

## Technical Note on Road Safety in Haiti

Nathalie Chiavassa Raphaël Dewez **Transport Division** 

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Technical note on

### Road Safety in Haiti





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### **List of Abbreviations**

AIS	Accident Information System	MSPP	Ministry of Public Health and Population
CAN	National Ambulance Centre	MTPTC	Ministry of Public Works, Transport and
DCPR	Direction de la Circulation et de la Police Routière	Commu	inications
FER	Road Maintenance Fund	NCAP	New Car Assessment Programme
GBD	Global Burden of Disease	NGO	Non-Governmental Organization
GDP	Gross Domestic Product	OAVCT	Third-Party Vehicle Insurance Organization
HDI	International Human Development Index	OECD	Organisation for Economic Co-operation and
HI	Humanity and Inclusion (Handicap International)	Develop	oment
IDB	Inter-American Development Bank	RSI	Road Safety Inspections
INFP	National Professional Training Institute	SDGs	Sustainable Development Goals
MEF	Ministry of Economy and Finance	UN	United Nations
MINUS	<b>TAH</b> United Nations Missions for stabilization in Haiti	VRU	Vulnerable Road Users
MSF	Medics without Border	WHO	World Health Organisation

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### 1. Introduction

The Republic of Haiti is a country located on the island of Hispaniola in the Caribbean Sea. The country covers 27,750 km² for a population estimated at 11,123,178 in 2018. The density of population is about 382 pers./Km². The Gross Domestic Product (GDP) Per Capita was estimated at USD 1,819 in 2018. Haiti is 169th of 189 countries in the International Human Development Index (HDI).

Road Transportation is vital for the economic and social development of the country. Haiti has a road network of 4,370 km of roads, including approximatively 1,800 km of asphalted roads and 8 National Roads connecting the main economic centres of the country.

The Inter-American Development Bank (IDB) has continuously supported Haiti's development efforts for many years. After the earthquake and the widespread destruction of basic infrastructure in Haiti, the IDB has significantly increased its technical and financial assistance. The Bank is currently one of the main sources of investment in the country.

A large part of the Bank's investment in Haiti is dedicated to improving road infrastructure. Main national road corridors were rehabilitated with support from the IDB. In the same time, the rapid increase of motorization and improved roads have contributed to relatively higher speeds of vehicles in the country. In this context, the Bank was the first Donor to initiate specific actions to mitigate road traffic crashes and

improve safety conditions in Haiti. These actions were conducted in the framework of the "UN Decade of Action for Road Safety 2011-2020" and will continue over the next coming years.

Over the last Decade, priority investments for Road Safety improvement have covered the establishment of a National Road Safety Strategy and a 5-year Action Plan, technical support for the establishment of a National Road Safety round table supported by working groups, the installation of a modern computerized Accident Information System (AIS) at Traffic Police (DCPR), training sessions and capacity building.

However, results in addressing Road Safety challenges have remain very partial due to important gaps in institutional capacities to undertake concrete actions, the lack of accurate and complete data and the lack of law enforcement measures at all levels.

This technical note was prepared in order to shed the light on the Road Safety situation of Haiti and to review efforts and challenges at all levels of Road Safety.

#### **DISCLAIMER**

Data presented in this technical note are partial and manly based on international crash data available. It is admitted that crash data are largely underreported in Haiti and with possible distortions. Only main figures are presented.





# 2. Part 1 Road Safety situation in Haiti

Improving Road Safety is among top political challenges for Haiti. Compared to other diseases, the Road Safety situation has not improved in the last decades. Awareness among drivers and the road users in general is still very poor. In this context, the Road Safety situation may have contributed negatively to the development of basic infrastructures and welfare.

The following paragraph gives a picture of the Road Safety situation according to available Data. However, it is largely accepted that crash data are probably much higher in the reality.

#### 1. Crash Data

Road Safety is a critical issue in Haiti. Lack of accurate detailed crash data clearly have a significant impact on political guidance for improving road safety. In 2017, road injuries were estimated to be the fifth leading causes of deaths in the country. The fatal crash rate per capita is estimated at 19.21 deaths per 100,000 inhabitants, which is about four times higher than the best performing countries in Western Europe<sup>1</sup>. While HIV/AIDS has been reduced by 60% over a ten years period, road injuries have increased by 4%.

In 2016, according to an IDB funded study performed in the metropolitan area<sup>2</sup>, traffic crashes have accounted for approx. 20% of hospitalizations in public hospitals. 56% of hospitalized victims were 21 to 40 years old.

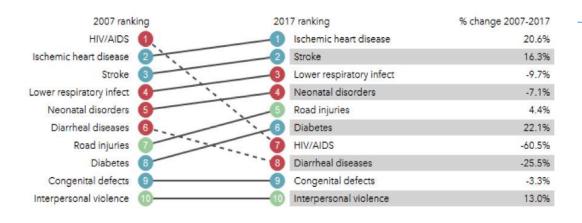


Figure 1: Leading causes of death in Haiti (GBD, 2017).

<sup>1.</sup> Data from WHO Road Safety Annual Report, 2018.

<sup>2.</sup> Analytical and epidemiological study of road traffic injuries in Haiti (IDB/PAHO, 2017).





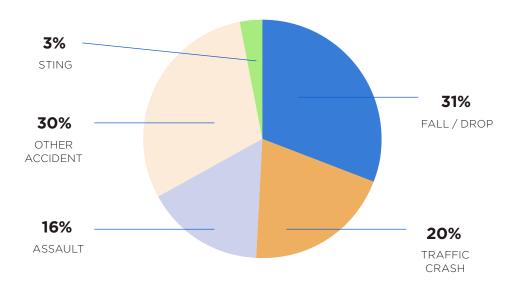


Figure 2: Hospitalizations causes in 2016 in the metropolitan area (IDB, PAHO, 2017).

The Road Safety situation in Haiti can be compared to the situation of other countries in the region. According to WHO data published in 2017, the average fatal crash rate per capita in the Americas was 16.4 deaths per 100,000 inhabitants, ranking from 34.6 in the Dominican Republic, down to 5.7 in Granada. More recent data published in 2019 by the GBD suggest that the situation has remained quite stable, with a rate of 11.02 death per 100,000 population for Haiti.

