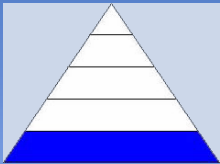


Norway



Structure and Culture

- **Basic data**

Table 1: Basic data of Norway in relation to the European average. (Sources: [1] OECD/ITF, 2011; [2] Eurostat; [3] DG-TREN, 2005; [4] CIA; [5] national sources)

Basic data of Norway	European average
– Population: 5.0 million inhabitants (2012) [2]	17.1 million (2010) ⁱ [1,2]
– Area: 323 802 km ² (2010) [3] (6.0% water) (2010)	156 225 km ² (2010) [1,3] 3% water (2010) [4]
– Climate and weather conditions (capital city; 2010): Average winter temperature (Nov. to April): -3°C Average summer temperature (May to Oct.): 13°C Annual precipitation level: 736 mm	(2010) 6°C 16°C 747 mm
– Exposure: 43 billion vehicle km (2010) (% cars, % vans etc. unknown)	168 billion vehicle km (2010 ⁱⁱ) [1]
– 0.56 motorised vehicles per person (2011)	0.7(2010 ^{i,iii}) [1,2]

- **Country characteristics**

Table 2: Characteristics of Norway in comparison to the European average. (Sources: [1] OECD/ITF, 2011; [2] Eurostat; [3] national sources)

Characteristics of Norway	European average
– Population density: 15 inhabitants/km ² (2010) [2]	110 inhabitants km ² (2010) ⁱ [1,2,3]
– Population composition (2012) [3]: 19% children (0-14 years), 66% adults (15-64 years), 15% elderly (65 years and over)	16% children, 67% adults, 17% elderly (2009 ⁱⁱⁱ) [1,2]
– Gross Domestic Product (GDP) per capita: €68 000 (2011) [2]	€26 100 (2010) [1,2]
– 19% of population lives inside urban area (2010) [2]	42% (2010 ^{iv}) [1,2]
– Special characteristics: Norway has only a few motorways, and roads that have suffered a lot from weather conditions in winter. Bridges, tunnels and wild animals are very common on roads in Norway.	

Norway has a very low population density.



ⁱ Based on 30 European countries; data of HU = 2009.

ⁱⁱ Based on 15 European countries (excl. BG, CY, EE, EL, ES, HU, IT, LT, LU, LV, MT, PL, PT, RO, SK); data of CZ, IE, SE, NO (2009); data of AT, BE, DK (2008); Data of UK (2006); data of NL (2003).

ⁱⁱⁱ Based on 27 European countries (excl. LT, NO, PL); data of BE, UK (2008).

^{iv} Based on 29 European countries (excl. IS).

Road Safety Country Overview-Norway

- **Structure of road safety management**

- Policy making is centralized in Norway for national roads.
- Road safety work is organised in three levels: national, regional and municipality levels. Several of the regions have their own political Road Safety Committee, where also the road administration, the Council for Road Safety and the police take part.
- Most of the municipalities have made Road Safety Action Plans.

The following key-actors are responsible for road safety (RS) management:

Table 3: Key actors per function in Norway. (Source: DG-TREN, 2010)

Key functions	Key actors
1. <ul style="list-style-type: none"> – Formulation of national RS strategy – Setting targets – Development of the RS programme 	<ul style="list-style-type: none"> – The Ministry of Transport and Communication: responsible and runs the road safety work through the National Transport Plan – The Road Safety Committee: lead agency.
2. Monitoring of the RS development in the country	The Road Safety Committee
3. Improvements in road infrastructure	The Norwegian Public Road Administration
4. Vehicle improvement	The Norwegian Public Road Administration
5. Improvement in road user education	The Norwegian Public Road Administration
6. Publicity campaigns	The Norwegian Public Road Administration
7. Enforcement of road traffic laws	The National Police Directorate
8. Other relevant actors	<ul style="list-style-type: none"> – The Directorate for Health and Social Welfare; – The Norwegian Council for Road Safety.

