

To: Transport & Health Policy Makers, & Practitioners
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Subject: Essential Evidence 4 Scotland No. 6 Safe Systems Road Safety

Top line: Analysis of traffic fatalities in 53 countries between 1994 and 2015 revealed that countries that have adopted a Safe System approach have both the lowest rates of fatalities per 100,000 inhabitants and the fastest rate of change in fatality levels.¹

The Safe System approach is based on a foundational understanding of the underlying causes of traffic fatalities and serious injuries, particularly human fallibility and vulnerability, and a government's responsibility to protect citizens. This approach is based on the principle that errors are inevitable but traffic fatalities and serious injuries should not be. Road systems should be designed so that human error does not have a serious or fatal outcome. The Safe System approach is guided by core elements for planning, implementation, evaluation, and monitoring. They include setting strong and accountable targets, enhancing economic analysis to identify the economic benefits of improved road safety, identifying priority areas to maximize impact, setting up a lead agency for governance and management, evaluating programs to identify evidence-based measures, and ensuring that infrastructure planning and investment consider safety an integral element of mobility.

The action areas of the Safe System approach are integrated and go far beyond attempting to persuade people to change their behaviour through education or enforcement alone. They include addressing underlying factors—such as land use and mobility planning—to reduce vehicle dependence and promote safe, healthy, and environment-friendly travel modes; comprehensive speed management to set safe speeds; intersection design to allow people to cross safely; road design that accounts for human error; improved public transport; safe vehicle design and technology; and better coordination and quality of post-crash emergency response and care. Following its successful implementation across regions and scales, the Safe System approach has gained global attention. The United Nations (UN) Global Plan for the Decade of Action for Road Safety 2011–2020 embraces a comprehensive, system-based approach to traffic safety. The UN Sustainable Development Goals include targets of halving global traffic fatalities and injuries by 2020 and providing safe, affordable, accessible, and sustainable transport systems and improved road safety by 2030. The 2015 Brasilia Declaration called for greater emphasis on sustainable transportation options, in addition to other established methods for improving road safety. The New Urban Agenda of UN-HABITAT commits to safety for all road users and safe and healthy journeys to school for every child.²

Many countries, states, and cities that have adopted a Safe System approach have reduced road fatalities at a faster rate than others that followed the traditional approach. According to the International Traffic Safety Data and Analysis Group³, the number of road fatalities declined 42 percent between 2000 and 2013 in the 32 countries in IRTAD for which data are available. IRTAD concludes that this overall good performance reflects “the implementation of systematic road safety strategies and programs.” Strategies and programs address education and enforcement issues, such as speeding and lack of compliance with traffic regulations; advance technical standards for road infrastructure and vehicles; improve emergency and health care; and address economic conditions.

¹ World Resources Institute, 2018. Sustainable & safe. A vision and guidance for zero road deaths. Washington: WRI.

² UN-HABITAT, 2016. Habitat III Conference for New Urban Agenda: Draft Outcome Document for Adoption in Quito. September 10. Nairobi, Kenya: UN-HABITAT.

³ IRTAD— the traffic safety data arm of the OECD and the International Transport Forum