



BULLETIN 405/

FACILITATION OF TRANSPORT
AND TRADE IN LATIN AMERICA
AND THE CARIBBEAN

Progress and challenges in road safety in Latin America and the Caribbean

Background

Road safety is a priority on the agendas of global policymakers. In its *Global Status Report on Road Safety 2023*,¹ the World Health Organization (WHO) assessed progress made during the Decade of Action for Road Safety 2011–2020 and established a baseline for the current Decade of Action for Road Safety 2021–2030. The report revealed a 5% reduction in the number of traffic fatalities from 1.25 million in 2010 to 1.19 million in 2021. This decline



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This *FAL Bulletin* concerns the work carried out by the Infrastructure Services Unit in the implementation of projects funded by the United Nations Road Safety Fund. This edition analyses progress and challenges in road safety in recent years, as well as the contributions of the Fund, which have had a positive impact in terms of reducing road accidents in the Latin American and Caribbean region.

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ECLAC

¹ This is the fifth edition of the report published since 2009.



came in spite of a worldwide increase in the vehicle fleet and road networks, as well as a population expansion of almost a billion people.² Only 10 countries in 4 regions,³ including Trinidad and Tobago and the Bolivarian Republic of Venezuela, achieved the Decade of Action for Road Safety 2011–2020 target of a 50% reduction in road traffic fatalities.

Closer examination of the figure of 1.19 million road traffic fatalities in 2021 reveals the following regional distribution: (i) 28% in South-East Asia; (ii) 25% in the Western Pacific; (iii) 19% in Africa; (iv) 12% in the Americas;⁴ (v) 11% in the Eastern Mediterranean; and (vi) 5% in Europe. The latter region stands out for registering the biggest decline (36%) in the number of deaths since 2010, while in the Americas the mortality rate remained constant.

According to WHO (2023), road crashes were the leading cause of death among children and young people aged 5–29 years in 2019, and the twelfth leading cause of death across all ages. Approximately 69% of fatalities were people of working age (18–59 years), generating high costs for public health systems and economic and labour imbalances in society. The economic costs of road crash victims are estimated to account for between 1% and 3% of gross domestic product (GDP), and in some cases up to 6% of GDP. In addition, traffic fatalities disproportionately affect men, with an overall ratio of 1:3 between women and men. Among the most recurrent causes of road crashes are: (i) deficient road infrastructure; (ii) speeding and, in many cases, driving under the influence of alcohol; (iii) failure to use a seatbelt; (iv) absence of child restraint systems; and (v) non-use of helmets by riders and passengers of two- and three-wheeled vehicles.

More than half of all road traffic deaths occur among pedestrians, cyclists and motorcyclists, and 92% of those deaths occur in low- and middle-income countries. In 2021, the highest mortality rates were recorded in low-income countries (21 deaths per 100,000 population), while the lowest rates were found in high-income countries (8 deaths per 100,000 population). Upper-middle-income and lower-middle-income countries had mortality rates of 16 deaths per 100,000 population (WHO, 2023).

In the Americas, 144,090 road traffic deaths were reported in 2021, accounting for 12% of global fatalities. Of that figure, 79% were men, and 21%, women. Figure 1 shows the distribution of fatalities by type of road user in 2013 and 2021, revealing a drop in fatalities for four-wheeler drivers and a significant increase among users of two- and three-wheelers, both globally and in the Americas region.

² The report's findings are based primarily on a survey and review of the legislation of 170 United Nations Member States and 2 territories. Twenty-four Member States did not participate in this report, but their information was included in the country profiles.

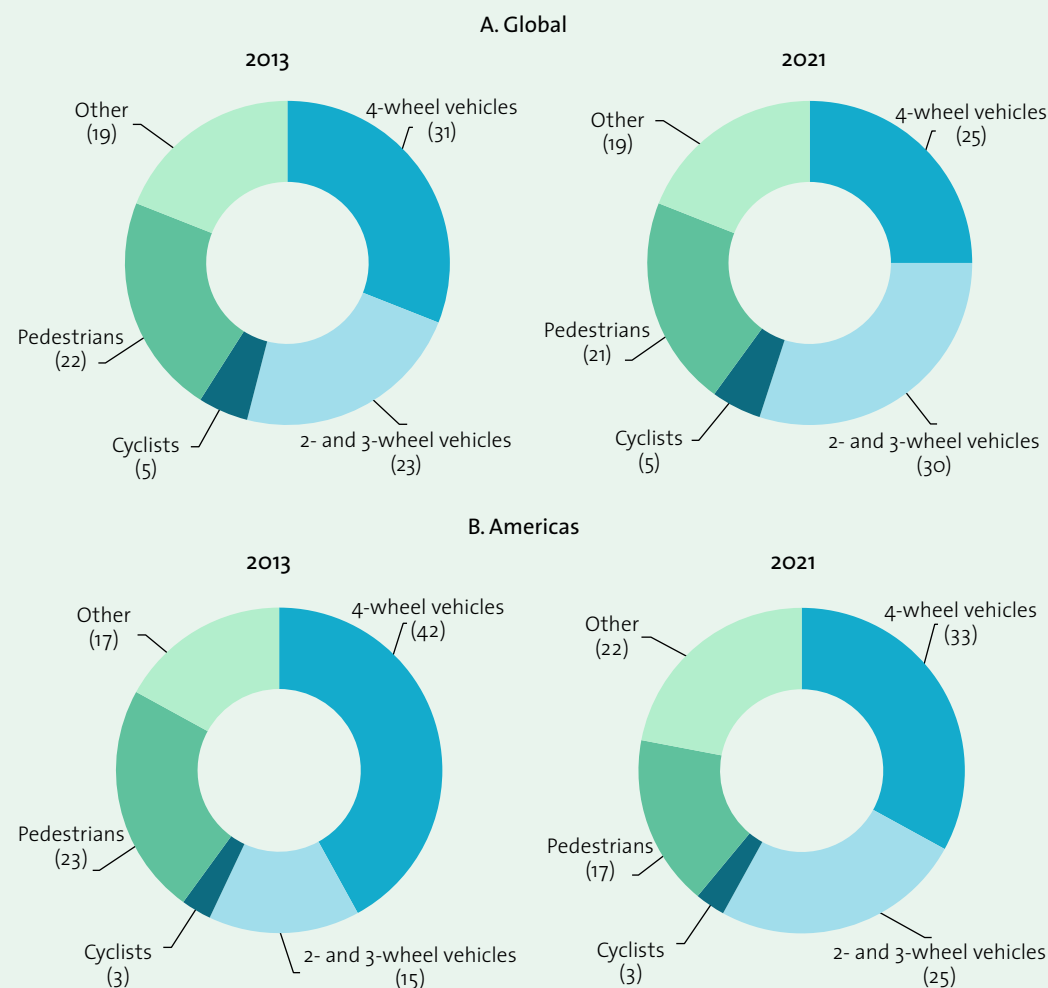
³ The 10 countries that met the Decade of Action for Road Safety 2011–2020 target are Belarus, the Bolivarian Republic of Venezuela, Brunei Darussalam, Denmark, Japan, Lithuania, Norway, the Russian Federation, Trinidad and Tobago, and the United Arab Emirates.

