

Structure and Culture

Basic Data

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

Basic data of Switzerland	EU average
- Population: 8,24 million inhabitants (2015)[2]	18,1 million (2015)
- Area: 41.285 km ² (2015)[2] (3,1% 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): 3,8°C	6,5°C
- Average summer temperature (May to Oct.): 16°C	17,8°C
- Annual precipitation level: 1.059 mm	651 mm
- Exposure: 63 billion vehicle km (2014) [1]	122,4 billion vehicle km (2014) ¹
- 0,73 vehicles per person (2014) [1]	0,62 (2014)

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

The GDP is more than 2 times higher than the EU average GDP.

Country characteristics

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

Characteristics of Switzerland	EU average
- Population density: 200 inhabitants/km ² (2015) [2]	114 inhabitants/km ² (2015)
- Population composition (2015) [2]	
14,9% children (0-14 years)	15,6% children
67,3% adults (15-64 years)	65,5% adults
17,8% elderly (65 years and over)	18,9% elderly (2015)
- Gross Domestic Product (GDP) per capita: €53.520 (2015) [1]	€26.300 (2015)
- 73,9% of population lives inside urban area (2015)[4]	73,3% (2015)
- Special characteristics [4]: mostly mountains with a central plateau of rolling hills, plains, and large lakes	

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 Federal Roads Office (FEDRO) was established in 1998 as Switzerland's federal authority responsible for road infrastructure and private road transport. It belongs to the Federal Department of the Environment, Transport, Energy and Communications (DETEC), and focuses on securing sustainable and safe mobility on the country's roads.

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

Table 3: Key actors per function in Switzerland

Key functions	Key actors
1. - Formulation of national RS strategy - Setting targets - Development of the RS programme	- Federal Roads Office - Federal Department of the Environment, Transport, Energy and Communication - Federal Office of Transport - Canton Transportation Administrations
2. Monitoring of the RS development in the country	- Federal Roads Office
3. Improvements in road infrastructure	- Federal Department of the Environment, Transport, Energy and Communication - Federal Office of Transport
4. Vehicle improvement	- Federal Roads Office
5. Improvement in road user education	- Swiss Council for Accident Prevention
6. Publicity campaigns	- Federal Roads Office - Swiss Council for Accident Prevention
7. Enforcement of road traffic laws	- Federal Department of Justice and Police - Cantonal Police - Regional Police
8. Other relevant actors	- Federation Routière Suisse (FRS)

Sources: national sources

The Federal Roads Office (FEDRO) focuses on securing sustainable and safe mobility on the country's roads.

Drivers in Switzerland are more supportive for stricter legislation on speeding but not on drink-driving compared to drivers in other countries.

Attitudes towards risk taking

- Drivers in Switzerland are more supportive for stricter legislation on speeding but not on drink-driving compared to drivers in other countries.
- The perceived probability of being checked is higher than the ESRA-average.

Table 4: Road safety attitudes and behaviour of drivers

	Switzerland	ESRA average
Self-reported driving behaviour	% of drivers that show behaviour at least once	
In the past 12 months, as a road user, how often did you drive without respecting a safe distance to the car in front?	63%	60%
In the past 12 months, as a road user, how often did you talk on a hand-held mobile phone while driving?	36%	38%
In the past 12 months, as a road user, how often did you drive faster than the speed limit inside built-up areas?	64%	68%
Supporting stricter legislation	% of drivers that disagree with the following	
What do you think about the current traffic rules and penalties in your country for each of the following themes?: The penalties are too severe: for speeding	52%	61%
What do you think about the current traffic rules and penalties in your country for each of the following themes?: The penalties are too severe: alcohol	84%	87%
Do you support the following measure?: Zero tolerance for alcohol (0,0‰) for all drivers	53%	41%
Perceived probability of being checked	% of drivers with answers in following categories	
In the past 12 months, how many times have you been stopped by the police for a check? (once or more)	36%	31%
On a typical journey, how likely is it that you (as a driver) will be checked by the police for respecting the speed limits (including checks by police car with a camera and/or GoSafe cameras)? (Very big chance)	44%	37%
In the past 12 months, how many times were you checked by the police for alcohol while driving a car (i.e., being subjected to a Breathalyser test)? (once or more)	14%	19%

Source: ESRA 2016

Legend

(comparison of country attitude in relation to average attitude of other SARTRE countries):

	2-9% better
	10-19% better
	≥ 20% better
	2-9% worse
	10-19% worse
	≥ 20% worse

No quantitative target was set under “Via Sicura”.