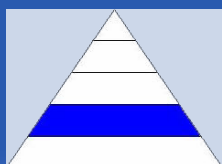
- **Attitudes towards risk taking**

- As Norway is not part of the SARTRE-surveys, there is no information on attitudes that is comparable to other European countries.

Road safety policy making in Norway is organised in three levels: national, regional and municipal.



Road Safety Country Overview-Norway



Norway has adopted vision zero on killed and seriously injured road crash victims.

Norway did various activities for road infrastructure improvement, including tunnel safety and avoiding ghost drivers.



Programs and measures

- **Road Safety Strategy of the country**

- Norway has adopted Vision Zero, based on the experiences of Sweden. This means that there will be a strong focus on measures that can reduce the most serious crashes (fatal and serious injuries).

- **National strategic plans and targets**

- The current national transport plan, which also addresses road safety, covers the period 2010-2019. A national action plan for road safety covers the period 2010-2013.
- Targets (referred to 2009):

Table 4: Road safety targets for Norway

Year	Killed and seriously injured
2014	Max. 950
2020	-33% Max. 775

- Priority topics:

- Review limits of traffic violations that entail driver licence revocation,
- Seat-belt wearing campaigns directed at young drivers
- Drink-driving test on high-risk locations,
- Traffic safety training on schools,
- Physical separators on 2- and 3-lane national roads,
- Road safety inspections and treatments after crashes,
- New criteria for speed limits outside urban areas,
- Alcohol-locks for transporters that carry out services for the agency,
- Classification of all-terrain-vehicles,
- Use of automatic number plate recognition for the inspection of vehicles,
- Review of regulations for (para)medics to test driver-fitness.

(Source: OECD/ITF, 2011; national sources)

- **Road infrastructure**

Table 5: Description of the road categories and their characteristics in Norway (Source: CIA).

Road type	Speed limit (km/h)
Urban roads	70/60/50/40/30
Rural roads	80
Motorways	100

- Special rules for: no information
- Guidelines and strategic plans for infrastructure in Norway: see National Transportation Plan (2010-2019).

Road Safety Country Overview-Norway

Table 6: Obligatory parts of infrastructure management in Norway and other European countries. (Sources: DG-TREN, 2010; national sources)

Obligatory parts in Norway:	European countries with obligation
Safety impact assessment: -	-
Road safety audits: yes	50%
Road safety inspections: yes	60%
Black spot treatment: yes	47% ^v

- Recent infrastructural actions have been addressing:
 - o Improvement of level crossings (railroad crossing)
 - o Road safety programmes at regional and local level for rural roads
 - o Tunnel safety
 - o Avoiding ghost drivers
 - o Improvement of urban road safety management

(Source: DG-TREN, 2010)

• Traffic laws and regulations

Table 7: Description of the regulations in Norway in relation to the most common regulations in other European countries. (Sources: [1] DG-TREN, 2005; [2] national sources; [3] DG-TREN, 2010; [4] DG-TREN, 2008)

Regulations in Norway	Most common in Europe (% of countries)
Allowed BAC level: 0.2‰; - Novice drivers: 0.2‰; - Professional drivers: 0.2‰ [1].	0.5‰ (60%) 0.5‰ and 0.2‰ (both 30%) 0.5‰ (30%) [1,2]
Phoning: - Hand held: prohibited. - Hands free: allowed [2].	Not allowed (97%) [2,3] -
Use of restraint systems: - Driver: obligatory - Front passenger: obligatory - Rear passenger: obligatory - Children: obligatory [3]	Obligatory (all countries) Obligatory (all countries) Obligatory (all countries) Obligatory on all seats (73%) [2,3]
Helmet wearing: - Motor riders: obligatory - Moped riders: obligatory - Cyclists: Recommended	Obligatory (all countries) Obligatory (all countries) Recommended (25% ^{vi}) [2,3]
- All cars have to be fitted with dedicated day time running lights. [4] - A demerit point system is in place. [3]	

Norway has a 0.2 dink-driving limit, which is lower than in most other countries.



^v Based on data of 18 countries (excl. AT, BE, CH, CZ, FI, FR, HU, IE, MT, NO, RO, SE).

