

# **European Road Safety Observatory**

National Road Safety Profile - Latvia



This document is part of a series of 30 country profiles: one for each member of the EU 27 and three EFTA countries (Iceland, Norway and Switzerland). The purpose of this series is to provide tables and figures that give an overview of the road safety situation in a specific country. The tables and figures are organized according to a pyramid of road safety information: (1) road safety outcomes, (2) road safety performance indicators, (3) road safety programmes and measures, and (4) structure and culture.

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# 1 Highlights

### **Road safety outcomes**

- In 2020 a total of 139 people were killed in reported traffic accidents in Latvia.
- Latvia has the second highest number of fatalities per million inhabitants among 27 EU countries.
- Compared to the EU average, the distribution of fatalities in Latvia shows a relatively high proportion of pedestrians and fatalities that occurred on rural roads. The proportion of powered two-wheelers on the other hand is much smaller than the EU average.

# **Road safety performance indicators**

- The quality or road infrastructure in Latvia is perceived as very low compared to other EU countries.
- The vehicle fleet in Latvia is considerably smaller than the EU average.
- Latvian passenger cars are significantly older than the EU average.

# Road safety policy and measures

• Enforcement of motorcycle helmet legislation is less widely perceived as effective in comparison to other EU countries.

# 2 Road Safety Outcomes

### 2.1 General risk in traffic

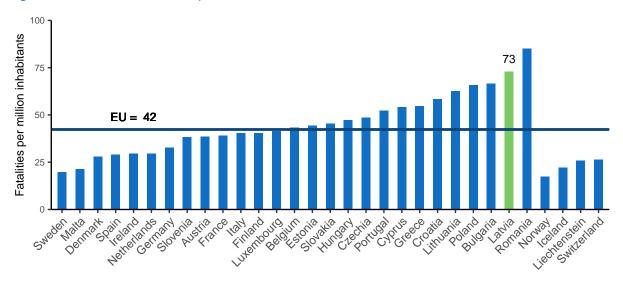
In Latvia, a total of 139 people were killed in reported traffic accidents in 2020. In terms of mortality rate, there were 73 road fatalities per million inhabitants, which is well above the EU average (42). In the first decade of this century, the mortality rate in Latvia was much higher than the EU average. From 2007 the mortality rate in Latvia decreased sharply and became closer to the EU average. Also when the number of vehicles is taken into account, Latvia performs worse than most EU countries with a rate of 1.59 fatalities per 10,000 registered vehicles.

Over the past ten years the number of fatalities in Latvia decreased by 36%, similar to the overall EU trend. Especially between 2014 and 2017 fatalities dropped considerably in Latvia, while they remained stable in the European Union. In most EU countries the numbers of fatalities and serious injuries fell between 2019 and 2020. The COVID pandemic and the associated restrictions in mobility undoubtedly led to a reduction in the number of casualties though the extent to which this was the case is not known.

Table 1. Number of road fatalities and serious injuries (2010 and 2020). Source: CARE

|                  | 2010 | 2020 | Trend | EU 2010 | EU 2020 | EU trend |
|------------------|------|------|-------|---------|---------|----------|
| Fatalities       | 218  | 139  | -36%  | 29611   | 18834   | -36%     |
| Serious injuries | 569  | 490  | -14%  | /       | /       | /        |

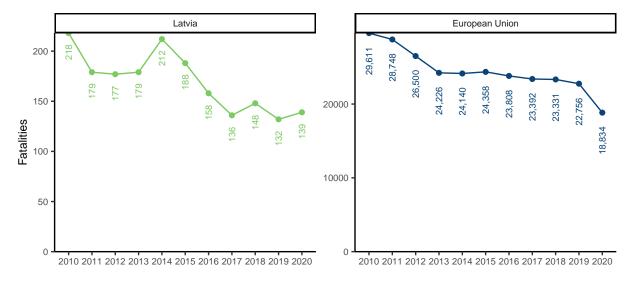
Figure 1. Number of road fatalities per million inhabitants (2020). Source: CARE & EUROSTAT



Fatalities per 10,000 vehicles 2.0 1.59 EU = 0.730.5 and Romania Thurday dina is Luxenbourd Liechter Beir Wetherlands Wetherlands Lich Jan Walk Austria Heland Slovenia + Slovakia .....Croatia Bullatia Haly Germany. Finland Poland Greece Malta Sweden Spain, CAble of Cascy by

Figure 2. Number of road fatalities per 10,000 registered vehicles (2020). Source: CARE & EUROSTAT

