Sustainable Development and Public Transport

Ramon J. Cruz
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Commission on Sustainable Development Learning Centre
United Nations CSD-19 Meeting, New York
The context: rapid urbanization, rapid motorization, rising but disparate incomes
with a large share of the world’s people unable to afford private motor vehicles in our lifetime

Photo: Carlos Pardo
Which path will developing countries follow?

![Graph showing per capita motorized travel in cars and household light trucks against per capita GDP, 2000 US$ at PPP](image-url)
Motorization grows with income, but not on a single path
Public Transport Is Essential for Especially for the Poor


Source: CAF – Observatorio de Movilidad Urbana

Argentine Peso (ARS) in 2006 USD values

Source: CAF – Observatorio de Movilidad Urbana
Which model of urbanization is being followed?

For whom are transport systems being designed and managed?
Are transport services designed to meet the needs of women, children, the elderly & disabled?

and to protect public health and safety?
A choice for decision-makers…

**Unmanaged motorization**
- subsidies for motor fuel
- expansion of high speed roads
- motor vehicles displace cyclists, pedestrians, public transport
- disorganized public transport
- unmanaged sprawl, urbanization
- high inequality of access

**Or Sustainable transport**
- support for quality public transport
- protected road space for buses, pedestrians, cyclists, public space
- rail or bus rapid transit organized in high demand corridors
- transit oriented development
- more equitable access for all
High carbon unsustainable path
Design for exclusive high cost mobility

Encourages separated land uses
Makes jobs inaccessible to those lacking private motor vehicles
Robs pedestrians & cyclists of social status, pushes them into gutter
Without sustainable transport, lower income people end up choosing between poor housing, long and costly access to jobs, or low wages close to home...
Motor fuel subsidies

For every unit transferred to poor, 3-5 times more goes to higher income people*

Boost equity with higher fuel taxes, support for health, education, user-side subsidies

Induced demand

Access to rural roads improves education, healthcare access

But expansion of urban roads boosts traffic, worsens equity

Expansion of transit, walking, biking boosts use of those modes

* Source: IMFSurvey – Rethinking Fuel Subsidies 2007
Design for the young & old, rich & poor, able & disabled
Car dependence can be reversed

Sao Paulo Success

% de viagens

SOURCE: OD 677187197102107

Graph: Sao Paulo Municipality
Singapore

transit trip share:
40% in 1975
65% in 2010
With the majority of transit trips on buses
Bogota success
¿Qué medio de transporte usa principalmente?

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- **Transp. Públ.**: 6% '98, 18% '00, 15% '01, 13% '02, 15% '03, 15% '04, 12% '05, 17% '06, 15% '07, 15% '08, 12% '09
- **Colectivo / individual**: 17% '98, 15% '00, 13% '01, 16% '02, 13% '03, 15% '04, 19% '05, 18% '06, 24% '07, 15% '08, 15% '09
- **Masivo (T.M.)**: 8% '98, 8% '00, 15% '01, 17% '02, 16% '03, 19% '04, 15% '05, 15% '06, 17% '07, 15% '08, 13% '09

1600 surveys, error 2.6% with a 95% confidence level

High Quality Bus Rapid Transit (BRT)
Guangzhou: Pre-BRT
Guangzhou With BRT
To boost transportation operational efficiency: AVOID – SHIFT- IMPROVE

Avoid unnecessary or low value travel with smart pricing, development, logistics, supply chains, communications
To boost transportation operational efficiency:
AVOID – SHIFT- IMPROVE

Shift travel to more efficient modes
To boost transportation operational efficiency:
**AVOID – SHIFT - IMPROVE**

Improve efficiency with more efficient vehicles, lower carbon fuels, and efficiently operated road networks.
1. Start with the pedestrian:

The vast majority of all trips made daily worldwide are on foot.
2. Provide high quality public transport connecting urban and suburban centers, with integrated fare systems and efficient intermodal/interline transfers
3. Encourage cycling and link it to public transport and major activity centers with continuous networks and secure parking/intermodal centers
4. Employ appropriate transportation market incentives and pricing with intelligent transportation systems
5. Design ‘Complete Streets’ safely serving all users and modes of transport
6. Manage the speed of motor vehicles for safety and system performance
7. Enhance transport services with new information, services, travel modes, innovation, telecommunications
8. Activate public space with small blocks, small streets, urban parks, climate sensitive design, and dense mixed-use people-oriented development
Ensure more funds on balance go to sustainable transport
Transport and Climate Finance

Approaching $100 Billion p.a. by 2020

Kick-start finance

Copenhagen Green Climate Fund

Existing international, domestic/private flows to transport

$30 Billion (new & additional climate finance) for 2010-2012

$ Trillions Now!
Forge partnerships to finance the new vision: ASAP

- **ANALYZE** The impacts of financing decisions on sustainability
- **SHIFT** Existing resources toward a sustainable direction
- **ADD** Increased funding for areas where resources are lacking
- **PAY** For the full costs of transport including environmental depreciation
For More Information

Ramon J. Cruz

Climate Policy Specialist
Institute for Transportation and Development Policy

9 East 19th St. 7th Floor
New York, NY USA
rcruz@itdp.org

www.itdp.org

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