

CHAPTER - 10

INSTITUTIONAL STRENGTHENING

10.1 REGIONAL PLANNING

10.1.1 Though the Study covers the transportation problems in the BMA, the impact of the traffic from the neighboring towns has also to be taken into consideration. The description of the BMR has already been given in Chapter 1. These towns lie in outer belt and the traffic which emanates from or bound for these come into or exit the city mostly through the major radials like Mysore Road, Magadi Road, NH-7, NH-4 and NH-209. The traffic to and from these areas have been accounted for through the outer cordon survey. Planning for these townships is being carried out independently by Bangalore Metropolitan Regional Development Authority (BMRDA). The data available individually for these towns as at present is meager. Hence, for the purpose of this study, the traffic which is passing through the outer cordon as determined by traffic counts at cordon points has been considered as the basis. The BMRDA is also involved in the development of the satellite towns and BIAPPA area.

10.1.2 As such it is presumed that any future planning in these areas will be directly controlled by the BMRDA or the BMRDA will be more actively involved in their development plans. According to the present structure, the overall planning in the BMRDA in respect of land use and transportation facilities is looked after and controlled by the BMRDA which forms the nodal agency. However the planning in respect of industries, education, commerce etc., for areas outside the city, are done by the respective Departments of the State Government at District level. They are coordinated by the District Commissioners. Within the city, it is partly coordinated by BDA and the City Corporation. The implementation of the various plans / proposals in the region is thus under different agencies as discussed below.

10.2 AGENCIES INVOLVED IN CIVIC WORKS

10.2.1 Presently day-to-day land use control and maintenance of services like drainage, roads etc., are done by Bruhut Bangalore Mahanagara Palike, BDA, TMCs and CMCs, while BDA prepares the Master Plan and development control regulations. The road infrastructure connecting the different municipalities, towns and also the National Highways and the State Highways passing through the city and these are maintained, improved and expanded by the Public Works Department/NHAI. The water supply within the city is looked after by the Bangalore Water Supply & Sewerage Board (BWSSB) and by respective municipalities in TMCs and CMCs.

10.2.2 Progress of works and flow of funds in respect of any aided projects, is watched and monitored by a Project Management Department/ Division of KUIDFC.

10.3 ROLE OF VARIOUS TRANSPORTATION AGENCIES

10.3.1 Transport Department

10.3.1.1 The Commissioner for Transport is in-charge of the licensing of the motor vehicles, issue of route permits/area of operation and monitoring condition of the vehicles by having them periodically examined and also maintaining the various statistics with regard to the transportation in the whole city. There are nine Regional Transport Officers who control the licensing and monitoring of the vehicle operations in and around BMA. While the commercial vehicles and larger passenger vehicle operations are licensed for statewide operation, the licensing for IPT modes like auto-rickshaws are confined to respective districts. There are certain constraints on their operations outside their respective areas, particularly from the district into the city, which sometimes cause problems. Even collection of the data on the vehicles operating in the metropolitan region becomes difficult in view of this.

10.3.2 Traffic Engineering & Transport Management

10.3.2.1 The traffic engineering works, design and implementation within the city is looked after by a separate division under the Engineering Department in BBMP and BDA. In parallel, the Commissioner of Police under whom there is a Traffic Division also initiates and implements certain traffic engineering proposals as part of traffic management.

10.3.2.2 The Traffic Management is considered an enforcement function and the Traffic Division under the Commissioner of Police does all the planning and implementation within the city as mentioned earlier. There is a coordinating body which is of a recommendatory nature functioning in the under Home Secretary.

10.3.3 Public Transport consisting of Road and Rail within BMA

10.3.3.1 The road transport is looked after by Bangalore Metropolitan Transport Corporations (BMTCL) working under the direct control of the Secretary / Transport of the State Government. In addition, there is Karnataka State Road Transport Corporation serving peripheral areas and regional towns around BMA.

10.3.3.2 Bangalore Metro Rail Corporation Limited (BMRCL) has been entrusting with the implementation of Bangalore Metro.

10.3.3.3 The Railway transport is under the South Western Railway, which works under the Ministry of Railways of the Central Government. There is very little coordination between these agencies. The fare policies are dictated by the State Government for bus and by the Central Government under the authority of the Parliament for the Railways. The expansion of facilities and utilisation of the available facilities are done by the respective agencies depending upon the availability of funds. Their routing and services are also run, keeping in view need for maximizing their use of assets and revenues. This naturally results in development of very little inter-modal services for the benefit of the commuters.

