European Commission

Country Profile

Iceland

Mobility and Transport

This document is part of a series of 30 country profiles: one for each Member State of the EU 27 and three EFTA countries (Iceland, Norway, and Switzerland). The purpose of this series is to provide an overview of the road safety situation in a specific country.

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Referencing:	Reproduction of this document is allowed with due acknowledgement. Please refer to the document as follows: European Commission (2023), Country Profile Iceland. Road Safety Observatory. Brussels, European Commission, Directorate General for Transport.

Contents

1. Highlights

Road Safety Outcomes

- In 2021, only 9 people were killed and 199 people were seriously injured in road crashes in Iceland.
- This translates to risk rates of 24 fatalities per million population and 0.27 fatalities per thousand vehicles, which is very low in comparison to the rest of the EU.

Road Safety Performance Indicators

- The use of child restraint systems (CRS) in passenger cars in Iceland is higher than the EU average.
- Helmet use rates among cyclists are higher than the EU average.

Road Safety Policy Measures & Country Characteristics

- There are no motorways in Iceland.
- The alcohol limit for drivers among the general population is 0.2g/l, which is lower than in most EU countries (0.5g/l).
- Iceland is characterized by very low road density compared to the EU average.

2. Road Safety Outcomes

2.1 Road Safety Trends

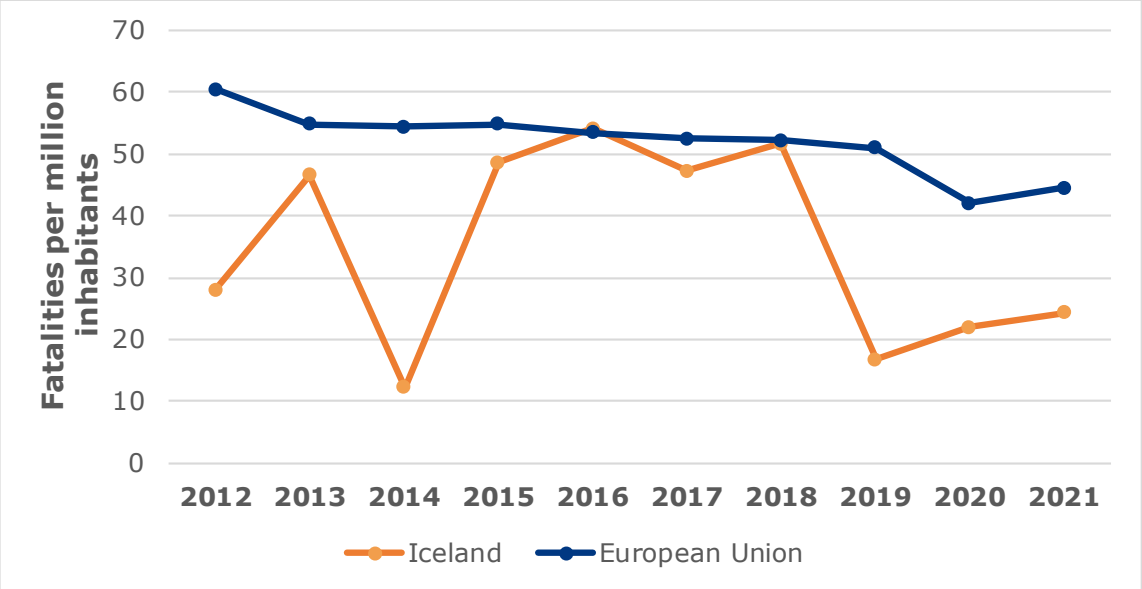
In Iceland, 9 people were killed and 199 people were seriously injured in road crashes in 2021[a]. Over the period 2012-2021, the number of fatalities in Iceland remained stable. The number of serious injuries on the other hand showed a significant increase over the same period (by 46%).

In terms of mortality rates, 24 road fatalities per million inhabitants were recorded in 2021, which is well below the EU average (45).

Table 1. Number of fatalities and serious injuries (2012 and 2021)

