NUTP and JnNURM - Government of India Initiatives to Strengthen Public Transport

SANJEEV KUMAR LOHIA
OSD(MRTS)
MINISTRY OF URBAN DEVELOPMENT
GOVERNMENT OF INDIA
India: Urban Transportation Scene

- 2nd Largest urban system
- 60% GDP generated from urban areas

5161 towns and cities
- 7 megacities (4 million + population)
  - 28 cities with population 1-4 million
  - 13 cities in 0.8 to 1.0 million range, will cross 1 million by next census
  - 40 cities in 0.5 to 1 million population range and balance state capitals

Motorization rates are high

In 6 Metro Cities, during 1981 to 2001
  - Population increased by 2 times
  - Motor vehicles increased by 8 times

In 2006 organised city bus service - in only 20 cities
In order to improve the Urban Transport Infrastructure and provide the gaps, the investment requirement is estimated as Rs 1,32,590 Cr in the 11th five year plan and about Rs 4,35,000 Cr over next 20 years.

Breakup of the Investments Required as per the 11th Five year plan

<table>
<thead>
<tr>
<th>Items</th>
<th>Investment required (Rs in Crore)</th>
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<tbody>
<tr>
<td>Capacity Building and urban transport planning</td>
<td>350</td>
</tr>
<tr>
<td>0.1 - 0.5 million cities</td>
<td>7400</td>
</tr>
<tr>
<td>0.5 - 1.0 million cities</td>
<td>7800</td>
</tr>
<tr>
<td>1.0 - 4.0 million cities</td>
<td>26040</td>
</tr>
<tr>
<td>4.0 million plus cities</td>
<td>21000</td>
</tr>
<tr>
<td>MRT for mega cities</td>
<td>32000</td>
</tr>
<tr>
<td>Modern Buses for city transport</td>
<td>38000</td>
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<tr>
<td>Total</td>
<td>1,32,590</td>
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</table>
Ministry’s Response to Urban Transport Demand

I. Policy – National Urban Transport Policy
II. JnNURM – Sector Reform Linked Investments – Bus, Rail and Related Infrastructure
III. Human Resources and Capacity Enhancement
A reform based mission for Central Financial Assistance (CFA) to Urban Local Bodies

Reforms like abolition of Rent Act, Urban Land Ceiling Act & reduction of Stamp Duty etc

Reforms to better urban transport planning and management made conditional to the sanction of Urban transport Projects are:

- Comprehensive Mobility Plan (CMP)
- 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.
- Setting up of Traffic Information and Management Control Centre etc.
- Mechanism for periodic revision of public transport fares

About 22% of the projects sanctioned under JnNURM for Urban transport (NUTP compliant)
Urban bus transport is important and has to be transformed to a level that it can be sold to public as a “branded product”

Aim to replicate metro experience on the urban buses
**Bus Rapid Transit System (BRTS)**

- Buses contribute as the most important mode of Public transport across all cities.
- BRTS Projects for 422 Kms sanctioned for 9 mission cities at a total cost of Rs 4770.86 Cr (@ Rs 11.30 Cr per km)

- Pune 101.77 km
- Pimpri Chinchwad 42.22 km
- Indore 11.45 km
- Bhopal 21.71 km
- Ahmedabad 88.50 km
- Jaipur 39.45 km
- Vijaywada 15.50 km
- Vizag 42.80 km
- Rajkot 29.00 km
- Surat 29.90 km

# Delhi is implementing BRTS with its own funds

*Ahmedabad is the first city under JnNURM to have successfully launched a complete BRT system.*
## Challenges

