

**National Urban Transport Policy and Its Implications\***

**ABSTRACT**

In order to support the required level of economic activities in urban areas it is imperative to maintain the mobility of people by providing reliable, comfortable and sustainable transport network so that the people could easily access to their work places, educational centers, recreational places etc. In fact, the poor mobility can become a major dampener to the economic growth of the urban centers. This all requires a policy to offer a direction and a framework for future action. This paper tries to discuss the National Urban Transport Policy in brief and its implications related to Comprehensive Mobility Plan, Bus Rapid Transit Projects, feasibility of PPP in urban transport. Finally, it throws light on the emerging issues or future research areas.

**Background**

Most of the cities in India have been facing urban transport problems for last many years, which affect the mobility of people and finally the economic growth of the urban areas. In order to support the required level of economic activities in urban areas, it becomes imperative to address the urban transport issues and frame an urban transport policy so that urban transport/comprehensive mobility plans could be prepared accordingly. In view of this, the National Urban Transport Policy (NUTP) was formulated in May 2005 and approved by the Cabinet in April 2006. The present note discusses the NUTP in brief and its implications, like, preparation of City Development Plan/ Comprehensive Mobility Plan, Bus Rapid Transit System / projects, feasibility of PPP in urban transport and finally the emerging research issues / areas in the sector.

**National Urban Transport Policy (NUTP), 2006 – At a Glance**

The National Urban Transport Policy primarily focuses on the mobility of people not the mobility of vehicles, reduction of travel demand by encouraging integration of land use and transport planning and sustainable transport solutions. It encourages improvement in public transport, introduction of Intelligent Transport Systems (ITS), and facilities for the use of non-motorized modes; capacity building – individual and institutional – revolving legal and administrative issues; greater involvement of private sector; innovative financing mechanism to enhance efficiency and reduce the impact on public budget; use of cleaner technology and; major awareness campaign for citizens.

**Objectives**

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The objective of this policy is to ensure safe, affordable, quick, comfortable, reliable and sustainable access for the growing number of city residents to job, education, recreation and such other needs within our cities. This is sought to be achieved through a multi-pronged approach which is as follows:

#### Integrating land use and transport planning

The Govt. of India would promote the development of integrated land use and transport plans for all cities. It would extend 50% of the total cost involved in developing such plans.

#### Equitable allocation of road space

The Central Govt. would encourage measures that allocate road space on an equitable basis, with people as its focus. This can be achieved by reserving lanes and corridors exclusively for public transport and non –motorized modes of travel. In order to facilitate better enforcement of lane discipline, suitable provision would be introduced in Motor Vehicles Act and other instrumentalities to enable stringent penalties for violation.

#### Priority to use public transport

The Central Govt. would promote investments in public transport as well as measures that make its use more attractive than in past. It would also encourage all state capitals as well as other cities with a population of more than one million to start planning for high capacity public transport systems.

Some allied issues that need to be addressed in this context are as follows:

##### (i) Quality and pricing of Public transport

The Central Govt. would encourage the provision of different level of services – a **basic service** with subsidized fares (affordable prices) for those who place a premium on cost and a **premium service** that is of high quality but charges higher charges. This service is for those who values time saved and more than price. To ensure that the fares charged are fair and reasonable, the Central Govt. would require that a regulatory authority be set up by the State Govt. to, inter-alia, regulate the prices to be charged by the different types of public transport services.

Under the NURM, the Central Govt. would offer support premium service infrastructure.

##### (ii) Technologies for Public Transport

The Central Govt. encourages all proven technologies be suited to a specific situation. In order to facilitate the proper evaluation of all available technologies, it would create a knowledge Centre that would provide necessary information required for taking the right technological decisions for a specific city.

##### (iii) Integrated public transport system

The Central Govt. would expect that investments in public transport systems would also seek to ensure that such systems are well integrated and offer a seamless system to the users. Its financial support would depend on appropriate authorities/entities being set up to ensure that a coordinated and integrated public transport system becomes available.

##### (iv) Financing:

The central Govt. would encourage high capacity public transport systems being set up through the mechanism of Special Purpose Vehicles (SPV) and would offer financial support either in the form equity or one time viability gap financing, after evaluating various parameters.

In financing the mass transit systems, the basic principal would be that the government should provide the infrastructure but the users/ commuters must pay for the operating costs and the rolling stock.

The Central Govt.'s capital support may be in the form of equity participation or one time viability gap funding and would be subject to a ceiling of 20 % of the capital cost of the project.

(v) Role of Para-transit:

Para-transit normally caters to a category of occasional trips, viz. trips to airport or rail stations, or emergency trips. When the quality of public transport deteriorates, para-transit tends to substitute for public transport. A policy would seek to restore para-transit to its normal role by persuading the improvement of the public transport.

