

## The need to establish coordinated measures for the reduction of road accidents in Latin America and the Caribbean

This edition of the FAL Bulletin approaches road safety and the need for urgent, coordinated measures to be established between the public and private sectors and civil society in order to prevent the rapid increase in deaths and casualties in road accidents in Latin America and the Caribbean, an issue which is threatening the sustainability of regional development. This bulletin summarises the activities of the Infrastructure Services Unit within the framework of the United Nations Development Account. Its authors are José Ignacio Nazif and Gabriel Pérez Salas. For further background, please contact [gabriel.perez@cepal.org](mailto:gabriel.perez@cepal.org)

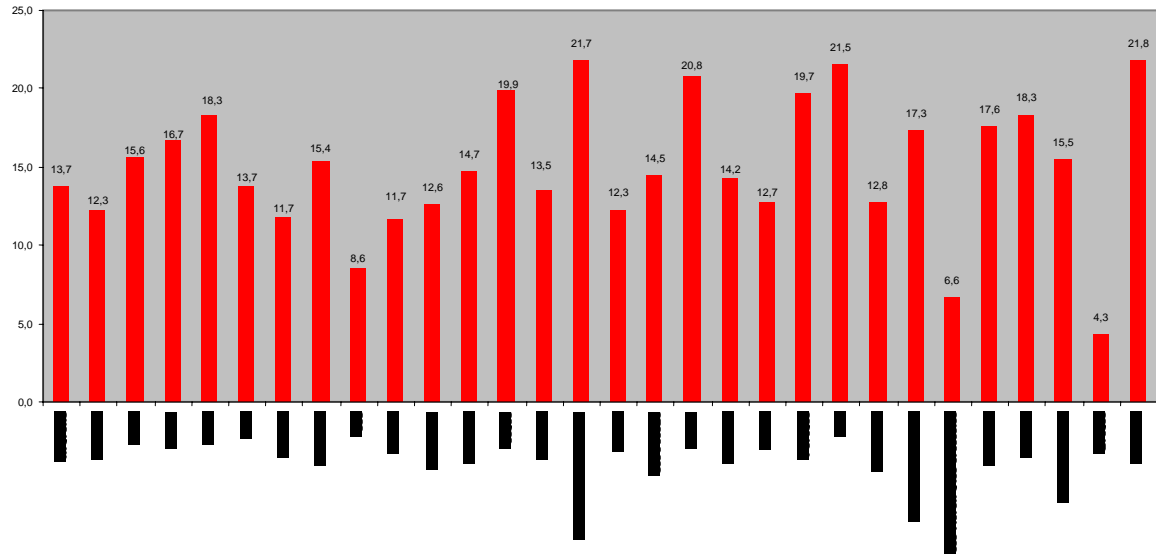
### I. Introduction and background

Road accident casualties are a global problem affecting all sectors of society. It is estimated that 1.2 million people die in traffic accidents every year worldwide, and another 50 million are injured. Approximately 85% of these deaths, however, occur in middle- and low-income countries. The economic and social burden, moreover, is greatest for the poorest sectors and most vulnerable road users, as these accidents not only affect the deceased, but also their families and the government, which has to cover an important part of the costs involved.

According to the World Health Organisation's 2009 report, Latin America and the Caribbean is one of the regions with the highest mortality rates in the world (15.01 deaths/100 000 people) and, without urgent action, this rate will have grown to 31 per hundred thousand inhabitants by 2020.

**Graph 1**

**Traffic accident deaths per 100 thousand inhabitants, by country (2008)**



Source: WHO, Global status report on road safety, 2009

Considering these figures, and the not only economic but social implications for citizens, active and decisive governmental involvement is fundamental, affecting policy-making related to both infrastructures and transport and to health, education, the administration of justice and all the sectors involved. The problem has already been tackled by many high-income countries, which have been capable of reducing the leading indicators in the field by as much as 50% in the last few decades.

