Sustainable Urban Mobility for Smart Cities

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www.unhabitat.org
World Population Growth (in billion)

Number of years to add each billion (year)

- First Billion: 1800
- Second: 130 (1930)
- Third: 30 (1960)
- Fourth: 15 (1975)
- Fifth: 12 (1987)
- Sixth: 12 (1999)
- Seventh: 14 (2013)
- Eighth: 14 (2027)
- Ninth: 21 (2048)
Why we are where we are?

- Rapid urbanization
- Rapid motorization
- Globalization – The market for cars is increasingly mostly in developing countries.
- Unplanned urban growth and urban sprawl

But planning, regulatory and institutional frameworks have not evolved with the challenges

Resulting in:
- Exclusion of the poor and vulnerable;
- Congestion;
- Injuries and fatalities;
- Health impacts from pollution;
- Exacerbating the challengers

Projected total stock of light duty vehicles by region 2000-2050
Source: GEF/WBCSD 2004
Lack of city-wide vision and spatial strategy;
Absence of wide stakeholder engagement in policy and planning (business and industry, travelling public, civil society);
Increase in vehicular traffic sought to be addressed by infrastructure – no effort for TDM and people-centered planning;
Unrealistic plans and inadequate finance;
“political considerations” given higher priority;
No Monitoring of Plans or implementation.
Why we are where we are?

The Urban Planning “Problem”

• Spatial Plans not made in advance of growth leading to uncontrolled growth, long travel distance/time, congestion, exclusion of poor……

• Potential of streets to provide connectivity and public space functions not used- cars crowd out people;

• Tendency towards sprawl as opposed to mixed use and high density.
What is needed for Sustainable Transport?

**Strengthening and integrating**

A strengthened and unified transport institution/authority for the entire metropolitan area

**Planning and participation**

- Institutionalized participatory;
- Transparent planning and decision making processes

**Coordination and capacity**

- Coordination and support of provincial and national level government;
- Increased capacity in spatial planning, operations and regulation
Transforming Public Transport Services

- No size-fits-all approach.
- In crafting a regulatory regime, policy-makers must choose from a spectrum of options:
  - Acceptance
  - Recognition
  - Regulation
  - Prohibition

**Current Status**
- Informal
- Chaotic
- Unsafe
- Unreliable
- Uncomfortable
- Excludes poor and vulnerable

**Goal**
- Organized/formal
- Regulated;
- Safe;
- Reliable;
- Affordable and inclusive
A new urban agenda

Sustainable Urban Planning & Design

• Better Planning & Design with optimal density and diversity

• Plan in advance and to scale of expected growth

• Plan starts with basic streets, water, sanitation networks, energy supply, urban mobility and other services;

• Avoid risky developments on steep slopes, water beds ad quake prone zones
A new urban agenda

Mobility and energy efficiency

- Public transport and improved urban mobility
- Increased energy efficiency - decreasing the demand for mobility is key
- Improved telecommunications and connectivity provides for increased urban efficiency and improved environment.
A new urban agenda

Promote urban economy

- **Economies of Urbanization:** Economical value generated by location and proximity to urban services and common goods.

- **Economies of Agglomeration:** Economical value generated by the proximity and diversity of production’s factors, diminishing transactions costs, favouring specialization. Massive increase of productivity.
India Case study: Transport Reforms Support by Central Government to City Level

- Government of India Initiatives to Strengthen Public Transport under JNNURM
  
  I. National Urban Transport Policy
  
  II. Reform Linked Investments – Bus, Rail and Related Infrastructure under JNNURM
  
  III. Human Resources and Capacity Enhancement

- Main Focus of JNNURM:
  
  - Support for Comprehensive Mobility Plan (CMP)
  
  - Unified Metropolitan Transport Authority (UMTA)
  
  - Public Transport / NMT
  
  - Capacity Building
India Case study:
National Urban Transport Policy

- Build capacity to plan for sustainable urban transport
- Ensure coordinated planning for urban transport
- Ensure integrated land use & transport planning
- People focused & equitable allocation of road space
- Investments in public transport & Non Motorized modes
- Projects to demonstrate best practices in sustainable transport
- Promote cleaner fuel & vehicle technologies for cities
- Innovative financing methods to raise resources
- Establish Regulatory mechanisms for a level playing field
- Strategies for parking space and freight traffic movements

Source: Ministry of Urban Development, Govt. of India
Investment Sanctions /Approvals of Urban transport Projects are subject to:

- Preparation of Comprehensive Mobility Plan (CMP) (80% financial grant by the Central Government)
- Setting up of Unified Mass Transit Authority (UMTA).
- Setting up of Dedicated Urban Transport Fund at state and city level.
- Transit Oriented Development Policy, Parking Policy and Advertisement Policy.
- Setting up of city specific Special Purpose Vehicle for managing public transport (50% financial support by the Central Government).
- Setting up of Traffic Information & Management Control Centre etc.
- Mechanism for periodic revision of public transport fares
City authorities generally not well placed to operate public transport services due to high work load and potential conflict of interest.

Regulating private sector contracts, concessions, and franchises, and monitoring performance require sophisticated legal and administrative frameworks and capacity.

In Nairobi a system is proposed where private sector franchisor regulate most operators, BUT oversight and regulation necessary by Government.
Benefits of Stakeholder Consultation

• **Improves governance** and strengthens local government institutions;

• Priority issues are addressed through a **process oriented framework**;

• Allows different **stakeholders** **negotiate strategies** and seek solutions collectively;

• Emerging Solutions and Strategies are widely owned- **mitigates irrational “pressures”**;

• Establish law and formal business processes to institutionalise SCP

(Adapted from UN-HABITAT’s “Issue Based Stakeholders’ Participation in Sustainable Cities Processes)
Concluding Remarks and Recommendations To Policy Makers

1. Urban Mobility is Complex and presents daunting challenges;

2. Institutional Building and Strong Participatory Processes are important for success and sustainable mobility;

3. Cities can improve incrementally - small successes lead to more; Start with a DIAGNOSTIC STUDY;

4. Integrated and Empowered City Transport Authority – Key to the performance of the sector including for attracting finance;

5. Build staff capacity to take forward the new paradigm;

6. Many Good (and Bad) examples; Cities can learn from one another.