Figure 3. Number of road fatalities (2010-2020). Source: CARE



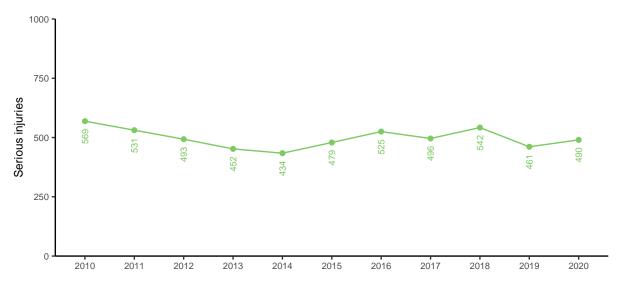
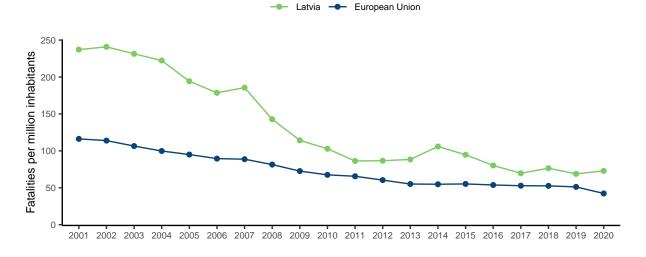


Figure 4. Number of serious injuries (2010-2020). Source: CARE

Figure 5. Number of road fatalities per million inhabitants (2001-2020). Source: CARE & EUROSTAT



# 2.2 Transport modes<sup>1</sup>

In 2020, pedestrians account for a third of road fatalities in Latvia. This percentage is much higher than that observed in the European Union (19%). Powered two-wheelers on the other hand, represent only 6% of road fatalities, which is much lower than the percentage in the European Union (18%).

Over the past ten years there was a decrease in the number of fatalities in Latvia for almost all modes. The number of serious injuries on the other hand, increased for cyclists and for powered two-wheelers. The overall number of fatalities in single vehicle crashes (i.e. only one vehicle and no other road user is involved) in Latvia decreased by 33% which is more than in the European Union.

Of all vulnerable road users (pedestrians, cyclists and powered two-wheelers) in Latvia that were fatally injured, 63% were involved in a crash with a car, and 24% were involved in a crash

<sup>&</sup>lt;sup>1</sup>For more details about the categories used in this subsection, please see section 6.2 Definitions.

with a lorry or heavy goods vehicle. Fatalities in these types of crashes show a downward trend, as in the European Union.

Figure 6. Number of road fatalities by transport mode (2020). Source: CARE

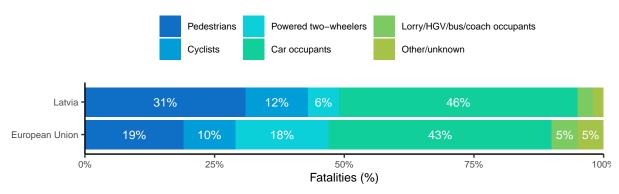


Table 2. Average number of road fatalities by transport mode (2010-2012 and 2018-2020). Source: CARE

|                      | 2010 - 2012 | 2018 - 2020 | Trend | EU 2010 - 2012 | EU 2018 - 2020 | EU trend |
|----------------------|-------------|-------------|-------|----------------|----------------|----------|
| Pedestrians          | 67          | 44          | -34%  | 5,793          | 4,328          | -25%     |
| Cyclists             | 15          | 12          | /     | 2,023          | 1,971          | -3%      |
| Powered two-wheelers | 14          | 6           | /     | 5,057          | 3,940          | -22%     |
| Car occupants        | 80          | 65          | -19%  | 13,309         | 9,597          | -28%     |
| Lorries, under 3.5t  | 2           | 4           | /     | 898            | 732            | -18%     |
| Heavy goods vehicles | 2           | 3           | /     | 590            | 378            | -36%     |
| Bus/coach occupants  | 3           | 0           | /     | 102            | 88             | -14%     |
| Other/unknown        | 7           | 6           | /     | 1,116          | 837            | /        |
| Total                | 191         | 140         | -27%  | 28,286         | 21,640         | -23%     |

Table 3. Average number of serious injuries by transport mode (2010-2012 and 2018-2020). Source: CARE

|                      | 2010 - 2012 | 2018 - 2020 | Trend |
|----------------------|-------------|-------------|-------|
| Pedestrians          | 129         | 104         | -19%  |
| Cyclists             | 43          | 55          | +28%  |
| Powered two-wheelers | 56          | 63          | +12%  |
| Car occupants        | 254         | 231         | -9%   |
| Lorries, under 3.5t  | 15          | 13          | /     |
| Heavy goods vehicles | 9           | 9           | /     |
| Bus/coach occupants  | 12          | 6           | /     |
| Other/unknown        | 12          | 17          | /     |
| Total                | 531         | 498         | -6%   |

**Table 4.** Average number of fatalities among vulnerable road users (pedestrians, cyclists and mopeds) involved in crashes involving cars, buses or coaches, and lorries or heavy goods vehicles (2010-2012 and 2018-2020). Source: CARE

|   | 2010 - 2012 | 2018 - 2020 | Trend | EU 2010 - 2012 | EU 2018 - 2020 | EU trend |
|---|-------------|-------------|-------|----------------|----------------|----------|
| Crashes involving buses or coaches                | 6           | 3           | /     | 258            | 173            | -33%     |
| Crashes involving cars                            | 46          | 35          | -24%  | 5,507          | 4,306          | -22%     |
| Crashes involving lorries or heavy goods vehicles | 21          | 14          | /     | 1,721          | 1,321          | -23%     |