Aware of the problem's importance, the United Nations General Assembly, in different resolutions, has confirmed the urgent need for coordinated action related to road safety. Its resolution of 29 May 2003 regarding the Global Road Safety Crisis (A/RES 57/309) refers to a need for global efforts to increase awareness of the importance of road safety as a public policy issue. Its resolution of 11 May 2004 (A/RES 58/289) recognises that many developing countries and countries with economies in transition have limited capacities to address these issues, and underlines, in this context, the importance of international cooperation towards further supporting the efforts of developing countries, in particular, to build capacities in the field of road safety, and of providing financial and technical support for their efforts. Its resolution of 1 December 2005 (A/RES 58/9) expresses its concern at the rapid increase, particularly in

developing countries, in traffic fatalities and injuries worldwide. Finally, its resolution of 25 April 2008 on Improving Global Road Safety (A/RES 62/244) reaffirms the need for the further strengthening of international cooperation and knowledge-sharing in road safety, taking into account the needs of developing countries, inviting all Member States to participate in the projects to be implemented by the United Nations regional commissions to assist low- and middle-income countries in setting their own **national road traffic casualty reduction targets**, as well as regional targets.

Along these lines, ECLAC, like the rest of the United Nations System, has been actively fostering the creation of national and regional coordination measures, by organising seminars and studies aimed at strengthening the political will of the region's countries, promoting a multi-sectoral, coordinated approach for such measures, and encouraging the establishment of casualty reduction targets in order to monitor and strengthen the measures adopted. In 2005, ECLAC published a first study containing statistical information about road safety in the region, highlighting institutional weakness as one of the reasons for the road accident rate differences between different countries<sup>1</sup>.

In 2007, in cooperation with the Chile's National Road Safety Commission, ECLAC developed the "Transport Safety Index"<sup>2</sup> (INSETRA), which is a statistical instrument for evaluating the traffic accident rate in a specific country or city, in order to monitor the impact of the measures adopted on effective accident rate reduction.

In 2008-2009, ECLAC and the other four United Nations regional commissions (ECA, ECE, ESCAP, ESCWA) undertook the project entitled **Improving Global Road Safety: the establishment of national and regional traffic casualty reduction targets**, funded by the United Nations Development Account, the objective of which was to help countries to develop national and regional traffic casualty reduction targets and provide examples of good practices which could help them to achieve such targets by 2015.

As part of this project, ECLAC organised three sub-regional seminars designed to analyse the specific situation and problems affecting these geographical areas. The events took place in Buenos Aires, Argentina for Southern Cone countries, in Panama for the countries involved in the Mesoamerica Project and in Georgetown, Guyana for the Caribbean, with a total of 22 countries attending. The main goal was to analyse the impact of infrastructure design and transport operations on road safety, disseminate

---

<sup>1</sup> Planzer R. Traffic Safety in Latin America and the Caribbean. Actual situation and challenges. In: United Nations - ECLAC, ed. Natural resources and infrastructure. Santiago de Chile: Economic Commission for Latin America and the Caribbean, 2005: 71

<sup>2</sup> Nazif J.I., Rojas D., Sánchez R. and Velasco A., Instrumentos para la toma de decisiones en políticas de seguridad vial en América Latina, In: United Nations - ECLAC ed. Natural resources and infrastructure. Santiago de Chile: Economic Commission for Latin America and the Caribbean, 2006:115,

best practices for reducing road accidents and achieve more effective coordination between governments and civil society. As a result of these seminars, declarations of support were signed for the work done by ECLAC in fostering and disseminating good practices to solve the region's road accident problems, emphasising the need and firm intention of the participants to coordinate national and sub-regional actions to reduce the number of casualties, which is currently threatening the sustainability of the region's development.