⁴ The Americas region includes Latin America and the Caribbean, the United States and Canada.

Figure 1

The Americas and the world: distribution of traffic fatalities by type of road user as of 2013 and 2021

(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of information from World Health Organization (WHO), *Global Status Report on Road Safety 2023*, Geneva, 2023 [online] <https://www.who.int/publications/i/item/9789240086517>.

The increasing number of motorcycle accidents in recent years has become one of the greatest challenges in the area of road safety. Evidence suggests that motorcycle use varies in line with country income. In general, in high-income countries, motorcycles are mainly used for recreational purposes, while in low- and middle-income countries, a large share of their use is for commercial purposes, serving as a source of income for their riders. Gender also has a strong bearing on motorcycle use, it being a means of transportation predominantly used by men. Azzato and others (2022) note, based on the Latin American mobility surveys, that 78% of motorcycle users are men, while only 22% of riders are women. This information coincides with the male accident rates previously mentioned in the WHO report (2023).

In the case of Chile, for example, the number of motorcycle accident fatalities increased from 112 in 2013 to 231 in 2023. Evidence suggests that one of the main factors behind this increase is the rise in delivery drivers using delivery applications, such as Uber Eats and Rappi (Arellano, 2024). The pandemic helped popularize home-based ordering, which made delivery work an affordable employment option. In addition, motorcycles are an efficient and practical alternative for this type of work, enabling fast travel that is economical in terms of fuel consumption, as well as being affordable.

Another example of a country that has seen a significant increase in the number of people killed in motorcycle accidents is Colombia. According to the International Traffic Safety Data and Analysis Group of the International Transport Forum, Colombia has the worst road accident rate of the 35 countries in its database, with 15.8 deaths per 100,000 population per year. Norway, by contrast, is notable for having the lowest number of motorcycle fatalities, with approximately 2 deaths per 100,000 population. In 2022, Colombia registered 800,000 new motorcycles, the highest number of purchases in a single year in the past decade. Of the total number of road fatalities in Colombia, motorcycle users account for 60% (ITF, 2023).

In Mexico, despite the introduction of a special license aimed at improving motorcycle safety in a bid to counter the high accident rate in the country's capital, accidents caused by motorcycles remain high. Navarrete (2022) notes that analysis for 2022 shows that of the 224 people who were killed in road accidents during the first half of the year, 103 were riding motorcycles (90 as drivers and 13 as passengers).



I. Progress in road safety in Latin America and the Caribbean

In 2018, to address the major global challenge of reducing the number of road crash fatalities, especially in low- and middle-income countries, the General Assembly adopted resolution 72/271, by which it created the United Nations Road Safety Fund. The purpose of the Fund, which was set up as a trust, is to finance and mobilize additional resources to implement high-impact projects based on internationally recognized best practices in order to increase road safety and, ultimately, eliminating the catastrophic consequences of road traffic accidents for all road users (UNRSF, n/d).

The Fund prioritizes projects that have a significant impact in achieving the road safety objectives set out in the Global Plan for the Decade of Action for Road Safety 2021–2030, and also in the 2030 Agenda for Sustainable Development and the 17 Sustainable Development Goals (SDGs). Although the initial focus of the Fund is on two specific SDG targets —3.6 and 11.2— its impact extends to the rest of the SDGs. SDG target 3.6 commits the global community to halving the number of deaths from road traffic accidents by 2030, while SDG target 11.2 seeks to improve road safety by promoting safer access and the adoption of sustainable mobility practices (UNRSF, n/d).

In line with SDG target 11.2, the Fund financially supports projects that promote safer urban environments for pedestrians, cyclists and drivers, as well as sustainable modes of transport, such as public transport and cycling, thus contributing to greater accessibility and quality of life in cities.

The Fund contributes to the achievement of these objectives by financing projects based on five main pillars: (i) road safety management; (ii) safer vehicles; (iii) safer road infrastructure; (iv) safer users; and (v) emergency response systems.

Robust road safety management systems are essential. In that regard, the Fund (2023) stresses the importance of these systems to provide a coordinated approach to road safety challenges, and enable countries to make data-informed decisions, improve enforcement, and ultimately create safer roads for all. In 2023, the Fund actively supported lead agencies in low- and middle-income countries through the following:

- (i) Development of national strategies. The projects in those countries facilitated the creation and implementation of national road safety strategies to meet their specific needs and challenges.



- (ii) Fostering government collaboration. The projects promoted communication and cooperation between government agencies, non-governmental organizations (NGOs) and other key stakeholders, thereby ensuring a unified approach to road safety at the national level and between countries and cities.
- (iii) Facilitating data-driven decisions. The Fund supported the development of systems for the collection, analysis and use of road safety data. This information is crucial for guiding policy changes, improving law enforcement and carrying out monitoring and evaluation activities.

A. Projects implemented by the Economic Commission for Latin America and the Caribbean through the United Nations Road Safety Fund

Thanks to United Nations Road Safety Fund support, the Economic Commission for Latin America and the Caribbean (ECLAC) has so far implemented three projects aimed at improving road safety in Brazil, Argentina and Colombia. These projects, in collaboration with government authorities and other key stakeholders, have focused on reducing traffic accidents by improving road infrastructure and signage, strengthening institutional capacities, increasing enforcement and carrying out road awareness and education campaigns, among other efforts.

