



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

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

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Our aims in Bogotá



- Oil depletion
- GHG emissions
- Urban sprawl

- Renewable energies
- Less emissions
- Transit-oriented development.



What we have in Bogotá

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



Taxis are not the problem



What we did in Bogotá

- **Surveyed** >400 drivers (personal **data**, 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
Total daily 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 million	58,000 million



Table 1: Daily emission by taxi sub-system
 Tabla 1. Toneladas diarias emitidas por el subsistema de taxis.

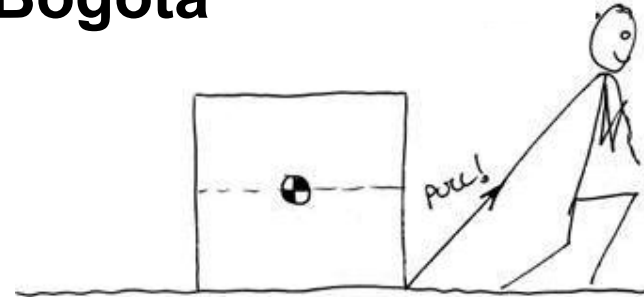
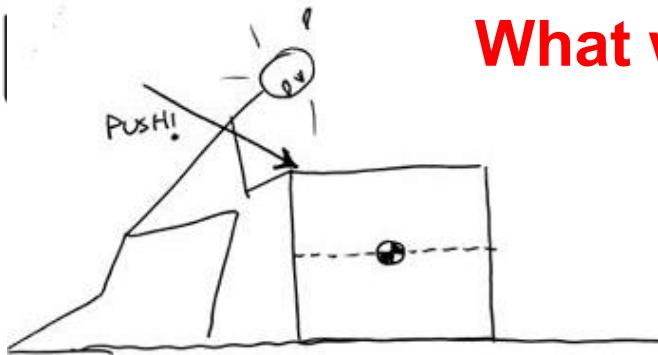
Emission Ton/day		
Contaminant	Bogotá	México D.F. ²
CO ₂	3.079	N/D ³
CO	123	368
NO _x	34	33
THC	32	44
PM	0,022	0,60



- Congestion
- Road safety
- Resources



What we did in Bogotá



- “Odd-Even” plate restriction: the *pico y placa* (peak-and-plate) system

?



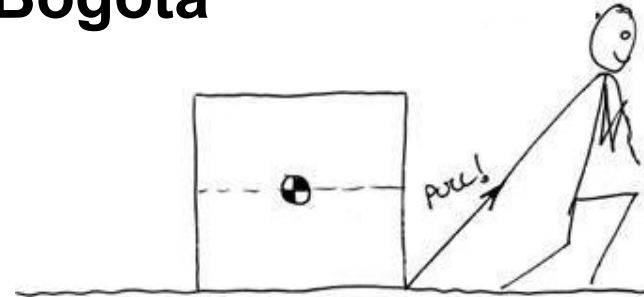
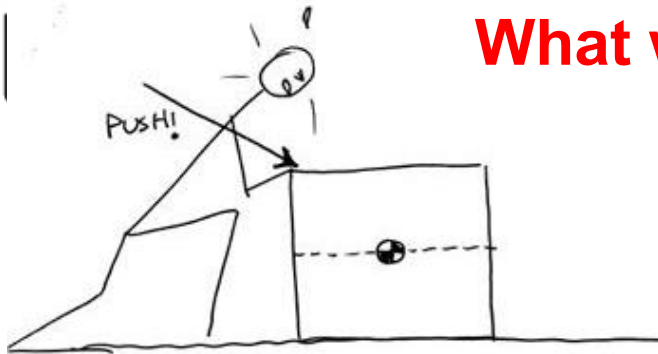
www.promovivamos.com - pico y placa



www.primaria.com - @primaria



What we did in Bogotá



- “Odd-Even” plate restriction: the *pico y placa* system

- Provided an integrated public transport system



Taxis **play on** both sides, and take **part according to** convenience

$$CT = CP + CS$$



Our aims in Bogotá



Conclusions

- Taxis are not **usually** part of the problem (sustainable urban mobility)
- Neither are **they** 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 **society** significant external cost
- In Bogotá, all costs are usually not accounted
- **Are taxis** more convenient than **cars**?
- **In Bogotá, is it necessary** to have **50,000** taxis burning fuel **driving** **12,500,000 km / day**



Thank you!

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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%