## II. Seminar results

### a) First seminar, Buenos Aires, Argentina

The first Road Safety Seminar for national technical agencies, NGOs and sectors linked to road safety from Southern Cone countries took place on 27 and 28 November 2008. It was attended by representatives of technical and governmental agencies from Argentina, Brazil, Chile, Ecuador, Paraguay and Uruguay, representatives of sub-national governments from Argentina and NGOs from Argentina and Uruguay. It also involved the active participation of the French Government, which presented the French viewpoint and road safety policy, and representatives of the Pan American Health Organisation (PAHO) and the Inter-American Development Bank (IADB).

The presentation of the federal authorities of Argentina highlighted the following: the formulation of a Road Safety Policy with permanent funding derived from the mandatory contribution of 1% of compulsory motor vehicle insurance premiums. It is coordinated by the National Road Safety Agency, which was established by law in 2008. Its policy comprises: 1. National Driver's License System. 2. National Driver Incident Register. 3. Package of control and penalty measures. 4. Road Observatory. 5. Education, training and dissemination programme. 6. Inter-jurisdictional Coordination. **This country has established a 50% reduction in the number of road deaths as a target for the next five years.**

Chile also has a Road Safety Policy, which is coordinated by the Chilean Government's National Road Safety Commission, which was created in 1993. The policy comprises: (i) driver instruction and licensing, (ii) vehicle quality management and public road and area management, (iii) transport service management, (iv) auditing, (v) legal action, (vi) accidents and insurance, (vii) research and information and (viii) education and communications. **The country has established a traffic fatality reduction target of 3% per year.**

In Paraguay, the National Road Safety Council was created by Presidential Decree. The National Road Safety Plan has explicitly established an **accident reduction target of 10% for the next five years, reducing fatalities by 20% in the same period.** The plan is divided into 14 strategies, including: (i) governmental and social awareness, (ii) establishment of modern registration and information systems for accidents, vehicles and drivers, (iii) design and application of an effective control, prevention and vigilance system to guarantee compliance with traffic standards, (iv) preponderant involvement of the health sector, (v) improved infrastructures, (vi) education and training and (vii) promotion of the use of safer vehicles.

Uruguay recently established a public proposal for developing road safety in the country. A National Road Safety Unit was created in 2008. It reports to the President of the Republic and has designed a 9-point plan as part of its programme for 2009: (i) single drivers' register, (ii) single casualty register, (iii) data observatory, (iv) penalties and violations, (v) zero alcohol, (vi) driver license points system, (vii) new laws and standards, (viii) national and international strategy and (ix) regional plan.

The seminar ended with the declaration of Buenos Aires, which was ratified by all those attending. The principal agreements set out in the document were: to support the United Nations initiative to establish road accident reduction targets worldwide, the application of best practices enabling the establishment of targets related to proven interventions, to recognise the need for comparable, objective statistical information, and to promote the coordination of broad-based, sustained joint action to enable regional activities aimed at reducing the effects of road accidents, together with their prevention.

## b) Second seminar, Panama City, Panama

The second seminar took place on 27 and 28 May 2009 in Panama City. It was entitled “Regional seminar: establishment of national and regional road accident reduction targets in Mesoamerica” and organised in coordination with the Mesoamerica Project. On this occasion it was attended by representatives of Belize<sup>3</sup>, Costa Rica, Colombia, El Salvador, Guatemala, Honduras, Nicaragua, Panama and Mexico, members of the Mesoamerica Integration and Development Project, representatives of the Governments of Dominican Republic, Chile and France, officials from international agencies such as the IABD, PAHO/WHO and SIECA and Executive Management of the Mesoamerica Project.

With regards to Costa Rica, the Road Safety Council was created in 2001 and there are government institutions responsible for road safety (General Directorate of the Traffic Police, Local Road Safety Councils, Directorate General of Traffic Engineering, National Insurance Institute, Ministry of Public Health, Ministry of Public Education, National Road Safety Council and Costa Rican Social Security System). **The 2007-2011 National Road Safety Plan has established a 19% fatality reduction target.** In relation to infrastructures, pilot road safety audits have already taken place.

