



**Transport Decarbonisation in Times  
of Unprecedented Global Crisis**  
**The case of Bogotá, Colombia**



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# Urban Freight in Bogotá

Population:  
**>8 million**

Urban area:  
**307km<sup>2</sup>**

**+ 83,000**  
freight trips/day

**12 million**  
tons of cargo  
entered Bogotá  
in 2019\*

**Autopista Norte**

5731 veh/day\*



**Calle 80**

5383 veh/day\*

**Calle 13**

6686 veh/day\*

**Vía Villavicencio**

2275 veh/day\*

**Autopista Sur**

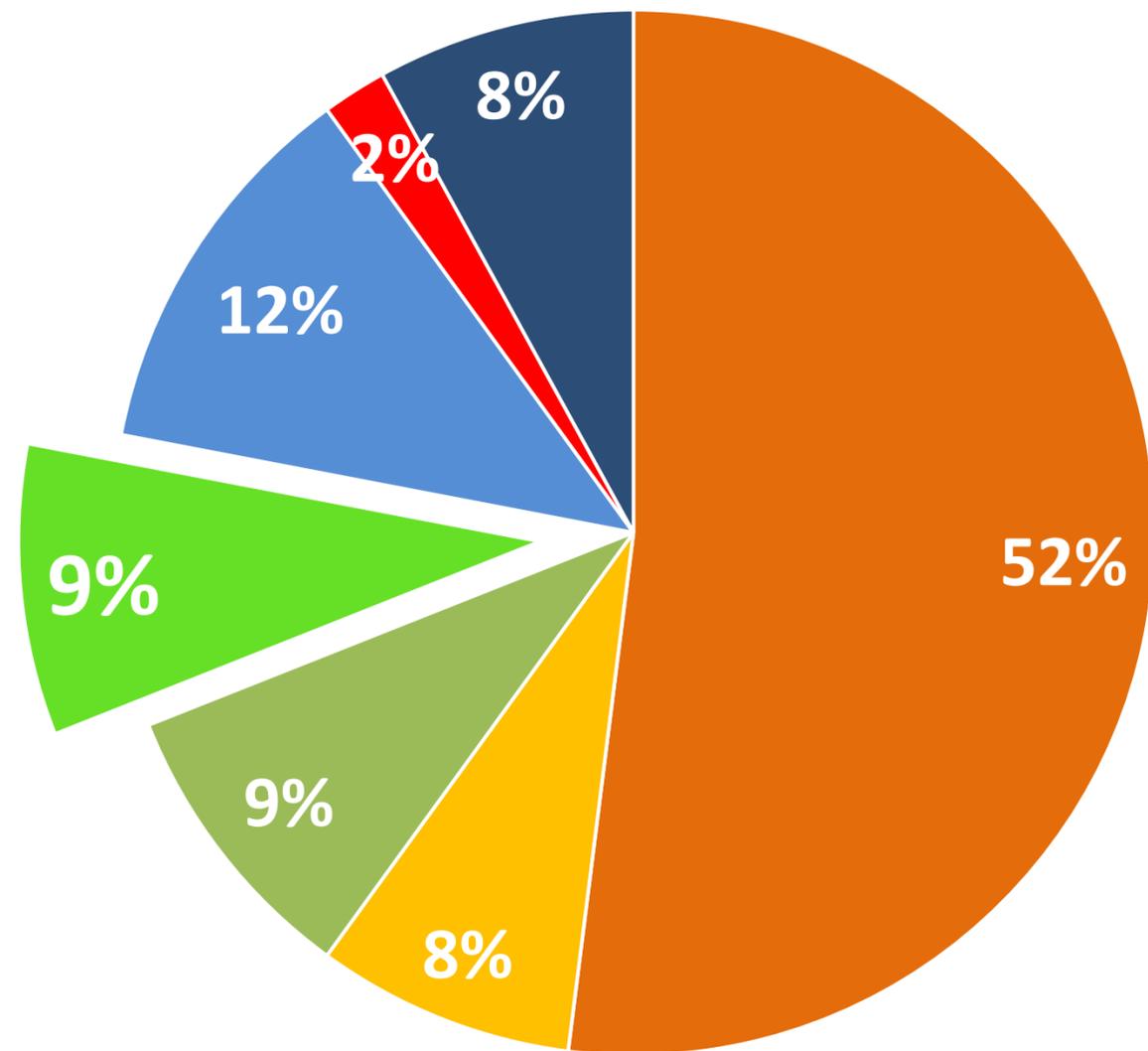
5640 veh/day\*

— Main Freight Corridors

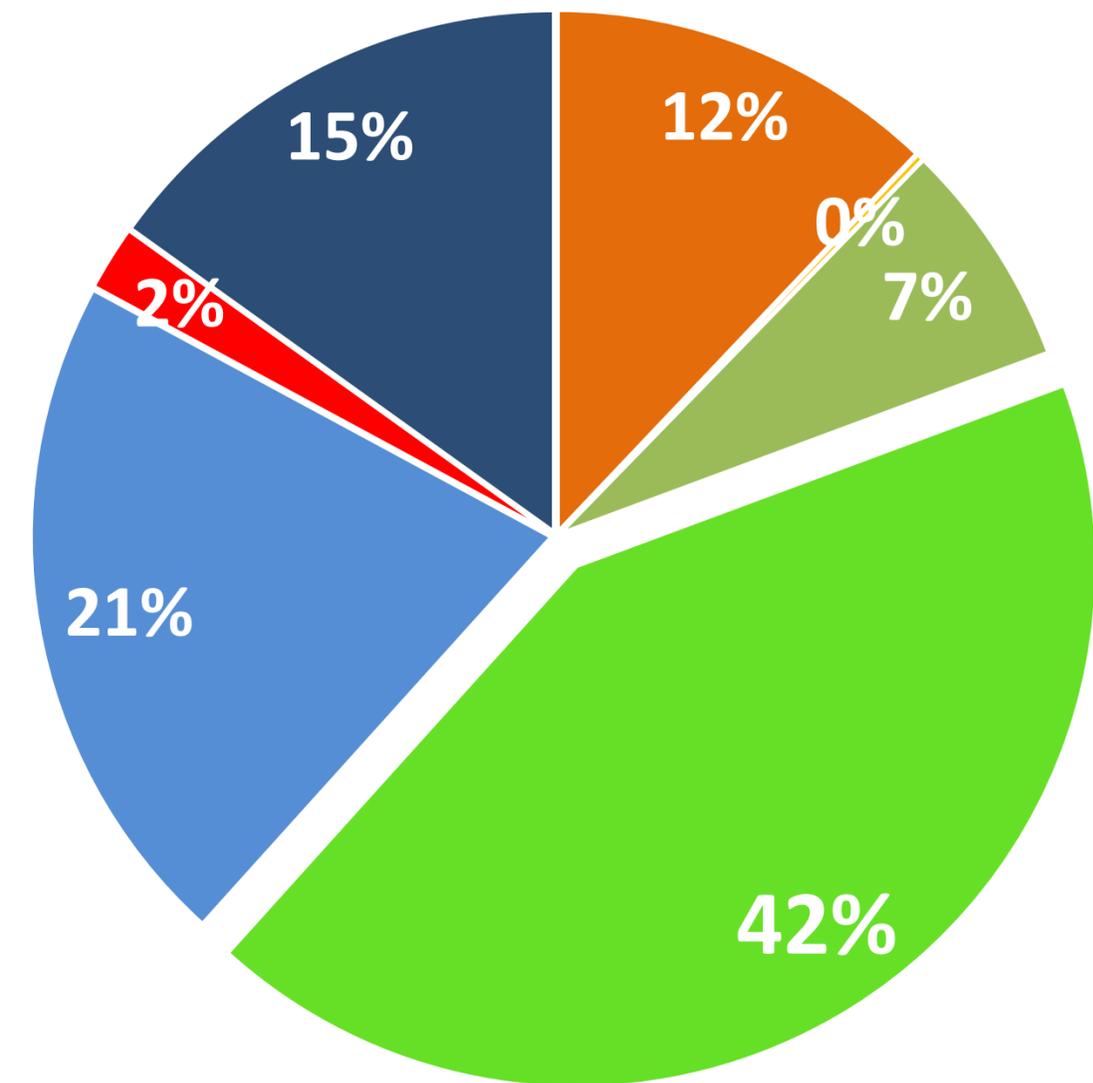
\*Source: RND - Ministerio de transporte