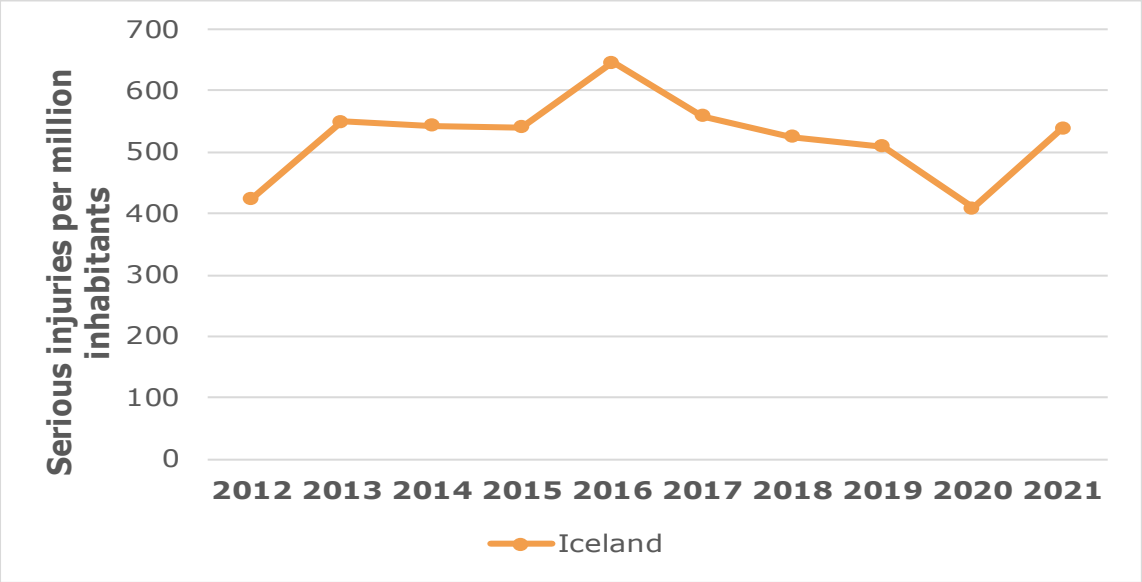
	2012	2021	Trend	EU trend
Fatalities	9	9	-	-25%
Serious Injuries	136	199	46%	-

Figure 1. Mortality rate development, 2012 – 2021



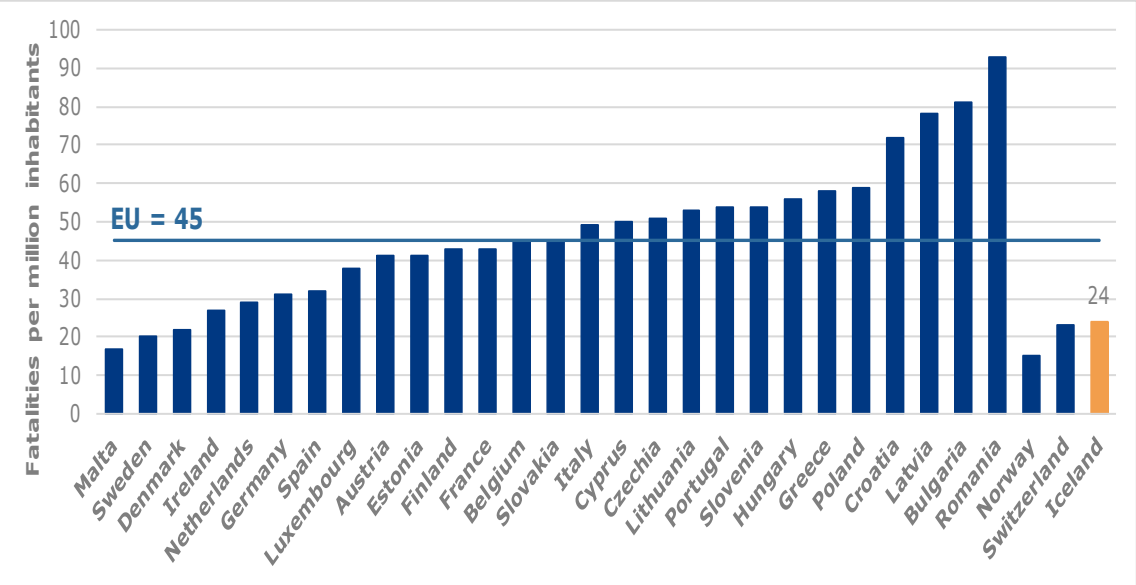
[a] It is noted that the global COVID-19 pandemic had an impact on the CARE data for 2020 and 2021 for many European countries. Traffic volumes dropped sharply during the pandemic due to traffic restrictions, which was associated with a significant drop in road traffic crashes and fatalities.

