Road Safety Country Overview November 2012

Hungary





The Hungarian population is decreasing due to a high fatality rate.

Structure and Culture

Basic data

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

Basis data of Hungary	European average
 Population: 10.014 million inhabitants (2010) 	17.1 million (2010 ¹) [1,2]
– Area: 93 023 km ² (2010)	156 225 km ² (2010) [1,3]
(3.7% water) (2010)	3% water (2010) [4]
 Climate and weather conditions (capital city; 2010): 	(2010)
Average winter temperature (Nov. to April): 5°C	6°C
Average summer temperature: 15°C	16°C
Annual precipitation level: 935 mm	747 mm
 Exposure: ca. 0.41 million vehicle km (2010) [5] 	168 billion vehicle km
	(2010 ["]) [1]
 0.3 motorised vehicles per person (2010) 	0.7(2010 ^{1, III}) [1,2]

Country characteristics

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

Characteristics of Hungary	European average
 Population density: 108 inhabitants/km² (2010) 	110 inhabitants km ² (2010 ¹)
	[1,2,3]
 Population composition (2010): 	
15% children (0-14 years),	16% children,
69% adults (15-64 years),	67% adults,
16% elderly (65 years and over)	17% elderly (2009 ¹¹¹) [1,2]
 Gross Domestic Product (GDP) per capita: €9 712 (2010) 	€26 100 (2010) [1,2]
 32% of population lives inside urban area (2010) 	42% (2010 ^{IV}) [1,2]
 Special characteristics: the average natural life span is 	
lower in Hungary than in other European countries and	
the birth rate is lower than the fatality rate in the country.	



- Based on 30 European countries; data of HU = 2010.
- 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).
 - Based on 27 European countries (excl. LT, NO, PL); data of BE, UK (2008).
 - ^{iv} Based on 29 European countries (excl. IS).

Structure of road safety management

Policy making is centralized in Hungary.

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

Table 3: Key actors per function in Hungary. (Source: national sources)

Key function	S	Key actors
1. – Formulatio – Setting tar – Developme	on of national RS strategy gets ent of the RS programme	 Ministry of National Development (NFM) The Ministry of the Interior (BM) The Inter-ministerial Committee for road safety: lead agency dealing with road safety.
2. Monitoring the country	of the RS development in	 The Transport Science Institute (KTI): engaged in the analysis of accidents, accident research and the preparation of the new national transport safety program.
3. Improveme	ents in road infrastructure	 Coordination Center for Transport Development (KKK): transport safety tasks on the network. The State Motorway Managing Co. Inc. (ÁAK Rt.): in charge of the management of the motorway network. Hungarian Roads Management Company (Kozut): maintenance and operation of the national public road network in each of the 19 counties. Transport safety tasks on the network.
4. Vehicle imp	provement	Central Office for Administrative and Electronic Public Services (KEKKH)
5. Improveme	ent in road user education	 National Accident Prevention Committee (OBB, part of the National Police Headquarters (ORFK)
6. Publicity ca	ampaigns	National Accident Prevention Committee (OBB, part of the National Police Headquarters (ORFK))
7. Enforceme	nt of road traffic laws	National Police Headquarters (ORFK)
8. Other relev	ant actors	National Transport Authority (NKH): issues standards, technical regulations and guidelines on the national road area.





Transport

Attitudes towards risk taking

- Hungarian drivers report somewhat more hazardous driving behaviour than drivers in other countries, except for inappropriate overtaking and speeding on motorways.
- In Hungary, there is more support for stricter legislation than in other countries, especially on the topics of speeding and the BAC level.
- The perceived probability of being checked is lower in Hungary than in other countries.

 Table 4: Road safety attitudes and behaviour of drivers (Source: SARTRE, 2004)

	Hungary	SARTRE average	
Self-reported driving behaviour	% of drivers that show behaviour		
	often or more		
Too close following	11%	9%	
Inappropriate overtaking	2%	5%	
Exceeding speed limit on motorways	16%	25%	
Exceeding speed limit on main inter-urban roads	21%	18%	
Exceeding speed limit on country roads	17%	13%	
Exceeding speed limit in built-up areas	12%	8%	
		% of drivers that support stricter	
Support of stricter legislation	% of drivers t	hat support stricter	
Support of stricter legislation	% of drivers the legislation	hat support stricter	
Support of stricter legislation Higher penalties for speeding offences	% of drivers the legislation 72%	hat support stricter	
Support of stricter legislation Higher penalties for speeding offences Higher penalties for drink-driving offences	% of drivers the legislation 72% 93%	hat support stricter 60% 88%	
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Legend

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

2-9% better 10-19% better

 \geq 20% better 2-9% worse

10-19% worse

 \geq 20% worse



Hungarian drivers are more in favour of stricter legislation than drivers in other countries.



