Reducing Speed in Europe

FEVR Conference
Münster, 26 July
2019
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Policy & Project Officer

European Transport Safety Council
A science based approach to road safety

Secretariat in Brussels

60 member organisations from across Europe

More than 200 experts contributing to ETSC’s work

The European Commission, Member Organisations, Member States and corporate sponsors are funding our work
Excessive and inappropriate speed is accountable for one-third of fatal collisions.

Aggravating factor in most collisions.

Relationship speed and collisions has been extensively studied: 1 km/h reduction in the mean speed results in 8.3% lower risk of a road death.

2,100 lives could be saved each year if the average speed dropped by only 1 km/h on all roads across the EU.
ROAD DEATHS BY ROAD TYPE

- Urban roads: 38%
- Rural roads: 54%
- Motorways: 8%

Vehicle occupants: 39%
- Pedestrians: 30%
- PTW riders: 19%
- Cyclists: 12%

SAFER ROADS, SAFER CITIES: HOW TO IMPROVE URBAN ROAD SAFETY IN THE EU
4th High Priority 39
June 2023
SPEED LIMITS IN URBAN AREAS

In 27 out of 28 EU countries standard speed limit on urban roads at all times is 50 km/h

Poland is the only country in the EU which allows a 60 km/h standard speed limit on urban roads at night
50 km/h (5 a.m – 11 p.m)
60 km/h (11 p.m – 5 a.m)
SPEEDING ON URBAN ROADS IN THE EU

35% to 75%
DOES SPEED REALLY GET YOU THERE ANY FASTER?

The effects of speed in reducing travel time are generally overestimated by road users and in urban areas the time savings are particularly small or negligible because of intersections, traffic lights, congestion, relatively short distances (OECD).

<table>
<thead>
<tr>
<th>Travel distance</th>
<th>Travel speed</th>
<th>Time needed for a trip</th>
<th>Time saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 km</td>
<td>30 km/h</td>
<td>20 min</td>
<td></td>
</tr>
<tr>
<td>10 km</td>
<td>40 km/h</td>
<td>15 min</td>
<td>5 min (30 vs 40 km/h travelling speed)</td>
</tr>
<tr>
<td>10 km</td>
<td>50 km/h</td>
<td>12 min</td>
<td>3 min (40 vs 50 km/h travelling speed)</td>
</tr>
<tr>
<td>10 km</td>
<td>60 km/h</td>
<td>10 min</td>
<td>2 min (50 vs 60 km/h travelling speed)</td>
</tr>
</tbody>
</table>
RISK OF PEDESTRIAN DEATH FOR DIFFERENT IMPACT SPEEDS

Impact speed (0 to 60 km/h)

Death Risk

@0 @10 @20 @30 @40 @50 @60

0% 5% 10% 15% 20%
30 KM/H URBAN ROADS

- Lack of speed observations throughout Europe; only in AT, BE, IE

<table>
<thead>
<tr>
<th>Belgium</th>
<th>Austria</th>
</tr>
</thead>
<tbody>
<tr>
<td>(In 27 school zones)</td>
<td></td>
</tr>
<tr>
<td>• 90% above legal limit</td>
<td>• 73% above legal limit</td>
</tr>
<tr>
<td>• No traffic calming measures</td>
<td>• With traffic calming measures</td>
</tr>
<tr>
<td>• Average speed: 43 km/h</td>
<td>• Average speed: 35 km/h</td>
</tr>
</tbody>
</table>
SPEEDING ON RURAL NON-MOTORWAY ROADS
STANDARD SPEED LIMITS ON RURAL NON-MOTORWAY ROADS

- **70**: Belgium (Flanders), Sweden
- **80**: Cyprus, Denmark, Finland, France, Ireland, Malta, Netherlands, Switzerland, Norway
- **90**: Belgium (Walonia), Bulgaria, the Czech Republic, Estonia, Greece, Croatia, Hungary, Italy, Luxembourg, Latvia, Lithuania, Poland, Portugal, Romania, Slovenia, Slovakia, Spain
- **100**: Austria, Germany, Ireland, UK
STANDARD SPEED LIMITS ON RURAL NON-MOTORWAY ROADS

- **70**
  - Belgium (Flanders), Sweden

- **80**
  - Cyprus, Denmark, Finland, France, Ireland, Malta, Netherlands, Switzerland, Norway

- **90**
  - Belgium (Walonia), Bulgaria, the Czech Republic, Estonia, Greece, Croatia, Hungary, Italy, Luxembourg, Latvia, Lithuania, Poland, Portugal, Romania, Slovenia, Slovakia, Spain

- **100**
  - Austria, Germany, Ireland, UK
SETTING SAFE SPEED LIMITS

SAFE SYSTEM APPROACH

- 70 km/h - safe speed limit on rural roads without a median barrier
- 100 km/h – safe speed on rural roads with median and side barriers

Speed limits of much of the road network in EU countries are higher than the protective quality of the road, roadside and vehicle designs allows
SPEEDING ON RURAL-NON MOTORWAY ROADS IN THE EU

9% to 63%
SPEEDING IN THE EU

23% to 59%

Motorways: 16% to 87%
Rural: 6% to 67%
Urban: 13% to 66%

Motorways: 42% to 62%
Rural: 21% to 66%
Not one single measure exist to reduce speeds for all road types, therefore a range of integrated measures is needed:

- Safe and credible speed limits
  - Supported by self-explaining and self-enforcing roads
- Vehicles that help drivers comply
- Stricter laws
- Effective traffic law enforcement activities
- Road user education
- Safety performance indicators
• Many countries have a requirement to set safe and credible speed limits in regulations