Through its Ministry of Transport, Colombia presented the development of a strategy which has reduced fatalities by 9.8% in the last four years. **The target is to reduce the number of both traffic accidents and fatalities in different vulnerable user groups by 10% in the next three years.** Different agents have now been added to the system: Directorate of Transport and Traffic, Ministry of Defence, Ministry of Social Protection, Ministry of Education, other departmental and municipal organisations and the Road Accident Prevention Fund, among other governmental agencies. The main projects currently underway are: single traffic register, national road accident register, investigation of accident rates on public transport, pilot test on two critical corridors of the national road network, driver standardisation, instruction, evaluation and licensing.

In El Salvador, the National Road Safety Committee has been responsible since 2005 for developing the 2004-2009 Strategic Road Safety Plan of El Salvador. This is a multidisciplinary plan which establishes targets. It contemplates re-educating drivers as a fundamental requirement for improving road safety by correcting inappropriate conduct. It does not, however, consider including road safety criteria in the design of new infrastructures, which is one of the major challenges facing future plans.

---

<sup>3</sup> The case of Belize was analysed in the third seminar, when more information was available.

Guatemala's presentation identified the many government agents participating in the application of measures, including the National Police, Traffic Department, Ministry of Communications, Infrastructure and Housing (through the Directorate General of Roads and Directorate General of Road Protection and Safety) and Municipal Traffic Police, emphasizing the importance of establishing efficient coordination, monitoring and evaluation mechanisms. With regards to infrastructures, it highlighted the application of management procedures for roads with high accident rates.

Honduras referred to the creation of the National Road Safety Council, which is responsible for acting in an advisory capacity in the preparation of plans, projects and programmes aimed at reducing road accidents. The National Road Safety Plan has an explicit funding scheme to cover the action to be taken.

With regards to Nicaragua, the National Road Safety and Education Council was created in 2003. It is an autonomous agency, its composition is part public and part private, and it acts in an advisory capacity. The National Road Safety Strategy covers five years (2005-2010), with a **70% reduction in fatalities established as a target for that period**. The controlling authority is the National Police, which also issues driving licenses. This institution is also active in road education and, in cooperation with the Ministry of Education; it is currently involved in the process of changing the respective curriculum.

Panama described its National Road Traffic and Safety Council as the agency which acts in an advisory capacity and is responsible for proposing plans and developing activities. Its Road Traffic and Transport Authority is responsible for the management of road traffic and transport, with its own resources. And the National Police is also involved in this field. It highlighted the existence of indicators to assess the operation of the system established to tackle road emergencies. In relation to infrastructures, the roads with the highest accident rates are identified, proposing both horizontal and vertical road signs, together with other repairs, which nonetheless are not yet compliant with road safety audit standards.

In Mexico, there has been an institution responsible for national policies regarding the prevention of road accident injuries since 2002. It operates with its own resources and is called the National Centre for the Prevention of Accidents. This country's target is to **reduce the number of traffic fatalities by 15%, particularly among the population aged from 15 to 29**. Control is provided by the State and the federal police. Education is based on specific campaigns on the one hand and on including the subject in some educational levels on the other. Road safety audits have started to be performed, and there is now a procedure for processing roads with high accident rates.



The seminar ended with a declaration signed by the participants. As well as confirming their support for the United Nations initiative and proposing the coordination of broad-based, sustained joint action to enable regional activities aimed at reducing the effects of road accidents, together with their prevention, as in the case of Buenos Aires, this sub-region decided to raise the subject to a higher level. It formally invited the Heads of State and Government of Tuxtla Dialogue and Coordination Mechanism countries to consider the creation of a Mesoamerican Road Safety System within the framework of the Mesoamerica Project, with the respective Ministers of Transport studying the institutionalisation of a multi-sectoral regional task force, reporting to the different Mesoamerica Project forums, to propose, manage, adopt and monitor the activities of the Mesoamerican Road Safety System.