Programmes and measures

Road safety strategy of the country

On 15 June 2012, the Swiss Federal Council adopted the road safety programme Via Sicura, almost 10 years after the first proposal. A range of safety measures is being progressively implemented.

National strategic plans and targets

- Targets:

Table 5: Road safety targets for Switzerland

Year	Fatalities	Serious injuries
-	No quantitative targets	No quantitative targets

- Priority topics:
 - Speed management
 - Drink-driving
 - Enforcement

(Sources: national sources)

Road infrastructure

Table 6: Description of the road categories and their characteristics in Switzerland

Road type	General speed limits (km/h)
Urban roads	50
Rural roads	80
Motorways	120

Source: EC DG-Move, 2015

- Special rules for: no information available
- Guidelines and strategic plans for infrastructure are under consideration in Switzerland.

Table 7: Obligatory parts of infrastructure management in Switzerland and other EU countries

Obligatory parts in Switzerland:	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%

Source: IRTAD, 2015

Switzerland is working on guidelines and strategic plans for infrastructure.

Switzerland has a zero drink-driving limit for novice and professional drivers.

Recent infrastructural actions have been addressing:

- A new norm “Single Accident Site Management” was published in 2015.

(Source: IRTAD, 2016)

Traffic laws and regulations

Table 8: Description of the regulations in Switzerland in relation to the most common regulations in other EU countries

Regulations in Switzerland [1]	Most common in EU (% of countries)
Allowed BAC² levels:	
- General population: 0,5‰	0,5‰ (61%)
- Novice drivers: 0,0‰ [2]	0,2‰ (39%) and 0,0‰ (36%)
- Professional drivers: 0,0‰ [2]	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: not obligatory unless they will be riding faster than 20 km/h	Not obligatory (46%)
Daytime running lights are mandatory. [2]	

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

Enforcement

Table 9: Effectiveness of enforcement effort in Switzerland according to an international respondent consensus (scale = 0-10)

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

Source: WHO, 2015

Drink-driving and child restraint law enforcement is less effective than in most EU countries, while enforcement of other issues is at the same level.

² Blood Alcohol Concentration

Driving licences thresholds and campaign themes are similar to those of most EU countries.

Road User Education and Training

Table 10: Road user education and training in Switzerland compared to the situation in other EU countries

Education and training in Switzerland	Most common in EU (% of countries)
General education programmes:	
- Primary school: is applied in all cantons	Compulsory (71%)
- Secondary school: is applied in some cantons	Compulsory (43%)
- Other groups: not available	-
Driving licences thresholds:	
- Passenger car: 18 years	18 years (79%)
- Motorised two wheeler: 16 years for A1; 18 years for restricted A or unrestricted after 2 years; 25 years for unrestricted A	18 years (low categories) and higher ages (32%)
- Buses and coaches: 21 years	21 years (86%)
- Lorries and trucks: 18 years	21 years (75%)

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

Public Campaigns

Table 11: Public campaigns in Switzerland compared to the situation in other EU countries

Campaigns in Switzerland	Most common issues in EU (% of countries)
Organisation:	
- Road Safety Fund	
- BfU	
- Focus group organisations	
Main themes:	
- Drink-driving	Drink-driving (96%)
- Seat belt	Speeding (86%)
- Speeding	Seat-belt (79%)
- Driver assistance systems	
- Sleepiness	

Sources: ETSC, 2011; IRTAD, 2014; national sources

Vehicles and technology (national developments)

Table 12: Developments of vehicles and technology in Switzerland compared to the situation in other EU countries

Mandatory technical inspections:	Most common in EU (% of countries)
Passenger cars: 4-3-2-2 years Taxis: every 12 months	Every 12 months (39%)
Motorcycles: 4-3-2-2 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

Mandatory inspection periods are similar to the most common periods in the EU for buses and lorries but have intervals for passenger cars and motorcycles.

Percentage of speed offenders on rural roads increased. For mean speed on motorways, an average annual change of -0,3% can be seen.

Road Safety Performance Indicators

Speed

Table 13: Number of speed tickets per population in Switzerland versus the EU average

Measure	2006	2007	Average annual change	EU average (2007)
Number of speed tickets/ 1.000 population	350	335	-4,3%	84

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

Table 14: Percentage of speed offenders per road type in Switzerland compared to the EU average

Road type	2004	2010	Average annual change	EU average
Motorways	30%	18%	-8,2%	n/a
Rural roads	19%	30%*	9,6%	n/a
Urban roads	19%	25%*	5,6%	n/a

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

*Data from 2009

Table 15: Mean speed per road type in Switzerland compared to the EU average

Road type	2004	2013	Average annual change	EU average
Motorways	111 km/h	108 km/h	-0,3%	n/a
Rural roads	73 km/h	75 km/h*	0,5%	n/a
Urban roads	43 km/h	44 km/h*	0,5%	n/a

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

*Data from 2009

Alcohol

Table 16: Road side surveys for drink-driving in Switzerland compared to the EU average

Measure	2006	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 Switzerland.