1. Strengthening road traffic enforcement in the State of Pará, Brazil: a road safety success story⁵

In 2020, ECLAC, in partnership with the Traffic Department of the State of Pará —as project organizer— and the State Traffic Council, the Military Police of the State of Pará and the municipal traffic agencies implemented the project “Strengthening road traffic enforcement in the State of Pará, Brazil”.

According to Pinto, Barleta and Saade Hazin (2022), the project focused on improving the operational capacity of traffic enforcement in the State of Pará, with the objective of reducing deaths and injuries caused by road accidents. The project sought to increase the efficiency and confidence level of traffic agents, in addition to reviewing and updating their operational practices through specific training sessions, based on the main risk factors and aligned with the activities defined in the 2019–2028 National Road Safety Plan.

⁵ For more details on the project see Pinto, Barleta and Saade (2022).

As the authors state, the project succeeded in strengthening and improving traffic enforcement activities. There was a significant increase in the number of traffic officers with improved skills and greater confidence in carrying out their enforcement duties. In addition, there was a notable decline in traffic fatalities and injuries thanks to the establishment of a statewide traffic protocol.

The project also allowed for a new approach in the way inspections were carried out, from an emphasis on verifying documentation (vehicle ownership registration, taxes, driver's licence) to approaches based on key risk factors, adopting a holistic view of road safety. Both the draft statewide traffic enforcement protocol and the training sessions included international best practices related to driving and alcohol, specifically sobriety checkpoints, high visibility law enforcement operations and random breathalyser testing.

Lastly, it is important to highlight that there was proper coordination between governmental and police agencies. The project has created auspicious conditions for implementing additional road safety activities by periodically reviewing the agreements with the municipal traffic agencies, as required by the National Traffic Code.

2. Speed management in Latin America: the case of Argentina⁶

The project "Speed management in Latin America: the case of Argentina" was selected by the United Nations Road Safety Fund to strengthen technical capacity in three Argentine municipalities: Azul, Cañuelas and Pergamino. According to Saade Hazin and Ortega Duarte (2023), the main objective of the project, which was implemented between 2021 and 2023, was to change the public's views about reducing speed to make urban and rural roads safer, in order to lower the number of road accident victims.

To achieve this objective, ECLAC, together with its implementing partners, carried out pilot projects and shared a manual of good practices with municipal technical authorities and policymakers involved in road safety. In addition to the results obtained in the three municipalities, the aim is to replicate the project in all provinces, the federal district and other municipalities in Argentina. Raising awareness and fostering cooperation to encourage safer and more responsible speed management on Argentine roads was key throughout the project.

A key element of the project was to bring together all stakeholders, as well as the general public, through educational strategies that promoted the benefits of proper speed management. To that end, a multi-agent approach was adopted that actively involved the public and private sectors and civil society.

The authors found that on the roads that cross the municipalities of Azul, Cañuelas and Pergamino, more than 70% of light and heavy vehicles exceeded the speed limits, with collisions mainly occurring in urban areas, in the vicinity of schools and in high-traffic areas. Thanks to the project, public opinion surveys conducted yielded very positive findings: more than 75% of respondents supported the speed management measures and the installation of speed radars. In addition, the safe fleet management pilot proved an effective tool, with a 38% reduction in speeding and a 75% decrease in road accidents.

Lastly, the document highlights that the implementation of road safety policies is more effective when approached from the perspective of shared responsibility between the public sector, the private sector, companies and workers. Two examples illustrate this notion: the successful implementation of the safe fleet management component, achieved thanks to the collaboration of the company Loma Negra; and the valuable technological and economic contribution of Fundación MAPFRE for braking distance demonstrations in cities.

On 11 May 2023, the closing event of the project was held at the facilities of the Ministry of Public Works in Buenos Aires. The event sought to bring together all the stakeholders directly involved in road safety in Argentina, in order to foster collaboration and highlight the contributions of each in improving road safety in the country. ECLAC brought together officials from the National Road Safety Agency (ANSV), the Ibero-American Alliance for Safe

⁶ For more details on the project see Saade Hazin and Ortega Duarte (2023).

Mobility (REDUX), authorities of the target municipalities (Azul, Cañuelas and Pergamino) and representatives of the Ministries of Transport and Health, the ANSV Training Centre for Road Safety Policy and Management, as well as Loma Negra (representing the private sector). During the event, the results of the project were presented, and experiences were shared, which made it possible to identify and outline current road safety challenges in Argentina.

3. Road safety depends on us all: participatory initiatives in different regions of Colombia

ECLAC is currently implementing a third project with support from the United Nations Road Safety Fund, entitled “Road safety depends on us all: participatory initiatives in different regions of Colombia”. The objective of this project is to carry out low-cost, high-impact, participatory urban interventions that actively involve the community, help to reduce traffic accidents and promote safe mobility for vulnerable road users.

The three projects implemented so far have contributed significantly to improving road safety in the countries concerned. However, it is important to note that all these projects are intended to be replicated, both within the countries and in the rest of the region. In addition, beyond SDG targets 3.6 and 11.2, which relate directly to road safety, achieving the SDGs is a core priority in the implementation of all projects involving the Fund.

Despite the achievements, much remains to be done. It is essential to continue developing and perfecting strategies that comprehensively address road safety, as well as involving all stakeholders—from local authorities to the community at large—to ensure that road traffic injuries are reduced for the benefit of all the region’s citizens.

II. Road safety challenges in Latin America and the Caribbean

Road safety faces a series of challenges at the global and regional levels, prime among which are:

- (i) Quality of road and highway infrastructure.
- (ii) Review and updating of traffic laws and regulations.
- (iii) Implementation of road awareness and education campaigns.
- (iv) Use of advanced technology for traffic control and monitoring.
- (v) Promotion and strengthening of mass transit.
- (vi) Cooperation and coordination between national and international authorities involved in road safety.
- (vii) Signing and ratification of the United Nations road safety conventions.

A. Quality of road and highway infrastructure

Adequate and safe infrastructure is crucial for road safety development. Well-designed, well-maintained roads, highways and signage help significantly to reduce road casualty rates.

In addition to having quality infrastructure, it is essential to ensure its continuous maintenance. As stated by the Ministry of Economy of Argentina (2023), it is necessary to conduct periodic reviews of the condition of roads, carry out repairs when necessary and ensure that signage, such as traffic signs, pavement markings and other visual elements, are appropriate to guide drivers.