^{vi} Based on data of 24 countries (excl. CH, CY, HU, LU, NO, PT).

Road Safety Country Overview-Norway

• Enforcement

Table 8: Effectiveness of enforcement effort in Norway according to an international respondent consensus (scale = 0-10) (Source: DG-TREN, 2010)

Issue	Score for Norway	Most common in Europe (% of countries)
Speed legislation enforcement	6	7 (35%)
Seat-belt law enforcement	6	7 (43%) ^{vii}
Child restraint law enforcement	9	6 (27%) ^{viii}
Helmet legislation enforcement	9	9 (39%) ^{ix}

Table 9: Performance of enforcement effort in Norway according to an international respondent consensus (scale = is good, is improving, needs to do more) (Source: DG-TREN, 2010)

Issue	Score for Norway	Most common in Europe (% of countries)
Speeding	-	Is improving (50%)
Drink driving	-	Is improving (79%) ^{ix}
Seat belt use	-	Is improving (52%) ^x

• Road user education and training

Table 10: Road user education and training in Norway, compared to the situation in other European countries. (Sources: [1] ROSE25, 2005; [2] ETSC, 2011; [3] national sources)

Education and training in Norway	Most common in Europe (% of countries)
General education programmes: – Primary school: Compulsory – Secondary school: Compulsory – Other groups: -	Compulsory (65%) ^{xi} Compulsory (50%) ^{xii} [1,2] -
Driving licences thresholds: – Passenger car: 18 years – Motorised two wheeler: 16 - 18 years – Busses and coaches: 18 year (with limited driving hours); 21 years (without vocational training) – Lorries and trucks: 18 year (with limited driving hours); 21 years (without vocational training)	18 years (79%) 18 years (low categories) and higher ages for faster vehicles (66%) 21 years (76%) ^{xiii} 21 years (79%) ^{xiv} [2,3]

Enforcement effectiveness for speed and seat-belt wearing is assessed as somewhat below average in Norway; child restraint enforcement is somewhat more effective.

Driving licence thresholds for most motorised vehicles are somewhat lower in Norway than the most common thresholds in Europe.



^{vii} Based on data of 23 countries (excl. DE, DK, IE, IS, LU, NL and UK).

^{viii} Based on data of 22 countries (excl. DE, DK, IE, IS, LU, NL, RO and UK).

^{ix} Based on data of 24 countries (excl. BG, CH, IS, NO, PL and RO).

^x Based on data of 25 countries (excl. BG, CH, IS, NO and RO).

^{xi} Based on data of 26 countries (excl. BG, CH, NO and RO).

^{xii} Based on data of 24 countries (excl. BG, CH, MT, NO, RO and SK).

^{xiii} Based on data of 29 countries (excl. NO).

^{xiv} Based on data of 28 countries (excl. IE and NO).

Road Safety Country Overview-Norway

- **Public campaigns**

Table 11: Public campaigns in Norway, compared to the situation in other European countries. (Sources: SUPREME, 2007; national sources)

Campaigns in Norway	Most common issues in Europe (% of countries)
Organisation: – Norwegian Public Road Administration	
Main themes: – Seat-belt – Speeding – Helmet use for cycles	Drink-driving (83%) Seat-belt (73%) Speeding (53%)

- **Vehicles and technology (national developments)**

Table 12: Developments of vehicles and technology in Norway, compared to the situation in other European countries. (Sources: TiS.PT, 2003; national sources)

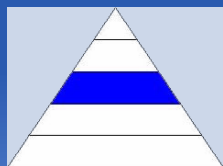
Mandatory technical inspections	Most common in Europe (% of countries)
Passenger cars: 2 years	Every 12 months (41%)
Motorcycles: not compulsory	Every 12 months (35%)
Busses or coaches: every 12 months	Every 12 months (41%)
Lorries or trucks: every 12 months	Every 12 months (41%) ^{xv}

Mandatory inspection periods for cars are somewhat longer in Norway than the most common period in Europe.



