



सत्यमेव जयते
**MINISTRY OF URBAN DEVELOPMENT
GOVERNMENT OF INDIA**

FINAL OPERATIONS DOCUMENT FOR UNIFIED METROPOLITAN TRANSPORT AUTHORITY IN HYDERABAD



**DEVELOPING OPERATIONS DOCUMENTS FOR
UNIFIED METROPOLITAN TRANSPORT AUTHORITY
(UMTA) AND URBAN TRANSPORT FUND (UTF)
PC1B 1**

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The **Ministry of Urban Development** is the apex authority of Government of India at the national level to formulate policies, sponsor and support programmes, coordinate the activities of various Central Ministries, State Governments and other nodal authorities and monitor the programmes concerning all the issues of urban development in the country.



Sustainable Urban Transport Project (SUTP), an initiative of the Ministry of Urban Development, launched in May 2010, is a sequel to adoption of National Urban Transport Policy (NUTP), 2006. SUTP aims at building capacity in Indian cities and pilot projects with the concept of "priority for moving people, not vehicles". It is financed by Government of India/ participating States & Cities and aided by World Bank, GEF and UNDP. The project's funding, about INR 17.5 billion, is used in building capacity in Transport planning pan India and demonstration of six projects in different cities. Under technical assistance component of SUTP to improve National, State and local capacity to implement NUTP, various guidance documents are being developed and this operations document is a part of the same.

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LIST OF ABBREVIATIONS

AA	Alternative Analysis
APSRTC	Andhra Pradesh State Road Transport Corporation
BRT	Bus Rapid Transit
CAG	Comptroller and Auditor General
CFI	Consolidated Fund of India
CTS	Comprehensive Transportation Study
CPSE	Central Public Sector Enterprises
CRF	Central Road Fund
DPR	Detailed Project Report
DTCP	Directorate of Town and Country Planning
ERP	Electronic Road Pricing
FME	Fund Management Expert
GAAP	Generally accepted accounting principles
GoI	Government of India
GHMC	Greater Hyderabad Municipal Corporation
HMDA	Hyderabad Metropolitan Development Authority
HMRL	Hyderabad Metro Rail Ltd.
ICAI	Institute of Chartered Accountants of India
IFI	International Financial Institution
IFRS	International Financial Reporting Standards
INR	Indian Rupee
IPTS	Integrated Public Transport System
ITS	Intelligent Transport System
JnNURM	Jawaharlal Nehru National Urban Renewal Mission
LAMATA	Lagos Metropolitan Area Transport Authority
LTA	Land Transport Authority
MBTA	Massachusetts Bay Transportation Authority
MoU	Memorandum of Understanding
MoUD	Ministry of Urban Development
MRTS	Mass Rapid Transit System
MYP	Multi-Year Programme
NHAI	National Highways Authority of India
NIF	National Investment Fund
NREGS	National Rural Employment Guarantee Scheme
NUTP	National Urban Transport Policy
PPP	Public Private Partnership

PWD	Public Works Department
SPV	Special Purpose Vehicle
STA	State Transport Authority
STIF	Transport Syndicate of the Ile de France
STU	State Transport Undertaking
T&TO	Transport & Traffic Officer
TOD	Transit Oriented Development
TfL	Transport for London
TPCB	Telangana Pollution Control Board
TRBD	Transport, Roads & Buildings Department
TSRTC	Telangana State Road Transport Corporation
ULB	Urban Local Body
UMTA	Unified Metropolitan Transport Authority
UTF	Urban Transport Fund
VfM	Value for Money

1. UNIFIED METROPOLITAN TRANSPORT AUTHORITY IN HYDERABAD

1.1 INTRODUCTION

Urban transport is a vital component of urban infrastructure and a lifeline for cities. A well-planned and developed transportation system is not only integral to economic and social activity but also a key facilitator in urban economic growth. Hyderabad, much like other emerging million-plus cities in India, has experienced a surge in travel demand in the last few decades. This has been a result of burgeoning population, high concentration of employment activities in the city, rising income levels, increased ownership of private motorized vehicles and urban sprawl. The consequences of this increased travel demand have been numerous, ranging from expanding pressure on often poorly managed urban transport systems, to increase in congestion and fuel consumption. All these factors contribute to the limited accessibility of people to employment, services, education and other opportunities, which may cause problems of social exclusions, and the urban transport system of Hyderabad being biased against non-motorized commuters. Hyderabad is getting urbanized at a rapid pace, and the need for a well-organized, safe and sustainable urban transport system which provides seamless mobility to people has become central to the development of the city.

The problem of expanding pressure on urban transport system on the demand side is amplified by structural inadequacies in the governance and legislative setup on the supply side. In Hyderabad, much like most million-plus cities in India, there are multiple agencies responsible for urban transport at the national, state and city levels of the government. These agencies play multiple roles geared towards public interest; however their interests, may, at times, conflict. There exist overlaps and gaps in the functions of these agencies. This becomes a matter of grave concern when it creates uncertainty and confusion relating to the tasks each agency is mandated to perform, thereby creating inefficiencies within agencies and wastage of scarce resources. In addition, there are multiple laws at the Central and State Government levels that affect the efficiency of the urban transport system, either directly or indirectly.

Both these factors - the surging demand for urban transport in the face of capacity constraints, and inadequate planning and coordination among urban transport agencies – require an agency to undertake holistic planning of urban transport in Hyderabad, with the objective of providing safe, sustainable and seamless mobility to its people. This chapter describes the key rationale for setting up UMTA in Hyderabad. It highlights various laws and agencies involved in providing urban transport and aligned services in city of Hyderabad and the distribution of various functions concerning urban transport among such agencies. A detailed analysis of the legal and structural scenario leads to the identification of the problems existing in the ambit of Hyderabad's urban transport system. These problems have led the Central Government to prescribe the evolution of the UMTA and UTF concept under National Urban Transport Policy 2006. The rationale and benefits of setting up UMTA and UTF are discussed in the following sections.

1.2 OVERVIEW OF EXISTING LEGAL AND INSTITUTIONAL ARRANGEMENTS

The Constitution of India provides the framework for laws in India. In doing so, it makes provisions for different lists under which governments at different levels can enact laws. However, urban transport is not an exclusive subject under any of the three lists given in Constitution. Therefore, in the city of Hyderabad, like in any other Indian city, there exists a plethora of laws and corresponding agencies at various levels, which collectively govern the urban transport system. However, there is no legislation that covers the needs of urban transport comprehensively. In such a scenario, the multiplicity of laws and authorities involved in urban transport functioning often gives rise to conflicting agendas of authorities. This can lead to a lack of understanding and coordination on various issues related to urban transport. Overlapping laws also create conflicts related to their interpretation, and often leave certain functions ambiguously defined, leading to functional gaps and lacunae in service provision. The existing fragmentation of responsibilities and powers is hindering the development of a robust, integrated and sustainable urban transport system in Hyderabad.

Currently, several agencies at the city level of Hyderabad are involved in the management of various components of urban transport. These include Greater Hyderabad Municipal Corporation (GHMC), Hyderabad Metropolitan Development Authority (HMDA), Hyderabad Metro Rail Limited (HMRL), Directorate of Town and Country Planning, etc. It has been observed that there is limited coordination among these agencies in dealing with urban transport in a holistic manner. For example, the Traffic Police, Telangana State Road Transport Corporation¹, Indian Railways, GHMC, HMDA, Finance Department, each tends to prepare its plans individually in isolation, with limited coordination with other agencies. There is no effective planning and coordinating agency or a common platform where individual plans of each of the agencies can be integrated, keeping the overall goal of improving urban mobility in focus.

1.2.1 Urban transport in Hyderabad is governed by several laws at the central and state levels

As discussed above, a variety of laws that directly affect the functioning of urban transport in Hyderabad. The existence of multiple laws leads to the constitution of distinct frameworks for various aspects of urban transport. Some aspects of urban transport are directly governed by laws enacted by the Union Parliament and some by laws enacted by State Legislatures. The following is a list of the various legislations applicable in the city of Hyderabad, which have a bearing on the urban transport sector:

- (i) The Andhra Pradesh (Andhra Area) Town Planning Act, 1920
- (ii) The Greater Hyderabad Municipal Corporation Act, 1955
- (iii) Hyderabad Metropolitan Development Authority Act, 2008
- (iv) Andhra Pradesh Municipal Tramways Act, 2008
- (v) Andhra Pradesh Road Development Corporation Act, 1998
- (vi) The Andhra Pradesh Housing Board Act, 1956

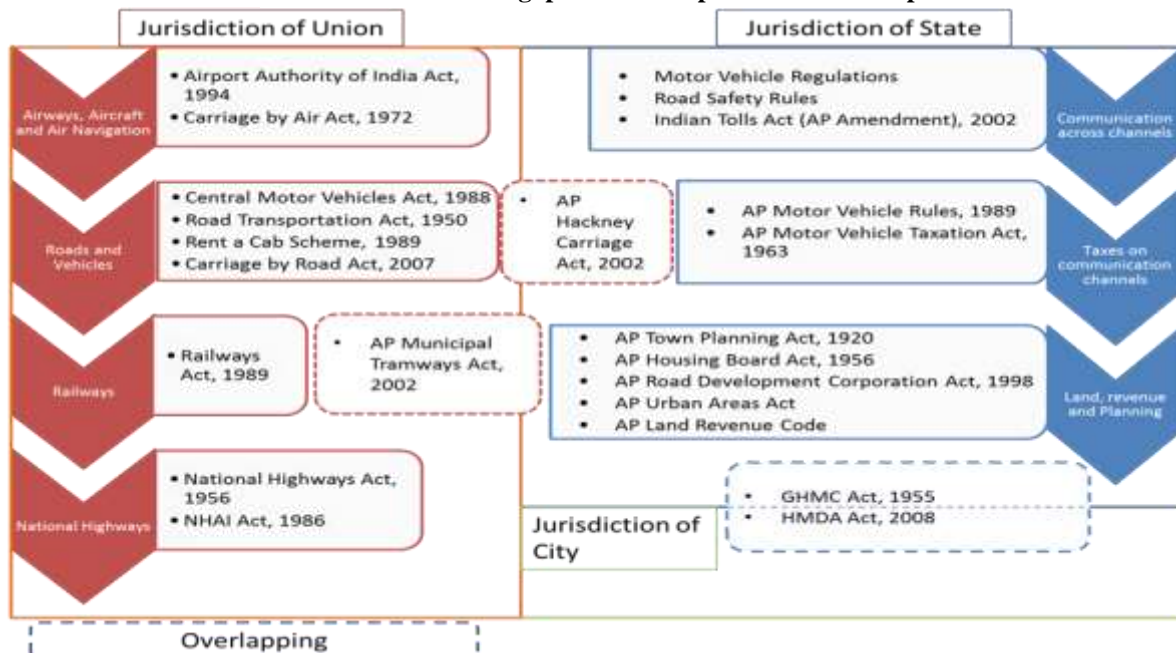
¹ We understand that APSRTC has been separated from TSRTC. However, for the purpose of this section, we are discussing urban transport planning that has historically taken place in Hyderabad.

- (vii) Andhra Pradesh Motor Vehicles Rules, 1989
- (viii) Andhra Pradesh Motor Vehicles Taxation Act, 1963
- (ix) The Central Road Fund Act, 2000
- (x) The Central Road Fund (State Roads) Rules, 2007
- (xi) The Road Transport Corporation Act, 1950
- (xii) Andhra Pradesh Land Revenue Code, 1999
- (xiii) The Indian Tolls (Andhra Pradesh Amendment) Act, 2002
- (xiv) Rent a Cab Scheme, 1989
- (xv) Andhra Pradesh Urban Areas (Development) Act, 1975
- (xvi) Andhra Pradesh (Andhra Area) Hackney Carriage Act, 1911
- (xvii) Carriage by Road Act, 2007
- (xviii) Andhra Pradesh Reorganization Act, 2014
- (xix) Central Motor Vehicles Act, 1988
- (xx) Central Motor Vehicles Rules, 1989

1.2.2 No single law to cover urban transport comprehensively

As pointed above, presently in Hyderabad, there is no single law that comprehensively covers the requirements of the urban transport sector. Urban transport is not a unified subject matter in the framework established for legislative competence under the Constitution. No single legislation is solely responsible for providing transport services as well as transport infrastructure. For legislative purposes, some components of urban transport come under the jurisdiction of the Central Government, other components come under the jurisdiction of the Government of Telangana, and still others may be legislated by either the Central Government or Government of Telangana. This overlap of the key laws governing urban transport in Hyderabad has been demonstrated in Exhibit 1.

Exhibit 1 Institutional gaps and overlaps in Urban Transport



1.2.3 Multiple laws lead to the creation of multiple agencies

The plethora of laws governing urban transport in Hyderabad has led to the emergence of multiple authorities with jurisdiction over various aspects of urban transport. These agencies play varied roles and have different agenda which may not be in harmony at times. Further, the fragmented distribution of power to control urban transport activities creates a structural overlap, which can be disabling, as it does not allow for unified planning or implementation. The following is a list of agencies that operate in the urban transport domain and have arisen out of the various laws described above:

1. Hyderabad Metropolitan Development Authority
2. Greater Hyderabad Municipal Corporation
3. Transport Department, Telangana
4. Traffic Police
5. Directorate of Town and Country Planning (DTCP)
6. Indian Railways (South Central)
7. Roads and Buildings Department, Telangana
8. Hyderabad Metro Rail Limited (HMRL)
9. Municipal Administration and Urban Development Department, Telangana
10. Telangana State Road Transport Corporation (TSRTC)
11. Telangana Pollution Control Board
12. National Highways Authority of India (NHAI)
13. Airports Authority of India

It is evident that there exist multiple agencies which play various roles in planning, implementation, operation, and management of urban transport facilities in Hyderabad. These agencies run parallel to the legislations that enforce and regulate urban transport. Thus, the multiplicity of laws and agencies has created a structure of operation and governance which is highly fragmented. Following are some of the problems that arise from such a complex institutional structure:

1. Limited coordination among agencies

Each agency performs its own urban transport initiatives and there is either no or very little coordination with other agencies. Greater coordination across the three levels of governance as well as within each level would lead to better execution of urban transport functions. Thus, there exists a need for an agency or a mechanism to facilitate integrated planning of development of urban transport systems through better institutional coordination.

2. Conflicting agendas

Since multiple agencies emanate from multiple legislations related to urban transport, the agendas of certain agencies may be inconsistent with the agendas of others in the absence of an unambiguously defined legal framework. The various laws governing municipalities, urban local bodies and development authorities also govern other aspects such as transport, road, and planned development of an area that lies within the

jurisdiction of the state. Therefore, there is a potential conflict and overlap across various agencies such as municipalities and development authorities over urban transport issues.

3. Limited accountability

Accountability is reduced when responsibilities are ambiguously defined and agendas are overlapping. Certain agencies may overlook performing certain responsibilities which are not clearly allocated or there is an overlapping of functions across agencies. In such instances, there is limited functional understanding among the agencies, which may reduce their accountability towards those functions. This may compromise on the provision of integrated urban transport services to the public.

4. Isolated functioning

Agencies at the central level such as NHAI, Indian Railways, Airports Authority of India, Central Public Works Department, etc. as well as agencies at the city level such as Metropolitan Planning Committee/ District Planning Committee, are involved in framing of guidelines and standards, operation and building of public transport infrastructure, approval of projects, etc. These functions are carried out by these agencies in isolation. This may be a hindrance to an integrated urban transport system and coordinated planning.

Exhibit 2 presents a mapping of urban transport functions to the respective agencies responsible for their provision in Hyderabad.

Exhibit 2 Departments performing different urban transport functions in Hyderabad

<p>1. Regulatory Functions</p> <ul style="list-style-type: none"> • Department of Transportation, Telangana • AP pollution Control Board • Traffic Police (Hyderabad & Cyberabad Police) • Finance Dept., Telangana • HMDA 	<p>5. Road Infrastructure</p> <ul style="list-style-type: none"> • GHMC • DT & CP • HMDA • MA & UD • TRBD • NHAI • AAI • PWD
<p>2. Strategic Policy Making</p> <ul style="list-style-type: none"> • Finance Department • Transport Department • GHMC • HMDA 	<p>6. Suburban Railways</p> <ul style="list-style-type: none"> • Southern Railway • MMTS
<p>3. Bus Infrastructure</p> <ul style="list-style-type: none"> • APSRTC 	<p>7. Metro Rail</p> <ul style="list-style-type: none"> • HMRL
<p>4. Cycle/Walkways</p> <ul style="list-style-type: none"> • GHMC 	<p>8. Integrated Services</p> <ul style="list-style-type: none"> • HMDA

1.3 OVERLAPPING OF FUNCTIONS AMONG AGENCIES

The structure of distributed jurisdiction for various aspects of urban transport between Hyderabad and Telangana as well as among various Central Government ministries and departments, has led to an overlapping of functions among various agencies. As shown above, multiple agencies like HMDA, GHMC, Police Department, Transport Department, etc. are responsible for different

aspects of urban transport. In practice, these agencies perform most of their functions in isolation, with little awareness about the functions of the other agencies. Thus, there may be repetition of certain tasks and omission of essential tasks. The following are some examples of overlapping functions that are being performed by multiple agencies in Hyderabad –

1. Planning

In Hyderabad, planning activities related to the transport sector fall under various laws like Andhra Pradesh Town Planning Act, 1920 and the Andhra Pradesh Housing Board Act, 1956. Besides, the Municipal Administration and Urban Development Department is entrusted with the function of preparing the master plan. This overlaps with the function of the Town and Country Planning Department.

Traffic planning is a key area where conflict among agencies is evident. Apart from the Traffic Police and regional transport officer, several other departments affect the flow of traffic in the city of Hyderabad. On one hand, GHMC has the authority to restrict and regulate traffic in areas where construction may be taking place, or imposing restrictions on the weight of the traversing vehicle, etc. On the other hand, the Andhra Pradesh Housing Board has also been authorized to restrict access to any public street vested under its jurisdiction. The result of both these agencies restricting traffic without coordination can cause confusion and inconvenience to the commuters.

2. Policy formulation

The Constitution of India and various urban reform initiatives advocate parking policy and advertisement policy are to be devolved to the local level of government. However, within parking policy there is considerable overlap. Different agencies plying different modes of transport dictate parking policy within their own jurisdictions. In Hyderabad, fee, toll, taxes, and parking charges come under the ambit of Indian Toll Act (Andhra Pradesh Amendment) 2002, Andhra Pradesh Road Development Corporation Act 1998, GHMC Act, HMDA Act and Central Motor Vehicles Act, 1988.

Tariff policy is decided by agencies at the central and state levels. Central level agencies such as NHAI, Indian Railways and Airports Authority of India are entitled to decide their tariff policy autonomously. There is limited coordination in tariff-setting among various agencies at the central and state levels, as well as with those agencies that levy parking charges.

Various authorities and agencies are involved in issuing permits for various tasks. For example, vehicle registration and license issuance are done by State/Regional Transport Authority. However, permits and approvals for construction of transport infrastructure like road, bus depots, parking lots, etc. are issued by HMDA, GHMC, State Highways Authority, NHAI, etc.

3. Project implementation

There is lack of coordination among agencies related to land development. GHMC is the primary agency responsible for city road infrastructure. The other agencies involved in construction and maintenance of the city roads are HMDA, PWD, NHAI etc.

Agencies such as HMDA, PWD and Andhra Pradesh Housing Board are responsible for the construction and maintenance of roads, flyovers and other infrastructure projects within the city of Hyderabad. Intercity roads/ highways are constructed and maintained by State Highways Authority and NHAI.

Parking infrastructure is not an exclusive subject assigned to any one authority or agency but to various authorities like HMDA, GHMC, Airports Authority of India, Traffic Police, Housing Board, etc. according to their territorial jurisdiction.

