Transport and Climate Change Week

Focus 2017: Urban Mobility

18 - 22 September 2017
National Urban Mobility Policies and Programmes
Agenda

- Welcome and Background
- Introduction to NUMPs
- Structure of the Political System – National and Local Competencies
- Institutional Set-up and Governance of NUMPs
- Financing Sustainable Urban Mobility
- Closing Session
Agenda

- Welcome and Background
  - Welcome and introduction to MYC (MobiliseYourCity & TUMI) (Markus Delfs /Christian Mettke, GIZ)
  - Aim and objectives of the workshop (Holger Dalkmann & Dario Hidalgo)
  - Introduction participants
Introduction of the MobiliseYourCity Partnership

Transport & Climate Change Week 2017, Berlin

Markus Delfs, MobiliseYourCity Secretariat

Version 9/2017
MobiliseYourCity focuses on Sustainable Urban Mobility Planning. It supports cities and national governments in emerging and developing countries to plan sustainable urban mobility.

MobiliseYourCity is a global partnership launched at COP21. It is one of 17 international transport initiatives under the UNSG/UNFCCC action agenda (GCAA). It assists beneficiaries in achieving their National Determined Contributions (NDCs).

MobiliseYourCity contributes to the New Urban Agenda and UN’s 2030 Agenda, specifically Sustainable Development Goal (SDG) 11: Make cities inclusive, safe, resilient and sustainable.

Quantitative goals:

- ≥ 100 cities acknowledged MobiliseYourCity and the need to implement Sustainable Urban Mobility Plans (SUMPs) targeting >50% CO2 until 2050
- ≥ 20 national governments acknowledged MobiliseYourCity and the need to implement National Urban Mobility Policies & Investment Programs (NUMPs)
**MYC Partners**

**Contributing Partners**
are either direct donors (providing funds or technical assistance) or implementing agencies managing delegated funds;

**Beneficiary Partners**
are local authorities or national government from emerging or developing countries, benefiting from funding or technical assistance under the Initiative;

**Knowledge and Networking Partners**
support the initiative in various ways.
MobiliseYourCity Contributing Partners

Undertaken with support from:

Implementing Partners:

Endorsed by:

Knowledge and Network Partners:
NUMPs: National Urban Mobility Policies & Investment Programs

Frameworks for supporting SUMP elaboration at the local level

- Legislative framework
- Capacity building
- Funding schemes
- MRV System
Interfacing with Financial Assistance

Technical Assistance

- Engaging in focused Mobility Planning / Initiation of Process
- Sustainable Urban Mobility Plan (SUMP) Development
- National Urban Mobility Policy & Program (NUMP) Development

Financial Assistance

- Prefeasibility Studies
- Environmental Impact Assessments
- Due Diligence
- Others

...for selected projects or SUMP-based program

AFD
KfW European Investment Bank
Beneficiary Partner Cities and Countries

Pilot Countries

Expressed interest

- Philippines
- Peru
- Madagascar
- Indonesia
- India
- Sri Lanka

- Dominican Republic
- Tunisia
- Morocco
- Senegal

- Brazil
- Mali
- Ukraine

- Ecuador
- Cape Verde
- Ivory Coast

- Burkina Faso
- Togo

- Cameroon
- Jordan
- Pakistan
- India

- Senegal
- Rwanda
- Uganda

- Kenya
- South Africa
- Madagascar
- Indonesia
- Pakistan
- Philippines
www.MobiliseYourCity.net

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Visit us along the COP23 in Bonn!

Follow us on Twitter:
• @mobiliseCity
• #mobiliseyourcity
Dr. Christian Mettke (GIZ)
Email: christian.mettke@giz.de
11 Partners

http://transformative-mobility.org/
Targets

(1) Accessible transport systems for economic growth and prosperity

Support our partner cities in reducing congestion and creating accessible environments for people and the economy.

(2) Healthy and clean cities as livable places

Support our partner cities in reducing the number of traffic fatalities and transport-related air pollution.

(3) Social inclusion for urban dwellers

Support our partner cities in providing affordable access to public transport services and safe walking infrastructures for all population groups.

(4) Climate-sensitive urban transport development

Support our partner cities in building resilient structures and reducing greenhouse gas emissions in urban transport.
How we promote sustainable Mobility

1000 Game-changers

- Ambitious training initiative
- Supporting leaders in transformation processes
- Learning, networking, reflecting
- Promoting partnerships

Move Fast

- Promotion of pilot activities
- Promotion of development dynamics
- Make innovations visible

Financing

- Mobilization of a total of EUR 1 billion by KfW in cooperation with other donors

All 3 pillars are closely linked and support each other.
Training objectives

• Be familiar with the basic principles and elements of NUMPs as well as the MobiliseYourCity (MYC) initiative;
• Have learnt different case studies and best practices in national urban transport policies, institutional frameworks and financing strategies including design options in investment support programmes;
• Be aware of options how to incentivise better urban mobility planning and stimulate investment via a NUMP.
Key Questions

• What are the **approaches around the world** with regard to national policies, programs and legislative frameworks that enable implementation of ambitious sustainable urban mobility actions?

• How to enhance **institutional coordination** between various national and local government institutions, private sector stakeholders and civil society, and strengthen human capacity?

• What can be done in the future in order to improve **financing sustainable urban mobility** to deliver positive results in climate change mitigation and quality of life?

• What are the **good practices** and where are they located?

