The São Paulo Night Deliveries Pilot Project

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São Paulo City and the urban sprawl

Source: GoogleMaps, IBGE

12 million p
1,523 km²
7,810 p/hec
Solution: truck bans?

1986
4 km²

1993
11 km
2

1998
12 km
2

2007
25 km
2

2008
100 km
2

Nos dias úteis das 6 às 21h
Nos sábados das 8 às 14h

Nos dias úteis das 10 às 20h
Nos sábados das 10 às 14h

De 2ª a 6ª das 9h às 19h
Aos sábados das 9h às 13h

De 2ª a 6ª das 5h às 21h
Aos sábados das 10 às 14h

LOSADA, CET 2013
The pilot project in SPC

• Evaluate **off hour deliveries in São Paulo City**, with **volunteer companies**, inside a selected area within the daytime truck restriction boundary.
  – No cash incentives from São Paulo City.

• Mayor: “Freight is fundamental for the city.”

• **Pilot Focus**: larger retail chains, particularly shopping malls, pharmacy, grocery, and home improvement materials.

• Evaluation by a neutral third party.
  – University (CISLOG).
Goal: measuring risks

• Safety.
  – Freight and store robbery.
  – People safety.

• Noise.
  – Current legislation..

• Productivity and costs in the supply chain.

• Stakeholder opinions.
Pilot history: stakeholder engagement

- **2013**
  - Jan: New mayor – freight is part of political agenda
  - July: Workshop CISLOG/USP about urban logistics:
    - SUFS, DSV, SMT, GPA, AMBEV, Martin Brower
  - October: Event SETCESP, 200 carriers, SUFS.

- **2014**
  - Feb-July: task force SMT, SETCESP, IDV, CISLOG/USP
  - August: project presentation to prospect companies
    - 100+ attendees from larger retailers/beverage
    - 15 volunteer companies in 3 waves
  - October: first wave (street stores)
  - December: second wave (shopping malls)

- **2015**
  - March: third wave (home improvement and others)
  - May: preliminary results presented; Mayor announced new directives
The pilot

- **Pilot test area**
  - Inside truck ban cordon
  - Mixed land use
  - Some big traffic generators

- **Receivers**
  - All volunteer group
  - 11 companies, 45 stores (including 2 shopping malls)
  - 60+ delivery route shadowings

- **First** big collaboration project between the traffic authority and private sector regarding freight transportation: carrier syndicate and retailer institute.
The pilot test area 11km²
People and operation safety were top priority for all participants

- **Facts:** no occurrences during the pilot (official data from SP State Police)
  - Night patrol routes included participant stores.
  - Two companies used armed escorts.

- **Differences between different receivers and supply chains**
  - Big stores, shopping malls x Small street stores
  - High risk x lower risk cargoes
NOISE

Measuring and evaluating noise was fundamental

- Fact: no complaints during the pilot (official data SP Prefecture Noise Task Force)
  - No complaints do not mean no problems...

- Differences between operations and supply chains
  - Covered delivery points x Street stores
  - Light x Heavy freight
  - Many louder noises came from other sources (background)

All noise factors have at least one solution

Source: CISLOG 2015
PRODUCTIVITY AND COSTS

• Under proper operations:
  – Travel time is shorter.
  – Delivery time is shorter.
  – Bigger vehicles were exception.

• There are additional costs for night deliveries.

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<tr>
<th></th>
<th>Supplier</th>
<th>Carrier</th>
<th>Receiver</th>
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<tbody>
<tr>
<td>Productivity</td>
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<td>Costs</td>
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• Different levels of operational expertise.
  – Pharmacy 1 x Pharmacy 2.
  – Anchor store 1 x Anchor store 2.
  – Grocery 1 x Grocery 2.
Truck speeds and outer beltway

- 5-35 mph
- 35+ mph
Truck speeds

Speed by hour - October/2014

Velocidades Vetoriais Marginais Km/h

ZMRC Mediana Km/h

3 x faster

2 x faster

Fonte: CISLOG 2015
Delivery times

![Graph showing delivery times with dia and noite categories. The graph indicates a 12-minute delivery time with 33% efficiency.](image-url)
Use of inner and outer beltways during the day
May – results presentation event.
• Urban logistics forum (including VREF CoE SUFS).
• Big success.
• Mayor: “freight should be considered as public transportation”.

Lessons.
• Collaboration is important between public and private sectors.
• Neutral ground for discussion: role of the university in Latin America.

And now:
• August: Division of Urban Freight is created.
• September:
  – OHD adopted as city policy by the mayor.
  – Implementation phase planning:
    • Entire city
    • Until now 23 big companies enrolled, 10 new.
THANK YOU!
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