

Task Force 06

**STRENGTHENING MULTILATERALISM AND GLOBAL GOVERNANCE**

## Recommitting to and Accelerating Action to Achieve the Sustainable Development Goals (SDGs) for Road Safety in the G20 Countries

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**TF06**



## Abstract

**Background:** Road safety is a major public health issue and key area of focus in the United Nations (UN) Sustainable Development Goals (SDGs) under targets 3.6 and 11.2. At the G20 in 2023, leaders recommitted to accelerating progress to achieve SDGs, and the action plan especially focuses on transformative actions to attain sustainable changes, and this is particularly needed to improve road safety.

**Issue:** Road safety is at a critical juncture and efforts to improve it globally are falling short of what is required to meet the SDGs and the UN goal to reduce road traffic deaths and injuries by 50% by 2030. This is an important consideration for the G20 which account for 59% of global road traffic fatalities. It is projected that annual road trauma levels in the G20 can reach more than 22,000,000 deaths and injuries at an estimated cost of US\$1.8 trillion. Further commitment and acceleration of actions to improve road safety is critical, especially in improving vehicle and infrastructure safety. With the top ten car companies globally, which account for 85% of global passenger car sales, all based in the G20, they are the countries that have the greatest influence and ability to transform vehicle safety and environmental performance. By implementing minimum standards for vehicles and 3-star or better roads for all road users and accelerating developments through New Car Assessment Programmes (NCAP) (e.g. Latin NCAP) and National Road Assessment Programmes (eg. BrazilRAP), the G20 can greatly reduce road trauma to achieve safer and more sustainable mobility.

**Policy recommendations:** The G20 to accelerate actions to implement minimum safety regulations for all new and used vehicles and new and existing roads and infrastructure according to the recommendations in the UN Global Road Safety Performance Targets and the Global Plan for the Decade of Action for Road Safety 2021-2030 and support the development/scaling of NCAPs and National Road Assessment Programmes.



## Diagnosing the issue

Road trauma is a predictable and preventable humanitarian crisis. Tragically, road traffic injuries are reaching crisis proportions globally and over 1.19 million people die, while many millions more are seriously injured every year (WHO, 2023). Inequalities can be seen between different world regions with a death rate 3 times higher in low-income countries compared to high income countries. Over the years, road trauma has made its way into 8<sup>th</sup> place as the leading cause of death globally and is the largest killer of those aged between 10 and 24 years old (WHO, 2016).

Despite this, road injury prevention has largely been overlooked as an issue important for sustainable development. Thankfully, there is now a global mandate for improving road safety. It is recognised as a major public health and sustainable development issue. Significantly, road injury prevention has been included in the United Nations (UN) 2030 Agenda for Sustainable Development. The Sustainable Development Goals (SDGs) for ‘Good Health and Well-Being’ and ‘Sustainable Cities and Communities’ both refer to road safety and have specific targets for road injury prevention (targets 3.6 & 11.2).

More recently, a UN resolution proclaimed the period 2021-2030 as a ‘Decade of Action for Road Safety’ and set a goal for countries to reduce road traffic deaths and injuries by at least 50% by the end of the decade. It also released a Global Plan for road safety (WHO & UN, 2021) to guide countries on priority actions for implementation. With representatives of states and governments affirming their commitment to drive the implementation of the Global Plan at a high-level meeting of the UN General Assembly on Global Road Safety (UN, 2022), the challenge now is for countries to implement changes to achieve the target. This is an updated policy brief from Truong et al. (2023).



## Road safety in the G20 countries

G20 countries account for 59% of global road traffic fatalities and include some of the world's best and worst performing countries, with road safety performance differing significantly between high-income and low- and middle-income countries. With close to 700,000 people killed in road crashes (refer to *Table 1*) in G20 countries each year, the social and financial imperative for action is clear. Not only can road trauma lead to a loss of human life, it also causes heavy financial burdens as a result of life-changing injuries. It is projected that annual road trauma levels in G20 countries alone can reach more than 22,000,000 total deaths and injuries at an estimated cost of US\$1.8 trillion (iRAP, 2023b). For every US\$100 that road trauma costs, only US\$1-3 is spent on prevention.