# Emissions Related to Freight

## CO<sub>2</sub> EMISSIONS

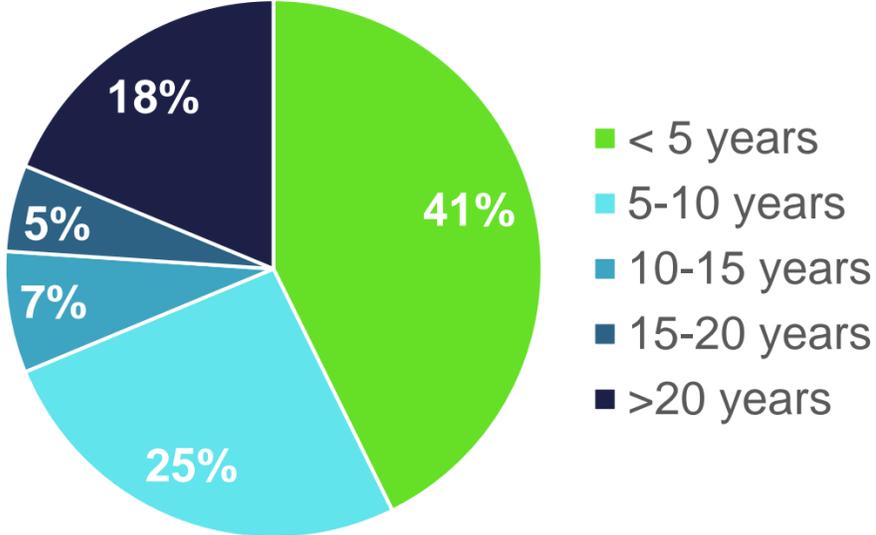


## PM<sub>10</sub> EMISSIONS

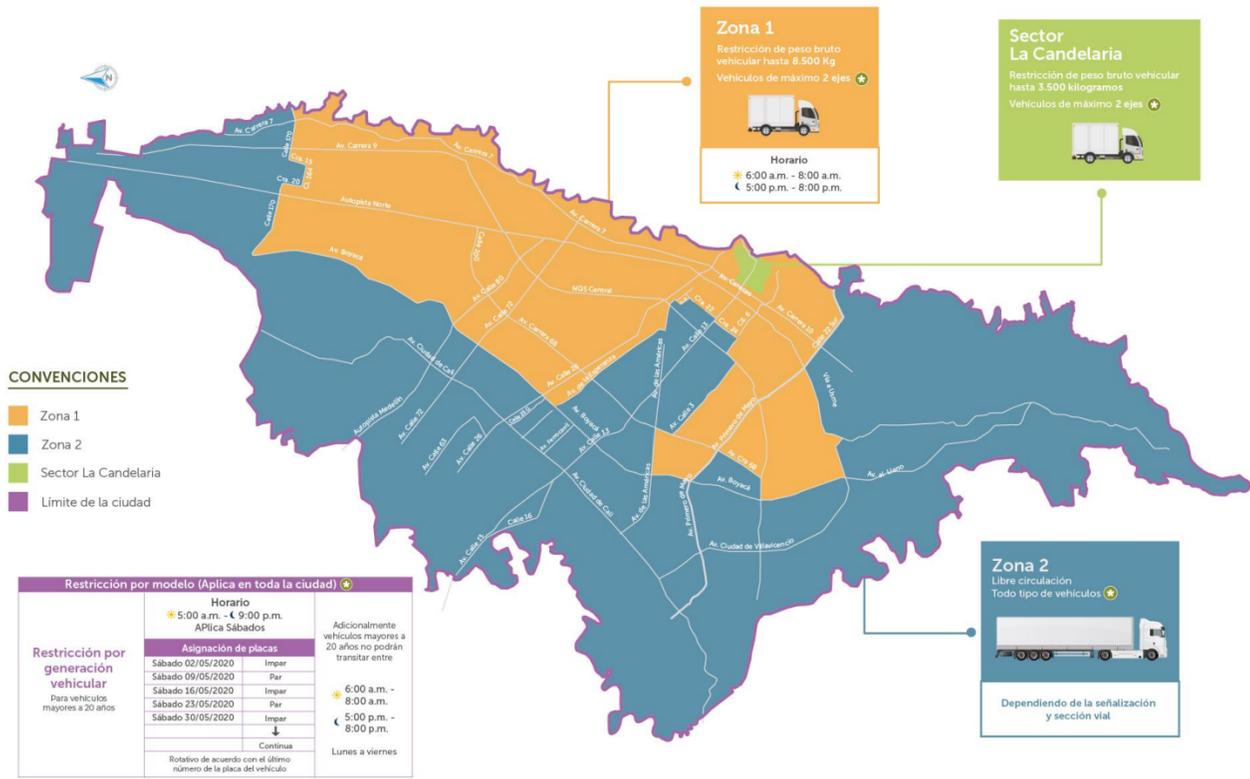


Auto Taxi Motorcycles Freight Buses Transmilenio Other

# Age of Trucks



- **18%** of the fleet older than 20 years.
- **84%** rated Euro III or below.
- **19%** reduction of PM10 emissions following the implementation of truck age restrictions.



