



# Road Safety Country Overview





### **Structure and Culture**

### **Basic Data**

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

| Basic data of Croatia   | EU average                                   |
|---|--|
| - Population: 4,23 million inhabitants (2015)[2]  | 18,1 million (2015)                          |
| - Area: 56.594 km² (2015)[2]  | 159.663 km <sup>2</sup> (2015)               |
| (1,1% water) (2015)[4]  | 2,94% water (2015)                           |
| - Climate and weather conditions (capital city; 2015) [3]:                                      | (2015)                                       |
| <ul><li>Average winter temperature (Nov. to April):<br/>5,5°C</li></ul>                         | 6,5°C  |
| <ul> <li>Average summer temperature (May to Oct.):</li> <li>18,8°C</li> </ul>                   | 17,8°C                                       |
| - Annual precipitation level: 856 mm  | 651 mm                                       |
| - Exposure: 20,4 billion vehicles km (2014) [1]   | 122,4 billion vehicle km (2014) <sup>1</sup> |
| - 0,74 vehicles per person (2014) [2]<br>Sources: [1] IRTAD; [2] EUROSTAT; [3] DG MOVE; [4] CIA | 0,62 (2014)                                  |

Croatia has a low population density.

### **Country characteristics**

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

| Characteristics of Croatia                                      | EU average                      |
|---|---------------------------------|
| - Population density: 75 inhabitants/km² (2015)                 | 114 inhabitants/km <sup>2</sup> |
| [2]   | (2015)                          |
| - Population composition (2015) [2]                             |                                 |
| 14,7% children (0-14 years)                                     | 15,6% children                  |
| 66,4% adults (15-64 years)                                      | 65,5% adults                    |
| 18,9% elderly (65 years and over)                               | 18,9% elderly (2015)            |
| - Gross Domestic Product (GDP) per capita:                      |                                 |
| €10.400 (2015) [2]  | €26.300 (2015)                  |
| - 59% of population lives inside urban area                     | 73,3% (2015)                    |
| (2015)[4]   | 75,5 /0 (2015)                  |
| - Special characteristics [4]: geographically                   |                                 |
| diverse; flat plains along Hungarian border, low                |                                 |
| mountains and highlands near Adriatic                           |                                 |
| coastline and islands   |                                 |
| Sources: [1] IRTAD; [2] EUROSTAT; [3] national sources; [4] CIA |                                 |

<sup>&</sup>lt;sup>1</sup> Based on the average of 24 EU countries.



### Structure of road safety management

The National programme for Road Safety was adopted by the Croatian Government in April 2011. The Programme is implemented by several ministries and agencies, however the coordination of all the Ministries involved is carried by the Ministry of Interior.

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

| Table 3: Key actors per function in Croatia  |   |  |  |  |
|--|---|--|--|--|
| Key functions  | Key actors  |  |  |  |
| <ul><li>1.</li><li>Formulation of national<br/>RS strategy</li><li>Setting targets</li><li>Development of the RS<br/>programme</li></ul> | <ul> <li>Ministry of Interior</li> <li>Ministry of Sea, Transport and Infrastructure</li> <li>Ministry of Science, Education and Sports</li> <li>Ministry of Health and Social Welfare</li> <li>Ministry of Justice</li> <li>Croatian Automobile Club</li> <li>Centre for Croatian vehicles</li> <li>Croatian Roads</li> <li>Croatian Insurance Bureau</li> </ul> |  |  |  |
| Monitoring of the RS development in the country  | - Ministry of Interior  |  |  |  |
| 3. Improvements in road infrastructure   | <ul> <li>Croatian Automobile Association</li> <li>Ministry of Maritime Affairs, Transport and<br/>Infrastructure</li> <li>Local administration</li> </ul>   |  |  |  |
| 4. Vehicle improvement   | - Croatian Roads d.o.o<br>- State Office for Metrology<br>- Centre for Croatian vehicles  |  |  |  |
| 5. Improvement in road user education  | <ul> <li>Ministry of Interior</li> <li>Ministry of Maritime Affairs, Transport and<br/>Infrastructure</li> <li>Professional Driving Schools</li> <li>Ministry of Education</li> <li>Croatian Autoclub (HAK)</li> </ul>  |  |  |  |
| 6. Publicity campaigns   | - Ministry of Health<br>- Ministry of the Interior<br>- Croatian Autoclub (HAK)<br>- Croatian Radiotelevision   |  |  |  |
| 7. Enforcement of road traffic laws  | <ul><li>Police department</li><li>Ministry of Interior</li><li>Supreme Court of Croatia</li><li>Local administration</li></ul>  |  |  |  |
| 8. Other relevant actors<br>Sources: national sources  | - The Ministry of Health  |  |  |  |