The G20 is in an ideal position to help change this rather grim picture of road safety as it stands right now by bringing attention to the issue and encouraging greater action to avoid road trauma. Leading countries have achieved ambitious road safety results with reductions in serious trauma by adopting a 'Safe System' approach that manages speed, improves road infrastructure and vehicles, while also supporting legislation, laws, enforcement, and post-crash and medical care, all areas which require consideration by the G20. Many of the solutions to road trauma are known. However, lack of leadership, willingness to invest, and slowness to implement effective measures have had a detrimental effect on road safety. What is required is courageous leadership from within the G20 to implement proven road safety measures.

TABLE 1. Road safety status in G20 countries (2021)

Country	Estimated fatalities	Estimated rate per 100K population
South Africa	14,528	25
Saudi Arabia	6,651	19
China	248,099	17
India	216,618	15
Brazil	33,586	16
US	47,750	14
Mexico	15,267	12
Russia	15,335	11
Indonesia	31,063	11
Argentina	3,983	9
Turkey	5,528	7
South Korea	3,570	7
Canada	1,805	5
Australia	1,163	5
Italy	2,964	5
France	3,035	5
EU (including France, Italy & Germany)	21,660	5
Germany	2,778	3
Japan	3,304	3
UK	1,606	2
<b>Total</b>	<b>671,516*</b>	

Source: WHO, 2023

\*Excludes double counting of fatalities in France, Italy and Germany which are also accounted for under the EU



## Recommendations

### Increasing the safety safety of vehicles

Global research has shown that safe vehicles have immense potential for reducing road trauma by preventing crashes and protecting occupants. Safe vehicles are, therefore, one of the most viable road safety intervention available. Once vehicles are designed and manufactured based on a high safety standard and have utilised appropriate technologies, these safety benefits last the entire lifespan of the vehicles. Alarming, many countries within the G20 have not fully applied the minimum safety standards for vehicles (see *Table 3*) recommended by the UN and its proposed Global Plan (see *Table 2*) and are continuing to allow poor-quality cars to be sold to the public.



TABLE 2. Priority UN vehicle safety standards

Seatbelt Anchorages	UN Regulation 14 (R14)
Seatbelts	UN Regulation 16 (R16)
Child Seats	UN Regulation 44/129 (R44/129)
Motorcycle Anti-lock Braking System (MC ABS)	UN Regulation 78 (R78)/Global Technical Regulation 3 (GTR3)
Frontal Impact	UN Regulation 94 (R94)
Side Impact	UN Regulation 95 (R95)
Electronic Stability Control (ESC)	UN Regulation 140 (R140)/Global Technical Regulation 8 (GTR 8)
Pedestrian Protection	UN Regulation 127 (R127)/Global Technical Regulation 9 (GTR 9)
Autonomous Emergency Braking (AEB)	UN Regulation 150 (R150)
Intelligent Speed Assistance (ISA)	-

Without a universal adoption of the minimum safety standards, manufacturers are able to produce and sell sub-standard cars in countries that are yet to apply safety standards. Typically, these are low- and middle-income countries. It is, therefore, critical to make vehicle safety accessible globally through the universal application of minimum vehicle safety standards to ensure consumers can buy safe and affordable cars.





Every year, approximately 90 million new vehicles are produced and sold globally (OICA, 2024). Of these, those that do not meet the minimum safety standards for vehicles will pose a threat to road safety in their lifespan and can be considered lost opportunities. Given the long lead time for the penetration of new technologies and a replacement of the existing vehicle fleet, there is an urgent need for swift implementation of appropriate legislations.