Priority to non-motorized transport

Non-motorized transport modes are environmentally friendly and have to be given their due share in the transport system of the city. The Central Govt. would give priority to the construction of cycle tracks and pedestrian paths in all the cities under NURM.

Parking

State Govt. would be required to amend building bye laws in all million plus cities so that adequate parking space is available for all residents/users of such buildings. Multilevel parking complexes should be made a mandatory requirement in the city centers which have several high rise commercial complexes. It could be constructed underground, including below areas declared as green belts in the master plan. Electronic metering would be encouraged for better realization of parking fees to make the investment viable. Preference in the allocation of parking space for public transport vehicles and Non-motorized modes (park and ride facilities for bicycle users with convenient interchange) would be given. Proposals for parking complexes would be given priority under NURM.

Freight traffic

Cities would be encouraged to build by-passes and to provide facilities for the parking vehicles outside city limits (such as truck terminals) through public-private partnership. Proposals for such facilities would be considered under NURM.

Legal and Administrative Issues

The Central Govt, will recommend the setting up of Unified Metro Transport Authority (UMTAs) in million plus cities, to facilitate more coordinated planning and implementation of urban transport programs and projects and an integrated management of urban transport system. It would also encourage the setting up of professional bodies that have the capacity to make scientific assessment of the demand on various routes and contract services that can be properly monitored.

Capacity Building

Capacity building will have to be addressed at two levels – institutional and individual. The Institute of Urban Transport (India) would be suitably strengthened to discharge the

responsibility of institutional capacity building. The Central Govt. would also encourage the development such institutional capacity at the state level through the platform of NURM.

For capacity building at individual level, the personnel belonging to the state transport departments, municipal corporations, metropolitan authorities etc. would be targeted.

The Central Govt. would facilitate joint ventures and collaboration agreements between the technology providers around the world and suitable

#### User of Cleaner technologies

Cleaner technologies, such as CNG buses, electric trolley buses, electric vehicles, electric two wheelers, need to be encouraged to avoid problem of vehicular pollution. The Central Govt. would encourage the research, development and commercialization of cleaner technologies.

Several vehicles tend to be poorly maintained and are overly polluting. In order to come these problems, the Central Govt. would lay down a clear and time bound schedule of progressively tighter emission norms, with adequate lead-time, to allow auto and oil industry to make the required investments. Statutory provisions would also be introduced requiring all in use vehicles to undergo a periodic checkup and obtain a specific certification. The Central Govt. would also support the establishment of training centers for the staff of such certification establishment.

#### Innovative financing mechanisms using land as a resource

The Central Govt. would encourage the levy of dedicated taxes to be credited to an urban transport fund and use exclusively to meet urban transport needs within the state. It would also encourage partnerships and greater use of private capital in areas where the private sector can competitively deliver urban transport services. The commercial utilization of land resources, available with public transport service providers, is also recommended to raise additional resources.

#### Association of the private sectors

The Central Govt. would encourage a more liberal use of the private sector for operation and maintenance of parking facilities, certification facilities, repair facilities, construction and management of terminal facilities etc. It would also encourage the State Governments to involve the private sector in providing public transport services.

#### Need for public awareness and cooperation

Urban transport policies cannot succeed without the fullest co-operation of all the city residents. In view of this, the Central Govt, would take-up a major awareness campaign in this regard and seek the support of the State Govt. in its implementation.

### **Some Implications of NUTP**

#### **Comprehensive Mobility Plan -**

Keeping in view the suggestions of the NUTP, cities of India are required to prepare City Development Plan, Comprehensive Mobility Plan (CMP) and Comprehensive Traffic and Transportation Plan. These should be an integrated transport and land use plans which should spell out the projected mobility needs and also the manner in which such mobility needs are proposed to be met. Such plans (projects) are to be funded under Jawaharlal Nehru National

Urban Renewal Mission (JNNURM), viability Gap Funding or budgetary support from the Government of India. An integrated land use and transport plan is a pre requisite to receive funds from Govt. of India for any major transport projects.

The Ministry of Urban Development (MoUD) has issued the Guidelines for preparation of detailed project report for Integrated Mass Transit System development plans (bus based/rail based), through its letter No. 14011/44/2006-UT, dated 1<sup>st</sup> November 2006. Later, the MoUD issued Policy Circular for CMP (No. K-1412/1019380/2006-NURM-I, dated 5<sup>th</sup> March.2007).

