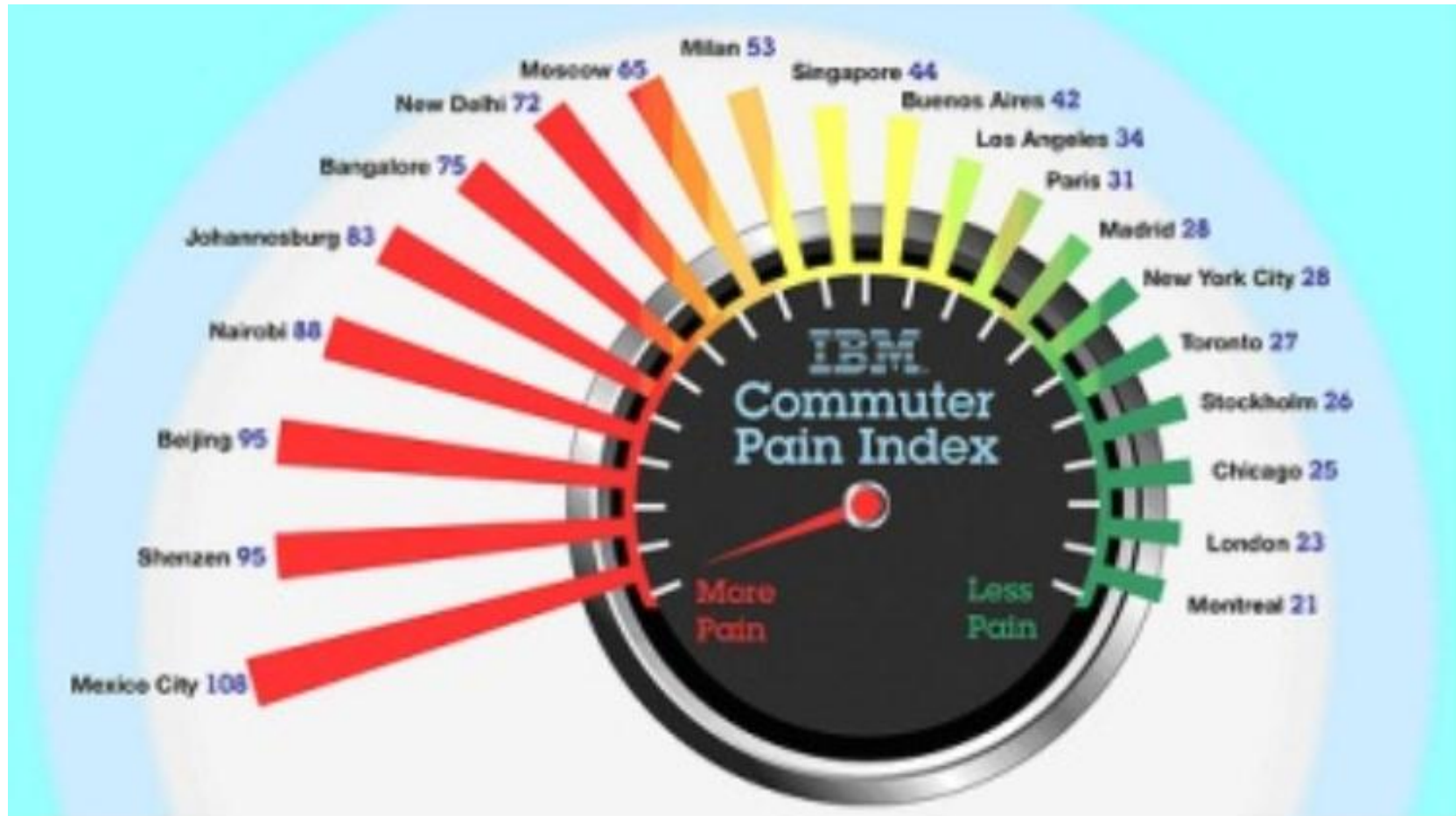# MEXICO CITY CONGESTION

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Introduction

- Mexico City government operates the second busiest publicly owned transit system in North America after New York City.