1.4 GAPS IN FUNCTIONS AMONG AGENCIES

A structural gap exists in the urban transport sector, since various modes of mass rapid transit and aspects of transport planning, multi-modal integration, tariff and financing are not covered under any particular act. The term 'gap' refers to an urban transport function which is not included or comprehensively covered under any existing act as its primary function. There are some important functions that have been excluded from the responsibilities of various agencies involved in urban transport of Hyderabad at present. Some of these functions have been highlighted below:

1. There is no agency specifically handling integrated services such as common ticketing, multi-modal passenger information and multi-modal terminals. This kind of institutional gap translates to commuter dissatisfaction since travel time and cost increase substantially.
2. Fare structures are set by agencies without considering the price structures of other modes of transport. This results in a gap with respect to modal fare fixing since the same makes it difficult to influence modal choice of users. Even within a particular mode of transport, fare structures vary widely.
3. Regulation of bus services is done by the State Transport Authority (STA), but it tends to merely agree with the routes applied for by the operators. Mostly, only those routes that are commercially viable are served and others are neglected.
4. Hyderabad ULBs has found to be ill-equipped to deal with problems related to urban transport management such as increase in traffic, change in technology or operation techniques. Also, as agencies grow over a period of time, there is learning and adoption of new best practices which need to be incorporated by other agencies across the national, state and city levels. This capacity building network is missing at the state and city levels.
5. No agency has the responsibility to develop and promote technology based solutions for traffic management, transport planning and designing of transport systems.
6. No agency currently has the responsibility of advancing the skills of persons employed by an authority, provision of facilities of training, education and research, or the efficiency of the equipment of the authority or the manner in which the equipment is operated.

Thus, certain aspects of urban transport such as integrated land-use and urban transport planning, multi-modal integration of passenger services, tariff setting and financing are not adequately covered in any of the existing central or state acts. Overlapping in the working of different agencies, lack of proper coordination and lack of dissemination of relevant data and

information amongst different agencies are serious hindrances in the prevailing urban transport system of Hyderabad.

This calls for Central Government acts like The Railways Act 1989, Inland Waterways Authority of India Act 1985, and the NHAI Act 1986, to be amended such that the Government of Telangana can integrate the plans of these Central Government agencies with the local needs of the city. However, this may not be feasible, and if done alone, will not be sufficient to solve the problem. There is a need for a comprehensive Urban Transport Act to incorporate plans of Central Government agencies like NHAI, Indian Railways, etc. with the plans of Government of Telangana and ULBs in Hyderabad, to ensure better coordination of available transport systems and services. In the absence of such legal amendments, urban transport will continue to be the secondary responsibility of several agencies as their scope will continue to remain restricted. In this scenario, efforts have been made to coordinate with multiple agencies involved, but this is a difficult task when each has its own legislative backing and mandate.

1.5 RATIONALIZATION OF FUNCTIONS - AUTHORITY ↔ ACCOUNTABILITY

Authority and accountability are closely related and should go hand in hand. It is imperative to delegate authority to an agency which can be held accountable for the implementation of its functions. In order to bring about integrated management and development of urban transport facilities and systems, there is a need for rationalisation of functions and ownership rights of agencies. Some instances where authority and accountability diverge between agencies in Hyderabad have been exemplified below:

- Currently, APSRTC is responsible for ensuring smooth operation of city buses in Hyderabad. However, APSRTC does not have the requisite authority required for this responsibility. It is Telangana Transport Department which issues licenses and route permits to various vehicles. It may be the case that the department issues licenses to buses as well as intermediate transport like autos and minibuses on the same route, causing the latter vehicles to undercut fares of buses, to increase their revenue. Such a scenario causes hindrance to the smooth operation of city buses for which APSRTC may be held responsible. It is clear that in such a situation, the department is responsible for disrupting operations of city buses on that particular route.
- In Hyderabad, the responsibility of preparing land use plan lies with HMDA. However, HMDA is not accountable for preparing plans related to urban transport. In such a scenario, in the event of any failure in urban transport planning, HMDA is not held accountable. Therefore, it is imperative to assign transport planning to a separate agency and ensure that the land-use and transport plans are integrated.
- Hyderabad Metro Rail Limited (HMRL) is responsible for metro rail transportation. If HMRL decides to add a metro corridor in an area, the authority to approve the same lies with HMDA, which might approve the plans after various consultations.

Therefore, there is a strong case for establishing an authority which undertakes the responsibility for carrying out clearly defined and distinguished urban transport functions in Hyderabad.

1.6 EMPHASIS OF GOVERNMENT IN ESTABLISHING UMTA

The Government of India has taken account of the above mentioned challenges being faced by the urban transport sector, and is currently working intensely to finalize the mechanisms to set up UMTA and UTF, which are seen as solutions to circumvent these challenges and move towards an integrated planning and regulation setup.

1.6.1 National Urban Transport Policy

In 2006, the Government of India (GoI) through the Ministry of Urban Development (MoUD) released National Urban Transport Policy (NUTP), as a response to the growing transport challenges. The main features of NUTP 2006 are:

- Integrated land-use and transport planning
- Promoting the use of public transport in the face of growing urban transport demand
- Promoting non-motorized transport such as walking and cycling
- Equitable allocation of road space
- Use of cleaner and more efficient technologies in the urban transport sector
- Use of innovative financing mechanisms
- Capacity building of state and city officials and other stakeholders

NUTP 2006, inter-alia, recommends the creation of **Unified Metropolitan Transport Authority (UMTA)** in all million-plus cities to facilitate more co-ordinated planning and implementation of urban transport programmes and projects. According to the Working Group Recommendations on Urban Transport for 12th Five Year Plan, the UMTA is envisaged to be a full time professional body working under a city council with representation from all city agencies and stakeholders including the surrounding region. It would undertake integration and approval of proposals by urban transport agencies at the city level; their strategy and policy functions; regulatory functions; transport demand management; organizing urban transport services; providing common services; resolution of day-to-day matters and monitor the work assigned to implementing agencies. For UMTA to be effective, it should be backed by a legislation and the entire funding for urban transport should be routed through UMTA.

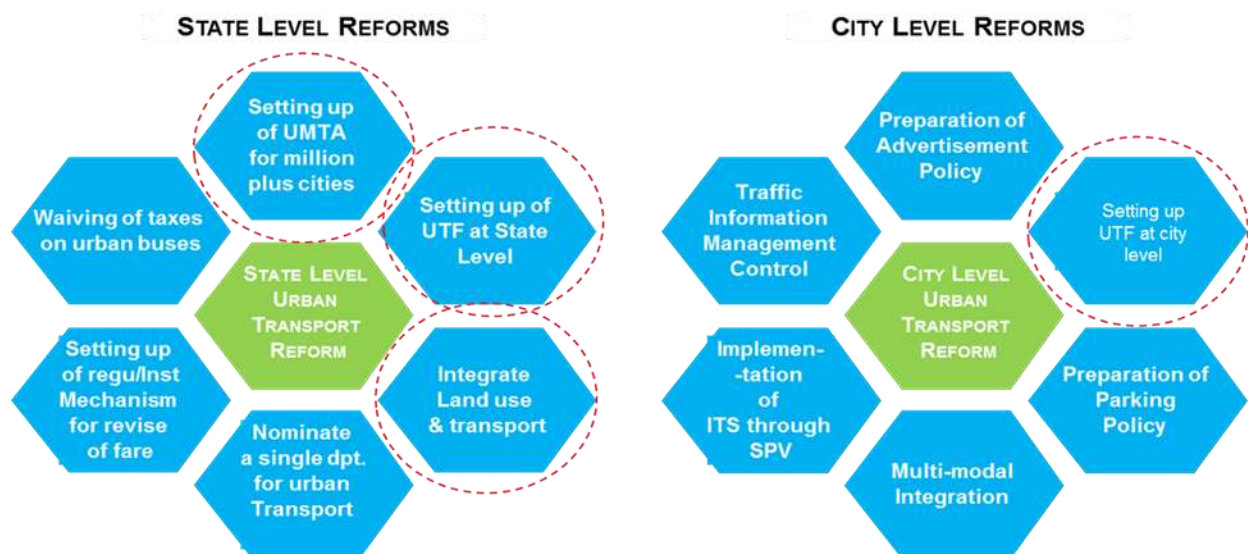
1.6.2 Urban Transport Reform

The city is the prime beneficiary from improved urban transport systems and it is the most logical jurisdiction level at which all decisions relating to the management and regulation of urban transport ought to be taken. The 74th Constitutional Amendment also encourages states to devolve powers to cities to enable them to take care of their own needs. In line with above, a city level UMTA can have a better understanding about the city's urban transport needs and challenges. In essence, it can play a major role in the development and management of urban transport.

The Central Government’s financial support for urban transport is contingent upon appropriate entities being established and on cities having appropriate urban transport policies. The Central Government has offered, inter alia, to extend financial support for the preparation of integrated land-use and transport plans to the extent of 50 percent of the cost involved in developing the plans, provided the city demonstrates its willingness to act in accordance with them.

Also, in order to encourage cities and states to improve their urban transport systems, several reform initiatives have been made mandatory for accessing funds under Atal Mission for Rejuvenation and Urban Transformation (AMRUT) and erstwhile Jawaharlal Nehru National Urban Renewal Mission (JnNURM). Some of the key state and city level reforms are presented in Exhibit 3.

Exhibit 3 State and City level reforms



As demonstrated, setting up UMTA and UTF in all million-plus cities, along with integration of land-use and transport plans, are crucial reforms that are being encouraged by the Central Government.

1.7 BENEFITS OF UMTA

The key benefits of UMTA include integrated planning and management of urban transport, multi-modal integration of transport services, efficient fare structures, and promotion of optimal and sustainable transport systems backed by research. These benefits have been discussed below.

1.7.1 Facilitate integrated planning and management of urban transport

Coordinated transport and land-use plans, infrastructure investments and urban services involve various departments and agencies at different levels. Functions like land acquisition and route planning are currently performed by agencies at centre, state and city levels. The concerned departments and agencies often have varying missions, objectives, budgets, management styles, governance structures and staff profiles. Therefore, co-ordination often becomes the obvious casualty and the seamless integration of transport systems becomes difficult. UMTA will render

this coordination by including in its purview all planning and implementation functions pertaining to urban transport programmes and projects. The responsibilities of all agencies involved in urban transport are envisaged to be aligned to UMTA. Thus, creation of UMTA is expected to streamline the functions of the plethora of agencies involved in urban transport.

UMTA is envisaged to be a unified agency that directs planning, operations and monitoring of various transport modes in an area. This would ensure that decisions about transport systems include future planning of urban development. These decisions will have spill-over effect on other development agenda, with a key objective of urban mobility to be planned in a holistic and integrated manner. Measures of integration that UMTA is expected to provide are demonstrated in Exhibit 4.

Exhibit 4 Measures of integration to be provided by UMTA

Integration	Description
Physical Integration	The land-use plan and transport plan should enable TOD to identify and spatially connect key demand generators of transport, thereby, providing improved connectivity to residences, offices and retail outlets.
Network Integration	Different networks should work complementarily to provide smooth and seamless connectivity. For example, bus routes should be designed in such a way that they feed into and support the mass transit systems. An essential part of network integration involves scheduling of services so that intra-modal and inter-modal services connect efficiently and effectively.
Fare Integration	A unified travel card for multiple transit services will facilitate convenient transfer between available modes. Cities such as Hong Kong, Singapore and London have demonstrated that a unified smart card system has underpinned the increase of public transport usage.
Information Integration	Information Technologies (IT) and Intelligent Transport Systems (ITS) can play important roles in integrated transport. For example, in Japan, all major railway stations have very clear signs, differentiating directions to the high speed rail network, the intercity train network and the suburban/local trains network. In addition, websites provide public transport users with information on the multi-modal transport options available and related details.
Institutional Integration	The Governing Board shall comprise representatives from all agencies and departments at the local, state and centre levels, performing any urban transport function for the particular city. UMTA will, thereby, create a platform for various planning, financing, monitoring and operational agencies to coordinate and integrate with one another, before performing their respective functions. This would ensure institutional integration and would prevent the agencies from operating in silos.

1.7.2 Facilitate multi-modal integration of transport services

The transport system in a city comprises several components such as land-use plans and development/master plans, road network and its associated infrastructure, parking facilities, the different modes of public transport systems and their associated infrastructure, private vehicles, the regulatory system, traffic management and enforcement system, etc. It is important that all these components work harmoniously, especially considering the inter-dependency factor which exists among them. UMTA is envisaged to be given complete control in the approval of all transport initiatives in its jurisdiction. Transport project approvals would be granted on the condition of their compliance with CTS. All investments would reach the implementing agencies only after UMTA approves those investments. UMTA would approve investments only if the envisaged projects comply with CTS. This concentration of power will ensure that adequate attention is paid towards providing services for all modes of transport, as decided in CTS. UMTA shall prevent public resources from being disproportionately channelized to the most commercially viable alternatives and move towards a more welfare-maximizing approach to allocate funds.

Besides, UMTA will facilitate transport integration, whereby all modes of transport will operate as one 'seamless' transport service which enhances the accessibility and mobility of the urban population. UMTA is expected to facilitate this integration among various transport modes by introducing integrated ticketing and integrated passenger information system.

1.7.3 Facilitate rational fare structures

NUTP proposes that a regulatory authority should regulate charges for different types of public transport services, to ensure that fares that are charged are fair and reasonable. Current central and state laws actively work against this concept. Therefore, such laws would need to be changed for this to be achieved.

Fare structures have a significant influence on the demand for urban transport services. Adjustment of fares can increase the favourability and competitiveness of public transport services in relation to private transport modes. However, lowering the fare charged for public transport services may need to be supported by subsidies in order to prevent service providers from incurring losses. UMTA is envisaged to assign a dedicated source of revenue to enable provision of subsidies. UMTA is expected to set up regulatory/ institutional mechanisms to periodically revise fares of all public and intermediate public transport systems.

1.7.4 Facilitate research studies and awareness

Research and development are other crucial functions which play an indispensable role in ensuring optimum utilisation and channelling of investment. In order to make informed decisions, data and information relating to the urban transport system should be made available to the agencies and the public. This includes travel patterns, segmented for different categories of city residents and modes of transport, and information on sustainable modes of transport. Such information proves useful in tailoring fare structures, specific to peak and off-peak periods, and enables service providers to practise price discrimination. Moreover, these research initiatives can enable maximisation of revenue, subject to meeting welfare objectives.

State and city authorities are in general ill-equipped in terms of trained staff to deal with the sheer increase in traffic volume or adopt advances in technology that would help them overcome urban transport problems. UMTA is expected to facilitate the application of guidance and consultancy services to urban transport problems in an integrated manner, and address the problems through research studies, awareness campaigns and promotion of good practices in urban transport.

1.8 UMTA UNDER HMDA ACT 2008

Hyderabad Metropolitan Development Authority (HMDA) constituted an UMTA for Hyderabad Metropolitan Area with an amendment to the HMDA Act 2008. It was formed to deal with issues related to traffic and transportation in Hyderabad. Some of its functions are to oversee the implementation of traffic and transportation measures undertaken by various agencies in the region, to ensure that effective public transport systems are in place for the metropolitan area, and to integrate various routes of public transport and manage issues related to integrated ticketing. Given the progress in establishing UMTA, Hyderabad is placed favourably with regard to strengthening the existing UMTA. The consultant has held various rounds of discussions with HMDA as well as other departments at the city, state and central levels, which have stakes in the urban transport system of Hyderabad. These discussions have pertained to the existing UMTA described in Chapter 4 of the HMDA Act 2008. Various suggestions have been made on enhancing the structure of the present UMTA viz. its Governing Board, functions and powers. These suggestions, along with the strategic decisions to be undertaken in order to strengthen the existing UMTA have been explained in this operations document.

1.9 PURPOSE OF THE OPERATIONS DOCUMENT

MoUD has realised the importance of urban transport and the role of UMTA in the overall development of the sector. MoUD is encouraging State Governments to set up an UMTA in each of the million plus cities to ensure coordinated planning and implementation of transport initiatives. However, there remains ambiguity among the city and state governments regarding the precise form and role that UMTA should undertake, which is hindering and delaying the establishment process. Some cities have requested MoUD to provide guidelines and procedures for establishment of UMTA, so as to help them gain a better understanding.

In this context, the MoUD intends to assist the city of Hyderabad to smoothen the strengthening process of its UMTA, by development of operations documents and guidelines to act as handbooks for Hyderabad in strengthening of UMTA and UTF² (Urban Transport Fund).

1.10 APPLICATION OF THE OPERATIONS DOCUMENT

This operations document is developed by MoUD as a guidance document for the city of Hyderabad to strengthen its UMTA and UTF. The objective of the operations document is to provide operational guidelines and procedures which comply with the provisions of the UMTA chapter under the HMDA Act 2008. Besides, the operations document also details out other laws of the Government of Telangana which may be applicable for setting up, operation and

² Please refer to Urban Transport Fund Operations Document

management of UMTA. The draft amendment for UMTA and UTF for Hyderabad under chapter 4 of the HMDA Act 2008 is provided in Annexure I.

It is important to point out that this document only discusses the new processes and procedures that are to be undertaken in strengthening UMTA that exists within HMDA in Hyderabad. This includes guidelines for modifying the structure of UMTA and process workflows for undertaking additional functions and powers. The administrative procedures, human resource matters and procurement processes that UMTA shall comply would be in line with the processes and procedures of HMDA. They have therefore, not been included in this document³. The procedures relating to financial management are provided in the UTF operations document. These include funding mechanism, accounting procedures and audit arrangements of UMTA, etc. Further, the procedures provided in this document are only for the purpose of providing broad guidelines. It is suggested that UMTA should adopt the prevailing policies and procedures as laid down by HMDA and Government of Telangana.

1.11 LIMITATIONS OF THE OPERATIONS DOCUMENT

Even though this operations document is customized for the case of Hyderabad, taking into account its characteristics, it may be revised, taking into account the update and modifications in the structure of UMTA. Further, this operations document spells out the process Hyderabad may follow to strengthen its already existing UMTA. It does not include technical and comprehensive details about how UMTA should carry out each function, although broad guidelines have been provided. Finally, the operations document is expected to be used by policymakers/officials from agencies in Hyderabad and Government of Telangana, for deciding the most suitable structure that Hyderabad UMTA should adopt. It is assumed that the user of this document has a good understanding of Hyderabad's transport system.

1.12 LAYOUT OF THE OPERATIONS DOCUMENT

The layout of this operations documents is as follows:

Chapter 1 provides an introduction to this guidelines document and discusses the need for strengthening UMTA in Hyderabad, along with its benefits. It also provides a description for the applicability and layout of this operations document.

Chapter 2 provides guidelines for finalisation of structure of UMTA, including geographical coverage, Governing Board structure, institutional arrangements and functions.

Chapter 3 deals with the aspects relating to operationalization of the augmented structure of UMTA. It discusses the establishment of a Task Force within HMDA for providing handholding support in strengthening the existing UMTA. It further covers guidelines for appointment of Transport & Traffic Officer of UMTA, and appointment of experts within the technical cell envisaged for UMTA.

³ These procedures have been provided in the generic operations documents prepared by MoUD, and may be referred to.

Chapter 4 provides guidelines for carrying out UMTA’s additional functions including development of policies, programmes, standards and guidelines, Multi-Year Programme, Alternative Analysis and conducting research studies and awareness activities.

2. FINALISATION OF UMTA'S FUNCTIONS AND STRUCTURE

2.1 INTRODUCTION

The institutional framework and governance structure for urban transport play a pivotal role in bringing about coordinated and integrated planning, implementation and operation of urban transport. UMTA cannot achieve the desired results of becoming a comprehensive urban transport agency, unless it is carefully designed for the specific context into which it is to fit, and adjustments are made to other agencies. In view of this, this chapter discusses the current UMTA structure for Hyderabad and proposes certain modifications to the existing structure, which would form the basis of the envisaged amendment in the UMTA chapter of the HMDA Act 2008.

