

MID TERM REVIEW
URBAN MOBILITY INDIA CONFERENCE

PUBLIC TRANSPORT IN GURUGRAM
City Bus Service



Usha Kiran, Senior Town Planner,
Urban Local Bodies Department, Haryana, Panchkula

PUBLIC TRANSPORT IN GURUGRAM - BACKGROUND

Gurugram is a glaring example of urban growth. It has experienced growth spurt both spatially and demographically. With this sharp spurt in its population and Urban Sprawl there is need to introduce Public Transport.

Planning perspective:

- ❑ The first Development Plan for the Gurugram was notified in the year 1995 for the year of 2001.
- ❑ In year 2007 the Development Plan for the year 2021 was notified
- ❑ In year 2011 the Development Plan for the year 2025 was notified
- ❑ In year 2012 the Development Plan for the year 2031 was notified

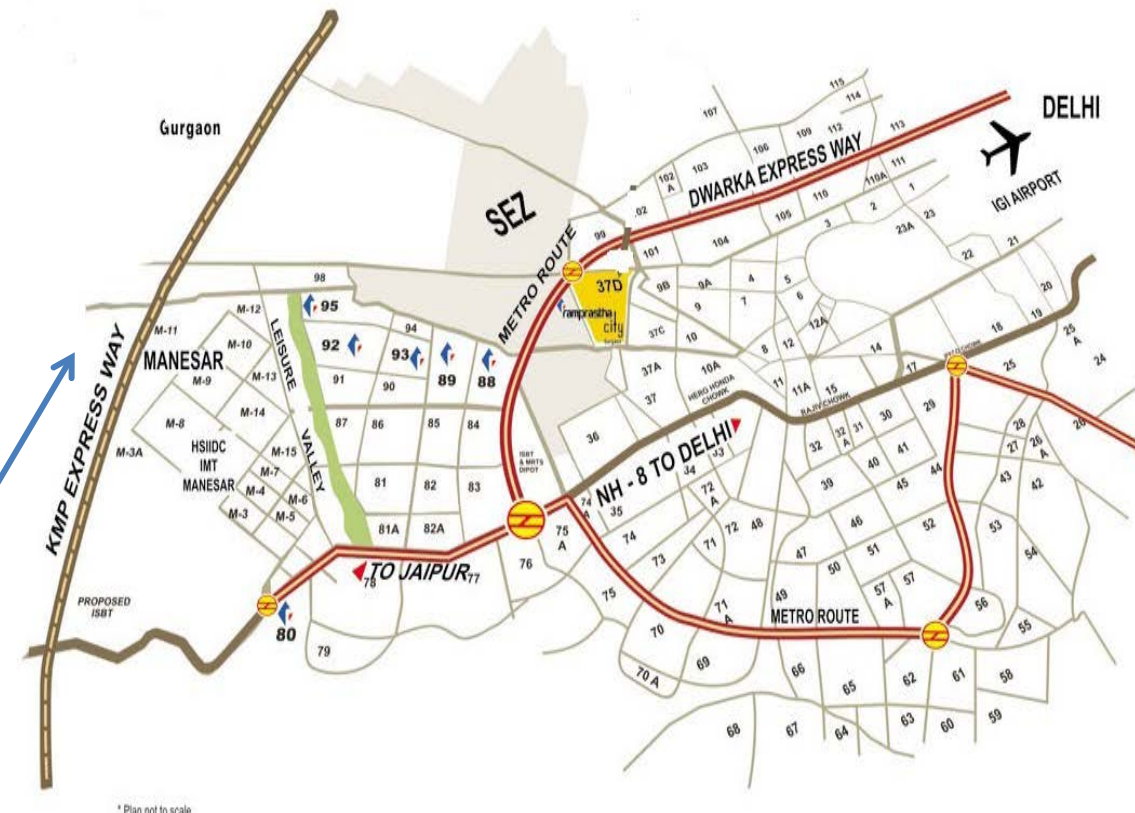
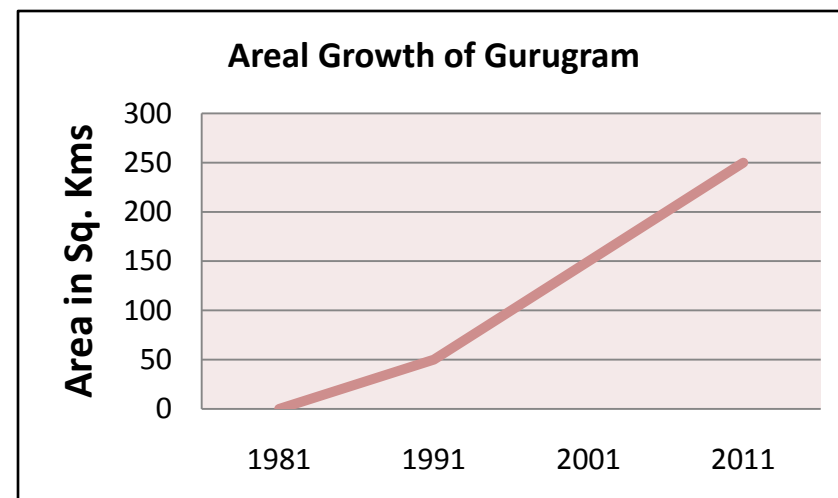
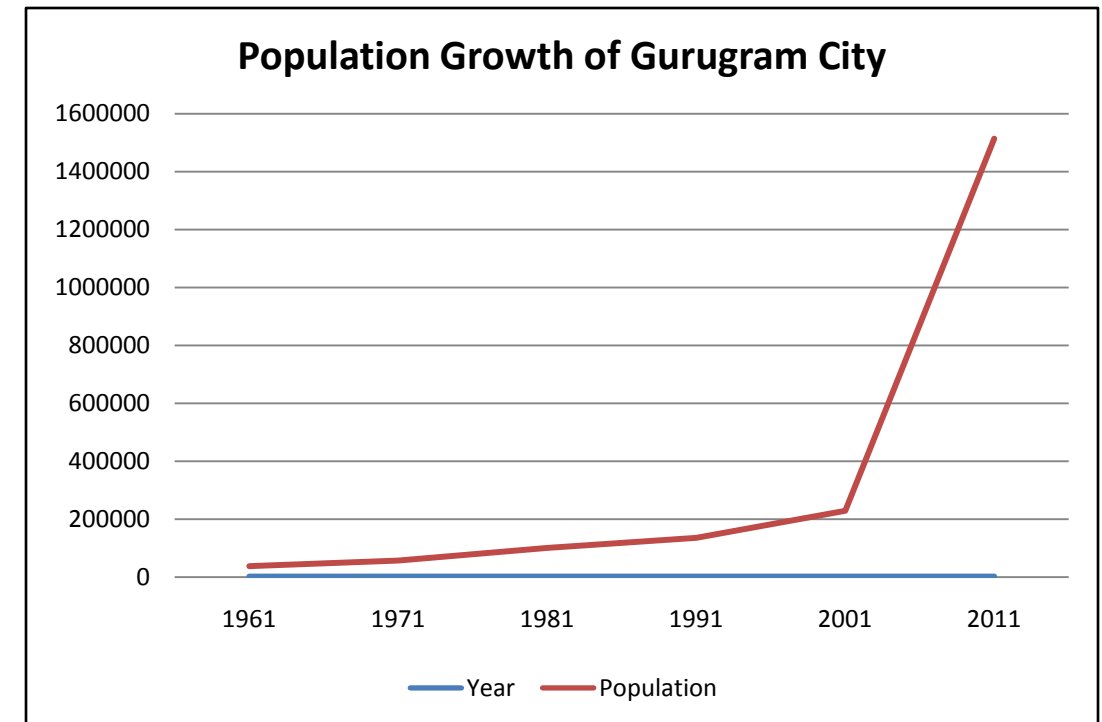
Since there is a rapid increase in the population growth as well as

Aerial growth of Gurugram from 1995 to 2011 and to cater the demand in the planned manner, the development plans were

- ❑ To move the people through Public Transport and decrease the number of private vehicle from the road.
- ❑ To provide High Level of Infrastructure to the citizen.