• What are suitable options to enhance sustainable urban mobility in my **political economy** through NUMPs?
Agenda

- Welcome and Background
- Introduction to National Urban Transport Programmes NUMPs
  - Structure of the Political System – National and Local Competencies
  - Institutional Set-up and Governance of NUMPs
- Financing Urban Mobility
- Closing Session
Challenges in developing cities

Humans love to move, travel, discover... by different ways and modes...
In most cities, mobility is dominated by personal motorized transport. Many people choose cars to move around…
Road transport is a major contributor to air pollution and climate change. Transport contributes to 23% of energy-related CO2 emissions and is still growing!
Worldwide, 1.3 Million road deaths and up to 50 Million people injured per year
Challenges in developing cities

10-25% of urban areas are taken by road transportation infrastructure -
A lot of space for cars but…
Challenges in developing cities

...where is the space for people?

the silent pedestrian, the invisible cyclist must be seen... and heard
Status Quo in many parts of the world

- Weak or non-existing regulations for integrated urban mobility planning, limited guidance on state-of-the-art planning processes
  → infrastructure-oriented transport planning vs. mobility behaviour and needs

- Limited guidance for designing safe and convenient walkways, cycling infrastructure and public transport integration
  → Outdated road building norms favour high speeds of motorised transport

- Uncoordinated funding mechanisms due to incoherent national urban transport policies
  → Lack of priority-setting for sustainable urban transport measures
Paradigm shift of urban mobility planning

„If you plan for cars and traffic, you get cars and traffic.“  „If you plan for people and places, you get people and places.“

<table>
<thead>
<tr>
<th>Traditional Transport Planning</th>
<th>Sustainable Urban Mobility Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on traffic</td>
<td>Focus on people</td>
</tr>
<tr>
<td>Primary objective:</td>
<td>Primary objectives:</td>
</tr>
<tr>
<td>Traffic flow capacity and speed</td>
<td>Accessibility and quality of life</td>
</tr>
<tr>
<td>Political mandates and planning by experts</td>
<td>Important stakeholders are actively involved</td>
</tr>
<tr>
<td>Domain of traffic engineers</td>
<td>Interdisciplinary planning</td>
</tr>
<tr>
<td>Infrastructure as the main topic</td>
<td>Combination of infrastructure, market, services, information, and promotion</td>
</tr>
<tr>
<td>Investment-guided planning</td>
<td>Cost efficient achievement of goals</td>
</tr>
<tr>
<td>Focus on large and costly projects</td>
<td>Gradual efficiency increase and optimisation</td>
</tr>
<tr>
<td>Limited impact assessment</td>
<td>Intensive evaluation of impacts and shaping of a learning process</td>
</tr>
</tbody>
</table>

Source: Rupprecht Consult, quotations by Fred Kent, President of „Project for Public Space“: www.pps.org
Why National Urban Mobility Programmes?
• Urban areas are engines of national growth, and home of the majority of the population – including a large share of the poor
• Urban transport is a key part of the sustainable development package: it helps to achieve the national energy security, GHG emissions targets
• And helps solving growing urban problems: congestion, traffic fatalities, poor air quality, lack of physical activity and access to jobs and urban opportunities for all
But it is not simply allocating money
NUMPs Building Blocks

**National**
- Funding Programs & Regulations
- Technical Guidance for cities

**Allocation of funding sources**

**Local**
- Mobilise local funding options & capacities
- Urban Mobility Plans

**Explore role of provinces**

**Requirement to access funds**

**Coordinate responsibilities**
What are National Urban Mobility Policies & Investment Programs (NUMPs)

Policy objective:
Agree on targets, establish a framework and allocate authorities and means to national institutions and/or city administrations to regulate, plan, finance & implement sustainable transport infrastructure and management projects in a comprehensive and integrated manner

Policy components:
- A sector vision, strategy, targets
- Institutional organization (interministerial + national versus local level)
- A comprehensive set of laws & regulations, tech. guidelines etc.
- Budgeting & financing (medium and long term)
What are National Urban Mobility Policies & Investment Programs (NUMPs)

**Investment Program objective:**
Agree and establish **regulatory and financial framework programs**, which **lead to significant transformation effects** in sustainable urban mobility through **development of selected transport modes** by the public and/or private sector.

**Investment Program examples:**
- National scrapping program of polluting vehicles
- Subsidy program to cities for construction of mass-rapid-transit systems
- Subsidy program to private sector to develop and maintain e-mobility infrastructure
Further NUMP examples

Policy component examples:

• Regulations and recommendations on urban mobility planning
• Regulations on road and street design (obligatory requirements / standards and/or facultative guidelines)
• Public transport regulations and service standards
• Parking management regulations
• General traffic rules
• Data management regulations
• Regulations on government borrowing
• Regulations on concessions and the role of the private sector
Further NUMP examples

Investment Program examples:

- Municipal Transport Sustainable Infrastructure Financing Programme (all modes)
- Cycling/NMT Infrastructure Investment Programme
- Road Safety Programme
- Access Enhancement Programme
- Traffic Management and ITS Programme
- Public Transport Service Subsidies
- Compensation Payments for discounted services for certain groups
- Capacity-Building Programmes
- Awareness-raising campaigns
What are National Urban Mobility Policies & Investment Programs (NUMPs) continued

Why a NUMP?

– **Agree** on vision & targets
– **Enable** relevant national and local institutions with knowledge, resources and required authorities to act and progress sector transformation
– **Ensure participation**, support and self-motivated follow-up by civil society and private sector
– **Connect** with technical and financial support at national and local level
– **Link** to international policies and targets (NDCs, New Urban Agenda etc.)
What are National Urban Mobility Policies & Investment Programs (NUMPs) continued

Key MYC Advisory Modules

• Initiation
• Status Quo Analysis
• Vision & Goal Setting
• Institutional Framework
• Budgeting & Finance
• Capacity Development
• Transport Technologies
• Monitoring & Reporting Coordination & Management
NUMP Examples

Colombia
Mexico
Brazil
China
India

http://www.sustainabletransport.org/archives/1487
Example: 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)
Example: 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
Example: 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
- Up to 50% national grants
- Additional loans for vehicles and rolling stock

BNDES
Example: 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
Example: 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
Session 1 National and local competencies

• Initial lecture (Dario Hidalgo) + OP Agarwal (India) - 30 minutes
• Q&A and introduction to group exercise
• 45 minutes group exercise
• Create good practice principles towards efficient and sustainable national policies / programmes (3-4 groups pending on size of participants) - each group with one facilitator
The importance of the political economy

