

### CONNECTING



# Global status report on road safety 2023



Section 1.

# The global burden of road traffic deaths



There were an estimated 1.19 million road traffic deaths in 2021; this corresponds to a rate of 15 road traffic deaths per 100 000 population.



As of 2019, road traffic injury remains the leading cause of death for children and young people aged 5-29 years and is the 12th leading cause of death when all ages



Globally, 4-wheel vehicle occupants represent 30% of fatalities; followed by pedestrians who make up 23% of fatalities; and powered two- and three-wheeler users who make up 21% of fatalities.



Cyclists account for 6% of fatalities while 3% of deaths are among users of micro-mobility devices such as e-scooters.



92% of deaths occur in low- and middle-incom



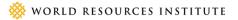
The risk of death is three times higher in low-incor countries than high-income countries despite the countries having less than 1% of all motor vehicles

#### **COMPLEX ISSUE**

- International
- National Government (Transport, Health, Interior (Police), Education, Finance, Commerce, Innovation, etc.)
- Local Government

#### **COMPLEX ISSUE**

- Civil Society
- Private sector (vehicles, infrastructure, tech, etc.)
- Financial organizations (MDBs, Private and Public finance organizations)
- Development organizations
- Academia
- Others



#### **COMPLEX ISSUE**















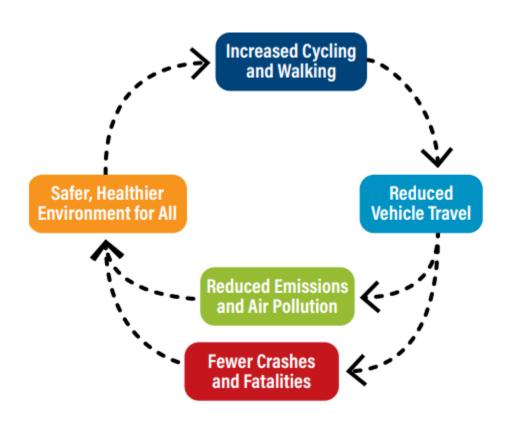


#### **SOLUTIONS**

#### **System Approach**



Interdependence





# Another way to grow: Planning mobility on a human scale

Juan Carlos Escudero. Center for Environmental Studies Vitoria-Gasteiz City Council



donde **el verde** es capital bertan **berdea** nagusi where **the green** is capital





## A shared learning process





October 2006 1st participatory workshop. <u>Report on Mo</u>bility and Sustainability in Vitoria-Gasteiz

> November 2006 2 <sup>or</sup> participatory workshop. Mobility in Vitoria-Gasteiz in 2020

January 2007 3rd <sup>participatory</sup> workshop Citizen Pact for Sustainable Mobility



- Citizen Pact for Sustainable Mobility
- Signature: April 2007
- Approval in Municipal Plenary. September 2007
- Approval in the Social Council. July 2008