10.3.3.4 Existing institutional arrangement for transportation in Bangalore is given in **Table 10.1**.

Table 10.1– Existing Institutional Arrangement for Transport in Bangalore

S.No.	Functions	Institution
1.	Policies and framework affecting transport sector	Departments of Urban Development and Transport
2.	Road building, road maintenance, street lighting, Construction of select ring roads and grade separators Construction of bus shelters Construction of traffic islands Issue of permission for road cutting	Bruhat Bangalore Mahanagara Palike (BBMP) the urban local body of the Bangalore City
3.	Enforcement of traffic laws and regulations, management of traffic junctions and corridors, regulation of right of ways, parking and right of ways	Bangalore City Traffic Police
4.	Public transport system – bus based – construction and maintenance of bus depots, stations and passenger centres	Bangalore Metropolitan Transport Corporation (BMTCL)
5.	Public transport system – Metro Rail	Bangalore Metro Rail Corporation Limited (BMRCL)
6.	Preparation of Comprehensive Development plan (CDP) (primarily land use and zoning), formulating of regulations, construction of select ring roads and grade separators	Bangalore Development Authority (BDA)
7.	Planning of transport System in BMR	BMRDA
8.	Registration of motor vehicles, issue of licenses and enforcement of regulations	Regional Transport Office and Department of Transport, Government

S.No.	Functions	Institution
	of motor vehicle act	of Karnataka
9.	Monitoring of air quality and noise levels	Karnataka State Pollution Control Board (KSPCB)
10.	Infrastructure and finance	Karnataka Urban Infrastructure and Finance Corporation Limited (KUIDFC)
11.	Construction and Operation of rail system	Indian Railways
12.	Construction and maintenance of NH	NHAI

10.4. NEED FOR UNIFIED METROPOLITAN TRANSPORT AUTHORITY

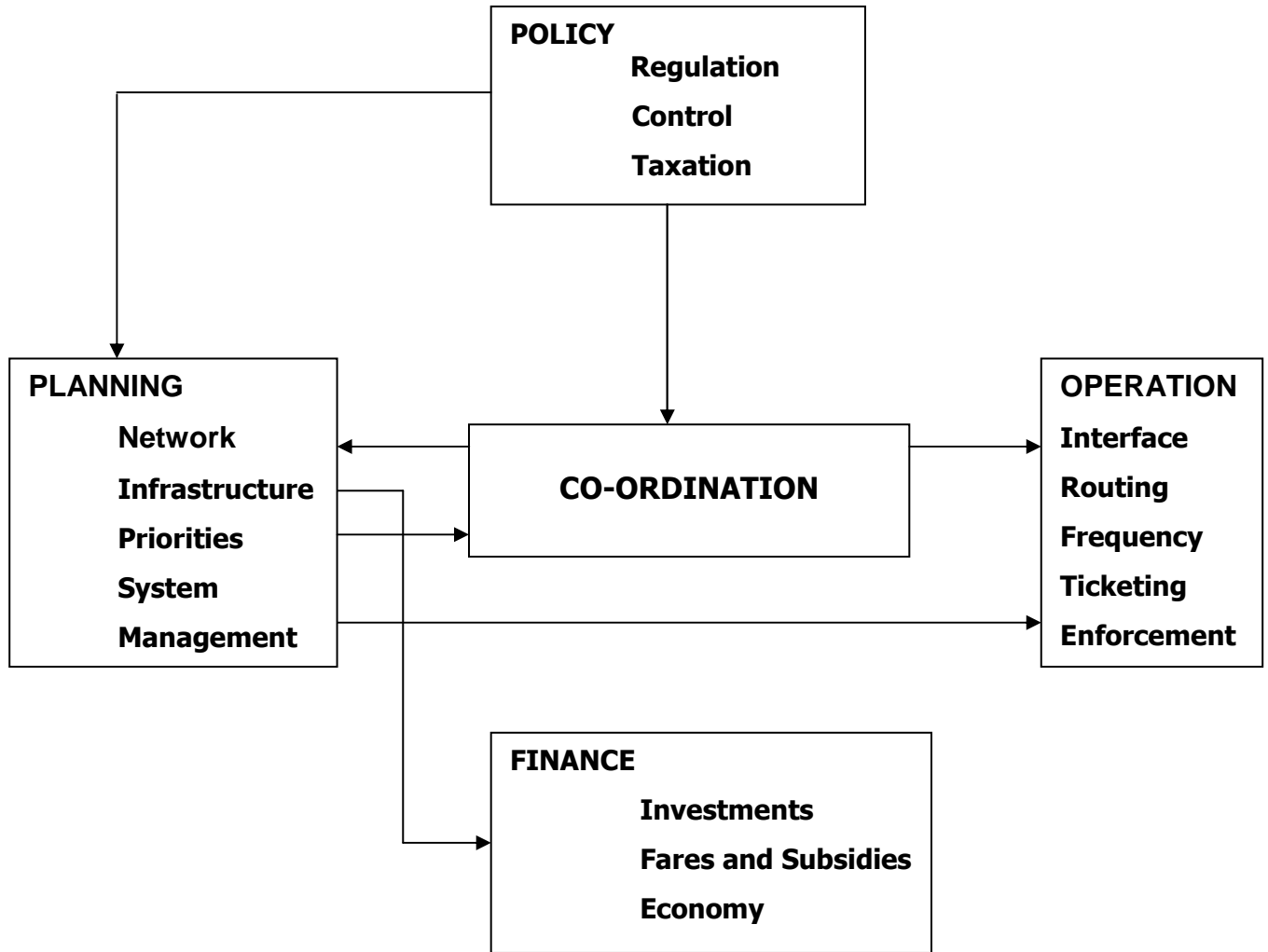
10.4.1 The above discussion suggests that there are many agencies involved in the urban transport in Bangalore. As such there is nothing wrong in multiplicity of authorities. However currently there is no mechanism to ensure coordination among various institutions which is one of the key road block affecting formulation and implementation of major schemes and initiatives to improve the traffic situation and mobility plans in the city. Close co-ordination is needed on number of factors as indicated in **Figure 10.1**.