Available national data compiled by OAVCT<sup>3</sup> suggest that the tendency in road crashes in Haiti has remained quite stable over the last decades with approx. 45,780 road crashes between 2000 and 2009 and 17,679 crashes between 2010 and 2014. Nevertheless, it is largely accepted that road crashes are underreported in the country.

Over the 2000 to 2010 period, the same national data compilation estimates that a majority of road crashes have occurred in urban areas (29,583 crashes against 16,200 in rural areas) and that a majority of victims were men (34,857 men against 10,926 women).

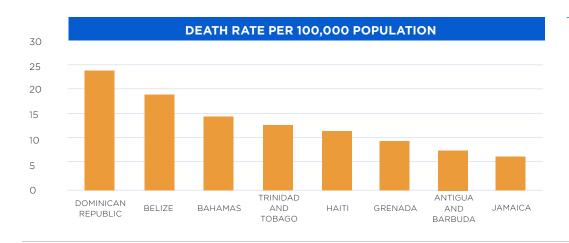


Figure 3: Haiti among other countries in the Region (GBD, 2019).





#### 2. Road users

Traffic composition in Haiti is characterized by a mix of users ranking from heavy trucks to buses, minibuses, pick-ups, cars, motorcycles and many pedestrians. This mixed function of the road between motorized vehicles and Vulnerable Road Users (VRU) such as pedestrian leads to a higher conflictive traffic environment were safety is difficult to manage.

It is worth mentioning that motorcycles are generally used as taxis all over the country and that public transport in urban areas is essentially operated by transformed pick-ups also called "Tap-Tap" and different types of minibuses and buses.

The road in Haiti has a mixed function. In urban areas and small villages, intersections are widely used as parking areas for "tap-tap" and moto-taxis as well as for merchant activities.



Figure 4: Typical road user categories in Haiti (Photo from the Consultant)



Figure 5: Major intersection on a small village on National Road N°1 (Photo from the Consultant)





Available traffic data composition from national statistics estimate that the total number of registered vehicles in Haiti was multiplied by 4 between 1998 and 2012. It is estimated that more than 523,900 vehicles are currently registered in the country.

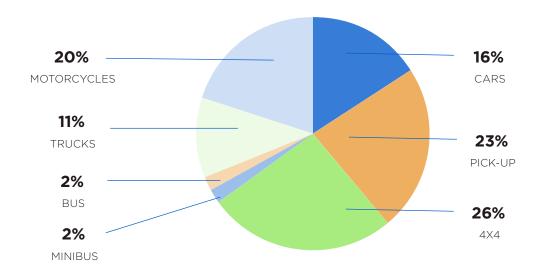


Figure 6: Traffic composition (OAVCT, 2014)

It is interesting to notice the very rapid increase of motorcycles in traffic between 2008 and 2012. This situation may be particularly preoccupying because drivers of moto-taxis do not receive a formal driving education.

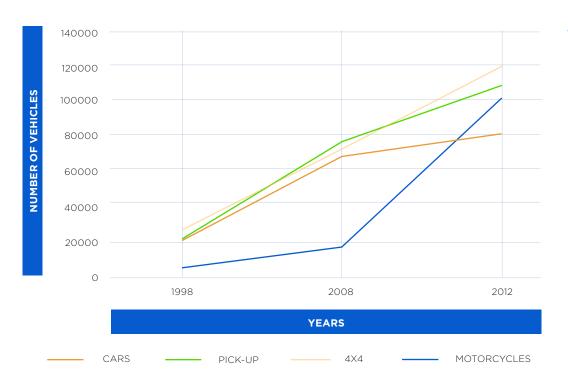


Figure 7: Rapid increase of motorcycles (OAVCT, 2014)





According to Global Burden of Disease (GBD) 2017 report, road users involved in traffic crashes in Haiti are comparable to the average of the Caribbean region. **However, the proportion of pedestrians seems significantly higher in Haiti than in the region with 41% of total deaths among road user categories.**Pedestrians being among the most Vulnerable Road Users (VRU), this is a particularly preoccupying situation.

The same situation applies for motorcyclist and passengers of moto-taxi who are very exposed to traffic crashes (around 15%).

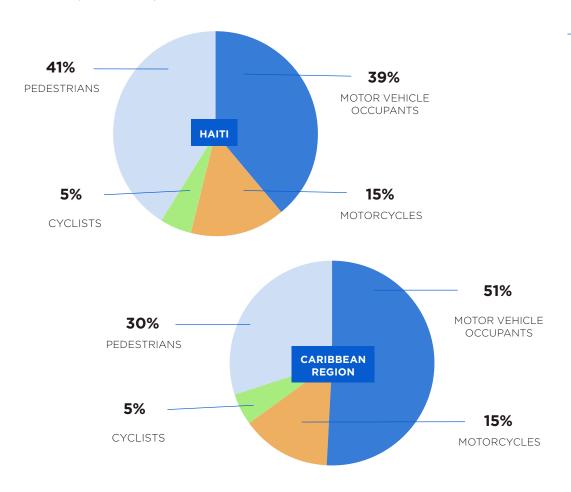


Figure 8: Estimated deaths by road user categories (GBD, 2017)





Figure 9: The use of taximoto as collective and mix transport in Haiti







#### 3. Road Safety challenges for Haiti

The Road Safety System Approach and the UN Sustainable Development Goals (SDGs) have provided a classification of five pillars for Road Safety improvement.

The five road safety pillars provide with a framework for promoting harmonized and integrated road safety initiatives worldwide.

Like many other countries, Haiti is facing challenges in all aspects of Road Safety. The following paragraphs intend to give a presentation of road safety challenges according to the five pillars of road safety improvement.

#### **PILLAR 1: ROAD SAFETY MANAGEMENT**

The Road Safety Pillar 1 is set to encourage the creation of multi-sectoral partnerships and designation of lead agencies with the capacity to develop and lead the delivery of National Road Safety Strategies, plans and targets, underpinned by the data collection and evidential research to assess countermeasure design and monitor implementation and effectiveness.

