Next Generation Urban Mobility Plans

Better Air Quality 2014 & 8th Environmentally Sustainable Transport Forum

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Colombo, November 19
New publication from SUTP:
Urban Mobility Plans:
National Approaches and Local Practice

- Now available at www.sutp.org

- Soon as well available in Spanish and Portuguese language
... allow to overcome antiquated paradigms in transport planning

<table>
<thead>
<tr>
<th>Traditional Transport Planning</th>
<th>Sustainable Urban Mobility Planning</th>
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<tbody>
<tr>
<td>Focus on traffic</td>
<td>Focus on people</td>
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<tr>
<td>Primary objective:</td>
<td>Primary objectives:</td>
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<tr>
<td>Traffic flow capacity and speed</td>
<td>Accessibility and quality of life</td>
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<tr>
<td>Political mandates and planning by experts</td>
<td>Important stakeholders are actively involved</td>
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<tr>
<td>Domain of traffic engineers</td>
<td>Combination of infrastructure, market, services, information, and promotion</td>
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<tr>
<td>Infrastructure as the main topic</td>
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<td>Investment-guided planning</td>
<td>Cost efficient achievement of goals</td>
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<tr>
<td>„If you plan for cars and traffic, you get cars and traffic.“</td>
<td></td>
</tr>
<tr>
<td>„If you plan for people and places, you get people and places.“</td>
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</table>

Source: Rupprecht Consult, quotations by Fred Kent, President of „Project for Public Space“.
An Urban Mobility Plan is a planning tool which comprises objectives and measures oriented towards safe, efficient and accessible urban transport systems.

- Can reveal the real challenges a city faces
- Offers the elaboration of different development scenarios
- Preparation process can help diverse stakeholders to agree on a common vision for their urban transport system

... facilitate the development of a feasible and powerful strategy to tackle mobility challenges
Cities can‘t improve everything at the same time!

 ✓ Clear priorities pay off in the short and long-term:
   • Investment priority should be given to public transport, walking, cycling & integration of different transport modes (Modal integration, transit-oriented/mixed land-use development)

 ✓ Investment priorities derive from national urban transport policy and urban mobility planning

 ✓ Capacity development for planning authorities, planning processes and civic participation pay off!

... allows for the more efficient use of scarce public funds
Transport policy goes hand in hand with energy, climate and sustainable development goals

- **Economic & social development:** transport infrastructures as well as reliable, safe and affordable mobility services are essential for sustainable development.

- **Environmental & urban development:** transport activities put stress on the global environment and urban areas through required space, road accidents, air pollution etc.

- **Social equity & inclusiveness:** Sustainable transport policies and planning - focussed on the mobility needs of all people (not only car-drivers) – can reduce social inequalities and allow to make full use of a country’s human potential for economic and social development.

... help to align the development of transport systems with overarching-policy targets
Benefits and Objectives of UMPs

- **Analyse** and assess local transport problems and **challenges**;
- **Identify** effective and cost-efficient **measures** to overcome these challenges,
- **Understand** different development scenarios and policy **options**;
- **Understand interests** and expectations of transport system users;
- **Develop a common vision** on urban transport development,
- **Choose and agree** an appropriate and feasible set of measures,
- **Prioritise and schedule** measures - in line with available budget and implementation capacities; and
- **Align stakeholder actions** and create high acceptance for transport interventions.
Guidance for Urban Mobility Planning

✓ National Urban Transport Policy + Funding Programs
  - Sets legal requirements in harmony with overarching policy targets
  - Creates incentives for realising “desired” measures & policies

✓ Comprehensive and integrated planning regulations
  - subordinated to national transport master planning and policies.
  - includes integrated regional and local mobility and land-use planning with priority for walking, cycling, public transport and sustainable logistics.
  - Ensure / facilitate stakeholder involvement and civic participation

✓ Design and operational guidelines
  - allowing cost-efficient maintenance, high operational reliability and quality, high safety standards of transport infrastructure and services.
The chain towards sustainable urban transport systems:

1. **The country’s sustainable development, climate & energy goals**

2. **The country’s transport policy & strategy** – including the national sustainable urban transport policy

3. **Institutions and a legal framework** supporting over-arching goals

4. **Transport taxation and charging policies** (Where the money comes from?)

5. **Appropriate spending** - based on standardized evaluation criteria & priorities defined in **Urban Mobility Plans** (Where the money goes?)