**Table 5.** Average number of road fatalities in urban areas by transport mode (2010-2012 and 2018-2020). Source: CARE

|                      | 2010 - 2012 | 2018 - 2020 | Trend | EU 2010 - 2012 | EU 2018 - 2020 | EU trend |
|----------------------|-------------|-------------|-------|----------------|----------------|----------|
| Pedestrians          | 33          | 19          | -42%  | 3,944          | 3,079          | -22%     |
| Cyclists             | 5           | 3           | /     | 1,113          | 1,125          | +1%      |
| Powered two-wheelers | 7           | 3           | /     | 2,200          | 1,562          | -29%     |
| Car occupants        | 13          | 14          | /     | 2,883          | 2,109          | -27%     |
| Lorries, under 3.5t  | 1           | 0           | /     | 149            | 137            | -8%      |
| Heavy goods vehicles | 0           | 0           | /     | 82             | 36             | -56%     |
| Bus/coach occupants  | 3           | 0           | /     | 24             | 36             | +50%     |
| Other/unknown        | 1           | 1           | /     | 219            | 254            | /        |
| Total                | 61          | 41          | -33%  | 10,803         | 8,406          | -22%     |

**Table 6.** Average number of road fatalities in single vehicle crashes by transport mode (2010-2012 and 2018-2020). Source: CARE

|                      | 2010 - 2012 | 2018 - 2020 | Trend | EU 2010 - 2012 | EU 2018 - 2020 | EU trend |
|----------------------|-------------|-------------|-------|----------------|----------------|----------|
| Cyclists             | 3           | 1           | /     | 299            | 400            | +34%     |
| Powered two-wheelers | 7           | 3           | /     | 1,746          | 1,429          | -18%     |
| Car occupants        | 36          | 28          | -22%  | 5,905          | 4,187          | -29%     |
| Lorries, under 3.5t  | 1           | 3           | /     | 365            | 271            | -26%     |
| Heavy goods vehicles | 1           | 1           | /     | 241            | 143            | -41%     |
| Bus/coach occupants  | 3           | 0           | /     | 40             | 33             | -18%     |
| Other/unknown        | 6           | 5           | /     | 327            | 309            | /        |
| Total                | 57          | 41          | -28%  | 8,923          | 6,772          | -24%     |

# 2.3 Age

The distribution of road fatalities across age groups in Latvia is similar to that for the European Union.

Over the past ten years, the number of serious injuries increased for the age groups of people aged 50 and older.

Figure 7. Number of road fatalities by age group (2020). Source: CARE

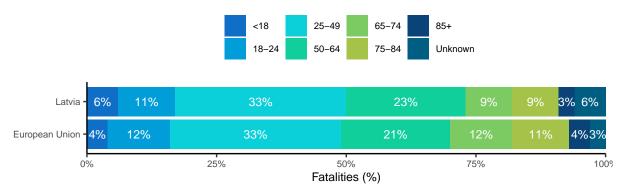


Table 7. Average number of road fatalities by age group (2010-2012 and 2018-2020). Source: CARE

|         | 2010 - 2012 | 2018 - 2020 | Trend | EU 2010 - 2012 | EU 2018 - 2020 | EU trend |
|---------|-------------|-------------|-------|----------------|----------------|----------|
| <18     | 10          | 7           | /     | 1,503          | 918            | -39%     |
| 18-24   | 24          | 13          | /     | 4,398          | 2,589          | -41%     |
| 25-49   | 71          | 50          | -30%  | 10,457         | 7,311          | -30%     |
| 50-64   | 42          | 36          | -14%  | 5,273          | 4,605          | -13%     |
| 65-74   | 25          | 13          | /     | 2,730          | 2,627          | -4%      |
| 75-84   | 10          | 12          | /     | 2,775          | 2,414          | -13%     |
| 85+     | 2           | 2           | /     | 882            | 1,075          | +22%     |
| Unknown | 7           | 7           | /     | 738            | 360            | /        |
| Total   | 191         | 140         | -27%  | 28,286         | 21,640         | -23%     |

Table 8. Average number of serious injuries by age group (2010-2012 and 2018-2020). Source: CARE

|         | 2010 - 2012 | 2018 - 2020 | Trend |
|---------|-------------|-------------|-------|
| <18     | 66          | 58          | -12%  |
| 18-24   | 96          | 51          | -47%  |
| 25-49   | 211         | 205         | -3%   |
| 50-64   | 90          | 98          | +9%   |
| 65-74   | 30          | 35          | +17%  |
| 75-84   | 18          | 26          | +44%  |
| 85+     | 3           | 6           | /     |
| Unknown | 16          | 17          | /     |
| Total   | 531         | 498         | -6%   |

### 2.4 Gender

The high proportion of males among total road fatalities in Latvia (67%) is similar to the EU average. This gender pattern apparent throughout the EU can be explained by differences in relation to frequency of transport use and to behaviour.

