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**Institute for City Logistics**



## **URBAN GOODS DELIVERIES IN BRAZIL: WHAT ARE THE PROBLEMS?**

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## Characterization of the all sample

- Study conducted with 202 companies;
  - These companies represent around 14,89% of the Brazilian GDP of 2017;
  - We conducted a survey with logistics operators in Brazil in order to obtain data to identify the challenges of sustainable urban freight transport in Brazilian cities;
  - The questionnaire contain 6 blocks, where we obtained data about the company, urban delivery process, e-commerce deliveries, problems related to urban freight transport, public policies and security issues;
  - We carried out the survey by Internet, and sent the questionnaire to main freight logistics companies in Brazil focusing on urban deliveries.
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**Different point of views on the same situation!!!**



# CHALLENGE

Almost two centuries ago, Charles Darwin said something like that:

**“It Is Not the Strongest of the Species that Survives But the Most Adaptable.”**

Charles Darwin 1809 -1882

Traditionally, urban planning has been focused on passenger transport, and this, over the years, led to serious problems that cities had to deal with, like the lack of an integrated freight urban transportation system design and implementation.



Technological and economical transformations, reclassifications in the urban land uses, environmental consequences of road based transport systems and the growth of the urban population.



Despite that, urban mobility policies are still based on the direct association of cargo distribution with the negative impacts generated by the movement of heavy vehicles in the city, causing the authorities to adopt restrictive policies that do not always contribute to the efficiency of the activity.



In general, it is possible to observe that congestion is present in most cities of the world. In Latin American cities, this congestion is a direct result of the current mobility model, which is based mostly on the use of private vehicles and of the public transportation system (that in general is of low effectiveness).

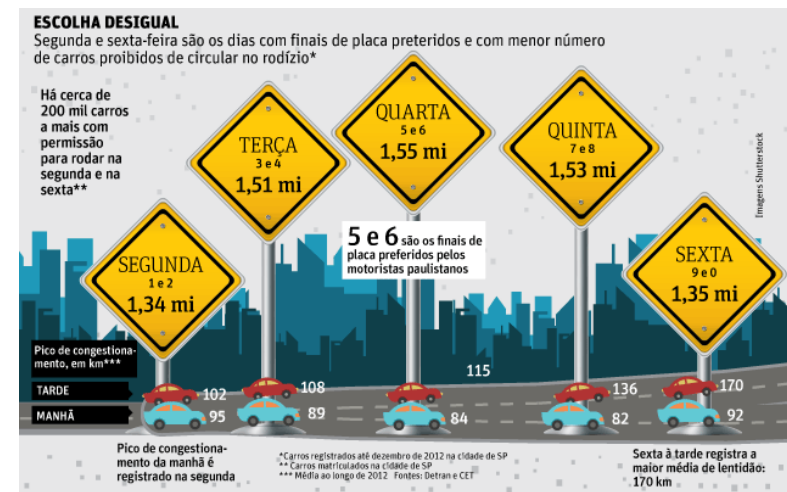
In this context, the carriers encounter complications when performing urban deliveries.