According to the policy circular, the cities of the country are required to submit a CMP with focus on mobility of people and give priority to pedestrian, non-motorised transport, public transport and integrated public transport. It should also integrate land use and transport planning. The structure of CMP should be in the following manner:

#### Comprehensive Mobility Plan -

Developing an integrated plan is the theme of this chapter. Integrated plan would imply integration wrt landuse and transport, integration of various modes (fares, routes, facilities) and institutional framework for coordination

- Future Travel Demand Scenarios
- Challenges and opportunities, goals and objectives
- Alternative Analysis  
Evaluation of various alternative technologies to solve the existing problems with cost benefit analysis, technical feasibility including evaluation of lowest cost options like Traffic Management, Rationalization etc., rationale for choosing a particular Technology / system concept
- Stake holder consultations including Workshops held if any
- Transport Master Plan  
It should focus on moving people and not vehicles. It should integrate land use with transport plan including mass transit systems connectivity to all new/ future Satellite Townships/emerging activity centres (SEZ's), main network and Feeder network including pedestrian & NVSs, phasing of implementation
- Integration of Master Transport Plan into the Master Plan of the city  
enclose soft & hard copy of approved Master Plan of the city and if not approved, provide time limits for approval.

The Pune Municipal Corporation is in the process of preparing CMP for the city. In Chandigarh, the decision has been taken to develop a CMP and a region wide mass transport network parallel to Metro project. Raipur City is also in the process of developing CPM. In Kolkata, the CMP has been prepared for Kolkata Metropolitan Area. However, the Kochi has prepared the CMP.

Many Indian cities are in the process of preparing rail based and bus based transit system projects. Metro rail based systems are being developed in many cities of India, viz. Delhi ( 121.26 km, Rs,192.51 billion), Mumbai (62.89 km, Rs.186.34 billion), Bangalore ( 33 km, Rs.63.95 billion), Kolkata (13.77 km, Rs.50.68 billion), Chennai (50 km, Rs,93.47 billion), Hyderabad (66.39 km, Rs.87.6 billion) etc. Light rail systems have been proposed in Kolkata while monorail systems in Delhi, Bangalore and Mumbai.

The Municipal Corporation Jalandhar has invited tender to prepare Detailed Project Report (DPR) for promotion of Non- Motorized Transport in Jalandhar , under the world Bank/ Global

Environmental Facility (GEF) assisted Sustainable Urban Transport Project (SUTP)-India, Ministry of Urban Development.

### **Bus Rapid Transport System -**

Bus Rapid Transit (BRT), fairly a recent and broad term (also known as High Capacity Bus System) which may be described as a high capacity transport system with its own right-of-way and is implemented using buses through infrastructural and scheduling improvements to provide a high level of service. This system has pre ticketing booths, turnstiles, automatic doors, wider and lower floors, high frequency and efficiency cut precious commuting time and give breathing space to the roads and parking areas. It also has cycling and pedestrian paths making the roads more people oriented. The goal of such systems is to at least approach the service quality of rail transit while still enjoying the cost savings.

However, BRT may have many dimensions, viz. physical, operational, institutional, financial, social, environmental, developmental and political but each city needs to find its own approach when implementing this concept.

The expression BRT is mainly used in North America; it is often called *Busways* in Europe, while elsewhere, one may speak of *quality bus* or simply *bus* service while raising the quality (Wikipedia, the free encyclopedia). It is highly successful in Latin America and is getting momentum in Asian cities also. This system is operational in many Asian Cities, namely, Akita (Japan), Ankara (Turkey), Beijing (China), Fukuoka (Japan), Gifu (Japan), Jakarta (Indonesia), Kanazawa (Japan), Miyazaki (Japan), Nagaoka (Japan), Nagoya (Japan), Nigata (Japan), Seoul (South Korea, Taipei (China). In most of the cities of China, this system is under construction.

The BRT projects have been sanctioned, under JNNURM, in many cities of India, namely, Ahmedabad (58.00 Km, Rs. 493.32 Crores), Vizag (42.80 Km, Rs. 452.93 Crores), Indore (11.45 Km, Rs.98.45 Crores), Jaipur (26.10 Km, Rs.219.19 Crores), Bhopal (21.71 Km, Rs.237.76 Crores), Rajkot (29.00 Km, Rs. 110.00 Crores), Vijaywada (15.50 Km, 152.64 Crores) and Pimpri-Chinwad (23.00 Km, Rs. 312.14 Crores). The BRT ( 101.70 Km) has arrived in Pune.

The BRT projects are also being considered in a number of cities, like, Vadodara, Mumbai, Hyderabad, Nagpur, Bangalore, Bhubaneshwar, Chennai, Kucknow, Kanpur and Kolkata.