Good-condition roads also require drainage systems to be clog-free to prevent flooding and streetlights and intersection lighting to work properly, especially in low-visibility conditions or at night. In addition to roads and highways, bridges and viaducts should also be regularly inspected and repaired to ensure their safety and structural integrity.

Currently, many countries in the region are contending with limited fiscal revenues and, in many cases, high levels of indebtedness, making it difficult to invest in the infrastructure needed to ensure the safety of roads, highways, bridges and viaducts. Reducing the infrastructure gap in relation to road safety requires large investments.

In the face of scarce resources, the implementation of public-private partnerships becomes crucial to enhance efficiency in public spending and attract investment. Such partnerships can be an effective solution in addressing infrastructure needs and promoting greater road safety.

Many countries in the region are investing in projects to modernize their road infrastructure, including building better-designed roads, implementing lighting systems and installing safe crosswalks. In addition, as the WHO *Global Status Report on Road Safety 2023* points out, it is essential to advance infrastructure safety to improve accessibility, especially for people with disabilities, and to facilitate transfer between different modes of transport. Infrastructure safety should be a priority for both new and existing roads.

The report also highlights that, despite the continued construction of roads to meet the growing vehicle fleet, many of those roads, especially in low- and middle-income countries, do not meet recognized safety standards. Of the 68 million km of roads reported in the survey, 4.5 million km are paved highways, 47 million km are paved inter-urban roads, and 10 million km are unpaved inter-urban roads. Only 35 countries reported the availability of bicycle lanes, for a total length of 140,000 km, or approximately 0.2% of the total length of roads reported. This deficit in cycling infrastructure has contributed to the increase in cyclist deaths seen in recent years.

In the region's cities, several countries are developing extensive bicycle lane networks to promote the use of bicycles as a safe and sustainable means of transportation. However, it is clear that these initiatives are not yet sufficient to meet demand and comprehensively improve the safety of cyclists.

It would be fair to say that the countries of the region have concentrated their efforts on improving road safety using available resources. This approach has been reflected in all the projects implemented by the United Nations Road Safety Fund mentioned above. An additional example of this commitment is the implementation of the Safe School Route (*Camino Escolar Seguro*) programme in Argentina, which began in 2011. This programme is based on encouraging students to walk to school via safe, appropriately marked routes, with the objective of guaranteeing a safe journey for children and promoting safe mobility practices.

As De la Peña and others (2016) mention, at Primary School No. 1247 Centenario de Rafaela, a pilot programme was implemented to reduce traffic congestion. By means of questionnaires and surveys on mobility habits and accessibility, mobility experts and the educational community identified a safe route for students. The school route, which covers 30 blocks, included signage and infrastructure improvements, as well as collaboration with road safety and public oversight authorities and the *Guardia Urbana Rafaelina*. In addition, road safety awareness and education programmes were carried out for students, parents and neighbours.

Following the implementation of the pilot, a follow-up survey found that 90% of families and students were highly aware of the project, and approximately 20% of families modified their commuting habits as a result of it.

The authors also highlight the progress made in the region with the development of manuals and guidelines for the audit, design, construction and operation of safe roads. For instance, Costa Rica has prepared a manual for the development of infrastructure projects from the perspective of road safety. The manual focuses on accident prevention by incorporating key road safety factors at every stage of road project development, from planning to operation. It also details the stages in the development of a road infrastructure project and presents design principles focused on safety. In this way, it offers professionals and decision makers a valuable tool to improve safety on the country's road network.

The projects implemented by the Fund and those mentioned above offer cost-effective, high-impact solutions to improve road safety at critical infrastructure points in countries, cities or municipalities with limited resources. Although those projects have made significant progress, Latin American and Caribbean countries still need more resources and improvements in infrastructure and signage to strengthen road safety throughout the region.

B. Review and updating of traffic laws and regulations

One of the greatest challenges for road safety in the region is the presence of gaps in laws and regulations and their lack of effectiveness and enforcement. In recent years, countries have introduced new laws and stricter road safety regulations to address problems, including speeding, seatbelt use and driving under the influence of alcohol. Of the 170 countries and two territories surveyed globally, only 6 meet all the best-practice criteria established by WHO to address major risk factors such as speeding, drunk driving and lack of motorcycle helmet use, seat belt use and child restraint systems (WHO, 2023). Fewer than 50 countries have policies that promote sustainable modes of transport such as walking, cycling and mass transit. Lack of investment due to limited resources has been a stumbling block for many countries' efforts to promote safe, sustainable mobility options. In addition, about 80 countries do not have laws governing vehicle safety standards.

Chile is one of the countries in the region that has adopted specific measures, such as a zero-tolerance policy towards alcohol use (ITF, 2017). In Uruguay, strict rules have been implemented on the use of motorcycles, including mandatory helmet use and speed limits (Decree No. 265/009, 2009). Mexico has also tightened its road safety regulations. In 2021 the Ministry of Mobility described the progress of the Road Safety Plan, which included three main components (Navarro, 2021):

- (i) Regulatory strengthening. The Criminal Code was amended to include certain risky behaviours that were not previously considered for road accidents resulting in injury or death.
- (ii) Reform of the Road Mobility Law. Coverage and characteristics of insurance policies were updated, with a special focus on mass transit.
- (iii) Amendment of the Mobility Law Regulations. The rules governing the A1 license were reformed, including the use of breathalysers, sanction procedures and recidivism.

These examples show the efforts of several countries to tighten their road safety laws and regulations. However, despite these initiatives, casualty figures remain high, underscoring the need for further progress in updating and implementing laws and regulations on road safety risk factors.

C. Implementation of road awareness and education campaigns

Awareness campaigns to educate citizens about the importance of road safety, with a particular focus on young people and professional drivers, are on the rise. The following are some examples of road safety education campaigns and improvements in Argentina and the Dominican Republic. Countries that enjoy positive results from such initiatives should serve as models for other nations in the region.