**Sunday – 1 e 2**  
**Tuesday – 3 e 4**  
**Wednesday – 5 e 6**  
**Thursday – 7 e 8**  
**Friday – 9 e 0**

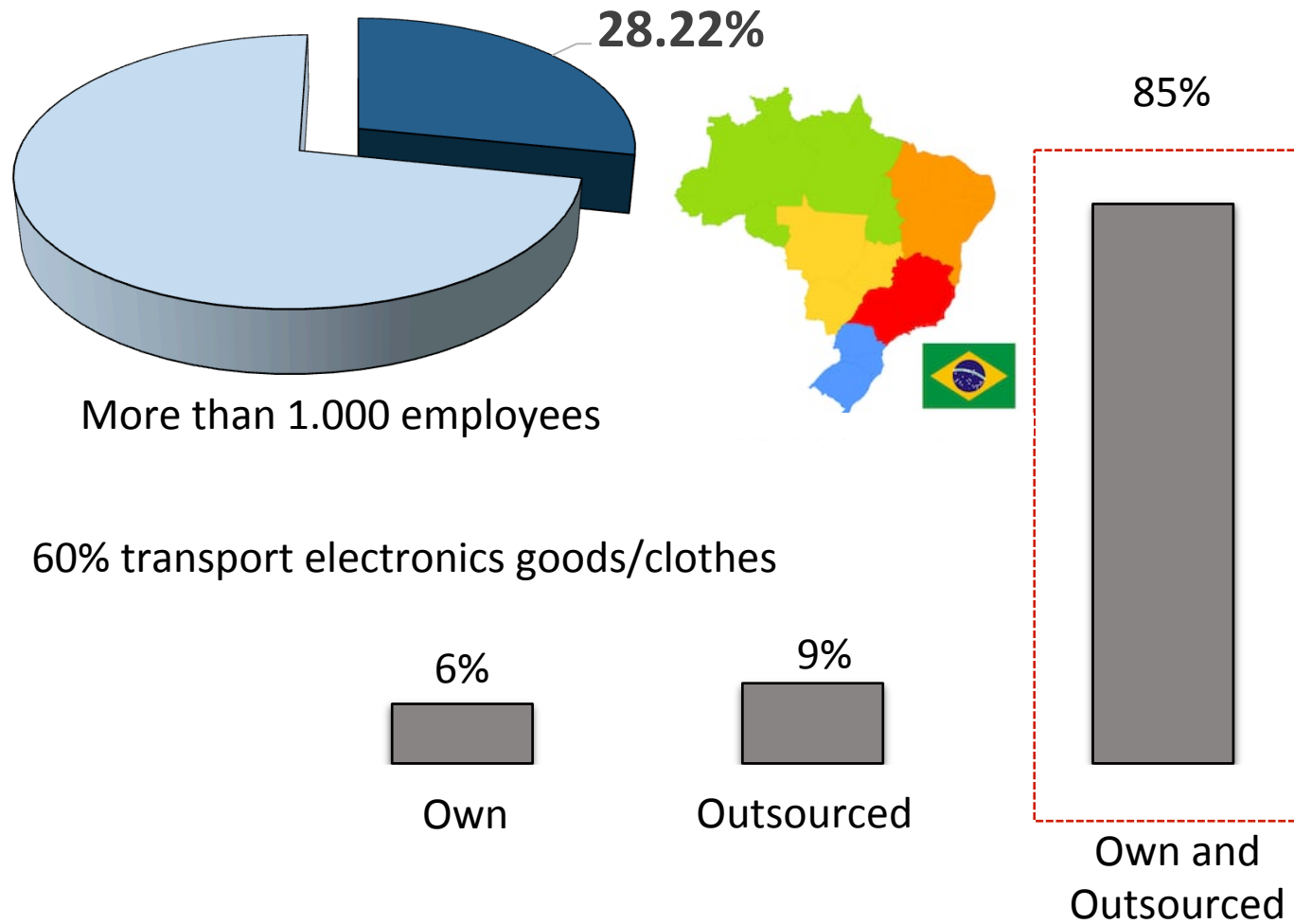


**License plate restriction**





# Research results



The fleet dedicated to these deliveries are mixed (own and outsourced) (85%), own (6%) and outsourced fleet (9%);  
One company that perform deliveries using the bicycle

# Research results



## Correlation results for UFT problems



## Research results

The results of the principal component analysis allowed us to conclude that are three main problems related to urban freight transport in Brazilian cities, according operator logistics companies:  
restriction.





## Research results

### Congestion



## Research results

Availability of loading/unloading spaces.





## Research results

The freight restriction was implemented, in general, to improve the car mobility. As a primary consequence of this measure we have the growth in congestion due to the change of larger vehicles to small freight vehicles or, the use of cars to delivery the goods in dense areas, which leads to the inefficiency of the operation.

Related to this, the number of loading/unloading spaces is not enough to the number of deliveries performed in these areas.

We believe this could be a solution with the involvement of stakeholders in the definition of the public policy to freight sector.





## Research results

The public policies to urban freight transport need to take in account that the freight is as important to people as is to the city. In this way, a good urban freight transport planning can create opportunities for the cities, by providing a business environment, influencing in the economic growth of areas, in the creation of vibrant urban economies, enhancing liveability and quality of life.



# CONCLUSIONS



- Change culture in the transportation planning process by integrating actors to create an urban freight mobility plan that creates opportunities for the city. In Brazil, the challenge is create an urban freight mobility plan for four years (duration of one political mandate), with simple solutions and, mainly, easy to implement.
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- One of the greatest difficulties in urban distribution is in the loading / unloading process. This is mainly due to the risks of theft and tipping of cargo;
- In addition, it is perceived that a reservation system of loading and unloading area, the consolidation of goods in urban distribution centers, a night delivery service, a transit information system and merchandise tracking could improve the transport and distribution service in the country according to those interviewed.
- Concluding, the public policies are effective with planning, monitoring and evaluation through realistic and standardized indicators. The urban freight mobility plan should be simple to implement within a single government with an efficient regulatory framework. In this way, urban freight transport can contribute to more efficient urban mobility.

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