

Transport Modelling and Feasibility Study for Mass Transit System in Faisalabad and Multan, Pakistan

PROJECT TITLE

Transport Modelling and Feasibility Study for Mass Transit System in Faisalabad and Multan, Pakistan

LOCATION

Faisalabad / Multan, Pakistan

CLIENT

THE PUNJAB METROBUS AUTHORITY (PMA)

DESCRIPTION

The main aim of the project is to prepare a study at par with international standards that can serve as the feasibility for implementing an integrated MTS in Faisalabad and Multan. This study should also serve as a guide for the decision makers and investors to decide whether to implement this project or not. The key objectives of the study are as follows:

1. To develop a travel demand forecasting model for the city. All data required for the model development, calibration and validation must be collected using traffic and transport surveys. Details of these surveys can be seen in Scope of Services. Travel Demand Forecast Model should be developed with an elaborate focus on public transport in general and mass transit in particular. It is expected that the model will be developed using modeling software with advanced public transport and mass transit assignment procedures that closely simulates the real situation.
2. To identify a network of MTS corridors for the city with the aim to establish a sustainable long term Public Transport System supporting daily travel needs and economic livelihood of the residents. Identification of MTS should carefully consider the integration with the existing and proposed transit routes branching on each side of the main corridor and serving the city.
3. To identify at least three priority lines suitable for MTS in the city and indicate their order of priority with clear time-lines for development.
4. To identify the type of MTS ie. Bus Rapid Transit(BRT), Light Rail Transit(LRT) or Metro Rail Transit (MRT) etc. on the proposed priority line. In case a BRT is proposed, future horizon year should be identified when the BRT should be converted to an LRT or MRT system based on the ridership forecasts.
5. To prepare a detailed feasibility study document for the priority MTS line as per scope of services section.
6. To carry-out all necessary steps to satisfy the Clean Development Mechanism (CDM) criteria for earning saleable credits through Certified Emission Reduction (CER).
7. To prepare preliminary design for the priority Mass Transit line. The consultant shall propose suitable parameters for the MTS based on quantitative analysis and best international practices.



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Scope of Services is to fulfill the following tasks:

- Assess the Current Transport System
- Proceed to Data Collection including Household Interview Survey (HIS); Manual Classified Counts (MCCs) of the vehicles; Roadside Interview Surveys (RIS); Public Transport Surveys; Willingness to Pay Surveys; Speed Surveys; Road Junctions & Traffic Signal Survey; Other Surveys
- Develop a Travel Demand Forecasting Model
- Conduct the Long Term Mass Transit Network Study
- Carry out Preliminary Design of Priority Mass Transit Corridor
- Carry out the Operational Design
- Assess the Impact of Land Development, Feeder Services and Park & Ride Facilities on MTS Priority Line
- Prepare the Traffic Management and Diversion Plans
- Provide Stakeholder Consultations
- Prepare Capital, Operation and Maintenance Costs
- Prepare the Revenue Estimation
- Prepare the Brand Concept and Information Signs
- Determine the Social, Environmental and Safety Overview of the Project
- Conduct Economic and Financial Appraisal
- Assess Risk Analysis and develop overall Risk profile
- Prepare the Project Action Plan
- Propose the Institutional Structure for Execution and Operation of the Project
- Prepare the Visualization Video of the Project
- Pursue and complete CDM Methodology