As detailed in previous sections, the United Nations Road Safety Fund finances projects aimed at enhancing road safety in the region. An outstanding example is the project "Speed management in Latin America: the case of Argentina". Key components of this project were its awareness campaigns and the promotion of road safety education to combat speeding. According to Saade Hazin and Ortega Duarte (2023), the project designed campaign phrases, such as "In a hurry?" ("*¿Estás apurado?*") and "Let's take a few minutes to talk" ("*Tomémonos unos minutos para hablar*"), and interviewed family members and friends of road traffic accident victims. The information was used to produce a video and other impactful material, which were distributed during the campaigns in the municipalities of Azul, Cañuelas and Pergamino. The aim was to raise awareness in the community about the dangers of speeding for drivers and pedestrians. These materials and the video have become models for future awareness-raising activities in Argentina and the rest of the region.

Another key activity was the Let's Paint the Future Together initiative (*Pintemos Juntos el Futuro*), in which different artists designed drawings on the subject of speed control. The initiative was combined with talks especially targeting students in the community. While road safety education is crucial, in many countries in the region it is not yet sufficiently integrated into the education system. Challenges, such as failure to comply with traffic regulations, speeding and

the use of mobile phones while driving continue to be major road safety concerns. Evidence shows that increased road safety education helps to reduce traffic accidents.

According to Pinto, Barleta and Saade Hazin (2022), the Dominican Republic is making significant efforts to strengthen road safety education to address the high number of road accidents in the country. There is evidence confirming that the Dominican Republic has the highest rates of road accident fatalities. In response to this situation, the National School of Road Education was created as part of the National Institute of Transit and Land Transport. According to Law No. 63-17 on Mobility, Land Transport, Transit and Road Safety of the Dominican Republic, it is essential to define and organize the general content of courses on traffic rules for violators of this law and its regulations, and continuous training on road safety for national, provincial, municipal and local technicians and officials.

D. Use of advanced technology for traffic control and monitoring

The use of technology in control and monitoring is crucial to advance road safety. Several countries have implemented surveillance cameras and speed radars, which have optimized traffic monitoring systems and enabled a swifter, more effective response by authorities.

Among the most commonly used tools are radio detection and ranging (RADAR) speed cameras. These cameras measure the change in frequency of radio waves bouncing off vehicles to accurately gauge their speed, using the Doppler effect. According to Viion (2021), while early Doppler cameras—introduced more than 40 years ago—were revolutionary, they had problems with precision and accuracy when it came to identifying the target vehicle. Today's cameras have come a long way and address those problems through the use of advanced technologies, such as time-of-flight ranging and radar triangulation.

In Argentina, the use of radars began more than 20 years ago. They were first used on an experimental basis on Route 2, which leads to the Atlantic Coast. With time, these radars have established themselves as a key traffic enforcement tool (Osuna Gutiérrez, 2022). In Colombia, speed cameras have been installed on streets and highways, according to López Bermúdez (2023). These cameras monitor vehicle speed and help to improve road safety by capturing electronic evidence that can be used in cases of alleged traffic violations.

Technological evolution has also had a significant impact on vehicle safety, which has contributed to a reduction in the number of road accidents. Countries with vehicles that meet higher safety standards have shown lower rates of road accident fatalities. In the United States, for example, the National Highway Traffic Safety Administration estimated that in 2012, the fatality risk for occupants of an average vehicle was 56% lower than for vehicles in the late 1950s. Strides in vehicle safety have led to an increase in the annual number of lives saved, from 115 in 1960 to 27,621 in 2012. In total, technological improvements saved more than 600,000 lives between 1960 and 2012 (NHTSA, n/d).

E. Promotion and strengthening of mass transit

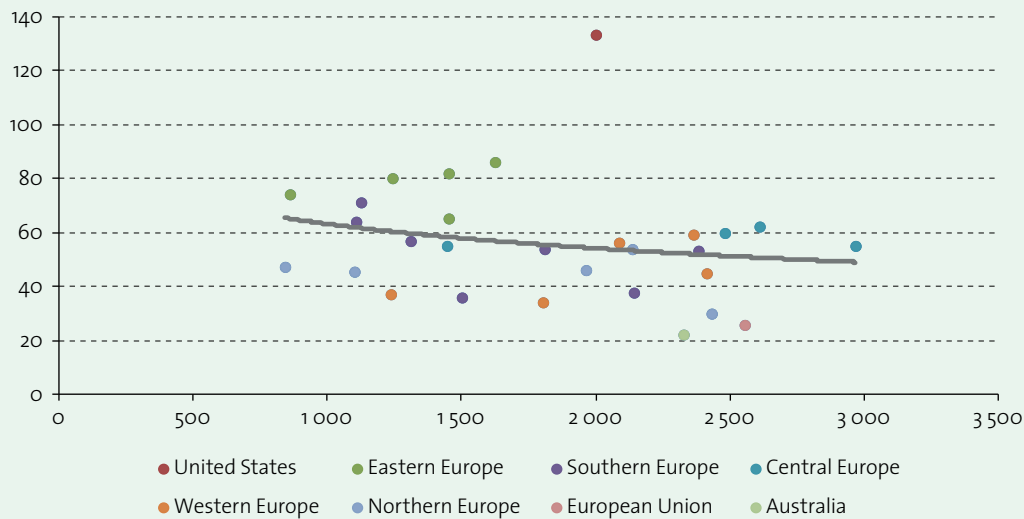
With the growing urban population, it is essential to implement an efficient and sustainable mix of different modes of transport. This includes mass transit, which is crucial to protect the safety of pedestrians, cyclists and other vulnerable users. These groups account for more than half of all road traffic deaths (WHO, 2023).

As the International Association of Public Transport (UITP, 2021) points out, road danger is a direct consequence of the predominance of road transport and inadequate street design and planning. Similar to how traffic congestion can be addressed, the implementation of integrated public transport infrastructure, the use of advanced urban design techniques, and effective traffic regulation are essential to mitigate these problems.

There is evidence confirming a positive correlation between the number of people killed on urban roads and the number of car journeys. According to UITP (2021), in cities with well-developed mass transit systems, the number of deaths in road accidents is half of that recorded in cities where most trips are made by car. Figure 2 shows a clear negative correlation between the use of mass transit and the number of fatalities.

Figure 2

Mass transit use and number of fatalities, 2022



Source: Prepared by the authors on the basis of International Association of Public Transport (UITP), *Better Urban Mobility Playbook*, Brussels, 2021; U.S. Department of Transportation; Transport Canada; Bureau of Infrastructure and Transport Research Economics (BITRE), Australian Government; European Commission; and European Union.