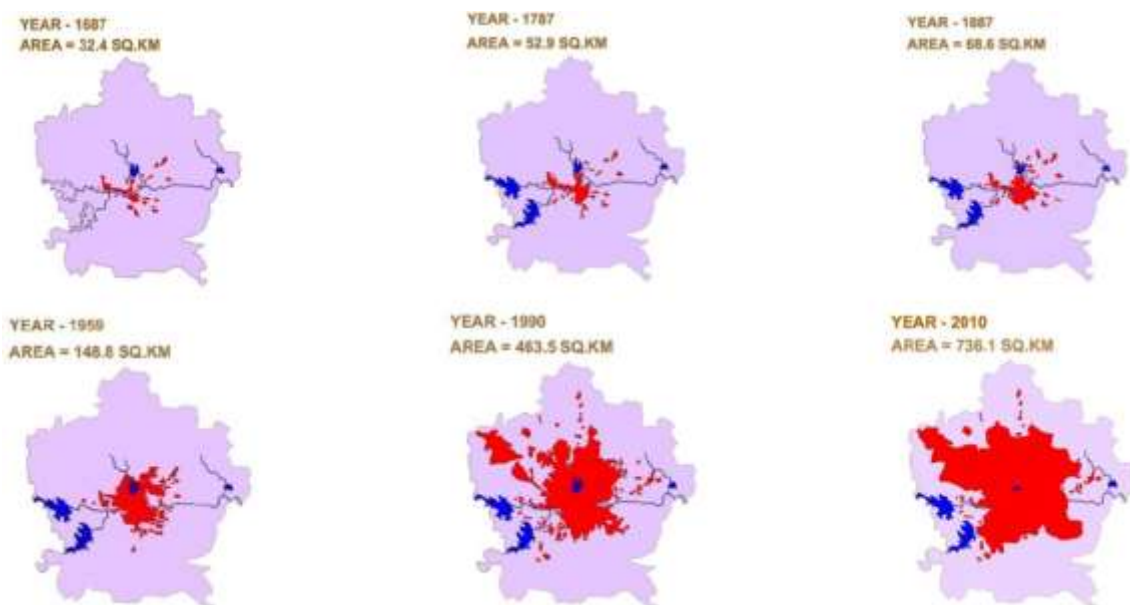
This chapter includes propositions for the following aspects of UMTA's structure:

- Geographical coverage;
- Governing Board structure;
- Functions.

2.2 GEOGRAPHICAL COVERAGE

The most important aspect related to UMTA's structure is its geographical coverage. Since Hyderabad UMTA is a part of HMDA, its geographical coverage spans the jurisdiction of HMDA. This is beneficial from the perspective of integrating the land-use plan prepared by HMDA with the Comprehensive Transportation Study prepared by the existing UMTA. Exhibit 5 depicts the growth of Hyderabad's Metropolitan Area.

Exhibit 5 Growth of Hyderabad Metropolitan Area, 1687-2010



In this context, it is important to note that the Hyderabad Metropolitan Area has been expanding rapidly. The urban agglomeration has grown 22 folds from 32.4 sq. km to 736.1 sq. km in three hundred years. From 1959 to 2010, the city has expanded more than four times in area.⁴ Its population stands at 9.5 million (Census 2011). Therefore, expanding population, and city-boundaries point to the need for updating the geographical coverage of UMTA in a timely manner, so as to incorporate the mushrooming towns in the periphery of the metropolitan area. There is also a need to connect remote villages in the vicinity of the city with transport services. Thus, it is recommended that flexibility should be maintained in extending the geographical coverage of UMTA beyond that of HMDA.

2.3 GOVERNING BOARD STRUCTURE

The Governing Board of UMTA is an independent decision-making body with representation from all city, state and national level transport agencies which are stakeholders in Hyderabad's transport system. It forms the core decision-making management of UMTA, meeting at regular intervals and undertaking decisions regarding execution of all functions of the Authority.

The composition of the Governing Board of UMTA has a major impact on streamlining its functions and coordinating with various stakeholders in the urban transport sector. The existing Board structure of UMTA has been proposed to be augmented, so as to include representation of organisations that are directly or indirectly involved in the urban transport system of Hyderabad. It should contain central, state and city level government representatives from all such agencies that perform urban transport functions. Further, Government of Telangana may nominate representatives from beneficiary groups such as citizen forums, civil society, etc. as all these members are stakeholders in urban transport matters. The idea of stakeholder representation on the Governing Boards is to allow for interest groups to be directly involved in making decisions regarding planning, coordination, oversight and management of all transport related matters. The augmented Governing Board of UMTA, along with the rationale for the proposed modifications has been provided in Annexure I. The composition of Hyderabad UMTA is represented in Exhibit 6.

The Governing Board of Hyderabad UMTA essentially has the following functions:

- To monitor and oversee the day-to-day proceedings of UMTA, while ensuring that the functions proposed for UMTA are being carried out;
- To set the timely targets for UMTA and carry out progress reviews to assess performance;
- To provide a forum where the stakeholders can have discussions on the decisions and directions of the authority.

⁴ Hyderabad Concept Plan for MCH by M/s Kamsax Pvt.

Exhibit 6 Revised composition of Governing Board proposed for Hyderabad UMTA

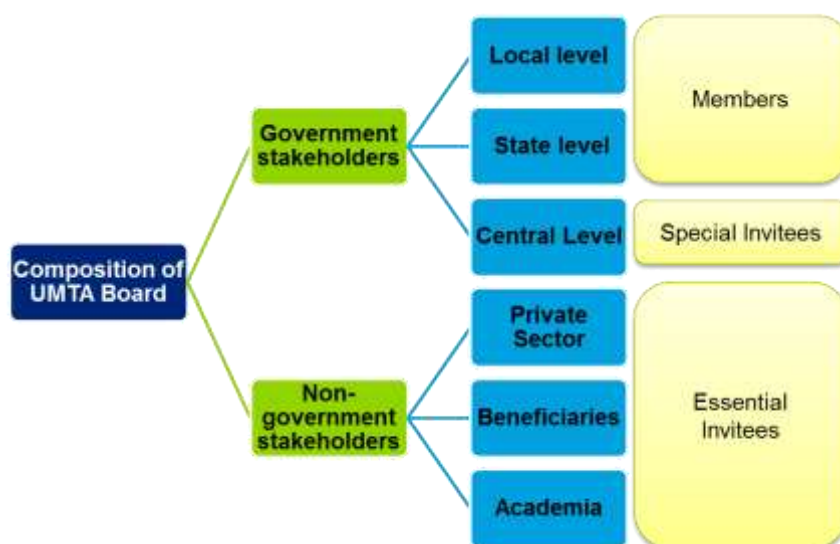
Position	Composition of Hyderabad UMTA		
Chairperson	Chief Secretary of Telangana or a nominee appointed on his behalf		
Members	Representatives from Telangana and Hyderabad		Representatives from Central Government
	<ul style="list-style-type: none"> ▪ Commissioner, Greater Hyderabad Municipal Corporation ▪ Metropolitan Commissioner of the Hyderabad Metropolitan Development Authority (Convener) ▪ Commissioner of Police, Hyderabad ▪ Commissioner of Police, Cyberabad ▪ Principal Secretary/Secretary, Municipal Administration & Urban Development Department ▪ Principal Secretary/Secretary, Roads & Buildings Department ▪ Principal Secretary/Secretary, Transport Department ▪ Vice-Chairman & Managing Director, the Telangana State Road Transport Corporation ▪ Member Secretary, Telangana State Pollution Control Board ▪ Managing Director, Hyderabad Metro Rail Limited ▪ Officer, Multi-Modal Transport System ▪ Principal Secretary to Government of Telangana, Finance Department ▪ Managing Director, Hyderabad Metropolitan Water Supply & Sewerage Board; 	<p>Special Invitees (shall be invited by the Board, as and when deemed necessary)</p>	<ul style="list-style-type: none"> ▪ Officer, Ministry of Urban Development ▪ Divisional Railway Manager, Hyderabad/ Secunderabad ▪ Regional Officer, Ministry of Road Transport and Highways/ Chief General Manager, National Highways Authority of India ▪ Officer, Airports Authority of India
		<p>Essential Invitees (shall be mandatorily invited)</p>	<p>Other Representatives</p> <ul style="list-style-type: none"> ▪ Two experts in the field of Urban Transport ▪ Any other person nominated by Government of Telangana.

2.3.1 Selection of UMTA Board Structure

The augmented Governing Board structure for Hyderabad UMTA has been proposed taking into consideration the suggestions made by various local, state and national level urban transport representatives of Hyderabad.

As demonstrated, the augmented Governing Board has adequate representation from all relevant stakeholders, i.e. those agencies, institutes or individuals which are involved in any aspect of urban transport in Hyderabad. In this context, the Governing Board comprises both government and non-government representatives. Among the non-government stakeholders, representation should be derived from the private sector, various beneficiary groups as well as academic institutions to assist in undertaking research and development activities. Exhibit 7 depicts the composition of the UMTA Governing Board.

Exhibit 7 Representation of the governing board of UMTA



The UMTA Governing Board has been classified into the following categories:

1. Chairperson: The Chairperson is the de jure head of UMTA. In line with the original UMTA Board composition, the Chairperson of the UMTA Board shall be the Chief Secretary of Telangana. Further, it is

recommended that the Chairperson should be given the option of nominating persons to chair meetings and act on his behalf. The Chairperson shall also exercise his/her deciding vote on decision matters pertaining to UMTA, only in the event of a tie between votes of other members.

2. Members: In line with the existing structure, these comprise officers from various departments of Government of Telangana as well as from Hyderabad ULBs. Various additional departmental heads and senior level officers have been proposed as members. UMTA members shall undertake all decisions relevant to the functioning of UMTA by exercising their right to vote. Each member, who shall be a departmental representative, shall exercise his/her vote on behalf of the department. All decisions of UMTA shall be taken by consensus, and in case no consensus is reached, the decisions shall be taken by a majority of votes.

3. Special Invitees: These have been envisaged to comprise officers from national level departments such as Indian Railways, Airports Authority of India, NHAI, etc. They may be invited to be a part of UMTA meetings at the request of the Chairperson, as and when deemed necessary for specific meetings. That is to say, they may be invited only when the subject matter and agenda of the meeting hold potentially concern and

interest to their respective departments. Special invitees are not envisaged to have voting rights.

4. **Essential Invitees:** This category is proposed to include all other pertinent urban transport stakeholders who have not been included in the previous categories. These would primarily include experts from urban transport institutions and other experts nominated by the State Government. The latter category could include experts from various realms relating to urban transport including finance, law, etc.; citizen representatives and organized beneficiary groups. A fixed proportion or all of these persons may be mandatorily invited to all UMTA meetings. These persons should be consulted so as to make the decision making process inclusive, transparent and technically sound. Essential invitees are not envisaged to have voting rights, however, the expert advice tendered by them shall be recorded

2.4 FUNCTIONS OF UMTA

The functions assigned to UMTA dictate all other aspects of its structural design. The finalization of functions that Hyderabad UMTA has been assigned is a generated outcome of the functional gaps and overlaps in the urban transport system of Hyderabad, and the overall situation in terms of planning, coordination and integration of different modes etc. Based on such analysis, the objectives and requirements of UMTA serve as starting points for the formation of its structure.

The functions of Hyderabad UMTA can be broadly categorized into the following groups: policy making, planning for infrastructure and services, regulatory functions, overseeing operation of public transport modes and supervision of construction and maintenance of infrastructure. Among these functions, strategic policy making is a prerogative of the Central Government and Government of Telangana. NUTP is an example of such a policy, drawn at the Centre, which incentivises both the state and cities to improve and develop their transport systems, by providing the requisite direction and resources. Apart from this, Hyderabad UMTA is expected to undertake planning and regulatory functions, to ensure that a well-coordinated urban transport system exists within Hyderabad Metropolitan Area. Since UMTA would mostly be a planning and regulatory body, it is not expected to undertake functions related to public transport operation and construction and maintenance of infrastructure, which may continue to be performed by implementing agencies. The following section discusses the various functions of UMTA which have been finalized after taking feedback and suggestions from stakeholders in Hyderabad. For a complete list of functions, including the existing and proposed functions, and rationale for the propositions, please refer to Annexure I. Exhibit 8 discusses instances of UMTA-like authorities across the world.

Exhibit 8 Instances of UMTA across the world

Instances of Unified Transport Agencies across the world

Various cities across the globe offer examples of their governments' organizational arrangement to manage urban transport:

Various cities across the globe offer examples of their governments' organisational arrangement to manage urban transport:

1. **STIF (Transport Syndicate of the Ile de France)** is a unified transport authority accountable for transportation of the whole region of Paris across all modes of ground transport. STIF is in charge of organizing, coordinating, modernizing and financing public

transport. It also formulates the urban mobility plan; defines the transportation routes; selects and appoints operators; sets the operational, management and financing guidelines; and ensures that the investment programmes have certain coherence.

2. **Transport for London (TfL)** is an integrated transport authority accountable for London’s transport system. TfL is responsible for planning and operation of transport facilities in the city which clocks more than 24 million commuters every day. TfL controls several modes of transportation such as London Underground, Dockland Light Railway, London Overground Train services, Croydon Tramlink, London River services, London Transport Museum and London Road Network. TfL manages a total of 580 km of road network in London and 6000 traffic lights installed in the UK capital. It is also responsible for administering the taxi and private hire trade.
3. **TransLink Vancouver** is the regional transportation authority of Metro Vancouver. It is responsible for regional transit, cycling, commuting options and installation of Intelligent Transportation Systems. TransLink, along with the municipalities in Metro Vancouver, is also involved in the Major Road Network (MRN). It is the first North American transportation authority to be responsible for the planning, financing and management of all public transportation systems. The services that come under TransLink are bus, ferry, commuter rail, skytrain, roads and bridges, among others.
4. The **Land Transport Authority of Singapore (LTA)** is the authority responsible for land transport development and regulation in Singapore. It is accountable for both public and private transportation. LTA was one of the first integrated transport authorities to be formed in the world, adopting the approach of a one-stop agency for all land transport functions.

The following table demonstrates the broad functions under the domain of unified urban transport agencies in various countries:

Country	Strategic Functions	Infrastructure Planning	Regulation	Service Planning	Infrastructure Construction & Maintenance	Public Transport Operations	
						Common Facilities	Independent Services
Paris	✓	X	✓	✓	X	X	X
London	✓	✓	✓	✓	X	✓	X
Vancouver	✓	✓	✓	✓	X	✓	X
Singapore	✓	✓	✓	✓	X	✓	X

2.4.1 Finalisation of UMTA’s functions

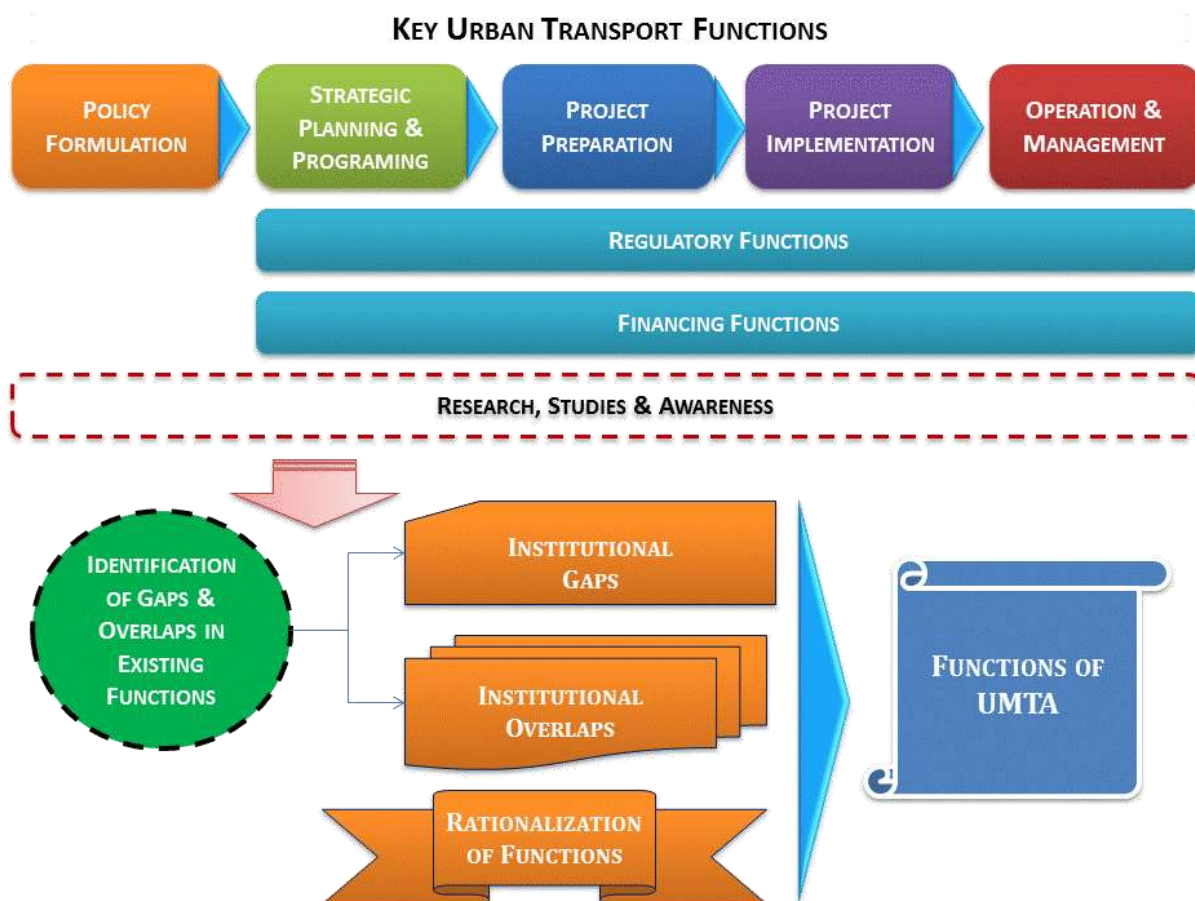
For UMTA to be an effective organization and to ensure that it plays a constructive role in integrated planning, coordination, development and provision of urban transport in Hyderabad, its role and responsibilities need to be clearly defined.

The urban transport functions and related activities for managing and funding the urban transport system of Hyderabad can be divided into eight broad categories, and are presented below. It should be noted that the following categories span the entire spectrum of urban transport functions that have been proposed for Hyderabad UMTA. While some of these functions have already been assigned to the current UMTA of Hyderabad, additional functions have been proposed in order to strengthen UMTA. Guidelines for key urban transport functions to be performed by UMTA are depicted in Exhibit 9.

i. Inputs into policy formulation

UMTA shall provide inputs to the Central Government and Government of Telangana in developing strategies for removing existing bottlenecks and modernising the city’s transport system. UMTA being a local-level government body, would have in-depth knowledge about the precise nature of urban transport challenges present in Hyderabad. These may range from infrastructural inadequacies to institutional and governance bottlenecks. UMTA would be in an appropriate position to advise Government of Telangana on Hyderabad’s current and future urban transport needs and the mechanisms for addressing these challenges. This is an additional function that has been proposed for UMTA.

Exhibit 9 Guidelines for key urban transport functions to be performed by UMTA



ii. Strategic planning

The existing UMTA has prepared a Comprehensive Transportation Study (CTS) for Hyderabad for the period 2011-41. This function would include revision of the CTS, including upgrading plans for MRTS, para-transit and non-motorised transport, as well as road and highway network and associated facilities. Another responsibility of UMTA pertains to integrating action plans of various implementing agencies and preparing a consolidated multi-year urban transport programme to ensure that urban transport initiatives are integrated and scheduled in a logical sequence. Therefore, UMTA’s overall objective should be to undertake planning functions that set the direction for Hyderabad’s long-term transport planning, providing a framework for transport policy and investment decisions to respond to key challenges.

iii. Project preparation and approval

To ensure that all modes of transport are adequately provided for, UMTA has been assigned the function and power to approve funding for all urban transport initiatives in the Hyderabad. Approval of urban transport initiatives is a power assigned to UMTA to give it the necessary authority to execute its functions. This is crucial, as UMTA is being assigned responsibilities, and in order to ensure that other agencies comply with UMTA's decisions, it needs to be given teeth. If UMTA is not given this power, it may not be able to ensure compliance of agencies with CTS.

It shall be mandatory for proposals by implementing agencies to obtain no-objection clearance and consent from the UMTA. UMTA should expedite this by issuing 'Certificates of Approvals' for projects drawn by implementing agencies which are in consonance with CTS. This would ensure compliance with strategies, plans, programmes, standards and guidelines. It is particularly important for the UMTA to review and approve projects for which it provides funding, either in whole or in part, so that it can be assured of gaining value from putting in its resources. Project approvals should be based on compliance with CTS and other guidelines and standards prepared by higher authorities.

iv. Ensuring project implementation

Project implementation functions include construction as well as upkeep and maintenance of urban transport infrastructure, including roads and associated facilities such as road furniture, traffic signals, road intersections, flyovers, grade separators, bridges, bypasses, and facilities for pedestrians, bicycles, terminals for inter-modal transfers and parking, etc. Construction and maintenance of road infrastructure is generally the responsibility of Central Government agencies such as National Highways Authority of India (NHAI), Telangana Public Works Department (PWD), and HMDA and GHMC for national, state and local roads respectively. The present arrangement for implementation of projects for individual modes of transport, including coordination with utility agencies, should continue because current responsibilities are clear and there are competent implementing agencies.