Goals and Objectives:

- ❑ To provide better and reliable source of Public Transport in terms of City bus and Metro.
- ❑ To change the mode of travel from private vehicle to Public Transport.



PUBLIC TRANSPORT IN GURUGRAM - CITY IMAGES



IT- Hub- Gurugram



Industrial Estate- Manaser



Water logging on roads of Gurugram and unsafe, overcrowded informal public transport

PUBLIC TRANSPORT IN GURUGRAM – EXISTING SITUATION

As already mentioned in the previous slide that Gurugram has experienced high rate of population as well as areal growth. Due to the expansion of the city, the Mobility of people is the major challenge in Gurugram.

- As per State Transport Commissioner, Haryana total 96,159 vehicles were registered in Gurugram in the year 2011 which is the highest in the State of Haryana.
- As per the Deputy Inspector General of Police total 971 accidents were recorded in the Gurugram District, in which 462 people lost their lives and 754 people were injured.
- Therefore in Gurugram there is an urgent need of the Public Transport System in terms of City Bus Service. The Metro in Gurugram is also unable to provide Public Transport in City due to limited route since as it choked being used by the large segment of people. City Bus Service will provide the missing mode of transport to the People.

Existing situation

Currently Haryana Roadways is providing city bus service on a few routes in Gurugram

- 142 Buses (70 working): only 30 buses operational now (21%)

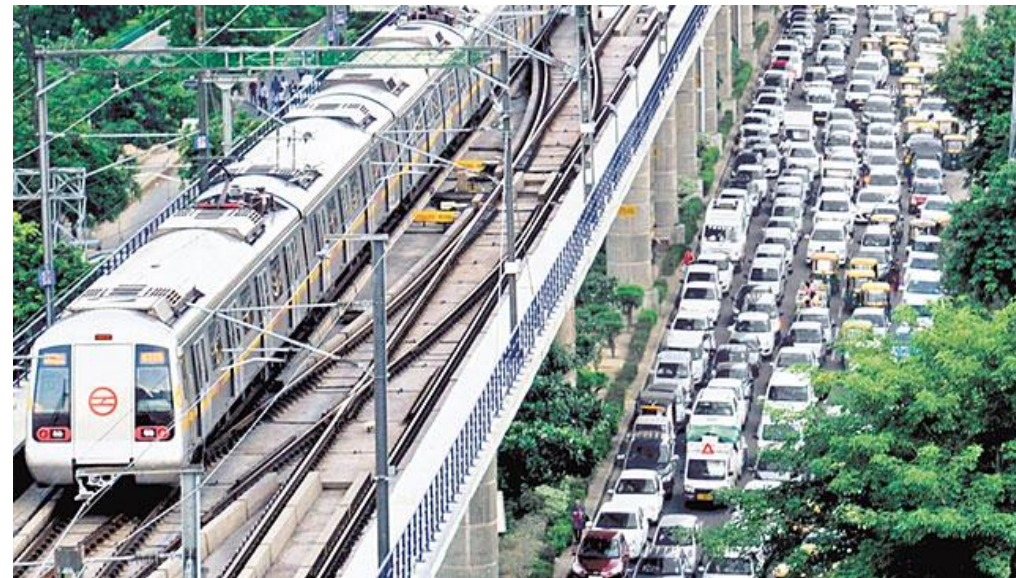
- 1 workshop in Gurgaon

- 3 Bus Stand: Sector-12, Sohna & Pataudi

Minimum 1000 buses are required for the Gurugram as per the norms.