#### International conventions

One of the first important aspect of the Pillar 1 is to adhere and implement international Road Safety Conventions.

Haiti is a member of the Geneva Convention of 1971 on the adoption of uniform traffic rules, signs and markings. However, the provision of uniform Traffic Control Devices (signs, marking and lighting) in Haiti remains a big challenge. To this date, Haiti has not adopted a uniform standard for road sign and

marking plan and, for this, reason, many different standards from the US and Europe are present on the roads.

The mix of standards has huge consequences on the continuity and readability of the road information provided to drivers. International practices have shown that adequate signing and marking of roads can reduce driving mistakes by 70%.





#### Road safety lead agency

Various initiatives were undertaken in Haiti in order to name a Road Safety Lead Agency. The establishment of a Road Safety Unit at the Ministry of Public Works, Transport and Communications (MTPTC) is one of them. This small unit was supported by the IDB with capacity building and a specific technical assistance was provided for the establishment of a Multi-sector round table with the aim of initiating multi-sector coordination of priority action plans. Despite these

efforts, multi-sectoral coordination on road safety is still weak in Haiti. Unfortunately, this process stops working without being supported by the Bank's external assistance and would require a stronger leadership and engagement from all parties. The culture of sharing information and engaging into a multi-sector coordination is not very developed in Haiti and public institutions experience more difficulties in initiating such a process.

#### National Road Safety Strategy

The establishment of a National Road Safety Strategy aims at: confirming long-term investment priorities; specifying agency responsibilities and accountabilities for development and implementation of core work programmes; identifying implementation projects; building partnership coalitions; promoting road safety management initiatives such as the new ISO

traffic safety management standard ISO 39001; and establishing and maintaining the data collection systems necessary to provide baseline data and monitor progress in reducing road traffic injuries and fatalities and other important indicators such as cost, etc.

#### Data-driven performance analysis

Set realistic and long-term targets for national activities based on the analysis of national traffic crash data through identifying areas for performance improvements; and estimating potential performance gains.

This activity would require a stronger support. Haiti has established an Accident Information System at the Traffic Police Direction (DCPR) in 2014, but the system is still facing many obstacles in order to work at its full capacity. The first problem is for data collection from traffic Police Agents. This task is not a mandatory activity for Traffic Police Officers and stops whenever not fully supported by the Bank's

assistance. Despite the motivation and strong interest of Traffic Police itself, the level of appropriation of such a system by National Police remains poor. As a consequence, there is no hierarchical process supporting data collection from top level Police deciders in Haiti. The OAVCT also collects accident data on site, particularly in urban areas, whenever there is a material damage on registered vehicles. But this organization does not share accident data with other institutions. Another consequence is that other institutions have limited access to existing data, and the use of the Accident data for identifying areas of improvements and potential gains is still not possible.





#### Secure sustainable funding for road safety

Road Safety in Haiti is almost exclusively funded by external Donors, the IDB being the most important. NGOs and some foundations also provide few funding for Road Safety initiatives. However, developing sustainable funding for Road Safety would require having a better picture of the funding needs and the establishment of a long-term mechanism supporting both public and private initiatives.

Haiti has established a Road Maintenance Fund (FER) in 2002, which benefits from fuel taxes and budget support from other international partners, but is still struggling to meet the maintenance needs of Haiti's National Road System<sup>5</sup>. But there is no specific funding dedicated to Road Safety in Haiti.



#### **PILLAR 2: SAFER ROADS AND MOBILITY**

The Road Safety pillar 2 aims at raising the inherent safety and protective quality of road networks for the benefit of all road users, especially the mos vulnerable (e.g. pedestrians, bicyclists, and motorcyclists).

#### Eliminating high risk roads

The National Road Safety Strategy 2015 has set various objectives as regard to improving safety level of road infrastructures, in particular by eliminating high risk roads on the national network, identifying and correcting black spots and promoting Road Safety Audit of all road projects. The IDB places emphasis on road safety in financing and supporting road network rehabilitation. Road Safety Audits are planned for all new roads to be rehabilitated with funds from the new IDB program (HA-L1104). In order for Road Safety Audits to become a more

and more mandatory procedure in Haiti, the IDB as initiated some key institutional strengthening activities oriented to road safety who will include capacity-building for these Road Safety Audits. In a longer term, the elimination of high-risk roads from the Haitian network would require a more systematic identification, detailed data and an improved level of accountability and responsibility from road authorities in implementing preventive measures to reduce crashes.





#### Designing roads for all users need

Recognizing and promoting the need for all users is one of the top challenges of road network improvement in Haiti. The rapid increase of motorists since 2008 has had consequences on traffic composition. National Road network crossing urban areas was not planned to integrate this increase of motorists and, in a large measure the specific needs of Vulnerable Road Users (VRU). Dedicated spaces

for motorists, cyclists and pedestrians are very poor. Speed management on national roads crossing small villages is not continuous and road crossing are not planned in a way of protecting pedestrians. In a large majority, roads are planned exclusively for cars. Safe mobility for VRU, including impaired people is a strong challenge for the country.

#### Promote safety on existing roads

Road safety on the existing road network is in principle conducted as a periodic mandatory activity including Road Safety Inspection (RSI) by local engineers from the Road Safety Unit, the identification of hazardous locations, safety assessment and small road safety improvement works during periodic maintenance.

Road Safety Inspections are not carried out in Haiti as part of road maintenance. The renewal of signs and marking being the only activity considered at this stage. Some crash locations or hazardous locations are well known and a list of them was even established in 2015-2016 with the MTPTC and Traffic Police, but no action was taken to correct these locations. After a crash, road authorities do not really conduct detailed site investigation and road damages such as damaged crash barriers etc. are not replaced systematically.

This has for consequence to increase the number and level of unsafe locations along existing road networks over time.