Figure 8. Number of road fatalities by gender (2020). Source: CARE

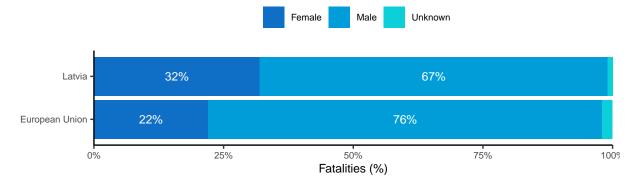


Table 9. Average number of road fatalities by gender (2010-2012 and 2018-2020). Source: CARE

|         | 2010 - 2012 | 2018 - 2020 | Trend | EU 2010 - 2012 | EU 2018 - 2020 | EU trend |
|---------|-------------|-------------|-------|----------------|----------------|----------|
| Female  | 27          | 35          | +30%  | 6,655          | 4,960          | -25%     |
| Male    | 119         | 104         | -13%  | 21,519         | 16,659         | -23%     |
| Unknown | 45          | 0           | /     | 1,310          | 254            | /        |
| Total   | 191         | 140         | -27%  | 28,286         | 21,640         | -23%     |

Table 10. Average number of serious injuries by gender (2010-2012 and 2018-2020). Source: CARE

|         | 2010 - 2012 | 2018 - 2020 | Trend |
|---------|-------------|-------------|-------|
| Female  | 98          | 182         | +86%  |
| Male    | 290         | 315         | +9%   |
| Unknown | 144         | 0           | /     |
| Total   | 531         | 498         | -6%   |

### 2.5 Area

The majority of road fatalities in Latvia occurred on rural roads (70%). This percentage is much higher than in the European Union as a whole. The share of fatalities on urban roads on the other hand is lower than the EU average. There are no motorways in Latvia. Over the past ten years, fatalities show a downward trend on both road types in Latvia, the decrease on urban roads was considerably larger than in the European Union.

Figure 9. Number of road fatalities by road type (2020). Source: CARE

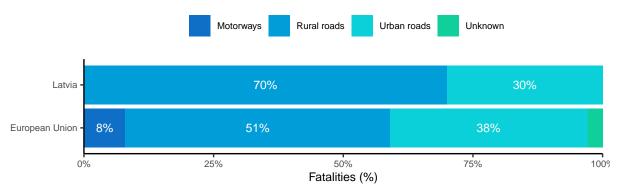


Table 11. Average number of road fatalities by road type (2010-2012 and 2018-2020). Source: CARE

|          | 2010 - 2012 | 2018 - 2020 | Trend | EU 2010 - 2012 | EU 2018 - 2020 | EU trend |
|----------|-------------|-------------|-------|----------------|----------------|----------|
| Motorway | /           | /           | /     | 2,072          | 1,812          | -13%     |
| Rural    | 130         | 99          | -24%  | 15,280         | 11,430         | -25%     |
| Urban    | 61          | 41          | -33%  | 10,803         | 8,406          | -22%     |
| Unknown  | /           | /           | /     | 908            | 543            | /        |
| Total    | 191         | 140         | -27%  | 28,286         | 21,640         | -23%     |

Table 12. Average number of serious injuries by road type (2010-2012 and 2018-2020). Source: CARE

|          | 2010 - 2012 | 2018 - 2020 | Trend |
|----------|-------------|-------------|-------|
| Motorway | /           | /           | /     |
| Rural    | 313         | 287         | -8%   |
| Urban    | 218         | 211         | -3%   |
| Unknown  | /           | /           | /     |
| Total    | 531         | 498         | -6%   |

### **2.6** Time <sup>2</sup>

The distribution of fatalities by day of the week and time of the day is very similar to that for the European Union, with the majority of fatalities occurring in the daytime during the working week.

<sup>&</sup>lt;sup>2</sup>For more details about the time periods used in this subsection, please see section 6.2 Definitions.

Working week - daytime Weekend - daytime Unknown Working week - night-time Weekend - night-time 61% 8% 9% Latvia 8% 10% European Union 57% 25% 50% 75% 0% Fatalities (%)

Figure 10. Number of road fatalities by period of time (2020). Source: CARE

Table 13. Average number of road fatalities by period of time (2010-2012 and 2018-2020). Source: CARE

|                           | 2010 - 2012 | 2018 - 2020 | Trend | EU 2010 - 2012 | EU 2018 - 2020 | EU trend |
|---------------------------|-------------|-------------|-------|----------------|----------------|----------|
| Working week - daytime    | 108         | 80          | -26%  | 15,495         | 12,506         | -19%     |
| Working week - night-time | 14          | 12          | /     | 2,573          | 1,848          | -28%     |
| Weekend - daytime         | 43          | 31          | -28%  | 6,383          | 4,974          | -22%     |
| Weekend - night-time      | 20          | 16          | -20%  | 3,549          | 2,327          | -34%     |
| Unknown                   | 8           | 1           | /     | 4,226          | 562            | /        |
| Total                     | 191         | 140         | -27%  | 28,286         | 21,640         | -23%     |

### 2.7 Road conditions

The majority of road fatalities occur on dry roads. This is the case for Latvia, as well as for the European Union as a whole. Regarding light conditions, one third of fatalities occur when it is dark, which is similar to the EU average. Regarding light conditions, Latvia has a significantly larger share of fatalities that occur when it is dark in comparison with the European Union.