## From a car-oriented public space...









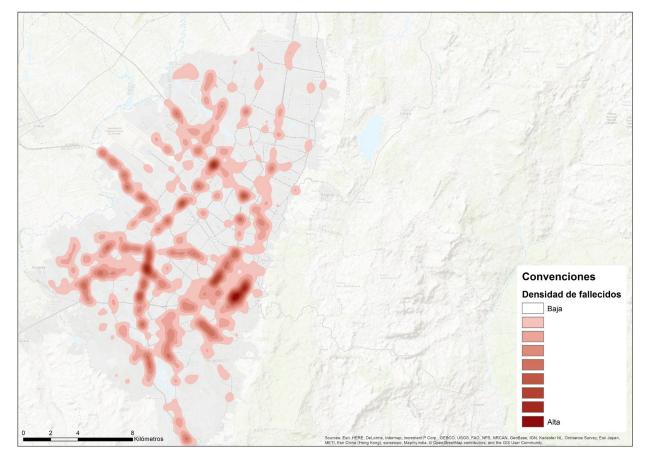




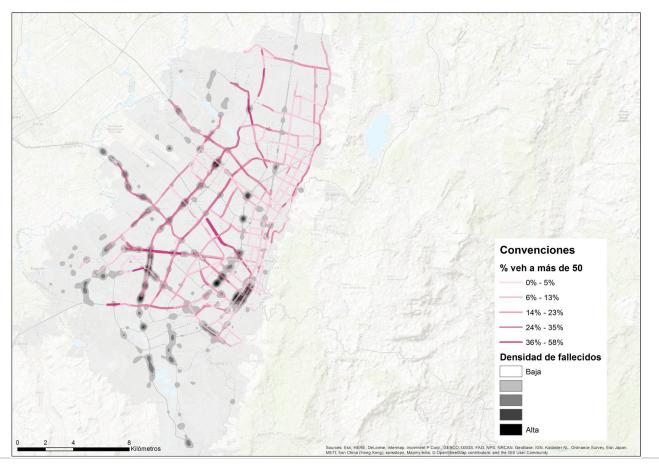


### **COLLECTING**

#### **FATALITIES IN BOGOTA**

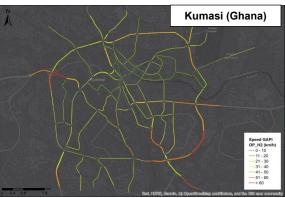


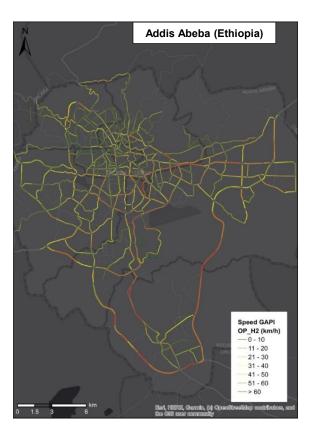
#### **SPEED AND FATALITIES IN BOGOTA**



#### **BIGRS DATA ON SPEED**



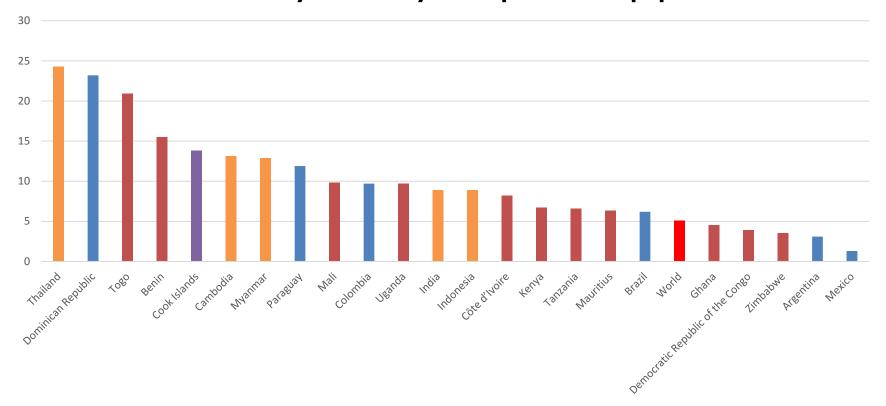




We divide the arterial network of selected cities into segments.

For each segment, we can obtain the average traffic speed data, at selected times of the day, and different traffic conditions.

#### Global Motorcycle Fatality Rates per 100,000 population



#### **DATA AND METHODS**

#### **SPEED**

Google API in segments

· 3am optimistic model

#### **GEOMETRY**

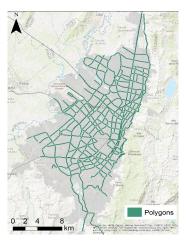
- Number and width of lanes by direction
- Width of corridor: roadbed width
- Markings and condition
- Median
- BRT trunk lanes

#### **LAND USE**

- % per use
- Blocks per km
- Population, employment density

#### **INFRASTRUCTURE**

- Signals
- Pedestrian bridges
- Intersections







Number of casualties (injuries or fatalities)

Data was collected in six cities: Bogota, Cali, Buenos Aires, Nairobi, Accra, Bangkok.