It would not be appropriate to make UMTA directly responsible for implementation of projects unless they relate to integration of transport modes or operations across jurisdictions, for which no single agency is currently responsible. UMTA could, however, be assigned the function of ensuring project implementation to ensure overall integration and compliance with CTS.

v. Overseeing operation and management

Operation, maintenance and management of transport infrastructure and facilities and operation of public transport services are generally carried out, either by public or private companies or agencies. Operations and Management requires technical staff and equipment and is recommended to be left to infrastructure and facility owners and service providers. In this regard, it has been proposed that UMTA should be made responsible for overseeing/regulating the operation of integrated facilities and systems for public transport within its jurisdiction.

vi. Regulation

Regulatory functions with respect to urban transport include registration and licensing of public, private and freight transport vehicles, fare fixation, issuance of permits, designation of public transport routes and service levels, inspection of vehicles, enforcement of traffic

laws and management of traffic. These functions are generally carried out by a number of departments within Government of Telangana. There are benefits to be realised from rationalising some of these functions, and enabling Hyderabad UMTA to issue recommendations on performance of such functions, thereby giving UMTA some degree of responsibility for matters that occur solely within its area of jurisdiction.

On the other hand, matters like registration and licensing of private and commercial vehicles, which apply to Telangana as a whole, would not be a suitable function for UMTA. The same argument applies to licensing and fare fixation for public transport vehicles that operate outside the purview of UMTA's jurisdiction. UMTA should, however, be allowed to provide recommendations on licensing and fare fixation of public transport vehicles operating within its jurisdiction, and regulate fees and charges for urban transport facilities and services. It is suggested that the UMTA should not get involved in inspecting vehicles or enforcing traffic laws or managing traffic.

vii. Funding

The funding requirements of the urban transport sector are huge. The urban transport reforms recommend establishment of an Urban Transport Fund (UTF) so that transport initiatives are less dependent on government budgetary allocations. As part of these reforms, UMTA's planning should regulate expenditure from UTF for urban transport initiatives in Hyderabad Metropolitan Area, and ideally UMTA should be responsible for managing utilisations from UTF. In this regard, UMTA is currently responsible for managing an escrow account of funds which are utilized towards management and administration of UMTA. The funding role of UMTA has been augmented, and additional roles and responsibilities have been defined in terms of:

- Resource mobilization
- Treasury management
- Utilisation / disbursements of funds
- Fund management
- Monitoring of fund utilisation

viii. Research studies and awareness

For development of Hyderabad's urban transport, research studies need to be conducted regularly. This function has been already assigned to the existing UMTA, involving development and dissemination of a common database based on traffic and transportation surveys. The existing UMTA also acts as a centre for technology transfer, guiding the local authorities for all their technical inputs and plans in the field of traffic and transportation.

The methodology and detailed guidelines for carrying out each of the above mentioned functions have been discussed in chapter 4 "Guidelines for Additional UMTA Functions". The Urban Transport Fund operations document provides guidelines on various aspects related to strengthening of UTF for Hyderabad to carry out all functions relating to funding.

2.5 CONCLUSION

This chapter discussed the additional aspects pertinent to the revised UMTA structure in Hyderabad. These covered geographical coverage, UMTA Governing Board structure and augmented functioning of UMTA. The next two chapters discuss guiding principles for the operationalization of the augmented structure of UMTA.

3. OPERATIONALIZATION OF REVISED UMTA STRUCTURE

3.1 INTRODUCTION

After the amendment of the UMTA chapter in HMDA Act 2008, UMTA shall begin to operationalize its existing and additionally proposed functions.

This chapter outlines the process of operationalization of the additional UMTA functions, which would be initiated by setting up a Task Force within HMDA. The chapter also provides description of various aspects such as establishment of a Task Force, appointment procedure of the Transport and Traffic Officer (T&TO) and other key professionals, structure of the organization, functions of various experts, etc. Hence, the various sub-sections have been explained sequentially for a clear understanding of the methods and procedures of UMTA's operationalization. The basic objective of this chapter is to provide guidance to Hyderabad for operationalization of a full-fledged UMTA.

3.2 ESTABLISHMENT OF A TASK FORCE FOR OPERATIONALIZING ADDITIONAL FUNCTIONS OF UMTA

The first step towards operationalizing UMTA's additional functions would be formation of a Task Force within HMDA, to provide handholding support in strengthening the existing UMTA. This necessitates the constitution of a specialized unit, which proficiently undertakes all planning and management required for the strengthening process.

3.2.1 Functions of the Task Force

The key functions and activities to be performed by the Task Force are highlighted below:

Assistance in amendment of UMTA chapter of HMDA Act 2008

- The Task Force shall be required to undertake all activities on behalf of HMDA in amending the provisions for UMTA under HMDA Act 2008. It shall act as an interface between the various agencies involved in urban transport and Government of Telangana, in finalizing the UMTA amendment. In this regard, it is expected to work alongside the state's legal department and provide it with all necessary support. The Task Force shall further assist HMDA in preparation of rules and regulations under UMTA, once the amendment is notified in the Act.

Setting up of UMTA Secretariat

- The Task Force, in coordination with the Governing Board, shall be responsible for appointing a Transport & Traffic Officer (T&TO), who shall be head of the UMTA Secretariat. The Task Force shall further assist the T&TO in appointing experts, and assist in recruiting the staff of UMTA. It shall also make the necessary logistical and administrative provisions of housing the UMTA Secretariat within HMDA. The Task Force may seek the help of a consultant to provide it with handholding support in setting up the UMTA Secretariat.

Other than the key functions highlighted above, the Task Force shall, at all times, coordinate with HMDA and other agencies (central, state and local government agencies) involved in UMTA. It should provide all the required support to HMDA on matters related to strengthening of UMTA. Further, the Task Force shall make itself fully aware about the transport situation in Hyderabad and be equipped with all information for finalization of UMTA and UTF structure, including all the administrative processes for setting up UMTA.

3.3 APPOINTMENT OF TRANSPORT & TRAFFIC OFFICER

In line with the proposition of UMTA having a separate Secretariat, a Transport and Traffic Officer (T&TO) is envisaged to head the operationalization of UMTA. The T&TO would primarily be an interface between the Governing Board and Secretariat of UMTA, with the responsibility of converting the vision of and decisions undertaken by the Board into actionable outcomes.

After setting up of the Governing Board, it has been proposed that the T&TO of the Authority shall be appointed by the UMTA Board in consultation with the Task Force. The Task Force may appoint a consultant for providing handholding support in selection and appointment of the T&TO. The process and terms of appointment of the T&TO along with roles and responsibilities are highlighted below.

3.3.1 Appointment process and terms

The T&TO would be the senior-most officer in-charge of the operation of the UMTA Secretariat. The T&TO could be appointed from the open market by Government of Telangana/ Governing Board or be nominated on deputation basis. The official heading the Task Force may also be appointed as the T&TO at the discretion of the Government of Telangana/ UMTA Governing Board. The T&TO may be appointed in accordance with the procedures set out by HMDA. For the purposes of appointing a T&TO, the Board may also invite a suitably qualified specialist. The professional selected for the post of T&TO post shall be appointed on a full time/ deputation basis for a minimum period of three years with reappointment options for a maximum of two consecutive terms. In case of reappointment, the T&TO shall be informed two months prior to the end of his/her term.

3.3.2 Role and responsibilities of T&TO

The T&TO shall be responsible for all day-to-day activities of the UMTA in accordance with the delegations of by the Board. The T&TO shall initially be responsible for operationalization of UMTA including recruitment of staff, appointment of various experts envisaged under UMTA with the help of handholding consultant and under the guidance of the UMTA Board. Once the UMTA gets operationalised, the T&TO shall be responsible for the functions of UMTA staff and presentation of periodic progress reports to the UMTA Board. These progress reports shall be submitted in a format agreed upon by the UMTA Board time to time.

The role and responsibilities of the T&TO of UMTA are recommended as below:

- Operationalization of UMTA
- Carrying out and administering appointments of other key professionals and support staff as decided in the operations document or as deemed necessary
- Conducting and scheduling Governing Board meetings
- Coordinating between HMDA and UMTA staff for implementation of the UMTA's functions for the selected jurisdiction

- Evaluating and analysing the progress of the Authority's functioning
- Advising and assisting the Governing Board members on various functions of UMTA
- All administrative and technical functions which the Authority may present before the T&TO time to time.

A detailed profile of the T&TO has been provided as a template in Annexure III.

3.4 APPOINTMENT OF EXPERTS WITHIN UMTA TECHNICAL CELL

The Governing Board of Hyderabad UMTA shall be assisted by a full-fledged technical cell headed by the T&TO. In order to perform various functions envisaged under UMTA, various expert positions have been proposed. These experts shall be responsible for discharging the functions assigned to them in coordination one another and with the assistance of support staff. The role and responsibilities of each of the experts are highlighted in the following sections. Further, the structure of the UMTA Secretariat has been illustrated in Exhibit 10.

- A. **Transport Planning Expert(s):** One of the major functions of UMTA shall be to work with various stakeholders responsible for provision of urban transport services and infrastructure and to update the Comprehensive Transportation Study (CTS) of Hyderabad in a timely manner. The Transport Planning Expert(s) of UMTA may have the following responsibilities:
- To comprehend a vision for the Hyderabad Metropolitan Area's transport system from planning perspective
 - To formulate policies for a sustainable urban transport system within Hyderabad Metropolitan Area
 - To update the CTS for Hyderabad
 - To conduct Alternative Analysis on the basis of the proposed outcomes of the CTS
 - To regularly coordinate with HMDA/ Municipal Administration and Urban Development Department/ Directorate of Town and Country Planning of Telangana and oversee the integration of CTS with land-use plan for Hyderabad
 - To oversee preparation of Multi-Year Programmes (MYPs) for urban transport by implementing agencies
 - To coordinate with all relevant implementing agencies and monitor compliance with the CTS and the Transport Investment Programme
 - To estimate and prioritize short, medium and long term plans
 - To coordinate with other experts of UMTA for integrated and holistic development of the transport system within Hyderabad Metropolitan Area
 - To assist and advise the Government of Telangana on matters relating to urban transport, in consultation with the other experts
 - To perform all such other functions as may be allocated by the T&TO time to time

Exhibit 10 Structure of UMTA Secretariat



B. Public Transport Management Expert(s): The functions related to public transport such as operation, maintenance and management of transport infrastructure and facilities and operation of public transport services are carried out either by public or private agencies. The Public Transport Management Expert(s) shall be responsible for integration of all modes of transport and overseeing operations of integrated facilities and systems. Regulatory functions assigned to UMTA to ensure an integrated public transport system shall also be performed by them. Some of the key functions that may be assigned to Public Transport Management Expert(s) include:

- Create plans for an integrated and sustainable public transport system for Hyderabad Metropolitan Area, with emphasis on non-motorised transport
- Prepare strategies for integration of all modes of transport
- Oversee operation of integrated facilities and systems for public transport
- Develop standards and guidelines for public transport services specific to the requirement of Hyderabad Metropolitan Area in consonance with the land-use pattern of the city
- Coordinate with all relevant implementing agencies and supervise project implementation
- Provide recommendations on issuance of licenses for public transport services
- Advise on monitoring and regulation of fee, charges, etc.
- Propose innovative public transport solutions suitable to Hyderabad Metropolitan Area
- Promote development of integrated multi-modal public transport systems for Hyderabad Metropolitan Area
- Implementation of common ticketing system for public transport modes
- Perform all such other functions as may be allocated by the T&TO time to time

These functions shall be carried out by the Public Transport Management Expert(s) of UMTA in coordination with the inputs provided by the Transport Planning Expert(s).

C. Traffic Management Expert(s): The Traffic Management Expert(s) shall be involved

in aspects related to improvement of transport safety, efficiency of city roads, provision of timely and accurate real-time traffic information, and facilitation of cooperative public and private partnerships that integrate transport services.

One of the most important functions of UMTA shall be to coordinate with the various implementing agencies and create a seamless transport management system for Hyderabad Metropolitan Area. In order to achieve this objective, a centralised and integrated traffic control system is to be operated by the implementing agencies in coordination with the Authority. The Centralised Operation Control Cell may be responsible for the following activities:

- Planning and monitoring of a centralised signalling system for better management of traffic
- Provision of driver assistance and automation technology
- On-site assistance for incident management
- Implementation of other ITS applications

D. Fund Management Expert(s): These experts shall manage all the financial matters including management of UTF, preparation of financial plan, preparation of budget and accounts, etc. They shall also be responsible for monitoring the expenditures of the implementing agencies, which have been granted funds from UTF. The list of their functions includes:

- Management of UTF
- Funding public transport services so as to provide seamless mobility and an integrated public transport system
- Funding / arranging / recommending / approving funding for urban transport infrastructure in whole or in part, in consultation with the Transport Planning Expert(s)
- Preparation of Transport Investment Programme
- Maintenance of all financial records and accounts of UMTA
- Preparation of annual reports, budgets and financial statements of UMTA
- Monitoring and audit of UTF's utilisation by implementing agencies
- Performing all such other functions as may be allocated by the T&TO time to time

E. Policy and Technical Support Expert(s): These experts shall provide technical input to all the other UMTA staff. The expert(s) shall facilitate maintenance of database of information on activities for which UMTA is responsible. Depending on the functions assigned to UMTA, the database should contain details of projects, funding, public transport routes and services, licenses, etc. Some of the key functions that may be assigned to these experts include:

- Providing policy assistance to the Gol, Government of Telangana and any local authority or agency in the form of analytical inputs to prepare national/state/local level urban transport policies, standards and guidelines
- Conducting research studies and awareness about good practices in urban transport
- Maintaining records related to urban transport, including details of projects, services and funding
- Developing, monitoring and reporting performance indicators for urban transport as prescribed by Central and State Governments
- Monitoring and advising on public transport safety
- Undertaking research on innovative sustainable transport solutions and their applicability in Hyderabad Metropolitan Area at large

- Preparation of standards and guidelines specific to transport engineering or as deemed necessary time to time
- Providing technical inputs and support to other divisions as and when required
- Coordinating with all relevant implementing agencies and supervising project implementation, if required
- Overseeing development and operation of transport systems and facilities
- Reviewing and ensuring project implementation timelines are adhered to
- Supervising and monitoring implementation of projects (by consultants or otherwise)
- Organizing capacity building programmes for staff time to time
- Performing all such other functions as may be allocated by the T&TO time to time

The consultant appointed for providing handholding assistance to the Task Force could be utilized to provide assistance to the T&TO in recruitment of experts and support staff for UMTA. The number of experts and their necessary qualifications shall be determined by the Board in consultation with the T&TO. The details of the educational qualifications and roles and responsibilities of these experts have been specified as templates as part of the Annexure III. Because of the high level of responsibility, UMTA needs to attract highly experienced, capable and professional staff for performing its functions in an effective and efficient manner. Further, it is important to note that even though the above mentioned categories are for experts, UMTA has the option of converting them to individual departments, as the scope of its functions and staffing capacities grow.

The experts appointed by UMTA shall be assisted by support staff in carrying out their functions. The main activities of the support staff shall include the following:

- Providing input to the experts/HMDA, whenever required, in taking strategic urban transport decisions;
- Implementing the decisions undertaken by the experts;
- Monitoring implementation of the commitments of implementing agencies under CTS and MYPs through collection, analysis and review of information and data;
- Appointing and engaging consultants in providing services for supporting UMTA's operations;
- Organizing and keeping records of meetings conducted by the Board.

3.5 CONCLUSION

This chapter described the process of operationalization of Hyderabad UMTA, with description of various aspects such as establishment of Task Force for operationalizing additional functions, appointment procedure of the T&TO and other key professionals in the UMTA Secretariat and functions of various experts. The next chapter outlines the guidelines for carrying out various functions of UMTA.

4. GUIDELINES FOR ADDITIONAL UMTA FUNCTIONS

4.1 INTRODUCTION

The basic objectives behind formation of an umbrella organization like UMTA for Hyderabad are to address existing institutional gaps and overlaps in transport management and rationalise urban transport functions.

In this context, this chapter outlines the guidelines for carrying out various newly proposed functions of the UMTA in order to facilitate the smooth functioning of the Authority. Typical work flow charts have been provided for each of the specific functions.

4.2 POLICIES, PROGRAMMES, STANDARDS AND GUIDELINES

There exist various policy issues concerning urban transport in Hyderabad. Some of them relate to balancing the supply and demand of various transport services, type of mode shares, technologies required for vehicles, types of fuels, split between public and private modes, operation of public transport modes and finally, decisions relating to financing urban transport investments. These policy decisions may be taken across all three tiers of the government (centre/state/local), depending upon which level is better equipped to handle the related financial and technical issues.

Policy decisions pertaining to land-use, which are undertaken by HMDA may have huge implications on urban transport. For example, compact cities generally require shorter travel distances which allow a larger share of travel needs to be met by walking and cycling, as well as public transport. On the contrary, sprawling cities offer generously spaced out locations, where travel distances tend to be longer and personal motor vehicles become more important in meeting travel needs. In such cities, policies may give preference to TOD.

Considering the fact that Hyderabad UMTA shall be closely involved in overseeing the local urban transport needs, it would be in a position to provide expert inputs and insights to all levels of government in developing policies and programmes. In view of this, it is suggested that UMTA's role would be to:

- Assist and advise Government of Telangana on urban transport matters which would include providing analytical inputs, recommendations, advice and assistance on urban transport policy, standards and guidelines.
- Provide inputs to HMDA, GHMC and other ULBs for developing urban transport policies, strategies, standards and guidelines for Hyderabad Metropolitan Area in accordance with national and state level policies, standards and guidelines.

UMTA, through its Policy and Technical Support Expert(s), would carry out the activities required to implement these functions.

4.2.1 Guidelines for providing inputs in urban transport policy, standards and guidelines

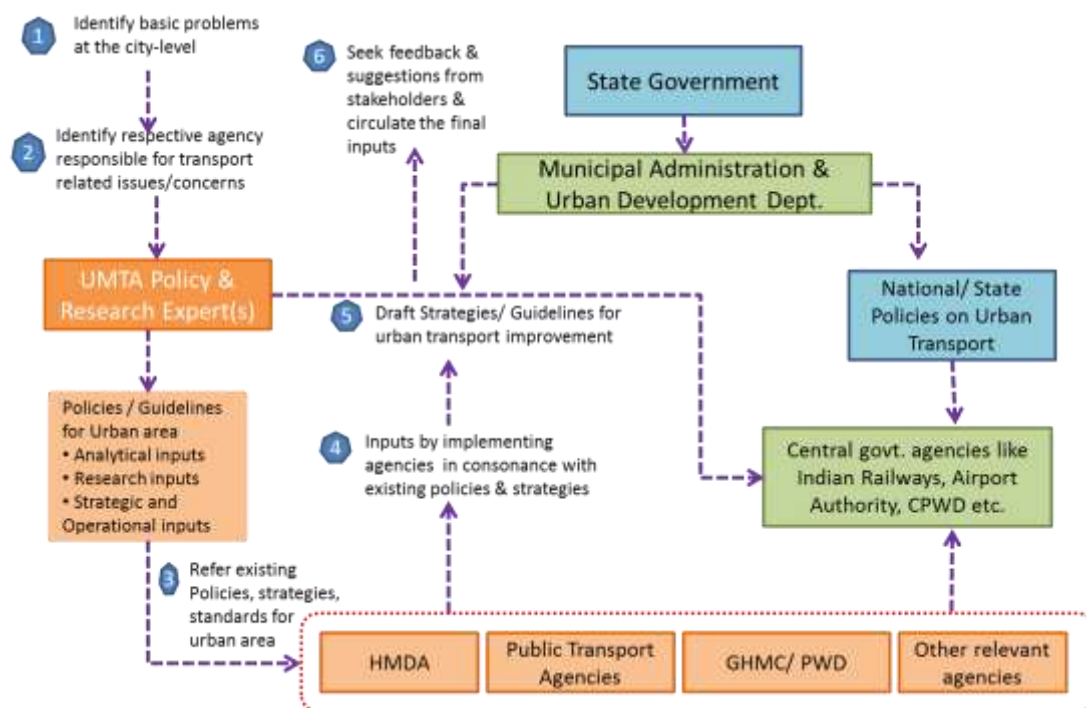
The process of developing public policy is an activity that generally involves research, analysis, consultation and synthesis of information to produce recommendations. UMTA, in coordination with implementing agencies shall be responsible for providing inputs to the Central Government, Government of Telangana and ULBs in Hyderabad for preparation of

urban transport policy for Hyderabad Metropolitan Area. The inputs to be provided by UMTA shall, inter-alia, include:

- ✓ **Analytical inputs:** UMTA shall provide practical and relevant analytical inputs based on deep analysis. For example, it could provide inputs on costs incurred in management of parking infrastructure, revenue potential from infrastructure used for advertising, etc.
- ✓ **Research Inputs:** UMTA shall carry out any research exercise that it has undertaken by itself or has been requested by Government of Telangana or any central level agency for the preparation of urban transport policies, standards and guidelines. For example, UMTA may provide research inputs on traffic management related issues, use of information technology in urban transport, etc.
- ✓ **Strategic and Operational Inputs:** UMTA may also provide strategic inputs in overall improvement of urban transport in Hyderabad Metropolitan Area. For example, it may provide inputs on applicability and feasibility of congestion charges scheme. Further, UMTA may provide inputs on identifying innovative sources of funding for urban transport.

