

Public transport system project in delhi construction essay



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Transportation is becoming a major cause of concern for the eternally expanding cities along with concerns like water and electricity. Delhi, with the added demands of the satellite towns, is no exception to the rule. It has to cater to millions of vehicles on a daily basis resulting in huge traffic jams, staggeringly high levels of pollution and waste of quality time for its citizens. However, the mega city cannot just keep building more and more roads to cater to the hastily increasing vehicular population.

Instead, what it desperately needs is an efficient transit system along with a planned, comfortable and dependable public transport system. The public transportation system mentioned has to have the offer the basic advantage of better mobility, in addition to offering societal advantages like reducing traffic congestion on the roads and air pollution. However, in order to gather a large number of commuters to public transport, there is a need to offer good quality and comfortable service.

For Delhi, the first step in this direction was the Delhi Metro, commissioned in 1998. BRT System plays a very important role in a good public transport system. The bus system still has its own importance. Delhi Metro cannot completely replace the Bus-based system on all routes. Due to higher capital cost, low capital return and large gestation period, it is not feasible to build metro lines on all stretches.

The BRT is a low-cost, flexible, mass transportation system that costs far less than a Metro system and can serve as much as 100 times the area of a rail based system. It has been seen that for a 18km stretch, a BRT system costs Rs. 5-20 crores/km as compared to metro costing about Rs. 125-220

crores/km, and the planning and construction time for an 18km stretch is 1.5 years for BRT vs. 5 years for the Metro.

Thus with a view to improve the public transport system in the city and encourage people to use it, Delhi govt. introduced the BRTS in Delhi in 2004 under its Integrated Mass Transit Plan.

Process

The proposal of BRT in Delhi was first brought up in 1996. An international workshop was organized by the Delhi Transport Corporation (DTC) and Infrastructure Development and Finance Company (IDFC) in 2001 to discuss the idea in Delhi's context by several International experts.

Following this, Committee on Sustainable Transport was set up by Delhi govt., chaired by the Chief Secretary in 2002, which recommended that BRTS should be implemented on all major corridors of Delhi. Extensive consultations were held with all the stakeholders, which included all concerned administration and construction departments, utility owners and RWA's along the proposed corridor. Govt. also organized an international workshop in Dec 2005 where experts from all over the globe and India were invited to examine the project and address the issues and doubts thrown up by various quarters. The experts observed that a road based public transport was among the most effective connectivity solution for a majority of city residents. It did not matter how many vehicle lanes were there. What mattered was the effective width available for vehicles. Govt. of Delhi also saw that many intelligent cities had adopted this system for the same reasons of efficiency, equity and environmental sustainability and it

approved the project. BRT corridor was not merely road re-engineering but a complete overhaul of the road system, wherein the most vulnerable vehicles are allocated road space and that it enabled the same right of way to move more people.

The concept, including exhaustive technical specifications and geometric design, was made by TRIPP (Transportation Research and Injury Prevention Programme), IIT Delhi. ITDP (Institute for Transportation and Development Policy), New York, was associated with TRIPP in the initial stages. The detailed design and project management was done by RITES, a Govt. of India Enterprise. DIMTS (Delhi Integrated Multimodal Transport Systems), a JV of the Govt. of Delhi and IDFC, was given the task of the implementation and operation of the entire system. The progress of implementation of the project was regularly and closely monitored by the EPCA (Environmental Pollution Control Authority).

Plan

Salient Features

The first BRT corridor from Ambedkar Nagar to Delhi Gate is 14.5 km long. The first phase of the corridor, 5.8 km long, became operational in April '08. The corridor infrastructure has exclusive bus lanes on the right side of the carriageway, i. e., along the central median of the road. Further details of the design are as shown

Company and school buses have to use the bus lanes. Emergency vehicles like ambulance, fire tender, police van are permitted to use the bus lane.

The segregated bus lanes provide for a quicker travel for all lanes of the corridor; it improves traffic situation and the driving conditions of all other types of vehicles on the road. This system, as a whole, produces a decreased load of pollution.

Safety, cleanliness, easy access, comfort, and least stoppage time, all come together to make for increased efficiency. The Bus shelters offer prominent displays of bus timings which add value and minimize waiting anxiety. To top it all, the whole system including the ramps and platforms is physically disabled-friendly.

