Road Safety

No deaths are acceptable
Deaths over 20 years of natural disasters

1.3 MILLION

Source: UNISDR, 2013
Low risk perception of traffic-related incidents

- TERRORIST ATTACK
- PLANE CRASH
- HEAT
- ROAD TRAFFIC INJURIES
- CANCER

Source adapted from: Susanna Hertrich
Spain
Car ownership, number of people driving and deaths by traffic-related incidents (per 30 days)

It is a severe problem but it has solution
Facilitar el diálogo regional e intersectorial entre los gobiernos LAC

IDB Group – Road Safety Strategy

- Post-crash response
- Road safety management
- Infrastructure
- Safer road users
- Safer vehicles
Road traffic crashes are no “accidents”
“Road traffic injuries are a **serious social and public health problem** worldwide. They should be considered as a health problem and thus be studied the same way as heart disease, cancer and cerebrovascular accidents, because **they can be prevented**, and they respond well to interventions design for that”

OPS. Informe Mundial sobre prevención de los traumatismos causados por el tránsito
Road fatalities by age group (2011)

Road fatalities by age group in Barbados

Trends in reported road traffic deaths

<table>
<thead>
<tr>
<th>Year</th>
<th>Deaths per 100,000 population</th>
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<tr>
<td>2010</td>
<td>6.8</td>
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<td>2011</td>
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<td>2013</td>
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Source: Royal Barbados Police Force.

Comparison with other countries of the region

Road fatalities per 100,000 population
DEATHS BY ROAD USER CATEGORY

Drivers/passengers (29%)
Drivers/passengers, heavy trucks (7%)
Pedestrians (29%)
Cyclists (8%)
Drivers 4-wheeled cars and light vehicles (18%)
Passengers 4-wheeled cars and light vehicles (18%)
Motorized 2- or 3-wheelers (21%)

Comparison with other countries of the region

Road fatalities per 100,000 population

Honduras: 27.3
Jamaica: 9.6
Guatemala: 6.5

ALC average: 17.2

TRENDS IN REPORTED ROAD TRAFFIC DEATHS

Source: Jamaica Constabulary Force (data from 2013).
DEATHS BY ROAD USER CATEGORY

- Pedestrians: 18%
- Cyclists: 4%
- Motorized 2- or 3-wheelers: 42%
- Passengers in 4-wheeled cars and light vehicles: 19%
- Drivers of 4-wheeled cars and light vehicles: 17%

Comparison with other countries of the region

<table>
<thead>
<tr>
<th>Country</th>
<th>Road Fatalities per 100,000 population</th>
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<tr>
<td>Honduras</td>
<td>27.3</td>
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<td>Suriname</td>
<td>14.3</td>
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<td>NAG average</td>
<td>17.2</td>
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Source: Traffic Police Ministry of Justice and Police (data from 2010)

TRENDS IN REPORTED ROAD TRAFFIC DEATHS


Suriname
Trinidad y Tobago
Safe System / Vision Zero

• Sweden approach to road safety.

• It is based on the simple fact that we are vulnerable humans and make mistakes.

• The road system needs to keep moving, but it must also be designed to protect us at every step.

Traditional approach

- Focus on accidents
- Perfect human behavior
- Individual responsibility
- Industry must be forced
- Saving lives is expensive

Vision Zero

- Focus on fatalities and serious injuries
- Integrate human error into the design
- Shared responsibility System-design
- Industry can be stimulated
- Saving lives is not expensive
Safe Road Infrastructure
A safe road infrastructure consists of elements that reduce the amount and severity of possible road traffic crashes.

The risk analysis is carried out by groups of specialists who propose road safety measures/recommendations as a result of a systematic audit and inspection process.
A **RSA** is a formal examination of a future route, in which the potential risk of road traffic crashes and road safety performance are reported; identifying the opportunity to improve safety for all users.