- Congestion affects citizens' commute and has a large impact on the environment due to automobile emissions.

- Including private operators(which carry about 60% of the traffic) the Mexico City passenger transport system handles about **twice** the passengers of the New York MTA.

IBM Commuter Pain Index

Mexico City Transportation Today

- One of the world's Megacities
  - Over 20 Million citizens
- High levels of traffic and densely populated
- 30 million vehicular trips in the city each day
- Over 3.5 million cars
- Between 70%-80% of trips are public transportation
- 4.5 million trips on Mexico City's 125 mile subway system

Modes of Transportation

- Mexico City Metro
- Mexico City Bus Network
- Mexico City Metrobús
- Xochimilco Light Rail
- Mexico City trolleybus network
- Peseros
- Tren Suburbano
- Taxis licensed to individuals by the government.
  - Mexico has many illegal taxis as well, which are not licensed.

Mexico City Bus Network

- Numerous suburban bus routes emanate from Mexico City's four major bus stations:
  - Terminal Central del Norte (North terminal),
  - México TAPO (East terminal),
  - México Taxqueña (Central del Sur, South terminal),
  - México Observatorio (Poniente or West terminal).
  - Second largest agglomeration of intercity and suburban bus terminals (after China)

Mexico City Metro Bus

Opened in 2005
- Serves 12 miles of Insurgentes, 36 stations, 2 terminals
- Replaces 350 standard buses with 97 BRT vehicles
- Run at high frequencies
- Capacity of 9,000 passengers per hour
- 250,000 passengers per day
- Has reduced travel time (1.5 hrs to 1)
- Reducing 35,000 tons of CO_2 annually

Peseros

- Point-to-Point
- "Collective Taxi"
- "Peso Collector"
- 28,000 in use

Bicycle Use

- Ideal for cycling with its flat terrain and favorable climate
- Making efforts to improve life in the city
  - Building bicycle paths
- Bike-sharing program
  - Ecobici bicycle; largest year-round bike sharing program in North America
  - Transformed Paris, Milan, & Barcelona
  - Attracted more than 30,000 people in Mexico City already
  - Cheapest transportation mode; $ 0.10 per day
  - Compliments public transport network; easy transfers between bicycles, Metro, Metrobus & trolleybus

Estaciones con mas de una bici   Estaciones sin bicis   Estaciones cercanas

1989 Driver Regulation

- Hoy No Circula
- Attempt to curb congestion in the city
- Each car could not be driven on one specific day during the week
  - o Determined by license plates
- Public popularity
- Inefficient and Ineffective

Solutions

- Increase popularity and usage of public transit
- Congestion tax
- Mileage tax
- Intelligent Central System for tolling

Increasing Popularity of Public Transit

- Public transit often available but under utilized
  - Inconvenient
    - Multiple payment systems
      - Bus
      - Subway
      - Parking garage

- Larger adoption of Public transit means less pollution and less vehicles on the road, freeing up road space

Multimodal Fare Card Ticketing

- One card for every mode of public transportation
    - More convenient
- Consolidate current transport systems
    - All buses, subway, trains owned by the city
- Data gathered from card could determine more efficient bus scheduling and routing based on most used destinations and times

Mileage Tax

- Already implemented in Oregon
- Looked at providing every new vehicle with a Global Positioning System to record every mile driven & where
- Took place of gas tax
    - Taxing drivers based on the number of miles they have driven instead of how much gas used

Congestion Tax

- Already implemented in Stockholm
- Cars registered in Sweden taxed as they enter the city
- 50% shorter queues
- 25% reduction in car use
- 14% less emissions
- Complete public approval
- Bus timetables re-written to take improvement into account

Intelligent central system for tolling

- Data gathered from tolls helps predict future congestion
  - Real time data sent to commuters who can then make a more informed decision on the route they choose to go to work

QUESTIONS?