### **c) Third seminar, Georgetown, Guyana**

The third seminar, for Caribbean countries, took place on 2, 3 and 4 September 2009 in Georgetown, Guyana. It was organised in cooperation with CARICOM and members of the Guyanan private sector. It was attended by representatives from Bahamas, Barbados, Belize, Jamaica, Surinam, Saint Lucia, Trinidad and Tobago and Guyana, together with representatives of the IABD, PAHO and the private sector.

Bahamas has an established Road Safety Policy based on a broad regulatory framework, as it is associated to the Road Traffic Act, which contemplates the compulsory use of safety belts and alcohol controls. Some highlights of this policy are the use of road signs for safety purposes and infrastructures comprising pedestrian overpasses and roundabouts. The country also has a line of education. The control strategy is applied through the Royal Police of Bahamas, the Department of Road Transport and the Ministry of Public Works. Finally, this policy is based on inter-sectoral collaboration between the National Road Safety Committee, the Ministry of Health, the Ministry of Public Works, the police force and members of civil society.

Barbados highlighted government action through the Ministry of Transport and Public Works, the police force and the Ministry of Education. The police force has developed an educational component and control activities, which are progressing in these two aspects of road safety. The Barbados Highway Code is another of the measures that the country has adopted. Finally, the mass media are being used for prevention campaigns.



In Belize, the road safety policy is the responsibility of the Ministry of Transport. This policy aims to reduce accidents in a five-year period (2007-2012), with non-governmental organisations involved in the Road Safety Committee. The control strategy depends on both the Ministry of Transport and the police force. Driver licenses are issued by means of a decentralised system, by the different Departments of Transport. Educational campaigns aim to improve preventive conduct. The Ministry of Public Works is also making changes to infrastructures considering road safety factors.

Guyana's presentation highlighted the legal resources enabling a road safety policy. The Ministry of Public Works and Communications is responsible for all technical aspects. The police play a fundamental role in enforcement of the laws, although it also performs educational functions with both radio and television campaigns and is responsible for collecting information regarding accidents. The National Road Safety Council is also part of the system established by Guyana.

In Jamaica, road safety is contemplated by two policies: the National Road Safety Policy and the National Transport Policy. Five different areas have been developed: education and information, traffic engineering, emergency response, control and auditing and monitoring. **The established target is less than 300 fatalities per year.** Finally, Jamaica also has multiple government sectors involved in the analysis of the steps that have been taken, including the Ministry of Health, the Fire Brigade, the Ministry of National Security, the National Police Force, the Ministry of Education, the Prime Minister's Cabinet, the Ministry of Transport and Public Works, the Department of Local Government and the Children's Development Agency, among others. Representatives of the private sector and non-governmental organisations are also actively involved.

In Surinam, road safety is based on a broad regulatory network, covered by the Ministries of Justice and Police, Public Works, Transport, Communications and Tourism and Health. Policy goals include reducing fatalities, casualties, accidents, medical costs and material damages. The road safety measures adopted cover the following aspects: control, engineering and traffic design, education and communication and data collection and processing. A Road Safety Committee has recently been created, with representatives of the Ministry of Justice and Police, the Ministry of Public Works and the Prosecutor's Office. Its objective is to design a plan of action.

Saint Lucia also has a broad legal network for the development of a road safety initiative, including the Road Traffic and Motor Vehicle Act, the Road Transport Directory, the licensing authority, the police force responsible for control and collaboration between agencies. The initiative is focused on: infrastructure, particularly road signs, speed limits, roundabouts, bus stops, division between lanes and pedestrian bridges, among others. Education involves programmes aimed at changing or strengthening cultural conduct. Auditing and control is closely linked to the police

information system. Finally, there is inter-sectoral coordination between the Ministry of Transport, the police, the Road Transport Directory, the Board of Insurers, taxi and minibuss associations, the private sector, the mass media and schools.