Figure 2. Evolution of serious injuries per million inhabitants, 2012 – 2021



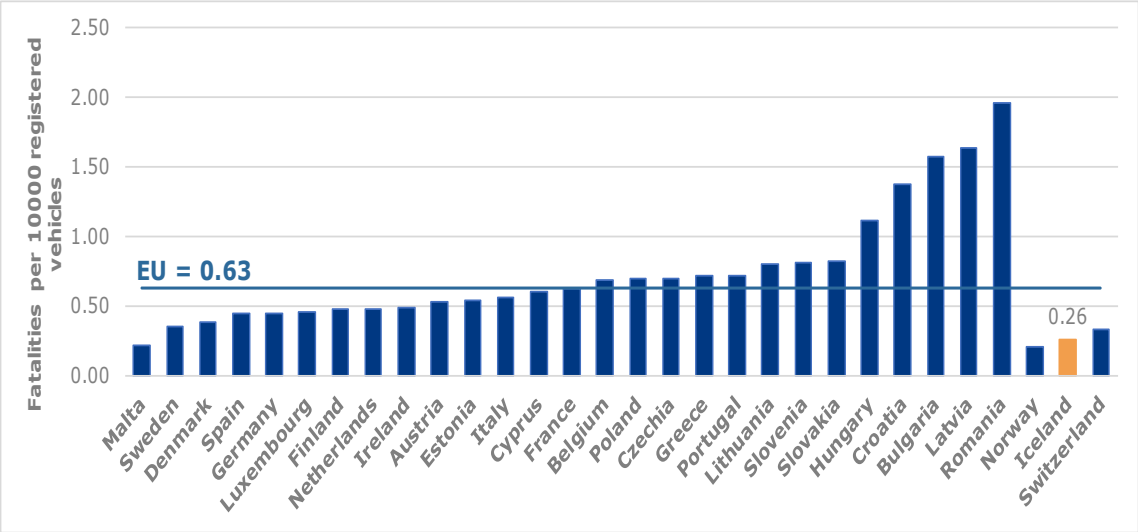
2.2 Risk Figures

Figure 3. Mortality rates by country, 2021



Taking into account the number of vehicles, Iceland still performs better compared to the EU average. The rate of 0.26 fatalities per 10,000 registered vehicles in Iceland is well below the EU average.

Figure 4. Fatalities per thousand registered vehicles, 2021



2.3 Transport Mode

In 2021[b], 4 out of 9 fatalities were car occupants. An increase was observed in serious injuries, with the highest increase recorded for pedestrians (67%), followed by powered two-wheelers (25%) and cyclists (20%).

Over the period 2012-2021, there has been a decrease in the numbers of fatalities in Iceland for almost all transport modes. Concerning serious injuries, an increase was observed in pedestrians (67%), powered two-wheelers (25%) and cyclists (20%).

Of those vulnerable road users (VRUs: pedestrians, cyclists and powered two-wheelers) that were fatally injured in Iceland in crashes involving either passenger cars or buses/coaches or lorries and heavy goods vehicles, half were involved in a crash with a car, and the other half were involved in a crash with a bus or coach.

Also, the number of fatalities in single vehicle crashes (i.e., only one vehicle and no other road user is involved) has decreased.

[b] Different shares of transport modes in the casualty numbers, as shown in this section, may also reflect differences in the size of the vehicle fleet and the usage of different modes rather than a difference in safety level.

Table 2: Number of fatalities by transport mode, 2012 and 2021

	2012	2021	Trend	EU trend
Bus/coach occupants	0	0	-	+26%
Car occupants	6	4	-	-28%
Cyclists	0	1	-	-12%
Heavy goods vehicles	0	1	-	-11%
Lorries, under 3.5t	1	0	-	-14%
Other/unknown	0	1	-	-13%
Pedestrians	2	2	-	-34%
Powered two-wheelers	0	0	-	-18%
Total	9	9	-	-25%

Figure 5. Distribution of road fatalities by transport mode, 2021

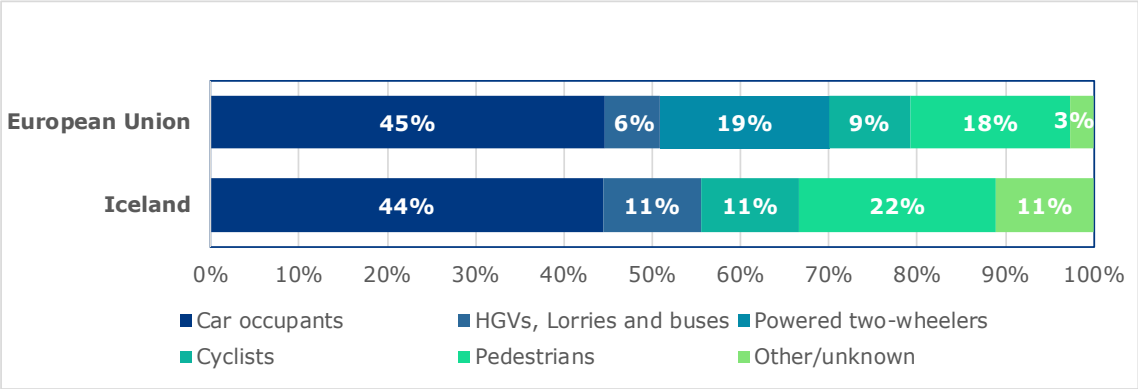


Table 3: Number of serious injuries by transport mode, 2012 and 2021

	2012	2021	Trend
Bus/coach occupants	3	5	-
Car occupants	69	68	-1%
Cyclists	20	24	+20%
Heavy goods vehicles	2	5	-
Lorries, under 3.5t	8	3	-
Other/unknown	2	49	-
Pedestrians	12	20	+67%
Powered two-wheelers	20	25	+25%
Total	136	199	+46%