With respect to motorcycles, Azzato and others (2022) highlight the need to distinguish between motorcycle users and four-wheel vehicle drivers in urban mobility policies. It is crucial to analyse the impact of motorcycle use on mobility, as well as the socioeconomic aspects that make them an attractive and expanding means of transport. Transportation demand management policies, which seek to reduce the use of private vehicles and promote mass transit, should evaluate how they affect motorcycle use, either by discouraging their use or preventing their increase. Azzato and others (2022) also mention the importance of developing a safe and affordable mass transit system to prevent people from opting for riskier modes of transportation, such as motorcycles and mopeds. This strategy is aligned with SDG target 11.2 of providing access to safe, affordable, accessible and sustainable transport systems for all, in order to improve road safety and attend to the needs of those in vulnerable situations, including women, children, persons with disabilities and older persons.

F. Cooperation and coordination between national and international authorities involved in road safety

One of the biggest challenges in advancing road safety in countries is having adequate cooperation and coordination among the various national authorities responsible, such as ministries and specialized agencies, as well as among all the stakeholders involved. Lack of coordination can give rise to significant delays in the implementation of effective public policies.

An example of how to address this challenge is the case of Argentina. There, ANSV was established to coordinate and supervise policies and measures related to road safety. ANSV, which collaborates with other government agencies and relevant stakeholders to ensure a comprehensive response, has strengthened the State's capacity to address road safety issues by centralizing management and coordination and achieving greater policy coherence and a swifter response to challenges (Bertraneu, 2013).

Another noteworthy case is that of Costa Rica, where an inter-agency body, the Road Safety Council, was set up to improve coordination between the ministries involved in road safety. The Council brings together representatives from different ministries and agencies to coordinate efforts and develop policies aimed at improving safe, healthy and sustainable mobility on roads, as well as infrastructure and transport (COSEVI, n/d). These examples illustrate how effective coordination among various entities could help improve road safety in the region.

G. Signing and ratification of the United Nations road safety conventions

As mentioned in Saade Hazin and Ortega Duarte (2023), one of the great challenges in Latin America and the Caribbean is the lack of accession to the seven United Nations conventions on road safety, which provide the basis for States to develop national legal frameworks to prevent road traffic injuries and deaths. Road safety governance depends to a large extent on political appetite to create and implement strategies and programmes at the national level. The General Assembly resolutions on improving global road safety urge all Member States to accede to those conventions and agreements (ECE, 2020):

- (i) The Convention on Road Traffic (1968) establishes rules on all aspects of traffic and road safety and serves as a reference for domestic legislation.
- (ii) The Convention on Road Signs and Signals (1968) establishes more than 250 internationally agreed road signs, symbols and markings.
- (iii) The Agreement concerning the Adoption of Harmonized Technical United Nations Regulations for Wheeled Vehicles, Equipment and Parts which can be Fitted and/or be Used on Wheeled Vehicles and the Conditions for Reciprocal Recognition of Approvals Granted on the Basis of these United Nations Regulations (1958), which provide the legal framework for the adoption of uniform regulations, specifically related to safety and environmental issues, for all types of manufactured wheeled vehicles.
- (iv) The Agreement Concerning the Adoption of Uniform Conditions for Periodical Technical Inspections of Wheeled Vehicles and the Reciprocal Recognition of Such Inspections (1997).
- (v) The Agreement concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts Which Can Be Fitted and/or Be Used on Wheeled Vehicles (1998), which provides a framework for developing global technical regulations on vehicle safety and environmental performance.
- (vi) The Agreement Concerning the International Carriage of Dangerous Goods by Road (1957), which establishes standards, including requirements for operations, driver training and vehicle manufacture, that can be applied to prevent and mitigate the impact of collisions involving hazardous goods.
- (vii) The European Agreement concerning the Work of Crews of Vehicles Engaged in International Road Transport (1970), which governs the working conditions of vehicle crews in international transport.

According to ECE (2020), to date, only the Bahamas, the Bolivarian Republic of Venezuela, Brazil, Chile, Costa Rica, Cuba, Ecuador, Guyana, Honduras, Mexico, Peru and Uruguay have signed one or more of these seven conventions.

III. The road to Marrakech⁷

Currently, the regional commissions and United Nations entities are working on the preparations for the fourth Global Ministerial Conference on Road Safety, which is to be held in Marrakech, Morocco, from 18 to 20 February 2025. The event will bring together heads of state and ministers of transport, infrastructure, health and education, as well as NGOs and heads of all road safety agencies. The Conference aims to assess progress in implementing the Global Plan for the Decade of Action for Road Safety 2021–2030 in its first five years and to support a new vision for safe and sustainable mobility.

The fourth Global Ministerial Conference will address key challenges, such as: (i) assessing progress and commitments to halve road deaths and injuries by 2030; (ii) encouraging investment in proven road safety interventions with a high cost-benefit ratio; and (iii) emphasizing the importance of safe road infrastructure and speed management, especially in low- and middle-income countries.

⁷ This section is based mainly on UNRSF (2024) and the Global Alliance of NGOs for Road Safety, [online] <https://www.roadafetyngos.org/events/editorial-marrakech-2025-invest-in-road-safety/>.

It is crucial that governments invest in interventions that are proven to save lives and protect people. Studies indicate that evidence-based road safety interventions are highly cost-effective in reducing health, insurance and other societal costs. For example, the International Road Assessment Programme's Safety Insights Explorer estimates that benefits of up to US\$ 8 could be realized for every US\$ 1 invested in upgrading roads to the 3-star level.

The fourth Global Ministerial Conference will also seek to integrate road safety with other urgent priorities for governments, such as poverty, inequality, climate change and accountability. The WHO *Global Status Report on Road Safety 2023* will be a key reference for discussions at the Conference.

IV. Concluding considerations

In recent decades, road safety has emerged as a key priority on public policy agendas in Latin America and the Caribbean. This approach has been driven by the progress achieved, the persistent challenges in the region and, crucially, by United Nations Road Safety Fund support for the implementation of projects aimed at reducing road traffic fatalities and injuries.

