

Keywords: Costs • Economic valuation • Road crashes • Fatality • Injury • Willingness to pay •

Costs of road crashes in Europe

There are large differences in official estimates of road crash costs in European countries. Total costs range from 0.4% to 4.1% of GDP and cost per fatality from €0.7 million to €3.0 million (2015, adjusted for PPP).

Cost per serious injury range from 2.5% to 34.0% of the costs per fatality, and the costs per slight injury from 0.03% to 4.2% of the costs per fatality. The differences are largely explained by differences in methodologies. The fact that under reporting is not taken into account in cost estimates in most countries implies a serious underestimation of total costs in these countries.

The methodological differences in cost estimates are a serious obstacle when decisions on countermeasures have to be decided at a supranational level or when international comparisons and benchmarking are needed. For these purposes more harmonization of methods is needed. This research presents a method to develop harmonized cost estimates, resulting in a standardized values for each cost component and for each severity level.

These standardized values were used to add cost components that are missing in a country or to replace values that are not based on internationally recommended methods.

In addition, corrections for under reporting of crashes and casualties were made.

This results in total costs of road crashes in the 32 European countries included in our analysis of at least €500 billion, or 3% of GDP. Further refinements of the method could concentrate on taking into account national characteristics such as geographical situation, economic performance and motorization rate.

We recommend using the standardized values if national costs estimates based on solid methodologies are not available.

Future national road crash costs studies could concentrate on applying international recommended methods, in particular WTP methods, on including all relevant cost components and on taking into account under reporting and PDO crashes •