Table 4: Number of VRU fatalities in crashes involving passenger cars, buses or coaches and lorries or heavy goods vehicles, 2012 and 2021

	2012	2021	Trend	EU trend
Crashes involving buses or coaches	1	1	-	-47%
Crashes involving cars	1	1	-	-29%
Crashes involving lorries or heavy goods vehicles	0	0	-	-15%

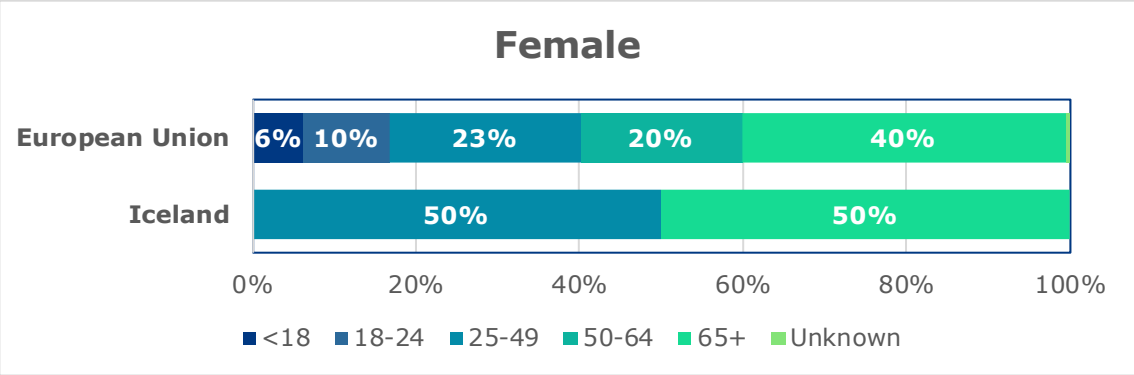
Table 5: Number of fatalities in single vehicle crashes by transport mode, 2012 and 2021

	2012	2021	Trend	EU trend
Bus/coach occupants	0	0	-	+47%
Car occupants	6	3	-	-28%
Cyclists	0	1	-	+37%
Heavy goods vehicles	0	1	-	-44%
Lorries, under 3.5t	0	0	-	-12%
Other/unknown	0	0	-	-20%
Powered two-wheelers	0	0	-	-16%
Total	6	5	-	-23%

2.4 Age and Gender

In Iceland, 7 out of 9 fatalities in 2021 were males. Fatalities and serious injuries remained stable for both genders.

Figure 6. Distribution of road fatalities by age and gender, 2021



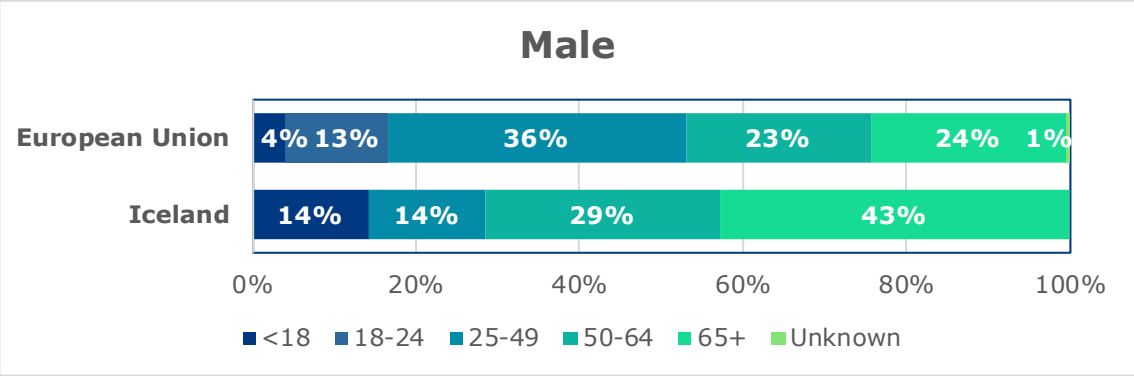


Table 6: Number of fatalities by age and gender, 2012 and 2021

	2012	2021	Trend	EU trend
Female				
<18	0	0	-	-44%
18-24	0	0	-	-40%
25-49	0	1	-	-37%
50-64	0	0	-	-23%
65+	2	1	-	-25%
Unknown	0	0	-	-22%
Total	2	2	-	-31%
Male				
<18	0	1	-	-27%
18-24	2	0	-	-37%
25-49	2	1	-	-30%
50-64	1	2	-	-13%
65+	2	3	-	-8%
Unknown	0	0	-	-9%
Total	7	7	-	-23%

Table 7: Number of serious injuries by age and gender, 2012 and 2021

	2012	2021	Trend
Female			
<18	12	13	+8%
18-24	8	10	+25%
25-49	17	25	+47%
50-64	11	12	+9%
65+	4	15	+275%
Unknown	0	0	-
Total	52	75	+44%

Male			
<18	10	23	+130%
18-24	15	14	-7%
25-49	39	42	+8%
50-64	9	28	+211%
65+	11	17	+55%
Unknown	0	0	-
Total	84	124	+48%

2.5 Area and Road Type

The majority of road fatalities in Iceland occurred on rural roads (56%). Over the period 2012-2021, the number of fatalities remained stable, but serious injuries increased on all road types in Iceland.