The World Health Organization facilitated the adoption of 12 voluntary global performance targets for road safety risk factors (WHO, 2017), which were then welcomed by the UN General Assembly (UN, 2018). These are intended to help member states guide action and measure progress during the implementation period in their advance towards meeting the SDGs by 2030. Together, they make up a global framework of safety performance indicators that could substantially reduce road deaths and serious injuries.

In this effort, the UN Global Road Safety Performance Target for vehicles is:

- **Target 5** – By 2030, 100 percent of new (defined as produced, sold, or imported) and used vehicles meet high quality safety standards, such as the recommended priority UN Regulations, Global Technical Regulations, or equivalent recognised national performance requirements.

The safety of the global fleet could be improved by meeting these targets, while also significantly reducing the number of people killed and seriously injured on the road. Implementing these standards in conjunction with consumer information partnerships like New Car Assessment Programmes (NCAPS) could encourage the development of a market for safer vehicles locally and worldwide, such as the NCAP for Latin America and the Caribbean (Latin NCAP). The benefits of NCAPs are two-fold – to assist car buyers to make safer purchasing decisions through the provision of independent safety information and to encourage manufacturers to voluntarily fit safety technologies in advance of any regulatory mandate and to produce safer vehicles.

The top ten car companies globally, accounting for 85 percent of global passenger car sales, are all based in G20 countries. These countries have the greatest ability to transform vehicle and environmental safety and the overall transport market.

### **Increasing the safety of roads**

The impact of improved road infrastructure safety levels on road trauma outcomes cannot be overstated. When safety is prioritised during the planning, design, construction, and operation of roads, it can automatically reduce deaths and injuries. Yet, the quality of roads in G20 countries is still very poor, with 36 percent of vehicle travel being undertaken on 1 or 2-star roads (one star is the least safe, 5 star is the safest)<sup>1</sup> (iRAP, 2023). This is especially true for vulnerable road users who are even more susceptible to injury, with 75 percent of pedestrian travel, 80 percent of bicyclist travel, and 75 percent of motorcyclist travel being done on 1 or 2-star roads (*Figure 1*) (iRAP, 2023).

Star Ratings by road length (km)

Star Ratings by distance travelled (km)

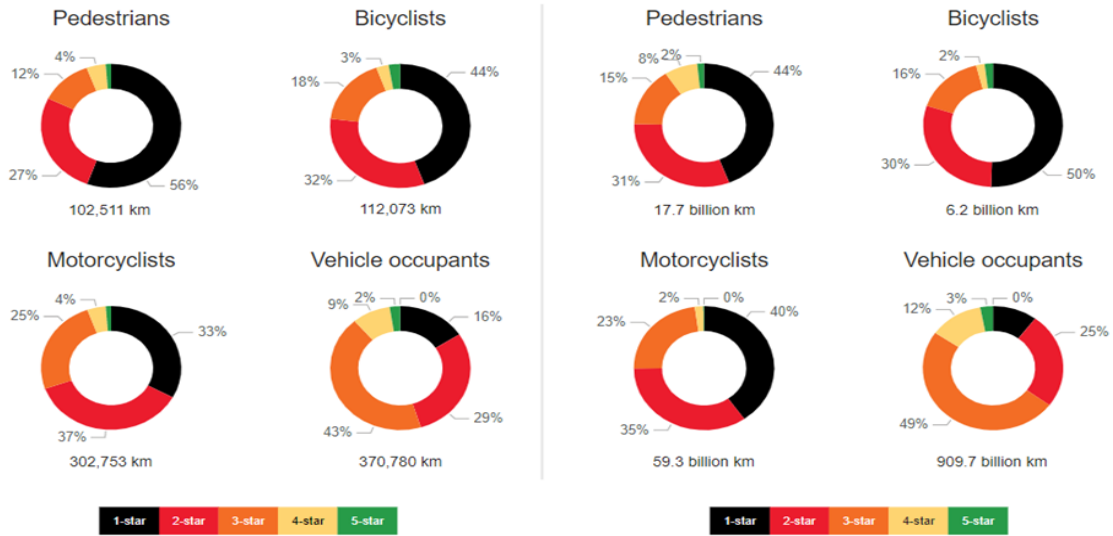


FIGURE 1. Road Safety Star Ratings for a sample of roads in G20 countries\*\*

Source: *iRAP Safety Insights Explorer* (iRAP, 2023b)

