

Structure and Culture

Basic Data

Table 1: Basic data of Iceland in relation to the EU average

Basic data of Iceland	EU average
- Population: 0,33 million inhabitants (2015)[2]	18,1 million (2015)
- Area: 103.000 km ² (2015)[2] (2,67% water) (2015)[4]	159.663 km ² (2015) 2,94% water (2015)
- Climate and weather conditions (capital city; 2015) [3]:	(2015)
- Average winter temperature (Nov. to April): 0,8°C	6,5°C
- Average summer temperature (May to Oct.): 8,3°C	17,8°C
- Annual precipitation level: 798 mm	651 mm
- Exposure: 3,29 billion vehicle km (2014) [1]	122,4 billion vehicle km (2014) ¹
- 0,83 vehicles per person (2014) [1]	0,62 (2014)

Sources: [1] IRTAD; [2] EUROSTAT; [3] national sources; [4] CIA

Iceland is characterised by a low population density and a cold and wet climate.

Country characteristics

Table 2: Characteristics of Iceland in comparison to the EU average

Characteristics of Iceland	EU average
- Population density: 3 inhabitants/km ² (2015) [2]	114 inhabitants/km ² (2015)
- Population composition (2015) [2]	
20,4% children (0-14 years)	15,6% children
66,0% adults (15-64 years)	65,5% adults
13,6% elderly (65 years and over)	18,9% elderly (2015)
- Gross Domestic Product (GDP) per capita: €34.500 (2015) [2]	€26.300 (2015)
- 94,1% of population lives inside urban area (2015)[4]	73,3% (2015)
- Special characteristics[4]: mostly plateau interspersed with mountain peaks, icefields; coast deeply indented by bays and fiords	

Sources: [1] IRTAD; [2] EUROSTAT; [3] national sources ; [4] CIA

¹ Based on the average of 24 EU countries.

Structure of road safety management

The Icelandic Road and Coastal Administration (IRCA) is responsible for about 13.000 km of main roads and country side roads in Iceland. This includes planning, design, construction, maintenance and service of those roads.

The following key actors are responsible for Road Safety (RS) policy making:

Table 3: Key actors per function in Iceland

Key functions	Key actors
1. - Formulation of national RS strategy - Setting targets - Development of the RS programme	- Ministry of Interior - The Icelandic Road and Coastal Administration - Icelandic Transport Authority - The Icelandic Transportation Safety Board
2. Monitoring of the RS development in the country	- The Icelandic Road and Coastal Administration - Icelandic Transport Authority
3. Improvements in road infrastructure	- The Icelandic Road and Coastal Administration
4. Vehicle improvement	- Icelandic Transport Authority
5. Improvement in road user education	- Icelandic Transport Authority - Local authorities
6. Publicity campaigns	- The Icelandic Road and Coastal Administration - Icelandic Transport Authority
7. Enforcement of road traffic laws	- The Police Districts in Iceland - The national Commissioner of the Icelandic Police
8. Other relevant actors	- safetravel.is - Icelandic Automobile Association - TMS Consultancy

Sources: national sources

Attitudes towards risk taking

As Iceland is not part of the ESRA survey, there is no information on attitudes that is comparable to other European countries.

The Icelandic Road and Coastal Administration is responsible for about 13.000 km of main roads and country side roads in Iceland.

Iceland aims to lower the number of killed and seriously injured by 5% each year and be among the best performing countries of killed per capita.

Programmes and measures

National strategic plans and targets

- In 2011, the Icelandic Parliament agreed upon a new Traffic Safety Plan for the period 2011-2022.
- Targets:

Table 4: Road safety targets for Iceland

Year	Fatalities and seriously injured	Average driving speed	Measures
2022	46% (referred to the average of 2006-2010) -5% per year 0		<ul style="list-style-type: none"> - The number of fatalities per 100.000 population must not exceed the rate of countries with outstanding traffic safety records - Total fatalities and serious injuries - Killed and seriously injured children - Killed due to lack of seat-belt wearing
Every year	-5%	<95 km/h	<ul style="list-style-type: none"> -Accidents due to influenced driving -Accidents involving 17-20 year-olds -Killed and seriously injured motorcycle riders -Injured vulnerable road users -Injured foreign road users -Accidents due to running off the road -Accidents due to lack of gap between cars -Accidents due to side impact -Average driving speed in rural area in summertime