#### Promote safer new roads

The safe development of new and rehabilitated infrastructures is nowadays largely promoted in the world, in particular with the recent development of systematic Road Safety Audits and rating systems. In Haiti, the IDB plays a very important role in promoting safer infrastructure that meets

international safety standards with a great emphasis on the National Road Network. However, it is still a challenge for the country itself, especially for better integrating mobility and safety needs of all users. The needs of VRU including impaired people should be more emphasized.







#### Promote a culture of road safety

The development of a "Road Safety culture" is a big challenge for a country like Haiti were the society must face many human challenges in education, awareness and training. However, the IDB has launched some road safety initiatives that had a strong impact, including training on road safety audits and crash data

collection. In a longer term, institutional mechanisms such as the multisector road safety round table would serve as a good basis for promoting the development of national education programs and curricula, thus supporting the emergence of a new generation of engineers and practitioners in Haiti.

#### Best international practices

Research and development have been very active in recent years, especially around the development of the "Safe System Approach" and safer infrastructures. The challenge for Haiti is to take a step in adhering to concepts and best practices that are tested and established at international level. As an example,

Latin American Countries have established regional programs and Road Safety Observatories with the support from IDB and the World Bank, where Haiti could participate. Also as a member state of the Geneva Convention, Haiti would benefit in implementing some of these international standards.



#### **PILLAR 3: SAFER VEHICLES**

Encourage universal deployment of improved vehicle safety technologies for both passive and active safety through a combination of harmonization of relevant global standards, consumer information schemes and incentives to accelerate the uptake of new technologies.

#### Safety standards of imported cars

Crash tests conducted by Latin NCAP<sup>6</sup> (New Car Assessment Programme) in 2013 have demonstrated that a majority of cars imported in Latin America and the Caribbean failed to comply with even a star safety level, while their equivalent models in Europe and America often score a minimum of four out of five stars. It is quite a big challenge for many countries to be able to set minimum requirements

for manufacturers to apply the UN's minimum crash safety standards to their global passenger car production. It is another challenge for a country to impose regulations on imported cars and still provide with affordable cars for all. Regional initiatives supported by United Nations and OECD have already started to impose minimum safety requirements for all manufactured cars.





#### Technical inspection

Another big challenge for Haiti is to maintain a minimum level of safety for operating cars and other vehicles. Technical inspection is not carried out in Haiti. Therefore, even if a visual inspection is carried out at the registration of the car, safety condition of cars will decrease dramatically over years, with no minimum mandatory checks.

This situation is particularly preoccupying for trucks, minibuses and transformed pick-ups used as collective transport means. A law enforcement plan would be necessary in order to establish a mandatory technical inspection mechanism in the country.



#### **PILLAR 4: SAFER ROAD USERS**

Develop comprehensive programs to improve road user behavior. Sustained or increased enforcement of laws and standards, combined with public awareness/education to increase seat-belt and helmet wearing rates, and to reduce drink-driving, speed and other risk factors. This pillar combines a wide range of activities including ranking from Law application to drivers training and education.

This pillar represents an important challenge for Haiti in all activities. Human factor contributes for approximatively 80% to 90% of crashes and addressing such challenges require long term engagement and funding with a quite unpredictable effect on reducing the burden of traffic crashes. However, no Road Safety improvement program can work without reducing human factors in traffic crashes.

#### Increase awareness and education of the road users

Formal education does not specifically provide road safety education. Awareness among the road users is in general very low. The same applies for Driver's awareness and education. Lack of awareness affects negatively user behavior. A large effort is to be made in improving awareness among road users in Haiti.

#### Speed limits

As stated previously in the document, speed management is not continuous and well defined along the national road network in Haiti. The lack of speed calming measures at the entrance of urban areas crossed by national roads increase the risk of traffic crash with Vulnerable Road Users (VRU)

living in the area. Defining a speed management plan would also require the establishment of a uniform standard on signs and marking in the country (reference is made to the Pillar 2), and the development of capacities within Traffic Police to control and enforce speed limits.





#### **Drunk driving**

Despite the existence of a law against drunk driving in the Traffic Act, Haiti does not apply any control. Law enforcement would require equipment and training, but it is an accessible challenge to address. Public awareness campaigns are a good tool to support law enforcement on drunk driving. School education can help preventing kids going with drunk drivers, although there is no direct link between education and drunk driving.

#### **Helmets**

According to recent studies, over 80% of motorcycle drivers and over 95% of passengers do not wear helmet<sup>7</sup>. Over 36% of victims from traffic crash in the metropolitan area of Port-au-Prince are motorcycle drivers<sup>8</sup>. This situation is particularly preoccupying and international organizations such as IDB have initiated studies and campaigns on helmet. Among the problems related to wearing a helmet in Haiti, recent studies<sup>9</sup> have demonstrated that the price, but also climate issues and the low level of law enforcement play an important role.

Helmet campaigns, awareness, but also a benchmark on the experience of other countries in establishing helmet campaigns would be required. Longer-term state measures supporting the price and safety standards of imported helmets would also be necessary.

Additionally, helmets in Haiti do not respond to international safety standards.

#### Seat-belts and child restraints systems

The use of seat belts and child restraints is still a top challenge in Haiti. Collective transport such as minibuses or tap-tap are not even equipped with seat belts, and the use of seat belts and child restraint systems are not well spread for private vehicles. The provision of law would require an amendment for the use of seat belts and child restraint system, as well as an enforcement plan

and education/awareness campaign.

As for helmets, longer-term state measures to set the minimum safety requirements of imported cars would be required in Haiti in order to support the establishment of mandatory seat belts and child restraint systems (reference to Pillar 3, "Safer cars").

<sup>7.</sup> TraumAyiti & Humanity and Inclusion, 2019.

<sup>8.</sup> Synthetic report on the use of helmet in Port-au-Prince, Ministry of Health, 2015.

<sup>9.</sup> Humanity and Inclusion, 2018.







#### **Collective Transport**

Collective transport is in a large majority in a poor condition as regard to safety. There is no specific training program for professional drivers. The so called "Tap-Tap" (minibuses used for collective transport) are in very poor mechanical conditions, thus exposing their passengers to a high level of risk.

Additionally, mixed transportation (passengers and freight) is very usual in Haiti. Which is a source of traffic accidents. Mixed transportation should be controlled by law enforcement measures.