^{xv} Based on data of 17 countries (excl. BG, CH, CY, CZ, EE, HU, LT, MT, NO, RO, SI, SK).

Road Safety Country Overview-Norway



The amount of speed tests per population in Norway is lower than the European average, but speed offenders on most roads have slightly decreased last years.

Road Safety Performance Indicators

• Speed

Table 13: Number of speed checks in Norway versus the European average (Source: ETSC, 2010)

Measure	2006	2008	% change	European average (2008)
Number of tests/1000 population	52	51	-2%	90.8 ^{xvi}

Table 14: Percentage of speed offenders per road type in Norway compared to the European average (Source: ETSC, 2010)

Road type	2004	2006	Average annual change	European average
Motorways	55%	52%	-6%	Not available
Rural roads	46%	45%	-3%	Not available
Urban roads	Not available	Not available	Not available	Not available

Table 15: Mean speed per road type in Norway compared to the European average (Source: ETSC, 2010)

Road type	2001	2009	Average annual change	European average
Motorways	100 km/h	99 km/h	-1%	Not available
Rural roads	78 km/h	79 km/h	1%	Not available
Urban roads	51 km/h	52 km/h	3%	Not available

• Alcohol

Table 16: Road side surveys for drink-driving in Norway compared to the European average (Source: ETSC, 2010)

Measure	2006	2008	% change	European average (2008)
Number of tests/1000 population	Not available	338	Not available	145.8 ^{xvii}
% tested over the limit	Not available	Not available	Not available	Not available



^{xvi} Based on data of 21 countries (excl. BE, CH, DE, EE, IE, IS, MT, PT and UK).

^{xvii} Based on data of 17 countries (excl. BE, BG, CH, CZ, DE, IS, LU, LV, MT, NL, RO, SK and UK.).

Road Safety Country Overview-Norway

The age of the car fleet is somewhat older in Norway than the European average.

Seat-belt and helmet wearing rates are very high in Norway.

• Vehicles

Table 17: State of the vehicle fleet in Norway compared to the European average (Source: ETSC, 2009; national sources)

Vehicle fleet in Norway	European average
Cars per age group (2009): <ul style="list-style-type: none"> – 10% ≤ 2 years, – 18% 2 to 5 years, – 26 % 6 to 10 years, – 46% > 10 year. 	Passenger cars (2009) ^{xviii} <ul style="list-style-type: none"> 12% ≤ 2 years, 19% 2 to 5 years, 27 % 6 to 10 years, 42% >10 years
EuroNCAP occupant protection score of cars (new cars sold in 2008): <ul style="list-style-type: none"> – 5 stars: 64% – 4 stars: 33% – 3 stars: 0% – 2 stars: 0% Remark: 3% in unknown 	<ul style="list-style-type: none"> 49% 35% 6% 1%^{xix}

• Protective systems

Table 18: Protective system use in Norway versus the average in Europe (Source: Vis & Eksler, 2008; national source)

Use of protective systems in Norway	European average
Daytime seat belt wearing in cars and vans (2011): <ul style="list-style-type: none"> – 94% front, – 95 % driver – 93 % front passenger – No information on % rear (since 2006) – No information on % child restraint use 	(2007) <ul style="list-style-type: none"> 85% front^{xx}, Not available Not available 60% rear^{xxi}, Not available
– Helmet use (2011): <ul style="list-style-type: none"> – 100% motor rides, – 100% moped riders, – 51% cyclists 	<ul style="list-style-type: none"> Not available Not available Not available



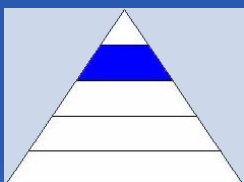
^{xviii} Based on data of 22 countries (excl. BG, DK, EL, FR, IS, MT, PT and SK).

^{xix} Based on data of 27 countries (excl. CY, IS and MT).