# New challenges raised by COVID-19

## SUPPLY CHAIN

- Restricted supply of some products (agricultural products, chemical and industrial supplies).
- Operational disruptions due to the lack of services that support logistical operations (gas stations, hotels, roadside restaurants).
- Different restrictions imposed by neighboring cities.
- Difficulty in maintaining biosecurity protocols.



## E-COMMERCE

- Sudden and substantial increase in the number of orders processed.
- Inadequate infrastructure for unloading in non-industrial areas of the city.

## PRODUCTIVITY 24/7

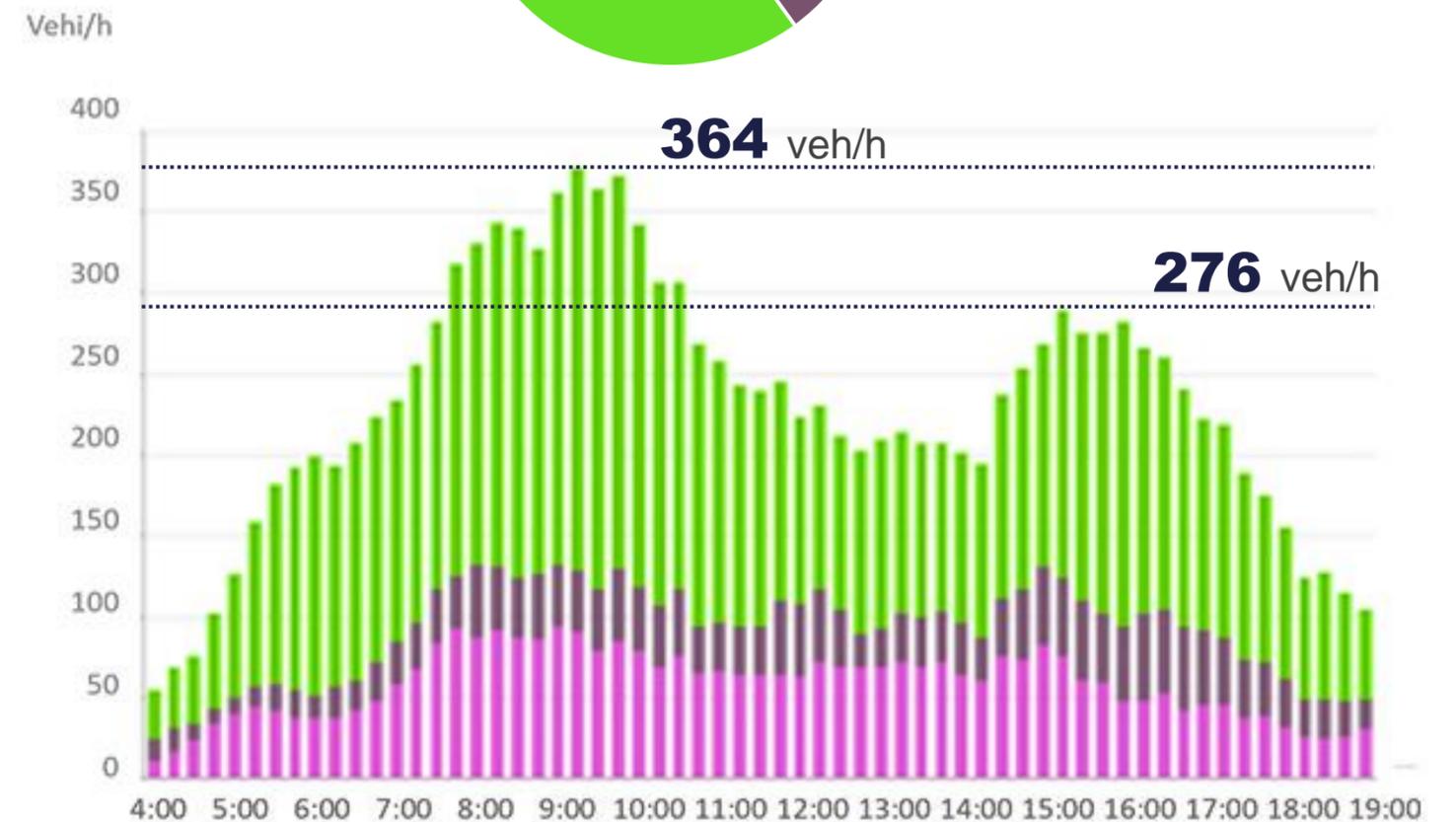
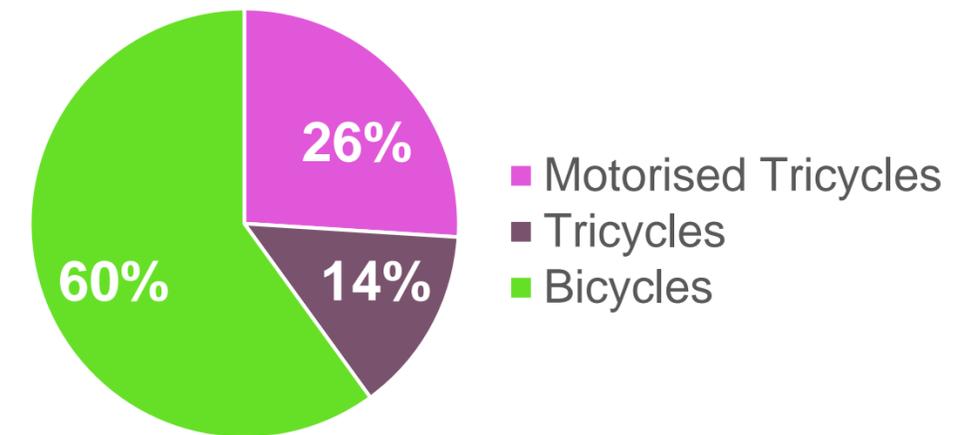
- Lack of staff and supplies.
- Income losses due to economic inactivity
- Security concerns.