10.4.2 Since early 1990s planners in India have been suggesting need for a unified metropolitan transport authority (UMTA) in order to ensure co-ordination, co-operation and continuity. In view of the fact that both central and state government agencies are involved in providing urban transport, such an authority will need to be created by an act in Parliament, even though the city and state governments are primarily responsible for urban planning including transport. Alternatively, it can be one of the existing authorities with full powers of planning, implementation and control. Such an authority could be an urban development authority at the third level. All departments of the authority should be manned by skilled personnel in technical jobs. The authority should ensure planning, development, co-ordination and implementation.

10.4.3 The National Urban Transport Policy has recommended setting up of Unified Urban Transport Authorities (UMTA's) in million plus cities. In the policy document it is observed as follows:

'The current structure of governance for the transport sector is not equipped to deal with the problems of urban transport. These structures were put in place well before the problems of urban transport began to surface in India and hence do not provide for the right coordination mechanisms to deal with urban transport. The central government will, therefore, recommend the setting up of Unified Metropolitan Transport Authorities (UMTA's) in all million cities to facilitate more co-ordinated planning and implementation of urban transport programmes & projects and integrated management of urban transport systems. Such Metropolitan Transport Authorities would need statutory backing in order to be meaningful'.

Figure 10.1 Unified Metropolitan Transport Authority



10.5 DIRECTORATE OF URBAN LAND TRANSPORT

10.5.1 Bearing in mind the National Urban Transport Policy, the Government of Karnataka felt that there is a strong case for reorganization of the administration structure dealing with urban land transport in the State by creation of a State Directorate of Urban Land Transport (DULT) under the administrative control of the Urban Development Department. Considering this, DULT has now been sanctioned by the State Government. The functions of the DULT are as follows.

1. Periodic assessment of travel demand in a given area through CTTS and other studies
2. Determination of level of public transport required on different corridors and the type of transport system required.
3. Assessment and recommendation of the new investments needed for creation of transport infrastructure
4. Apart from State owned service providers devising a system of procurement of public transport services from private operators and ensuring compliance
5. Setting policy guidelines for development of total network
6. Actively liaising with the municipal bodies/UDAs in designing and developing integrated policies and plans

10.5.2 The Directorate of Urban Land Transport (DULT) shall initially cover jurisdiction of seven Municipal Corporations in the State viz, Bangalore, Mysore, Mangalore, Hubli-Dharwar, Belgaum Gulbarga and Bellary. The integrated transport plans for these cities may extend to the local planning areas (LPAs) also. It will be gradually extended in stages to all towns / cities and urban settlements with a population of over one lakh.

