

URBAN TRANSPORT INITIATIVES IN INDIA

BEST PRACTICES IN PPP



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PREFACE

Most of the cities in India have been facing transport problems for past many years affecting the mobility of people and the economic growth of the urban areas. Keeping these in view, the Government of India approved the National Urban Transport Policy in April 2006. It focuses on mobility of people; integration of land use and transport planning; improvement in public transport; introduction of intelligent transport system; facilities for non-motorised modes; capacity building; revolving legal and administrative issues; involvement of private sector; innovative financing mechanism; use of cleaner technology and major awareness campaign for citizens.

In this context, many urban transport initiatives have been taken up in India, such as Modern Bus Services, Bus Rapid Transit System, Public-Private Partnership, Unified Mass Transport Authorities, Metro Rail Systems etc.

In view of the above, the present study documents transport initiatives /projects undertaken in ten cities of India, which includes four BRTS projects of Ahmedabad, Pimpri-Chinchwad, Vishakhapatnam, Jaipur; five modern city bus services of Jalandhar, Jabalpur, Surat, Vadodara and Jalgaon; and multi-level underground parking project of Kolkata. Barring Jaipur Public Transport project, remaining projects are PPP based projects. The study presents description of the project, identifies challenges/constraints, lessons learnt and finally gives suggestions.

We hope that the report will be helpful to urban transport planners and professionals in formulating and implementing the transport projects in the country.

We wish to express our sincere thanks to the Ministry of Urban Development for giving us this opportunity to work on the study. Thanks are also due to officials of Special Purpose Vehicles, Urban Local Bodies, State Governments and Private-Sector Organisations of the selected cities.



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List of Abbreviations

ADB	Asian Development Bank
AMTS	Ahmedabad Municipal Transport Service
AMC	Ahmedabad Municipal Corporation
BOT	Built Operate and Transfer
BOOT	Built Own Operate and Transfer
BRTS	Bus Rapid Transit System
CIRT	Central Institute for Research in Transportation
CBD	Centre Business District
CEPT	Centre for Environmental Planning & Technology
CMP	Comprehensive Mobility Plan
CNG	Compressed Natural Gas
DPR	Detail Project Report
DP	Development Plan
ETS	Efficient Transport System
FoB	Foot over Bridges
GPS	Global Positioning System
GoI	Government of India
GoR	Government of Rajasthan
GIDB	Gujarat Industrial Development Board
GSRTC	Gujarat State Road Transport Corporation
ITS	Intelligent Transport System
IPT	Intermediate Public Transport
JCTSL	Jaipur City Transport Service Limited
JDA	Jaipur Development authority
JNNURM	Jawaharlal Nehru National Urban Renewal Mission

KM:	Kilometre
KMC	Kolkata Municipal Corporation
LRT	Light Rapid Transport
MIDC	Maharashtra Industrial Development Corporation
MSRTC	Maharashtra State Road Transport Corporation
MRTS	Mass Rapid Transit system
MoUD	Ministry of Urban Development
NUTP	National Urban Transport Policy
NGO	Non Government Organisation
PHPDT	Peak Hour Peak Direction Trip
PPHPD	Person per Hour per Direction
PCMC	Pimpri-Chinchwad Municipal Corporation
PPP	Public Private Partnership
PMPML	Pune Mahanagar Parivahan Mahamandal Ltd.
RSRTC	Rajasthan State Road Transport Corporation
RUIDP	Rajasthan Urban Infrastructure Development Program
RTA	Regional Transport Authority
RoW	Right of Way
SPV	Special Purpose Vehicle
SMC	Surat Municipal Corporation
TDR	Transfer of Development Right
UMTA	Unified Mass Transit Authority
UTF	Urban Transport Fund
UTF	Urban Transport Fund
VMSS	Vadodara Mahanagar Seva Sadan

Executive Summary

Background

The present study documents ten urban transport initiatives / projects undertaken in ten cities of India. It covers four Bus Rapid Transit System (BRTS) projects of Ahmedabad, Pimpri-Chinchwad, Visakhapatnam, Jaipur; five modern city bus services of Jalandhar, Jabalpur, Surat, Vadodara and Jalgaon; and multilevel underground parking project of Kolkata. Apart from Jaipur Public Transport (through BRT and modern city bus service) project, the remaining are Public-Private Partnership (PPP) based projects. For each, the study documents description of the project including situation before implementation of the initiative, factors of success, budgetary implications, performance and impact of the project. Besides, it also identifies challenges / constraints, lessons learnt and finally provide suggestions.