In view of Croatian membership in the European Union as of 2013, the Croatian Government adopted the National Programme for Road Safety 2011-2020.

### Attitudes towards risk taking

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



Croatia has set road safety targets that fit into the goal of reducing fatalities by 50%

of the EC.

### Road Safety Country Overview - CROATIA

### **Programmes and measures**

#### National strategic plans and targets

- The latest National Road Safety Programme of the Republic of Croatia, proposed by the Ministry of Interior, was adopted in 2011 and covers the period 2011-2020.
- Targets (referred to 2010):

Table 5: Road safety targets for Croatia

| Year | Fatalities |
|------|------------|
| 2020 | -50%       |
|      | Max. 213   |

Sources: national sources

#### Priority topics:

- Improvement in road user behaviour which includes: speed, drink and drug driving, seat-belts and helmets, road safety education, driver training and driving tests, the most vulnerable road users, not keeping a safe distance, aggressive driving, driver fatigue and distracted driving.
- Better road infrastructure which includes: identifying and eliminating high risk sites, improving road safety on urban roads, wrong-way driving on motorways, traffic safety in tunnels.
- Safer vehicles which includes: active and passive safety, school buses, goods vehicles and buses, vehicle roadworthiness
- Effective post-crash medical care which includes: emergency medical services, hospital care, first aid education of the public
- Other areas of actions which includes: civil society organizations and the public, legislation, establishing new road safety authorities, science-based traffic safety

(Sources: national sources)

#### Road infrastructure

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

| Road type   | General speed limits for passenger cars (km/h) |
|-------------|--|
| Urban roads | 50   |
| Rural roads | 80/90  |
| Motorways   | 90/130   |

Source: EC DG-Move, 2016

#### Special rules for:

- 80km/h on rural roads and 90km/h on motorways for heavy goods vehicles (over 3,5t)
- Guidelines and strategic plans for infrastructure are available in Croatia.



High risk site treatment has already been implemented in Croatia.

Croatia has a zero tolerance law for drink-driving for novice drivers, which is stricter than the most common in the EU.

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

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

Sources: national sources

- Recent activities of road infrastructure improvement have been addressing:
  - projects that are being made to eliminate high risk sites on motorways and on county and local roads.

(Sources: national sources)

### Traffic laws and regulations

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

| common regulations in other EO countries   |                                    |  |  |
|--|------------------------------------|--|--|
| Regulations in Croatia [1]                 | Most common in EU (% of countries) |  |  |
| Allowed BAC <sup>2</sup> levels:           |                                    |  |  |
| - General population: 0,5‰                 | 0,5‰ (61%)                         |  |  |
| - Novice drivers: 0,0‰                     | 0,2‰ (39%) and 0,0‰ (36%)          |  |  |
| - Professional drivers: 0,0‰               | 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 16 years old  | Not obligatory (46%)               |  |  |
| - Daytime running lights are mandatory for |                                    |  |  |
| motorcycles and mopeds and during the      |                                    |  |  |
| winter time for other vehicles             |                                    |  |  |
| - A demerit point system is in place. [2]  |                                    |  |  |

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

<sup>&</sup>lt;sup>2</sup> Blood Alcohol Concentration



Child restraint and helmet wearing law enforcement is assessed as less effective in Croatia than in most countries in the EU.