Sources: IRTAD, 2016; national sources

• Priority topics:

- Children
- Adolescents
- Drink-driving
- Driving speed
- Seat-belt wearing
- Tailgating
- Vulnerable road users
- Motorcyclists
- Foreign road users
- Run-of road accidents
- Side-impact accidents

Road infrastructure

Table 5: Description of the road categories and their characteristics in Iceland

Road type	General speed limits (km/h)
Urban roads	50
Rural roads	80/90
Motorways	n/a

Source: IRTAD, 2015

In Iceland, roads are improved by safety impact assessment, high risk site treatment, road safety inspections and audits.

- Special rules for:
 - HGVs and cars pulling trailers: 80 km/h.
 - gravel roads: 80 km/h
- Guidelines and strategic plans for infrastructure are available in Iceland.

Table 6: Obligatory parts of infrastructure management in Iceland and other EU countries

Obligatory parts in Iceland:	EU countries with obligation
Safety impact assessment: yes	32%
Road safety audits: yes	81%
Road safety inspections: yes	89%
High risk site treatment: yes	74%

Sources: national sources

- Recent activities of road infrastructure improvement have been addressing:
 - elimination of high risk sites
 - separation of driving directions
 - increased use of rumble strips
 - improved winter services (as many crashes occur on icy roads)

(Source: IRTAD, 2016)

Traffic laws and regulations

Table 7: Description of the regulations in Iceland in relation to the most common regulations in other EU countries

Regulations in Iceland [1]	Most common in EU (% of countries)
Allowed BAC ² levels:	
- General population: 0,5‰	0,5‰ (61%)
- Novice drivers: 0,5‰	0,2‰ (39%) and 0,0‰ (36%)
- Professional drivers: 0,5‰	0,2‰ (36%) and 0,0‰ (36%)
Phoning:	
- Hand held: not allowed	Not allowed (all countries)
- Hands free: allowed	Allowed (all countries)
Use of restraint systems:	
- Driver: obligatory	Obligatory (all countries)
- Front passenger: obligatory	Obligatory (all countries)
- Rear passengers: obligatory	Obligatory (all countries)
- Children: obligatory	Obligatory (all countries)
Helmet wearing:	
- Motor riders: Obligatory	Obligatory (all countries)
- Moped riders: Obligatory	Obligatory (all countries)
- Cyclists: obligatory up to 14 years old	Not obligatory (46%)
- Daytime running lights are mandatory.	
- A demerit point system is in place [2]	

Sources: [1] EC DG-Move, 2016; [2] WHO, 2013

Allowed BAC limits for novice and professional drivers are higher than those of most EU countries.

² Blood Alcohol Concentration

Effectiveness of speed, drink-driving and seat-belt law enforcement is below the level of most EU countries.

Enforcement

Table 8: Effectiveness of enforcement effort in Iceland according to an international respondent consensus (scale = 0-10)

Issue	Score for Iceland	Most common in EU (% of countries)
Speed legislation enforcement	6	7 (43%)
Seat-belt law enforcement	6	7 (25%) and 8 (25%)
Child restraint law enforcement	9	8 (39%)
Helmet legislation enforcement	9	9 (50%)
Drink-driving law enforcement	5	8 (43%)

Source: WHO, 2015

Road User Education and Training

Table 9: Road user education and training in Iceland compared to the situation in other EU countries

Education and training in Iceland	Most common in EU (% of countries)
General education programmes:	
- Primary school: compulsory	Compulsory (71%)
- Secondary school: compulsory	Compulsory (43%)
- Other groups: kindergarten programme	-
Driving licences thresholds:	
- Passenger car: 17 years	18 years (79%)
- Motorised two wheeler: 15 years for mopeds, 17 years for $\leq 125\text{cm}^3$, 11kW; 21 years for unlimited kW or two years of experience on $\leq 125\text{cc}$ (19 years at least, if one has two years of experience on the $\geq 125\text{cc}$)	18 years (low categories) and higher ages (32%)
- Buses and coaches: 21 years for ≤ 16 passengers, 23 years for > 16 passengers	21 years (86%)
- Lorries and trucks: 18 years for up to 7,5t, 21 years for $> 7,5\text{t}$	21 years (75%)