A **RSI** is a systematic review of an existing road or urban street, in order to identify potential hazards for different users and propose corrective measures.
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<tr>
<th>Área</th>
<th>Temas de diagnóstico³</th>
<th>Países desarrollados</th>
<th>Argentina</th>
<th>Brasil</th>
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Resumen sobre el uso del ASV e ISV en los países latinoamericanos y en el conjunto los países desarrollados

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<td><strong>3. Predictability</strong> of the road course and user behaviour through a recognizable road design</td>
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<td><strong>4. Awareness of the state of the road</strong> by the user</td>
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<td><strong>5. Roads that forgive</strong> in case of user error</td>
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RSA and RSI Diagnosis and Guides

- Best practices
- Practical tools
- Terms of References
- Support in design and implementation
Technical guide for the application of Road Safety audits

- Developed from extensive international experience and advances in LAC.
- Contains detailed information on the basic principles, the application process, the profiles and obligations of those responsible for RSA.

Target Group
- The road safety audit teams and authorities in competent entities
- Professionals and technicians (planning, design, construction and operation of urban roads and highways).

RSA Principles
✓ It is up to the project developer to define the measures that he accepts to implement.
✓ The RSA do not replace the designer responsibility.
✓ The RSA must take into account all users of a road project.
The earlier it can intervene, the lower the cost of road safety for society. **IT IS BETTER AND EASIER TO PREVENT THAN REMEDY!**

The audit is based on **how users behave** and not on how they should behave or how we would like them to behave.

The **homogeneity of the treatments** applied. Treat problems with similar characteristics with similar treatments to avoid confusion.

Priorities must be **rational**. There will always be a shortage of resources and it is not enough to show an action to reduce the number of crashes. We must show that benefits outweigh the costs.

The concepts of **cause and guilt must be abandoned**. It must be projected considering possible human errors and applying the concept of *Roads that Forgive*.

**Traffic exposure** to dangerous situations must be reduced.
Technical guide for the application of Road Safety inspections

The Road Safety Inspection - RSI is a proactive tool developed through a systematic and regular review process on the site, of a section or of a road, by a trained team, expert in road safety and independent, in order to identify dangerous aspects, or deficiencies likely to trigger a road traffic crash, propose treatment measures and monitor their implementation.
These are some criteria to select individual sections of roads to inspect:

- When a concentration of crashes is observed in the section, especially with various types of structures.

- When there is evidence or other information about problems in the section that makes a RSI prudent.

- When there are road safety deficiencies, potential hazards or the same type of crashes along the section.

Inspections should be standardized and designed so that they can be systematic procedures and for this purpose it can be helpful to develop checklists.
www.menti.com

Code to vote: 395950
The World’s Deadliest Animals

Number of people killed by animals, 2015

830,000
Mosquito

580,000
Human

60,000
Snake

24,200
Sandfly

17,400
Dog

8,000
Kissing bug

4,400
Freshwater snail

3,500
Scorpion

3,500
Tsetse fly

1,600
Tapeworm

500
Hippopotamus

100
Elephant

60
Bee

40
Jellyfish

6
Shark

Which kind of infrastructure do you prefer?
Safe Routes to School

- Educational toolkit to promote safer routes to schools.
- Online platform accessible to LAC countries.

Caminosseguros.iadb.org
Factors to consider:

- Geographic diversity
- Demographic
- Economic
- Social
- Politics
- Cultural

The "copy-paste" in solutions that serve in another location without considering these elements, can result in poor results.
We commonly find the following involved:

School community (children, parents and teachers)
Surrounding community
Transit police
Planning agencies
Organized civil society (associations and organizations)
Private sector (sellers or businesses)

The projects in which more actors are involved with commitment are usually the most successful. A united community is vital!
With the support of the planning agencies and the traffic police, it is necessary to identify the points around the school that concentrate the highest frequency and severity where children are involved.

- In what time slots are the incidents concentrated?
- Which users are the most vulnerable?
- What land uses does the territory have in a radius range of 500 meters around?
- What speeds are recorded in nearby roads?
ANY SIMILARITY?
Some of the elements present in different initiatives are:

**Origin-Destination Surveys**
- How do children get to school?
- What are the most frequent routes?

**School environment audits**
- Sidewalk features
- School Transportation Features
- Characteristics of cycle paths
- Adjacent intersections
- Visual scope
- Traffic lights, beaconing, signage
- Barriers
HOW DO CHILDREN ARRIVE TO SCHOOL?
In addition to **reducing and controlling speed in school environments**, the main elements that have been found in the initiatives studied are
Communication is essential throughout the project:

- Before
- During
- After

It is very important that the project has its own identity. This will facilitate understanding and dissemination.
There are different funding sources for these projects that range from:

1. National or local grants or subsidies.
2. Multilateral Banking

Sustainability is a great challenge, so it is recommended to integrate private initiative locally
8 Monitoring and Evaluation

It is essential to have quantitative and qualitative measures; these measurements facilitate timely decision making as well as a clear surrender of externalities that are expected to be positive.