Thanks to the support of the Fund, the ECLAC has carried out several road safety projects that have already shown positive results in Brazil and Argentina. In the State of Pará, Brazil, the operational capacity of the traffic enforcement agencies has been strengthened through improved surveillance and road safety education of the public on the importance of obeying traffic regulations. These achievements would not have been possible without close collaboration between the Ministry of Transportation, the Ministry of Education, the security forces and local authorities, which culminated in a tangible decrease in the number of deaths and injuries caused by road accidents. In Argentina, speed management in the Azul, Cañuelas and Pergamino municipalities has shown how collaboration between different levels of government and sectors of society can produce concrete results. The installation of radars, awareness campaigns and the active participation of the community have helped to create a safer environment. This joint effort between public and private actors has encouraged a change in the mentality of drivers and fostered deeper respect for traffic laws, which shows what can be achieved when all sectors are aligned around a common goal.

Despite these advances, road safety in Latin America and the Caribbean continues to face major challenges. One of the most critical problems is the high accident rate among motorcyclists. In several countries in the region, the number of motorcyclist fatalities has increased considerably, especially with the expansion of the use of this type of vehicle for delivery services. In addition, poor road infrastructure, lack of effective enforcement of traffic laws and limited use of safety measures, such as helmets and seatbelts, continue to be significant problems. In many regions, the infrastructure does not meet international safety standards, increasing the risk to drivers and pedestrians.

Road safety education and awareness campaigns have been instrumental in reducing traffic accidents. The awareness campaigns in Argentina and similar initiatives have been effective in changing attitudes towards speeding and improving road behaviour. Ongoing education about the dangers of speeding and drink-driving is crucial to reducing road crashes. Community engagement in these initiatives has been essential to foster a culture of safety and shared responsibility on the roads.

A key aspect for the success of road safety efforts is cooperation and coordination among different stakeholders. Examples such as the creation of ANSV in Argentina and the Road Safety Council in Costa Rica illustrate how coordination between government agencies, NGOs and the private sector can result in more effective and consistent implementation of road safety policies. Such collaboration facilitates harmonization of strategies and optimization of resources and enables a more agile response tailored to the specific challenges of each country.

Improving road safety requires a holistic approach that combines infrastructure improvement with updating and enforcement of traffic laws. In addition, the use of advanced technologies for traffic monitoring, such as speed cameras and automated control systems, should be

strengthened. Investing in safe infrastructure and promoting mass transit as a viable alternative are crucial measures to reduce dependence on private vehicles and improve road safety.

The road to safer mobility in Latin America and the Caribbean requires a continuous commitment from all stakeholders: governments, civil society and the private sector. Although significant progress has been made, it is essential to maintain and bolster efforts to create a safer, more sustainable road environment. Coordination and cooperation are key to building a culture of road safety that protects all road users.

Ultimately, effective policy implementation, continuous education, coordination among key stakeholders and international cooperation will remain key pillars to achieve the objectives set out for the Decade of Action for Road Safety 2021–2030, as well as in the 2030 Agenda and the SDGs.

V. Bibliography

- Arellano, J. (2024), “Peligro sobre dos ruedas: por qué se duplicaron las muertes de motociclistas en Chile en una década”, *La Tercera* [online] <https://www.latercera.com/la-tercera-domingo/noticia/peligro-sobre-dos-ruedas-por-que-se-duplicaron-las-muertes-de-motociclistas-en-chile-en-una-decada/H3Q3G2TTS5A6BKDKT5B2UPHXHQ/>.
- Azzato, F. and others (2022), *La motocicleta en América Latina: actualidad y buenas prácticas para el cuidado de sus usuarios*, Inter-American Development Bank (IDB), No. 971 [online] <https://policycommons.net/artifacts/2232248/la-motocicleta-en-america-latina/2989721/>.
- Bertraneu, J. (2013), “Creación de agencias especializadas, capacidad estatal y coordinación interinstitucional. Análisis del caso de la Agencia Nacional de Seguridad Vial de Argentina”, *Revista Perspectivas de Políticas Públicas*, vol. 2, No. 4.
- Brichetti, J.P. and others (2021), *La brecha de infraestructura en América Latina y el Caribe. Estimación de las necesidades de inversión hasta 2030 para progresar hacia el cumplimiento de los Objetivos de Desarrollo Sostenible* [online] <https://interactive-publications.iadb.org/La-brecha-de-infraestructura-en-America-Latina-y-el-Caribe>.
- Chukwu, O. (2024), *Editorial – Marrakech 2025: invest in road safety*, Global Alliance of NGOs For Road Safety, February [online] <https://www.roadsafetyngos.org/events/editorial-marrakech-2025-invest-in-road-safety/>.
- CIDEU (Ibero-American Centre for Strategic Urban Development) (2019), “Primer Camino Escolar Seguro de la Argentina” [online] <https://www.cideu.org/proyecto/primer-camino-escolar-seguro-de-la-argentina/>.
- COSEVI (Consejo de Seguridad Vial) (n/d), “¿Quiénes somos?” [online] <https://www.csv.go.cr/quienes-somos>.
- De la Peña, E. and others (2016), “Experiencia de éxito, factor de infraestructura”, *Seguridad Vial en América Latina y el Caribe*, Asociación Española de la Carretera/Inter-American Development Bank (IDB), February [online] <https://www.aecarretera.com/estudios/2019/11.4.-Experiencias-de-exito-en-seguridad-vial-en-America-Latina-y-el-Caribe-Factor-infraestructura.pdf>.
- ECE (Economic Commission for Europe) (2020), “United Nations Road Safety Conventions” [online] <https://unece.org/transport/publications/united-nations-road-safety-conventions>.
- ECLAC (Economic Commission for Latin America and the Caribbean) (2023), *Economic Survey of Latin America and the Caribbean, 2023* (LC/PUB.2023/11-P/Rev.1), Santiago.
- IMPO (Dirección Nacional de Impresiones y Publicaciones Oficiales) (2009), “Aprobación del reglamento nacional de uso de casco protector por parte de los usuarios de ciclomotores, motos, motocicletas, motonetas o similares”, Decreto No. 265/009, Uruguay [online] <https://www.impo.com.uy/bases/decretos/265-2009/1>.
- International Transport Forum (2017), *Benchmarking de la seguridad vial en América Latina. Análisis de políticas de casos específicos* [online] <https://www.itf-oecd.org/sites/default/files/docs/benchmarking-seguridad-vial-america-latina.pdf>.
- ITF (International Transport Forum) (2023), *Colombia: Road Safety Country Profile 2023*, Paris, OECD Publishing [online] <https://www.itf-oecd.org/sites/default/files/colombia-road-safety.pdf>.