In 2010 Ministry of Finance and Asian Development Bank's tool kit for public-private partnerships in urban bus transport for the state of Maharashtra, flagged off a set of criteria for deciding bus numbers for cities. According to this a city needs about 60 buses per 1 lakh of population. This is followed as a benchmark for bus services widely – and especially for PPP projects.

There is thus clearly an urgent need to augment Bus based Public Transport in Gurugram in order to reduce people's dependence on personalized mode of travel.



Picture of Netaji Subhash Marg in Gurugram shows that even after Metro the people use the private vehicles as no mode of Public Transport is available to approach the metro station.

Why Bus based Public Transport

Public Transport Technologies

Important to evaluate alternative technologies in the context of the city characteristics

Approx. Rs 300 - 350 crores/km Under Ground
Approx. Rs 200 - 250 crores/km Above Ground

High cost
High Capacity
Low flexibility

Heavy rail metros

Approx. Rs 100 - 120 crores/km

Light rail on dedicated right of way

Approx. Rs 70-100 crores/km

Light rail on shared right of way/Monorail/Sky-bus

Approx. Rs 10-15 crores/km

High capacity bus on dedicated lanes/BRT

Approx. Rs 5-8 crores/km

Electric trolley bus
Dedicated bus-way

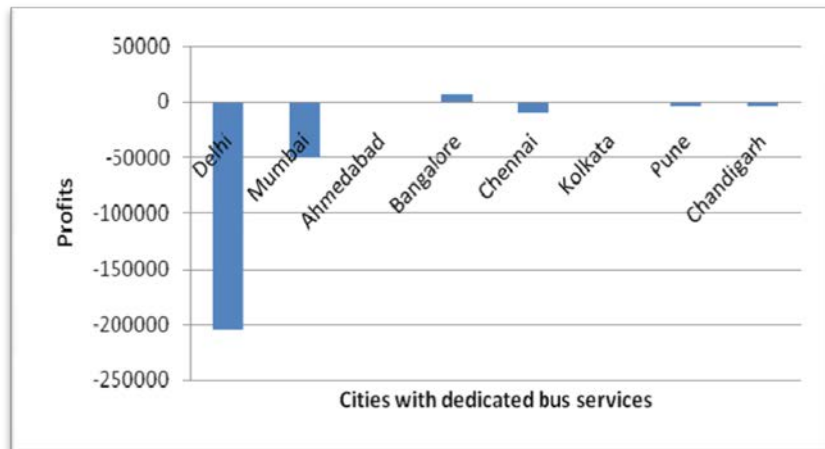
Low cost
Low capacity
High Flexibility

Buses in mixed traffic

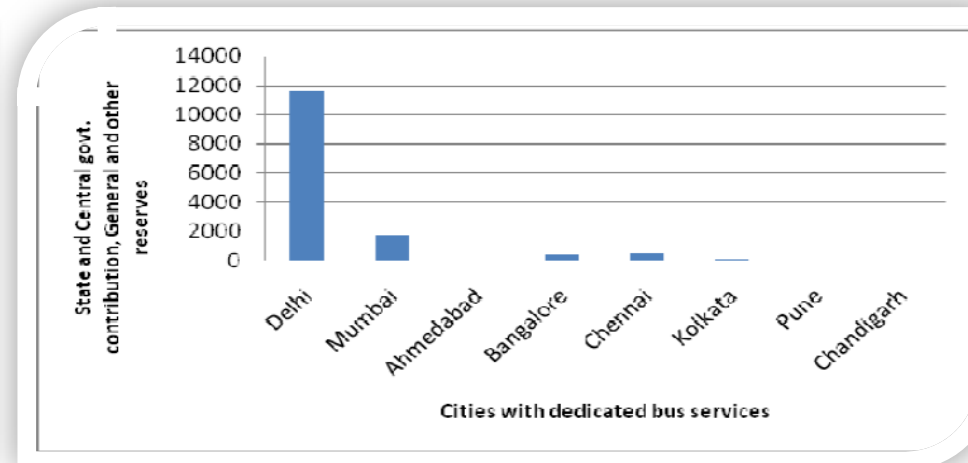


PUBLIC TRANSPORT IN GURUGRAM – NEED AND CHALLENGE

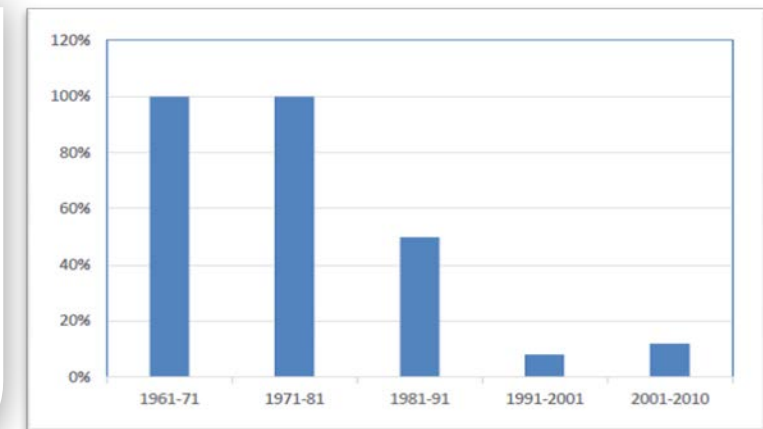
Unprofitable: The studies shows that the operation of the City bus service is mostly unprofitable. The Diagram shows massive losses in operation of the city. The only corporation that shows profit is Bangalore Metropolitan Transport Corporation (BMTC). The annual numbers of passengers carried are double for Bangalore's BMTC than Delhi's Delhi Transport Corporation (DTC). During 2009-10 DTC carried 8817.43 lakh passengers as opposed to 15056 lakhs by BMTC. The second diagram shows that the Huge capital investments/contributions are being made by the State and Central government, and from other reserves. DTC survives on a lot of such contributions showing its excessive dependence on exogenous funds and help.



Profit of State owned Bus agencies (in lakh)



