



Bus Rapid Transit System For Karachi

Project Introduction

The main objective behind introducing this project is to curb the transportation issues and improve the traffic flow and the environmental situation. The present road network and the current condition of bus service creates stress and extreme difficulties for the local community of Karachi. Karachi is the largest urban city of Pakistan and involves on an average 13.5 million trips to work. The rise in population has resulted in an increase in travel demands. Hence, the initiative taken to launch this bus service would address the congestion to some extent. This public transport is reliable, comfortable and affordable, comes along with a separate lane for buses. The Bus Transit will run on three corridors initially which extends to 44.5 kms. The estimated project cost is USD \$258.50 Million.

Market Analysis and Viability of the Project

BRTS is a huge project that aims to provide people transport services of the same quality that is available in Western countries. The project encompasses the construction of 3 corridors. The BRTS would facilitate the transportation of at least 20,000 passengers on a persons-per-hour-per-direction basis. The BRTS will resemble a network of railway stations because instead of bus stops, there will be station-like compounds. Like railway tracks, no other transport will be allowed to ply on the track of buses under the BRTS.

Feature Of BRT System

1	Dedicated Right of way	<ul style="list-style-type: none"> Increased bus speed Reduced passenger travel time
2	Attractive Infrastructure	<ul style="list-style-type: none"> Convenient and easily accessible station Provided parking, shops and bicycle and pedestrian access
3	Vehicles	<ul style="list-style-type: none"> At-Level boarding Comfortable modern vehicles Purpose-built dedicated fleet Use clean fuel technologies
4	Fare Collections	<ul style="list-style-type: none"> Electronic Ticketing Off bus or on board fare collection
5	Service	<ul style="list-style-type: none"> High frequency service Fast dwell times Combination of express and local service provided Flexible operation to suit travel demand
6	Intelligent Transportation System(ITS)	<ul style="list-style-type: none"> Track vehicle locations Control traffic signals Update passengers on travel times



Estimated Project Cost:

BRT Line	Length (Km)	No. of Stations	Approximate Cost million US\$
BRT Line 1	25	23	146.00
BRT Line 2	15.5	10	90.50
BRT Line 3	4	4	23.00
Total	44.5	37	258.50

Characteristic Of BRT In Karachi

- BRT lanes will Run in the Central Median Portion
- Door will be on the Right side of Vehicles (Station will be on the center of Road)
- Pedestrian Stairs/Ramps will be provided for access from Footpath to Station
- 3 Buses will be passed in minute interval
- Peak Hour capacity is 13,000 Passenger per Hour per Direction
- Priority will be given to BRT at Signalized intersection through intelligent Signal System

Current Progress

Topographic survey for both corridors has been done

Traffic Count Survey has been done on All Major Intersection along the both corridors

Social and Environmental surveys has also conducted along both corridors

Demand Forecast

BRT Line	Total No. of Passengers (1,000/day)	Maximum Demand at a section (1,000/day)	Peak Hour/Peak Direction Traffic (per/hour)
BRT Line 1	791.9	114.5	11,500
BRT Line 2	845.2	337.2	33,700
BRT Line 3	64.3	23.2	2,300

Route Alignment	Mode	Length (km)	Structural Configuration	Stations	Total Cost Billion Rs. (Million \$)	Const. n Period	Boarding Per Day	Gross Revenue / Day @ 20 per passenger per trip	Operating Cost (35%)	Net Revenue/ Day	250 Active Working Days/Year
Surjani to Jama Cloth Market (via North Nazimabad/Nazimabad/M.A.Jinnah), Organi Town to Matric Board Office	BRT	25.9	All At-Grade (Dedicated Lanes in Median)	35	Rs. 9 b (\$ 99 million)	2.5	963,372	19,267,440	6,743,604	12,523,836	3,130,959,000
Malir Cantt to Regal Chowk (via University Road), Malir to Shershah via (Hub River Road)	BRT	31.7	All At-Grade (Dedicated Lanes in Median)	40	Rs. 9.5 b (\$ 104.4 million)	2.5	695,831	13,916,620	4,870,817	9,045,803	2,261,450,750
Dawood Chowrangi to Numaish/Lucky Star (via Korangi Road), Hawksbay to Gulbai (via Maripur Road)	BRT	34.2	All At-Grade (Dedicated Lanes in Median)	65	Rs. 8.1 b (\$ 89 million)	2	1,102,000	22,040,000	7,714,000	14,326,000	3,581,500,000