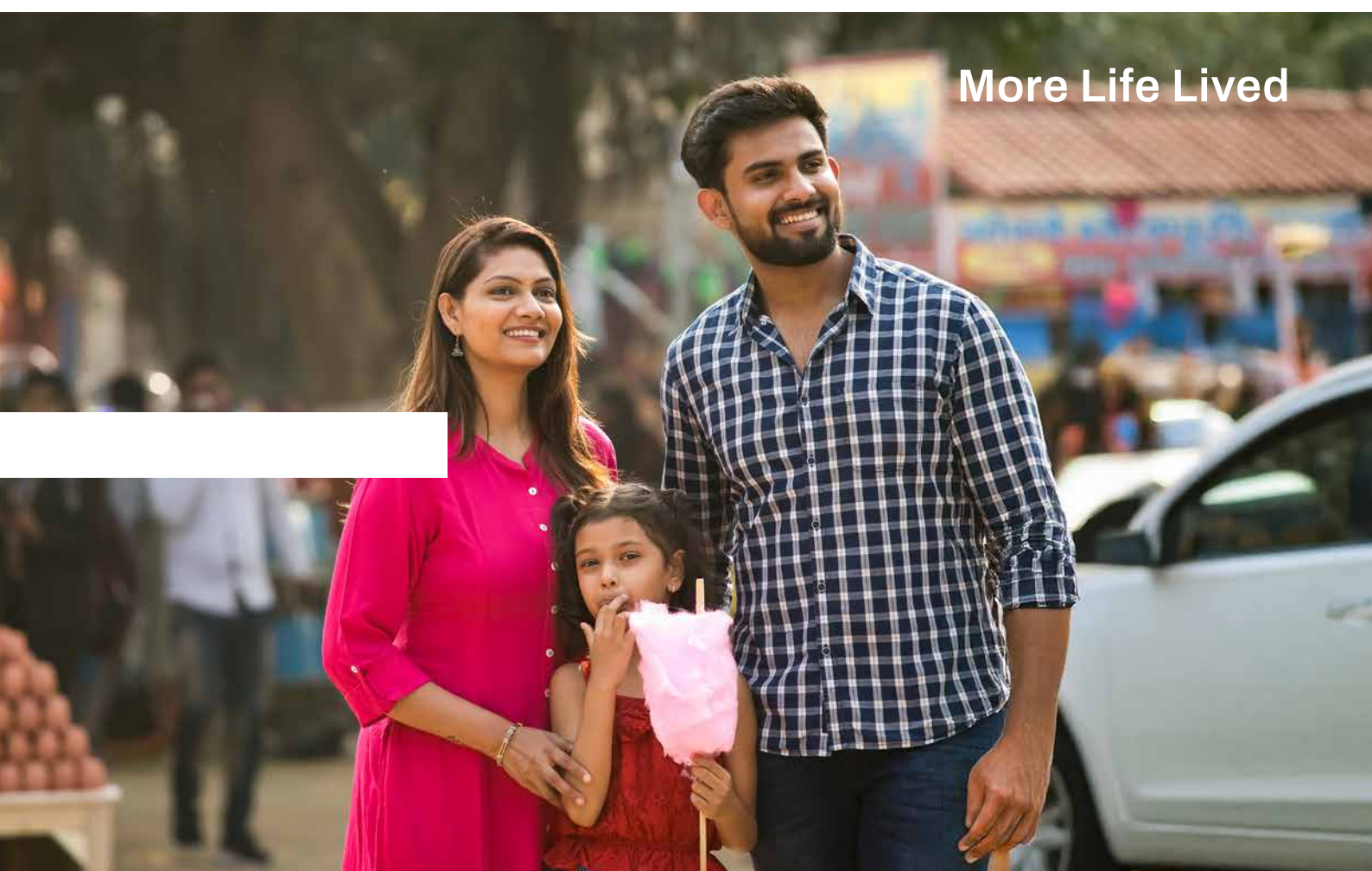


Road Safety in India

Recommendations of the Advisory Joint Working Group



January 2025

Autoliv

> Foreword

Cross-sector collaboration is essential for effective road safety improvements, aligning private sector innovation with societal benefits and leveraging technology for meaningful change. The Advisory Joint Working Group brings together various stakeholders in India and has an important role in driving change in India. Based on expert feedback, we present updated recommendations for improving road safety in India through this report.



Mikael Bratt
President and CEO, Autoliv

Sweden and India share a strong commitment to addressing critical challenges that shape a safer and more sustainable future. Drawing on Sweden's pioneering spirit of innovation, demonstrated by initiatives such as Vision Zero, our collaboration on road safety highlights the potential to save lives and make meaningful change.