The process flow chart for carrying out these functions is presented in Exhibit 11.

Exhibit 11 Process flow chart for providing inputs to urban transport policy, standards and guidelines



Hence, as per the above depicted flow chart, the UMTA will be responsible for preparation of urban transport policies and standards for Hyderabad as deemed necessary by Government of Telangana time to time. The steps involved in carrying out these activities are described below:

Step 1: The first and foremost step in the provision of policy recommendations shall be identifying the problem at hand and defining it clearly. It is important to distinguish the repercussions of the problem from the actual problem. For example, Hyderabad may face heavy congestion, which may be a symptom of a number of issues such as lack of enforcement of traffic discipline, insufficient availability of public transport, etc.

Step 2: Following problem identification, UMTA shall determine the nature of the problem. Increasingly, urban transport issues and solutions to them are multi-faceted and multi-layered, often involving more than one department and level of government. Due to the cross cutting nature of these problems, UMTA would need to identify the department which was involved in developing the policy or is capable of addressing the challenge at hand.

Step 3: Following this, UMTA shall deploy suitable resources in the form of policy advisors and provide them with the required infrastructure (such as information technology support, access to database, research studies, etc.). It is noteworthy to point out that UMTA may exercise the option of outsourcing any of these activities to a consultant with a clear set of terms of reference.

Step 4: Following this, UMTA may refer to existing policies and guidelines that have been prepared for its jurisdiction. This is important because:

- i. It ensures that UMTA does not work towards developing policies/standards/guidelines that already exist;
- ii. It allows undertaking activities for improvement of existing policies, standards and guidelines to ensure that functional and institutional gaps and overlaps are addressed. For example, the safety guidelines for operating a bus may be available in certain cases. In such a scenario, UMTA should focus on building guidelines as to how a bus should operate on a corridor.

Step 5: The next step shall be to seek inputs of other agencies (including implementing agencies, public transport operators and other planning agencies) on urban transport policies, standards and guidelines. These inputs will help in understanding the perspectives of such agencies and in preparing practical and appropriate policies, standards and guidelines.

Besides the above mentioned steps, UMTA may conduct its own research studies and reviews of best practices.

Step 6: Based on its experience, review of already existing works and inputs solicited from other agencies, the UMTA should draft its inputs on different policies, standards and guidelines. It should also develop performance indicators for monitoring its propositions, wherever applicable. This could be for use by any level of government for improvement of urban transport.

At the same time, UMTA may provide necessary inputs on reviewing and updating existing policies and strategies to reflect new directions and changing circumstances.

Step 7: Once the draft inputs have been prepared, they may be further strengthened by taking feedback and suggestions from different stakeholders. The finalised inputs may be then circulated to relevant agencies.

It is advised that UMTA refers to the document - "A Guide to Policy Development", Office of the Auditor General, Manitoba, 2003 – for carrying out the above mentioned function.

4.2.2 Service Level Benchmarking

Service level benchmarking in the context of urban transport, is a process of comparing performance levels against set targets or best practice cases. It helps in identifying the existing gaps and challenges in urban transport systems. Benchmarking is well recognized as a crucial mechanism for introducing accountability in service delivery. It can help a city in identifying performance gaps and facilitating improvements, through continuous sharing of information and best practices, ultimately resulting in better service delivery. The process of urban transport benchmarking is highlighted in Exhibit 12.

To measure the performance of urban transport parameters over time in Hyderabad, it is important that the performance levels are monitored against set benchmarks. In this context, MoUD has initiated an exercise to define service level benchmarks, for the following areas of intervention:

- Public transport
- Pedestrian infrastructure facilities
- Non-motorized transport facilities
- Use of ITS
- Travel speed along major corridors
- Road safety
- Availability of parking facilities
- Pollution levels
- Land-use and transport integration
- Financial sustainability of public transport

Exhibit 12 Process of urban transport benchmarking



In the context of Hyderabad, the role of UMTA would be to monitor the performance on parameters highlighted by MoUD. These performance measurements, once estimated by UMTA, shall be reported to Government of Telangana, which will then undertake steps for disseminating the data. For UMTA to precisely measure the performance in relation to the set benchmarks, it would have to adopt clear definitions and methodologies to eliminate any bias in measurement and reporting.

The output expected from UMTA in this context would be periodic performance reports on the service level benchmarks. The periodicity of these reports shall be finalized by the Governing Board at the time of finalization of functions of UMTA. The following guiding principles would be useful for initiating performance reporting:

- To begin with, data formats and processes defined for performance measurement should be kept simple.
- The Chairperson of UMTA shall take the lead in making the service level benchmarking operational
- UMTA staff should be provided training and orientation on service level benchmarking to enable them discharge their respective responsibilities.

For the SLBs defined by MoUD, reference to “Service Level Benchmarks for Urban Transport at a Glance”⁵ is indicated.

4.3 ALTERNATIVE ANALYSIS

Among various strategies proposed, the CTS of Hyderabad identifies priority corridor(s) that need transportation improvements. Once a corridor has been identified, the next step would be assess different transportation options for that corridor – whether MRTS, corridor alignment options or different land-use scenario options. The CTS also spells out all transport alternatives for the proposed corridor(s). Alternative Analysis (AA) should evaluate the alternatives for the identified corridor and suggest the option best suited to the city. As an example, suppose the CTS proposes a particular corridor to be developed as a long term strategy, and advocates alternatives like an improved bus system, BRTS, a metro or mono-rail. AA would evaluate all these alternatives based on defined criteria and select the alternative best suited for the corridor. Therefore, during AA, the priority corridor identified in the comprehensive planning is studied in detail, focussing on the effects of alternative solutions on the corridor’s transportation problems. The alternatives shall be analysed in detail based on the following basic criteria:

- Overall benefits and public well-being achieved due to the project
- Effective cost involved in project implementation
- Impact caused by each alternative and its expanse
- Comprehensive technical basis available for the selected alternatives
- Economic impact
- Environmental sustainability
- Financial sustainability
- Promotion of multi-modality

The responsibility of preparation of the Alternative Analysis report based on the CTS document shall lie with UMTA, which can either use its in-house technical staff, or appoint a consultant for its preparation. The Alternative Analysis report shall be prepared in close coordination with key stakeholders and implementing agencies. The report shall be cleared only after the approval of the final alternatives by the UMTA Governing Board.

Based on the AA report, the Transport Investment Programme shall be finalised by UMTA and sent across to the implementing agencies. For a step-by-step guide on preparation of AA, please refer to Toolkit for Alternative Analysis prepared by MoUD. Exhibit 13 gives a gist of the various steps involved in the process of AA.

⁵ Refer - <http://jnnumr.nic.in/wp-content/uploads/2010/12/SLB-Urban-Transport.pdf>

Exhibit 13 Checklist for conducting alternative analysis

Process	Checklist	Action
Step 1 – Set goals and objectives	Have the problems with the corridor been identified? E.g. congestion, low capacity, safety	UMTA
	Goals and objectives identified? E.g. mobility (connects houses to offices, easy inter-modal transfer), Safety (minimise accidents across all modes, conformation with engineering design and safety standards), capacity (provide sufficient capacity, minimise delay)	UMTA
	What is the “big decision” that has to be made? E.g. transit system or highway alignment? What type of bus transit is suitable along the corridor?	UMTA
Step 2 – Set up a committee within UMTA	Have decision makers been identified?	UMTA
	Have all decision makers been contacted?	UMTA
	Does UMTA have technical expertise to conduct the AA or will it have to hire a consultant?	UMTA
Step 3 – Review technical issues, data and models	Have the problems been identified? E.g. Current transit travel times during the peak period 45-75 minutes, as against 20-30 minutes by car, corridor contains a significant percentage of transit dependents, etc.	UMTA
	Causes for performance deficiencies? E.g. For congestion, possible causes may be rapid residential and employment growth, inadequate transit system, demand exceeds capacity, poor past land-use planning, etc.	UMTA
	Terms of reference	UMTA

Step 4 – Define scope of services	Time frame/ work plan for the study	UMTA
	Budget	UMTA
Step 5 – Framing the analysis	Have the terms of reference been refined? (Revisit/ refine problem statements, causes of the problems identified in the terms of reference, assess need to update travel demand model)	Consultant ⁶
	Evaluation criteria to be established at various levels (effectiveness and comprehensiveness in measuring goal attainment, conformity with NUTP)	Consultant
	Link performance measures to goals and objectives	Consultant
	Decide rating scale	Consultant
	Existing and future needs analysis	Consultant
	Analysis of strengths, weakness, opportunity and threats	Consultant
Step 6 – Identification of alternatives	Plan and design Standards. E.g. Indian Roads Congress Design Standards, Guidelines and Codes, etc.	Consultant
	Operational plans for each alternative, all having same parameters (Fare assumptions, parking assumptions, approximate alignment, route network- feeder and trunk, etc.)	Consultant
	Is there any screening needed?	Consultant
	What are the criteria, depending on screening levels?	Consultant
Step 7 – Final definition of alternatives	Conceptual engineering (plans, drawings)	Consultant
	Travel demand forecasting (base year model, forecast model)	Consultant

⁶ The final responsibilities of any task assigned to the consultant remains with UMTA.

	Operational planning (transportation impacts, land-use impacts, environmental and social impacts, economic impacts, project development costs/ capital costs, operation and maintenance costs, financial plans)	Consultant
Step 8 - Public review process	Identify relevant stakeholders	Consultant
	Decide on mode of contact, meeting date	Consultant
	Decide on public meeting dates	Consultant
	Inform public about the feedback process time-frame, format, etc.	Consultant
Step 9 – Evaluation	Rating scale	Consultant
	Performance measures to be evaluated	Consultant
	Grouping of performance measures	Consultant
	Composite score of each evaluation category by alternative	Consultant
	Final score – sum of score of all evaluation categories by alternative	Consultant
Step 10 - Selection of preferred alternative	Present evaluation matrix in previous step with all supporting documents	Consultant
	Public feedback	Consultant
	Decision on preferred alternative	Consultant
	Public meeting notification	Consultant

Post preparation of the AA report, UMTA would finalize corridor strategies and identify the project to be undertaken in the short to medium turn (up to 15 years). This will set the way for subsequent studies like the Detailed Project Report, by the concerned implementing agencies, which would lead the selected project to the project sanction stage. The process flow chart for

Alternative Analysis is depicted in Exhibit 14. Exhibit 15 discusses the case study of Oklahoma.

Exhibit 14 Process flow chart for alternative analysis

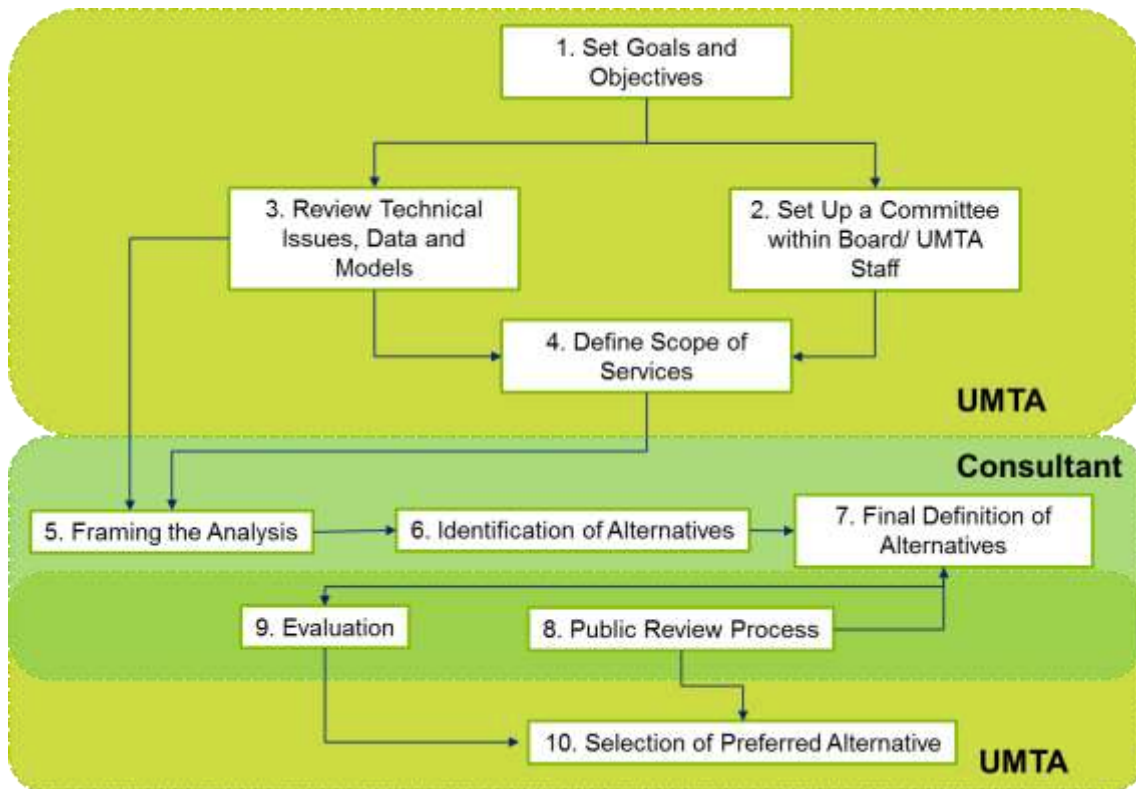


Exhibit 15 Case Study- Tulsa, Oklahoma

CASE STUDY: Alternative Analysis (AA) of transportation models by INCOG – Tulsa Metropolitan Area, Oklahoma

With the increase in population and the flow of traffic in Tulsa, the problems of congestion and traffic accidents amplified. The INCOG (Indian National Council of Governments), which is a voluntary association of local and tribal governments in the Tulsa metropolitan area in northeast Oklahoma, conducted a study in the year 2000, to identify and analyse the various alternative transportation modes and select the one that meets the requirement. The existing and future conditions of the city were also examined to set a base for the analysis of alternatives.

Key Concepts: In the first step, the factors that may affect the selection of the alternatives were identified and then the various options were identified. These factors included travel time, costs, frequency, comfort, environmental consequences, etc. The various alternatives in the case of Tulsa were identified as buses, BRTS, light rail, commuter rail and pedestrian lanes. The selection process began with demand estimation, identifying modes that are apt considering the demand and the assessment of the pros and cons of each mode selected. Following this, the cost - benefit, mobility and land-use benefit analysis were required to make the final selection of the alternative.

Relevance to Indian context: Several Indian metropolitan areas face similar problems and alternative analysis of various modes of transportation can provide a foundation of sound congestion management and several economic incentives. Using AA, different options can be suggested on the selected routes. It is important to note that the suggested alternative might not be a single mode of transportation, but a group of such modes and steps that can be implemented over an appropriate period.

4.4 TRANSPORT INVESTMENT PROGRAMME

It is imperative that strategic planning undertaken during preparation of CTS and Alternative Analysis is closely integrated with budgeting. In view of this, it is envisaged that UMTA would prepare a Transport Investment Programme for Hyderabad Metropolitan Area, to achieve the goals of the CTS and plan financing of projects proposed in the CTS. Prior to this, the implementing agencies in Hyderabad would draw Multi-Year Programmes (MYPs), which would be tactical in nature, and closely integrated with the strategies proposed in the CTS. The MYPs shall present activities that an implementing agency would pursue over a short to medium term planning horizon, towards achieving the strategies proposed in CTS, based on reasonable expectations of the project budget. Multi-year plans submitted by the implementing agencies would enable UMTA to prepare a consolidated Transport Investment Programme for Hyderabad Metropolitan Area. The Transport Investment Programme shall be a detailed five – year programme for financing the projects proposed in the CTS, based on inputs from the MYPs.

UMTA shall review and approve the MYPs drawn by implementing agencies, in order to ensure that the programmes meet the guidelines set by CTS, are in line with the state and national level priorities and within the limits of the available resources. Therefore, through the process of approving the MYPs, UMTA would play an indirect role in overseeing the planning process of implementing agencies.

The MYP would primarily make use of technical costing and planning tools to generate a budget request for a transport sector investment, in line with the projects proposed within CTS. It is suggested that MYP should include yearly expenditure estimates and the intended source of funding. Post approval of MYP, UMTA would issue a Certificate of Approval (CoA) to the implementing agency, for a particular project proposed in its MYP, which could be furthered to the Finance Department/concerned Central Government ministry/funding agency for making a request for funds for that particular project.

The MYP shall be prepared for a minimum time period of five years and broken into short term (1 to 3 years) and medium term (3 to 5 years) for better monitoring and implementation of various projects. This should be developed in consonance with the CTS. It is recommended to be updated every 2 years or as decided by the Governing Board time to time.

Further, once the MYP has been approved, it can be detailed out in the form of annual action plans by the implementing agencies, which will carry the exact roadmap of activities to be performed by that agency during a particular year. The process flow chart of preparing the Transport Investment Program is depicted in Exhibit 16.

4.4.1 Guidelines and Procedures for Preparation of Transport Investment Program

The suggestive process for preparation and approval of the MYP is presented in Exhibit 17. Key steps involved in development and finalisation of MYP are provided below.

Step 1: Reference to CTS, Alternative Analysis and other guidelines

The UMTA shall circulate the finalised CTS and other guidelines to the implementing agencies. The concerned agencies shall refer to these documents and make themselves aware of the finalised objectives and strategies envisaged for development of urban transport of Hyderabad over the planning period.

Step 2: Development of draft Multi-Year Programme by each implementing agency

Each of the implementing agencies shall prepare (by its internal staff or by appointing a consultant) a draft MYP and submit the same to the UMTA for ensuring compliance with CTS. The implementing agencies should draw MYPs to include the following:

- Determining key activities to be undertaken by the implementing agency, to achieve the objectives and strategies of the CTS. Example for the case of MYP drawn by Hyderabad Metro Rail Corporation is presented below.