10.5.3 The newly created directorate of Urban Land Transport (DULT) shall take up comprehensive traffic and transportation studies (CTTS) for the six Municipal Corporations (excluding Bangalore). These studies would help assess the urban transport needs over a medium term perspective (say 25 years), identify technological and cost options, intensity of local urban economic activity and paying capacity of the average population and in short help arrive at an optimal urban transport solution. On completion of the CTTS, the existing master plan for the LPAs of these cities will be updated / revised to incorporate the necessary land use changes so that the transport and land use plan are totally integrated. A city level investment plan for creation of transport infrastructure together with sources of financing will also have to be created so as to enable posing of the projects for financing under different schemes including multilateral / bilateral assistance as also on PPP basis.

10.5.4 Other functions of the State Directorate of Urban Land Transport would include (i) road network planning in the urban areas, (ii) setting of technical standards for construction of the maintenance of urban roads, (iii) planning execution of infrastructure for pedestrians/cyclists, (iv) comprehensive drainage network to ensure road quality, (v) parking infrastructure etc. All of them will be part of the Intergrated Transport Plan at the city level and would be developed in close coordination with the local bodies who will eventually need to adopt the plan.

10.5.5 An important aspect with respect to the adopted functions of the State Directorate for Urban Land Transport is capacity building. It is necessary to develop a manpower base for good and sustainable urban transport planning and execution by creating a pool of skilled manpower. There is a need to:

- 1) Strengthen academic programme in the State in urban transport
- 2) Create systems for accreditation of specialists in urban transport
- 3) Ensure mechanism for continuous training at all levels.

A multi disciplinary team of experts will be constituted as an advisory board for the State Directorate of Urban Land Transport to provided inputs for:

- 1) Capacity building
- 2) Academic and educational programmes
- 3) Preparation of standards/manuals/codes
- 4) Development for Intelligent Transport System (ITS)
- 5) Other technical issues related to urban transport

10.5.6 The Organisation for DULT is supposed to have Commissioner (Urban Land Transport), Special Officer (Urban Planning), Traffic & Transportation Planners, Traffic Engineer etc. It is necessary that DULT is staffed with adequate numbers of transportation personnel as it will cover urban transport for all cities of Karnataka.

10.6 BANGALORE METROPOLITAN LAND TRANSPORT AUTHORITY

10.6.1 Bearing in mind the National Urban Transport Policy, the State Government considered it also necessary to create an Unified Metropolitan Transport Authority for the Bangalore Metropolitan Region (BMR) which will function as an umbrella organization to coordinate planning and implementation of urban transport programmes and projects and provide an integrated management structure. All land transport systems (excluding Railways) in the BMR may be brought under all purview of the Bangalore Metropolitan Land Transport Authority (BMLTA). The BMLTA will be created initially under an executive order and later with statutory backing.

10.6.2 Under the circumstances explained above, Government has already sanctioned creation of Bangalore Metropolitan Land Transport Authority (BMLTA) for Bangalore metropolitan Region (BMR) as per Government Order No. UDD 134BMR 2006 (2), Bangalore dated 09.03.2007. This shall be taken up as a part of the Greater Bangalore reorganization exercise so as to make it operational by 2007–08. Initially as an interim arrangement, the Government has set up this as a Committee of the BMRDA with the Chief Secretary as Chairman with the following composition.

1.	Chief Secretary to Government	Chairman
2.	Principal Secretary, Finance Department	Member
3.	Principal Secretary, UDD	Member
4.	Principal Secretary, Transport Department	Member
5.	Principal Secretary, Forest Ecology & Environment Department	Member
6.	Principal Secretary, Public Works Department	Member
7.	Commissioner, Urban Land Transport (DULT)	Member
8.	Commissioner, BMP	Member
9.	Commissioner, BDA	Member
10.	Managing Director, BMTC	Member
11	VC & Managing Director, KSRTC	Member
12	Commissioner, BMRC	Member
13.	Commissioner of Police	Member
14.	Managing Director, KUIDFC	Member
15.	Representatives from Railways, AAI etc	Member
16.	Any other experts connected with the Urban Transport found necessary	Member
17.	Commissioner, BMRDA	Member Secretary

10.6.3 The Functions of BMLTA / committee shall be as follows:

- (1) To coordinate all land transport matters in the BMR
- (2) To prepare detailed Master Plan for Transport Infrastructure based on the Comprehensive Traffic and Transport Study for Bangalore.
- (3) To oversee implementation of all transportation projects
- (4) To appraise and recommend transportation and infrastructure projects for bilateral / bilateral Central assistance.
- (5) To function as empowered Committee for all Urban Transportation Projects
- (6) To initiate action for a regulatory frame work for all land transport systems in BMR.
- (7) To initiate steps, where feasible for common ticketing system.
- (8) Take any other decision for the integrated urban transport and land use planning and implementation of the projects.
- (9) Any other functions entrusted from time to time.