Hungary has a target for road casualties that is in accordance with the aim of the EC.

Road inspections, safety audits and

inspections are obligatory in Hungary.



Programs and measures

National strategic plans and targets

- The current road safety program covers the period 2011-2013. The national transport safety programme was adopted in 2005 for the period 2010 2015.
 Targets (referred to 2001):
- Targets (referred to 2001):

Table 5: Road safety targets for HungaryYearFatalities and injury crashes2015-50%

- Priority topics:
 - o the behaviour of powered two-wheelers,
 - o the use of seat belts,
 - o speeding,
 - o drink-driving,
 - o technical vehicle inspections,
 - o motorway network development,
 - o roundabouts,
 - o safety of rail-road crossings,
 - o pedestrian facilities.

(Source: DG-TREN, 2005; 2010; OECD/ITF, 2011)

Road infrastructure

Table 6: Description of the road categories and their characteristics in Hungary (Source: TiS.PT, 2003).

Road type	Speed limit (km/h)
Urban roads	50
Rural roads	90
Motorways	110/130

- Special rules for:

- Light motorcycles (A1; until 18 years): 80 km/h
- Guidelines and strategic plans for infrastructure are available in Hungary.

Table 7: Obligatory parts of infrastructure management in Hungary and other European countries. (Sources: DG-TREN, 2010)

Obligatory parts in Hungary [2]:	European countries with obligation
Safety impact assessment: yes	-
Road safety audits: yes	50%
Road safety inspections: yes	60%
Black spot treatment: yes	47% ^v

- Recent activities of road infrastructure improvement have been addressing [1]:
 the improvement of level crossings (railroad crossing),
 - o new motorways,
 - o increased use of roundabouts,
 - redesign of pedestrian crossings.

(Sources: DG-TREN, 2010)

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



Traffic laws and regulations

Table 8: Description of the regulations in Hungary 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 Hungary	Most common in Europe (% of countries)
Allowed BAC level: 0.0%;	0.5‰ (60%)
 Novice drivers: 0.0‰; 	0.5‰ and 0.2‰ (both 30%)
 Professional drivers: 0.0‰. [1] 	0.5‰ (30%) [1,2]
Phoning:	
 Hand held: prohibited 	Not allowed (97%) [2,3]
 Hands free: allowed [3] 	-
Use of restraint systems:	
 Driver: obligatory 	Obligatory (all countries)
 Front passenger: obligatory 	Obligatory (all countries)
 Rear passenger: obligatory 	Obligatory (all countries)
 Children: obligatory [3] 	Obligatory on all seats (73%) [2,3]
Helmet wearing:	
 Motor riders: obligatory 	Obligatory (all countries)
 Moped riders: obligatory 	Obligatory (all countries)
 Cyclists: not obligatory [3] 	Recommended (25% ^{VI}) [2,3]
- DRL: obligatory outside built up areas,	
recommended inside urban areas [4, 2];	
 A demerit point system is in place [3] 	

• Enforcement

Table 9: Effectiveness of enforcement effort in Hungary according to an international respondent consensus (scale = 0-10) (Source: DG-TREN, 2010)

Issue	Score for Hungary	Most common in Europe (% of countries)
Speed legislation enforcement	4	7 (35%)
Seat-belt law enforcement	4	7 (43%) ^{vii}
Child restraint law enforcement	4	6 (27% ^{viii})
Helmet legislation enforcement	9	9 (39% ^{ix})

Except for helmet legislation enforcement, enforcement effectiveness is assessed as much lower than the European average.

Hungary has zero tolerance for drinkdriving.



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

Transport

Table 10: Performance of enforcement effort in Hungary according to an international respondent consensus (scale = is good, is improving, needs to do more) (Source: DG-TREN, 2010)

Issue	Score for Hungary	Most common in Europe (% of countries)
Speeding	need to do more	Is improving (50%)
Drink driving	is improving	Is improving (79%) ^{ix}
Seat belt use	need to do more	Is improving (52% ^x)

Road user education and training

Table 11: Road user education and training in Hungary, compared to the situation in other European countries. (Sources: [1] ROSE25, 2005; [2] ETSC, 2011; [3] national sources)

Education and training in Hungary	Mast common in Europa (% of countries)
Education and training in Hungary	Most common in Europe (% or countries)
General education programmes:	
 Primary school. Compulsory 	Compulsory (65% ^{xi})
 Secondary school: Compulsory 	Compulsory (50% ^{xii}) [1,2]
 Other groups: lifelong journey 	-
program	
Driving licences thresholds:	
 Passenger car: 17 years 	18 years (79%)
 Motorised two wheeler: 20 years 	18 years (low categories) and higher ages for faster
	vehicles (66%)
 Busses and coaches: 21 years 	21 years (76%) ^{xiii}
 Lorries and trucks: 21 years 	21 years (79% ^{xiv}) [2,3]

Public campaigns

Table 12: Public campaigns in Hungary, compared to the situation in other European countries. (Sources: SUPREME, 2007; national sources)

Campaigns in Hungary	Most common issues in Europe (% of countries)
Organisation:	
 The National Committee for Accident Prevention 	
(OBB) of the national police headquarters.	
Main themes:	
 Drink-driving (information on checks), 	Drink-driving (83%)
 Seat-belt, 	Seat-belt (73%)
 Speeding (information on checks), 	Speeding (53%)
 Hazard of railway crossing. 	-



Driving licence thresholds are lower for passenger cars but higher for motorised two wheelers than in most other countries.