#### **Enforcement**

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

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

Source: WHO, 2015

### **Road User Education and Training**

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

| Education and training in Croatia   | Most common in EU<br>(% of countries)  |
|---|--|
| General education programmes:   |  |
| <ul> <li>Primary school: not compulsory (only pilot projects)</li> <li>Secondary school: not compulsory</li> <li>Other groups: safety education activities for target groups (vulnerable road users)</li> </ul> | Compulsory (71%)<br>Compulsory (43%)   |
| Driving licences thresholds:  |  |
| <ul> <li>Passenger car: 18 years</li> <li>Motorised two wheeler: 15-24 years (starting with AM category)</li> <li>Buses and coaches: 21 years</li> <li>Lorries and trucks: 18-24 years</li> </ul>               | 18 years (79%)<br>18 years (low categories) and<br>higher ages (32%)<br>21 years (86%)<br>21 years (75%) |

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

### **Public Campaigns**

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

| Campaigns in Croatia  | Most common issues in EU (% of countries)                |
|---|--|
| Organisation:   |  |
| <ul> <li>Ministry of the Interior</li> <li>Ministry of in charge of education</li> <li>Croatian Autoclub</li> <li>Main themes:</li> </ul> |  |
| - Seat-belts and child restraint systems - Helmets - Vulnerable road users (pedestrians, cyclists, motor riders, children)                | Drink-driving (96%)<br>Speeding (86%)<br>Seat-belt (79%) |

Sources: national sources

Road safety education is not compulsory in Croatia at primary and secondary schools.



Mandatory vehicle inspection periods are similar to the most common periods in other EU countries.

### Vehicles and technology (national developments)

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

| Mandatory technical inspections:                                       | Most common in EU (% of countries) |
|--|------------------------------------|
| Passenger cars: first inspection after 24 months, then every 12 months | Every 12 months (39%)              |
| Motorcycles: every 12 months   | 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



### **Road Safety Performance Indicators**

#### **Speed**

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

| average                                  |      |      |                             |                      |  |
|--|------|------|-----------------------------|----------------------|--|
| Measure                                  | 2011 | 2015 | Average<br>annual<br>change | EU average<br>(2015) |  |
| Number of speed tickets/1.000 population | 52   | 66   | 6,1%                        | 94                   |  |
| Sources: [1] ETSC, 2010; [2] ETSC, 2016  |      |      |                             |                      |  |

The amount of speed tickets per population in Croatia has increased over time.

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

| Road type   | 2004 | 2012 | Average<br>annual<br>change | EU<br>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 15: Mean speed per road type in Croatia compared to the EU average

| Road type   | 2004 | 2012 | Average<br>annual<br>change | EU<br>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 16: Road side surveys for drink-driving in Croatia compared to the EU

| Measure                          | 2006 | 2015 | Average<br>annual<br>change | EU average<br>(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

There is no information on drink-driving in Croatia.



In Croatia, the vehicle fleet is older than the EU average.

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

#### **Vehicles**

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

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|---|--------------------------------|
| Vehicles                                    | EU average                     |
| Cars per age group (2012) [1]:              | Passenger cars (2012) [2]      |
| - ≤ 2 years: 7%                             | ≤ 2 years: 9%                  |
| - 3 to 5 years: 15%                         | 3 to 5 years: 13%              |
| - 6 to 10 years: 27%                        | 6 to 10 years: 28%             |
| - > 10 years: 51%                           | >10 years: 49%                 |
| 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% <sup>3</sup> |
| Source: [1] EUROSTAT, 2015; [2] ETSC, 2016  |                                |

### **Protective systems**

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

| Protective systems   | EU average⁴  |
|--|--|
| Daytime seat-belt wearing in cars and vans (2014):   | (2015)   |
| <ul> <li>- 65% front</li> <li>- no information on % driver</li> <li>- no information on % front passenger</li> <li>- 30% rear</li> <li>- no information on % child restraints</li> <li>Helmet use (2009):</li> </ul> | 89,7% front<br>not available<br>not available<br>69,5% rear<br>not available |
| <ul><li>50% motorcyclists</li><li>no information on % cyclists</li></ul>   | not available  |

Source: WHO,2015

<sup>&</sup>lt;sup>3</sup> Based on data of 25 EU countries (excl. HR, LU and MT).

