

SURAT CITY BUS SERVICE



6.0 Surat City Bus Service

6.1 Context

Surat, formerly known as Suryapur or Khubsoorat, is the eighth largest city in India. The city is the seventh most populous city in India and 49th in the world. Surat is the administrative capital of Surat district. With population approaching 3 million as indicated by census 2001, growth rate as well as GDP growth rate is highest in India at 85 % and 11.5 % respectively (as of 2008). The sex ratio is as low as 760, owing to migration of single laborers to work in industries in Surat. Labour intensive industry dominates, with diamond, textile and chemical industry employing a large number of migrant workers. Heavy industries like ONGC, KRIBHCO, NTPC, Shell, Reliance, etc. make the city nationally important.

6.2 Situation before Implementation of the Project

It was clear that only providing traffic dividers, roundabouts, signals and flyovers could not solve traffic problems. It required an integrated mass transportation system. This system should be such that it can work in co-ordination with the city's existing transportation system. An efficient mass transportation system was very much needed for sustainability of not only the economy of the city but also for reducing stress due to pollution on the environment.

6.2.1 Problems and Needs Addressed by the Project

The City Bus Service was intended to overcome the following issues:

- Increasing vehicular pollution;
- Growing number of vehicle ownership;
- Increasing number of auto-rickshaws on the roads;
- Lack of affordable and reliable city buses; and
- Lack of public transport system.

6.2.2 Reason for Adoption of Particular System

Travel characteristics salient features:

Trip Rate- Per capita trip rate has increased from 1.0 to 1.3. Increase in motorized trips is more significant and is around 0.8.

Modal Share- Significant shift from NMV and public modes to private mode are observed.

- Walk- trip share is around 40%;
- Bus patronage is almost 0%;
- Two wheelers share 30%; and
- A steady increase in dependence on auto-rickshaws has been observed.

Trips Purpose-

- 50% work trips (high work participation rate)
- 30% education trips
- 90% trips performed daily.

Trip Length - Average Trip length is 5 km.

Public Transit Choice -

- 59% respondents from surveys are willing to shift to public transport system for work purpose;
- 74% respondents from surveys are willing to shift to public transport system for education purpose; and
- And 90% respondents would prefer starting such a transit service in Surat and are willing to pay up to ₹ 1 per km.

Travel Pattern-

Movement is largely along 7 major radial corridors. A considerable amount of traffic moves along the river. Bicycle movements are shorter and concentrated more in the central part of the city. With high participation rate, overall work related travel is high, most of which is around the walled city. Modal shift in favor of personalized and IPT modes have been observed, which is due to lack of public transport. People are willing to shift to public mode of transport if it is made available to them. The fare levels have to be reasonable if such a shift has to be made realistic.

6.3 Description of the Project

City Bus Service System has got approved from government of Gujarat with PPP model. Overall monitoring has been done by the Surat Municipal Corporation. In this model, private investment has come in buses, operation of buses and decision with reference to tariff; Routes and frequency of buses has been decided by the SMC.

6.3.1 Goals of the Project

- 1) Privatisation is to aim at relieving the financial and administrative burden of the government undertaking and maintaining a vast and constantly expanding network of city bus services.
- 2) Privatisation would promote competition, improve efficiency and increase in adequacy of services. It would assist in reduction of administrative and overhead expenses of the public sector and improve its resource position. The private enterprises may have lower operating cost and greater capacity and freedom to obtain and maintain necessary bus fleet.

6.3.2 Strategies Used to Achieve the Desired Goals

An innovative PPP model will be used to reach the above goals.

6.3.3 Activities Implemented to Achieve the Desired Goals

The technical duties performed by the SMC to realize the above vision are as under:

- Traffic and transportation survey;
- Overall regulations and control of vehicles, pedestrians, traffic and transportation and to provide safe and un-delayed travel trips to the citizens;
- Installation of traffic signals on the road junctions;
- Construction of channelisers on road junctions;
- Construction of road dividers either with RCC pardi of guard stones with provision for plantation;
- Installation of automatic night blinkers at critical vehicular gaps, accident-prone points, etc;
- Construction of traffic islands, rotaries; and
- Running the city bus service in PPP basis.

6.3.4 Challenges / Constraints Encountered and how it was conquered

The overwhelming amount of rickshaws and poor traffic sense of the citizens have created difficulties in day to day traffic despite efforts towards high standards of traffic engineering in the city.