Figure 11. Number of road fatalities by surface conditions (2020). Source: CARE

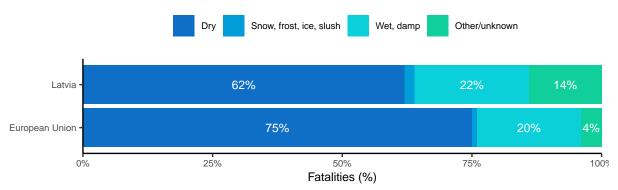


Table 14. Average number of road fatalities by surface conditions (2010-2012 and 2018-2020). Source: CARE

|                         | 2010 - 2012 | 2018 - 2020 | Trend | EU 2010 - 2012 | EU 2018 - 2020 | EU trend |
|-------------------------|-------------|-------------|-------|----------------|----------------|----------|
| Dry                     | 101         | 77          | -24%  | 21,101         | 16,582         | -21%     |
| Snow, frost, ice, slush | 16          | 7           | /     | 988            | 362            | -63%     |
| Wet, damp               | 59          | 42          | -29%  | 5,638          | 4,328          | -23%     |
| Other/unknown           | 35          | 14          | /     | 2,486          | 580            | /        |
| Total                   | 191         | 140         | -27%  | 28,286         | 21,640         | -23%     |

**Figure 12.** Number of road fatalities by light conditions (2020). Source: CARE

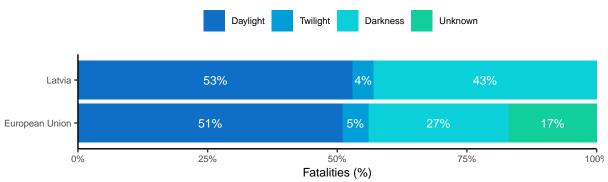


Table 15. Average number of road fatalities by light conditions (2010-2012 and 2018-2020). Source: CARE

|          | 2010 - 2012 | 2018 - 2020 | Trend | EU 2010 - 2012 | EU 2018 - 2020 | EU trend |
|----------|-------------|-------------|-------|----------------|----------------|----------|
| Darkness | 83          | 63          | -24%  | 8,922          | 6,275          | -30%     |
| Daylight | 100         | 70          | -30%  | 13,717         | 11,235         | -18%     |
| Twilight | 8           | 7           | /     | 1,499          | 1,156          | -23%     |
| Unknown  | 0           | /           | /     | 5,326          | 3,729          | /        |
| Total    | 191         | 140         | -27%  | 28,286         | 21,640         | -23%     |

# 3 Road safety performance indicators

### 3.1 Behaviour of road users

For Latvia there is currently no data available yet about behaviour in traffic that is comparable with other EU countries.

New road safety performance indicators based on roadside observations, have been estimated in the framework of the EU Baseline-project. The values should be available from early 2023 via this link<sup>3</sup>. For Latvia the KPIs regarding behaviour in traffic that are produced in the Baseline-project are:

- Speeding: % of vehicles travelling within the speed limit;
- Use of seatbelts and child restraint systems: % of vehicle occupants using the safety belt or child restraint system correctly;
- Use of protective helmets: % of riders of powered two-wheelers and bicycles wearing a protective helmet;
- Driving under the influence: % of drivers driving within the legal limit for blood alcohol content (BAC);
- Distraction: % of drivers not using a handheld mobile device.

### 3.2 Infrastructure

The overall road network in Latvia shows similar road density in comparison with the EU average. The indicator for the quality of road infrastructure is based on the judgements made by road users themselves. For Latvia, a score of 3.6 (on a value scale from 1 to 7) is given, which is one of the lowest scores.

In the framework of the EU Baseline-project a new road safety performance indicator related to road infrastructure is estimated. The KPI is defined as the percentage of distance driven over roads with a safety rating above an agreed threshold. The values should be available from early 2023 via this link<sup>4</sup>.

### 3.2.1 Road density

Table 16. Road density. Source: EUROSTAT (2020)

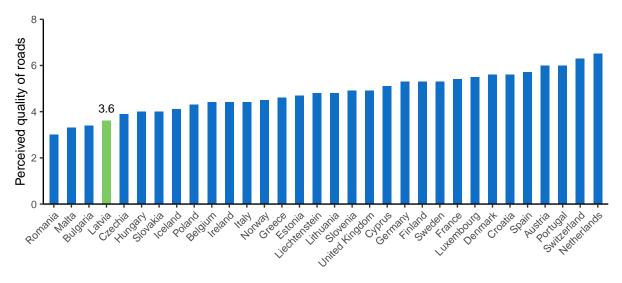
|                        | Latvia                           | European Union                   |
|------------------------|----------------------------------|----------------------------------|
| Inside built-up areas  | 140 km road/1000 km²             | 150 km road/1000 km²             |
| Outside built-up areas | 762 km road/1000 km²             | 607 km road/1000 km <sup>2</sup> |
| Total                  | 902 km road/1000 km <sup>2</sup> | 918 km road/1000 km <sup>2</sup> |

<sup>&</sup>lt;sup>3</sup>https://baseline.vias.be/

<sup>&</sup>lt;sup>4</sup>https://baseline.vias.be/

### 3.2.2 Road quality

**Figure 13.** Perceived quality of the road infrastructure (1 = extremely poor, 7 = among the best in the world). Source: World Economic Forum, Executive Opinion Survey (2019)



### 3.3 Vehicle fleet

The size of the vehicle fleet in Latvia, expressed per 100 inhabitants, is considerably smaller than the EU average. Regarding the age of the vehicles, passenger cars appear to be significantly older than the EU average, with over 70% passenger cars over 10 years.