10.6.4 BMLTA / committee will function as an umbrella organization to coordinate planning and implementation of urban transport programmes and projects and provide an integrated management structure. All land transport systems (excluding Railways) in the Bangalore Metropolitan Region shall be brought under the purview of BMLTA / Committee.

10.6.5 It is seen from the above that the GOK has already taken the lead and has initiated steps to strengthen the institutions for urban transport. Therefore it is important that BMLTA is established at the earliest with statutory backing and adequate technical staff provided for this organization. It is also important that BMLTA is also given with the power to assign various projects to various organizations. All the finances for transportation projects to the concerned organizations should also be routed through BMLTA in order to make BMLTA effective and to ensure timely completion of projects.

10.6.6 Shifting of utilities, a key function encountered in most of the road improvement works as well construction of new roads requires very effective coordination among institutions to ensure timely completion of projects. This key function is reported to be the major contributor for project delays and cost over runs. Revamping of institutional arrangements with assignment of authority to single entity to accord approvals and sanction would enhance the efficiency of implementation of major projects proposed under the CTTS. The study recommends that this be vested with BMLTA.

10.7 TRANSPORT PLANNING UNIT (TPU)

10.7.1 The role of BDA with regard to town planning is defined within the BDA act as follows:

- i) To prepare a structure plan for the development of BMA
- ii) To formulate schemes for implementation the structure plan
- iii) To secure and coordinate the execution of the town planning schemes for development of transport infrastructure and management of transport system in accordance with the plan.
- iv) To entrust to any local authority the work of execution of the development plan and schemes
- v) To coordinate the activities of the various bodies which are concerned with developmental activities.

10.7.2 Transport planning is essential ingredient of the town planning. Presently there is no proper technical body for the required transport planning inputs. It is necessary that technical expertise is created not only within BDA to undertake this task but also in BMRDA to carry out similar jobs at Bangalore Metropolitan Region Level.

10.7.3 The proposed Transport Planning Unit (TPU) will perform the following specific functions:

- i) To prepare a strategic plan for long term development and utilisation of transport facilities
- ii) To formulate schemes for implementing the strategic transport plan
- iii) To secure and coordinate the execution of schemes for development of transport infrastructure and management of transport system in accordance with the plan.
- iv) To entrust to appropriate local authorities the work of execution of transport schemes
- v) To coordinate activities of the various bodies concerned with transport with BDA
- vi) To define a strategic transport network for BDA / BMRDA
- vii) To define a metropolitan transport policy based on strategic network demand and plan.

10.7.4 The other important responsibilities of Transport Planning Unit will include the establishment of criteria for capital investment and methods for fixing the priorities for road and transport schemes and feasibility studies. The TPU will also be responsible to prepare definite policies related to public transport, road safety, environmental protection and goods movement pattern with related agencies dealing with road planning, railways, traffic engineering, enforcement and regulation will be imperative.

10.7.5 The TPU will be headed by a Senior Transport Planner, who will be of rank of superintending Engineer. The head will be overall in charge and will give the necessary direction to the unit apart from the high level coordination with the concerned departments. He will be assisted by two transport planners, one for policy planning and other for the co-ordination and monitoring. An economist at a senior level is also proposed to be associated with the unit on a part time basis depending upon the requirements.

10.8 TRAFFIC ENGINEERING CELLS (TEC)

A large number of agencies deal with roads such as BBMP, BDA, Traffic Police, PWD, NHAI, BMRDA, Transport Department, KUIDFC, BMRCL, BMTCL, BMLTA etc. There are numerous issues of proper road geometrics, traffic circulation, junction design, traffic signals, road signs/markings, street furniture etc which are properly attended to by these agencies due to lack of traffic engineering expertise. Traffic planning is a continuous affair. It is therefore important that Traffic Engineering Cells are established in these organizations with qualified and adequate staff such as traffic engineers. This will ensure that the traffic schemes are properly implemented with better results and fine tuned later, if necessary. This will go a long way to improve traffic flow in Bangalore.