- ^{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).

Mandatory inspection periods in Hungary are longer for cars and motorcycles than in other countries.

• Vehicles and technology (national developments)

Table 13: Developments of vehicles and technology in Hungary, 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: New: 48 months. More	Every 12 months (41%)
than 4 years old: every 24 month	
Motorcycles: New: 48 months. More than 4	Every 12 months (35%)
years old: every 24 month	
Busses or coaches: Every 12 months	Every 12 months (41%)
Lorries or trucks: Every 12 months	Every 12 months (41%) ^{xv}



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



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The amount of speed offenders and also the mean speed in Hungary decreased most at motorways and urban roads.

The amount of drink-driving tests in Hungary has decreased between 2006 and 2008 and the amount of offenders has increased.

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Road Safety Performance Indicators

Speed

Table 14: Number of speed checks in Hungary versus the European average (Source: ETSC, 2010)

Measure	2006	2008	% change	European average (2008)
Number of tests/1000 population	17	29	71%	90.8 ^{xvi}

Table 15: Percentage of speed offenders per road type in Hungary compared to the European average (Source: ETSC, 2010)

Road type	2001	2008	Average annual change	European average
Motorways	56%	32%	-44%	Not available
Rural roads	27%	30%	10%	Not available
Urban roads	70%	55%	-21%	Not available

Table 16: Mean speed per road type in Hungary compared to the European average (Source: ETSC, 2010)

Road type	2006	2008	Average annual change	European average
Motorways	120 km/h	116 km/h	-34%	Not available
Rural roads	82 km/h	82 km/h	0%	Not available
Urban roads	56 km/h	46 km/h	-17%	Not available

Alcohol

Table 17: Road side surveys for drink-driving in Hungary compared to the European average (Source: ETSC, 2010)

Measure	2006	2008	% change	European average (2008)
Number of tests/1000 population	144	130	-10%	145.8 ^{xvii}
% tested over the limit	3%	3%	7%	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.).



Seat –belt wearing rate in Hungary is lower than the European average.

• Vehicles

Table 18: State of the vehicle fleet in Hungary compared to the European average (Source: ETSC, 2009)

Vehicle fleet in Hungary	European average
Cars per age group (2009):	Passenger cars (2009) ^{xviii}
$-6\% \leq 2$ years,	12% ≤ 2 years,
 19% 3 to 5 years, 	19% 3 to 5 years,
- 31% 6 to 10 years,	27 % 6 to 10 years,
– 44% > 10 year.	42% >10 years
EuroNCAP occupant protection of cars (new cars sold in	
2008):	
– 5 stars: 38%	49%
- 4 stars: 45%	35%
- 3 stars: 4%	6%
– 2 stars: 3%	1%^^^

Protective systems

Table 19: Protective system use in Hungary versus the average in Europe (Source: Vis & Eksler, 2008; national sources)

Use of protective systems in Hungary	European average
Daytime seat belt wearing in cars and vans (2009):	(2007)
 79% front, 	85% front ^{xx} ,
 No information % driver 	Not available
 No information % front passenger 	Not available
– 49% rear,	60% rear ^{xxi} ,
 67% child restraint systems 	Not available
Helmet use:	
 Ca. 100% motor rides, 	Not available
 No information % moped riders 	Not available
 No information % cyclists 	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 Outcomes

General positioning









The annual amount of fatalities per population in Hungary are higher than the European average, but last years, Hungary is showing a quite large improvement.



Transport

Pedestrians and cyclists have a relative high share in the annual fatalities of Hungary.

Transport mode

Table 20: Reported fatalities by mode of road transport in Hungary compared to the European average of the last year available (Source: CARE, national sources).

Transport mode	2003	2009	Average annual change	% in 2009	European average (2009 ^{xxii})
Pedestrians	299	186	-6%	23%	18%
Car occupants	640	386	-7%	47%	47%
Motorcyclists	66	73	2%	9%	13%
Mopeds	36	23	-6%	3%	2%
Cyclists	178	103	-7%	13%	5%
Bus/coach occupants	38	3	-15%	0%	<1%
Lorries or truck occupants	45	40	-2%	5%	4%

• Age, gender and nationality

Table 21: Reported fatalities by age, gender and nationality in Hungary versus the European average of the last year available (Source: CARE, national sources).