In the framework of the EU Baseline-project a new road safety performance indicator related to vehicle safety is estimated. The KPI is defined as the percentage of passenger cars with a Euro NCAP safety rating equal or above a certain threshold. The values should be available from early 2023 via this link<sup>5</sup>.

Table 17. Number of registered vehicles per 100 inhabitants. Source: EUROSTAT (2020)

|  | Latvia | European Union |
|--|--------|----------------|
| All vehicles (except trailers and motorcycles) | 44     | 64             |
| Total utility vehicles                         | 5      | 9              |
| Lorries  | 4      | 7              |
| Road tractors                                  | 1      | 1              |
| Trailers and semi-trailers                     | 4      | 4              |
| Motorcycles                                    | 2      | 6              |
| Passenger cars                                 | 39     | 56             |
| Motor coaches, buses and trolley buses         | 0      | 0              |
| Special vehicles                               | 0      | 1              |

<sup>&</sup>lt;sup>5</sup>https://baseline.vias.be/

**Table 18.** Age of registered passenger cars. Source: EUROSTAT (2020)

|  | Latvia | European Union |  |
|--|--------|----------------|--|
| Percentage of total number of passenger cars |        |                |  |
| Less than 2 years                            | 4%     | 11%            |  |
| From 2 to 5 years                            | 6%     | 15%            |  |
| From 5 to 10 years                           | 13%    | 20%            |  |
| From 10 to 20 years                          | 55%    | 41%            |  |
| Over 20 years                                | 22%    | 12%            |  |

# 4 Road safety policy and measures

# 4.1 Legislation<sup>6</sup>

National road safety legislation in Latvia reflects the situation in the majority of EU countries.

**Table 19.** National road safety legislation. Source: WHO (2018)

|  | Latvia                       | EU countries   |
|--|------------------------------|--|
| Speed limits for passenger cars          |                              |  |
| Urban roads                              | 50 km/h                      | 50 km/h: 27  |
| Rural roads                              | 90 km/h                      | 80 km/h: 5; 90 km/h: 17; 100 km/h: 3; 110 km/h: 2              |
| Motorways                                | /                            | No limit: 1; 140 km/h: 2; 130 km/h: 14; 120 km/h: 6;           |
|  |                              | 100 km/h: 1  |
| Allowed BAC (blood alcohol concentration | ) levels                     |  |
| General population                       | 0.5 g/l                      | 0 g/l: 3; 0.2 g/l: 3; 0.4 g/l: 1; 0.5 g/l: 19; 0.8 g/l: 1      |
| Novice drivers                           | 0.2 g/l                      | 0 g/l: 8; 0.1 g/l: 1; 0.2 g/l: 12; 0.3 g/l: 1; 0.5 g/l: 4; 0.8 |
|  |                              | g/l: 1   |
| Professional drivers                     | 0.5 g/l                      | 0 g/l: 7; 0.1 g/l: 1; 0.2 g/l: 10; 0.3 g/l: 1; 0.5 g/l: 7; 0.8 |
|  |                              | g/l: 1   |
| Seatbelt requirement                     |                              |  |
| Drivers                                  | Yes                          | Yes: 27; No: 0   |
| Front passengers                         | Yes                          | Yes: 27; No: 0   |
| Rear passengers                          | Yes                          | Yes: 27; No: 0   |
| Transport of children                    |                              |  |
| Child restraint required                 | Up to 150 cm                 | Up to 150 cm: 12; Up to 140 cm: 1; Up to 135 cm: 12;           |
|  |                              | Up to 10 yrs: 1  |
| Children in front seat of passenger cars | Allowed in a child restraint | Prohibited under 10 yrs: 1; Prohibited under 12 yrs or         |
|  |                              | 135 cm: 1; Prohibited under 150 cm: 1; Prohibited              |
|  |                              | under 135 cm: 1; Allowed in a child restraint: 22; Not         |
|  |                              | restricted: 1  |
| Children passengers on motorcycles       | Prohibited under 150 cm      | Not restricted: 9; Prohibited under certain age/height:        |
|  |                              | 18   |
| Motorcycle helmets                       |                              |  |
| Applies to driver                        | Yes                          | Yes: 27; No: 0   |
| Applies to passengers                    | Yes                          | Yes: 27; No: 0   |
| Applies to all roads                     | Yes                          | Yes: 27; No: 0   |
| Applies to all engines                   | Yes                          | Yes: 25; No: 2   |
| Helmet fastening required                | Yes                          | Yes: 19; No: 8   |
| Standard referred to and / or specified  | No                           | Yes: 19; No: 8   |
| Mobile phone restriction                 |                              |  |
| Applies to hand-held phone use           | Yes                          | Yes: 26; No: 1   |
| Applies to hands-free phone use          | No                           | Yes: 0; No: 27   |

### 4.2 Enforcement

According to an international respondent consensus, in which the effectiveness of road safety enforcement is measured on a ten-point scale, Latvia scores below the EU average for motor-cycle helmet legislation.