<table>
<thead>
<tr>
<th>Cities</th>
<th>Challenges Faced</th>
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<tbody>
<tr>
<td>Ahmadabad</td>
<td>1. Design modification to accommodate NHAI concerns,</td>
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<td></td>
<td>2. Presence of underground utilities hampered work during construction, high tender premium,</td>
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<td></td>
<td>3. Price escalations due to rise in steel and cement,</td>
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<td>4. Viability gap in operations,</td>
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<td></td>
<td>5. Poor response from bus manufacturers</td>
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<tr>
<td>Rajkot</td>
<td>1. Negative Media Publicity (especially Delhi and Pune BRTS)</td>
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<td></td>
<td>2. Apprehensions of Car / Two Wheeler users about reduction in road space</td>
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<td></td>
<td>3. Lack of knowledge of BRT System amongst various stakeholders</td>
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<td></td>
<td>4. Steep rise in cost raw material (Steel, Cement) may impact the construction cost of Pilot Project</td>
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<tr>
<td>Bhopal</td>
<td>1. Road widths are not uniform through out the Corridors</td>
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<td></td>
<td>2. On street parking need to be restricted along the BRTS corridors.</td>
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<tr>
<td>Indore</td>
<td>1. Project Implementation in City condition involves delay due to provisions of multiple services</td>
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<td>2. Negative press in other cities regarding BRTS causes doubts in the minds of local press and politicians.</td>
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<td>3. Non-availability of funds for subsidizing induction of world class technology including high capacity modern rolling stock.</td>
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<td>Pune &amp; Pimpri</td>
<td>1. Due to lack of a full understanding of a BRT system, initial cost estimates as presented to MoUD were too low.</td>
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<tr>
<td>Chinchwad</td>
<td>2. Demand for underpasses / foot over bridges at bus stops</td>
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<td></td>
<td>3. Enforcement of BRT lanes, Narrow streets</td>
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<td></td>
<td>4. Training of bus drivers</td>
</tr>
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<td></td>
<td>5. Hawkers, encroachment, parking, and Access control from adjoining properties</td>
</tr>
<tr>
<td></td>
<td>6. Demand to allow other high capacity modes, Media strategy</td>
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<tr>
<td>City</td>
<td>Issues</td>
</tr>
<tr>
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<td>------------------------------------------------------------------------</td>
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</tbody>
</table>
| Vijaywada | 1. Land Acquisitions  
2. Integration of planned and existing ROBs and Flyover  
3. Encroachments  
4. Integration issues with NHAI, APSRTC and other agencies |
| Vizag  | 1. Land Acquisition  
2. Mixed composition of traffic of both MV & NMV  
3. No park and ride facilities  
4. Integration with existing flyovers and FOBs  
5. Bad media publicity due to problems in BRTS projects already in operation |
| Jaipur | 1. Re routing of 1800 mini buses  
2. Lack of understanding of BRT elements by contractors  
3. Inadequate RoW on few sections  
4. Land acquisition delays the implementation process & land acquisition issues  
5. Unavailability of lands for provision of parking near bus stops  
6. Unacceptability of one way traffic movement  
7. Shopkeepers/property owners habitual to free on-street parking (consider it as their right)  
8. Shifting of existing utilities services  
9. Monopoly of bus manufacturers  
10. Low floor buses are costly to operate and procure  
11. Financial sustainability of overall operational |
| Delhi  | 1. Signaling  
2. Breakdown of vehicles  
3. Damage to structures  
4. Heavy traffic in motorized lane in certain stretches, specially some intersections  
5. Enforcing traffic discipline  
6. Jay walking  
7. Inappropriate design features |
Buses for City Transport

Urban Bus Specifications

- Low floor (400mm), semi low floor (650mm) and standard buses (900mm) as against prevailing 1100mm floor height (truck chassis)

ITS features

- LED sign boards,
- Audio visual passenger information
- Multiplexing, On board diagnostics,
- Cameras, integrated controller
- GPS, GPRS, Smart card ticketing machines

Economic stimulus package

- Funding procurement of buses for urban transport under JnNURM.
- 15260 modern buses sanctioned under economic stimulus package at a cost of US $ 1020 Million