How political forces affect the choice of policies, especially as to distributional conflicts and political institutions

International Organizations

National Governments

City and Local Projects
Decision Making

• National to local (Colombia)
• National competition for funding - Project by Project (Mexico, Brazil, India, China)
• Co-funding requirement (30%-50%)
• Additional funding from national development Banks (Brazil BNDS, Mexico Banobras)
Example on the NUMP process - Colombia

- 1980’s Decision on Metro de Medellín - Debt to be paid by Region and City, but project costs escalated and project took 13 years to be complete
- 1989 A national law was required to complete Metro de Medellín funding and create local sources (fuel tax)
- 1996 Law is modified to create the opportunity for other projects - mainly Metro in Bogotá, up to 70% funding from the national budget - funding process defined, inclusive of socio-economic evaluation
- 2000 Funding is approved for TransMilenio BRT system in Bogotá
- 2003 National Framework Created for Seven Large Cities in Colombia - Funding for BRT based integrated systems
Example of NUMP Process - México

- 2008 Interest by the Ministry of Finance for supporting mass transit using national road concessions surplus
- 2009 inclusion of mass transit as eligible destination of funding from the National Infrastructure Fund managed by Banobras (second floor national development bank)
- 2010 funding framework defined, up to 50% funding national - 50% state and local - additional funding made available for lending to states and cities and for the private operators
- Cities started applying to the funds - Pipeline 43 cities, 11 projects in operation
Example of NUMP Process - India

- Amendment of the constitution, transferring responsibilities to the Urban Local Bodies (including transport)
- Jawaharlal Nehru National Urban Renewal Mission (JnNURM) massive city-modernisation scheme launched by the Government of India
- Guidance developed for reform and investment - National Urban Transport Policy NUTP
  - Cities required to advance urban mobility plans - moving people not cars
  - Co-funding up to 50% urban transport projects
  - Foster public private partnerships
  - Create Special Purpose Vehicle SPV for Project development
Creation of NUMPs - Lessons learnt

• No single approach fits all contexts
• Different stakeholders, laws, regulations, preferences
• International organizations, consultants, academia, provide a key role in catalyzing transformations
• A local champion and capable institutions are instrumental
• Policy guidance, capacity building, financing mechanisms are core elements of NUMPs
# NUMP Implementation Approaches

<table>
<thead>
<tr>
<th>National Selection (Centralized)</th>
<th>National Selection (Competitive)</th>
<th>Local Imitative (mobilize national support)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faster execution</td>
<td>Uncertain time table</td>
<td>Slow execution</td>
</tr>
<tr>
<td>Opportunity of mobilizing international finance</td>
<td></td>
<td>Difficult to get international funding</td>
</tr>
<tr>
<td>Difficult to get local commitment</td>
<td></td>
<td>Higher local commitment</td>
</tr>
<tr>
<td>Project may be detached from local needs</td>
<td>Best projects get funded</td>
<td>Project may be well adapted to local context</td>
</tr>
<tr>
<td>May include diverse cities with varied capacities</td>
<td>Bigger cities with larger capacity get funding first</td>
<td>Need to develop local capacity as part of the project cycle</td>
</tr>
<tr>
<td>May not get much public participation</td>
<td>Uncertain local participation</td>
<td>May be able to mobilize large local participation</td>
</tr>
<tr>
<td>Some projects may not be cost effective</td>
<td>Cost – effectiveness may be an important criterion</td>
<td>May not be cost-effective</td>
</tr>
</tbody>
</table>
Policy Guidance - Recommended Approach

• **Strategic:** not inputs (money - projects) but outputs (impacts: economic, social, environment)

• **Integrated:** land use and multimodal transport

• **Effective:** maximize impact, ensure deliverability, manage risks
Example: Brazil

• Strategic guidance: requirement of comprehensive mobility plans to seek national funding

Example: Colombia

TransMilenio empieza a cambiarle la cara al municipio de Soacha

Strategic Guidance: Requirement of Comprehensive Mobility Plan and Project Evaluation

Example: México

- Strategic guidance: urban mobility plan and Project Evaluation
Example: India

- **Strategic Guidance:** National Urban Transport Policy (NUTP)
  - Urban Mobility Plan
  - Creation of Unified Metropolitan Transit Authority (UMTA)
  - Constitution of Special Purpose Vehicle (SPV)

- **Bus financing**
Example: China

Strategic Guidance

• From priority of public transport to Transit Metropolis
• From transport sector to multi-sector, city government
• Indicators in 5-year plan
• Motorized mode share in public transport (more than 60%)
• Coverage of public transport station in central areas (100%)
• Bus operation speed in peak time (more than 18 km per h)
• Green bus percentage (more than 50%)
• Mortality rate (less than 0.04/million vehicle km)
Example: China

37 Pilot cities of Transit Metropolis approved by MOT

Policy Guidance - Review of Examples

• **Strategic**: requirement of planning and some institutional development

• **Integrated**: land use and multimodal transport - mostly just transport, some cases just transit corridors

• **Effective**: diverse impacts, delays in delivery, operational risks not solved
Lessons learned from NUMP processes

• No national support → very little progress in sustainable urban mobility
• Not just money: capacity building, institutional development - need to go beyond “compliance in paper”
• Relatively easy to fund infrastructure - very difficult to advance operations reform
• Clear procedures and decision making processes: guidelines and evaluation criteria for project funding
• Co-funding mobilizes local financial effort, increases commitment and selection of more cost-effective processes
• Continuous process of adaptation, improvement, revision
Barriers of Implementation

Source: Luis Antonio Lindau, Dario Hidalgo and Adriana de Almeida Lobo (2013) Barriers to planning and implementing BRT systems, THREDBO 13
Institutional complexity
Lack of technical capacity

CONSULTANCY SERVICES
Many stakeholders with conflicting interests
National Government’s perspective
Traditional bias towards road capacity expansion
Opposition from existing operators