Figure 6.1: The City Bus of Surat

SMC has allotted 2 plots measuring 4000 sqm to the concessionaire for setting up workshops / fuel stations/ depots/ daily cleaning system, etc at Re. 1/- token rent / sqm.

6.3.5 Expected Outcome of the Initiatives

- Reducing dependency on personal vehicle; encouraging use of NMV and public transit;
- Long term sustainability, strategy development to lesser the burden on public budgetary resources through PPP;
- Accessibility to all user groups incorporating local economic activities within the design;
- Effective maintenance of traffic island for overall pleasing effect and desired traffic benefits; and
- Maintenance and excellence in design of bus stops.

6.3.6 Role and Activities of the Partner

The Surat Municipal Corporation is the lead implementing agency of the project.

Public Partner

- SMC has defined the bus routes, bus stops and fare structure. It has also defined the quality of service in terms of frequency and has determined that buses should be run on CNG fuel. Regional Transport Authority is responsible for sanction of stage carriage permits under Motor Vehicles Act for city bus service, providing statutory sanction to these terms; and
- The bus stands are made by SMC on BOT basis. In lieu of the rights given to the operators for collecting fare, SMC gets a premium on yearly basis from the operators.

Private Partner

- Buses are procured, owned, operated and maintained by the private operator thus expenditure on rolling stock and operation and maintenance is done by the operator. This includes cost of driver and conductor, supervision of operations, fuels, repairs and maintenance, etc.

The drivers and conductors have been given uniforms, which carry logo of SMC and the concessionaire. The corporation has not made any cash investment either on the fleet or on the staff, and in return has generated revenue from the licensed operators (concessionaires).

6.3.7 Important Stakeholders Involved and Communication / Networking Procedure for the Project

The contract given to the private operators for running and maintaining the city bus service is for 5 years. RTA gives the carriage permission for city bus service.

All buses are provided with vehicle tracking system for monitoring the frequency and timely operation from the control room, which will also be set at the SMC main office, presently it has been set up at the concessionaire's office.

6.4 Factors of Success

SMC has provided PPP based public bus service to the citizens of the city, which is efficient (in terms of frequency), cost effective and eco-friendly. It issues daily passes, students'

passes and allow free travel to freedom fighters. A system of weekly review by the traffic department of the corporation has been put in place.



Figure 6.2: Surat City Bus Service Gaining Popularity amongst Commuters

6.5 Impact of the Initiatives

The citizens have obtained an increase in transport facility through the introduction of city buses. To date, around 116 buses are running on 41 routes and on an average 50, 000 passengers travel by bus services daily. The revenue to the Urban Local Body for the next five years is estimated to be around ₹ 18,000 per bus per year as premium from operators. Revenue of ₹ 32,000 per bus stand per year from advertisement is estimated to be obtained from 461 bus stands in the next five years. The Ministry of Urban Development (MoUD), Government of India, gave Best PPP initiatives in Urban Transport award to SMC for its PPP initiative in the city bus service in the Conference and Exhibition on Urban Mobility India in Delhi.

6.6 Summing Up

The city bus service of Surat is being run by SMC in public private partnership. It is having a fleet of 116 buses, which are operating on 41 routes. These buses are efficient (in terms of frequency), cost effective and eco-friendly. Around 50,000 commuters travel by these buses daily. SMC represents the public sector, which has defined the bus routes, bus stops, fare structure quality of service in terms of frequency and has also determined that buses should be run on CNG fuel. The Regional Transport Authority is another public sector responsible for the sanction of stage carriage permits under motor vehicles act for city bus service, providing statutory sanction to these terms.

Buses are procured, owned, operated and maintained by the private sector (private operators) thus expenditure on rolling stock and operation and maintenance is done by the operator. Besides, bus stands have been constructed by SMC on BOT basis and in lieu of the rights given to the operators for collecting fare, SMC gets a premium on yearly basis from the operators.

It is to be noted that the corporation has not made any cash investment either on the fleet or on the staff, and in return has generated revenue from the licensed operators (concessionaires). The city bus service of Surat has been running successfully as it is efficient (in terms of frequency), cost effective and eco-friendly. It issues daily passes, students' passes and allow free travel to freedom fighters. Besides, a system of weekly review by the traffic department of the Corporation has been put in place to make the system more effective and efficient.



Figure 6.3: Award of Best PPP Initiatives in Urban Transport to SMC in the conference and Exhibition on Urban Mobility India, 2008.