In Trinidad and Tobago there are a series of agencies involved in a road safety policy. Control, engineering and education are the responsibility of the Ministry of Transport and Public Works. Both the fire brigade and the police report to the Ministry of National Security. The police force is responsible for law enforcement. The Ministry of Health is responsible for the protocol for response to emergencies derived from collisions.

The seminar ended with a workshop which, among other aspects, analysed the institutional and legal framework, and the need for a sustainable Road Safety Committee to be established in each country, with representatives from the government, private sector and civil society. The final declaration, as well as supporting the initiative, highlights the need for road safety to be considered when building urban and rural roads, and monitored by accident audits. It also contemplates other recommendations related to education and the need to standardise vehicle inspections and establish appropriate mechanisms and technologies to ensure that traffic violations can be processed without overloading the legal system.

### **III Conclusions**

In all this time, ECLAC has attempted to support the development of road safety in the region by promoting public infrastructure service policies which take road safety into account and the creation of coordinating agencies between the public sector and civil society to ensure effective action in support of sustainable development in different geographical areas. The establishment of fatality and accident reduction targets could be useful for assessing the impact of the action taken, which can be re-formulated if the results are not as expected.

Although the region's countries show significant diversity in relation to this challenge, public interest is evidently growing. Indeed, the creation of leading agencies has progressed significantly in each sub-region. Finally, the target-establishment process is an emerging response, as eleven of the region's countries have already adopted such a public policy and international experience shows that countries which establish an objective, public, numerical target are more effective in reducing accident rates. The following table shows the institutions responsible for road safety in the region, together with the reduction targets established in each country.

**Table 1: Presence of leading agency and reduction targets by country**

|                                  | Leading agency   | Declared reduction target   |
|----------------------------------|--|---|
| Argentina                        | National Road Safety Agency  | 50% the number of fatalities in the next five years                               |
| Barbados                         |  |   |
| Belize                           | Department of Transport and Police Department Road Safety Committee                |   |
| Bolivia                          | National Road Safety Council   |   |
| Brazil                           | National Traffic Department<br>National Traffic Council                            |   |
| Chile                            | National Traffic Safety Commission   | 3% fatality rate per year   |
| Colombia                         | National Traffic Authority   | 10% of fatalities in different groups of vulnerable users in the next three years |
| Costa Rica                       | National Road Safety Council   | 19% the number of fatalities in the 2007-2011 period                              |
| Cuba                             | National Road and Traffic Commission   |   |
| Ecuador                          | National Traffic and Road Transport Council  |   |
| El Salvador                      | National Road Safety Committee   |   |
| Guatemala                        | National Council for the Prevention of Traffic Accidents and Road Safety Education |   |
| Guyana                           | Guyana National Road Safety Council  |   |
| Honduras                         | National Road Safety Council   |   |
| British Virgin Is.               |  |   |
| Jamaica                          | National Road Safety Council   | Less than 300 fatalities per year   |
| Bahamas                          | National Road Safety Committee   |   |
| Mexico                           | National Centre for the Prevention of Accidents                                    | 15% of fatalities in the population aged 15 to 29                                 |
| Nicaragua                        | National Road Safety and Education Council   | 70% of fatalities in the 2005-2010  |
| Panama                           | National Traffic Authority   |   |
| Paraguay                         | National Road Safety Council   | 20% fatalities in the next five years   |
| Peru                             | National Road Safety Council   | 30% of collisions caused by road users' attitudes or conduct                      |
| Dominican Republic               |  |   |
| Saint Vincent and the Grenadines |  |   |
| Saint Lucia                      | Road Transport Board   |   |
| Surinam                          |  |   |
| Trinidad and Tobago              |  |   |
| Uruguay                          | National Road Safety Unit  |   |
| Venezuela                        | Inter-ministerial Commission for Road Safety, Accident Prevention and Education    |   |

Source: based on information from the WHO "Global status report on road safety", 2009.