Crash

Any accident involving at least one road vehicle in motion on a public road or private road to which the public has right of access, resulting in at least one injured or killed person (Source: UNECE/ITF/Eurostat Glossary). Note: the definition of "injury" varies considerably among EU countries thus affecting the reliability of cross country comparisons.

Bicycle

Vehicle with at least 2 wheels, without engine. In some cases it can also use electric power.

Bus or Coach

Bus: passenger-carrying vehicle, most commonly used for public transport, having more than 16 seats for passengers. Coach: passenger-carrying vehicle, having more than 16 seats for

passengers. Most commonly used for interurban movements and tourist trips. To differentiate from other types of bus, a coach has a luggage hold separate from the passenger cabin.

CARE EU Average and aggregated numbers

In the second section "Road safety outcomes", we provide EU averages and aggregated figures based on the most recent figures available (2019). However, as some countries have not yet provided their official data for that year, we have produced the EU averages and aggregated data by imputing figures based on data from previous years. The aggregated EU averages and figures in this report may therefore differ slightly from the aggregated averages and figures for 2019 that will be published in the future.

Fatal crash

Crash with at least one person killed regardless the injury severity of any other persons involved.

Fatalities

Total number of persons fatally injured within 30 days of the road crash; correction factors applied when needed. Confirmed suicide and natural death are not included.

Lorry, under 3.5 tonnes

Goods vehicle under 3.5t maximum gross weight. Smaller motor vehicle used only for the transport of goods.

Pedestrian

Person on foot. Included are occupants or persons pushing or pulling a child's carriage, an invalid chair, or any other small vehicle without an engine. Also included are persons pushing a cycle, moped, roller-skating, skateboarding, skiing or using similar devices. Does not include persons in the act of boarding or alighting from a vehicle. (Source: UNECE/ITF/Eurostat Glossary and CADAS Glossary) Unilateral pedestrian crashes (e.g. pedestrian falls) are excluded.

Powered two-wheelers

Driver or passenger of either a moped (two or three wheeled vehicle equipped with engine size of maximum 50cc and maximum speed that does not exceed 45 km/h. A moped can also have an electric motor. Speed pedelecs and electric powered bicycles that offer pedal assistance up to 45 km/h, also belong to this category of vehicles.) or a motorcycle (motor vehicle with two or three wheels, with an engine size of more than 50 cc. A motorcycle can also have an electric motor.).

Seriously injured (at least 30 days)

The CARE database includes the number of persons seriously injured who have been hospitalised for at least 24 hours. An alternative source is MAIS (Maximum Abbreviated Injury Scale) which is a globally accepted trauma scale used by medical professionals. The injury score is determined at the hospital with the help of a detailed classification key. The score ranges from 1 to 6, with levels 3 to 6 considered as serious injuries.

Working week – Daytime

Monday to Friday 6.00 a.m. to 9.59 p.m.

Working week – Night-time

Monday 10 p.m. to Tuesday 5.59 a.m. Tuesday 10 p.m. to Wednesday 5.59 a.m. Wednesday 10 p.m. to Thursday 5.59 a.m. Thursday 10 p.m. to Friday 5.59 a.m.

Weekend - Daytime

Saturday to Sunday 6.00 a.m. to 9.59 p.m.

Weekend - Night-time

Friday 10 p.m. to Saturday 5.59 a.m. Saturday 10 p.m. to Sunday 5.59 a.m. Sunday 10 p.m. to Monday 5.59 a.m.