Contraproduc tive measures, such as funding for private transport through cheap loans for buying vehicles, too low fuel taxes or even fuel subsidies, etc. should be avoided.
The elaboration of a Transport Master Plan follows a strictly regulated procedure:

1. The decision on the elaboration of the plan or on its correction by the city council,
2. the commitment to provide finance by the city council,
3. the selection of the contractor via tender,
4. the preparation of the plan by the contractor,
5. public hearings following the draft master plan,
6. review by an authorised institute,
7. approval of the plan by the city council.
Regular results:
Status Quo

- Generalist infrastructure-oriented transport planning neglects factual mobility behaviour and needs
- Outdated road building norms favour high speeds of motorised transport
- no/limited guidance for cycling and public transport integration
- Public consultation neglected.

BUT: Several Ukrainian cities pro-actively engage for sustainable mobility
INDIA – Comprehensive Mobility Plans

“A CMP presents a long-term vision of desirable mobility patterns (people and goods) for a city and provides strategy and policy measures to achieve this vision. It follows the guidelines set forth by National Urban transport Plan which emphasizes on NMT measures, PT systems and sustainable systems”

- National Urban Transport Policy: Comprehensive process description, funding program + national guidance
- Guidelines for CMPs, revised in 2013

Source: CMP Preparation Toolkit - Guidelines and Toolkits for Urban Transport Development in Medium Sized Cities in India – MoUD/ADB
Elaboration process of a Comprehensive Urban Mobility Plan

1. Previous organization
   - Define working Team work
     - Plan of work
     - promotion
     - Pre-diagnosis
     - General objectives draft

2. Diagnosis
   - Mobility Supply and demand diagnosis.
     - Externalities diagnosis
     - SWOT analysis
     - Identify strategic action zones
     - Strategic actions

3. Comprehensive Mobility Plan elaboration
   - Specific objectives
   - Instruments
   - Scenarios construction and models
   - Define strategy
   - Projects and measure selection
   - Financing

4. Approval and publication
   - Approval and publication
   - Political agreement signature

5. Monitoring and Evaluation
   - Monitoring indicators
   - Evaluation
   - Corrective measures
INDIA – Comprehensive Mobility Plans

Initial Problems:

- A lack of ‘ownership’, understanding and feasibility of CMPs
  - Reason: plans were solely developed by consultancy firms without wider stakeholder involvement
  - Consequence: A lack of political priority-setting;
- “real challenges” like e.g. the lack of pavements and cycling infrastructure not properly addressed in most CMPs;
- A lack of proper monitoring and evaluation after project implementation makes it hard to assess whether or not goals are achieved;
- Recommendations and mechanisms for periodic revision and updating a CMP were not sufficiently outlined.
BRAZIL – Planos de Mobilidade Urbana

- New National Policy on Urban Mobility (2012), PlanMob guidelines currently being revised
- Massive investments in urban transport (~ USD 55 billion till 2020)
- New approaches for stakeholder involvement
- Capacity development Strategy of Min. of Cities
GERMANY – Transport Development Plans

“Transport development planning is an integrated, forward-looking, preparation and realisation of decision-making processes with the purpose of influencing movements of people and goods within a planning area by structural, constructional, operational, regulatory, tariff and price political measures towards certain strategic aims.“

- Long lasting history in traffic and transport planning

- Transport development planning allows coordination of mobility planning with overarching planning documents, neighboring communities and relevant stakeholders
GERMANY – Transport Development Plans

- “non-obligatory” process - but required for receiving national funds for large-scale projects and as input for sectoral (obligatory) plans

- Transport Development Plans required for land-use planning and as base for further strategic planning documents, such as

  - Local/regional public transport plans
  - Cycling and Walking strategies
  - Commercial transport concepts (Freight plans)
  - Road Safety programmes
  - Noise reduction plans
  - Clean-air plans
Regional Public Transport Plans

1. Frameworks Conditions

2. Rail Based Public Transport
   • Developments of Services
   • Future Development of Services (Short-term, Long-term Measures)
   • Infrastructure (Stations, Network)

3. Intermodal Mobility
   • Passenger Information
   • Accessibility
   • Interconnectivity with public transport, with Individual transport

4. Safety and Customer Management

5. Tariff and Marketing

6. Financing

Example
PT in Rhein-Ruhr area
8 million inhabitants
Various reporting tasks, data collection and evaluation processes

Continuous tasks

Data and transport model update, reporting

Process evaluation

Evaluation of measures and strategies

Strategic-conceptual level (periodical and continuous)

- General orientation, aims
- Analysis, methods, scenarios
- Strategies, Framework plans and concepts

Level of measures (implementation-oriented)

- Further Planning documents (public transport, clean-air plans, etc.)
- Complexe transport measures
- Sectoral measures
- Single measures and projects

Participation & Information

Informing and Involving politics, administrations, general public and specially affected groups