- Has the road risk problem decreased?
- Is there greater empowerment of children and their environment?
- Is there greater use of active modes (pedestrians and cyclists)?
- Is there a higher quality of service in public transport modes?
- Is there greater social cohesion?
- Who are the direct or indirect beneficiaries?
- Is there greater equity and inclusion?
2. TACTICAL URBANISM
EXAMPLE
TIMES SQUARE, NYC

FUENTE: IDEO AND STREET PLANS COLLABORATIVE
PILOT: PANAMA CAMINA
THE SURROUNDING AREA AS AN OPPORTUNITY

Panamá Camina: comparte la Central

EXPERIMENTO URBANO
Del 17 de noviembre al 16 de diciembre 2018

SOURCE: PROPOSAL MAS ALLA DEL MARTA (EQUIPO DE PROYECTO PN-L1146)
PILOT: PANAMA CAMINA
CONFLICT POINTS: PEDESTRIANS VS VEHICLES

SOURCE: PROPOSAL MAS ALLA DEL MARTA (EQUIPO DE PROYECTO PN-L1146)
PILOT: PANAMA CAMINA
PEDESTRIANS LOOKING FOR THE SHORTEST ROUTE

SOURCE: PROPOSAL MAS ALLA DEL MARTA (EQUIPO DE PROYECTO PN-L1146)
PILOT: PANAMA CAMINA
ROADS ARE WIDE AND DIFFICULT TO CROSS

SOURCE: PROPOSAL MAS ALLA DEL MARTA (EQUIPO DE PROYECTO PN-L1146)
PILOT: PANAMA CAMINA
PUBLIC SPACE = ~80% FOR CARS; ~20% FOR PEDESTRIANS

SOURCE: PROPOSAL MAS ALLA DEL MARTA (EQUIPO DE PROYECTO PN-L1146)
PILOT: PANAMA CAMINA

OBJECTIVE 1: INCREASE PEDESTRIAN SPACES
PILOT: PANAMA CAMINA

OBJECTIVE 2: SIMPLIFY VEHICLE CIRCULATION

SOURCE: PROPOSAL MÁS ALLA DEL MARTA (EQUIPO DE PROYECTO PN-L1146)
PILOT: PANAMA CAMINA

OBJECTIVE 3: FACILITATE PEDESTRIAN MOVEMENT

SOURCE: PROPOSAL MAS ALLA DEL MARTA (EQUIPO DE PROYECTO PN-L1146)
PILOT: PANAMA CAMINA
EXPERIMENT WITH TEMPORARY PAINT

SOURCE: PROPOSAL MAS ALLA DEL MARTA (EQUIPO DE PROYECTO PN-L1146)
PILOT: PANAMA CAMINA
VISUAL SIGNALS MARKING CONFLICT SPOTS

SOURCE: PROPOSAL MAS ALLA DEL MARTA (EQUIPO DE PROYECTO PN-L1146)
PILOT: PANAMA CAMINA
SENSIBILISATION CAMPAIGN

SOURCE: PROPOSAL MAS ALLA DEL MARTA (EQUIPO DE PROYECTO PN-L1146)
Some innovative/creative ideas based on evidence

#PanamaCamina #ComparteLaCentral
MOOC Modules

1. Road safety as a problem for the development of sustainable growth
2. Road safety in the world: current situation and main challenges.
3. Institutional management of road safety
4. The role of data in road safety
5. Safe infrastructure
6. Safety in the urban environment: sustainable transport
7. Our responsibility with vehicles and safe behaviors
8. Education and communication
THANK YOU!

#CaribbeanRoadSafety