Need to leapfrog
Lack of effective mechanisms for real stakeholder participation
User protests
Discontinuities due to political cycles
Insufficient funding: unfinished projects
## Barrier Analysis

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional complexity</td>
<td>Organize metropolitan public transport authorities</td>
</tr>
<tr>
<td>Lack of technical capacity</td>
<td>Work with universities and research institutions to advance continuous training programs</td>
</tr>
<tr>
<td>Many stakeholders with conflicting interests</td>
<td>Find common ground through effective participation mechanisms (consensus may not be achievable)</td>
</tr>
<tr>
<td>National economic perspective favorable to cars (industry, jobs, banking, taxation)</td>
<td>Work with appropriate ministries to advance a sustainable agenda (show the numbers)</td>
</tr>
</tbody>
</table>
## Barrier Analysis

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional bias towards road capacity expansion</td>
<td>Show overall impacts of sustainable mobility, inclusive of job creation and contribution to overall economic growth, not just the positive externalities</td>
</tr>
<tr>
<td>Opposition from existing operators</td>
<td>Find mechanisms to make them part of the new process (or mitigate their exit). Recognize that this has a cost</td>
</tr>
<tr>
<td>Lack of effective mechanisms for real stakeholder participation</td>
<td>Foster mechanisms for more community involvement</td>
</tr>
<tr>
<td>User protests</td>
<td>Focus on quality and affordability</td>
</tr>
<tr>
<td>Discontinuities of the political cycles</td>
<td>National and international cooperation help mitigate</td>
</tr>
<tr>
<td>Insufficient funding</td>
<td>Good project preparation</td>
</tr>
</tbody>
</table>
45 minutes group exercise: Create good practice principles towards efficient and sustainable national policies / programmes (3-4 groups pending on size of participants) - each group with one facilitator
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Institutions

• Coordination

• Capacity
  – Technical
  – Financial
  – Managerial

• Participation
Typical Institutional Arrangements

- National Programme Unit
- Local transportation authority (need for metropolitan coordination)
- Special Purpose Vehicle for Project delivery and operation
- Private Operation under PPP Scheme
Typical Institutional Arrangements

- Programme supervision - compliance with process - capacity building
- Approval plans - coordination
- Planning-Construction-Contracting Operations - Control Contracts
- Service delivery

Unit in National Ministry
   ↓
Local/State Secretary of Mobility
   ↓
SPV
   ↓
Operator (Private)
<table>
<thead>
<tr>
<th>Country</th>
<th>Goal setting</th>
<th>Planning and Supervision</th>
<th>Construction</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia</td>
<td>President and Cabinet (Conpes)</td>
<td>Natl. Planning Dept + M of Transport + M of Finance</td>
<td>Municipality (Roads Dept or SPv)</td>
<td>Private (public) operators contracted by SPV</td>
</tr>
<tr>
<td>Mexico</td>
<td>President and Cabinet (National Plan)</td>
<td>S of Transport, S of Finance, Banobras</td>
<td>State or Local Body</td>
<td>Private (public) operators contracted by state or local body</td>
</tr>
<tr>
<td>Brazil</td>
<td>President and Cabinet</td>
<td>Ministry of Cities</td>
<td>State or Local Body</td>
<td>State or Local body</td>
</tr>
<tr>
<td>China</td>
<td>Five year plan</td>
<td>Ministry of Transport</td>
<td>Local body</td>
<td>Public transport agency</td>
</tr>
<tr>
<td>India</td>
<td>Prime minister and cabinet</td>
<td>Ministry of Housing and Urban Dev.</td>
<td>State or Local body</td>
<td>Public Transport Undertaking or Private</td>
</tr>
</tbody>
</table>
Establishing Unified Metropolitan Transport Authorities (UMTA)

Presentation by
O.P. Agarwal
Outline

• Why UMTA
• Functional framework
• Key issues in setting up UMTAs
  • Legal basis
  • Jurisdiction
  • Functions
  • Manpower
  • Management structure
  • Financing
• Evolution
• Important lessons
• The Indian context and way forward
Why UMTA

• People choose travel modes based on origin to destination convenience - Typically this involves multiple modes
• Good integration between modes - easy transfer - allows them to leave their cars/motorbikes at home
• Hence, need for a holistic approach
• Needs to balance supply side measures with demand side measures
• This requires many actions to happen in an integrated manner
• These actions are required to be taken by multiple agencies - often cutting across different levels of govt.
• Institutional fragmentation needs to be unified
• This is the case for an UMTA
## Agencies responsible for transport in Delhi

<table>
<thead>
<tr>
<th>Name of the Agency</th>
<th>Major Functions</th>
<th>Level of Govt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport Department</td>
<td>Overall planning, regulation, oversight of the bus services, management of driver licensing, vehicle registration, route licensing and road transport fare fixation</td>
<td>State</td>
</tr>
<tr>
<td>DTC</td>
<td>Operate publicly owned buses in the city</td>
<td>State</td>
</tr>
<tr>
<td>DMRC</td>
<td>Operate metro rail services in the city</td>
<td>State + Central</td>
</tr>
<tr>
<td>DIMTS</td>
<td>Management of the BRT and contracted bus services</td>
<td>State</td>
</tr>
<tr>
<td>Indian Railways</td>
<td>Operate sub-urban rail services</td>
<td>Central</td>
</tr>
<tr>
<td>PWD</td>
<td>Construction of Roads and bridges</td>
<td>State</td>
</tr>
<tr>
<td>Environment Department</td>
<td>Prescribe emission standards</td>
<td>State</td>
</tr>
<tr>
<td>Delhi Police</td>
<td>Traffic management and enforcement of traffic laws</td>
<td>Central</td>
</tr>
<tr>
<td>MCD / NDMC</td>
<td>Approving building plans, managing public spaces, provision of water and sanitation, providing parking</td>
<td>Local</td>
</tr>
<tr>
<td>DDA</td>
<td>Master planning, land allocation, removal of encroachments, parking facilities, etc</td>
<td>Central</td>
</tr>
<tr>
<td>Delhi Cantt Board</td>
<td>Management of cantonment areas</td>
<td>Central</td>
</tr>
</tbody>
</table>
**Strategic Level**