Road safety is not just a policy priority – it is a human imperative. In India, where road fatalities are a pressing concern, there is an opportunity to adapt proven approaches and develop solutions tailored to the local context. This report consolidates insights and recommendations from Indian and international experts, offering actionable pathways to enhance safer mobility.

Let us view this report as more than a document – it is a step toward tangible progress. By working together and sharing expertise, we can pave the way for a future where every journey is safer, every life is valued, and every partnership grows stronger.



Jan Thesleff
Ambassador of Sweden to India



Joint Working Group Recommendations



Road safety remains a societal burden in India. Official statistics for 2022 report 168,000 fatalities on Indian roads, marking an increase from the 151,000 fatalities in 2018 when the first Joint Working Group Report was published. According to the Global Status Report on Road Safety, there were an estimated 216,618 deaths in 2021 compared to 202,999 in 2016, despite both figures being larger than reported deaths. The estimated road fatalities for India show a more positive trend, with the increase being less in magnitude.

To understand and address this issue, the Advisory Joint Working Group for Road Safety (AJWG) in India was reconvened. This group consists of experts from IIT-Delhi, iRAP India, an independent road safety expert, and Autoliv. The AJWG reviewed and revised several of these recommendations to reflect the progress made in India.

Despite substantial efforts across various sectors to enhance road safety in India, critical gaps persist in implementation, consistency, and public engagement. A cohesive and collaborative approach is essential to reduce road fatalities and create a safer road environment. This requires concerted efforts to strengthen statutory frameworks, enhance technical capacities, and ensure uniform policy implementation. The recommendations from the AJWG are as follows:

1. Road Safety Management

1.1. Road Safety Authorities: States have established lead road safety bodies and the government has announced the National Road Safety Board (NRSB). There is a strong need to expedite the launch of the NRSB with the authority and resources for effective policy enforcement.

1.2. Data Collection: The Integrated Road Accident Database (iRAD) is improving accident data collection but needs to be monitored to ensure completeness and quality data accessible to concerned authorities, researchers, and stakeholders. State-based workshops should be conducted to identify data flow and gaps and integrate iRAD with other data sources such as hospital and death registry data to improve the completeness and quality of fatality data.

1.3. Digitalization and data sharing: Vehicle registration, driving licenses, and offences/traffic violations should be connected digitally in all states and integrated nationally. The integrated system should be monitored to address the current gaps in integration.

1.4. Enforcement of UN Conventions: Currently India adheres to two of the key UN road safety conventions (1949 and 1998). Steps must be taken to significantly enhance the enforcement and compliance with them. The adoption of the 1970 European Agreement concerning the Work of Crews of Vehicles Engaged in International Road Transport (AETR), which includes regulations on rest times for heavy truck drivers, must be prioritized to address safety issues caused by heavy trucks.

1.5. Utilization of Crash Risk Mapping and Star Rating for Performance Tracking: Star Rating should be utilised for proactive assessment of road infrastructure safety features, ensuring continuous monitoring of road improvements and potential hazards. Employ Crash Risk Mapping to analyse real-time crash data, pinpointing high-risk areas and emerging trends. Emphasize the potential of digitalization to enhance these processes, enabling timely interventions and data-driven decisions to effectively reduce fatalities and serious injuries on roads.

1.6. Triple-Helix Collaboration: Cross-sector collaboration will be key in driving effective road safety improvements by ensuring that the private sector innovation aligns with societal benefits and that regulations leverage technological opportunities.

2. Infrastructure

2.1. International Standards: India's engagement with global road safety forums (such as Asian Highway Network Classification and Design Standards) is positive. India's regulations are influenced by the UN Agreements such as the 1968 Vienna Convention on Road Traffic, however, it is recommended to accede and ratify the same to ensure compliance with international best practice.

2.2. Infrastructure and Standards: The Indian Road Congress (IRC) reviews and updates existing codes using local experts, but they must be made mandatory on all roads. Develop and implement standards for safe infrastructure specifically for powered two-wheelers (PTW) on highways and other roads, and ensure these standards also prioritize the safety of all vulnerable road users (VRU).

2.3. Signage and Infrastructure: Progress has been made in ensuring uniformity and compliance with codes on national highways, but rural and urban areas still need attention. Expanding and improving safety audits on highways and urban areas is key to ensuring compliance and uniformity.

2.4. Road Safety Policy: Adopt a road safety policy that sets a target of 3-star or better for all road users across national, regional, and urban road networks. Ensure these targets are included in road infrastructure projects and funding schemes.