Sources: [1] ROSE25, 2005; [2] ETSC, 2011; [3] national sources

Public Campaigns

Table 10: Public campaigns in Iceland compared to the situation in other EU countries

Campaigns in Iceland	Most common issues in EU (% of countries)
Organisation:	
- The Road Traffic Directorate	
- Municipalities	
- Insurance companies	
Main themes:	
- speeding	
- drink-driving	Drink-driving (96%)
- seat-belts	Speeding (86%)
- mobile phones	Seat-belt (79%)
- reduction of foreign drivers crashes	
- the Traffic Safety School called the Grundas schoolproject	

Sources: [1] SUPREME, 2005; [2] ETSC, 2011; [3] national sources

As in the majority of countries, road safety education is compulsory both at primary and secondary school in Iceland.

Mandatory vehicle inspection periods differentiate by vehicle type in Iceland.

Vehicles and technology (national developments)

Table 11: Developments of vehicles and technology in Iceland, compared to the situation in other EU countries

Mandatory technical inspections:	Most common in EU (% of countries)
Passenger cars: 4-2-2-1-1 etc. years	Every 12 months (39%)
Motorcycles: 4-2-2-1-1 etc. years	Every 24 months (32%)
Buses or coaches: every 12 months	Every 12 months (61%)
Lorries or trucks: every 12 months	Every 12 months (68%)

Sources: EC website, national sources

No information is available on speed in Iceland.

Road Safety Performance Indicators

Speed

Table 12: Number of speed tickets per population in Iceland versus the EU average

Measure	2006	2015	Average annual change	EU average (2015)
Number of speed tickets/1.000 population	n/a	n/a	-	94

Sources: [1] ETSC, 2010; [2] ETSC, 2016

Table 13: Percentage of speed offenders per road type in Iceland compared to the EU average

Road type	2004	2013	Average annual change	EU average
Motorways	n/a	n/a	-	n/a
Rural roads	n/a	n/a	-	n/a
Urban roads	n/a	n/a	-	n/a

Sources: [1] ETSC, 2010; [2] ETSC, 2015

Table 14: Mean speed per road type in Iceland compared to the EU average

Road type	2004	2012	Average annual change	EU average
Motorways	n/a	n/a	-	n/a
Rural roads	n/a	n/a	-	n/a
Urban roads	n/a	n/a	-	n/a

Sources: [1] ETSC, 2010; [2] ETSC, 2015

Alcohol

Table 15: Road side surveys for drink-driving in Iceland compared to the EU average

Measure	2007	2015	Average annual change	EU average (2015)
Amount of tests/1.000 population	n/a	n/a	-	209
% tested over the limit	n/a	n/a	-	2,2%

Sources: [1] ETSC, 2010; [2] ETSC, 2016

No information is available on drink-driving in Iceland.

Iceland has relatively many vehicles between 6 and 10 years.

Seat-belt wearing rates are lower than the EU average.

Vehicles

Table 16: State of the vehicle fleet in Iceland compared to the EU average

Vehicles	EU average
Cars per age group (2008) [1]:	Passenger cars (2008) [2]
- ≤ 2 years: 8%	≤ 2 years: 14%
- 3 to 5 years: 15%	3 to 5 years: 18%
- 6 to 10 years: 39%	6 to 10 years: 26%
- > 10 years: 38%	>10 years: 42%
EuroNCAP occupant protection score of cars (new cars sold in 2013) [2]:	
- 5 stars: no information	5 stars: 52,5%
- 4 stars: no information	4 stars: 4,5%
- 3 stars: no information	3 stars: 2,9%
- 2 stars: no information	2 stars: 0,5%
- not tested: no information	not tested: 39,6% ³

Source: [1] EUROSTAT, 2015; [2] ETSC, 2009

Protective systems

Table 17: Protective system use in Iceland versus the average in EU

Protective systems	EU average ⁴
Daytime seat-belt wearing in cars and vans (2013):	(2014)
- 84% front	89,7% front
- no information on % driver	not available
- no information on % front passenger	not available
- 65% rear	69,5% rear
- 92% child restraint system	not available
Helmet use (2014):	
- No information on % powered two-wheelers riders	not available
- no information on % cyclists	

Source: IRTAD, 2016

³ Based on data of 25 EU countries (excl. HR, LU and MT).

