



**Expert Group Meeting on
Sustainable Urban Transport
Modernizing and Greening Taxi Fleets**

**“Empirical Studies on Sustainability in
Taxi Operations: The case Bogotá”**

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We aim in Bogotá



- Oil depletion
- GHG emissions
- Urban sprawl

- Renewable energies
- Less emissions
- Transit oriented develop.



We have in Bogotá

- Taxi – Private Automobile Ratio: 1:20
- It seems there are not that much taxis in Bogotá.
- Very congested city



Taxis are not the problem



We made in Bogotá

- Survey to >400 drivers (personal info, vehicle, operation)
- Published a report



Taxis play a very important role in the future sustainable urban transport



	Taxis	TransMilenio
Fleet	50.000	1.150 articulated
		517 feeder
Daily total distance of all vehicles (km)	12'500.000	330.000
Total daily passengers	1'100.000	1'550.000
Total daily income per system (COP)	140.000 millions	58.000 millions



Tabla 1. Toneladas diarias emitidas por el subsistema de taxis.

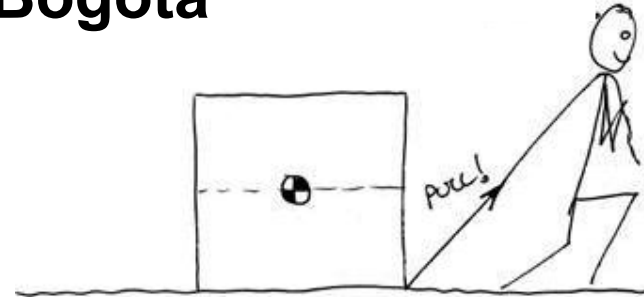
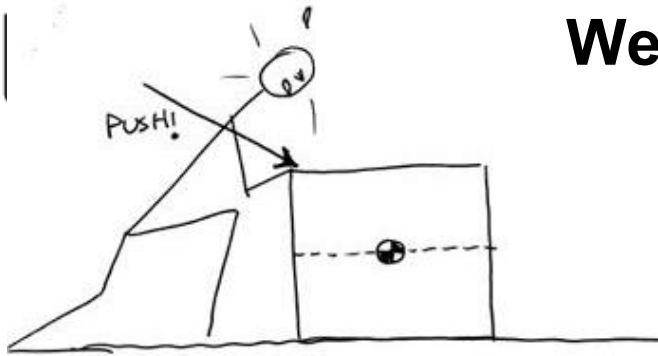
Emisión (Ton/día)		
Contaminante	Bogotá	México D.F. ²
CO ₂	3.079	N/D ³
CO	123	368
NO _x	34	33
THC	32	44
PM	0,022	0,60



- Congestion
- Road safety
- Resources



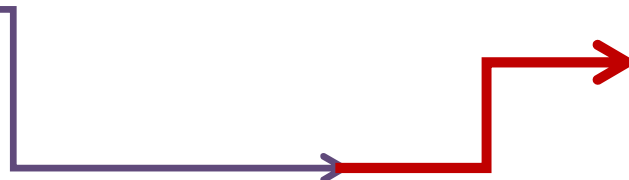
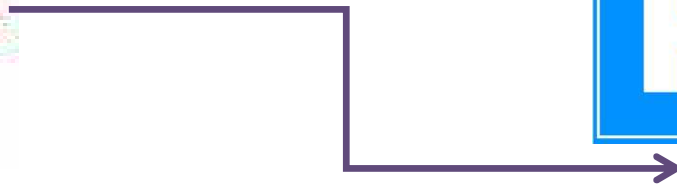
We made in Bogotá



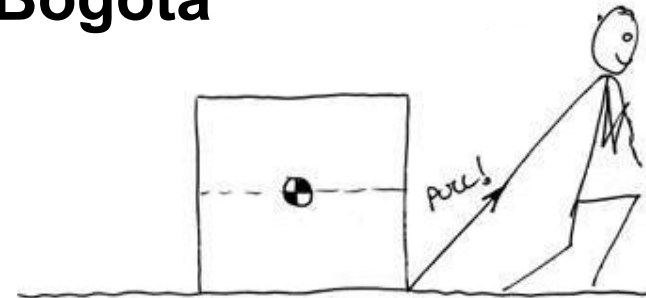
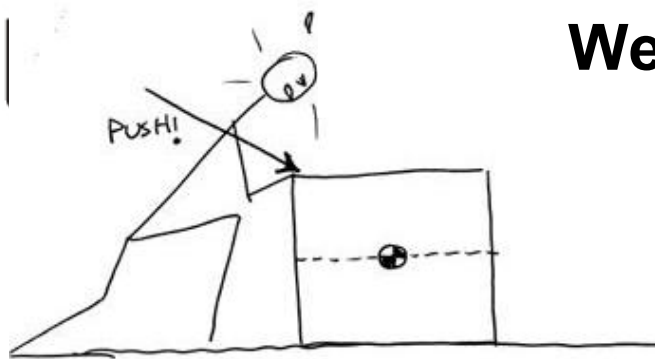
- “Odd-Even” plate restriction:
Pico y placa

?





We made in Bogotá



- “Odd-Even” plate restriction:
Pico y placa

- Provide an integrated Public
Transport System



Taxis is playing in both sides,
and take party depending on
the convenience



$$CT = CP + CS$$



We aim in Bogotá



Conclusions

- Taxis usually are not part of the problem (sustainable urban mobility)
- Neither are for the solution
- We have to invest to know how our systems operate
- We have to compare our systems, so we can learn from each other



Conclusions

- Taxis cause significant external cost to the society.
- In Bogotá, all costs are usually not accounted
- Is taxi more convenient than car?
- Is in Bogotá necessary to have 50.000 taxis burning fuel in 12'500.000 km / day



Obigado!

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The drivers

Number of taxis	50.000
Number of drivers	59.000
Man - women percentage (drivers)	98,7% - 1,3%
Average of daily worked hours	13,8
Average monthly income (COP)	1.230.000 – 1.800.000
Average age (years)	41,5
Mean age when entering (years)	32,0
Self-employed drivers	32,8%
Drivers younger than 50 years old	78,0%
Rides per day	18 to 25
Low-income³ drivers	93%
Drivers with not even elementary school	32,1%
Perception of this job as permanent	3 of each 4 drivers
Drivers with 10 or more years in this job	29,2%