Exhibit 16 Process flow chart of preparing Transport Investment Programme

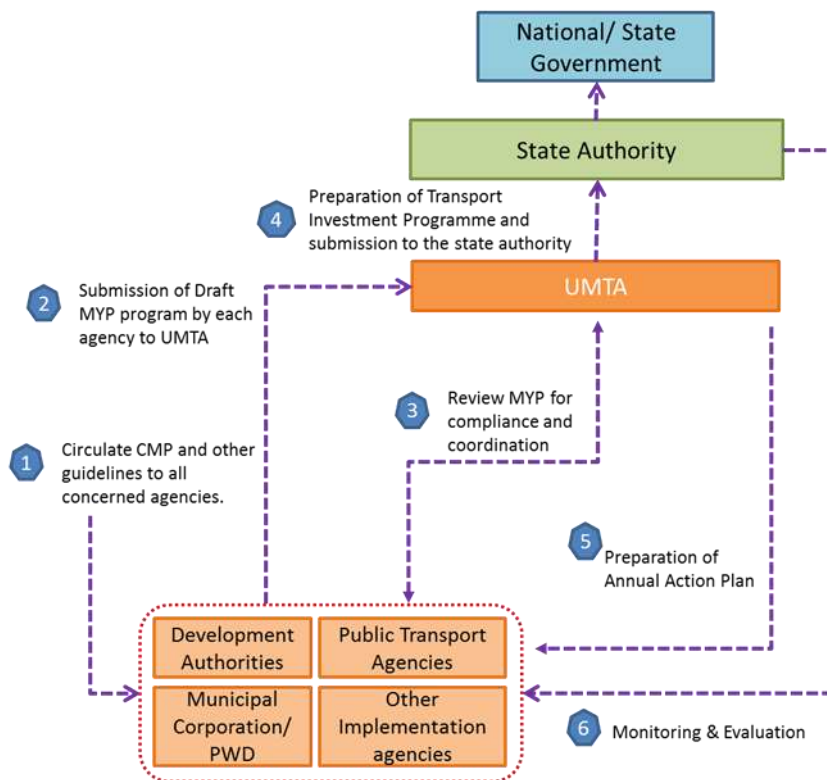


Exhibit 17 Illustration for Multi Year Programme

Transportation Service	CTS Objective	CTS strategy	AA Outcome	Main Activity by Metro Corp.	Timelines	Costs
Public Transport	To increase public transport ridership by 20% in the planning period	To develop 100 kms of corridor around the city	Metro is the best option suited for the corridor	Build 25 kms of metro in 4 phases	2016 Completion of 25km	-
					2017 Completion of 50km	-
					2018 Completion of 75km	-
					2019 Completion of 100km	-
...						
...						

- Determining the year(s) in which each activity proposed to be undertaken by the implementing agency will be carried out, in order of priority. All augmentation of transport network and infrastructure provisions may be worked out for the short term, while policy level implementation may be worked out in the medium term.
- Estimating the current and future costs and financing of the major activities proposed,

predicting scenarios and identifying strategies that will improve the financial sustainability of the MYP. It is crucial that the MYP clearly spells out how much is being spent on what and from what source, and identifies funding gaps and future fund requirements. The costs can be determined by:

- Estimating current project costs
- Predicting future resource requirements
- Estimating current project financing
- Predicting future financing levels and patterns over the MYP's time horizon
- Estimating financing gaps by comparing resource needs with available financing

Step 3: Review of MYPs for compliance

The primary function of UMTA is to ensure coordinated development of overall urban transport in Hyderabad. In this regard, UMTA shall review the MYPs submitted by all implementing agencies with the objective to ensuring that:

- a. The planned developments envisaged in the CTS and other guidelines have been covered by the MYPs;
- b. There is no overlap or gap in achieving the envisaged developments;
- c. The projects finalised under the MYP are within the time and budget frames that have been predicted by the CTS.

The UMTA would provide its comments and suggestions to the concerned agencies for revision of the MYPs. Once these suggestions have been incorporated, the MYPs shall be finalized for approval by the Governing Board.⁷

Step 4: Consolidating the MYPs into a Transport Investment Programme

Once the MYPs have been revised, UMTA would prepare a Transport Investment Programme, consolidating the MYPs of various implementing agencies and submit it to Government of Telangana via its nodal department for approval.

Step 5: Preparation of annual action plan

Once the consolidated Transport Investment Programme has been approved by Government of Telangana, UMTA shall break down the consolidated Transport Investment Programme into implementing agency-specific programmes, and shall circulate them to all the concerned implementing agencies. The agencies shall then decompose their respective MYPs into an annual action plan for the following year. This process of annual action plan formulation should be repeated every year for the time horizon of the MYP.

Step 6: Monitoring and evaluation of MYPs

UMTA shall establish a monitoring and evaluation framework to track the progress of implementing agencies towards the activities set out in their MYPs. This process would enable UMTA to include annual and mid-term corrections to MYP strategies, should this tracking demonstrate that milestones and targets are not being achieved. The UMTA may perform its monitoring and evaluation activities on a random basis, since it may pose difficult to supervise all activities of implementing agencies. The principles of establishing an effective monitoring

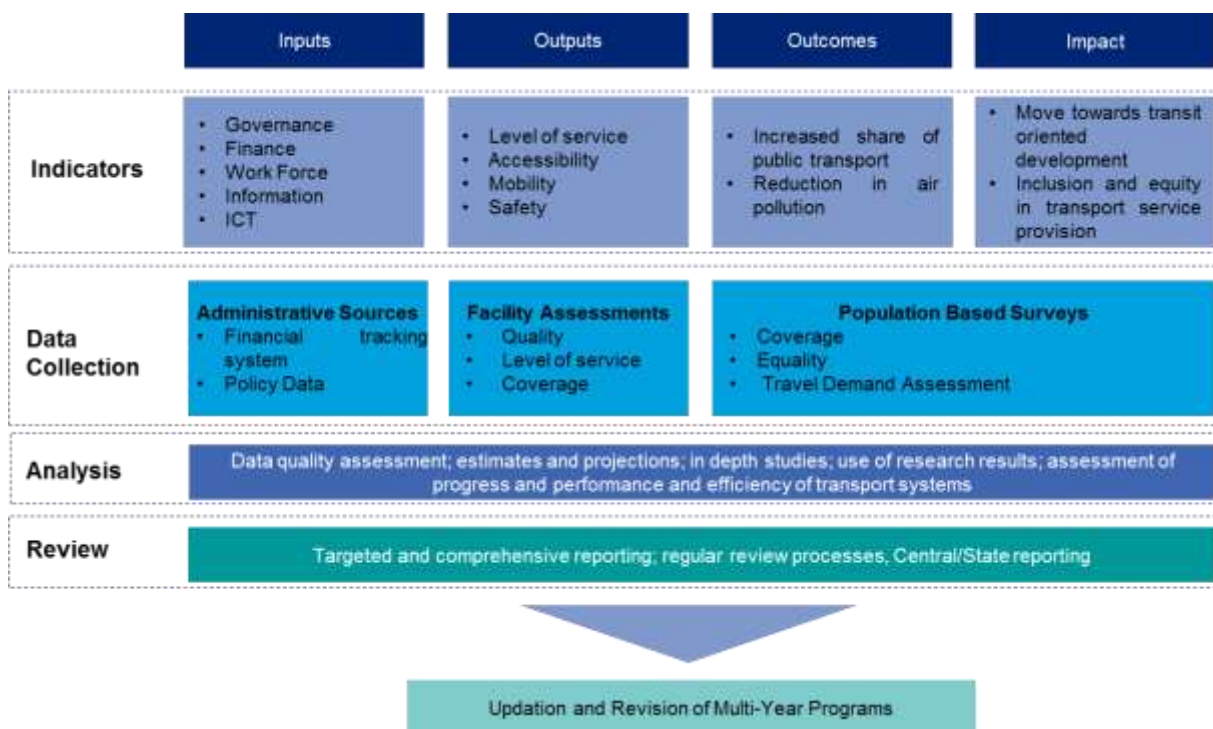
⁷ All projects with issues pertaining to land requirement shall be referred to the land owning Authority for clearance on land requirement/ acquisition. Hence, the implementing agencies will be responsible for getting clearance on any change in land-use for the projects approved under the Multi-year Program. UMTA shall be responsible for monitoring the process of land-use change undertaken by the implementation agencies and may time to time facilitate the same as deemed necessary by the UMTA board.

and evaluation framework are:

- Ensure selection of specific, measurable, achievable, relevant and time-bound indicators to track performance.
- Plan in advance the data sources for measuring the indicators and the means by which the data will be verified.
- Describe accurate baselines that will enable tracking of progress.
- Define targets that are realistic and achievable in relation to the baseline data.

Exhibit 18 gives an illustrative monitoring and evaluation framework which the UMTA could adopt.

Exhibit 18 Illustration of monitoring and evaluation framework of UMTA



The Authority may also engage consultants as deemed necessary for the purpose of monitoring and auditing processes.

4.5 INTEGRATED FACILITIES

An integrated transport system supports cross-city and cross-region journeys by way of new travel opportunities through increased interchange. Planning for integrated facilities aims to ensure that there exists suitable and interconnected transport infrastructure for all transport modes, such as private vehicles, freight, public transport, walking and cycling. To ensure seamless and smooth connectivity of people and goods across Hyderabad, it is crucial that all

transport modes (by way of infrastructure and services) are connected and work together. Integrated service provision results in a seamless journey that is as door-to-door as possible.

Today, most commuters in Indian cities face barriers and discontinuities in seamless travel across an urban area. These discontinuities are sharper for pedestrians, cyclists and public transport users than for car drivers, who can usually find a way around such impediments.

- For pedestrians, barriers include roads that are difficult to cross, lack of footpaths, hostile walking environment, etc.
- For cyclists, barriers may include dangerous intersections leading to safety concerns, high traffic roads without provision of cyclist tracks, etc.
- For public transport users, barriers include services, routes and schedules that do not connect, low frequency of service, absence of end-to-end connectivity, etc.

In planning and development of integrated facilities, UMTA should keep in view certain measures:

- Integrated transport networks means integration among modes as well as within each individual mode. Is this inter and intra-modal integration being achieved?
- How good is the walking access to bus/train stations? How can the walking environment be improved?
- How secure are the facilities for cycling to bus and train stations?
- How well do buses connect with one another and with trains in terms of schedules and physical access?
- How does one ensure seamless travel of the commuters in buses or trains and from buses to trains and vice versa? What procedures (of security frisking, ticketing, etc.) can be streamlined so as to cause minimum discontinuity for commuters?

4.5.1 Guiding Principles for Integrated Transport Planning

The guiding principles for integrated transport planning have been demonstrated in Exhibit 19.

Exhibit 19 Guiding principles for integrated transport planning

Principle	Considerations for UMTA interventions	Potential Outcomes
Providing satisfied commuting experience	<ul style="list-style-type: none"> • Identify ticketing and fare requirements for commuters to introduce integrated ticketing across public transport⁸ • Offer clear and accessible information to commuters for public transport across modes, operators, routes and schedules • Encourage good pedestrian access to public transport services • Consider the needs of all users of the network 	<ul style="list-style-type: none"> • Increased patronage towards public transport services and facilities

⁸ Refer to 'Draft Guidelines – Smart Ticketing', Expert Group on Urban ITS. Access - <http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetailDoc&id=5783&no=3>

Principle	Considerations for UMTA interventions	Potential Outcomes
<p>Development of an integrated, seamless public transport network</p>	<ul style="list-style-type: none"> • Plan for a hierarchy of mass, intermediate and local transit services in a network through terminal and interchange point development • Follow consistent timetables and stopping patterns for services • Coordinate convenient transfers between services • Increase network connectivity 	<ul style="list-style-type: none"> • The public transport network is effective and easy to understand and navigate • The public transport network considers the needs of different user groups • Changing between public transport modes is as convenient as possible
<p>Plan for rehabilitation of existing assets and infrastructure</p>	<ul style="list-style-type: none"> • Provide services making the best use of existing assets and infrastructure • Plan for future asset and infrastructure procurement and development 	<ul style="list-style-type: none"> • Appropriate distribution of public transport services across the network • Service provision increases network productivity • Public transport services are integrated with future asset and infrastructure improvements
<p>Foster continuous improvement</p>	<ul style="list-style-type: none"> • Undertake periodic reviews to ensure that services continue to reflect demand expectations 	<ul style="list-style-type: none"> • Service planning continues to be efficient and effective
<p>Ensure safety of commuters and prompt accident mitigation</p>	<ul style="list-style-type: none"> • Establish a unified and centralized command and control center for Hyderabad enabling quick incident response⁹ • Plan for high quality facilities to ensure commuter safety, comfort and ease of use 	<ul style="list-style-type: none"> • Reduction in fatalities caused during accidents
<p>Ensure integrated traffic management</p>	<p>A centralised and integrated traffic control system should be operated by the implementing agencies in coordination with UMTA. The centralised operation control cell may be responsible for the following activities:</p> <ul style="list-style-type: none"> • Using ITS to streamline traffic signal control, enabling prioritisation of 	<ul style="list-style-type: none"> • Reduced congestion • Reduced energy consumption and traffic emissions • Increased efficiency of the transport system • Improved freight delivery • Enhanced road safety • Reduction in parking congestion

⁹ Refer to 'Simplified Guide to Incident Command System for Transport Professionals', U.S. DOT. Access - http://www.ops.fhwa.dot.gov/publications/ics_guide/ics_guide.pdf

Principle	Considerations for UMTA interventions	Potential Outcomes
	public transport and traffic optimisation <ul style="list-style-type: none"> • Satellite tracking of vehicles to give real - time passenger information • Automatic number-plate recognition and vehicle detection systems • Enabling a visual view of transport system through closed circuit television surveillance¹⁰ 	

For the development of integrated facilities, UMTA’s role is envisaged to be that of planning these services so as to facilitate their development and oversee their operations. The planning of integrated services is part of the currently drafted CTS of UMTA. It is recommended that the UMTA should dynamically plan and revise the CTS from the perspective of upgrade of integrated facilities, as per the needs and development of the urban transport system of Hyderabad. The UMTA is not envisaged to be directly managing the construction and implementation of these facilities and systems in Hyderabad, but to ensure that they are developed and implemented as necessary by appropriate operators to support integrated public transport services for Hyderabad Metropolitan Area. Hence, the core operation and management function would be continued by the respective public or private agencies, service providers and facility owners. Hyderabad UMTA shall be responsible for coordinating between the facility providers and providing integrated solutions for operation and management time to time. Exhibit 20 presents a case study on the integrated ticketing system in London.

Exhibit 20 Case Study- London

London Oyster Card – Integrated ticketing system

Nearly two- thirds of the total rail journeys in United Kingdom either start or end in London. Public transportation in United Kingdom is administered by TfL (Transport for London). TfL introduced a smart card – known as the Oyster card - which could be used in various modes such as London Bus, DLR, Tramlink, London Underground, etc. This project was a public-private partnership operated by TranSys consortium. The system is similar to the smart card system of Delhi Metro Rail Corporation where passengers need to touch the card on a sensor at the beginning and end of the journey.

The Oyster card was set up under a Private Finance Initiative contract between TfL and TranSys and a consortium of suppliers. The £100 million contract was signed in 1998 for a term of 17 years until 2015 at a total cost of £1.1 billion. There is documented evidence that introduction of Oyster cards has increased the number of users of public transport in London. This has positively affected traffic congestion and therefore, journey times, which in turn has reduced CO2 emissions and pollution levels.

Key outcomes – As of 2012, 7 million cards were regularly used and a total of 57 million journeys are made using Oyster card every week. Around 80% of the total bus and tube travel in London has been estimated to be made through Oyster. In a survey conducted by DoT in 2009, 98% of responses were favourable when it came to the implementation of Oyster system.

Relevance to Indian context – TfL is an authority quite similar to the proposed UMTA and the integration of ticketing as adopted by TfL can be established in Indian context too. Lessons can be taken from other integrated ticketing systems such as Hong Kong, Montreal, etc.

¹⁰ Refer to ‘Guidelines for ITS Deployment in Urban Areas’, Urban ITS Expert Group, 2013. Access - http://ec.europa.eu/transport/themes/its/road/action_plan/doc/2013-urban-its-expert_group-guidelines-on-traffic-management.pdf

4.6 REGULATION

It has been suggested that for UMTA, there is a potential recommendatory role to be played in licensing and fare fixation functions for public transport vehicles operating within its jurisdiction as well as in regulating fees and charges for other urban transport facilities and services.

In this regard, the suggested functions of UMTA shall include:

- Assist the Transport Department, Telangana in issuing licences (or permits) for public transport vehicles;
- Monitor and advise on fees/fares/charges for roads, public transport, parking and other public transport facilities and services and regulate fares for urban bus services;
- Enforce regulations for which UMTA is responsible.

Guidelines for carrying out these functions are provided in the following sub-sections.

4.6.1 Options for licensing function for public transport services

As an important part of the contracting function of UMTA, it should also be enabled to provide inputs on issuance of licenses for the operation of public transport vehicles. For achieving this, the licensing authority may issue the licenses/ permits only in consultation with UMTA. This function is crucial since UMTA should exercise some degree of decision making power in regulating the number of public transport vehicles operating within Hyderabad and their routes and frequency. This would involve licensing activities for existing routes and new routes.

4.6.2 Options for monitoring and regulating fees and charges

Fares influence the patronage of public transport services, and therefore, adjustment of public transport fares can be used to encourage or discourage use of a particular mode of travel. Setting of fares can, therefore, be part of a wider multi-modal travel demand management strategy for Hyderabad, which may involve charging vehicles, particularly private vehicles, for their use of roads (road pricing, congestion charging, etc.). Such a strategy would operate best with a single agency in control of fixing all relevant fares, fees and charges. Therefore, UMTA's role shall be to make recommendations to various fare-setting agencies, within the framework of the overall travel demand management strategy.

It has been suggested that UMTA should be responsible for the following functions within the ambit of monitoring, fixing and regulating fees/charges in Hyderabad Metropolitan Area:

- Suggest on fixing all relevant fares/fees/charges within Hyderabad Metropolitan Area – This applies to all modes of public transport, so that fare fixation becomes part of a wider reform of public transport planning and funding. All these aspects need to be placed under the control of a single agency for effective service delivery.
- Suggest on fare structure for sub-urban rail services – This shall include advising the Indian Railways for fixing the sub-urban railway charges within the overall travel demand management strategy.
- Provide advice on matters related to the amount of subsidy required for public transport services – UMTA shall provide such advice on the basis of the level of revenue it has been able to recover from various sources of resource mobilization as discussed in the UTF Operations document. In the event, the resources of UMTA fall short of meeting the

planned expenditure, it shall communicate to the Central Government and Government of Telangana on the subsidy shortfalls and the means of meeting them.

UMTA's role would essentially be advising on effective fare fixation and regulating its implementation through conveying the same to the relevant implementing agencies. The UMTA will interact with all the relevant agencies such as public transport operators, regulatory agencies such as Transport Department for ensuring that monitoring and regulatory functions are undertaken properly.

4.7 RESEARCH STUDIES AND AWARENESS

One of the main functions of UMTA is to conduct research and study activities and spread awareness regarding urban transport initiatives. Research and development are central to a successful, well-strategized and updated transport network. Hence, various types of transport policies, guidelines and studies need to be worked out by UMTA. The research functions of UMTA are depicted in Exhibit 21.

In this regard, UMTA's functions have been suggested to include following:

- 1. Maintain records including details of projects, services, funding and public transport safety:** To manage its affairs, UMTA will need to maintain database of information on activities for which it is responsible. Depending on the functions assigned to UMTA, the database should contain details of projects, funding, public transport routes and services, licences, etc. The data base would help in monitoring and understanding the various traffic and transportation needs in Hyderabad.