 $<sup>^6</sup>$ The speed limit on rural roads varies from the norm during the summer. It is set to 100 km/h on some roads and 110 km/h on others.

**Table 20.** Effectiveness of enforcement according to an international respondent consensus (scale = 0-10). Source: WHO (2018)

|                                    | Latvia | European average |
|------------------------------------|--------|------------------|
| Speed legislation                  | 7      | 6.8              |
| Drink-driving legislation          | 7      | 7                |
| Seatbelt legislation               | 7      | 7                |
| Child restraint system legislation | 7      | 7                |
| Motorcycle helmet legislation      | 7      | 8                |

# 4.3 Road infrastructure

 Table 21. Infrastructure-related policy. Source: WHO (2018)

|  | Latvia | EU countries                 |
|--|--------|------------------------------|
| Audits or star rating required for new road infrastructure | Yes    | Yes: 10 Partial: 17          |
| Inspections / star rating of existing roads                | Yes    | Yes: 26 No: 1                |
| Design standards for the safety of pedestrians / cyclists  | Yes    | Yes: 25 Partial: 2 No: 0     |
| Investments to upgrade high risk locations                 | Yes    | Yes: 21 No: 6                |
| Policies & investment in urban public transport            | No     | Yes: 24 No: 3                |
| Policies promoting walking and cycling                     | No     | Yes: 21 Subnational: 3 No: 3 |

### 4.4 Post-crash care

 Table 22. Policy related to post-crash care. Source: WHO (2018)

|   | Latvia   | EU countries                |
|---|----------|-----------------------------|
| Trauma registry   | National | National: 13 Subnational: 4 |
|   |          | Some facilities: 0 None: 7  |
| National assessment of emergency care system                  | Yes      | Yes: 9 No: 18               |
| Provider training and certification - Prehospital providers - | Yes      | Yes: 19 No: 6               |
| Formal certification pathway                                  |          |                             |
| Provider training and certification - Nurses - Post graduate  | Yes      | Yes: 21 No: 5               |
| courses in emergency and trauma care                          |          |                             |
| Provider training and certification - Specialist doctors -    | Yes      | Yes: 21 Subnational: 0      |
| Emergency medicine  |          |                             |

# **5 Structure and culture**

# **5.1** Country characteristics

Population density in Latvia is much lower than the EU average, and its population is mainly settled in cities and rural areas. Its GDP per capita is below that of the European Union, but the percentage of GDP that is dedicated to road spending is higher than the EU average (1.5%).

 Table 23.
 Country characteristics.
 Source: EUROSTAT and IRTAD

|   | European Union | Latvia  |  |  |  |
|---|----------------|---------|--|--|--|
| Population-related data (2021)          |                |         |  |  |  |
| Population (2021)                       | 447218763      | 1893223 |  |  |  |
| Population density (inhabitants/km²)    | 106            | 29      |  |  |  |
| % Children (0-14)                       | 15%            | 16%     |  |  |  |
| % Adults (15-64)                        | 64%            | 63%     |  |  |  |
| % Elderly (65+)                         | 21%            | 21%     |  |  |  |
| Urbanization (2021)                     |                |         |  |  |  |
| % living in cities                      | 39%            | 43%     |  |  |  |
| % living in suburbs and towns           | 35%            | 22%     |  |  |  |
| % living in rural areas                 | 26%            | 35%     |  |  |  |
| Economic data                           | Economic data  |         |  |  |  |
| GDP per capita (EUR, 2021)              | 32438.4        | 17768.6 |  |  |  |
| Unemployment rate (2021)                | 7%             | 8%      |  |  |  |
| % GDP dedicated to road spending (2020) | 0.7%           | 1.5%    |  |  |  |

# 5.2 Structure of road safety management

Table 24. Road safety management structure. Source: National sources

| Key functions                                | Key actors  |  |  |
|--|---|--|--|
| Formulation of national road safety strategy | Ministry of Transport   |  |  |
| Monitoring of the road safety development    | Road Traffic Safety Council (The Council approved by the        |  |  |
|  | Government consists of governmental/state administration and    |  |  |
|  | municipal administration bodies and representatives of NGOs)    |  |  |
|  | The Ministry of Transport: responsible for state roads          |  |  |
|  | State Ltd. Latvian State Road (LVC)                             |  |  |
| Improvements in read infrastructure          | Road Traffic Safety Directorate (CSDD): responsible for road    |  |  |
| Improvements in road infrastructure          | audits  |  |  |
|  | Local road authorities: responsible for county roads and local  |  |  |
|  | roads   |  |  |
| Improvement in vehicles                      | CSDD  |  |  |
| Improvement in road user education           | CSDD  |  |  |
| improvement in road user education           | Ministry of Education and Science                               |  |  |
|  | CSDD  |  |  |
| Publicity campaigns                          | LVC, State Police   |  |  |
|  | Road Safety Safety Council                                      |  |  |
| Enforcement of traffic laws                  | State Police  |  |  |
|  | Research activities: Riga Technical University                  |  |  |
| Other relevant actors                        | Riga City Council Traffic Department                            |  |  |
|  | NGOs ( bicycle driver association, motoclub association e.t.c.) |  |  |

# 6 Notes

### 6.1 Data sources

### CARE

(Community database on Accidents on the Roads in Europe) All information in part 1 of this document (road safety outcomes) is based on data in the CARE database. The European average is based on the average of the 27 EU countries.