In Delhi, BRTS (with its own funds) expects to introduce sleek, modern buses with Intelligent Communication System and additional facilities for non –motorized modes along a new corridor. In phase- I, seven corridors have been taken up for BRTS operation which is a part of the transport plan of 37 corridors comprising 500 Km for road-based mass transit like BRTS, monorail and Light Rail Transit (LRT).

### **Feasibility of PPP in Urban Transport -**

In urban areas, public mass transport falls within the jurisdiction of the State Transport Authorities or City Transport Corporations. However, a large number of private operators provide city transports that are ready to follow the norms prescribed by the transport authorities concerned. These authorities/ corporations are responsible for regulating the public transport provided by the private operators through a number of measures. The management of traffic flows within the city/urban areas falls within the jurisdiction of the local police department.

The NUTP, 2005, indicates that the Central Government would encourage liberal use of private sector in the activities, like, operation and maintenance of parking facilities, repair facilities, construction and management of terminal facilities etc. Moreover, the Central

Government would encourage the State Government “ to involve the private sector in providing transport services, but under well structured Procurement contacts”.

As far as the rail based transport system is concerned, it should be continued under the public management because of its high cost investment. However, fixed infrastructure (track etc.) may be financed by the Government and the balance (rolling stock etc.) may be given on BOT.

The NUTP mentions that the Central Government would encourage partnerships and greater use of private capital in areas where the private sector can competitively deliver urban transport services. It further mentions that the greater use of private buses in the city would be encouraged to reduce the dependence on public budget.

The Worldwide experiences with the private operators give mixed results. Some cities have reasonable good experience with the private operators. In context of India, attempts were made to privatize the passenger transport in many cities of India, like, Delhi, Jaipur, Bhopal, Indore Visakhapatnam etc. However, in some cities, such as Jalandhar, Ludhiana, Amritsar, Ajmer Nagpur, Jodhpur and Surat initiatives are being taken in this regard.

In Indore, the Indore City Transport Services Limited ( ICTL) is providing modern bus services. Some city buses in Indore city are fully financed by the private sector and the private sector recover its operating and maintenance costs through:

- (i) Operators, which make bids for a route. However, their source of revenue through the income from the fare collection, advertisements and passes.
- (ii) The entire contract, for advertisements on buses, is given to one company.

Special contractors are there for passes. They give the guarantee to sell a fixed amount of passes.

#### Emerging Research Issues/Areas in the sector

- As indicated above that NUTP has given priority to non-motorized transport because it is environment friendly. In order to encourage the non- motorized transport (Cycles, Cycle Rickshaws etc.), there is a need to formulate comprehensive strategies for different size (small cities, medium sized cities and large cities) of cities; different types (in view of the topography of the city) of cities; and for religious, tourist, historical cities etc.
- Capacity building in urban transport is essential to have full understanding to deal with the problems related to urban transport. This requires sincere efforts for strengthening capabilities at state as well as city level that may address and undertake the task of developing sustainable urban transport system. The institutional capacity may be enhanced by:
  - i. Formulating the strategies to develop common curriculum. This would include the technical guidelines (in view the proven technologies) besides other parameters.
  - ii. Designing of training – preparation of training modules for top level and middle level officials related to urban transport departments.
- Pricing of public transport is a crucial issue. Most of the Public Transport in India have been suffering huge financial losses and are not able to recover even its operating cost from the fare box. Keeping in view the socio-economic conditions of the people, these have to peg fares at low level and also have to provide free and concessionary passes to certain categories of people. . Here some questions arise, as how the fares should be fixed? To what extent the subsidy should be allowed? Who will compensate the operators for providing low fare and concessions? Should the subsidy be given for fleet expansions or for other improvements in services? This all requires a comprehensive study on fixation of fares. In this context, NUTP

has also suggested a **basic service** with subsidized fares (affordable prices) for those who place a premium on cost.

- As indicated in NUTP that the current structure of governance for the transport sector is not equipped to deal with the problems of urban transport. There is need to develop a Model Legislation at National level to solve the transport related problems and to provide right coordination mechanisms to deal with urban transport. Later, the states may amend their legislations as per the guidelines / policies provided by the Model Transport Legislation and the priority / demand of their cities.
- Parking of vehicles in large cities has become a serious problem. NUTP has suggested multi-level parking, under ground parking including below areas declared as green belts in the master plan, park and ride facilities for bicycles users with interchange facility etc. This requires a study on parking policy and advertisement policy which may provide guidelines for better recovery of the cost of using space for parking purpose, appropriate changes in bye laws and appropriate legislation to prevent the use of the right of way on road systems for parking purposes.
- In order to encourage private sector participation in urban transport sector participation, policies may be framed which would provide guidelines for involving the private sector in many activities, viz. providing public transport services, operation and maintenance parking facilities, certification facilities, repair facilities, construction and management of terminal facilities etc.

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