#### **Driver licensing**

This challenge is an achievable challenge for Haiti. Formal driving schools do operate and driver examination is conducted by Traffic Police. However, driver examination is very limited to very few questions and there is no practical exam. In practice, driver examination is not an exam that can be considered having a value in terms of knowledge,

practice, and safety. Also, it is worth mentioning that drivers are trained in the use of European traffic signs and marking despite the fact that Haiti uses a mix of standards. Mix of standards for signs and marking also has negative consequences on driver training and licensing, with negative impact on safety.



#### **PILLAR 5: POST-CRASH RESPONSE**

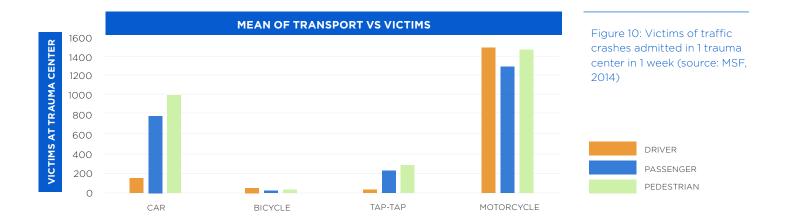
Increase responsiveness to post-crash emergencies and improve the ability of health and other systems to provide appropriate emergency treatment and longer-term rehabilitation for crash victims.

WHO estimates that approximatively 10% (1 million people) of Haitian population lives with a permanent disability. Not all disabilities are a result of traffic crashes, but according to NGOs such as Humanity & Inclusion (HI) and Medics without Border (MSF), traffic crashes are among the top contributors to permanent disabilities in the country. Post-crash response and long-term rehabilitation are therefore important challenges that Haiti is facing.

As an example, in one typical week of activity, the MSF trauma center located in Martissant, in the Metropolitan area of Port-au-Prince, dedicates 22% of its traumatology to traffic crashes. The following figures were communicated: 6,818 victims admitted in traumatology in one week (approximatively 22% of total admitted cases), including 1,479 pedestrians hit by motorcycles.







Another study funded by the IDB in 2016<sup>10</sup> was conducted on the hospitals of the metropolitan area of Port-au-Prince. Over the 2016-year period 6,648 victims were hospitalized. This is quite a small number of victims compared to the MSF trauma center in Martissant (6,818 victims in only one week). This can be explained by the fact that all public hospitals do not have trauma centers and emergency services operate with limited equipment.

#### Prehospital care systems

National NGOs in Haiti, such as STOP accidents, are very involved in this area, with WhatsApp application providing rapid alert system, emergency phone numbers and other organizations such as

"Ayiti Air Anbilans" provide with possibility of rapid extraction with helicopter. However, in many cases, injured road users are transported to hospital by private means without informing authorities.

#### Hospital Trauma Care Systems

According to international NGOs involved in trauma care such as Medics without Border (MSF), trauma centers are not well developed in Haiti. Few trauma

centers are operating, most of them being located in big cities. Depending on the location of the crash, access to a trauma center can be very complex.

#### Rehabilitation and Support to Impaired Victims

International NGOs such as Humanity & Inclusion (HI) actively work in providing support for long term rehabilitation of impaired victims. According to their available information, most taxi-motorcycle drivers

experience at least one serious crash in the first two years of activity. Prevention and training are for the moment one of the top possible responses to reduce crashes and the risk of getting long term handicap.





#### 4. Institutional Structure

The lead institution for Road Safety in Haiti is the Ministry of Public Works, Transport and Communications (MTPTC), but various other institutions are involved on a multi-sector basis.

Institutional responsibilities in addressing road safety challenges in Haiti are spread among the following main stakeholders:

Figure 11: Addressing Road Safety Challenges in Haiti

		P	illar	1				Pill	ar 2	2		Pill	ar 3			P	illar	4			P	illar	5
Institutional structure  Responsible Participant	Uniform standard for signs and marking	Leadership & multi-sector coordination	Renew national road safety strategy	Accident data collection and sharing	Sustainable funding mechanism	Accountability & ownership of road planners	Design for all users	Safety on existing roads	Safety on new roads	Capacity building, training, safer roads	Road safety best practices	Safety standards on imported cars	Mandatory technici inspection	Road safety awareness and education	Define and apply speed limits	Drunk-driving law enforcement	Spreading the use of helmet	Seat belts and child restraint systems	Prevent mix transportation	Driver licensing process	Prehospital Care Systems	Hospital Trauma Care Systems	Rehabilitation and Support to Impaired Victims
Organizations	Ē							-	-	_	_	allen	-					-					_
High level institutions & parliament																							
Ministry of Public Works, Transport & Communication																							
Ministry of Justice and Public Security					1																		
DCPR (Traffic Police)																							П
Ministry of Economy and Finance																	0 1						
Ministry of Education and Professional Training																							
Ministry of Public Health and Population																							
OAVCT												12											
Other organizations (NGOs, media, driving schools etc.)																							
International funding institutions																							





#### The Ministry of Public Works, Transport and Communications

The Ministry of Public Works, Transport and Communications (MTPTC) is responsible for the Transport sector in Haiti.

According to the organic law set by the decree of October 20, 1983, the MTPTC ensures the planning, execution, maintenance, control, supervision, and evaluation of all roads. These activities include road signage (horizontal and vertical) and, since December 2013, Road Safety.

The various services belonging to the Transport Directorate are as following:

· Transport Studies and Planning Service: responsible for formulating strategies and objectives related to land transport (classification of road types, establishment of technical and financial standards, studies of road projects including programming and preparation of files tender).

- · Road Construction Service: responsible for the execution of all road projects (only the primary and secondary networks) as well as the engineering structures which are part of it.
- · Vehicle Weight Control Service: responsible for ensuring the application of accepted standards with regard to the characteristics of vehicles traveling on highways in order to prevent premature deterioration of the road surface;
- · National Road Network Permanent Maintenance Service: responsible for the maintenance of the national road network (preparation of tender documents, supervision of works);
- $\cdot$  Road Safety Unit: recently established in September 2013 with the support from IDB $^{11}$ .