Date of extraction: 4th of October, 2022. There may be small discrepancies between the CARE data presented in the report and the accident data published in national reports.

**ESRA** (E-Survey of Road Users' Attitudes)

The European average is the average of 20 European countries (Austria, Belgium, Czechia, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Portugal, Serbia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom)

https://www.esranet.eu/en/

**ETSC** (European Transport Safety Council)

Car safety data was retrieved from https://etsc.eu/wp-content/uploads/PIN-Flash-30-Final.pdf

Data about speeding was retrieved from https://www.etsc.eu/pinflash36

**IRTAD** (International Traffic Safety Data and Analysis Group)

Data is retrieved from the OECD database: https://stats.oecd.org/

Date of extraction: 11th of October 2022

WHO (World Health Organization)

The data are retrieved from the WHO Global Status Report on Road Safety that was published in 2018. The European average is based on the average of the 27 EU countries.

https://www.who.int/violence\_injury\_prevention/road\_safety\_status/2018/en/

#### **World Economic Forum**

Data is retrieved from https://www.theglobaleconomy.com/rankings/roads\_quality/

Date of extraction: 11th of October 2022

### 6.2 Definitions

### **Accident / Crash**

Any accident involving at least one road vehicle in motion on a public road or private road to which the public has right of access, resulting in at least one injured or killed person (Source: UNECE/ITF/Eurostat Glossary). Note: the definition of "injury" varies considerably among EU countries thus affecting the reliability of cross country comparisons.

### **Bicycle**

Vehicle with at least 2 wheels, without engine. In some cases it can also use electric power.

### **Bus or Coach**

Bus: passenger-carrying vehicle, most commonly used for public transport, having more than 16 seats for passengers. Coach: passenger-carrying vehicle, having more than 16 seats for passengers. Most commonly used for interurban movements and tourist trips. To differentiate from other types of bus, a coach has a luggage hold separate from the passenger cabin.

### **CARE EU Average and aggregated numbers**

In the second section "Road safety outcomes", we provide EU averages and aggregated figures based on the most recent figures available (2020). However, as some countries have not yet provided their official data for that year, we have produced the EU averages and aggregated data by imputing figures based on data from previous years. The aggregated EU averages and figures in this report may therefore differ slightly from the aggregated averages and figures for 2020 that will be published in the future.

### Fatal crash

Crash with at least one person killed regardless the injury severity of any other persons involved.

### **Fatalities**

Total number of persons fatally injured within 30 days of the road crash; correction factors applied when needed. Confirmed suicide and natural death are not included.

### Lorry, under 3.5 tonnes

Goods vehicle under 3.5t maximum gross weight. Smaller motor vehicle used only for the transport of goods.

### **Pedestrian**

Person on foot. Included are occupants or persons pushing or pulling a child's carriage, an invalid chair, or any other small vehicle without an engine. Also included are persons pushing a cycle, moped, roller-skating, skateboarding, skiing or using similar devices. Does not include persons in the act of boarding or alighting from a vehicle. (Source: UNECE/ITF/Eurostat Glossary and CADAS Glossary) Unilateral pedestrian crashes (e.g. pedestrian falls) are excluded.

### **Powered two-wheelers**

Driver or passenger of either a moped (two or three wheeled vehicle equipped with engine size of maximum 50cc and maximum speed that does not exceed 45 km/h. A moped can also have an electric motor. Speed pedelecs and electric powered bicycles that offer pedal assistance up to 45 km/h, also belong to this category of vehicles.) or a motorcycle (motor vehicle with two or three wheels, with an engine size of more than 50 cc. A motorcycle can also have an electric motor.).

### Seriously injured (at least 30 days)

The CARE database includes the number of persons seriously injured who have been hospitalised for at least 24 hours. An alternative source is MAIS (Maximum Abbreviated Injury Scale) which is a globally accepted trauma scale used by medical professionals. The injury score is determined at the hospital with the help of a detailed classification key. The score ranges from 1 to 6, with levels 3 to 6 considered as serious injuries.

# **Working week - Daytime**

Monday to Friday 6.00 a.m. to 9.59 p.m.

# Working week - Night-time

Monday 10 p.m. to Tuesday 5.59 a.m.

Tuesday 10 p.m. to Wednesday 5.59 a.m.

Wednesday 10 p.m. to Thursday 5.59 a.m.

Thursday 10 p.m. to Friday 5.59 a.m.

# Weekend - Daytime

Saturday to Sunday 6.00 a.m. to 9.59 p.m.

# Weekend - Night-time

Friday 10 p.m. to Saturday 5.59 a.m.

Saturday 10 p.m. to Sunday 5.59 a.m.

Sunday 10 p.m. to Monday 5.59 a.m.