 $<sup>^4</sup>$  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)

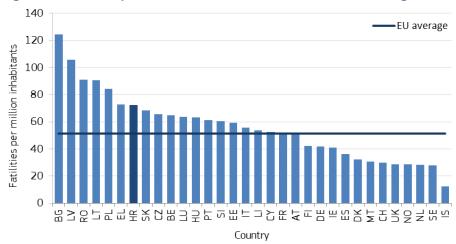


### **Road Safety Outcomes**

### **General positioning**

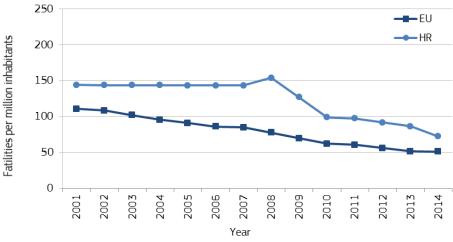
The fatality rate of Croatia has been higher than the EU average (around 73 fatalities per million population in 2014) in all years between 2001 and 2014.

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 Croatia and the EU average



Sources: CARE, Eurostat

The fatality rate of Croatia

has been higher than the EU

average in all years between 2001 and 2014.

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The share of motorcyclist fatalities is a bit higher compared to the EU average.

**Transport mode** 

The share of motorcyclist fatalities is a bit higher than the EU average. While the average annual reduction of motorcyclist fatalities between 2007 and 2015 was 6%, it was 8% for car occupants. In the same period, the annual reduction rate of pedestrian was 8%. The rate of cyclist fatalities rose by 2%.

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

| to the Lo with age  |      |      |                             |                  |                         |
|---------------------|------|------|-----------------------------|------------------|-------------------------|
| Transport mode      | 2007 | 2015 | Average<br>annual<br>change | Share in<br>2015 | EU<br>average<br>(2015) |
| Pedestrians         | 124  | 61   | -8%                         | 18%              | 21%                     |
| Car occupants       | 309  | 164  | -8%                         | 47%              | 45%                     |
| Motorcyclists       | 96   | 58   | -6%                         | 17%              | 14%                     |
| Mopeds              | 20   | 14   | -4%                         | 4%               | 3%                      |
| Cyclists            | 28   | 34   | 2%                          | 10%              | 8%                      |
| Bus/coach occupants | 6    | 1    | -20%                        | 0%               | 0%                      |
| Lorries or truck    | 17   | 11   | -5%                         | 3%               | 5%                      |

Sources: CARE, national sources

### Age, gender and nationality

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

| versus the LO aver | age         |           |                             |                  |                         |
|--------------------|-------------|-----------|-----------------------------|------------------|-------------------------|
| Age and gender     | 2008        | 2015      | Average<br>annual<br>change | Share in<br>2015 | EU<br>average<br>(2015) |
| Females            |             |           |                             |                  |                         |
| 0 - 14 years       | 9           | 4         | -11%                        | 2%               | 2%                      |
| 15 - 17 years      | 3           | 5         | 8%                          | 2%               | 1%                      |
| 18 - 24 years      | 16          | 3         | -21%                        | 1%               | 2%                      |
| 25 - 49 years      | 40          | 16        | -12%                        | 7%               | 7%                      |
| 50 - 64 years      | 44          | 12        | -17%                        | 5%               | 4%                      |
| 65+ years          | 45          | 17        | -13%                        | 7%               | 8%                      |
| Males              |             |           |                             |                  |                         |
| 0 - 14 years       | 11          | 5         | -11%                        | 2%               | 2%                      |
| 15 – 17 years      | 13          | 1         | -31%                        | 0%               | 1%                      |
| 18 - 24 years      | 114         | 28        | -18%                        | 11%              | 10%                     |
| 25 - 49 years      | 221         | 80        | -14%                        | 33%              | 28%                     |
| 50 - 64 years      | 87          | 36        | -12%                        | 15%              | 16%                     |
| 65+ years          | 59          | 37        | -6%                         | 15%              | 14%                     |
| Nationality of dri | ver or ride | er 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

Croatia has a similar share of road fatalities by age and gender to the EU average.