# Cargo Bikes

- Some companies have used cargo bikes **since 1975**.
- We seek to promote the use of **electric cargo bicycles** as an innovative and efficient alternative for last mile delivery.
- **Pilot** to be implemented in late 2020-early 2021 involving several private companies.



## Non-conventional freight vehicles in Bogotá



# E-commerce

## What we know...

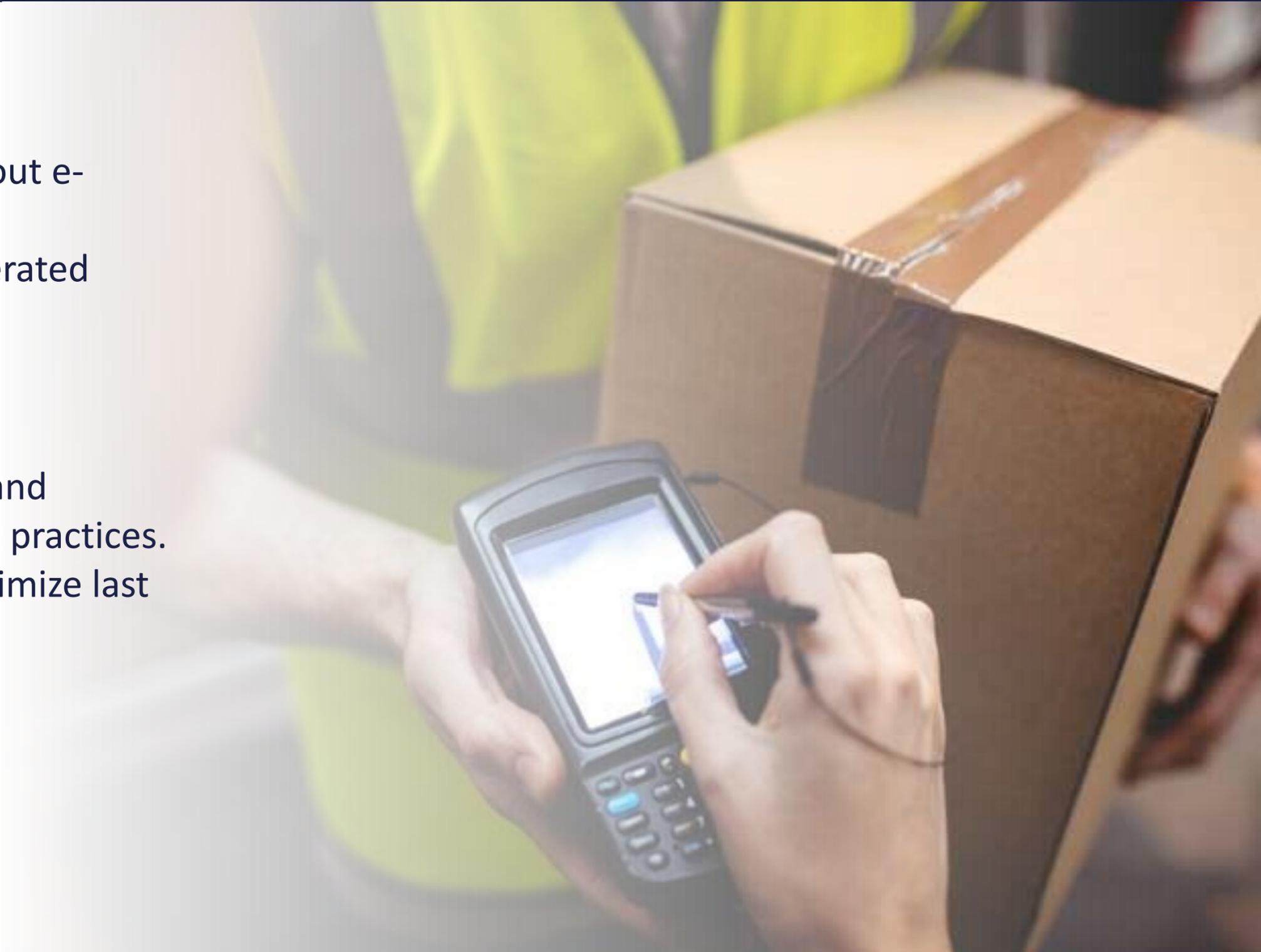
- **91%** of internet users in Colombia carry out e-commerce operations.
- **19%** buy and pay online\* - a trend accelerated after the pandemic.

## What we are doing...

- Diagnosing the current status in Bogotá and formulating strategies to implement best practices.
- Defining and promoting strategies to optimize last mile delivery, supported by the **IADB**.