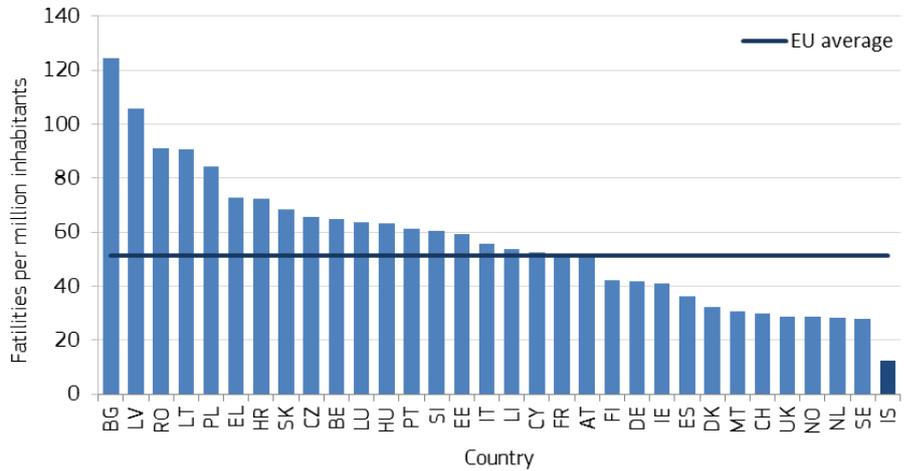
⁴ Based on data of 17 EU countries; data of AT, IE, LT, PL, SE, UK (2014); data of DE, FI, HU, PT (2013); data of CZ, DK, EE, ES, FR, LV (2012)

Road Safety Outcomes

General positioning

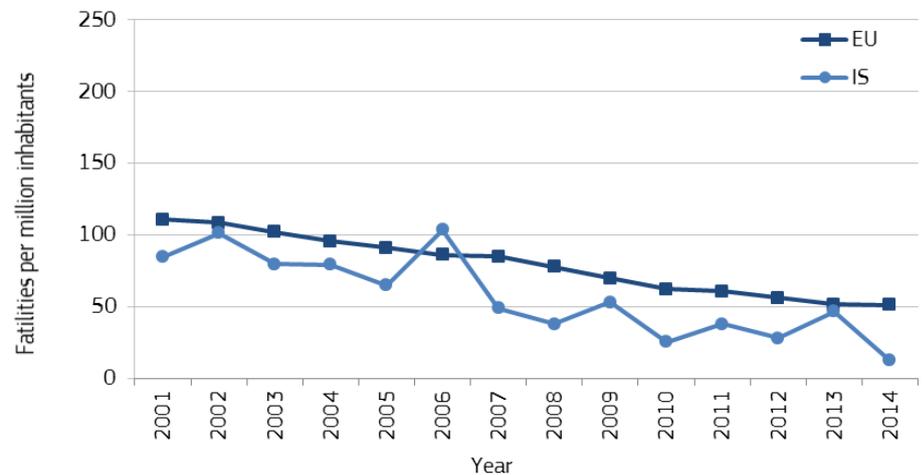
The fatality rate of Iceland is currently the lowest in the EU (around 12 fatalities per million population in 2014), however it has been subject to large fluctuation during the period 2001 – 2014 due to small fatality figures.

Figure 1: Fatalities per million inhabitants in 2014 with EU average



Sources: CARE, Eurostat

Figure 2: Development of fatalities per million inhabitants between 2001 and 2014 for Iceland and the EU average



Sources: CARE, Eurostat

The fatality rate of Iceland is currently the lowest in the EU, however it has been subject to large fluctuations during the period 2001 – 2014.

The share of car occupant fatalities is much higher than the EU average.

Transport mode

The share of car occupant fatalities is much higher than the EU average. The average annual reduction of car occupants was 6%.