Source: "Die neuen Hinweise der Forschungsgesellschaft für Straßen- und Verkehrswesen zur Verkehrsentwicklungsplanung", fig. 10
**Structure and Contents**

- Results and experiences of previous strategy
- Long-term overarching objectives, e.g.
  - Energy
  - Climate Protection
  - Safeguarding Mobility
- Guidelines of related policy field
  - Urban Development
  - Environment
  - Economy
- Framework Conditions
  - Population
  - Spatial Structure
  - Finances

**Transport Effects and Scopes for Action**

**Analyses and Forecasts**

- Guiding Vision (integrated)
- Aims (12 quality aims, 4 dimensions)
- Strategy (7 partial strategies)
- Impact Assessment / Evaluation
- Measures (5 different categories)
- Infrastructure
  - Long-term options

**Example: Integrated Mobility Planning in Berlin**

- Complex Structure:
  - Approaching different aspects individually
  - Combining measures in integrated strategic packages
  - Integrated impact assessment to identify missing topics
Target-Orientation, Interconnection of strategy and measures:

City Mission Statement 2040 (integrated)

- Ecologic
- Economic
- Social
- Institutional

Strategies

- Promotion of Public Transport, walking, cycling
- Quality of Life and Environment
- Supporting commercial transport
- Mobility and traffic management
- Inner City Concept
- Regional Concept (Brandenburg)
- Intermodality

Measures

- Land Use
- Regulatory and price measures
- Organisational
- Communication
- Infrastructure

Example: Integrated Mobility Planning in Berlin

Source: „Planwerk StEP Verkehr“ (Overview)
Integrated Strategy: Overlap of Partial Strategies

- Seven partial strategies form the integrated strategy of the transport master plan
- Each strategy combines a bundle of measures including:
  - Urban Space and Structure
  - Organisational aspects
  - Pricing policies / regulative measures
  - Improvement of information / motivation
  - Infrastructure

Wider Scope: Not just related to transportation as such
Addresses framework for travel, transport means, external affects
Formulates links to and requirements from other fields of policy

Example: Integrated Mobility Planning in Berlin
EU - Sustainable Urban Mobility Plans (SUMP)

“… strategic plan designed to satisfy the mobility needs of people and businesses in cities and their surroundings for a better quality of life. It builds on existing planning practices and takes due consideration of integration, participation, and evaluation principles.”

A guideline for Urban Mobility Planning in EU

www.mobilityplans.eu
ADDRESSING THE FOUR KEY CHALLENGES OF SUSTAINABLE URBAN MOBILITY PLANNING

- Participation
- Cooperation
- Measure Selection
- Monitoring and Evaluation
Key lessons learned

(1) The key role of national policy frameworks and funding schemes

(2) Apply the whole set of Avoid-Shift-Improve measures

(3) Evaluation and update of policies and planning frameworks on a regular base

(4) Use the potential of stakeholder and citizen involvement

(5) Planning process and implementation of a UMP requires sufficient capacities and access to funding

(6) Thoughtful impact assessment and a set of appropriate side measures can increase the effectiveness of transport interventions and limit/reduce negative impacts

- Accuracy and completeness of transport data - data on non-motorised transport, household surveys
Potential Building Blocks

... of sustainable urban transport financing

1. Explore role of provinces

2. Coordinate responsibilities

3. Mobilise local funding options
### Various financing options for different ranges of application

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Amount typically involved</th>
<th>Main components supported</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Infrastructure</td>
</tr>
<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>$$</td>
<td></td>
</tr>
<tr>
<td>Public transport subsidies</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>Land development/land value taxes</td>
<td>$$$</td>
<td>x</td>
</tr>
<tr>
<td>Public private partnerships</td>
<td>$$</td>
<td>x</td>
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<tr>
<td>Advertising</td>
<td>$</td>
<td>x</td>
</tr>
<tr>
<td>Fuel taxes/surchages</td>
<td>$$$</td>
<td>x</td>
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<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>
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<tr>
<td>CDM</td>
<td>$</td>
<td>x</td>
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<tr>
<td>GEF</td>
<td>$</td>
<td>x</td>
</tr>
<tr>
<td>Multilateral/bilateral climate funds</td>
<td>$</td>
<td>x</td>
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Table showing various financing options and the components they support.
First-hand knowledge on Sustainable Urban Transport on [www.sutp.org](http://www.sutp.org) and [www.capsut.org](http://www.capsut.org)

GIZ Sourcebook on Sustainable Urban Transport

- addresses the key areas of sustainable transport policy framework
- consists of over 70 modules, technical papers and training packages
- intended for policy-makers and their advisors

Contact: [transport@giz.de](mailto:transport@giz.de)