Achievements/Effectiveness

The first phase of the BRT corridor, started in April 2008, ran into troubles during the initial operating period as heavy traffic jams were observed all along the corridor. These can be mainly attributed to

Unfamiliarity of the drivers of all vehicles with the new system which mandatorily required buses and cars to move in separate lanes

Bus commuters were not familiar with the model of central bus stops

Problems in both the hardware and software of the newly installed traffic signal system

After the hardware problems were fixed, signalization was fine-tuned and most of the problems faced by the road user was resolved

Other problems observed were lack of training of bus drivers, encroachment on the cycle track and footpath, vehicles straying into wrong lanes and cars piled up in long queues.

The media harshly criticised the project and called it corridor of chaos, ill conceived, a blunder, and demanded that it be scrapped. Four and Two Wheeler users argued that the system did not ease traffic at all; instead it caused more traffic snarls. They felt that their road space had been stolen by having a separate dedicated lane for buses. As a result of all the negative reactions, the initial public perception of the project was pretty negative.

What the commuters did not understand is that this is a system specifically designed to decrease the person delays rather than the vehicle delays. The system allows public transport to carry a greater number of people as conveniently and economically as possible. Hence, the media complains that private vehicle owners have been put to considerable troubles misrepresents the real intent of the system.

The objective of the project is to give increased importance to sustainable modes, which includes bicycles and buses and hence car congestion is the wrong measure of success. To correctly measure the performance of the BRT system, human throughput should be considered instead of vehicular throughput.

In due course of time, in addition to providing a safe and fast mode of comfortable travel, the corridor has achieved three things, unprecedented in India:

Given Delhi a public transport system which is disabled friendly

The special street lighting has been designed keeping in mind the safety needs of the pedestrians and then the other users of the corridor

A dedicated bicycle lane which enhances the safety of the cyclists along the entire length of the corridor and reduces ambient pollution levels

Buses stop regularly for passengers, without hindering the cars and motorcycles. So, whereas in the pre-BRT scenario, a bus' halting, blocked the left lane and caused the vehicles behind it to try and merge with the right lane, thus, slowing down traffic. Also, NMV (Non Motorised Vehicles) traffic, which moved along the left lane, blocked buses from pulling into the bus stops, so buses used to just stop in the middle of the road. Amid all this, bus passengers needed to negotiate traffic to board buses. The above mentioned exercised resulted in underused or unused road space, slow vehicular movement and increased risk to pedestrians and other non-motorised traffic.

The BRT intends to ensure an equitable sharing of road space and safety for all by segregating traffic into separate lanes depending on their speed and type.

The BRT system in Delhi does more than providing a dedicated corridor for buses. It provides for pedestrian and cycle lanes that are obstacle-free, well-illuminated, and disabled-friendly, thus catering to the primary needs of over 4/5th of the commuters on the road.

Cyclists are an ignored lot in debates on traffic, but for early morning BRT

users, it is difficult to miss hundreds of cyclists pedalling to work on the <https://assignbuster.com/public-transport-system-project-in-delhi-construction-essay/>

bicycle lane. On an average about 8, 330 cycles and 1, 020 rickshaws use the corridor. They are the biggest beneficiaries of the BRT system.

BRT has also given priority to emergency vehicles to use the bus corridors; and substantially decreased the number of accidents on the road; Accident data reports indicate that ever since the corridor opened, there have been zero fatal bicycle, motorcycle, and car crashes on this section. Only pedestrians - mainly because many of them simply walk in the dedicated bus corridor. No fatal accident on the corridor has happened after the first four months period of its operation. NDTV also carried out a user survey which showed that 65% bus commuters, 88% bus drivers and most bicycle users were extremely happy and satisfied with the system.

A May 2008 survey by the Centre of Science and Environment & Indian Youth Climate Network recorded that a staggering 83% of all commuters, majorly bus commuters, pedestrians and cyclists, supported the BRT. 73 per cent of car and two-wheeler drivers felt that the project should be implemented in other parts of the city.

A December 2008 survey Indian Institute of Technology, Delhi students has reinforced the above findings by recording that 85% of bus commuters felt that the BRT had been successful in promoting public transport, 88% claimed that bus travel was quicker and 90% supported the idea of implementing it in other parts.

Monitoring studies undertaken during June-July 2008 (TRIPP, August, 2008) and latest evaluation by Washington based expert group EMBARQ (February, 2009) show how bus speeds have improved by 50%, car speed is same as in <https://assignbuster.com/public-transport-system-project-in-delhi-construction-essay/>

a parallel corridor, and bus commuters and bicycle commuters find the system a huge improvement from the earlier left side bus lane in spite of encroachment, and frequent ingress of motorcyclists in violation of lane discipline.

To sum up, the concept is very popular with the majority users of the system, and, therefore, the pilot project has been successful in achieving the objectives.