- **Infrastructure Planning**
  - Planning for roads, bridges, and other infrastructure

- **Regulation**
  - Functions Under Law
  - Issue of permits for public tpt
  - Fare fixation
  - Driver license & Vehicle registn
  - Traffic Management
  - Enforcement

- **Service Planning**
  - Planning functions
  - Demand assessment
  - Network & route design
  - Service planning
  - Inter-modal coordination

**Public Transport Operations**

- Metro
- BRT
- Buses

**Common Facilities**

- Metro
- BRT
- Public Transport

**Infrastructure Construction / Maintenance**

- Construction & maintenance of Roads/bridges, etc
- Terminals, Bus stops, Control systems, Database, Ticketing, Accident recovery

**Transport and Climate Change Week**

Focus 2017: Urban Mobility
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Public Transport Operations

Strategic Functions

High Levels in the Government

Infrastructure Planning
Regulation
Service Planning

Typically agencies that function under the Government

Infrastructure Construction / Maintenance
Public Transport Operations
Common Facilities
Separate Services

Could be public or private entities
Key issues in setting up UMTA

• Legal basis
• Jurisdiction
• Functions
• Manpower profile and size
• Management structure and accountability
• Financing
## Legal basis

- Under Own legislation
- Under Generic legislation
- Under Executive orders
- Under Mutual Agreement

<table>
<thead>
<tr>
<th>City</th>
<th>Option adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paris</td>
<td>Framework Law for such organizing authorities for public transport</td>
</tr>
<tr>
<td>London</td>
<td>Greater London Authority Act, 1999 Subsidiaries - under a generic Companies Act</td>
</tr>
<tr>
<td>Vancouver</td>
<td>TransLink – South Coast British Columbia Authority Act - Subsidiaries – Generic legislation</td>
</tr>
<tr>
<td>Singapore</td>
<td>Land Transport Authority Act</td>
</tr>
<tr>
<td>Lagos</td>
<td>LAMATA Act</td>
</tr>
<tr>
<td>Cairo</td>
<td>Presidential Decree</td>
</tr>
<tr>
<td><strong>Most Cities in India</strong></td>
<td><strong>Executive Order</strong></td>
</tr>
</tbody>
</table>

*Some cities may have used a combination of legal bases.*
## Jurisdiction

- Single city
- 2 or more cities
- Several contiguous cities
- Entire metropolitan region

- Depends on people’s travel patterns - need for cross jurisdictional transport systems
- Increasing recognition of city clusters

<table>
<thead>
<tr>
<th>Authority</th>
<th>Jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTA Singapore</td>
<td>Single city</td>
</tr>
<tr>
<td>AMCO, Pereira</td>
<td>3 cities</td>
</tr>
<tr>
<td>STIF, Paris</td>
<td>1284 municipalities</td>
</tr>
<tr>
<td>TfL, London</td>
<td>Greater London</td>
</tr>
<tr>
<td>TransLink</td>
<td>Greater Vancouver</td>
</tr>
<tr>
<td>LAMATA</td>
<td>Lagos Metropolitan Area</td>
</tr>
</tbody>
</table>
## Functions

- **Only public transport or a more comprehensive responsibility**
- **Only planning, and regulation or also operating**
- **If operating - on its own or through subsidiaries**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>STIF, Paris</td>
<td>Only public transport - only planning and regulation. Operations by RATP (public sector) and Optile (private sector)</td>
</tr>
<tr>
<td>TfL, London</td>
<td>Comprehensive - Planning and regulation. Operates metro through subsidiary, plans for bus system and concessions to private operators</td>
</tr>
<tr>
<td>LTA, Singapore</td>
<td>Comprehensive - only planning and regulation, Operations by private operators</td>
</tr>
<tr>
<td>TransLink, Vancouver</td>
<td>Comprehensive - planning, regulation and operations - operations through subsidiaries</td>
</tr>
<tr>
<td>LAMATA, Lagos</td>
<td>Comprehensive - only planning - operations contracted</td>
</tr>
</tbody>
</table>
Paris

- **Strategic Functions**
  - STIF

- **Infrastructure Planning**
  - Local Government
  - RATP/SNCF

- **Regulation**
  - STIF
  - Police

- **Service Planning**
  - STIF

- **Infrastructure**
  - Construction / Maintenance
    - Construction companies
    - Local Government

- **Public Transport Operations**
  - RATP, SNCF
  - OPTILE

- **Common Facilities**

- **Separate Services**
Translink

Infrastructure Planning
- Translink/Operating companies

Regulation
- Translink
  - Department of Transport

Service Planning
- Translink

Infrastructure Construction / Maintenance
- Private Construction firms

Public Transport Operations

Common Facilities
- Translink

Separate Services
- Subsidiary companies
Lagos

**Strategic Functions**
- LAMATA

**Infrastructure Planning**
- LAMATA

**Regulation**
- LAMATA, DoT, POLICE

**Service Planning**
- LAMATA

**Infrastructure Construction / Maintenance**
- Private Construction firms

**Public Transport Operations**

**Common Facilities**
- None

**Separate Services**
- Private operators
Transport Authorities – 6 Global Examples
## Authority Tasks

<table>
<thead>
<tr>
<th>City</th>
<th>Authority</th>
<th>Roads, Traffic, Parking, Non-Motorised Transport</th>
<th>Public Transport</th>
<th>Freight Transport</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Plan</td>
<td>Design &amp; construct</td>
<td>Manage</td>
</tr>
<tr>
<td>Singapore</td>
<td>LTA</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>TD</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Bangkok</td>
<td>BMTA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New York</td>
<td>NYTA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manila</td>
<td>LTD</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Munich</td>
<td>MVV</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Paris</td>
<td>STP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>London</td>
<td>London Transport</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: GIZ. 1b. Urban Transport Institutions (Richard Meakin)
Effective Public Transport Management