- López Bermúdez, D. A. (2023), “¿Va a viajar? Estos son los lugares donde hay cámaras de fotodetección en Colombia”, *El Tiempo* [online] <https://www.eltiempo.com/datos/camaras-de-fotomultas-donde-estan-ubicadas-en-colombia-mapa-y-coordenadas-837092#:~:text=En%20Colombia%20hay%20equipos%20de,19%20de%20diciembre%20de%202023>.
- Ministry of Economy of Argentina (2023), “Infraestructura vial: factor de riesgo de la seguridad vial” [online] <https://www.argentina.gob.ar/seguridadvial/observatoriovialnacional/infraestructura-vial-factor-de-riesgo-de-la-seguridad-vial>.
- Navarrete, S. (2022), “Muertes de motociclistas aumentan en CDMX a más de un año de licencia especial”, *ADNPolítico*, October [online] <https://politica.expansion.mx/cdmx/2022/10/22/muertes-de-motociclistas-aumentan-en-cdmx-a-mas-de-un-ano-de-licencia-especial>.
- Navarro, C. (2021), “CDMX presenta avances del Plan de Seguridad Vial y alistan campaña de concientización”, *El Heraldo de México*, May [online] <https://heraldodemexico.com.mx/nacional/2021/5/19/cdmx-presenta-avances-del-plan-de-seguridad-vial-alistan-campana-de-concientizacion-297668.html>.
- NHTSA (National Highway Traffic Safety Administration) (n/d), *How Vehicle Safety Has Improved Over the Decades*, Washington, D.C [online] <https://www.nhtsa.gov/how-vehicle-safety-has-improved-over-decades>.
- Osuna Gutiérrez, P. (2022), “Cámaras y radares de velocidad: multas, polémicas y cómo evolucionará el sistema”, *La Nación* [online] <https://www.lanacion.com.ar/autos/al-volante/camaras-y-radares-de-velocidad-entre-la-prevencion-y-el-efecto-punitivo-nid11062022/>.
- Pinto, F., E. Barleta and M. Saade Hazin (2023), “Strengthening road traffic enforcement in the State of Pará, Brazil: a successful road safety project”, *FAL Bulletin*, No. 396, Economic Commission for Latin America and the Caribbean (ECLAC), Santiago.
- Pinto, A. M. and others (2023), “Road safety in Latin America and the Caribbean: after a decade of action prospects for safer mobility”, Inter-American Development Bank (IDB) [online] <https://publications.iadb.org/es/seguridad-vial-en-america-latina-y-el-caribe-tras-un-decenio-de-accion-y-perspectivas-para-una>.
- Saade Hazin, M. and J. Ortega Duarte (2023), “Speed management in Latin America: the case of Argentina”, *FAL Bulletin*, 398, No. 2, Economic Commission for Latin America and the Caribbean (ECLAC), Santiago.
- Secretariat of Communications and Transport of Mexico (2022), *Campaña Nacional de Seguridad Vial “Carreteras Seguras” Gobierno de México*, March [online] <https://www.gob.mx/sct/articulos/campana-nacional-de-seguridad-vial-carreteras-seguras>.
- UITP (International Association of Public Transport) (2021), *Better Urban Mobility Playbook. International Association of Public Transport*, Belgium [online] <https://cms.uitp.org/wp/wp-content/uploads/2022/02/Report-BETTER-URBAN-MOBILITY-PLAYBOOK.pdf>.
- UNRSF (United Nations Road Safety Fund) (n/d) [online] <https://roadsafetyfund.un.org/>.
- (n/d), *La seguridad vial la construimos entre todos: intervenciones participativas en diversas regiones de Colombia* [online] <https://roadsafetyfund.un.org/es/projects/la-seguridad-vial-la-construimos-entre-todos-intervenciones-participativas-en-diversas>.
- (2024), “En route pour le Maroc. Un appel à réapprovisionner le fonds des Nations Unies pour la Sécurité Routière 2025-2030”.
- (2023), *UN Road Safety Fund, Annual Report 2023. Staying the course, Building government capacities*.
- Viion (2021), *Cómo funcionan las cámaras de control automatizado de velocidad*, Viion Systems Inc. [online] <https://www.viionsystems.com/index.php/es/noticias/how-automated-speed-cameras-work-1>.
- WHO (World Health Organization) (2023), *Global Status Report on Road Safety 2023*, Geneva [online] <https://www.who.int/publications/i/item/9789240086517>.
- (2018), *Global Status Report on Road Safety 2018: Summary*, Geneva (OMS/NMH/NVI/18.20) [online] <https://www.who.int/publications/i/item/WHO-NMH-NVI-18.20>.
- World Bank (2024), *The World Bank in Latin America and the Caribbean. Overview* [online] <https://www.bancomundial.org/es/region/lac/overview>.

VI. Publications of interest



FAL Bulletin No. 398

Speed management in Latin America: the case of Argentina

Miryam Saade Hazin
Julia Ortega Duarte

This *FAL Bulletin* concerns one of the projects funded by the United Nations Road Safety Fund. In 2018, the United Nations General Assembly adopted resolution 72/271, entitled “Improving global road safety”, which established the Fund, with a view to joining forces and consolidating action to achieve safe mobility targets. The project “Speed management in Latin America: the case of Argentina” was selected for implementation thanks to the Fund and aimed at strengthening technical capacity to implement public policies and strategies to change the perception of the public—in particular in the municipalities of Azul, Cañuelas and Pergamino— about the benefits of reducing speed on urban and rural roads with a clear goal in mind: to advocate for a safer road environment for all.

Available in:

English

Spanish



FAL Bulletin No. 396

Strengthening road traffic enforcement in the State of Pará, Brazil: a successful road safety project

Francisca Pinto
Miryam Saade Hazin
Eliana Barleta

This issue of *FAL Bulletin* shows how the adoption of appropriate road safety measures has not only contributed to reducing the number of traffic-accident fatalities and injuries in the Brazilian State of Pará, but has also become a road safety benchmark for other entities and countries.

Available in:

English

Spanish