^{xx} Based on data of 25 countries (excl. AT, EL, IS, LT and RO); data of SK (2008); data of BE, CH, DK, IE, MT, NL (2006); data of HU, IT, NO, PT (2005); data of LU (2003)

^{xxi} Based on data of 22 countries (excl. CY, EL, ES, IS, IT, LT, RO and SK); data of BE, CH, DK, IE, MT, NL (2006); data of HU, NO, PT (2005); data of LU (2003).

Road Safety Country Overview-Norway



The number of fatalities per inhabitants in Norway is below the European average; the decline is somewhat less than average.

Road Safety Outcomes

- General positioning

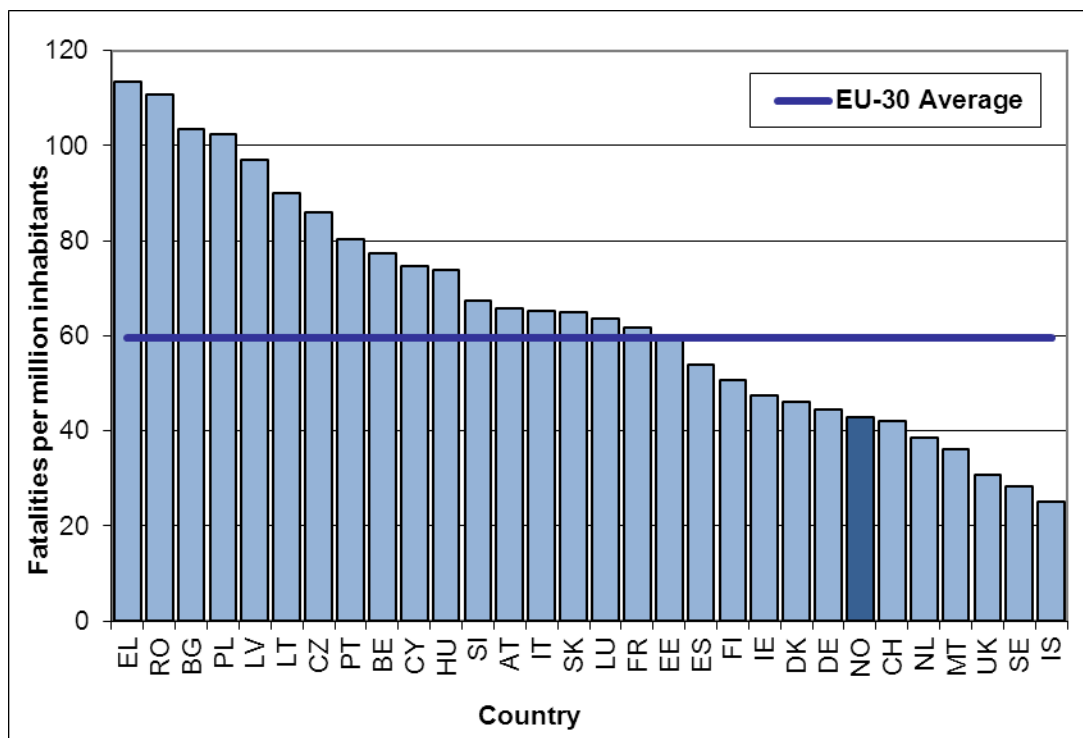


Figure 1: Fatalities per million inhabitants (2010). (Source: CARE, Eurostat).