#### The Ministry of Justice and Public Security

The Ministry of Justice and Public Security is responsible for developing and implementing justice and police policies and strategies, within the framework of the general policy defined by the Head of Government (Decree of December 28, 2005). In particular, the Ministry supervises and

controls the National Police of Haiti and ensures the maintenance of public order. Traffic Police (DCPR) is a Department of National Police placed under the guidance of the Central Department of Administrative Police.

<sup>11.</sup> The attributions of this Unit are: (i) to define the critical path for the reduction of black spots on the road network identified through the inventory of road accidents conducted by the Vehicle Traffic Service and an analysis of the existing situation of road infrastructure; (ii) to classify the causes of accidents and derive an order of priority for action; (iii) to highlight the defects of the road infrastructure in question; (iv) to monitor rehabilitation studies; (v) to verify compliance with recommendations during the execution of works; and (vi) to prepare and publish a code of safety or road prevention.







#### The Ministry of Economy and Finance

The Ministry of Economy and Finance (MEF) determines the economic and financial policy of the Government, ensures the collection of taxes and duties. (Decree of March 13, 1987 amending

that of October 31, 1983). The MEF is responsible for determining the amount of public investment allocated to the transport sector.

#### The Ministry of Education and Professional Training

As part of the reorganization of the Ministry of Education (decree of October 23, 1984), a decree of March 14, 1985 created a national vocational training institute (INFP) with the aim (Art. 25 of the decree) of developing continuous professional training

in the areas of its competence, harmonizing and coordinating professional training programs. The ministry can therefore design vocational training programs on all aspects, including Road Safety.

#### The Ministry of Public Health and Population

The mission of the Ministry of Public Health and Population (MSPP) is to guarantee the health of the Haitian people. In this context, the MSPP publishes each year a statistical book prepared by the statistics service of the Study and Programming Unit (UEP).

The MSPP has also established an ambulance service with a national number, 116. This service, the National Ambulance Center (CAN) is located within the MSPP and has an ambulance fleet of which thirty (30) were supplied by Brazilian cooperation.

#### The Third-Party Vehicle Insurance Organization (OAVCT)

The OAVCT is the National Insurance body responsible for issuing and administrating mandatory third-party insurance. The OAVCT is also in charge of

collecting and administrating vehicle registration data and traffic accident data.





# **3. Part 2**Road Safety actions

A great effort has been deployed in investing for Road Safety improvement in Haiti over the last decade. Some progress have been made in some key areas with a great engagement from National Authorities, NGOs and local partners, with continuous support from the IDB.

So far, the challenges that have been covered as primary key areas for Road Safety improvement in Haiti mainly cover Road Safety Management as well as Safer Roads and Safer Road Users.

However, results in addressing Road Safety challenges have remain very partial due to important gaps in institutional capacities to undertake concrete actions, the lack of accurate and complete data and the lack of law enforcement measures.

Main key interventions are presented in the following sections.

	CHALLENGES	ACTIONS UNDERTAKEN SINCE 2014				
PILLAR 1:	Challenge 2: Road Safety Lead Agency	Establishment of a multi-sector Road Safety Round Table				
ROAD SAFETY MANAGEMENT	Challenge 2. Road Salety Lead Agency	Capacity Building to the MTPTC Road Safety Unit				
	Challenge 3: National Road Safety	Establishment of a multi-sector Road Safety Round Table				
<u>@</u>	Strategy	Capacity Building to the MTPTC Road Safety Unit				
The state of the s	Challenge 4: Data Driven Performance	Establishment of a modern Accident Information System (AIS)				
	Analysis	Training & Capacity Building to Traffic Police on data collection				
PILLAR 2:	<b>Challenge 1</b> : Eliminating High Risk Roads	Road Safety Audits planned with IDB funding				
SAFER ROADS AND MOBILITY	Challenge 3: Safety on existing Roads	Carried out a Road Safety Inspection on RN1, RN2 & RN8				
.++	Challenge 4: Promote Safer New Roads	Integrated Road Safety Audit to all IDB funded rehabilitation projects				
	<b></b>	Trained Staff from MTPTC in Road Safety Inspections (RSI)				
	<b>Challenge 5</b> : Promote a culture of Road Safety	Trained Staff from MTPTC in Road Safety Audits (RSA)				
		Conducted Seminars on Road Safety for decision-makers				
PILLAR 4:	Challenge 1: Increase awareness and	Organized the first Road Safety Week in Haiti				
SAFER ROAD USERS	education	NGOs involved in Road Safety Awareness				
	Challenge 2: Speed Limits	Trained Traffic Police Officers in the use of Speedometers				
	Chanenge 2. Speed Limits	Prepared a Law Enforcement Manual for Traffic Police				
	Challenge 4: Helmet	Awareness Campaigns on Helmet				
PILLAR 5: POST-CRASH	Challenge 1: Pre-Hospital care system	NGO developed Crash Alert Application				
RESPONSE	Challenge 2: Hospital Trauma Care	Carried out Studies on Hospital trauma Care				
	Systems	NGO Trauma Centers in Port-au-Prince				
	<b>Challenge 3</b> : Rehabilitation and Support to Impaired Victims	NGO Support to users with disabilities				

Figure 12: Road Safety Achievements





#### 1. Road Safety actions supported by the IDB

#### The establishment of a 5 years Road Safety Strategy

In 2014, The IDB provided support to the MTPTC for the establishment of a five years National Road Safety Strategy and Action Plan<sup>12</sup>. This strategy was approved in 2015 and published has the official National Road Safety Strategy.

This action was a first very important step towards

improved consideration for Road Safety issues in Haiti. The Strategy is organized around the five Road Safety pillars from the UN Decade of Action, with clear targets and dedicated Action Plan.

This action was a major contribution in addressing Road Safety Pillar 1 "Road Safety Management".

#### The establishment of an Accident Information System

In the framework of the same support for National Road Safety Strategy, the IDB supported the establishment of a modern Accident Information System (SIA) at Traffic Police (DCPR).