\*\*Sample of 369,000km of roads in 26 countries

The UN Global Road Safety Performance Targets for roads are:

- **Target 3**– By 2030, all new roads achieve technical standards for all road users that take into account road safety, or meet a three-star rating or better
- **Target 4**– By 2030, more than 75 percent of travel on existing roads is on roads that meet technical standards for all road users that take into account road safety (equivalent to a three-star rating or better)

An estimated US\$800 billion of road infrastructure investment is mobilised each year in G20 countries, with additional finance provided for road development and Overseas Development Assistance in emerging economies (World Bank, 2022). The systematic application of the ‘3-star or better’ global standard for all road users as part of this existing investment arrangement represents a significant opportunity to deliver on both road safety and the climate agenda. The provision of safe infrastructure for pedestrians, cyclists, micro-mobility users, motorcyclists, and passenger and freight vehicles is fundamental to meeting many of the SDGs.



## Recommendations to the G20

To help achieve the SDG goal for road traffic safety and to support the success of other SDGs, the G20 countries can consider the following policy interventions:

- Adopting the UN Global Road Safety Performance Target 5 for vehicles.
- Adopting the UN Global Road Safety Performance Targets 3 and 4 for roads.
- Supporting the development and scaling of New Car Assessment Programmes (e.g. Latin NCAP) and National Road Assessment Programmes (e.g. BrazilRap).
- Make road safety a priority issue, one to be addressed during Brazil's G20 presidency in 2024.



## Scenario of outcomes

The life-saving potential of standards application and NCAPs are well demonstrated in research. A report found that the application of UN Regulations for seat belts, anchorages, front and side occupant protection in Brazil could result in over 34,000 lives saved and 350,000 serious casualties prevented between 2015-2030 (Cuerden et al, 2015). Similarly, an increase of a 1-star improvement in an NCAP is associated with a 20-25% reduction in the risk of injury (Paine et al, 2013), and NCAPs have the influence to transform and increase the safety of the fleet (Paine et al, 2015) and go a long way in reducing road deaths and injuries.

The benefits of the '3-star or better' standard were demonstrated in the document *G20 Principles for Quality Infrastructure Investment* published during the Japanese presidency in 2019 (Global Infrastructure Hub, 2019) and other research which show crash costs per kilometre travelled are approximately halved for each incremental improvement in infrastructure star rating (iRAP, 2023b). The analysis for G20 countries indicates a return of US\$6 for every US\$1 of infrastructure investment that achieves the target of 75 percent of travel at a 3-star or better standard for all road users. An estimated 250,000 lives will be saved per year with more than 55 million people saved from death or serious injury over the life of the infrastructure interventions deployed (iRAP, 2023b).

Brazil is a global leader in integrating safety assessments into infrastructure projects, where proactive evaluations of over 55,000 km of roads are influencing nearly US\$8 billion in infrastructure investments nationwide. Brazil incorporates road safety targets and optimized investments into major concession projects. This innovative approach, combining results-based financing with Public-Private Partnerships (PPPs), serves as a model for others. The Piracicaba-Panorama (PiPa) concession exemplifies this success

and is one of the first to utilize a performance-based penalty scheme to set clear road safety targets. Upgrading roads to meet the iRAP 3-star rating or higher is projected to save an estimated 34,000 lives and serious injuries and demonstrates the effectiveness of integrating road safety into concession contracts in low- and middle-income countries (LMICs) (World Bank, 2022).



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