64% of the Swiss car fleet is made of cars under 10 years of age, which is higher than the EU average.

Rear seat-belt wearing rates are higher than the EU average.

Vehicles

Table 17: State of the vehicle fleet in Switzerland compared to the EU average

Vehicles	EU average
Cars per age group (2012) [1]:	Passenger cars (2012)
- ≤ 2 years: 16%	≤ 2 years: 9%
- 3 to 5 years: 19%	3 to 5 years: 13%
- 6 to 10 years: 29%	6 to 10 years: 28%
- > 10 year: 36%	>10 years: 49%
EuroNCAP occupant protection score of cars (new cars sold in 2013) [2]:	
- 5 stars: 53,2%	5 stars: 52,5%
- 4 stars: 3,7%	4 stars: 4,5%
- 3 stars: 2,7%	3 stars: 2,9%
- 2 stars: 0,7%	2 stars: 0,5%
- not tested: 39,7%	not tested: 39,6% ³

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

Protective systems

Table 18: Protective system use in Switzerland versus the average in EU

Protective systems	EU average ⁴
Daytime seat-belt wearing in cars and vans (2015) [1]:	(2015)
- no information on % front	89,7% front
- 93% driver	not available
- 92% front passenger	not available
- 76% rear	69,5% rear
- 93% child restraint systems (2012)	not available
Helmet use (2015) [1]:	
- Nearly 100% powered two wheelers	not available
- 46% cyclists (2013) [2]	

Sources: [1] IRTAD, 2016; [2] ETSC, 2015

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

⁴ Based on data of 15 EU countries; data of AT, BE, IE, IT, LU, HU, FI, SE (2015); data of CZ, DE, DK, HR, LT, PL, UK (2014); data of PT (2013)

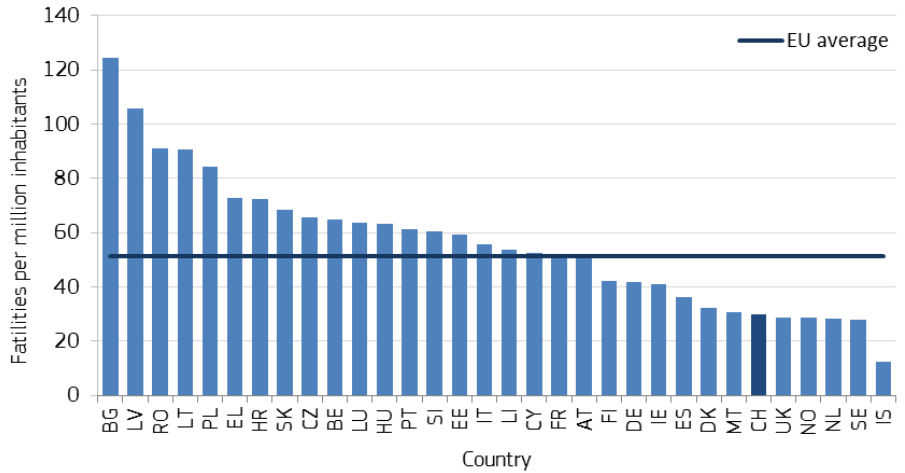
The fatality rate of Switzerland is one of the lowest in the EU. Its development was similar to the EU average in the period 2001-2014.

Road Safety Outcomes

General positioning

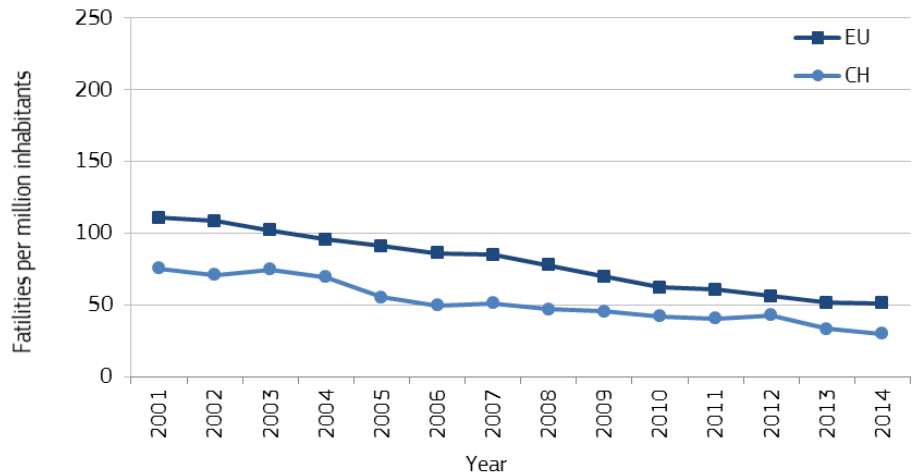
The fatality rate of Switzerland is one of the lowest in the EU (around 30 fatalities per million population in 2014). Its development was similar to the EU average in the period 2001-2014.