Table 8: Number of fatalities by road type, 2012 and 2021

	2012	2021	Trend	EU trend
Motorway	/	/	-	-6%
Rural	7	5	-	-28%
Urban	2	4	-	-24%
Unknown	0	0	-	-48%
Total	9	9	-	-25%

Figure 7. Distribution of road fatalities by road type, 2021

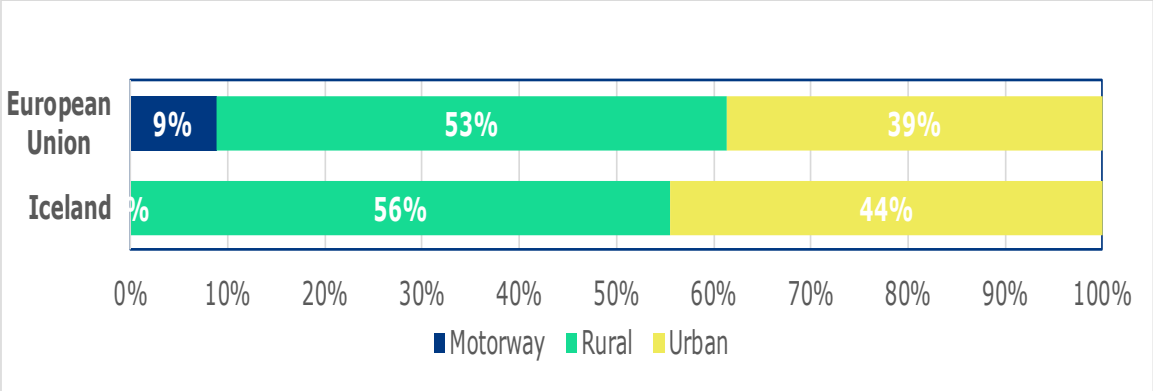
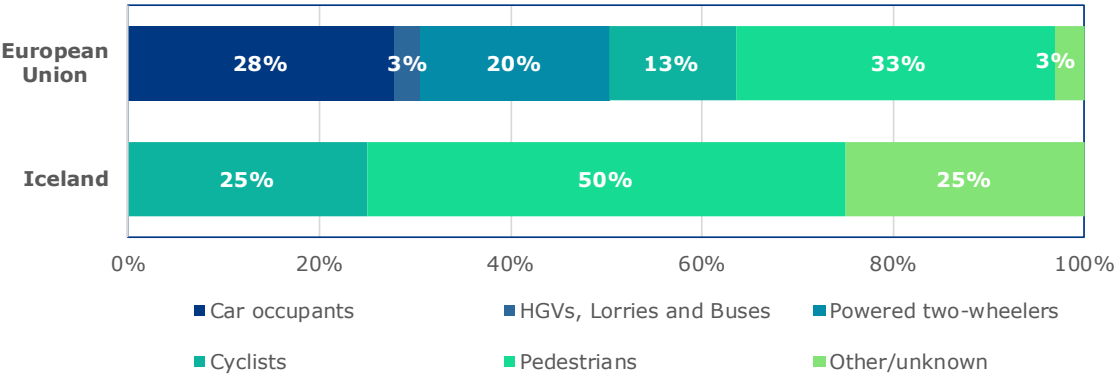


Table 9: Number of serious injuries by road type, 2012 and 2021

	2012	2021	Trend
Motorway	-	-	-
Rural	60	91	+52%
Urban	76	108	+42%
Unknown	-	-	-
Total	136	199	+46%

Figure 8. Distribution of road fatalities inside urban areas by type of transport mode, 2021



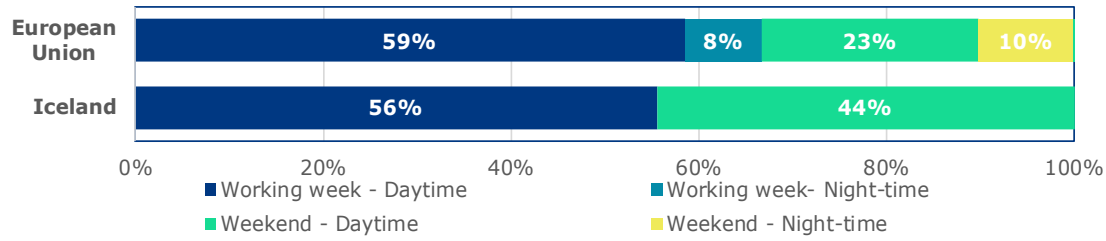
2.6 Time Period

The distribution of fatalities by day of the week and time of the day is similar to that of the EU. Most fatalities occurred during working weekdays.