UMTA shall maintain a database with information on activities for which it is responsible. Depending on the functions assigned to it, such database should contain the following:

- Details of projects;
- Details of existing urban transport infrastructure;
- Planned development by different agencies in consonance with the multi-year programme;
- Fare structures;
- Funding;
- Public transport routes and services;
- Licences;
- System performance including safety

The maintenance of transport database shall help in the following:

- Facilitate sharing of data across various agencies
- Facilitate coordination of information/ reports across agencies
- Minimise duplication of data collection
- Map of all transport developments for planning purposes
- Facilitate selected access of information/ reports to the general public

- Provision of data to the Policy and Research Expert(s) of UMTA

Exhibit 21 Research function within UMTA

UMTA Research Functions		
Maintenance of Database	Public Transport safety guidelines	Performance Indicators
<ul style="list-style-type: none"> • Transport projects • Existing urban transport infrastructure • Public transport routes and services • Fare Structures and Licenses 	<ul style="list-style-type: none"> • Quality of infrastructure • Driver training, testing and licensing • Registration, testing/certification of vehicles • Road accidents • Enforcement of traffic rules 	<ul style="list-style-type: none"> • Develop measures and publish performance indicators • Conduct workshops for awareness about best practices

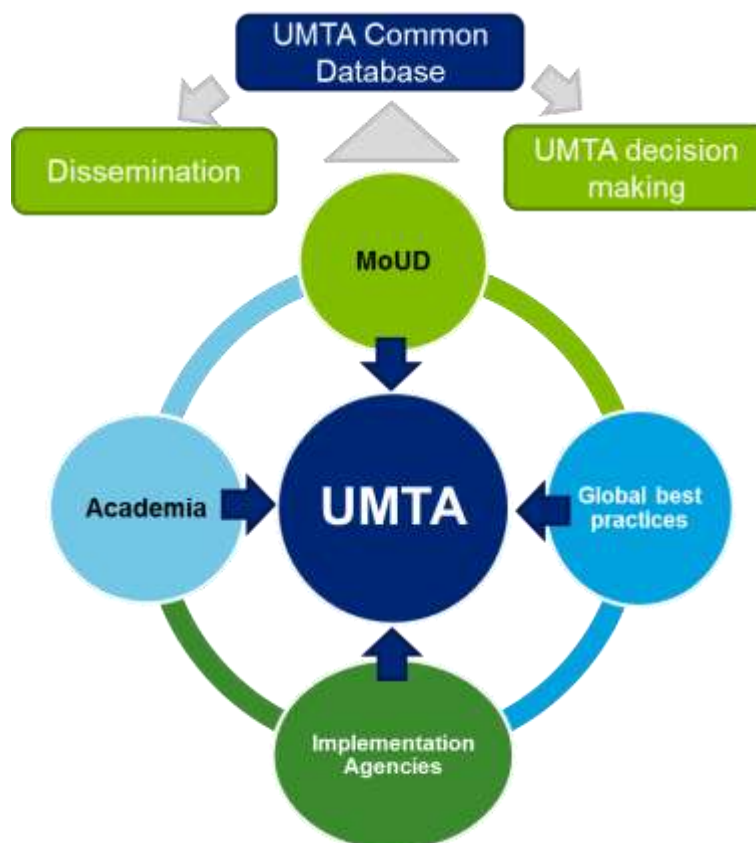
The broad outline of data which is recommended to be collected is provided below:

- Demand for urban transport:
 - Traffic operations
 - Performance of major routes
 - Passenger and freight data
 - Vehicle population for public, private as well as para-transit system
- Supply of urban transport:
 - Capacity trends
 - Fleet data
 - Road and traffic infrastructure facilities and provisions
- Safety statistics and financial results,
- Date on fuel consumed by public, private and para-transit system
- Information on road infrastructure, road conditions; updated information on all public transport modes, routes, frequency and timings;
- Non-motorised transport facilities;
- Mobility indicators;
- Modal share/ split of transport vehicles;
- Incidents of accidents, fatalities;
- Service level benchmarks; and
- Other benchmarking data.

2. Develop and manage local performance indicators for urban transport:

UMTA needs to develop, measure and publish performance indicators for urban transport within its jurisdiction. These indicators should be in line with the service level benchmarks published by the MoUD, but will also be a measure of the UMTA's outputs.

Exhibit 22 Common database for UMTA



3. Conduct research studies, education and awareness about good practices in urban transport for overall improvement:

For UMTA to be successful, it needs to conduct research and studies to take informed decisions. These studies

could be undertaken by in-house experts of UMTA or by external consultants. The research and studies should be based on the common database built by UMTA. There is also a role for UMTA in raising awareness about good practices in various aspects of urban transport. The latter could include providing training opportunities and support to new professionals from other agencies.

4. Develop and maintain transport analysis tools such as demand and network models, GIS, etc.:

UMTA should maintain network datasets that model transportation networks and perform route, closest facility, service area, origin-destination cost matrix, vehicle routing problem, and location-allocation network analyses on transportation networks.

The process for preparing common database for UMTA is depicted in Exhibit 22.

4.8 CONCLUSION

This chapter outlined the guidelines for carrying out various additional functions of UMTA, including providing input in policy, standards and guidelines, conducting alternative analysis, MYP preparation, regulation, and research studies and awareness.

ANNEXURE I – COMPARISON OF EXISTING AND PROPOSED UMTA FOR HYDERABAD

(Provided separately)

ANNEXURE II – LIST OF CONSULTANTS EMPANELLED BY MoUD

No. K-14011/13/2011-MRTS/UT-II (Pt. III)

Government of India
Ministry of Urban Development
(UT-I Division)

Nirman Bhawan, New Delhi

Dated 30th April, 2015

01st May

To

The Principal Secretaries/ Secretaries (Urban Development/ Transport) of all States/ UTs

Subject: Empanelment of Consultants for Providing Handholding Assistance to Indian Cities in Setting up Unified Metropolitan Transport Authority (UMTA) and Urban Transport Fund (UTF).

Sir/ Madam,

Ministry of Urban Development, Government of India is implementing the Sustainable Urban Transport Project (SUTP) with support from Global Environment Facility (GEF) and the World Bank with the objective to ensure that environmental considerations are taken into account in implementation of the National Urban Transport Policy (NUTP) and to achieve a paradigm shift in urban transport systems in favour of sustainable development. The project envisages setting up of Unified Metropolitan Transport Authority (UMTA) and Urban Transport Fund (UTF) in the cities.

2. The related operations documents for Unified Metropolitan Transport Authority (UMTA) and Urban Transport Fund (UTF) will be uploaded on the website <http://moud.gov.in/> and <http://www.sutpindia.com/> shortly for reference and guidance to establish Unified Metropolitan Transport Authority (UMTA) and Urban Transport Fund (UTF) by cities. As the concept is new to the Indian cities which will require additional support from agencies having required expertise, the **Ministry has empanelled seven (07) qualified consultants following a competitive process**. List of empanelled consultants in the order of their ranking is attached at **Annexure**.

3. This empanelment has been done for providing the handholding assistance to cities while setting up the UMTA and UTF without having to go through the process of inviting EOIs and identifying suitable agencies.

4. This panel of consultants with requisite expertise is exclusive and specific to the UMTA and UTF projects only. The cities are free to engage any consultant for UMTA and UTF either by using the enclosed list or engaging any other through their own procedures.

5. There is flexibility to add/ delete names from the list based on the performance. The list will be available on the MoUD website <http://moud.gov.in/>. The panel will be valid for a period of six (06) years and the respective cities may directly engage any of the empanelled consultants after issue of RFP and evaluation of the offer. Expenditure shall have to be met from their own resources.

Contd. on page 2/-....

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6. It is therefore requested to make use of the panel in setting up of UMTA and UTF and take early action in establishing these institutions which will go a long way in improving the transport system in your cities.

Yours faithfully,

Enclosure: As Above.



(R. K. Singh)
Director (UT-I)
Tel:- 011-2306 2798

Copy to:-

- i. Shortlisted Consultants
- ii. National Project Manager, PMU/ SUTP

ANNEXURE**List of Empaneled Consultants for Unified Metropolitan Transport Authority (UMTA) and Urban Transport Fund (UTF) from Ministry of Urban Development, Govt. of India**

S. No.	Empaneled Consultant	Rank	Address
1	Joint Venture of Deloitte Touche Tohmatsu India Pvt. Ltd. and Voyants Solutions Pvt. Ltd	1	Mr. Vishwas Udgirkar, Senior Director 7 th Floor, Building 10 Tower B DLF Cyber City Complex, DLF City Phase II (New Delhi / NCR) Gurgaon, Haryana – 122002, India Telephone no: +91 (0124) 679 2000 Mob: +91 98114 18230 Fax: 0124 679 2012 Email ID - vudgirkar@deloitte.com
2	Consortium of Infrastructure Development Finance Company Ltd. (IDFC), Infrastructure Development Corporation (iDeCK), Feedback Infrastructure Services Pvt. Ltd. and Delhi Integrated Multi-Modal Transit System Limited (DIMTS)	2	Infrastructure Finance Company Limited (IDFC) Ms. Jyoti Gujral, Director The Capital Court, 2 nd Floor, Olof Palme Marg, Munirka, New Delhi - 110 067 Tel: +91 11 4331 1000 Fax: 91 11 26713359 Email ID - Jyoti@idfc.com
3	Ernst and Young Pvt. Ltd in association with SYSTRA MVA Consulting (India) Pvt. Ltd.	3	Mr. Abhaya Krishna Agarwal Executive Director & National PPP Leader 6 th Floor, HT House, 18-20 Kasturba Gandhi Marg, New Delhi 110 001 Telephone: 011 4363 3060 Mob: +91-9871 6933 42 Email ID- abhaya.agarwal@in.ey.com
4	LEA Associates South Asia Pvt. Ltd. (LASA)	4	Mr. Ananda Kishore Das, Chief General Manager, B-1/E-27, Mohan Co-operative Industrial Estate, Mathura Road, New Delhi – 110044, India. Tel- +91-11-41678150, 26973950/51/52 Mobile: +91-9810381490 Email: anandakdas@lasaindia.com

P.T.O.


S. No.	Empaneled Consultant	Rank	Address
5	CRISIL Risk and Infrastructure Solutions Limited in association with SLS Transport Training Institute and Consultancy Pvt. Ltd.	5	<p>Mr. Abhay Kantak, Director, Urban Practice Crisil House, Central Avenue, Hiranandani Business Park, Powai, Mumbai – 400076</p> <p>Phone: 91-22-33422 3000 Mobile - +91-9820416720 Email - abhay.kantak@crisil.com</p>
6	RITES Ltd	6	<p>Mr. Piush Kansal, Group General Manager (Urban Transport)</p> <p>Registered Address: Scope Minar, Laxmi Nagar, Delhi – 110092 Corporate Address: Rites Bhawan, No- 01, Sector 29, Gurgaon – 122001 Tel- 0124 – 2571666 Email – info@rites.com</p>
7	Consortium of Urban Mass Transit Company India Limited (UMTC) and Cambridge Systematics Consulting & Technology Pvt. Ltd.	7	<p>Urban Mass Transit Company India Limited, 2nd Floor, Corporate Tower, Ambiance Mall, NH-8, Gurgaon – 122022, India Tel – 0124 – 4716300 Email-ankush.malthora@ilfsindia.com</p>

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ANNEXURE III - UMTA STAFF SPECIFICATIONS

Transport & Traffic Officer

Position	Transport & Traffic Officer (T&TO)
Position Description	
Reports to	Governing Board
<p>Purpose of the Position</p> <ul style="list-style-type: none"> a) To administer the affairs of the Authority and ensure smooth functioning. b) To execute the decisions and directives of the Governing Board. c) Exercise the powers and discharge the duties delegated by the Board. d) To recruit and manage the professionals in the Executive Office along with performance assessments. e) To manage the overall performance of all activities of the Authority and the achievement of key outcomes, in accordance with the delegations, instructions and approvals from the Board. f) To be the Chairperson of the Executive Office guiding through its development processes and ensuring that it efficiently and effectively carries out its functions and pursues its organisational objectives. g) To provide effective leadership by modelling the way and keeping the organisational values alive and well. 	
<p>Key Responsibilities</p> <p>Start Up Responsibilities</p> <ul style="list-style-type: none"> a) Manage and lead the executive office with a planned vision for the city transport b) Planned development of the city's transportation network based on integrated, sustainable, multimodal transport modes c) Ensure the finalisation of the operational procedures for the Governing Board and Secretariat, within three months from the date of establishment of the Governing Board, and submit these to the Board for approval. d) Develop a Vision plan within eight months of the establishment of the Board. e) Obtain approval of delegations from the Board. f) Obtain Board approval on the Operational Plan prepared by the consultants. g) Carry out and administer appointments of other key professionals and support staff as decided in the Operations Manual or as deemed necessary h) Ensure that the values, behaviour and culture of the people in the Authority are aligned with the mission of the Board and its strategic priorities. i) Obtain Board approval of agreements with the implementing agencies and revenue collection agencies. <p>Ongoing Responsibilities</p> <ul style="list-style-type: none"> a) To coordinate between the Governing Board and executive office for implementation of transport functions for the selected jurisdiction b) Evaluate and analyse the progress of the Authority's functioning process c) Advise and assist the governing Board members on project prioritization and speed up the project implementation process 	

Position	Transport & Traffic Officer (T&TO)
	<p>d) Arrange Board meetings and visits and ensure that agendas and minutes are prepared and distributed in accordance with agreed procedures.</p> <p>e) Co-ordinate and direct the overall activities of the Authority so as to achieve the objectives of the Board as stated in the Act and Manual.</p> <p>f) Represent the Board in acts of civil life – this includes representing the Board in meetings and negotiations with the implementing agencies, and representing the Board on all relevant national and international groups.</p> <p>g) Ensure that the activity programmes of the Authority are executed in an effective and efficient manner based on the three-year business plan.</p> <p>h) Ensure the proper organisation and functioning of the Board and Secretariat.</p> <p>i) Ensure that the objectives of the Board are met, driving the planning, budgeting and goal setting processes that communicate organisational objectives.</p> <p>j) Annually review the policies and procedures adopted by the Board.</p> <p>k) Ensure that the Authority operates in compliance with:</p> <ul style="list-style-type: none"> • the Act and rules made under the Act • all other relevant legislation and rules • its Business Plan • The policies and procedures adopted by the Board. <p>l) Ensure that the strategic plans are reviewed and updated as deemed necessary.</p> <p>m) Ensure that the Authority has adequate and skilled resources to meet its strategic objectives, including recruiting, appointing, assessing, dismissing staff in strict compliance with the legislative and regulatory provisions in force.</p> <p>n) Promote the Board's identity and public image and establish sound working relationships with clients, relevant Ministries, implementing agencies, the Board and stakeholders.</p> <p>o) In conjunction with the Technical heads of the Executive Office, propose delegations to the Board and exercise the delegated powers conferred by the Board.</p> <p>p) Ensure that all Board procurements, contracts and agreements are finalized and managed in a timely manner.</p> <p>a) Obtain Board approval of the annual budget, the annual and the corporate accounts and of other documents as deemed necessary time to time.</p> <p>q) Present regular progress reports to the Board.</p> <p>r) Approve staff loans.</p> <p>s) Keep informed of innovative and sustainable transport practices, trends and issues and prepare the Board to respond efficiently and effectively to the changing environment.</p>
	<p>Reporting</p> <p>The T&TO will report to the Governing Board at all meetings. The T&TO shall also be the formal link between the Governing Board and the Executive Office.</p>
	<p>Salary and Benefits</p> <p>The pay scale is recommended to be at par with that of central/state level public sector undertakings (PSUs).</p>

Position	Transport & Traffic Officer (T&TO)
<p>Required Competence</p> <ul style="list-style-type: none"> a) Demonstrated successful management of a similar sized organisation specialised in transport sector. b) Demonstrated understanding of the political, technical, financial and administrative requirements of an organisation of this nature. c) Strong leadership and motivational qualities. d) Highly developed verbal and written communication and negotiation skills, in both English and relevant regional languages. e) Should be an Indian citizen. 	
<p>Qualifications and Experience</p> <ul style="list-style-type: none"> a) At least a First Class Post Graduate Degree in any subject b) Minimum post qualification experience of 15 years with at least 10 years' experience in core transport sector c) Membership of a relevant professional body. d) Should be an expert in Transport planning and management e) Experience in a position with strategic focus, ability to rise above detail to summarise overall patterns, assess value and see trends. f) Experience in developing and describing the future vision in a way that encourages and motivates staff to follow. g) Extensive relationship management experience, including liaison with, communicating to, consulting with and influencing stakeholders. h) Experience of working with central and local Government and experience in presentation and advocacy before Government. i) Understanding of regulatory principles and the ability to apply them. j) Experience in managing large groups of employees and demonstrated ability to develop and lead effective teams. k) Proven time management and multiple task management capabilities. l) Working knowledge of up to date financial and organisational management processes. m) Experience with the start-up of a company and related change management is a plus. n) Candidates with Bachelor's degree in Civil Engineering or Architecture shall be preferred o) Master's degree in Transport /Urban /Regional Planning from a recognized university shall be desirable 	
<p>Skills and Personal Attributes</p> <ul style="list-style-type: none"> a) Client focused. b) Good understanding of the work environment and trends, organisational performance, and the political and regulatory climate. c) Identifies potential opportunities, risks and issues before they arise and prepares effective responses. d) Develops and maintains strong relationships with Government Ministers and agencies and key stakeholders in the industry. e) Actively demonstrates, promotes and models desired organisational behaviours and 	

Position	Transport & Traffic Officer (T&TO)
<p>values.</p> <ul style="list-style-type: none"> f) Promotes a climate of innovation, change and adaptation. g) Consults and shares information within a team environment and across functionality. h) Delegates decision making where appropriate, ensuring that staff have the capability and knowledge to make sound decisions. i) Makes timely decisions based upon evidence and on merit. j) Leads and manages the organisation through change and transition. 	

Transport Planning Expert(s)

Position	Transport Planning Expert(s)
Position Description	
Reports to	T&TO
<p>Purpose of the Position</p> <p>a) To be part of the senior management of the authority and being in-charge of the Planning function of UMTA ensuring that it efficiently and effectively carries out its functions and pursues its organisational objectives.</p> <p>b) To provide strategic support to the T&TO and the board on all matters related to planning for the overall development of the urban transport sector including preparation and finalisation of Comprehensive Mobility Plan and other such strategic planning works.</p> <p>c) To provide effective leadership of Executive office staff by modelling the way and keeping the organisational values alive and well.</p> <p>d) To provide leadership, enhance strategic capability and provide service excellence in the relevant technical or management field.</p>	
<p>Key Responsibilities</p> <p>a) Developing a vision for the urban area's transport system from planning perspective</p> <p>b) Developing principles and policies for sustainable urban transport system for the urban area</p> <p>c) Developing and finalisation of Comprehensive Mobility Plan for the urban area</p> <p>d) Ensuring the integration of the urban transport planning with land-use planning</p> <p>e) Ensuring effective coordination with all relevant agencies for achieving the objectives of the planning function of UMTA</p> <p>f) Finalisation of a detailed multi-year programme for urban transport In conjunction with implementation agencies</p> <p>g) Estimate and prioritize short and long term plans</p> <p>h) Coordinate with the other experts of UMTA for integrated holistic development of transport system within the urban area.</p> <p>i) In consultation with the other experts, aid and advise the State Government on matters relating to urban transport</p> <p>j) Perform all such other functions as may be prescribed by the T&TO of UMTA time to time</p> <p>k) Effectively represent the Board's interests to external stakeholders and key partners.</p> <p>l) Ensure that the values, behaviours and culture of the staff working under different experts are aligned with the strategy of the Board to achieve a truly integrated work environment.</p> <p>m) Demonstrate excellence in staff management including the appropriate recruitment, retention, performance management and development of employees.</p>	
<p>Reporting</p> <p>The Transport Planning Expert(s) shall report regularly to the T&TO through verbal and as necessary, written, reports. The Transport Planning Expert(s), shall periodically prepare and present written reports to the Board, particularly on policy, planning, projects and programme matters.</p>	

Position	Transport Planning Expert(s)
<p>Salary and Benefits</p> <p>The pay scale is recommended to be at par with that of central/state level public sector undertakings (PSUs).</p>	
<p>Required Competence</p> <ul style="list-style-type: none"> a) Leadership: The quality to inspire, lead, coach and develop others to achieve desired goals and objectives. This competency includes defining a vision and guiding individuals towards that vision. b) Strategic Transport Planning Excellence: This includes deep understanding of strategic planning, sector understanding, regulatory environment, international best practices, government policies and their effects etc. c) Decision Making / Problem Solving: The ability to effectively analyse and evaluate information and situations and render effective decisions. This includes anticipating, identifying and defining problems, seeking root causes and developing and implementing practical and timely solutions. d) Strategic Orientation: The ability to think and act strategically, to link short and long-term visions to daily activities. This includes the ability to provide clear direction and priorities, and clarify roles and responsibilities. This direction is based on a wider external perspective, where the directions of industry and community are considered. e) Results Orientation: A commitment to meeting and exceeding standards of excellence. f) Risk Management Orientation: This is the ability to identify and take advantage of opportunities while identifying and minimizing risks that will impede the authority from achieving its goals. g) Innovation: The ability to identify innovative solutions, innovative planning, identifying efficient processes, identifying non-value adding processes and develop creative approaches that lead to overall improvement in working and the urban transport sector. 	
<p>Qualifications and Experience</p> <ul style="list-style-type: none"> a) Post graduate degree in the Transport Planning / relevant field. b) At least 15 years of work experience with at least 5 years of experience in Senior Management position in Transport Planning Function of any public / private sector entity. c) Membership of a relevant professional body. d) Experience in Transport planning, development of transport sector programmes and economic appraisal. e) Sound knowledge of transport planning and programming theories and methods. f) Proven strategic thinking. g) Experience in developing and describing the future vision, in a way that encourages and motivates staff to follow. h) Experience in a position with strategic focus, ability to rise above detail, to summarise overall patterns, assess value, and see trends. i) Experience in delegation, managing workloads and work streams, budgeting and monitoring costs, and ensuring compliance. j) Experience in building and fostering relationships. k) Significant leadership experience in a range of corporate positions and proven 	