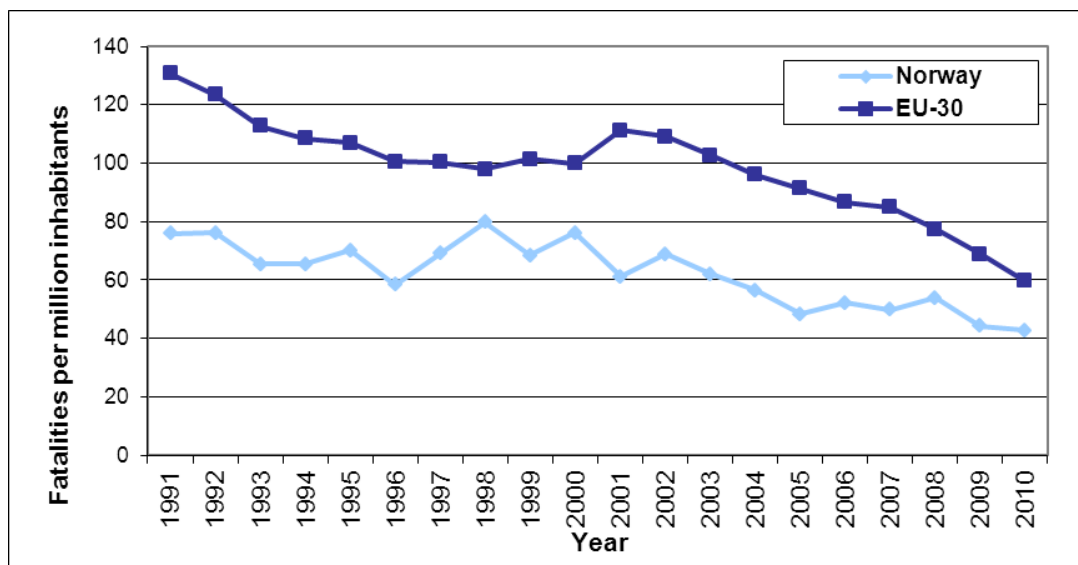


Figure 2: Development of fatalities per million inhabitants between 1991 and 2010. (Source: CARE, Eurostat).



Road Safety Country Overview-Norway

In Norway, a larger share in fatalities among car occupants is reported than for other means of road transport.

In Norway, a larger share of older people die in a road crash than on average in Europe.

No information is available in Norway on road fatalities by location.



• Transport mode

Table 19: Reported fatalities by mode of road transport in Norway compared to the European average of the last year available (Source: CARE, national sources).

Transport mode	2001	2011	Average annual change	% in 2011	European average (2009 ^{xxii})
Pedestrians	44	18	n.a.	11%	18%
Car occupants	165	101	n.a.	60%	47%
Motorcyclists	28	13	n.a.	8%	13%
Mopeds	6	3	n.a.	2%	2%
Cyclists	8	10	n.a.	6%	5%
Bus/coach occupants	3	3	n.a.	2%	<1%
Lorries or truck occupants	17	13	n.a.	8%	4%

• Age, gender and nationality

Table 20: Reported fatalities by age, gender and nationality in Norway versus the European average of the last year available (Source: CARE, national sources).

Age and gender	2001	2011	Average annual change	% in 2011	European average (2009 ^{viii})
Females					24%
0-14 years	5	1	n.a.	1%	1%
15 – 17 years	5	5	n.a.	3%	1%
18 – 24 years	9	6	n.a.	4%	4%
25 – 49 years	22	16	n.a.	10%	7%
50 – 64 years	9	10	n.a.	6%	3%
65+ years	31	12	n.a.	7%	7%
Males					75%
0-14 years	2	6	n.a.	4%	2%
15 – 17 years	9	1	n.a.	1%	2%
18 – 24 years	46	21	n.a.	13%	13%
25 – 49 years	78	41	n.a.	24%	31%
50 – 64 years	23	24	n.a.	14%	12%
65+ years	35	25	n.a.	15%	12%
Nationality of driver or rider killed					
National	n.a.	n.a.	n.a.	n.a.	Not available
Non-national	n.a.	n.a.	n.a.	n.a.	Not available

• Location

Table 21: Reported fatalities by location in Norway compared to the European average of the last year available (Source: CARE, national sources).

Location	2001	2010	Average annual change	% in 2010	European average (2009 ^{viii})
Built-up areas	n.a.	n.a.	n.a.	n.a.	33%
Rural areas	n.a.	n.a.	n.a.	n.a.	49%
Motorways	n.a.	n.a.	n.a.	n.a.	5%
Junctions	n.a.	n.a.	n.a.	n.a.	12%

^{xxii} Based on data of 28 countries (excl. NO, LT); data of FR, IE, MT, SE (2008).

Road Safety Country Overview-Norway

A larger share of fatalities occur during daylight and during rain in Norway than on average in Europe.