Table 10: Number of fatalities by time period, 2012 and 2021

	2012	2021	Trend	EU trend
Working week - Daytime	5	5	-	-21%
Working week- Night-time	1	0	-	-30%
Weekend - Daytime	3	4	-	-25%
Weekend - Night-time	0	0	-	-39%
Unknown	0	0	-	-75%
Total	9	9	-	-25%

Figure 9. Distribution of road fatalities by time period, 2021



2.7 Lighting and Weather Conditions

According to the distribution of fatalities by lighting and weather conditions, the majority of fatalities in Iceland occurred during darkness.

Table 11: Number of fatalities by lighting and weather conditions, 2012 and 2021

	2012	2021	Trend	EU trend
Lighting Conditions				
Daylight	5	0	-	-17%
Twilight	1	1	-	-25%
Darkness	2	5	-	-33%
Weather Conditions				
Dry	4	2	-	-24%
Rain	3	2	-	-28%
Other/Unknown	2	5	-	-25%

3. Safety Performance Indicators

3.1 Road User Behaviour

Table 12: Road Safety Performance Indicators, 2022 or latest available year

	Iceland	EU
Speeding[c] % of passenger cars travelling within speed limits[1]		
Motorways	/	-
Rural Roads	34.0	-
Urban Roads	46.0	-
Seat belt & CRS use rates (%)[1,2]		
Front	93.6	93.3
Rear	92.3	75.5
Child restraint systems	97.2	67.0
Helmet use rates (%)[1]		
PTW driver	/	97.0
PTW passenger	/	94.4
Cyclist	84.3	37.8
DUI of Alcohol[3] (self-reported)		
% car drivers have driven at least once in the last 30 days over the legal limit	/	11.8
Driver Distraction[1]		
% of drivers not using hand-held mobile device/phone while driving	96.9	94.8

Sources: [1]Baseline project, [2]ETSC (2022), [3]ESRA3 project (2024), [4]national sources

[c] An EU average is not available for speeding, due to different legal speed limits among countries, which does not allow for a straightforward comparison. Please also note that for some Safety Performance Indicators of Section 3, the EU average is based on a small number of EU Member States with available data (see Section 6.1).

3.2 Vehicle Safety

Table 13: Vehicle Safety Performance Indicators, 2019

	Iceland	EU
% of new passenger cars rated with 4 EuroNCAP stars and above[1]	/	83.6
Average age of passenger car fleet (years)[2]	12.7	11.8

Sources: [1]Baseline project, [2]ACEA (2022)

3.3 Enforcement

Table 14: Number of traffic police tickets per thousand population, 2020

Tickets per 1,000 population	Iceland	EU
Speeding	82	139.7
Non-use of seat-belt	1.2	5.7
Illegal use of mobile phone	4.2	4.4
Driving above legal alcohol limits	1.3	1.9

Source: National sources

4. Road Safety Policy and Measures

4.1 National Road Safety Strategy

Table 15: National road safety strategy and targets

	Iceland
Timeframe	2020-2034
Lead Authority	Ministry of Transport
Targets	
Fatalities	-5% each year
Serious injuries	-5% each year
Baseline Year	2019
SPIs	-
Link	https://www.althingi.is/altext/pdf/150/fylgiskjol/s0599-f_III.pdf

Source: national sources

4.2 Traffic Laws and Regulations

National road safety legislation in Iceland reflects the situation in the majority of EU countries with some exceptions. There are no motorways in Iceland, but according to legislation the maximum speed limit would be 110 km/h, which is lower than in most countries (130 km/h). Furthermore, the alcohol limit for the general population is 0.2 g/l.

Table 16: National road safety legislation

	Iceland	Most common in EU
Speed limits for passenger cars (km/h)		
Urban roads	50	50: 26/27
Rural roads	90	90: 17/27
Motorways	110	130: 14/27
Allowed BAC levels (g/l)		
General population	0.2	0.5: 19/27
Novice drivers	0.2	0.2: 12/27, 0.0: 9/27
Professional drivers	0.2	0.2: 10/27, 0.0: 9/27, 0.5: 6/27
Seatbelt requirement		
Drivers	Yes	Yes: 27/27
Front Passenger	Yes	Yes: 27/27
Rear Passenger	Yes	Yes: 27/27
Child restraint systems		
CRS required	Up to 135cm	up to 135 cm: 11/27, up to 150 cm: 11/27
Children in front seats	Allowed in CRS	Allowed in CRS: 22/27