Position	Transport Planning Expert(s)
<p>management ability.</p> <p>l) Has highly developed verbal and written communication skills in English and relevant regional languages.</p>	
<p>Skills and Personal Attributes</p> <p>a) Maintains a good understanding of the work environment and trends, authority's performance, and the political and regulatory climate and identifies potential opportunities, risks and issues before they arise.</p> <p>b) Actively demonstrates, promotes and models desired organizational behaviours and values.</p> <p>c) Promotes a climate of innovation, change and adaptation within own area.</p> <p>d) Delegates decision making where appropriate, ensuring staff have the capability and knowledge to make sound decisions.</p> <p>e) Makes timely decisions based on evidence and on merit, within authority levels, and takes responsibility for the results.</p> <p>f) Gathers all relevant information, utilises an analytical and logical approach to problem solving, and accurately assesses impact of decisions made.</p> <p>g) Takes responsibility for the position accountability and own actions, and for the actions of staff who report to the position.</p> <p>h) Is honest, ethical, and able to develop and maintain the trust and confidence of all constituents.</p> <p>i) Demonstrates strong leadership within the planning function and with the management team as a whole</p> <p>j) Has strong communication skills</p> <p>k) Works reliably under pressure to produce timely, accurate information</p> <p>l) Maintains awareness of overall organisational goals, and looks for opportunities to contribute organisation-wide as able.</p>	

Public Transport Management Expert(s)

Position	Public Transport Management Expert(s)
Position Description	
Reports to	T&TO
<p>Purpose of the Position</p> <p>a) To be part of the senior management of the authority and being in-charge of the Public Transport Management function of UMTA ensuring that it efficiently and effectively carries out its functions and pursues its organisational objectives.</p> <p>b) To provide strategic support to the T&TO and the board on all matters related to public transport management for the overall development of the urban transport sector including planning for integrated sustainable public transportation for the urban area and overseeing operation of integrated facilities and systems for public transport and all associated regulatory matters.</p> <p>c) Develop standards and guidelines for public transport services specific to the urban area in consonance with the land-use pattern of the city.</p> <p>d) To provide effective leadership of executive office staff by modelling the way and keeping the organisational values alive and well.</p> <p>e) To provide leadership, enhance strategic capability and provide service excellence in the relevant technical or management field.</p>	
<p>Key Responsibilities</p> <p>a) Developing plan and strategy for integration of all public transport modes to ensure development of sustainable integrated transport system for the urban area.</p> <p>b) Planning, strategizing and overseeing the implementation of projects for integration of public transport in the urban area</p> <p>c) Overseeing the operation of facilities and systems implemented for integration of public transport in the urban area</p> <p>d) Developing standards and guidelines for public transport services specific to the urban area in consonance with the land-use pattern of the city</p> <p>e) Planning, strategizing and implementing/coordinating for implementing all related regulatory functions including:</p> <ul style="list-style-type: none"> • Contracting public transport operators for operating in the urban area • Strategizing for issue of licenses for public transport services in the urban area • Monitoring and regulating (or providing support in regulating) fee and charges of different modes of public transport <p>f) Coordinating with all other relevant implementing agencies and supervise project implementation</p> <p>g) Coordinating with research experts for innovative public transport solutions suitable to the urban area</p> <p>h) Promoting development of integrated multi-modal public transport systems for the urban area</p> <p>i) Performing all such other functions as may be prescribed by the T&TO time to time</p> <p>j) Effectively represent the Board's interests to external stakeholders and key partners.</p> <p>k) Demonstrate excellence in staff management including the appropriate recruitment,</p>	

Position	Public Transport Management Expert(s)
retention, performance management and development of employees.	
Reporting	
The Public Transport Management Expert(s) shall report regularly to the T&TO through verbal and as necessary, written, reports. The Public Transport Management Expert(s) shall periodically prepare and present written reports to the Board, particularly on policy, planning, projects and programme matters.	
Salary and Benefits	
The pay scale is recommended to be at par with that of central/state level public sector undertakings (PSUs).	
Required Competence	
<ul style="list-style-type: none"> a) Leadership: The quality to inspire, lead, coach and develop others to achieve desired goals and objectives. This competency includes defining a vision and guiding individuals towards that vision. b) Public Transport Management Excellence: This includes deep understanding of overall institutional structure of public transport management especially for the urban area, the different public transport operators, the infrastructure requirements of urban transport, the operation and maintenance aspects of urban transport etc. c) Decision Making / Problem Solving: The ability to effectively analyse and evaluate information and situations and render effective decisions. This includes anticipating, identifying and defining problems, seeking root causes and developing and implementing practical and timely solutions. d) Strategic Orientation: The ability to think and act strategically, to link short and long-term visions to daily activities. This includes the ability to provide clear direction and priorities, and clarify roles and responsibilities. This direction is based on a wider external perspective, where the directions of industry and community are considered. e) Results Orientation: A commitment to meeting and exceeding standards of excellence. f) Risk Management Orientation: This is the ability to identify and take advantage of opportunities while identifying and minimizing risks that will impede the authority from achieving its goals. g) Innovation: The ability to identify innovative solutions, innovative planning, identifying efficient processes, identifying non-value adding processes and develop creative approaches that lead to overall improvement in working and the urban transport sector. 	
Qualifications and Experience	
<ul style="list-style-type: none"> a) Post graduate degree in Transport Planning / Transport Engineering / other relevant field b) At least 15 years of work experience with at least 5 years of experience in Senior Management position in Public Transport function in any public / private sector entity. c) Membership of a relevant professional body d) Experience in planning / strategy formulation / implementation of public transport projects e) Experience in planning / strategy formulation / operation of public transport facilities and systems 	

Position	Public Transport Management Expert(s)
	<ul style="list-style-type: none"> f) Experience in regulatory aspects g) Experience in a position with strategic focus, ability to rise above detail, to summarise overall patterns, assess value, and see trends. h) Experience in: delegation, managing workloads and work streams, budgeting and monitoring costs, and ensuring compliance. i) Proven strategic thinking. j) Understanding of effective information delivery techniques including education, marketing and communication. k) Experience in building and fostering relationships.
<p>Skills and Personal Attributes</p>	<ul style="list-style-type: none"> a) Maintains a good understanding of the work environment and trends, authority's performance, and the political and regulatory climate and identifies potential opportunities, risks and issues before they arise. b) Actively demonstrates, promotes and models desired organizational behaviours and values. c) Promotes a climate of innovation, change and adaptation within own area. d) Delegates decision making where appropriate, ensuring staff have the capability and knowledge to make sound decisions. e) Makes timely decisions based on evidence and on merit, within authority levels, and takes responsibility for the results. f) Gathers all relevant information, utilises an analytical and logical approach to problem solving, and accurately assesses impact of decisions made. g) Takes responsibility for the position accountability and own actions, and for the actions of staff who report to the position. h) Is honest, ethical, and able to develop and maintain the trust and confidence of all constituents. i) Demonstrates strong leadership within the planning function and with the management team as a whole j) Has strong communication skills k) Works reliably under pressure to produce timely, accurate information l) Maintains awareness of overall organisational goals, and looks for opportunities to contribute organisation-wide as able.

Traffic Management Expert(s)

Position	Traffic Management Expert(s)
Position Description	
Reports to	T&TO
<p>Purpose of the Position</p> <ul style="list-style-type: none"> a) To lead the traffic management functions of UMTA through its development processes and ensuring that it efficiently and effectively carries out its functions and pursues its organisational objectives. b) To provide technical inputs to all the other experts of UMTA. c) To develop standards and guidelines on technical aspects of urban transport and provide these inputs for overall development of urban transport. d) The Expert(s), in coordination with the staff will review all papers for the Board, review and lead development of strategies and plans developed by experts corresponding to the UMTA objectives. e) To provide effective leadership, enhance strategic capability and provide service excellence in the relevant technical or management field. 	
<p>Key Responsibilities</p> <ul style="list-style-type: none"> a) Preparing standards and guidelines specific to transport engineering or as deemed necessary time to time. b) Providing technical input to other experts c) Coordinating with all relevant implementing agencies and supervising in project implementation, if required d) Providing technical inputs in development and operation of integrated, facilities and systems. e) Supervising and monitoring the implementation of projects by Consultants or otherwise at regular intervals. f) Provide value-added expertise in engineering discipline and project leadership. g) Provide execution oversight for important research, development, and evaluation efforts. h) Perform all such other functions as may be prescribed by the Board / T&TO time to time i) Effectively represent the Board's interests to external stakeholders and key partners. j) Demonstrate excellence in staff management including the appropriate recruitment, retention, performance management and development of employees. 	
<p>Reporting</p> <p>The Traffic Management Expert(s), shall report regularly to the T&TO through verbal and as necessary, written, reports. The Traffic Management Expert(s) shall periodically prepare and present written reports to the Board, particularly on policy, planning, projects and programme matters.</p>	
<p>Salary and Benefits</p> <p>The pay scale is recommended to be at par with that of central/state level public sector undertakings (PSUs).</p>	

Position	Traffic Management Expert(s)
<p>Required Competence</p> <ul style="list-style-type: none"> a) Leadership: The quality to inspire, lead, coach and develop others to achieve desired goals and objectives. This competency includes defining a vision and guiding individuals towards that vision. b) Engineering Excellence: This includes deep understanding of engineering related aspects especially for the urban transport sector with focus on urban transport infrastructure and operations. c) Decision Making / Problem Solving: The ability to effectively analyse and evaluate information and situations and render effective decisions. This includes anticipating, identifying and defining problems, seeking root causes and developing and implementing practical and timely solutions. d) Strategic Orientation: The ability to think and act strategically, to link short and long-term visions to daily activities. This includes the ability to provide clear direction and priorities, and clarify roles and responsibilities. This direction is based on a wider external perspective, where the directions of industry and community are considered. e) Results Orientation: A commitment to meeting and exceeding standards of excellence. f) Risk Management Orientation: This is the ability to identify and take advantage of opportunities while identifying and minimizing risks that will impede the authority from achieving its goals. g) Innovation: The ability to identify innovative solutions, innovative planning, identifying efficient processes, identifying non-value adding processes and develop creative approaches that lead to overall improvement in working and the urban transport sector. 	
<p>Qualifications and Experience</p> <ul style="list-style-type: none"> a) Post graduate degree in Transport Engineering / other relevant field b) At least 15 years of work experience with at least 5 years of experience in Senior Management position in Engineering Function of any public / private sector entity working in public transport sector. c) Membership of a relevant professional body d) Experience in engineering aspects of transportation projects including transport infrastructure, transport operations, systems and facilities development and operation etc. e) Experience in a position with strategic focus, ability to rise above detail, to summarise overall patterns, assess value, and see trends. f) Experience in delegation, managing workloads and work streams, budgeting and monitoring costs, and ensuring compliance. g) Proven strategic thinking. h) Understanding of effective information delivery techniques including education, marketing and communication. i) Experience in building and fostering relationships. 	
<p>Skills and Personal Attributes</p> <ul style="list-style-type: none"> a) Maintains a good understanding of the work environment and trends, authority's performance, and the political and regulatory climate and identifies potential opportunities, risks and issues before they arise. 	

Position	Traffic Management Expert(s)
	<ul style="list-style-type: none"> b) Actively demonstrates, promotes and models desired organizational behaviours and values. c) Promotes a climate of innovation, change and adaptation within own area. d) Delegates decision making where appropriate, ensuring staff have the capability and knowledge to make sound decisions. e) Makes timely decisions based on evidence and on merit, within authority levels, and takes responsibility for the results. f) Gathers all relevant information, utilises an analytical and logical approach to problem solving, and accurately assesses impact of decisions made. g) Takes responsibility for the position accountability and own actions, and for the actions of staff who report to the position. h) Is honest, ethical, and able to develop and maintain the trust and confidence of all constituents. i) Demonstrates strong leadership within the planning function and with the management team as a whole j) Has strong communication skills k) Works reliably under pressure to produce timely, accurate information l) Maintains awareness of overall organisational goals, and looks for opportunities to contribute organisation-wide as able.

Policy and Technical Support Expert(s)

Position	Policy and Technical Support Expert(s)
Position Description	
Reports to	T&TO
<p>Purpose of the Position</p> <ul style="list-style-type: none"> a) To lead the Policy and Technical Support function of UMTA and ensure that it efficiently and effectively carries out its functions and pursues its organisational objectives. b) To carry out policy, research, education and awareness activities for overall development of urban transport. c) To develop and manage local performance indicators for urban transport d) To provide effective leadership in enhance strategic capability and providing service excellence in the relevant field. 	
<p>Key Responsibilities</p> <ul style="list-style-type: none"> a) Leading the activities of conducting research studies, education and awareness about good practices in urban transport b) Providing strategic inputs in development of policy, standards and guidelines for overall development of urban transport c) Ensuring the maintenance of updated database with information relating to urban transport, including details of projects, services, funding, and public transport safety etc. d) Contributing to developing and managing performance indicators for urban transport e) Monitoring and advising on public transport safety f) Identify, analyse and recommend innovative and improved practices, technology and processes for overall improvement of urban transport g) Developing networks in the research community in the field of public transport locally, nationally and internationally. h) Suggesting trainings, capacity buildings for enhancing quality of professionals in the urban transport. i) Perform all such other functions as may be prescribed by the T&TO time to time 	
<p>Reporting</p> <p>The Policy and Technical Support Expert(s), shall report regularly to the T&TO through verbal and as necessary, written, reports. The Policy and Technical Support Expert(s), shall periodically prepare and present written reports to the Board, particularly on policy, planning, projects and programme matters.</p>	
<p>Salary and Benefits</p> <p>The pay scale is recommended to be at par with that of central/state level public sector undertakings (PSUs).</p>	
<p>Required Competence</p> <ul style="list-style-type: none"> a) Leadership: The quality to inspire, lead, coach and develop others to achieve desired goals and objectives. This competency includes defining a vision and guiding individuals towards that vision. b) Policy and Research Excellence: This includes deep understanding of overall policy and governance frameworks, public transport standards and guidelines, best 	

Position	Policy and Technical Support Expert(s)
	<p>practices, research studies etc.</p> <p>c) Decision Making / Problem Solving: The ability to effectively analyse and evaluate information and situations and render effective decisions. This includes anticipating, identifying and defining problems, seeking root causes and developing and implementing practical and timely solutions.</p> <p>d) Strategic Orientation: The ability to think and act strategically, to link short and long-term visions to daily activities. This includes the ability to provide clear direction and priorities, and clarify roles and responsibilities. This direction is based on a wider external perspective, where the directions of industry and community are considered.</p> <p>e) Results Orientation: A commitment to meeting and exceeding standards of excellence.</p> <p>f) Risk Management Orientation: This is the ability to identify and take advantage of opportunities while identifying and minimizing risks that will impede the authority from achieving its goals.</p> <p>g) Innovation: The ability to identify innovative solutions, innovative planning, identifying efficient processes, identifying non-value adding processes and develop creative approaches that lead to overall improvement in working and the urban transport sector.</p>
<p>Qualifications and Experience</p>	<p>a) Post graduate degree in Public Policy / Arts (Public Policy) / other relevant field</p> <p>b) At least 15 years of work experience with at least 5 years of experience in Senior Management position in Policy and / or Research division of any public sector entity (preferably in urban transport).</p> <p>c) Membership of a relevant professional body</p> <p>d) Experience in policy making, research and analysis aspects of urban transport sector</p> <p>e) Experience in a position with strategic focus, ability to rise above detail, to summarise overall patterns, assess value, and see trends.</p> <p>f) Experience in delegation, managing workloads and work streams, budgeting and monitoring costs, and ensuring compliance.</p> <p>g) Proven strategic thinking.</p> <p>h) Understanding of effective information delivery techniques including education, marketing and communication.</p> <p>i) Experience in building and fostering relationships.</p>
<p>Skills and Personal Attributes</p>	<p>a) Maintains a good understanding of the work environment and trends, authority's performance, and the political and regulatory climate and identifies potential opportunities, risks and issues before they arise.</p> <p>b) Actively demonstrates, promotes and models desired organizational behaviours and values.</p> <p>c) Promotes a climate of innovation, change and adaptation within own area.</p> <p>d) Delegates decision making where appropriate, ensuring staff have the capability and knowledge to make sound decisions.</p> <p>e) Makes timely decisions based on evidence and on merit, within authority levels, and takes responsibility for the results.</p>

Position	Policy and Technical Support Expert(s)
	<ul style="list-style-type: none"> f) Gathers all relevant information, utilises an analytical and logical approach to problem solving, and accurately assesses impact of decisions made. g) Takes responsibility for the position accountability and own actions, and for the actions of staff who report to the position. h) Is honest, ethical, and able to develop and maintain the trust and confidence of all constituents. i) Demonstrates strong leadership within the planning function and with the management team as a whole j) Has strong communication skills k) Works reliably under pressure to produce timely, accurate information l) Maintains awareness of overall organisational goals, and looks for opportunities to contribute organisation-wide as able.

ANNEXURE IV - TEMPLATE FOR THE NOTE FOR GOVERNMENT OF TELANGANA

[Please note that this will depend on the state legal department rules followed and we would not be able to comment on the same].

No. _____

Government of Telangana

[Department of Legal Affairs]

Hyderabad

Note for the State Government

Subject: Establishment of Unified Metropolitan Transport Authority and Urban Transport Fund in Hyderabad – Enactment of Legislation - Regarding

1. Introduction

A snapshot of the proposal in 3 or 4 sentences.

2. Background

A brief background of the proposal to understand its genesis. This would include reference to NUTP 2006, initiatives by Ministry of Urban Development - Government of India, development of generic legislation for setting up UMTA and UTF by Ministry of Urban Development, Government of India, initiatives for setting up UMTA and UTF in the Hyderabad urban area etc.

3. Proposal

The proposal may be stated with clarity and precision so that there is no ambiguity in what the urban area aims to achieve by implementing the proposal. The time-lines for completion of different stages of the projects/scheme/plan etc., where relevant, need to be clearly spelt out.

4. Justification

Rationale of the proposal may be brought out in this part of the note.

5. Stakeholder Consultations

Details of all stakeholder consultations and their views/comments should be brought out in this section.

6. Financial Implications

The financial implications of the proposal may be worked out as accurately as possible and should be detailed in this section. Further, the manner in which the expenditure is proposed to be borne may also be clearly indicated.

7. Approval Paragraph

The approval paragraph shall contain the proposal on which consideration and approval of the Cabinet is solicited. It should be a self-contained paragraph and drafted with clarity and

precision leaving no scope for ambiguity or differing interpretations.

8. Statement Of Implementation Schedule (Appendix- I)

As per prescribed format and conforming to the approval paragraph.

9. Statement Of Equity, Innovation And Public Accountability (Appendix- II)

As per prescribed format. Brief details of how the proposal will sub serve the three criteria to be included in the main body of the note.

10. Approval of the Minister-in-charge

The last paragraph should indicate about the approval of the Minister-in-charge to the proposal(s) contained in the note.

Enclosed: Draft Legislation*

Signature_____

Name_____

Designation_____

Telephone No._____

****Draft Legislation should be enclosed along with the Note***

Note: The above format is indicative and the exact headings may vary.

ANNEXURE V - STATEMENT OF IMPLEMENTATION SCHEDULE

Subject: Establishment of Unified Metropolitan Transport Authority and Urban Transport Fund

S No.	Gist of Decision Required	Projected Benefits	Time-frame and manner of Implementation

Signature_____

Name_____

Designation_____

Telephone No._____

Note: The above format is indicative and the exact headings may vary.

ANNEXURE VI - STATEMENT OF EQUITY, INNOVATION AND PUBLIC ACCOUNTABILITY

Subject: Establishment of Unified Metropolitan Transport Authority and Urban Transport Fund

S No.	The required goal	How does the proposal advance this goal?
1.	Equity or Inclusiveness	
2.	Innovation	
3.	Public Accountability	

Signature_____

Name_____

Designation_____

Telephone No._____

Note: The above format is indicative and the exact headings may vary.



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