• Lighting and weather conditions

Table 22: Reported fatalities by lighting and weather conditions in Norway compared to the European average of the last year available (Source: CARE, national sources).

Conditions	2001	2011	Average annual change	% in 2011	European average (2009 ^{xxiii})
Lightning conditions					
During daylight	155	107	n.a.	64%	55%
During nighttime	116	59	n.a.	35%	39%
Weather condition					
While raining	41	32	n.a.	19%	10%

• Single vehicle crashes

Table 23: Reported fatalities by type in Norway compared to the European average of the last year available (Source: CARE, national sources).

Crash type	2001	2011	Average annual change	% in 2011	European average (2009 ^{xxiv})
Single vehicle crash	95	58	n.a.	35%	40%

• Under-reporting of casualties

- Fatalities: 100% (2011). This amount is suspected since adequate alternative registration systems are missing for a check.
- Hospitalised: no information.

(Source: national sources)



^{xxiii} Based on 25 countries (excl. IE, IT, LT, NO, SI); data of AT, BE, DK, EE, FI, FR, MT, SE (2008).

^{xxiv} Based on 27 countries (excl. IE, LT, NO); data of AT, BE, DK, EE, FI, FR, MT, SE (2008).

Road Safety Country Overview-Norway

- Risk figures

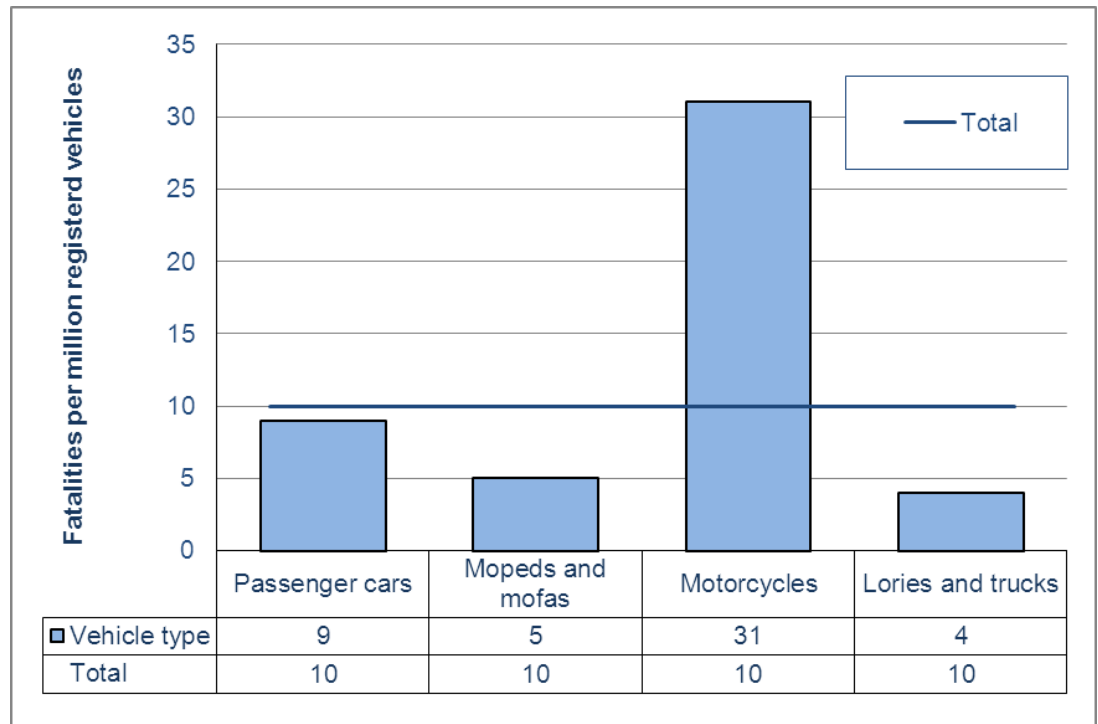
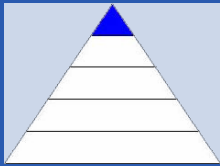


Figure 3: Fatalities by vehicle type for the country in 2010 (Sources: CARE).