- Waive state & local taxes on public transport (upto 16%)
- 61 mission cities Covered; about 4000 buses are on road – 31st Dec’09
- City buses planned for 118 more 200 thousand+ population cities

34 new cities to get organised city bus service
Buses sanctioned under JnNURM with the following reform conditionalities:

a) Set up an SPV to manage bus services, set up an UMTA to coordinate urban transport and use PPP for operations
b) Use of ITS and integration of multi-modal systems
c) Bus prioritisation at intersections, dedicated/demarcated lanes for buses
d) Designate a nodal department for urban transport
e) Formulate a policy on parking and its implementation plan
f) Formulate a policy on advertising and its implementation plan
g) Formulate a policy on Transit Oriented Development
h) Set up an Urban Transport Fund
i) Waive/reimburse state and local taxes on public transport
j) Mechanism for periodic revision of public transport fares
k) Set up a Traffic Information and Management Center
Urban Transport—Metro Rail Projects

- Urban ministry is supporting metro rail projects also in bigger cities to serve high demand corridors.

- Delhi
  - 86 kms is under operations.
  - Another 100 kms is under construction.

- Metro rail projects promoted under joint ownership with the concerned state governments in Delhi, Bangalore, Kolkata & Chennai.

- 20% Viability Gap Funding for Urban transport projects on PPP
  - Mumbai

<table>
<thead>
<tr>
<th>City</th>
<th>Kms</th>
<th>Cost (Rs crore)</th>
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<tbody>
<tr>
<td>Delhi</td>
<td>121.26</td>
<td>19,200</td>
</tr>
<tr>
<td>Mumbai</td>
<td>62.89</td>
<td>18,400</td>
</tr>
<tr>
<td>Bangalore</td>
<td>42.30</td>
<td>8,158</td>
</tr>
<tr>
<td>Kolkata</td>
<td>14.67</td>
<td>4,874</td>
</tr>
<tr>
<td>Chennai</td>
<td>46.50</td>
<td>14,600</td>
</tr>
<tr>
<td>Hyderabad</td>
<td>71.00</td>
<td>12,400</td>
</tr>
<tr>
<td>Cochin</td>
<td>25.30</td>
<td>2,900</td>
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Rs 90,000 Cr for about 380 kms at Rs 237 Cr/km

Finding resources to cover entire demand!
Initiatives of MoUD for Urban Transport planning & Capacity Building

To promote better practices:

- Ministry provides central financial assistance up to 80% of the cost for
  - undertaking various studies relating to preparation of CMP
  - Launching of awareness campaign and
  - Developing Clean development mechanisms etc...

- For preparation of Detailed Project Reports (DPR) Financial assistance is given up to 50% of the cost of preparation of DPR

- Training of trainers and practitioners

- Institute of Urban Transport to support ministry in capacity building initiatives

- 4 Centres of Excellence in Urban Transport
  - CEPT University, Ahmedabad
  - IIT, Delhi
  - IIT, Chennai
  - NIT, Warangal
Benchmarking is to identify the gaps in service delivery and effect in improvement through the sharing of information and best practices, resulting in better services to the people through the urban sector.

It provides common minimum framework for monitoring and reporting on SLBs and Guidelines on how to operationalize in phased manner.
Initiatives and Way Forward

• Policy and Planning
  – National policy for public transport sensitive to climate change
  – National policy for metro rail projects
  – Advisories/Circulars to State Govts for guiding city development and redevelopment.
  – Advisory on CDM

• Management
  – Task Force on UMTA
  – Core Group on ITS
  – National Consultant for CDM
  – Partial Funding for Urban Transport cell at ULB and UMTA in cities

• Investment
  – Innovative PPP to attract private financing.
  – Dedicated Urban transport fund so as to catch up with investment requirements given the pace of urbanization and increase in the travel demand.
  – Fund Innovations in IT and Bus Technologies
Thanks