	Iceland	Most common in EU
Children on motorcycles	Not restricted	Prohibited under certain age/height: 18/27
Helmet requirement		
Powered Two Wheelers	Yes	Yes: 27/27
All roads	Yes	Yes: 27/27
All engines	Yes	Yes: 25/27
Cyclists	/	Not mandatory: 19/27
Age restriction	Children under 16 years	Not restricted: 16/27
Mobile phone use		
Hand-held phone use allowed	No	No: 26/27
Hands-free phone use allowed	Yes	Yes: 27/27
E-scooters		
Age restriction	Not restricted	Not restricted: 9/27, Allowed from 14 years: 6/27
Max. speed limit (km/h)	25	25: 18/27
Helmet required	For children under 16 years	Not required: 12/27
Allowed on road lanes	No	Yes: 18/27
Allowed on pavements	Yes	No: 13/27, Yes: 9/27
Allowed on bicycle paths	Yes	Yes: 21/27

Sources: EC (2023), WHO (2018), FERSI (2020), National sources

4.3 Driving Licences

Table 17: Policies and regulations related to driving licences

	Iceland	Most common in EU
Novice Drivers		
Accompanied driving	16 years old	17 years: 13/27, No: 7/27
Probation period for novice drivers	2 years	2 years: 7/27, 3 years: 5/27
Renewal procedure		
Renewal procedure (compulsory)	Yes	Yes: 26/27
Renewal interval (Age)	15 years until age 70 4 years at age 70 3 years at age 71 2 years at age 72–79 1 year above age 80	Every 10years: 13/27, Every 15years: 9/27
Medical requirements	Yes	Yes: 22/27

Source: National sources

4.4 Road Infrastructure

Table 18: Policies and regulations related to road infrastructure

	Iceland	Most common in EU
Audits or star rating required for new road infrastructure	Yes	Yes: 10/27, Partial:17/27
Inspections / star rating of existing roads	Yes	Yes:26/27
Design standards for the safety of pedestrians / cyclists	Partial	Yes:25/27
Investments to upgrade high risk locations	Yes	Yes:20/27
Policies & investment in urban public transport	Yes	Yes:23/27
Policies promoting walking and cycling	Yes	Yes: 21/27

Source: WHO (2018)

5. Structure and Culture

5.1 Country Characteristics

Population density in Iceland is much lower than the EU average and its GDP per capita is above that of the European Union. The percentage of elderly (65+) in the population is lower than the EU average.

Table 19: Country Characteristics, 2021

	Iceland	EU
Demographics[2]		
Population (inhabitants)	368,792	447,000,548
Population density (inh./km^2)	3.6	109.0
% children (0-17)	22.4	18.2
% adults (18-64)	62.9	61.6
% elderly (65+)	14.7	20.3
% of urban population	94.9	75.2
Economic Data[2]		
GDP per capita (euro)	58,020	32,560
Infrastructure[1]		
Country Area (km^2)	102,679	4,225,134
Road network length (km)	12,949	4,473,380
Road density (km/km^2)	0.1	1.1
% of motorways	0.32	1.67
% GDP spent to road infrastructure[3]	0.5	0.4
Vehicle Fleet[1]		
Vehicles per population	0.95	0.73
% of passenger cars	82.7	77.3
% of motorcycles	3.7	11.4
% of HGVs	12.6	11.1
% of buses	1.0	0.2
Exposure[1]		
Modal split of passenger transport on land (passenger-km in %):		
- Passenger cars	89.0	85.2
- Bus/coach/Metro/Tram	11.0	8.7
Modal split of freight transport on land (tonne-km in %):		
- Road	100	74.6
- Rail	-	16.4
Environment[1]		
CO2 emissions from road transport (million tonnes)	0.9	739.8
Share of road transport emissions in total transport emissions (%)	59.7	76.3

Sources: [1]EC (2023b), [2]Eurostat, [3]OECD (2023)

5.2 Structure of Road Safety Management

Table 20: Road Safety Management Structure

Key Functions	Key Actors
Formulation of national road safety strategy	- Ministry of Interior - The Icelandic Road and Coastal Administration - Icelandic Transport Authority - The Icelandic Transportation Safety Board
Monitoring of the road safety development	- The Icelandic Road and Coastal Administration - Icelandic Transport Authority
Improvements in road infrastructure	- The Icelandic Road and Coastal Administration
Improvement in vehicles	- Icelandic Transport Authority
Improvement in road user education	- Icelandic Transport Authority - Local authorities
Publicity campaigns	- The Icelandic Road and Coastal Administration - Icelandic Transport Authority
Enforcement of traffic laws	- The Police Districts in Iceland - The national Commissioner of the Icelandic Police
Other relevant actors	- safetravel.is - Icelandic Automobile Association - TMS Consultancy

Source: National sources

5.3 Self-declared behaviour & Attitudes

For Iceland, there are no data available on self-declared behaviour and attitudes in ESRA 3 project.

6. Notes

6.1 Data Sources

CARE (Community database on road accidents in Europe)
All information in section 1 of the Country Profile is based on the CARE database. The full glossary of definitions of variables used in this Report is available at EC Mobility & Transport - Road Safety webpage.

