



L&T Infra Engineering

L&T Infrastructure Engineering Ltd.

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- 1. Chapter 9 – Cost Estimates and Financing Options

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9 Cost Estimates and Financing Options

9.1 Cost Estimates

9.1.1 Introduction

The transportation improvement proposals identified as part of CMP are broadly classified into following three categories as discussed in **Chapter 8**.

- Short-term proposals
- Medium-term proposals
- Long-term proposals

Short-term proposals include provision of road signage & marking, development of bus shelters, strengthening of roads, provision of raised pedestrian crossing, junction improvements, installation of street lighting etc.

Medium-term proposals include proposals related to parking management, NMT, PT and Road development proposals such as development of on-street and off-street parking facilities; development of footpaths and cycle tracks; widening of roads which also includes removal of encroachments and provision of footpaths; expansion of intra-city bus terminal at Sakchi; up-gradation of bus depots at Agrico and Baridih; development of missing links; construction of ROB/RUB etc.

Long-term proposals include development of mobility corridors which also include development of footpaths etc., development of marine walkways, relocation ISBT terminal and development of truck terminal.

The overall cost for implementation of proposals is estimated as Rs. 1,520.78 crore in next 20 years in which cost of elevated corridor itself accounts to about 50% i.e., Rs. 746.64 crore. Further the cost of short-term, medium-term and long-term proposals are estimated as Rs. 31.19 crore, Rs. 1,158.15 crore and Rs. 331.44 crore respectively. It has to be noted that the land acquisition cost is not included in the cost estimates.

The proposals are suggested for implementation in three phases as presented below.

- Phase I (2016 – 2019)
- Phase II (2020 – 2025)
- Phase III (2026 – 2035)

The phase-wise costing of the proposals is estimated to be Rs. 777.83 crore for Phase I, Rs. 375.35 crore for Phase II and Rs. 367.60 crore for Phase III. The summary of cost estimates is presented in **Table 9-1**.

Table 9-1: Summary of Cost Estimate

9.1.2 Limitations

To arrive at the cost estimates, Consultants have relied on secondary data, market information and have ensured to the best of its ability the correctness of the same. However, material markets in cities/ towns continue to be non-transparent, subject to non-disclosure and fragmentation. Therefore, the cost estimates provided in this chapter are preliminary in nature and shall be treated as “reference” information.

All facts & figures, unit rates etc. discussed in this chapter are based on macro-level assessment. Hence, they shall be considered as “indicative rates/ estimates”. Detailed/ micro-level cost estimates shall be carried out separately. Land acquisition cost is not included in arriving at the cost estimates.

9.2 Financing Options

9.2.1 General

As per the recommendations of working group on urban transport for 12th five year plan, the financing of urban transport projects in the country has largely been confined to gross budgetary support from the government and the user charges. Due to heavy investment needs of urban transport and conflicting demands on the general exchequer, the investment in urban transport in past has not kept pace with the rapidly increasing requirement of the sector. The current level of user charges of limited urban transport facilities, do not make the system self sustainable. At the same time, providing safe, comfortable, speedy and affordable public urban transport to all has to be a necessary goal of the local government.

The key funding sources besides government budgetary support and fare box; can be dedicated levies, land monetization, recovery from non-user beneficiaries, debt and private investments. The paradigm of financing has to clearly move from “non-users pay” principle to “users pay” and “polluters pay” principles. There is a need for long-term sustainable dedicating financing mechanism to address requirements of urban transport.

The various components in which the investment would be required would need to be funded through a combination of funding from Government of India, State Government, Urban Local Body, Development Authority, property development, loans from domestic and financial institutions and Public Private Partnership (PPP).

9.2.2 Investments on Roads in Jamshedpur UA

The total investment details and the details of investments made on roads sector in Jamshedpur UA for the last few years are presented in **Table 9-2**. It can be observed that an average of Rs. 156 crore has been spent in Traffic and Transportation sector.

Table 9-2: Details of Annual Expenditure in Jamshedpur UA

Year	Total Expenditure on Traffic and Transportation (in Rs crore)
2008-09	324.35
2009-10	288.93

2010-11	159.93
2011-12	4.15
2012-13	3.15

Source: Jamshedpur City Development Plan (CDP)

The total cost of CMP proposals to be implemented over next 20 years is Rs. 1,520.78 crore out of which the cost of short, medium and long term proposals is Rs. 31.19 crore, Rs. 1,158.15 and Rs. 331.44 crore respectively.

Jamshedpur UA is spending on an average of about Rs. 156 crore per annum in traffic and transportation sector. Therefore, requirement of finding alternative sources of funding is envisaged as per the phasing plan of CMP proposal implementation.

The potential sources of funding as well as options for transport projects include:

- Taxes - property tax shall be increased to the market rates at regular interval
- Taxes like surcharge on the sale of petroleum products could facilitate in availability of additional funds
- Taxes on advertisement could facilitate undertaking proper IPT stops, footpaths, landscaping etc
- Parking fee
- Additional fee on Pollution Under Control (PUC) Certificate
- Collection from traffic violation fines
- Additional registration fee on vehicles
- Development charges
- Proceeds from "Land Value Tax" or "Betterment Levy"
- Tax on vacant land

9.2.3 Viability Gap Funding

In a recent initiative, the Government of India has established a special financing facility called "Viability Gap Funding" under the Department of Economic Affairs, Ministry of Finance, to provide support to PPP infrastructure projects that have at least 40% private equity committed to each such project.

The Government of India has set certain criteria to avail this facility under formal legal guidelines, issued in August 2004, to support infrastructure under PPP framework. Viability Gap Funding can take various forms such as capital grants, subordinated loans; O&M support grants and interest subsidies. It will be provided in instalments, preferably in the form of annuities. However, the Ministry of Finance guidelines require that the total government support to such a project, including Viability Gap Funding and the financial support of other Ministries and agencies of the Government of India, must not exceed 20% of the total project cost as estimated in the preliminary project appraisal, or the actual project cost, whichever is lower. Projects in the following sectors implemented by the Private Sector are eligible for funding:

- Roads and bridges, railways, seaports, airports, inland waterways, power
- Urban transport, water supply, sewerage, solid waste management and other physical infrastructure in urban areas
- Infrastructure projects in Special Economic Zones
- International convention centres and other tourism infrastructure projects

9.2.4 Public Private Partnership (PPP)

Public-Private Partnerships is cooperation between a public authority and private companies, created to carry out a specific project. In a PPP for a new transport infrastructure development project, the public authority creates a secure environment for the private sector to carry out the project, and the private partner offers its industry know-how, provides funding and shares in the project's risk. The decision to undertake a public-private partnership and the choice of the most suitable form of partnership greatly depends on the context and the types of project to be developed. Some of the projects amenable for Public Private Partnership in Jamshedpur UA are listed below.

- Parking – parking fee
- Retailing - lease rentals
- Advertisement Revenue:
 - *Landscaping in the circulation areas can be developed and maintained in lieu of advertisement by Private parties*
 - *Advertisement on buses, in bus terminals and other public places such as bus stops*
 - *Advertisements along cycle tracks, footpaths etc.*
- Bus Terminal
- Truck Terminal
- Bus Operation