3. Vehicle Technology

3.1. Harmonization of Regulations: India has aligned its vehicle safety and environmental regulations with four regulations within the framework UN 1998 Agreement. However, compliance with all UN 1998 regulations and harmonization with UN 1958 agreements and its regulations must be prioritized. Efforts must be taken to enhance regulations for commercial vehicles and power two-wheelers. In addition, stricter import standards with attention to safety equipment could be developed.

3.2. Safety requirements on HGV: Enhance enforcement of existing safety regulations for commercial vehicles including the implementation and use of safety rear and side under guards to improve protection for pedestrians and motorized two-wheelers. Ensure regular compliance checks and stringent penalties for non-compliance.

3.3. Cancellation of Non-Compliant Vehicle Registrations: Update current safety and environmental standards to meet international best practices. Strengthen the mandate for relevant authorities to cancel registrations of vehicles that do not meet safety or environmental standards. Implement more frequent and comprehensive vehicle fitness tests, including checks for pollution control, vehicle integrity, and compliance with safety features.

3.4. Event Data Recorders (Black Boxes): The progress to install black boxes in commercial vehicles is ongoing with a new standard drafted by ARAI (AIS 192). It has the potential to improve road safety through accident data collection and must therefore be prioritized. Additionally, Event Data Recorder data should be made available to researchers and relevant authorities to develop policy and technological requirements in India.

3.5. Vehicle Safety Rating Program (BNCAP): The Bharat NCAP program, launched in August 2023, is a positive step in assessing vehicle safety. The Bharat NCAP program must be tailored to address India's specific needs by prioritizing important load cases for pedestrian protection, occupant protection, powered-two wheelers, and heavy goods vehicle ratings. Studies must be conducted to evaluate the effectiveness and benefits of vehicle safety technologies in the Indian traffic context.

4. Human Behaviour

4.1. Driving Training Scheme: There is an urgent need for a nationwide Graduate Driver License Scheme with better integration with the Institute of Driver Training and Research (IDTR) and Driver Training Centres. Evaluations of education and learning programmes' effectiveness must be performed periodically to review and update them.

4.2. School Education Effectiveness: Several private and governmental schemes exist, however, there is a need for uniform and mandatory inclusion into school curricula. These must be evaluated regularly for effectiveness and updated.

4.3. Recognition for Good Driving Behaviour: The government should continue collaborating with various stakeholders to incentivise and promote safe driving. The focus must also be on promoting safer vehicle technology such as providing tax benefits to safer vehicles. Campaigns for seatbelt and helmet use must be increased.

4.4. Recognition of first responders: The Good Samaritan Law is a positive step for encouraging responsible actions and promoting a culture of safety and compassion on the roads. However, the awareness remains low and efforts must be made to improve its awareness.

5. Monitoring

5.1. Installation of Monitoring Systems: Scale up the installation of CCTV cameras and speed radars, integrating geo-location to enhance crash data collection at blackspots and key locations. Address challenges in platform management, operational execution, and data sharing between stakeholders. Implement automation for violation reporting and monitoring to support operational capacity and address resource constraints. AI platforms can be used to monitor and enforce seatbelt and helmet compliance.

5.2. Digital Platform for Accident Reporting: A digital platform (such as the Actionable Intelligence for Sustainable Traffic Management (ASTraM) by Bangalore Traffic police) should be created nationally for the public to easily report any road accidents through phones or mobile applications which could support faster rescue and medical care/attention.

5.3. Speed management: Adjust national speed limits to align with international best practices and traffic interactions, as current speed limits are higher than recommended best practices. Enhance enforcement with automatic speed cameras and advanced speed monitoring, such as average speed zones, to effectively reduce speeds and mitigate serious injuries and fatalities.

5.4. Drink driving legislation: Enhance measures to address drunk driving by increasing the number of random checks and implementing alco-locks for professional drivers to improve road safety.

5.5. Child restraint: Increase awareness of child safety in cars, including the use of child seats, booster cushions, and the dangers of children sitting in the front seat. Phase in the enforcement of these safety measures to improve compliance.