This system was approved as official and User Manual was published in 2015<sup>13</sup>. A training program was conducted to Traffic Police Officers on the use of the SIA at the Police Academy and on Site.

This action was a major contribution in addressing Road Safety Pillar 1 "Road Safety Management".

On a second phase of technical support for SIA in 2017, an Android Tablet Application was developed, and 20 tablets were provided to Traffic Police for data collection on site and geolocation of crash sites. A second phase of training programme was organized for over 100 officers, with the support from international consultants.







In 2017, the SIA has shown first results with over 300 crashes registered over the first six months period. First editions of SIA's Statistical Reports were edited with the support from consultants on a monthly period from March 2017 to January 2018, including accident geolocation.









### Road Safety in Haiti



#### Capacity Building of Traffic Police Officers

The IDB provided capacity building and training support to Traffic Police (DCPR) on Law Enforcement (Speed measurement, alcohol-testing and Law Enforcement Manual) with the support of a French Traffic Police Officer and international trainer.



A pilot Road Safety Inspection (RSI) was carried out by an international consultant in 2014 with support from IDB on three sections of the primary road network: RN1, RN2 and RN8.

The RSI team was composed of three persons: An international Road Safety Auditor, The Head of the MTPTC Road Safety Unit and a traffic Police Officer (DCPR).

This was the first Road Safety Inspection (RSI) conducted in Haiti. Conclusions from the RSI have provided recommendations for Road Safety improvements and identification of hazardous locations.

Additionally, an introductory session of three days on Road Safety Audits and Inspection was provided to 10 MTPTC staffs in 2015 with support of the IDB and a team of two international specialists. This action was a major contribution in addressing Road Safety Pillar 2 "Safer Roads".

However, it is necessary to mention that after its introduction in 2015, the AIS has not been in use on a national scale and is still not performing on a regular manner.













#### The creation of a multi-sector round table

In 2017, The IDB provided Technical Support for the establishment of a Road Safety multi-sector coordination group called "Road Safety Round Table". This round table was composed of representatives from MTPTC (designated lead agency), Traffic Police, Ministry of Education, Ministry of Justice and Population. Representatives from Ambulance Centre and NGOs were also invited to take part.

Organization	Function within organization
Haiti Ambulance	Business Manager
Haiti Ambulance	Head of Development
State Secretariat for Population	Adviser
State Secretariat for Population	Adviser
Haiti Red Cross	Coordinator
MTPTC/transport	Head of Road Safety Unit
Traffic Police (DCPR)	Technical Cabinet
OFATMA	General Director
OFATMA	Consultant
MTPTC/transport	Adviser
MTPTC State Secretary	State Secretary

Figure 13: members of the Road Safety round table

The Road Safety Round Table have had weekly meeting and worked on establishing priority action plan for Road Safety.

One of the major achievements was the organization of the First Road Safety Week in Haiti on May 2017 with support from IDB and PAHO and active participation of all involved institutions, NGOs and

foundations. Another important achievement was the establishment of a working group for data collection involving Traffic Police, Ambulance Centre and STOP Accident.

This action was a major contribution in addressing Road Safety Pillar 1 "Road Safety Management" and to Pillar 4 "Safer Road Users".











#### Other initiatives supported by the IDB

Over the same period, the IDB has provided technical assistance for the revision of Traffic Rules and the Elaboration of a uniform Manual for Signs and Marking in Haiti. This work was performed by an international consultant.

The IDB also supported a national study, performed by a local consultant, for the study and analysis of hospitalized victims in hospitals in the metropolitan area of Port-au-Prince. This study was published on 2016.<sup>14</sup>

#### 2. Other actions on Road Safety

Various organizations have initiated Road Safety actions between 2015 and 2017 in Haiti. Among them, the most important are Handicap International, STOP Accidents and the "Rose et Blanc" Foundation (FREB) from the former first Lady Mme Sophia Martelly.

Among actions, training sessions, School education programs and public media awareness campaigns were organized over the period.

#### STOP Accidents

STOP Accidents is a Haitian organization initiated in 2016 by doctors and practitioners preoccupied by traffic crashes and their consequences in Haiti. The establishment of such an organization is a direct result of the high mobilization initiated by the establishment of the national Road Safety Strategy and the multi-sector Round Table. In 2017, STOP AccidentS has actively participated in the first Road Safety Week in Haiti and has initiated school and media awareness campaigns. More recently, STOP ACCIDENTS has also launched an application to help alerting in case of a traffic crash. This application

is now largely spread in Haiti and helps alerting emergency centers and collecting important data on traffic crashes. STOP ACCIDENTS also provides firstaid training sessions.







#### Humanity and Inclusion (HI)

Humanity and Inclusion (HI), formally called Handicap International, is an international NGO with a very long history and track record within the area of Road Safety, especially towards people with disabilities. In Haiti, HI has developed a strategy focusing on rehabilitation care and professional and social inclusion of people with disabilities. In more recent years, and due to the magnitude of traffic crashes in Haiti, HI has launched a new strategic plan with focus on Road Safety improvement.

More specifically, HI advocates and provides capacity building, training, and support to local population on Road Safety Awareness, studies, support and awareness on Helmet, support for post trauma care and rehabilitation after a traffic crash.

has published various papers and studies on helmet use and a Road Safety Policy in line with the National Road Safety Strategy. Among other, the organization advocates for the establishment of a dedicated Road Safety Agency, safer road infrastructure, mandatory technical inspection and driver licensing.



#### Other organizations

In addition, other international organizations such as the UNDP and the United Nations Stabilization Mission in Haiti (MINUSTAH) has provided support to

HI actively contributes to addressing Road Safety challenges in Haiti as a long-term partner. In 2019, HI

the Haitian Traffic Police for the acquisition of vehicles and motorcycles for Road Patrols.

### 4. Conclusion on Road Safety Challenges and Achievements

As regard of the extent of the road safety problem in Haiti in all areas, actions undertaken on the past decade seem to not have produced significant impacts. Results remain very partial on addressing challenges in reducing traffic crashes.

The current institutional structure does not make it possible to effectively support Road Safety concrete







actions. Institutional gap has a negative impact on producing effective coordination.

