

Press release

Road accidents in India stem a socio-economic cost of \$15.71–38.81 bn: A Bosch Study

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- The total socio-economic cost due to road traffic accidents in India's is \$15.71–38.81 bn, which is estimated to be 0.55–1.35 percent of the nation's GDP
- Nearly 781,668 vehicles were involved in road accident in 2019 according to RASSI Weighted data, which amounted to \$1.81 bn in vehicle damages.
- First of its kind study to utilize suitable weighting factors from the RASSI database to offer a holistic view on a national scale

Bengaluru, India – With India's economy forecasted to thrive in the coming years, it is pivotal for its road transport requirement to align with new policies and international supply chain categorization. However, the meagre availability of factual data, regarding socio-economic loss due to road accidents is hindering the path to ideation and implementation of new policies. Set against this backdrop, Bosch India has unveiled a unique study that identifies and analyses the socio-economic loss due to road traffic accidents in India.

For this study, the Accident Research team from Bosch India's Advanced Autonomous Safety Systems and Corporate Research department studied and analyzed global road accident data over the last two decades to obtains results which can be effectively used to identify new products, business strategies, and road safety policies. This data will serve as a reference for policy makers to derive cost-benefit estimates for economic loss incurred by the respective stakeholders through the Human Capital (HC) method, Willingness-To-Pay (WTP) method and iRAP's Rule of Thumb (RoT) method . This study is the first of its kind to utilize suitable weighting factors from the Road Accident Sampling System of India (RASSI) database to offer a holistic view on the national scale.

Some of the key findings of the research are as follows:

- The total socio-economic cost due to road traffic accidents in India's is \$15.71–38.81 bn, which is estimated to be 0.55–1.35 percent of the nation's GDP
- Nearly 781,668 vehicles were involved in road accident in 2019 according to RASSI Weighted data, amounting to \$0.57–1.81 bn in damages

- The damage costs include \$356.2 mn for commercial vehicles, \$69.8 mn for cars, \$18.7 mn for two wheelers, and \$39.6 mn for buses
- The total medical cost of the road traffic accidents victims in 2019 was close to \$0.82–1.92 bn
- In 2019, the total productivity loss due to male fatalities was \$10.9 bn and female fatalities was \$1.44 bn. (considering avg. Net National income per capita for male and female employees)
- Total productivity loss in the year 2019 owing to serious injuries accounted for \$123 mn while minor injuries accounted for \$14 mn.

The report provides OEMs, fleet operators and transport authorities with an accurate view of accident situations and can be leveraged to tailor technological innovations, countermeasures, and policies to make Indian roads safer. Any stakeholder can support road safety by bridging the data gap and building on the framework provided here, hence bring further road reforms. The methodology and results of this study can contribute in deriving a cost benefit analysis of various road safety technologies and thus help enforce them towards making Indian roads safer for all it's users.

Speaking at the report launch, **Girikumar Kumaresh, Senior Program Manager, Head Accidnet Research India, Advanced Autonomous Safety Systems at Robert Bosch Engineering and Business Solutions** said, “Road traffic accident casualties bring about a great deal of human suffering in terms of social, medical and economic costs, and it is crucial we mitigate them. The absence of data regarding the loss due to road accidents was the motivating factor for us to study and analyze the socio-economic impact of road accidents in India. This research is a testament to two years of hard work combining studies from the World Bank and World Economic Forum, and over 50 international journals underpinned by Bosch’s innovative method to estimate socio-economic loss due to road traffic accidents in India.”

The full reports can be accessed here:

[Estimation of Socio-Economic Loss due to Road Traffic Accident in India](#)

[Overview of truck accidents in India and its economic loss estimation](#)

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The Bosch Group is a leading global supplier of technology and services. It employs roughly 395,000 associates worldwide (as of December 31, 2020). The company generated sales of 71.5 billion euros in 2020. Its operations are divided into four business sectors: Mobility Solutions, Industrial Technology, Consumer Goods, and Energy and Building Technology. As a leading IoT provider, Bosch offers innovative solutions for smart homes, Industry 4.0, and connected mobility. Bosch is pursuing a vision of mobility that is sustainable, safe, and exciting. It uses its expertise in sensor technology, software, and services, as well as its own IoT cloud, to offer its customers connected, cross-domain solutions from a single source. The Bosch Group's strategic objective is to facilitate connected living with products and solutions that either contain artificial intelligence (AI) or have been developed or manufactured with its help. Bosch improves quality of life worldwide with products and services that are innovative and spark enthusiasm. In short, Bosch creates technology that is "Invented for life." The Bosch Group comprises Robert Bosch GmbH and its roughly 440 subsidiary and regional companies in some 60 countries. Including sales and service partners, Bosch's global manufacturing, engineering, and sales network covers nearly every country in the world. With its more than 400 locations worldwide, the Bosch Group has been carbon neutral since the first quarter of 2020. The basis for the company's future growth is its innovative strength. At 129 locations across the globe, Bosch employs some 73,000 associates in research and development, of which nearly 34,000 are software engineers.

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