Advisory Joint Working Group

Dr Geetam Tiwari
IIT-Delhi

Mr Jigesh Bhasvar
IndiaRAP

Mr Greg Smith
iRAP

Dr Maria Segui-Gomez
Independent Road Safety Expert

Dr Cecilia Sunnevang
Autoliv

Contact

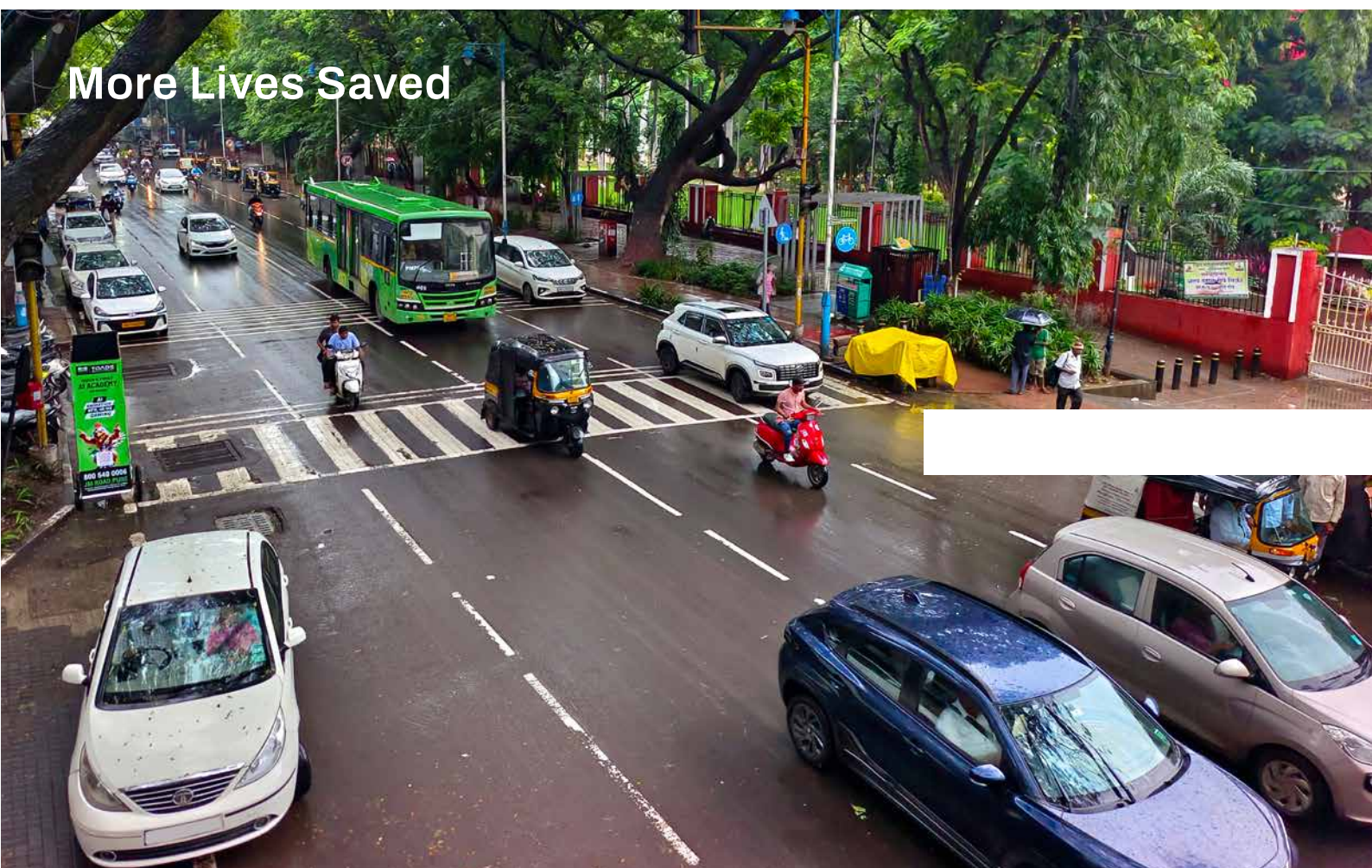
Autoliv India:
Mr Sivakumar Sudhachandran
siva.sudhachandran@autoliv.com

Autoliv Governmental Affairs:
Mr Peter Kronberg
peter.kronberg@autoliv.com

Editor of this report:
Mr Tejas Chandran
tejas.chandran@autoliv.com

Cover photos:
Vinayak Jagtap and Triloksphotography

More Lives Saved



Established by Autoliv in 2018, the Joint Working Group for Road Safety in India brings together road safety experts with a vision to reduce road traffic fatalities in India. In 2020, the group presented a list of recommendations to the Transport Minister Shri Nitin Gadkari at the 3rd UN Ministerial Conference on Road Safety, aligning with the launch of the 2nd Decade of Action for Road Safety. Minister Gadkari appreciated the collaborative efforts and insightful report.

In 2024, Autoliv reconvened the group to update recommendations based on India's progress. This current report, prepared in conjunction with the 4th UN Ministerial Conference on Road Safety, serves as a supplement to the original report, reflecting the ongoing commitment to enhancing road safety in India.