The European average is based on the average of the 27 EU countries. EU trends and aggregated figures are based on the most recent figures available (2021). In case of missing values, the EU averages and aggregated data were produced by imputing figures based on data from previous years. For values less than 10, the trend is not shown since it may be due to randomness. Also, due to missing data on serious injuries for some EU countries, EU total/average is not calculated. Date of extraction: July 2023

ACEA (2022)
European Automobile Manufacturers' Association. *The automobile industry - Pocket guide 2022/2023*. ACEA, 2022.
https://www.acea.auto/files/ACEA_Pocket_Guide_2022-2023.pdf

Data on the average age of the passenger car fleet come from the ACEA. The European average is based on the average of 24 EU countries. Date of extraction: July 2023

Baseline project
Information in section 3 is based on Key Performance Indicators collected within the Baseline project.
https://road-safety.transport.ec.europa.eu/statistics-and-analysis/data-and-analysis/key-performance-indicators-kpis_en

Alternative sources were used for countries with no available data in the Baseline project (e.g., ETSC, national sources). The European average is based on the average of 17 EU countries for speeding, 23 EU countries for seat-belt use, 13 EU countries for CRS use, 14 EU countries for helmet use, 14 EU countries for driver distraction and 13 EU countries for vehicle safety. Date of extraction: July 2023

European Commission 2023
Data were retrieved from EC Mobility & Transport - Road Safety website:https://europa.eu/youreurope/citizens/travel/driving-abroad/road-rules-and-safety/index_en.htm
Date of extraction: July 2023

European Commission – Statistical Pocketbook 2023 (b)
European Commission, Directorate-General for Mobility and Transport. *EU transport in figures – Statistical pocketbook 2023*. Publications Office of the European Union, 2023. Date of extraction: November 2023 https://data.europa.eu/doi/10.2832/319371

Eurostat
Data were retrieved from Eurostat: https://ec.europa.eu/eurostat
The European average is based on the average of the 27 EU countries. Date of extraction: July 2023

ESRA project
Information in sections 3 (drink-driving) and 5.3 is based on data from the ESRA 3 (E-Survey of Road Users' Attitudes) project (2023). https://www.esranet.eu/

The European average is the average of 17 European countries. In the ranking of the countries in Table 21, Switzerland is also included. Date of extraction: November 2023

ETSC
Information in section 3 is based on data from the following ETSC report. The European average is the average of 24 European countries for all indicators, except the alcohol related tickets (20 countries).

European Transport Safety Council. *How traffic law enforcement can contribute to safer roads*. PIN Flash Report 42. ETSC, 2022. https://etsc.eu/how-traffic-law-enforcement-can-contribute-to-safer-roads-pin-flash-42/

FERSI (2020)
Kamphuis, K. & van Schagen, I. (2020) E-scooters in Europe: legal status, usage and safety. Results of a survey in FERSI countries. FERSI paper. https://fersi.org/. Date of extraction: July 2023

IRTAD (International Traffic Safety Data and Analysis Group)

Data related to the percentage of GDP spent to road infrastructure (Section 5.1) is retrieved from the OECD database: https://stats.oecd.org/. Date of extraction: July 2023

WHO
Data were retrieved from the WHO Global Status Report on Road Safety, 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/. Date of extraction: July 2023

6.2 Definitions

Road Crash
Any crash 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. Data are based on police reports and there may be an underestimate because of underreporting (especially for non-fatal crashes and crashes not involving a motorised vehicle).

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.

Seriously injured (at 30 days)
Total number of persons seriously injured corrected by correction factors when needed. Injured (although not killed) in the road crash and hospitalized at least 24 hours. The definition of "serious injury" varies considerably among EU countries, affecting, thus, the reliability of cross-country comparisons.

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

Heavy Goods Vehicles
Goods vehicle over 3.5t maximum gross weight. Larger motor vehicles used only for the transport of goods.

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.).

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.

Speeding
The percentage of passenger cars travelling within legal maximum speed limits based on roadside measurements during daytime.

Seat belt & CRS use rates
The percentage of passenger car occupants using seat belts and child restraint systems (CRS) based on roadside observations during daytime.

Helmet use rates
The percentage of powered two-wheeler riders and cyclists using helmets based on roadside observations during daytime. Helmet use rates for cyclists in some countries concern only urban roads. Please note that in some countries the use of helmets is not obligatory for cyclists (see Table 16).

DUI of Alcohol
The percentage of car drivers who have driven at least once in the last 30 days over the legal alcohol limit based on a self-reported survey.

Driver Distraction
The percentage of drivers not using a hand-held mobile device/phone while driving based on roadside surveys during daytime on working days. The vehicle types included are passenger cars, light goods vehicles and buses/coaches.

Explanations of symbols in tables:
/ : not available
- : not applicable (e.g. calculation cannot be performed)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