- Coherent policies and implementation strategies
- Public transport industry open to competition and regulatory control
- Regulatory frameworks with solid legal basis, mixing commitments and incentives
- Control institutions with adequate capacity and Independence (planning, regulation, guidance for industry development)
- NUMPs shall encourage the creation of unified metropolitan transport authorities - beyond paper
Singapore - Land Transport Authority

• Integrated policy

• Planning, design, development and control of ALL the land transport infrastructure

• Controls, but does not operate MRT, buses and taxis

• Builds and maintains roads, manages traffic and enforcement

• Licenses vehicles, quota, congestion pricing and parking

• Board: 15 representatives from industries, academia, labor unions and community organizations
Hong Kong - MTR

- Public corporation organized for future privatization
- Has launched stocks successfully
- 186% cost recovery through user fares and collateral activities (land development)
- Policy Continuity over 30+ years
- Adequate professional experience supported by consultants (not everything in house all the time)
- Financial discipline
- Regulation and coordination
Paris - STIF

- Regional association (Ile de France), City of Paris, 7 départements (counties) and others
- Gradual evolution since 1959
- Organizes, coordinates, modernizes and finances public transport
- Prepares the Urban Mobility Plan (PDU), defines routes, selects operators, defines operational, administrative and financial guidelines, ensures coherence of the investment programs
- Defines the level of transport tax (VT), defines fare policies, supervises students transport, on-demand services and boats
New York-Metropolitan Transit Authority MTA

- Plans, builds, operates the most extensive network in North America: 15 million people from NYC to Long Island, South of New York State and Connecticut.
- Multimodal: subway, buses, commuter rail
- 2,622 million trips every year (1 out of 3 transit users in USA, 2/3 rail users)
- 4 out of every 5 trips to the CBD

http://web.mta.info/mta/network.htm

<table>
<thead>
<tr>
<th>MTA Totals at a Glance*</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2014 operating budget</td>
<td>$13.6 billion</td>
</tr>
<tr>
<td>Annual ridership</td>
<td>2,621,866,180</td>
</tr>
<tr>
<td>Average weekday ridership</td>
<td>8,552,646</td>
</tr>
<tr>
<td>Rail and subway lines, and bus routes</td>
<td>345</td>
</tr>
<tr>
<td>Rail and subway cars</td>
<td>8,778</td>
</tr>
<tr>
<td>Buses</td>
<td>5,701</td>
</tr>
<tr>
<td>Track miles</td>
<td>2,047</td>
</tr>
<tr>
<td>Bus route miles</td>
<td>2,858</td>
</tr>
<tr>
<td>Rail and subway stations</td>
<td>736</td>
</tr>
<tr>
<td>Employees</td>
<td>65,150</td>
</tr>
</tbody>
</table>

On behalf of:

MTA
21 Council Members

New York City Transit
Metro & Buses

MTA Bus Company
Buses (took over 7 franchises)

Long Island Railroad

Metro North Railroad

Transport and Climate Change Week
Focus 2017: Urban Mobility
18 - 22 September 2017

New York City Transit at a Glance*
- Subway in four boroughs, buses and paratransit in five boroughs.
- 2014 operating budget: $10.1 billion
- Annual ridership: 2,331,836,169
- Average weekday passengers: 7,579,555

MTA Bus at a Glance*
- Buses in four boroughs
- 2014 operating budget: $678.8 million
- Annual ridership: 120,677,799
- Average weekday ridership: 390,685
- Bus routes: 79
- Buses: 1,264
- Bus route miles: 927
- Employees: 3,629

Long Island Rail Road at a Glance*
- Rail lines in Nassau and Suffolk counties and in New York City
- 2014 operating budget: $1.8 billion
- Annual ridership: 81,763,411
- Average weekday ridership: 285,082
- Rail lines: 11
- Rail cars: 1,165
- Track miles: 594
- Rail stations: 124
- Employees: 6,414

Metro-North Railroad at a Glance*
- Rail lines in Westchester, Putnam, Dutchess, Orange, and Rockland counties and in Connecticut and New York City.
- 2014 operating budget: $1.4 billion
- Annual ridership: 82,953,626
- Average weekday passengers: 281,331
- Rail lines: 6**
- Rail cars: 1,239
- Track miles: 795
- Rail stations: 122
- Employees: 6,002

**Includes a line not in service
Munich - MVV
„1 network 1 schedule 1 ticket“

- Regional Railway (DB-Nacional)
- Suburban Railway (S-Bahn Region 442 km, 150 stations)
- Underground Railway (U-Bahn MVG 100 km, 100 stations)
- Light Rail (City Tram MVG 13 lines, 79 km)
- Buses (11 metropolitan lines, 50 urban lines)
- Regional Buses (40 companies, 500 buses, 200 lines)
MVV Munich - Goals

• Full integration public transport in the city and the region
• Common user interface - common branding
• Dynamic supply according to demand changes
• Integrate multiple modes: pedestrians, bicyclists and car users (parking)
• Catalyze technical and planning innovations
• Oriented towards sustainability

http://www.mvv-muenchen.de/fileadmin/media/Dateien/7_Der_MVV/dokumente/
Transport for London - TfL

• All public transport services, traffic management on arterial streets and planning new infrastructure
• Coordinates buses, taxis, underground, light rail, cable, boats, public bikes, and a museum
• 24 million daily trips: reliable, safe, sustainable
• Controls 580km arterial roadways and 6,000 signalized intersections, regulates taxis and congestion pricing scheme
Invests in user information and control technology; open data, apps and maps
### Table 2: Typology of metropolitan transport authorities