Table 19: Reported fatalities by mode of road transport in Iceland compared to the EU average

Transport mode	2002	2015	Average annual change	Share in 2015	EU average (2015)
Pedestrians	1	1	0%	6%	21%
Car occupants	26	12	-6%	75%	45%
Motorcyclists	0	1	-	6%	14%
Mopeds	0	0	0%	0%	3%
Cyclists	0	1	-	6%	8%
Bus/coach occupants	0	0	0%	0%	0%
Lorries or truck occupants	1	0	-100%	0%	5%

Sources: CARE, national sources

Age, gender and nationality

Table 20: Reported fatalities by age, gender and nationality in Iceland versus the EU average

Age and gender	2002	2015	Average annual change	Share in 2015	EU average (2015)
Females					
0 - 14 years	4	1	-10%	6%	2%
15 - 17 years	0	0	-	0%	1%
18 - 24 years	0	2	-	13%	2%
25 - 49 years	4	0	-100%	0%	7%
50 - 64 years	2	0	-100%	0%	4%
65+ years	4	1	-10%	6%	8%
Males					
0 - 14 years	1	1	0%	6%	2%
15 - 17 years	0	0	-	0%	1%
18 - 24 years	4	3	-2%	19%	10%
25 - 49 years	4	3	-2%	19%	28%
50 - 64 years	4	1	-10%	6%	16%
65+ years	2	4	5%	25%	14%
Nationality of driver or rider killed					
National	n/a	n/a	n/a	n/a	n/a
Non-national	n/a	n/a	n/a	n/a	n/a

Sources: CARE, national sources

The share of road fatalities by gender of Iceland is similar to the EU average.

Fatalities in rural areas are over-represented in Iceland.

Location

Fatalities in rural areas are over-represented in Iceland compared to the EU average.

Table 21: Reported fatalities by location in Iceland compared to the EU average

Location	2001	2015	Average annual change	Share in 2015	EU average (2015)
Built-up areas	2	3	3%	19%	37%
Rural areas	27	13	-5%	81%	53%
Motorways	n/a	n/a	-0%	-	7%
Junctions	n/a	n/a	-	-	20%

Sources: CARE, national sources

Lighting and weather conditions

Table 22: Reported fatalities by lighting and weather conditions in Iceland compared to the EU average

Conditions	2002	2015	Average annual change	Share in 2015	EU average (2015)
Lightning conditions					
During daylight	18	10	-4%	63%	50%
During night-time	4	3	-2%	19%	30%
Weather conditions					
While raining	4	2	-5%	13%	10%

Sources: CARE, national sources

Single vehicle accidents

Table 23: Reported fatalities by type in Iceland compared to the EU average

Accident Type	2002	2015	Average annual change	Share in 2015	EU average (2015)
Single vehicle accidents	16	9	-4%	56%	24%

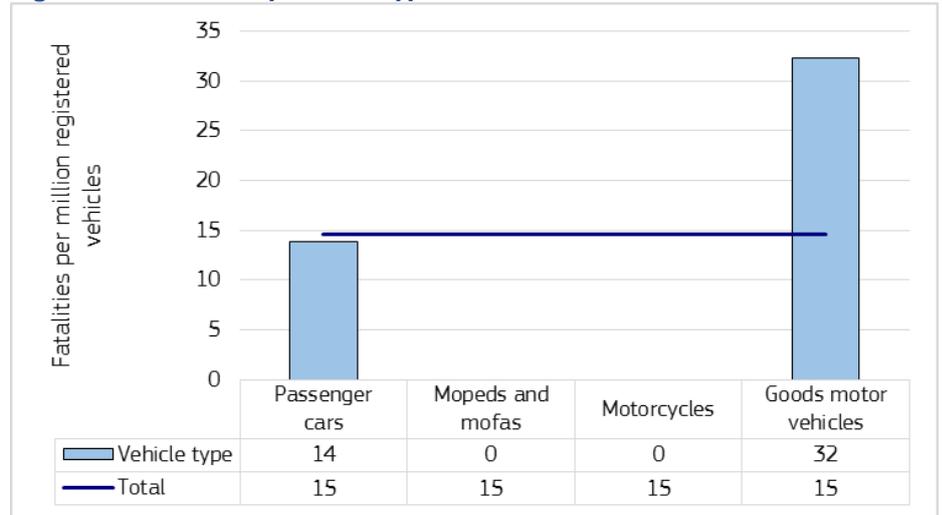
Sources: CARE, national sources

Under-reporting of casualties

- Fatalities: 100%, due to improvements of the data recording systems.
- Hospitalised: no studies with quantitative information exist.