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 Switzerland and the EU average



Sources: CARE, Eurostat

The share of motorcyclist fatalities is higher than the EU average.

Transport mode

The share of motorcyclist fatalities is higher than the EU average. While the average annual reduction of motorcyclist fatalities between 2001 and 2014 was 4%, it was 7% for car occupants. In the same period, the annual reduction rates of pedestrian and cyclist fatalities were 7% and 1%.

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

Transport mode	2001	2014	Average annual change	Share in 2014	EU average (2014)
Pedestrians	104	43	-7%	18%	22%
Car occupants	245	97	-7%	40%	45%
Motorcyclists	94	53	-4%	22%	15%
Mopeds	22	1	-21%	0%	3%
Cyclists	38	34	-1%	14%	8%
Bus/coach occupants	6	2	-8%	1%	1%
Lorries or truck occupants	19	5	-10%	2%	5%

Sources: CARE, national sources

Age, gender and nationality

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

Age and gender	2001	2014	Average annual change	Share in 2014	EU average (2014)
Females					
0 - 14 years	11	5	-6%	2%	1%
15 - 17 years	1	1	0%	0%	1%
18 - 24 years	15	3	-12%	1%	3%
25 - 49 years	36	9	-10%	4%	6%
50 - 64 years	27	6	-11%	2%	4%
65+ years	45	32	-3%	13%	9%
Males					
0 - 14 years	11	4	-7%	2%	1%
15 - 17 years	19	1	-20%	0%	2%
18 - 24 years	73	35	-5%	14%	12%
25 - 49 years	162	56	-8%	23%	29%
50 - 64 years	62	37	-4%	15%	15%
65+ years	82	54	-3%	22%	16%
Nationality of driver or rider killed					
National	n/a	n/a	-	-	-
Non-national	n/a	n/a	-	-	-

Sources: CARE, national sources

In Switzerland, the elderly fatalities have a higher share compared to the EU average.

Fatalities in rural areas are over-represented in Switzerland.

Location

Fatalities in rural areas are over-represented in Switzerland compared to the EU average. There is no information available about fatalities at junctions for Switzerland.

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

Location	2001	2014	Average annual change	Share in 2014	EU average (2014)
Built-up areas	204	93	-6%	38%	38%
Rural areas	269	138	-5%	57%	54%
Motorways	71	12	-13%	5%	7%
Junctions	n/a	n/a	-	-	19%

Sources: CARE, national sources

Lighting and weather conditions

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

Conditions	2001	2014	Average annual change	Share in 2014	EU average (2014)
Lightning conditions					
During daylight	325	160	-5%	66%	49%
During night-time	165	64	-7%	26%	29%
Weather conditions					
While raining	64	29	-6%	12%	10%

Sources CARE, national sources

Single vehicle accidents

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

Accident Type	2001	2014	Average annual change	Share in 2014	EU average (2014)
Single vehicle accidents	n/a	n/a	-	-	-