Age and gender	2003	2009	Average annual change	% in 2009	European average (2009 ^{VIII})
Females	318	207	-6%	25%	24%
0-14 years	16	10	-6%	1%	1%
15 – 17 years	8	7	-2%	1%	1%
18 – 24 years	37	15	-10%	2%	4%
25 – 49 years	112	61	-8%	7%	7%
50 – 64 years	62	50	-3%	6%	3%
65+ years	75	64	-2%	8%	7%
Males	1 008	612	-7%	75%	75%
0-14 years	16	12	-4%	1%	2%
15 – 17 years	24	9	-10%	1%	2%
18 – 24 years	92	66	-5%	8%	13%
25 – 49 years	469	292	-6%	36%	31%
50 – 64 years	235	134	-7%	16%	12%
65+ years	157	99	-6%	12%	12%
Nationality of driver or	rider killed	k			
National	1288	794	-6%	97%	Not available
Non-national	38	28	-4%	3%	Not available





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

More fatalities happen on rural roads and junctions in Hungary than on average in Europe. Location

Table 22: Reported fatalities by location in Hungary compared to the European average of the last year available (Source: CARE, national sources). Motorways and junctions are part of built-up and rural areas.

Location	2003	2009	Average annual change	% in 2009	European average (2009 ^{VIII})
Built-up areas	478	301	-6%	37%	33%
Rural areas	848	521	-6%	63%	49%
Motorways	58	38	-6%	5%	5%
Junctions	316	169	-8%	21%	12%

• Lighting and weather conditions

Table 23: Reported fatalities by lighting and weather conditions in Hungary compared to the European average of the last year available (Source: CARE, national sources).

Conditions	2003	2009	Average annual change	% in 2009	European average (2009 ^{xxiii})
Lightning conditions					
During daylight	731	466	-6%	57%	55%
During nighttime	540	356	-6%	43%	39%
Weather condition					
While raining	71	61	-2%	7%	10%

Single vehicle crashes

Table 24: Reported fatalities by type in Hungary compared to the European average of the last year available (Source: CARE, national sources).

Crash type	2003	2009	Average annual change	% in 2009	European average (2009 ^{xxiv})
Single vehicle crash	462	228	-8%	28%	40%

Under-reporting of casualties

- Fatalities: 100% (2010). This amount is suspected since adequate alternative registration systems are missing for a check.
- Hospitalised: no information

(Source: CARE)



^{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).

In Hungary, a smaller share of single vehicle crashes happen than on average in Europe.

• Risk figures



Figure 3: Fatalities by vehicle type for Hungary in 2009 (Sources: CARE).



Figure 4: Fatalities by number of inhabitants in Hungary in 2009 (Sources: CARE, OECD/ITF, 2011).



Motorcyclists and

elderly people have the highest risk of

dying in a road crash in Hungary.



Social Cost

- Total costs of road crashes: 0.77 million Euros (2002; deaths only; willingness to pay-method)
- Percentage of GDP: 1.17%

Table 25: Cost (in million Euro) per injury type in Hungary versus the European average (Source: Bickel et al., 2006; national sources).

Injury type	Value	European average ^{xxv}
Fatal	0.47*	1.28
Hospitalised	Not available	0.18
Slightly injured	Not available	0.02

* Value of prevented fatality per currency of the central bank (2007: 1 Euro = 251.31 HUF)



fatalities are lower in Hungary than on average in Europe.



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





Speed and drinkdriving enforcement have increased in Hungary, and the amount of offenders have decreased.

Synthesis

Safety position

 The annual amount of fatalities per population in Hungary are higher than the European average.

• Scope of problem

- Pedestrians and cyclists have a relative high share in the annual fatalities of Hungary, but motorcyclists have the highest risk.
- Older men are slightly overrepresented in the fatalities in Hungary but certainly have a higher risk.
- Especially fatalities on rural roads are overrepresented in Hungary.
- Most traffic rule enforcement is assessed as much less effective than the European average and especially the seat- belt wearing rate in Hungary is low.
- The Hungarian vehicle fleet is somewhat older than the European average and has a lower occupant protection score.

Recent progress

- Last years, Hungary is showing a quite large improvement in the annual amount of fatalities per million population.
- The amount of speed offenders and also the mean speed in Hungary decreased most at motorways and urban roads.
- The amount of drink-driving tests in Hungary has decreased between 2006 and 2008 and the amount of offenders has increased.

Remarkable road safety policy issues

- Road inspections are obligatory in Hungary.
- Hungary has zero tolerance for drink-driving.
- Driving licence thresholds are lower for passenger cars but higher for motorised two wheelers than in most other countries.







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