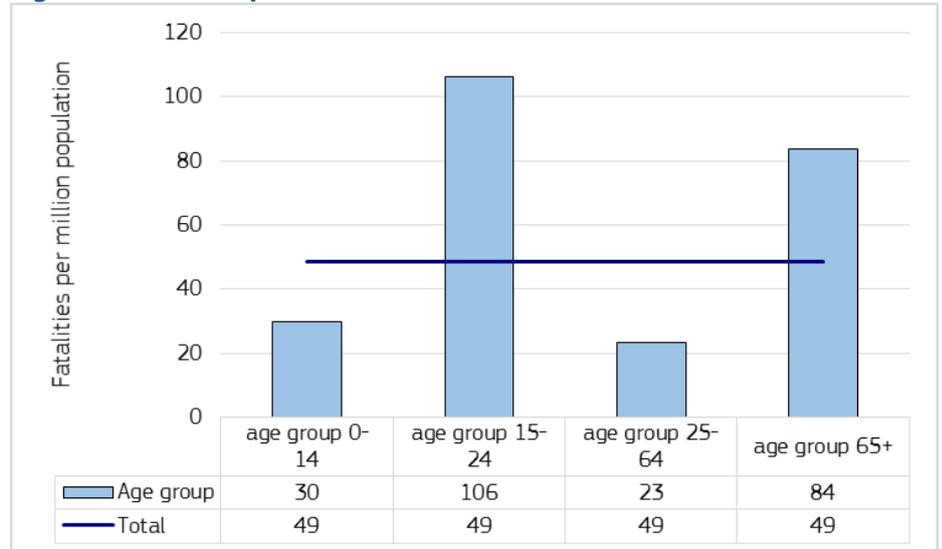
Risk Figures

Figure 3: Fatalities by vehicle type in Iceland in 2014



Sources CARE, IRTAD

Figure 4: Fatalities per million inhabitants in Iceland in 2015



Sources: CARE, EUROSTAT

In Iceland, risk is highest for drivers of goods motor vehicles, youngsters and the elderly.

Estimated costs of road injuries (especially fatal) are higher in Iceland than on average in Europe.

Social Cost

- The total cost of road accident casualties (fatalities and injuries) is estimated at 48,5 billion euros (2014).

Table 24: Cost (in million €) per injury type in Iceland versus the EU average

Injury type	Value	European average ⁵
Fatal	1,88	1,28
Hospitalised	0,22	0,18
Slightly injured	0,04	0,02

Sources: Bickel et al., 2006; national experts

⁵ Based on data of 20 countries (excl. BG, DE, FI, FR, HU, IS, LT, NO, RO and SK)

Iceland aims to lower the number of killed and seriously injured by 5% each year and to be among the best performing countries of killed per capita.

Synthesis

Safety position

- Iceland is one of the best performing countries in Europe.
- Because of the low numbers, road safety data of Iceland should be handled with care, especially when comparing Iceland with other countries.

Scope of problem

- Most fatalities in Iceland are among car occupants. The share of car occupants is significantly higher than the EU average.
- In Iceland, fatalities in rural areas are over-represented.
- The small number of fatalities does not allow further identification of particular groups or types of accidents that may be problematic.

Recent progress

- The fatality rate of Iceland is subject to substantial fluctuation due to the country's small accident figures.
- Effectiveness of law enforcement is at or above the level of most EU countries.

Remarkable road safety policy issues

- Iceland aims to lower the number of killed and seriously injured by 5% each year and be among the best performing countries of killed per capita.
- In Iceland, roads are improved by safety impact assessment, high risk site treatment, safety inspections and audits.
- Allowed BAC limits for novice and professional drivers are higher than those of most EU countries.

