Safety
Why Safety Matters for Sustainable Mobility

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Safety is one of four global goals identified in the Global Mobility Report (GMR)—along with universal access, efficiency, and green mobility. The safety goal is aimed at curbing the human pain, suffering, loss, grief, and economic costs of transport-crash-related injuries and deaths. The scale of the safety problem is profound across all transport modes, including air, rail, road, and water. Safety efforts need to be focused on Low- and Middle-Income Countries (LMICs), where 90 percent of the 1.4 million transport crash deaths occur each year.

The inclusion of road safety in the Sustainable Development Goal targets has created opportunities for an increased global commitment. Nevertheless, to date there has been no overarching effort to set an overall target for safety of mobility and to collect reliable global data on transport safety across all modes. To increase the momentum, the GMR sets targets for global transport safety aimed at setting a unified transportation safety goal.

Safety in the global agenda
To date, there has been no overarching effort to set an overall target for the safety of mobility across transport modes, although various agencies have attempted to address the safety of discrete modes of transport. Road safety is featured in two SDG targets: target 3.6, which aims to halve the number of global deaths and injuries from road accidents by 2020; and target 11.2, which aims to improve road safety by expanding public transport. And while road and aviation have global safety plans, rail does not. Although there is no global waterborne transport safety plan, there are key conventions proposed as standards by the International Maritime Organization. The nature of transport systems also varies: rail and air transport are largely closed or highly regulated systems; water-based transport is a mix; and road transport is an open system with billions of—often minimally regulated—participants.

Methodological challenges in measuring safety
There is a need for a stronger strategic approach to safety data collection integrating all modes of transport. Regarding road safety, some aspects are well measured but there are still many challenges, including the definitions of road crash deaths—which vary

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across countries—and the difficulty of collecting and collating comprehensive crash data. For rail transport, there is no global coverage of crashes and casualties, since it is mostly collected by railways and national regulators. For air and waterborne transport safety, the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO) collect and analyze safety data at the global scale.

As part of the Global Tracking Framework, the GMR proposes a target that builds on SDG 3.6, i.e., halving global death and injuries from road traffic accidents by 2020, and reducing by 5 percent the fatalities and injuries in each of the other modes of transport: waterborne, rail, and air, by 2020.

**Trends in safety**

Road crashes account for 97 percent of deaths and 93 percent of health complications resulting from crashes across all transport modes. The latest WHO estimate is 1.34 million road crash deaths per year, yielding a total near 1.4 million transport-related crash deaths.

The unfortunate dominance of road transport in suffering resulting from transport crashes exists because road travel is the most common form of transport, and because road travel is considerably less safe. Road travel overall has 27 times more deaths per million passenger kilometers than either air or rail travel.\(^1\) In addition, air transport is becoming safer worldwide, as is rail transport—where data exist (in Europe and North America).\(^2\) The global trend in road crash deaths is a small increase over time—with a growth rate that has decreased during the UN Decade of Action for Road Safety. This continuing statistical dominance of roads—in both deaths and costs—warrants road safety as our point of focus.

Because most transport-related deaths occur in LMICs, transport safety is especially relevant to the international development agenda, for example, to the World Bank's twin goals of ending extreme poverty and boosting shared prosperity. Moreover, road deaths and injuries are concentrated among young people, and are the number one killer of people ages 15 to 29 years, whereas other leading causes of death, such as cardiovascular disease and cancer, are concentrated among older persons. Thus, each road crash death or disability costs more in healthy human life years and is a greater productivity loss. In LMICs, the death or disability of family breadwinners can also drive families into poverty.

**Scale of the challenge**

Deep challenges limit the successful management and delivery of road safety, especially in LMICs. There is insufficient focus on speed management and the adoption of safe systems. There is, in many cases, an absence of appropriate data with which to manage safety. The costs of crashes and trauma are often hidden or externalized from key stakeholders, and as a result they are less focused on safety. Related to these issues is the inadequate commitment of funding to address the road safety crisis.

The GMR focuses on four challenges for the safety goal. First, to incorporate safety in transport planning, prioritizing safer modes and incorporating safety in people’s travel decision making. Second, for countries to implement a roster of cost-effective interventions, which include improved management of speed—which may also deliver synergies with other sustainable mobility goals, greater focus on safe systems and infrastructure design and engineering to provide safer roads and roadsides—especially for vulnerable road users, and improving vehicle safety. Third, to ensure that the integration of transport-aid related technologies prioritizes safety. Fourth, to measure safety with sound, timely, and quality data on fatalities for every mode of transport.

Powerful opportunities for improvement of road safety exist, with a number of factors generating greater global focus. The inclusion of road safety in an SDG, the acknowledgement of road safety as a core pillar of sustainable mobility, and the appointment of a UN Special Envoy for road safety are all necessary steps to safer transport globally.

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Notes: Connections is a series of knowledge notes from the World Bank Group’s Transport & Information and Communication Technology (ICT) Global Practice. Covering projects, experiences, and front-line developments, the series is produced by Nancy Vandycke and Shokraneh Minovi.