#### Location

Fatalities in built-up areas are over-represented in Croatia compared to the EU average.

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

| Location       | 2007 | 2015 | Average<br>annual<br>change | Share<br>in 2015 | EU<br>average<br>(2015) |
|----------------|------|------|-----------------------------|------------------|-------------------------|
| Built-up areas | 328  | 220  | -5%                         | 63%              | 37%                     |
| Rural areas    | 226  | 112  | -8%                         | 32%              | 53%                     |
| Motorways      | 65   | 16   | -16%                        | 5%               | 7%                      |
| Junctions      | 82   | 44   | -7%                         | 13%              | 20%                     |

Sources: CARE, national sources

Fatalities in built-up areas are over-represented in Croatia.

### Lighting and weather conditions

Table 22: Reported fatalities by lighting and weather conditions in Croatia

compared to the EU average

| Conditions                  | 2007 | 2015 | Average<br>annual<br>change | Share in<br>2015 | EU<br>average<br>(2015) |
|-----------------------------|------|------|-----------------------------|------------------|-------------------------|
| <b>Lightning conditions</b> |      |      |                             |                  |                         |
| During daylight             | 312  | 185  | -6%                         | 53%              | 50%                     |
| During night-time           | 283  | 137  | -9%                         | 39%              | 30%                     |
| <b>Weather conditions</b>   |      |      |                             |                  |                         |
| While raining               | 71   | 43   | -6%                         | 12%              | 10%                     |

Sources CARE, national sources

### Single vehicle accidents

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

| Accident Type            | 2007 | 2015 | Average<br>annual<br>change | Share<br>in 2015 | EU<br>average<br>(2015) |
|--------------------------|------|------|-----------------------------|------------------|-------------------------|
| Single vehicle accidents | 237  | 111  | -9%                         | 32%              | 24%                     |

Sources: CARE, national sources

#### **Under-reporting of casualties**

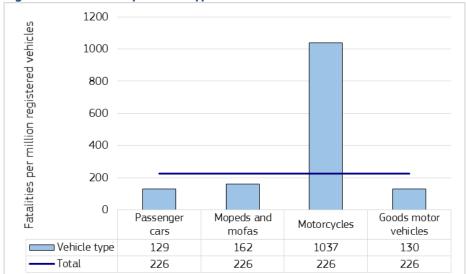
- Fatalities: 100%, due to improvements of the data recording systems.
- Hospitalised: no studies with quantitative information exist.

The share of fatal single vehicle accidents in Croatia is higher than the EU average.



### **Risk Figures**

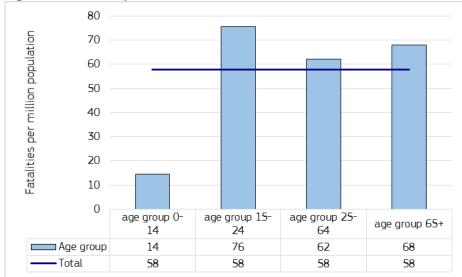
Figure 3: Fatalities by vehicle type in Croatia in 2012



Sources CARE, UNECE

In Croatia motorcyclists, youngsters and the elderly have the highest risk.

Figure 4: Fatalities per million inhabitants in Croatia in 2015



Sources: CARE, EUROSTAT



#### **Social Cost**

- The total cost of road accident casualties (fatalities and injuries) is estimated at 48,5 billion euros (2014).
- The following costs are an update of the values in Table 5.3 of the HEATCO Deliverable D5 (2006) to base year 2010. Each figure includes the value of safety per se (VSL<sup>5</sup> for fatality, 13% of VSL for severe, 1% for light injury) and the value of direct and indirect economic costs (10% of VSL for fatality, severe and slight injury based on HEATCO (2005)). EU average based on the VSL of €1,7 million.
- The costs per casualty for 2010 are as follows:

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

| Country        | Fatality  | Severe injury | Slight injury |
|----------------|-----------|---------------|---------------|
| Austria        | 2.395.000 | 327.000       | 25.800        |
| Belgium        | 2.178.000 | 330.400       | 21.300        |
| Bulgaria       | 984.000   | 127.900       | 9.800         |
| Croatia        | 1.333.000 | 173.300       | 13.300        |
| Cyprus         | 1.234.000 | 163.100       | 11.900        |
| Czech Republic | 1.446.000 | 194.300       | 14.100        |
| Denmark        | 2.364.000 | 292.600       | 22.900        |
| Estonia        | 1.163.000 | 155.800       | 11.200        |
| Finland        | 2.213.000 | 294.300       | 22.000        |
| France         | 2.070.000 | 289.200       | 21.600        |
| Germany        | 2.220.000 | 307.100       | 24.800        |
| Greece         | 1.518.000 | 198.400       | 15.100        |
| Hungary        | 1.225.000 | 164.400       | 11.900        |
| Ireland        | 2.412.000 | 305.600       | 23.300        |
| Italy          | 1.916.000 | 246.200       | 18.800        |
| Latvia         | 1.034.000 | 140.000       | 10.000        |
| Lithuania      | 1.061.000 | 144.900       | 10.500        |
| Luxembourg     | 3.323.000 | 517.700       | 31.200        |
| Malta          | 2.122.000 | 269.500       | 20.100        |
| Netherlands    | 2.388.000 | 316.400       | 25.500        |
| Poland         | 1.168.000 | 156.700       | 11.300        |
| Portugal       | 1.505.000 | 201.100       | 13.800        |
| Romania        | 1.048.000 | 136.200       | 10.400        |
| Slovakia       | 1.593.000 | 219.700       | 15.700        |
| Slovenia       | 1.989.000 | 258.300       | 18.900        |
| Spain          | 1.913.000 | 237.800       | 17.900        |
| Sweden         | 2.240.000 | 328.700       | 23.500        |
| Great Britain  | 2.170.000 | 280.300       | 22.200        |
| EU average     | 1.870.000 | 243.100       | 18.700        |

Source: Update of the Handbook on External Costs of Transport. Final Report. Report for the European Commission: DG MOVE. Ricardo-AEA/R/ ED57769 Issue Number 1; 8th January 2014

Estimated costs of traffic casualties in Croatia are lower

than the EU average.

<sup>&</sup>lt;sup>5</sup> Value of Statistical Life



### **Synthesis**

### Safety position

- Croatia - with 73 fatalities per million population - is one of the countries with the highest fatality rate among the EU countries in 2014.

#### Scope of problem

- The fatality shares by mode of transport in Croatia are similar to the EU average. The share of motorcyclist fatalities is a bit higher compared to the EU average.
- Fatalities in built-up areas and while raining are over-represented in Croatia.
- Seat-belt wearing rates are lower than the EU average.
- The passenger car fleet in Croatia is somewhat older than the average EU car fleet.

### **Recent progress**

- The annual fatality rates per million population have decreased since 2008, with a significant drop occurring during 2008-2010.
- A decrease in the number of fatalities can be observed for all age groups and most transport modes in Croatia.
- The amount of speed tickets per population in Croatia has increased over time.

#### Remarkable road safety policy issues

- Croatia has set road safety targets that fit into the goal of reducing fatalities by 50% of the EC.
- High risk site treatment has already been implemented in Croatia.
- Croatia has a zero tolerance law for drink-driving for novice and professional drivers.

The amount of speed tickets per population in Croatia has increased over time.

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#### **Notes**

#### 1. Country abbreviations



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: <a href="http://ec.europa.eu/transport/road/safety/pdf/statistics/cadas/glossary.pdf">http://ec.europa.eu/transport/road/safety/pdf/statistics/cadas/glossary.pdf</a>

- 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 <u>DaCoTA</u>.

#### 7. Disclaimer

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8. Please refer to this Report as follows:

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