Motorcyclists have by far the highest fatality risk in Norway.



Road Safety Country Overview-Norway



Estimated costs of road crashes are a lot higher in Norway than on average in Europe.

Social Cost

- Total costs of road crashes: no information.
- Percentage of GDP: no information.

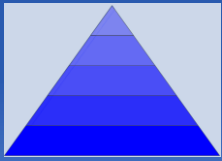
Table 24: Cost (in million Euro) per injury type in Norway versus the European average (Source: Bickel et al., 2006; national sources).

Injury type	Value	European average ^{xxv}
Fatal	3.8	1.28
Hospitalised	Very serious: 2.9 Serious: 1.02	0.18
Slightly injured	0.08	0.02



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

Road Safety Country Overview-Norway



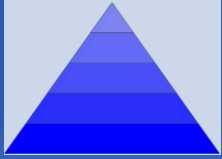
Norway has adopted vision zero and has twice as much alcohol test per number of inhabitants than the European average.

Synthesis

- **Safety position**
 - The number of fatalities per inhabitants in Norway is below the European average
- **Scope of problem**
 - Norway has a relative large share of fatalities among car occupants and among older people.
 - Enforcement effectiveness for speed and seat-belt wearing is assessed as somewhat below average in Norway
- **Recent progress**
 - The decline in fatalities per population is somewhat less than average.
 - Speed offenders on most roads in Norway have slightly decreased last years.
- **Remarkable road safety policy issues**
 - Norway has adopted vision zero on killed and seriously injured road crash victims. Therefore, the government focuses on measures that can reduce the most serious crashes.
 - The BAC limit in Norway is 0.2‰ for all road users, while the most common limit in other European countries is 0.5‰. The amount of alcohol tests per population in Norway is more than twice as much than the European average.
 - Child restraint law enforcement is assessed as somewhat more effective than average in Europe.
 - Helmet use is obligatory for cyclists up to 12 years.



Road Safety Country Overview-Norway



Literature

- Bickel, P. et al (2006) HEATCO deliverable 5. Proposal for harmonised guidelines. EU-project developing harmonised European approaches for transport costing and project assessment (HEATCO). Institut für Energiewissenschaft und Rationelle Energieanwendung, Stuttgart.
- CARE database
- CIA database
- DG-TREN (2005) Road safety country profiles (on website http://ec.europa.eu/transport/road_safety/observatory/country_profiles_en.htm)
- DG-TREN (2008) Day time running lights (on website http://ec.europa.eu/transport/road_safety/observatory/doc/drl_rules.pdf)
- DG-TREN (2010). *Technical Assistance in support of the Preparation of the European Road Safety Action Program 2011-2020. Final Report*. DG-TREN, Brussels
- ETSC (2009). *Boost the market for safer cars across Europe. + Background tables* PIN Flash no.13. ETSC, Brussels
- ETSC (2010). *Tackling the three main killers on the road. A priority for the forthcoming EU Road Safety Action Program + Background tables*. PIN Flash no.16. ETSC, Brussels
- ETSC (2011) www.etsc.eu/faq.php (FAQ on driving licensing has been removed now)
- Eurostat database
- National sources: via CARE national experts
- OECD/ITF (2011). *IRTAD Road Safety 2010. Annual Report*. OECD/ITF, Brussels
- ROSE25 (2005). *Inventory and compiling of a European good practice guide on road safety education targeted at young people. Final report*. KfV, Vienna
- SUPREME (2007) Final Report Part F1. Thematic Report: Education and Campaigns. European Commission, Brussels.
- TiS.PT (2003). *Study on Road Traffic Rules and Corresponding Enforcement Actions in the Member States of the European Union*. European Commission Directorate-General Energy and Transport, Brussels.
- Vis, M.A. and Eksler, V. (Eds.) (2008) *Road Safety Performance Indicators: Updated Country Comparisons*. Deliverable D3.11a of the EU FP6 project SafetyNet.