As a result, the National Road Safety strategy has remained largely under-implemented over the last years and many areas of Road Safety were not at all addressed, especially actions related to law enforcement, applying uniform safety standards on roads, for vehicles and users, and for producing accurate data.

Despite some efforts from Traffic Police Officers, the Accident Information System installed and started in Haiti Traffic Police has also produced limited results. Registering traffic crashes is not a mandatory task for Police Officers and the lack of engagement from high

level decision-makers in allowing dedicated resources to the system have negatively impacted the success of the tool.

The few good results obtained in training and capacity building of Ministries and Traffic Police staffs in Road Safety have not been supported by an institutional process able to deploy these new skills into concrete actions for Road Safety.

As a conclusion, reducing traffic crashes still appears as a top challenge for the country. A strong leadership supported by a political vision will be crucial for making progress in this area. Next section provides recommendations for future actions.

# 5. Recommendations for future actions

	ROAD SAFETY MANAGEMENT											
Road Safety related issues	Goal	Recommended actions	Expected result/impact	Required resources and institutional set up	Timeframe							
The current institutional structure in Haiti does not allow for deep coordination in the area of multi-sector intervention. The lack of leadership and political vision does not allow for the definition and implementation of targeted road safety actions to reduce traffic crashes.	To have effective multi-sector coordination under guidance of a strong Lead Agency with executive power to define and implement road safety political agenda.	To formally establish a National Road Safety Policy with clear political program, targets and performance indicators. To formally name a Road Safety Lead Agency accountable for political results. To evaluate and renew National Road Safety Strategy and Action Plan. To make mandatory Traffic Accident Data Collection and share of statistical data between Police, OAVCT and other stakeholders. To establish a sustainable source of funding for Road Safety actions.	A clear political vision geared towards reducing traffic crashes in Haiti. Improved accountability of public organizations towards results.	· Engage with a political reform to formally integrate road safety within public state agenda. · Provide financial and technical resources/ support for the establishment of a dedicated Agency and capacities.	Ten years period							





SAFER ROADS AND MOBILITY											
Road Safety related issues	Goal	Recommended actions	Expected result/impact	Required resources and institutional set up	Timeframe						
The development of safer roads for all users implies to better take into account safety conditions on new and existing road schemes, including: road design, road signs and marking, safety measures for vulnerable users, speed management, rod safety audit and inspections.	To achieve Safer Roads for all users.	<ul> <li>To politically recognize the needs for safety and mobility of all users, including the most vulnerable ones.</li> <li>To improve road planning to respond to the need of all users.</li> <li>To upgrade road design standards to better include safety measures for Vulnerable Road Users.</li> <li>To make Road Safety Audit as a mandatory procedure for new and rehabilitated sections on main road corridors.</li> <li>To identify and correct hazardous locations on the main road network.</li> <li>To make Road Safety Inspections as a periodic standard procedure as part of road periodic maintenance.</li> </ul>	Road safety is integrated at all stages of road design, construction and maintenance. Road Safety Audit (RSA) is mandatory for all road construction and rehabilitation projects.	· Technical and financial support to establish road safety technical capacities within road departments.	Five years period						

SAFER VEHICLES										
Road Safety related issues	Goal	Recommended actions	Expected result/impact	Required resources and institutional set up	Timeframe					
Improving safety standards of imported vehicles requires the establishment of specific rules with a set of minimum requirements on imported vehicles such as age limit and passive safety standards. Maintaining safety level of vehicle fleet in Haiti requires the establishment of vehicle inspection centers, procedures and rules for testing vehicle safety conditions.	To have Safer Vehicles on Haitian roads.	To seek political regional agreement on minimum standard level of safety for imported vehicles. To formally establish regulations on imported vehicles. To formally establish mandatory periodic technical inspection of vehicles with minimum standard requirements for safety in Haiti.	Imported cars respond to a minimum set of safety standards (age, passive safety etc.). Vehicle fleet circulating in Haiti meets a minimum set of safety conditions by formally undertaking periodic vehicle technical inspections.	Establish minimum set of safety standards for imported vehicles in Haiti. Provide technical assistance for establishing technical inspection centers in Haiti under MTPTC. Provide grant access to renew collective transport fleet (bus, mini-bus, tap-tap etc.) with assistance from the State.	Ten years period.					

## Technical note on Road Safety in Haiti



SAFER ROAD USERS										
Road Safety related issues	Goal	Recommended actions	Expected result/impact	Required resources and institutional set up	Timeframe					
Behavior change is an important part of road safety challenges. Long term change requires the establishment of a culture of road safety at all levels of the society, including decision makers, education, training and awareness.	To promote a culture of Road Safety among users.	To seek engagement of high political decision makers into promoting Road Safety efforts in Haiti. To initiate Road Safety Education programs in Schools. To upgrade Driver's training and licensing system. To engage into public-private partnerships for Road Safety Awareness.	Political engagement with a consensus in addressing road safety challenges is reached. Road safety is integrated in formal education and training. Reforming Driver licensing process. Government policy actively supports awareness campaigns.	· MTPTC and Road safety lead agency engage institutional reform for driver's licensing process. · Ministry of Education to establish formal road safety curricula. · Public mass media actively engage in promoting safer practices and awareness.	Five years period					

POST-CRASH RESPONSE										
Road Safety related issues	Goal	Recommended actions	Expected result/ impact	Required resources and institutional set up	Timeframe					
Post-crash services, emergency and trauma centers in Haiti are not equipped to quickly and efficiently take action after a crash.	To have a more effective post-crash response.	To promote rapid alert intervention systems. To establish a sector strategy for the development of trauma centers in Haiti. To improve medium and long-term rehabilitation systems for handicapped victims.	· Emergency interventions are fast and efficient · Trauma / emergency centers are equipped in order to treat heavy injured users. · Long term rehabilitation systems are in place to accompany handicapped victims.	· Technical and financial support to Ministry of Health for the establishment of efficient emergency services. · Establish trauma centers with required equipment and training of staffs. · Establishment of long-term rehabilitation centers and capacity building support.	Ten years period					