<table>
<thead>
<tr>
<th>City</th>
<th>Name of Authority</th>
<th>Governing Body</th>
<th>Constituent Local Government Units</th>
<th>Public Transport Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Planning</td>
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<td></td>
<td>Service Planning, Bus/Rail, Integration</td>
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<td></td>
<td>Procuring and Regulating Services</td>
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<td>Fare Setting</td>
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<td>Managing Fare Collection System</td>
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<td>Marketing PT Services</td>
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<td>Planning PT Infrastructure</td>
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<td>Funding PT Infrastructure</td>
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<td></td>
<td>Managing Construction of PT Infrastructure</td>
</tr>
<tr>
<td>London</td>
<td>Transport for London</td>
<td>Appointed Expert Governing Board</td>
<td>Boroughs</td>
<td>✓</td>
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<tr>
<td>Manchester (Model for 7 UK Metropolitan Counties)</td>
<td>Greater Manchester Passenger Transport Authority</td>
<td>Elected Representatives of constituent Councils</td>
<td>10 District Councils</td>
<td>✓</td>
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<td>✓</td>
</tr>
<tr>
<td>Paris region</td>
<td>Syndicat des Transports d’Ile de France</td>
<td>Council of representatives of central, department and region gov’t</td>
<td>Departments and Region</td>
<td>✓</td>
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<td>✓</td>
</tr>
<tr>
<td>Lyon (French provincial model)</td>
<td>Urban Transport Perimeter (PTU)</td>
<td>Association of constituent town councils</td>
<td>25 town councils</td>
<td>✓</td>
</tr>
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<td>✓</td>
</tr>
<tr>
<td>Frankfurt (German Model)</td>
<td>Rhein-Main-Verkehrsverbund GmbH</td>
<td>Supervisory Board Representatives of constituent cities districts and state</td>
<td>11 cities, 15 districts, State of Hessen</td>
<td>✓</td>
</tr>
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<td>✓</td>
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<td>✓</td>
</tr>
<tr>
<td>Singapore</td>
<td>Singapore Land Transport Authority</td>
<td>Appointed Board of Directors</td>
<td>No local governments</td>
<td>✓</td>
</tr>
<tr>
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<td>✓</td>
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<td></td>
<td></td>
<td>By PTC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By Operators</td>
</tr>
<tr>
<td>Metro Manila</td>
<td>Metro Manila Development Authority</td>
<td>Metro Manila Council of constituent Mayors</td>
<td>13 cities, 4 municipalities</td>
<td>✓</td>
</tr>
<tr>
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<td>✓</td>
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<td></td>
<td></td>
<td>By LTRFB</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By Operators</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Transport Bureau and Transport Department</td>
<td>Appointed Transport Advisory Committee</td>
<td>No local governments</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By TAC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>By Operators</td>
</tr>
</tbody>
</table>

**Notes:**
- LTRFB: Land Transportation Franchising and Regulatory Board
- PTC: Public Transport Council
- TAC: Transport Advisory Committee and Chief Executive-in-Council

1b. Urban Transport Institutions (Richard Meakin)
Review International Experiences

- Evolution according to local conditions
- The more advanced, the greater geographic coverage and modal integration
- Planning and regulatory functions kept at the highest level; construction and operation are sometimes integrated
- Values include service quality and sustainability
- Common branding and simplified user information systems
- Supported by advanced technologies; permanent improvement and innovation
- Combination of public and private sectors (operation only)
- There is no bias towards a particular mode or technology
60 minutes group exercise: Create good practice principles towards efficient and sustainable institutional set-up (3-4 groups pending on size of participants) – each group with one facilitator
We need to spend differently, not just more

Transport spending across the world 2016, WRI study
Major Actors

Financing of urban transport

City administration

National and regional governments

Citizens

Donors and International Organisations

Private sector

Photo by Christopher Kost

Photo by Georg Döhn

Photo by Carlos F. Pardo

ADB

Photo by Carlos F. Pardo

Crosscountry

Macrobús
The real costs of transport – who is paying what?

- Time costs
- Vehicle and vehicle operating costs
- Public transport fares
- Private accident costs

- Infrastructure
  - Accidents – health treatment, loss of family income, grief and suffer
  - Air pollution, noise, vibration and associated health costs
  - Climate Change
  - Congestion & urban space consumption

Paid by transport users

Paid to a large extent by the society
<table>
<thead>
<tr>
<th>Type of incentive or disincentive</th>
<th>Possible Economic Instruments</th>
<th>Selected Economic Measure(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discourage motorized vehicle ownership</td>
<td>Tax/charge on vehicle purchase/ownership/scrappage</td>
<td>Annual vehicle tax, Registration tax/charge, (Re)sales tax/charge, Scrappage tax/charge</td>
</tr>
<tr>
<td></td>
<td>Restricting the number of vehicles and/or new registrations</td>
<td>Auction schemes competitive bidding for new licenses, Licensing car ownership</td>
</tr>
<tr>
<td>Discourage motorized vehicle use</td>
<td>Tax/charge on vehicle use</td>
<td>Fuel tax, Pay-at-the-pump (sur)charges</td>
</tr>
<tr>
<td>Encourage switch to public or non-motorized transport</td>
<td>Tax/charge on road and/or infrastructure use</td>
<td>Parking fees, City tolls, Road pricing, Bridge tolls, Cordon pricing, Congestion pricing</td>
</tr>
<tr>
<td>Subsidies for public transport and/or multimodal transport (modal subsidies)</td>
<td>Subsidies for public transport networks and operation, Tax-deductible public transport expenses, P%R schemes</td>
<td></td>
</tr>
<tr>
<td>Encourage lower emission technology use and innovation</td>
<td>Taxes/charges on vehicle purchase/ownership/scrappage, Taxes/charges on vehicle use, Taxes/charges on road and/or infrastructure use</td>
<td>Tax differentiations based on emissions, Carbon/energy taxes, Emission fees, Emission-based surcharges, Subsidies, tax rebates for low emission vehicles/technologies</td>
</tr>
</tbody>
</table>
## Various financing options for different ranges of application