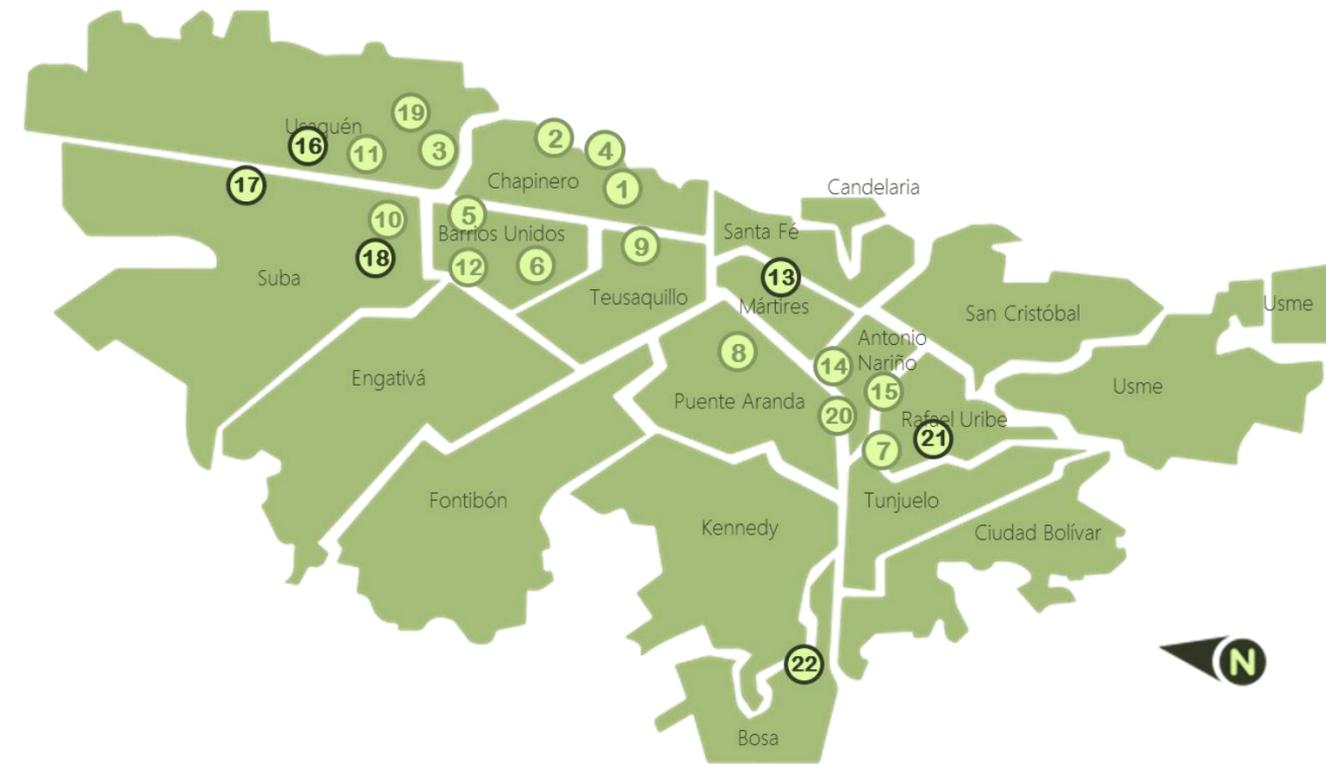
\* Encuesta MINTIC- CCCE 2019



# Unloading and Loading: 24/7 productivity

## LOADING/UNLOADING ZONES

- 143 zones adequated and **22 additional pilots** currently under evaluation.
- Focus on heavily congested areas of the city.



## OFF-HOURS DELIVERIES

### 2016

#### Off-Hour Delivery Pilot

- **170%** delivery speed increase.
- **45%** travel time reduction.
- **46%** increase in unloaded goods.
- **42%** CO2 emissions reduction.

### 2019

“Guidelines of Best practices guidelines for off-hours loading and unloading in Bogotá”.

### 2020

Off-hour delivery/loading **regulation** under construction



# Low carbon urban freight

## ECOLOGISTICS

- Development of a low carbon urban logistics policy.

Increase efficiency



Reduce GHG emissions



Capacity-building



Monitoring and mitigation of GCH



## PACT FOR AIR QUALITY

- Agreement signed between the city government and carriers in Feb 2020.
- Eco-driving and road safety programs
- Support for cargo vehicle owners in the process of scrapping and repowering their assets.
- District fleet renewal promotion.



# Transport decarbonisation in Bogotá...



...much more than urban freight!

# Bicycles in Bogotá before COVID-19



37%



23.9%



6.6%

More trips than in motorcycles (5.5%)

67 %

% of trips using sustainable modes

+551 km

Bike Infrastructure

+37 k

Bicycles registered

+15 k

Certified parking spaces for bicycles

+1.1million

"Al Colegio en Bici" Trips





# Bogotá after confinement



**Reduction in public transport trips**

**Cycling-focused public policy**

**Enhancement of cycling infrastructure**

**Provision of additional services like parking and mechanics**

**Improvement in bicycle security including Bike Registry promotion**

**Promotion of bicycle use by women and children**

**Improvement of air quality**



# Vital Neighborhoods

## Vision

Improve the quality of life in Bogota's neighborhood streets



Stockholm – Sweden. Source: Own – Urbana 2019

# Vital Neighborhoods

## Vital Neighborhood:

1. Traffic Calming

+

2. Sustainable Modes get Priority

+

3. “Placemaking”



# Vital Neighborhoods

## Phase 1 Tactical Urbanism



## Phase 2 Permanent Improvement



Community Participation and Co-Design

Pilot Projects as Demonstration

Scalability and “Competitive” Call for Projects



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