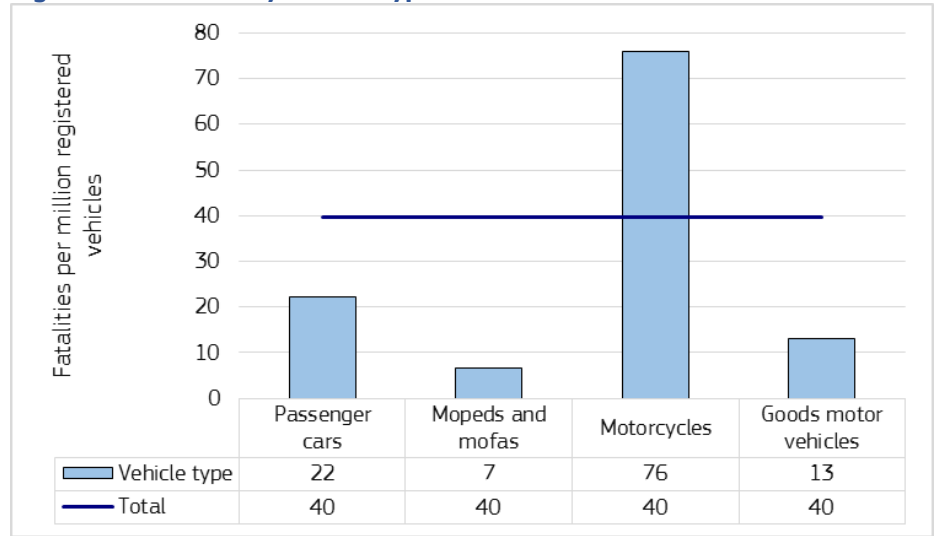
Sources: CARE, national sources

Under-reporting of casualties

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

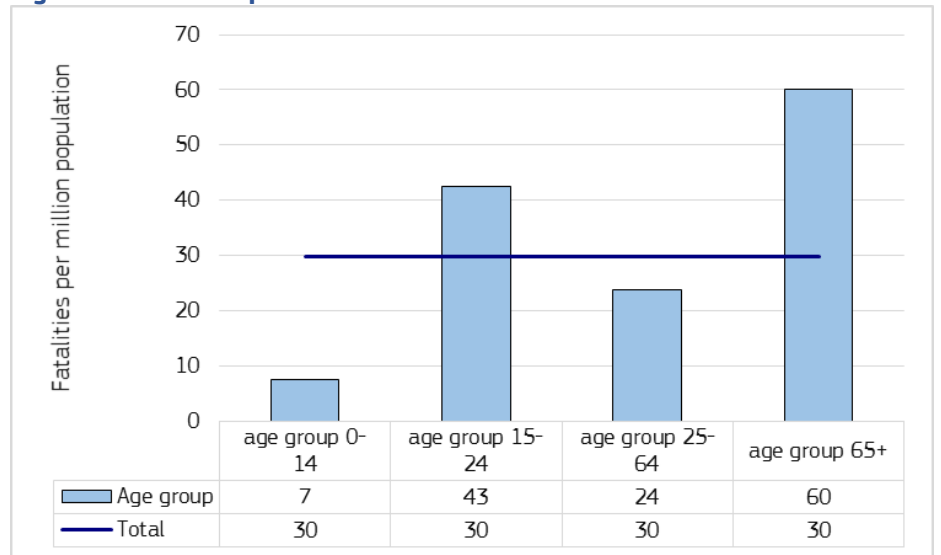
Risk Figures

Figure 3: Fatalities by vehicle type in Switzerland in 2014



Sources CARE, IRTAD

Figure 4: Fatalities per million inhabitants in Switzerland in 2014



Sources: CARE, EUROSTAT

In Switzerland motorcyclists, elderly people and youngsters have the highest risk of getting involved in a fatal crash compared to the other groups.

Estimated costs of road injuries are much higher in Switzerland 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 Switzerland versus the EU average

Injury type	Value	European average ⁵
Fatal	1,79	1,28
Hospitalised	0,29	0,18
Slightly injured	0,02	0,02

Source: Bickel et al., 2006

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

In 2012, the Swiss Federal Council adopted the road safety programme, "Via Sicura". A range of safety measures is being progressively implemented.

Synthesis

Safety position

- Switzerland is the country with the 6th lowest fatality rate in Europe in 2014.

Scope of problem

- The largest share of fatalities is among car occupants, pedestrians and motorcyclists, of which the last share is significantly higher than the EU average.
- The number of elderly people who died in road accidents is higher in Switzerland than in the EU on average.
- Road fatalities in rural areas are over-represented in Switzerland compared to the EU average.

Recent progress

- Since 2001 the fatality rate per million population in Switzerland has been lower than the EU average. Significant decrease has been recorded in road fatalities of males aged 15-17 years old.
- A large decrease has been registered in the percentage of speed offenders on Swiss motorways and rural roads.

Remarkable road safety policy issues

- In 2012, the Swiss Federal Council adopted the road safety programme, "Via Sicura", almost ten years after the first proposal. A range of safety measures is being progressively implemented.
- Switzerland has a zero drink-driving limit for novice and professional drivers.
- Child restraint law enforcement is somewhat less effective in Switzerland than in most EU countries, while enforcement of other issues is at the same level.
- 64% of the Swiss car fleet is made of cars under 10 years of age, which is higher than the EU average.

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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
	Ireland	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

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8. Please refer to this Report as follows:

European Commission, Road Safety Country Overview – Switzerland, European Commission, Directorate General for Transport, September 2016.