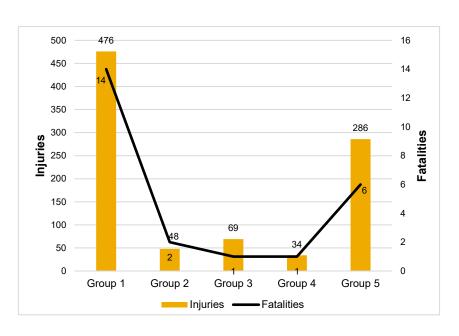
## **COMMUNICATING** \_\_\_

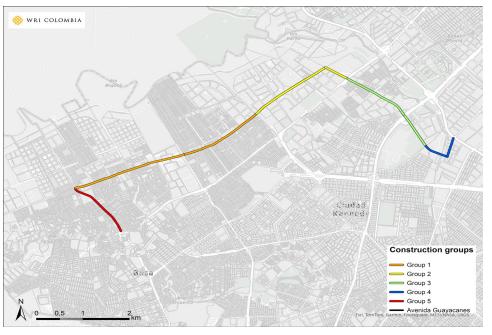
#### FINDINGS AND RECOMMENDATIONS

Variable	Finding	Recommendations
Speed	Traffic speed is the best predictor of motorcycle crashes and victims	<b>SPEED MANAGEMENT</b> strategies at corridor and area level, not just spot-based
Land use	Population density, commercial land use and lower income levels are associated with higher risks for motorcyclists	Special focus on minimizing conflicts and reducing speeds in dense urban environments with commercial activity, review investment in infrastructure for low-income neighborhoods and allocating resources equitably
Intersections	Motorcyclists are particularly vulnerable in intersections, compared to other users	Safe intersection design for safe approaching speeds is needed. <b>Compact, simple, and controlled</b> intersections are safer
Road design	Wider roads with multiple lanes – associated with filtering and weaving. Medians are associated with increases in injuries, likely due to merging at high speeds	Redesign of lane width for speed management, redesign or close median openings might be needed
Other users	Actions that guarantee safety for pedestrians and passengers bring positive outcomes for motorcyclists' safety	Remove pedestrian bridges for safe crossings, speed management measures, design public transit stations and stops to minimize conflicts.



#### TRAFFIC CAUSALITIES - GUAYACANES AVENUE





Guayacanes Avenue has concentrated **913 injuries** and **24 fatalities** across its 5 construction groups.

#### **VICTIMS – GUAYACANES AVENUE**

#### Una mujer murió tras ser embestida por una motocicleta en la Av. Guayacanes

La emergencia se presentó cuando la mujer de 65 años intentaba atravesar la calle.

A 65-year-old woman died after being hit by a motorcycle while trying to cross the street

https://citytv.eltiempo.com/fotos-y-videos/video-y-multimedia/unamujer-murio-tras-ser-embestida-por-una-motocicleta-en-la-avguayacanes 70215 Taxista borracho atropelló a dos mujeres en Bogotá: una de ellas perdió la vida luego del accidente de tránsito

Drunk cab driver hit two women on a motorcycle

https://www.infobae.com/colombia/2024/02/18/taxista-borrachoatropello-a-dos-mujeres-en-bogota-una-de-ellas-perdio-la-vida-luegodel-accidente-de-transito/ Motociclista perdió la vida en accidente de tránsito en Bogotá; chocó contra un poste

Motorcyclist died after crashing into a streetlight

https://www.pulzo.com/nacion/bogota/motociclista-fallecioaccidente-transito-sabado-19-octubre-PP4026495

Paramédico murió tras ser arrollado cuando

atendía un accidente de tránsito: video retrató

la angustia

Paramedic who was hit by a truck died while attending a traffic crash

https://www.eltiempo.com/bogota/paramedico-murio-tras-ser-arrollado-cuando-atendia-un-accidente-de-transitovideo-retrato-la-angustia-3338457





# THANK YOU!