Financing Urban Transport Policies and Programs

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We Insist in a Paradigm Shift

Moving Cars

Moving People
Global Report on Human Settlements 2013

http://www.unhabitat.org/content.asp?typeid=19&catid=555&cid=12336
We think we have it clear how

<table>
<thead>
<tr>
<th>Avoid</th>
<th>Shift</th>
<th>Improve</th>
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<tbody>
<tr>
<td>Quantity and length of motorized trips</td>
<td>To the most efficient modes</td>
<td>Technology and operations</td>
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But not enough change is happening

- 10% of GDP
- $\text{\$\$\$}$ (Economic loss)
- 1.24m Traffic fatalities every year
- 2.1m Premature deaths from air pollution every year
- Transport GHG emissions increase by 80% by 2050

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Why?

Dispersed single land use

Provision of Road Capacity

[Prediction of Vehicular Flows]

Increased urban area

Increased Motorization

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Wrong solution!

- Eating
- Expanding the Size of The Pants
- Lack of Exercise
- Obesity

Lewis Mumford, October 19, 1895 – January 26, 1990
“Lock-in” effect
Keys to “Unlock”

- Re-allocating Finance
- Building Capacity
- Capturing the trends

Re-allocating finance

Source: Sakamoto et al. (2010)
Public finance in the transport sector

Source: Sakamoto et al. (2010)
National Governments are Central

International Organizations

National Governments

City and Local Projects

Transport Policy

Projects

Transport Finance
National Programs


Evaluate, Enable, Engage: Principles to Support Effective Decision Making in Mass Transit Investment Programs

Some Examples: Brazil

- National Urban Policy
- Comprehensive Mobility Plan (1,600 cities 20,000+)
- Growth Acceleration Program (PAC) USD 9.5 billion for BRT, LRT, Metro Infrastructure – co-funding from state and local levels
- Additional loans for vehicles and rolling stock BNDES
Some examples: Colombia

- National mass transit policy
- Up to 70% support for infrastructure
- USD 2.5 billion for BRT in seven cities
- Integrated public transport in intermediate cities
- Technical assistance
- Encourages private participation
- Metro in Bogotá (expected)
Some examples: México

- Mass transit program (PROTRAM) USD 2.4 billion
- 50% of project capital cost for Rail and BRT
- 5 Cities in operation/final construction; 34 cities identified
- Requires private participation
Some Examples: India

- National Renewal Mission (JnNURM) USD 20 billion
  - Requires comprehensive mobility plan and co-funding from the state and local levels
  - Resulted in implementation of Metro in 6 cities and BRT in 7 cities
  - Encourages private participation

Bhopal BRTS Mybus
http://sustainablecitiescollective.com/sites/sustainablecitiescollective.com/files/Picture3.jpg
Some examples: China

- “Transit City” project 30 cities
- Requires co-finance of provincial governments
- In 2012 Beijing Metro reached 16-lines 442km - 1,050km expected by 2020
- Other 16 Chinese cities expanding Metro; 18 cities with Metro and LRT systems under construction; 22 cities with construction planned.
- 15 cities with BRT; 11 under construction or planning
Continued Funding - National

International Fuel Prices Series

http://www.giz.de/expertise/html/4317.html
Continued Funding - Local

Land Development
- Property taxes
- Value capture
- Transit Oriented Development

User and Property Taxes
- Registration/licence (property)
- Taxes to inputs (fuels)
- Parking management
- Urban tolls
Land Development (along public transport)

http://www.tramz.com/co/bg/t/ts.html

Photo: Courtesy of Oren Tatcher
Singapore
Ørestad City, Copenhague

Bogotá
Central Station
Urban Renewal Project (under construction)

Source: Empresa de Renovación Urbana, Bogotá
Vehicle Registration Fees (Quotas)

Vehicle Registration Fees (Quotas)

**Singapore (1990)**
Auction: USD 67,000 per vehicle
Quota 1% increase in fleet per year
~ 6,000 new cars, ~US 400+ million per year (for SUT)

**Shanghai (1994)**
Auction: USD 9,000 per auto
~ 96,000 new vehicles per year
~US 900+ million per year (for SUT)

**Guangzhou (2012)**
120,000 new vehicles per year (12,000 clean vehicles lottery, 60,000 rest lottery, 48,000 auction)
Parking Management

http://www.baycitizen.org/transportation/story/clog-streets-pay-premium/
Parking income in San Francisco
US $187 million per year (for SUT)

US $87,263,867  Parking violation fines
US $47,119,999  Parking-meters
US $43,354,632  Garages
US $9,747,900   Residential permits

29,058 spaces with parking meters
79,000 residential permits
263 enforcement officials

Fuente: Autoridad Metropolitana de Transporte de San Francisco SFMTA, 2011
Congestion Pricing
London, Sweden, Valetta, Singapore
The idea is to leverage funding
The challenge: 23% reduction in VKT in 2050

- 22.8% reduction in vehicle-km
- USD 20 Trillion Savings

Source: IEA (2012) Energy Technology Perspectives
The impact: 1.3 million people not killed in traffic

Source: EMBARQ Analysis, Duduta and Hidalgo (2013)
Thank You!  ¡Muchas Gracias!  धन्यवाद