Despacio
Introduction to urban logistics

- Urban distribution: modes diversity, routs, schedules, goods, etc.
- Urbanization: by 2050, 7 of 10 people will live in large cities
- Increase in large cities and megacities: LatAm – CDMX, Sao Paulo, Buenos Aires, Lima, Santiago.
- Vertical growth, there are more and more inhabitants per unit area
- Lack of adequate infrastructure
Where do we buy? Nanostores

Source: Dinero Magazine, 2017
Top 10 of LATAM initiatives (from the public side) - frequency

1. Vehicular restriction (*)
2. Off-hour deliveries (****)
3. Loading and unloading zones (***)
4. Management of Corridors (*****)
5. Good practices guide (*)
6. Fleet modernisation (******)
7. Eco-driving (*****)
8. Observatory (*)
9. Logistics agreement (***)
10. Logistics platforms (*)
Study Cases in Latin America:

- Micro center of CABA, Argentina
- Cargo bikes in Colombia
- Off-Hour delivery pilot in Bogota, Colombia
- Freight Loading and Unloading Zones
Micro center of CABA (Ciudad Autónoma de Buenos Aires), Argentina
Micro center of CABA, Argentina

Source: Buenos Aires Ciudad, 2014

Before

After

- More than 1,400 stores (60% of the total) belong to 4 items
- 2,260 shops require supply in this area (not considering offices)
Micro center of CABA, Argentina

Vehicle Volume per hour, vehicle type and time zone

Maximum vehicular flow between 8 and 10 in the morning

75% of loading and unloading operations before noon.

Source: ITBA, 2014
Micro center of CABA, Argentina – results: negative effects

- **Blue boxes**: “there is only one blue box per block”
- **Vehicular restriction**: “an increase in trucks will translate into an increase in the demand for labor.”
- **Off-hour deliveries**: not used because insecurity, noise, lack of personal from receivers

Source: Abastecimiento en la ciudad de Buenos Aires, 2018
CycleLogistics (cargo bikes)
Bogotá
Cartagena
Medellín
Barranquilla
Off-Hour delivery pilot in Bogota
Off-Hour delivery pilot in Bogota

Companies involved

Source: Mobility Secretariat of Bogota
Off-Hour delivery pilot in Bogota-Results

- A total of **22 routes were registered** within the companies
- The operation **performance** of compared in day and night,
- Direct observation and **tracking routes of the vehicles with GPS devices and ArcGIS**

**Evaluation of the results:**
For the development of the project, topics of analysis were set for:
Off-Hour delivery pilot in Bogota-Results

Security

No. road accidents: 0
No. report of thefts: 0

There were zero events related to accidents or thefts in the areas evaluated.

Environment

Average savings (%) on emissions of air pollutants

- CO: 42%
- SOx: 15%
- N2O: 14%
- NOx: 8%
- 1,3-Butadiene: 8%
- Acetaldehyde: 8%
- Benzene: 8%
- Formaldehyde: 8%
- CO2: 8%
- NH3: 8%
- PM: 1%

Source: SEPRO-UN
Off-Hour delivery pilot in Bogota - Results

Logistics performance

46% more merchandise unloaded.

Travel costs

Light vehicle: 2 axles
Heavy vehicle: > 2 axles

Source: SEPRO - UN
The companies and drivers perceived decongestion of the roads, which facilitated the fastest deliveries within the city.
Freight Loading and Unloading Zones
## Freight Loading and Unloading Zones in Bogota

<table>
<thead>
<tr>
<th>ZONE</th>
<th>Location</th>
<th>Improvement of average speed (%)</th>
<th>Average loading and unloading time (min)</th>
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<tbody>
<tr>
<td>ZONA G</td>
<td>KR 5, entre CL 69 y CL 71</td>
<td>12</td>
<td>14</td>
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<tr>
<td>PARQUE 93</td>
<td>CL 93A, entre CL 93 y 93B</td>
<td>6</td>
<td>14</td>
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<td>WORLD TRADE CENTER</td>
<td>KR 9, entre CL 97 y CL 99</td>
<td>Unaffected</td>
<td>18</td>
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<td>BARRIOS UNIDOS</td>
<td>CL 68, entre KR 20 y KR 22</td>
<td>8</td>
<td>34</td>
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<td>SANTA LUCIA</td>
<td>CL 46 S, entre CL 47 y Av. Caracas</td>
<td>73</td>
<td>35</td>
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<tr>
<td>LOS MÁRTIRES</td>
<td>AK 18, entre CL 11 y CL 13</td>
<td>15</td>
<td>25</td>
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<tr>
<td>GALERÍAS</td>
<td>KR 27, entre CL 52 y CL 54</td>
<td>5</td>
<td>24</td>
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<td>BARRIOS UNIDOS</td>
<td>CL 66, entre KR 16 y AV. CARACAS</td>
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<td>25</td>
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<td>PUENTE ARANDA</td>
<td>KR 60 y KR 63, entre CL 5B y CL 9</td>
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<td>37</td>
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<td>LOS MÁRTIRES</td>
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<tr>
<td>LISBOA</td>
<td>KR 151 Bis y KR 152 con calle 132 D</td>
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<td>30</td>
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<tr>
<td>CALLE 71</td>
<td>CL 71, entre AK 9 y AK 11</td>
<td>Unaffected</td>
<td>25</td>
</tr>
</tbody>
</table>

**Source:** Secretariat Mobility of Bogota
Freight Loading and Unloading Zones in Bogota

Zona G

Parque la 93

Galerías

Alcaldía de Bogotá
Lessons Learned

- Confidence
- Documented pilot projects
- How to dot it (what to do)
- Institucional structure
- Be realistic
- Public policy based on data
- Integrate freight sector on urban planing
¡Thank you!

Dario Hidalgo
dario@despacio.org
@dhidalgo65
@deespacio
www.despacio.org