• Translating this into practice proves difficult

• Great majority of EU countries do not have estimates on proportion of roads with safe and credible speed limits
GUIDELINES FOR SETTING SPEED LIMITS

• Speed limit setting guidelines should accompany road traffic acts

• Regular and systematic speed limit reviews should be mandatory to assess whether the speeds need to be revised

• If implemented, guidelines help to establish a consistent practice and assist drivers in developing good driving habits
SWEDEN: SETTING SAFE AND CREDIBLE SPEED LIMITS

- 2008-2011 revision of speed limits on rural road network
- Speed limit based on safety classification of the road
- 2020 goal: 90% of states road with a speed limit of 80 km/h or below. Roads with higher speed limit should have a median barrier. (76% matched the criteria in 2017).
- Reduction of speed limit on rural roads from 90 to 80 km/h.
- Result:
  - 3.1 km/h decrease in mean speed
  - 41% decrease in road deaths
ENFORCEMENT
ANNUAL CHANGE IN THE NUMBER OF SPEEDING TICKETS
## Data on Speeding Tickets between 2015-2017

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Speeding tickets/1000 inhabitants</td>
<td>% by fixed or time-over-distance camera</td>
<td>Speeding tickets/1000 inhabitants</td>
</tr>
<tr>
<td>NL</td>
<td>457</td>
<td>77%</td>
<td>470</td>
</tr>
<tr>
<td>LU</td>
<td>428</td>
<td>95%</td>
<td>470</td>
</tr>
<tr>
<td>BE</td>
<td>299</td>
<td>n/a</td>
<td>292</td>
</tr>
<tr>
<td>FR</td>
<td>n/a</td>
<td></td>
<td>253</td>
</tr>
<tr>
<td>LV</td>
<td>186</td>
<td>65%</td>
<td>116</td>
</tr>
<tr>
<td>MTY</td>
<td>171</td>
<td>99.9%</td>
<td>163</td>
</tr>
<tr>
<td>CY</td>
<td>121</td>
<td>6%</td>
<td>124</td>
</tr>
<tr>
<td>SE</td>
<td>116</td>
<td>78%</td>
<td>126</td>
</tr>
<tr>
<td>F*</td>
<td>111</td>
<td>66%</td>
<td>111</td>
</tr>
<tr>
<td>DK</td>
<td>97</td>
<td>n/a</td>
<td>98</td>
</tr>
<tr>
<td>LT</td>
<td>94</td>
<td>92%</td>
<td>58</td>
</tr>
<tr>
<td>HR</td>
<td>71</td>
<td>n/a</td>
<td>77</td>
</tr>
<tr>
<td>SI</td>
<td>57</td>
<td>n/a</td>
<td>37</td>
</tr>
<tr>
<td>PL</td>
<td>56</td>
<td>20%</td>
<td>55</td>
</tr>
<tr>
<td>BG</td>
<td>54</td>
<td>n/a</td>
<td>47</td>
</tr>
<tr>
<td>RS</td>
<td>52</td>
<td>n/a</td>
<td>47</td>
</tr>
<tr>
<td>HU</td>
<td>51</td>
<td>n/a</td>
<td>28</td>
</tr>
<tr>
<td>NO</td>
<td>45</td>
<td>39%</td>
<td>50</td>
</tr>
<tr>
<td>SK</td>
<td>45</td>
<td>3%</td>
<td>47</td>
</tr>
<tr>
<td>PT†</td>
<td>43</td>
<td>70%</td>
<td>10</td>
</tr>
<tr>
<td>IL</td>
<td>42</td>
<td>77%</td>
<td>18</td>
</tr>
<tr>
<td>RO</td>
<td>36</td>
<td>0%</td>
<td>42</td>
</tr>
<tr>
<td>EE</td>
<td>31</td>
<td>n/a</td>
<td>36</td>
</tr>
<tr>
<td>SI</td>
<td>20</td>
<td>n/a</td>
<td>16</td>
</tr>
<tr>
<td>SE</td>
<td>14</td>
<td>51%</td>
<td>15</td>
</tr>
<tr>
<td>SI***</td>
<td>n/a</td>
<td>87%</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Data available for speeding tickets on part of the road network only

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
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<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>F*</td>
<td>13</td>
<td>78%</td>
<td>15</td>
</tr>
<tr>
<td>F†</td>
<td>47</td>
<td>n/a</td>
<td>44</td>
</tr>
<tr>
<td>SE†</td>
<td>n/a</td>
<td>78%</td>
<td>n/a</td>
</tr>
<tr>
<td>SA***</td>
<td>n/a</td>
<td>37</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Data available for speeding tickets on part of the road network only
European SPI on speed

Percentage of vehicles travelling within the speed limit.
ETSC RECOMMENDATIONS ON SPIs

To Member States:

- Monitor speed patterns (incl. mean speed and proportion above the speed limit)
- Set national SPI targets, including for speed
- Collaborate with the European Commission by systematically collect the SPI data
WHAT IS INTELLIGENT SPEED ASSISTANCE?

1. Car receives position information via GPS and current speed limit from a digital map. Can also be combined with video camera sign recognition.

2. Speed limit is displayed on the dashboard.

3. Car helps driver not to speed when speed limit is reached.

Driver can override system by pushing harder on accelerator.

SAFER VEHICLES

COLLISIONS: -30%
FATALITIES: -20%
RECOMMENDATIONS

• Develop, and encourage speed limit-setting authorities to apply, national speed limit guidelines based on the Safe System approach

• Review and regularly update speed limits

• Adopt national or regional enforcement plans with annual targets for a number of checks and compliance levels, including on speeding

• In countries with low numbers of safety cameras, consider extending the network

• Systematically collect (SPI) data and set national SPI targets, including SPIs related to speed