Public-Private Partnership

Based on the analysis, one can infer that public and private sectors enter into PPP through various types of agreements, contracts or concessions to meet their requirements. Public sector usually do not have sufficient finances or technical expertise or means due to which they have to depend upon private sector for procuring, operating and maintaining of buses; erection of bus shelters / bus stops; providing ITS and other infrastructures. However, the role of public sector is planning, designing, identification of routes, fixing of fares, over all supervision and monitoring of the project. In a nutshell, this is all done for providing efficient and better quality of services to the citizens.

It is expected that the PPP arrangements may help in making the project successful in terms of operational performance. This largely depends upon financial performance, which itself is subject to management efficiency and fare structure. The system should initially recover its operating cost from its fare box (achieving breakeven point). Capital cost is recovered in a fixed period of time either from fare box or revenue from other sources, like advertisements, rents, etc. The following section of this chapter tries to identify success stories - '*Best Practices*' by evaluating overall performance of the case projects with the available data / information on the projects.

Best Practices

Out of ten urban transport projects, eight have been implemented and running successfully. However, Jalgaon City Bus Service (JCBS) has been started recently. Amongst the eight implemented projects, two are the BRTS of Ahmedabad and Jaipur; five are City bus services of Jalandhar, Surat, Jabalpur, Vadodara, Jalgaon; and Kolkata Multilevel Underground Parking Project. Above mentioned case studies may be treated as success stories in terms of their overall performance and impacts of the projects.

Major Challenges / Constraints

It is to be mentioned that these case studies are success stories in many respect but these have encountered many challenges or constraints, either at the time of planning or at the time of implementation. Challenges / constraints indicated in the case studies may be classified in following categories:

a) Finance

- Financial constraints due to cost escalation; and
- Financial sustainability of overall operation.

b) Planning

- Inadequate 'Right of Way' (RoW) in some areas;
- Availability of minimum RoW to achieve segregation of traffic on the corridors;
- Land acquisition of properties to produce RoW;
- Acquisition of land for construction of depot, workshop and bus terminals;
- Unavailability of lands for provision of parking near bus stops;
- Land acquisition which delays the implementation process;
- Lack of interagency coordination; and
- Shifting of utility services addressing drainage.

c) Operation of Buses

- Low frequency of buses;

- Buses are time efficient but the frequencies of these buses are very low; and
- Existing routes are not viable for profit to the Bus Operators.

d) Technical

- Problem of driving buses as the engine fitted at the rear side of bus and there is no automatic transmission system; and
- As buses are big in size, operation on narrow road is not smooth having inadequate turning radius.

e) Socio-Economic Issues

- Agitation by auto rickshaws drivers;
- Poor knowledge of traffic sense of the citizens have created difficulties in day to day traffic despite efforts towards high standards of traffic engineering in the city; and
- Strategic locations of settlements where property acquisition is rather difficult.

Suggestions

Following are the suggestions based on review of case studies:

- a) The analysis of various case projects reveals that PPP is one of the factors, which is responsible for making the project successful.
- b) The public sector should be responsible for planning, designing, identifying routes and locations of bus stops / bus queue shelters, fixing of fares etc Moreover, it should be responsible for monitoring the operation of buses to ascertain as to whether the operators are operating buses as per the schedule or time table.
- c) Fixation of fares or preparing fare structure should be done by the public authorities. Moreover, the fares should be revised periodically to meet the operating cost.
- d) The authorities should explore other ways to generate revenues besides the fare box.

- e) Where Municipal Corporations or Public Transport Undertakings are not financially sound, they should enter into PPP and engage the private sector through service contract to procure, operate and maintain buses.
- f) If a public sector does not have technical and engineering means, it may involve the private sector for specific purposes.
- g) In order to make the BRTS more successful, it may be suggested to identify nodal points at BRT corridors and provide 'feeder' services from these nodal points to important city areas.
- h) Land acquisition for providing 'Right of Way' in city area had become one of the major constraints. In such cases, the Government should take a quick decision to release the land by giving appropriate compensations to the property owners.
- i) Coordination problems have been faced with the agencies involved. In this regard, it may be suggested that the public body-Special Purpose Vehicle (SPV) or transport committee should intervene to solve the coordination problem with the relevant departments or agencies involved.
- j) Technically sound projects are not successful in many instances due to unavailability of adequate project information for the general public. Awareness Campaign should be organized to provide knowledge about the project.