<table>
<thead>
<tr>
<th>Local Instruments</th>
<th>Amount typically involved</th>
<th>Main components supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking charges</td>
<td>$</td>
<td>x</td>
</tr>
<tr>
<td>Road Pricing/congestion charge</td>
<td>$$</td>
<td>x</td>
</tr>
<tr>
<td>Employer contributions</td>
<td>$$</td>
<td>x</td>
</tr>
<tr>
<td>Fare box revenues</td>
<td>$$</td>
<td>x</td>
</tr>
<tr>
<td>Public transport subsidies</td>
<td>$</td>
<td>x</td>
</tr>
<tr>
<td>Land development/land value taxes</td>
<td>$$$</td>
<td>x</td>
</tr>
<tr>
<td>Public private partnerships</td>
<td>$$</td>
<td>x</td>
</tr>
<tr>
<td>Advertising</td>
<td>$</td>
<td>x</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>National Instruments</th>
<th>Amount typically involved</th>
<th>Main components supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel taxes/surcharges</td>
<td>$$$</td>
<td>x</td>
</tr>
<tr>
<td>Vehicle related taxes and charges, including auctioning of quotas</td>
<td>$$$</td>
<td>x</td>
</tr>
<tr>
<td>Loans and grants</td>
<td>$$</td>
<td>x</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Global Instruments</th>
<th>Amount typically involved</th>
<th>Main components supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDM</td>
<td>$</td>
<td>x</td>
</tr>
<tr>
<td>GEF</td>
<td>$</td>
<td>x</td>
</tr>
<tr>
<td>Multilateral/bilateral climate funds</td>
<td>$</td>
<td>x</td>
</tr>
</tbody>
</table>
Continued Funding Sources

• Fuel taxation (national)

• Land development

• User and property taxes
Fuel Taxation

Country Category 1
Very High Gasoline Subsidies (1-51 US Cents)
The retail price of Gasoline is up to the price for crude oil on the world market.

Country Category 2
Gasoline Subsidies (52-76 US Cents)
The retail price of Gasoline is above the price for crude oil on the world market and up to the price level of the United States. Note: The fuel prices of the United States are average cost-covering retail prices incl. industry margin, VAT and incl. approx. 10 US cents for the 2 road funds (federal and state). This fuel price may be considered as the international minimum benchmark for a non-subsidised road transport policy.

Country Category 3
Gasoline Taxation (77-146 US Cents)
The retail price of Gasoline is above the price level of the United States and up to the price level of Romania. Note: In November 2010, Gasoline prices in Romania were the lowest in EU-27. Prices in EU countries are subject to VAT, fuel taxes as well as other country-specific duties and taxes.

Country Category 4
Very High Gasoline Taxation (147-254 US Cents)
The retail price of Gasoline is above the price level of Romania.

Grey Benchmark Line: Retail Price of Gasoline in Romania = 146 US Cents/Litre

Green Benchmark Line: Retail Price of Gasoline in the United States = 76 US Cents/Litre


Fuel price refers to unsubsidised Petroman Plus, subsidised gasoline "Premium" is available at a price of 4.550 Rupiah (~ US$0.51/US$-

Continued Funding

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

Foto Cortesía Oren Tatcher
Singapore
Ørestad City, Copenhagen

Bogotá Central Station
Urban Renewal Project
(under construction)

http://www.erus.gov.co/contenido/articulo/247-estacion-central

Empresa de Renovación Urbana, Bogotá
Land Value Capture

- Updated land assessment (cadaster) and adequate levels of property tax
- Increased value contribution (“valorización”)
- Joint development (preferred)
- Development rights
- Town planning schemes
<table>
<thead>
<tr>
<th>Country</th>
<th>Property tax</th>
<th>Increased value contribution</th>
<th>Joint development</th>
<th>Development rights</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia</td>
<td>Large cities, not earmarked</td>
<td>Common, difficult to assess, approve</td>
<td>Possible, has not been used extensively</td>
<td>No</td>
</tr>
<tr>
<td>Mexico</td>
<td>Not earmarked</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Brazil</td>
<td>Not earmarked</td>
<td>No</td>
<td>Possible, some use</td>
<td>Very well developed</td>
</tr>
<tr>
<td>China</td>
<td>No (leases instead)</td>
<td>No</td>
<td>Possible, some use</td>
<td>No (joint development in Hong Kong)</td>
</tr>
<tr>
<td>India</td>
<td>Incipient</td>
<td>No</td>
<td>Possible, has not been used extensively</td>
<td>Some cities (other town planning schemes)</td>
</tr>
</tbody>
</table>
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 officilas

Pic Autoridad Metropolitana de Transporte de San Francisco SFMTA, 2011
Congestion Tolls
Financing Sustainable Urban Transport

International Review of National Urban Transport Policies and Programmes

- Brazil
- Colombia
- France
- Germany
- India
- Mexico
- United Kingdom
- United States of America

Available for download in English from

www.sustainabletransport.org
• 60 minutes group exercise: Create good practice principles towards better financing for urban mobility through national programs and local investments set-up (3-4 groups pending on size of participants) - each group with one facilitator
Key lessons learned

- National level authorities shape urban transport by policy/planning frameworks, funding schemes and guidance

- Planning and implementation of urban mobility interventions or plans requires **sufficient local capacities** and access to funding options

- Critical to evaluate and update policies and planning frameworks on a regular base → Exchange between national and local levels
Recommendations

- Establish a supportive legal and regulatory framework, particularly for public transport, demand management, NMT, emissions and safety
- Improve institutional coordination and cooperation, horizontally between policies and vertically between tiers of government
- Decentralise responsibilities where possible and centralise them where necessary
- Support local or regional authorities to develop capacities
Recommendations

- Ensure a comprehensive pricing and fiscal structure which sends appropriate signals to users and operators (fee’s, taxes & user charges)
- Rationalise financing and investment streams so that they are consistent across all modes
- Improve data collection, monitoring and research
- Encourage effective public participation
Knowledge Products

- Bus Rapid Transit
- Public Awareness and Behavioural Change
- Non-motorised Transport
- Travel Demand Management
- Mass Transport Options
- Bus Regulation and Planning
- Financing Urban Transport
- MRV Reference Document
Thank you!