References

1. CARE database (2015).
2. CIA database (2015).
3. DG-TREN (2010). Technical Assistance in support of the Preparation of the European Road Safety Action Program 2011-2020. Final Report. DG-TREN, Brussels.
4. European Commission website (2015).
http://europa.eu/youreurope/citizens/vehicles/registration/formalities/index_en.htm
5. European Commission DG Move website (2015).
http://ec.europa.eu/transport/road_safety/index_en.htm
6. ETSC (2009). Boost the market for safer cars across Europe. + Background tables PIN Flash no. 13. ETSC, Brussels.
7. ETSC (2010). Road Safety Target in Sight: Making up for lost time. + Background tables 4th Road Safety PIN report. ETSC, Brussels.
8. ETSC (2014). Ranking EU progress on car occupant safety. + Background tables PIN Flash no. 27. ETSC, Brussels.
9. ETSC (2015). Enforcement in the EU-Vision 2020. + Background tables. ETSC, Brussels.
10. ETSC (2015). Making walking and cycling on Europe's roads safer. + Background tables PIN Flash no. 29. ETSC, Brussels.
11. ETSC (2015). Ranking EU progress on improving motorway safety. + Background tables PIN Flash no. 28. ETSC, Brussels.
12. Eurostat database (2015).
13. European Commission (2014). Handbook on External Costs of Transport. Final Report. Ricardo-AEA/R/ ED57769 Issue Number 1; 8th January 2014.
14. European Commission (2015). Road Safety in the European Union: Trends, statistics and main challenges. European Commission, Mobility and Transport DG, Brussels.
15. National Sources (2015): via national CARE experts and official national sources of statistics.
16. OECD/ITF (2014). Road Safety Annual Report 2014. OECD Publishing, Paris.
17. OECD/ITF (2015). Road Safety Annual Report 2015. OECD Publishing, Paris.
18. OECD/ITF (2015). Road Infrastructure Safety Management. OECD Publishing, Paris.
19. ROSE25 (2005). Inventory and compiling of a European good practice guide on road safety education targeted at young people. Final report. KfV, Vienna.
20. SARTRE (2010). European road users' risk perception and mobility. SARTRE 4 survey.
21. SUPREME (2007) Final Report Part F1. Thematic Report: Education and Campaigns. European Commission, Brussels.
22. WHO (2013). Global status report on road safety 2013: supporting a decade of action. World Health Organisation, Geneva.
23. WHO (2015) Global status report on road safety 2015. World Health Organisation, Geneva.
24. UNECE database (2015).

Notes

1. Country abbreviations

	Belgium	BE		Italy	IT		Romania	RO
	Bulgaria	BG		Cyprus	CY		Slovenia	SI
	Czech Republic	CZ		Latvia	LV		Slovakia	SK
	Denmark	DK		Lithuania	LT		Finland	FI
	Germany	DE		Luxembourg	LU		Sweden	SE
	Estonia	EE		Hungary	HU		United Kingdom	UK
	Iceland	IE		Malta	MT			
	Greece	EL		Netherlands	NL		Iceland	IS
	Spain	ES		Austria	AT		Liechtenstein	LI
	France	FR		Poland	PL		Norway	NO
	Croatia	HR		Portugal	PT		Switzerland	CH

2. Sources: CARE (Community database on road accidents), EUROSTAT, ITF-IRTAD, National sources.

The full glossary of definitions of variables used in this Report is available at: http://ec.europa.eu/transport/road_safety/pdf/statistics/cadas_glossary.pdf

3. Data available in September 2016.

4. Average annual change is calculated with the power function between the first and last years:

[aac = (b/a)^{1/n}-1, where aac: annual average change, a: first year value, b: last year value, n: number of years].

5. Explanation of symbols in Tables:

n/a: not available

"-": not applicable (e.g. calculation cannot be performed)

6. This 2016 edition of Road Safety Country Overviews updates the previous version produced in 2012 within the EU co-funded research project [DaCoTA](#).

7. Disclaimer

This report has been produced by the National Technical University of Athens ([NTUA](#)), the Austrian Road Safety Board ([KFV](#)) and the European Union Road Federation ([ERF](#)) under a contract with the [European Commission](#). Whilst every effort has been made to ensure that the information presented in this report is relevant, accurate and up-to-date, the Partners cannot accept any liability for any error or omission, or reliance on part or all of the content in another context.

Any information and views set out in this report are those of the author(s) and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use that may be made of the information contained therein.

8. Please refer to this Report as follows:

European Commission, Road Safety Country Overview - Iceland, European Commission, Directorate General for Transport, September 2016.