Government contribution to bus State Agencies



Decadal growth rate of PT Bus fleet in India

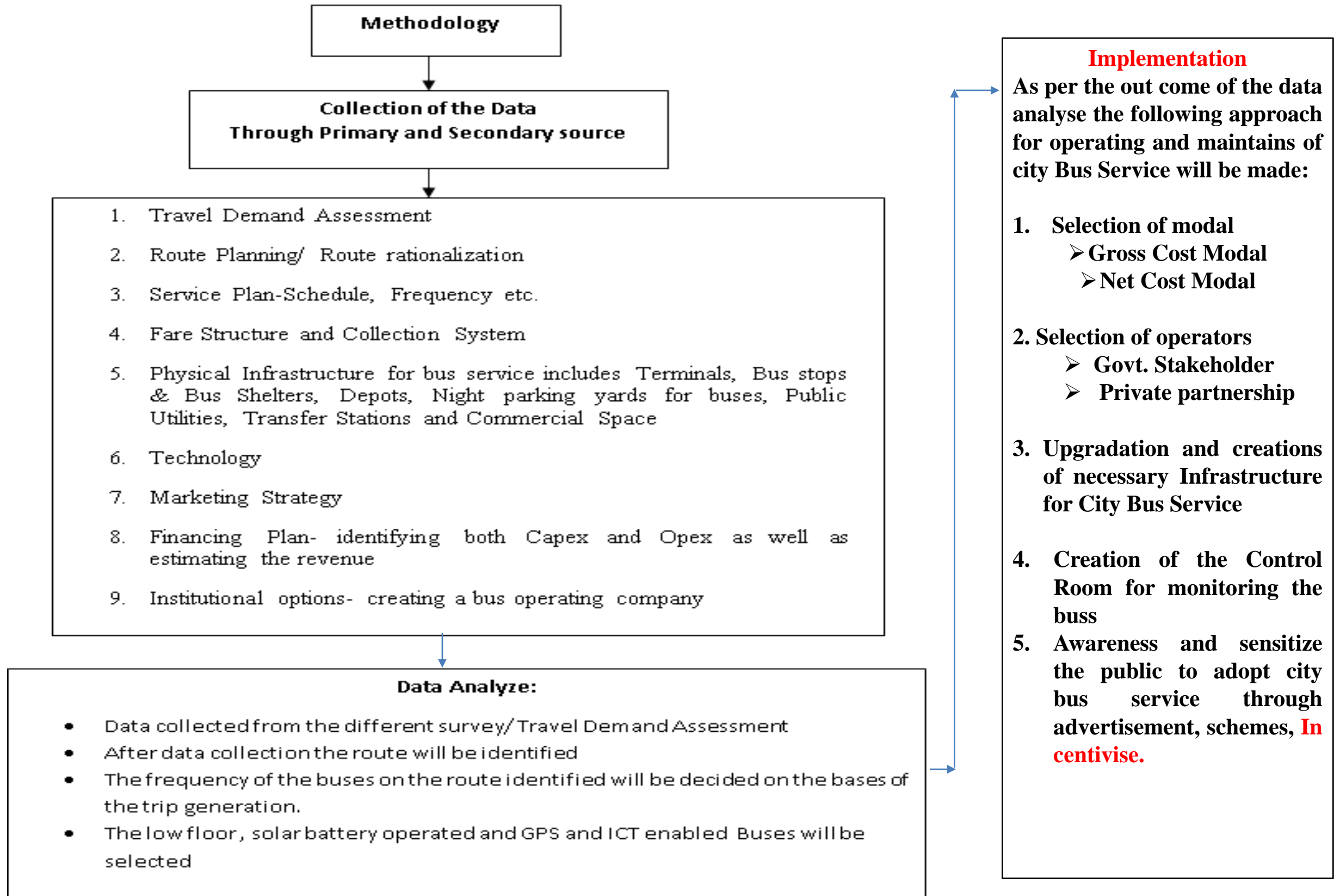
Congestion on Road: It is estimated that by 2030, 52 percent of the total transportation demand in Indian cities will be fulfilled by cars, two-wheelers. The slow turnaround time of operational buses due to road congestion also affects the fleet utilisation and the overall performance of the bus fleet. As congestion causes a difference in the scheduled bus trips operated daily (up to 20 per cent of scheduled trips are cancelled daily in Delhi) which effect the passenger volume.

Lack of Traffic Support Infrastructure: City bus service can only work effectively if there are traffic support infrastructure is available on the road side. The traffic support infrastructure includes the various components (crossing for pedestrian, pathways, bus stops, road side furniture, water tap, barrier free environment for physically disabled persons) with of the transport system which enables the smooth operation of city bus service. In India the Traffic Support Infrastructure is missing in almost all the cities.

Need of Private Sector in Indian Bus Transportation: The bus transportation industry is still in its nascent stage in India which not familiar with the traffic condition of the Indian Cities. Further most of the private players are operating small number of buses and only very few are operating on pan-India basis.

Informal / Shared Transport: Due to absence of organized public transport system, there is a surge of informal transport in every city has mainly in the form of mini-buses, shared auto, cab etc. These informal modes of transportation are owned by individual operators and are operated without any fixed route or schedule. Further, the organized bus operators end up competing with these informal transportation modes on the road.

Approach and Methodology and data collected



PUBLIC TRANSPORT IN GURUGRAM – CONCEPTUAL PROPOSAL

❑ **Bus service is an essential part of Public Transport. Following steps are involved a City Bus System:**

- Travel Demand Assessment
- Route Planning/ Route rationalization
- Service Plan-Schedule, Frequency etc.
- Fare Structure and Collection System
- Physical Infrastructure for bus service includes Terminals, Bus stops & Bus Shelters, Depots, Night parking yards for buses, Public Utilities, Transfer Stations and Commercial Space
- Technology
- Marketing Strategy
- Financing Plan- identifying both Capex and Opex as well as estimating the revenue
- Institutional options- creating a bus operating company

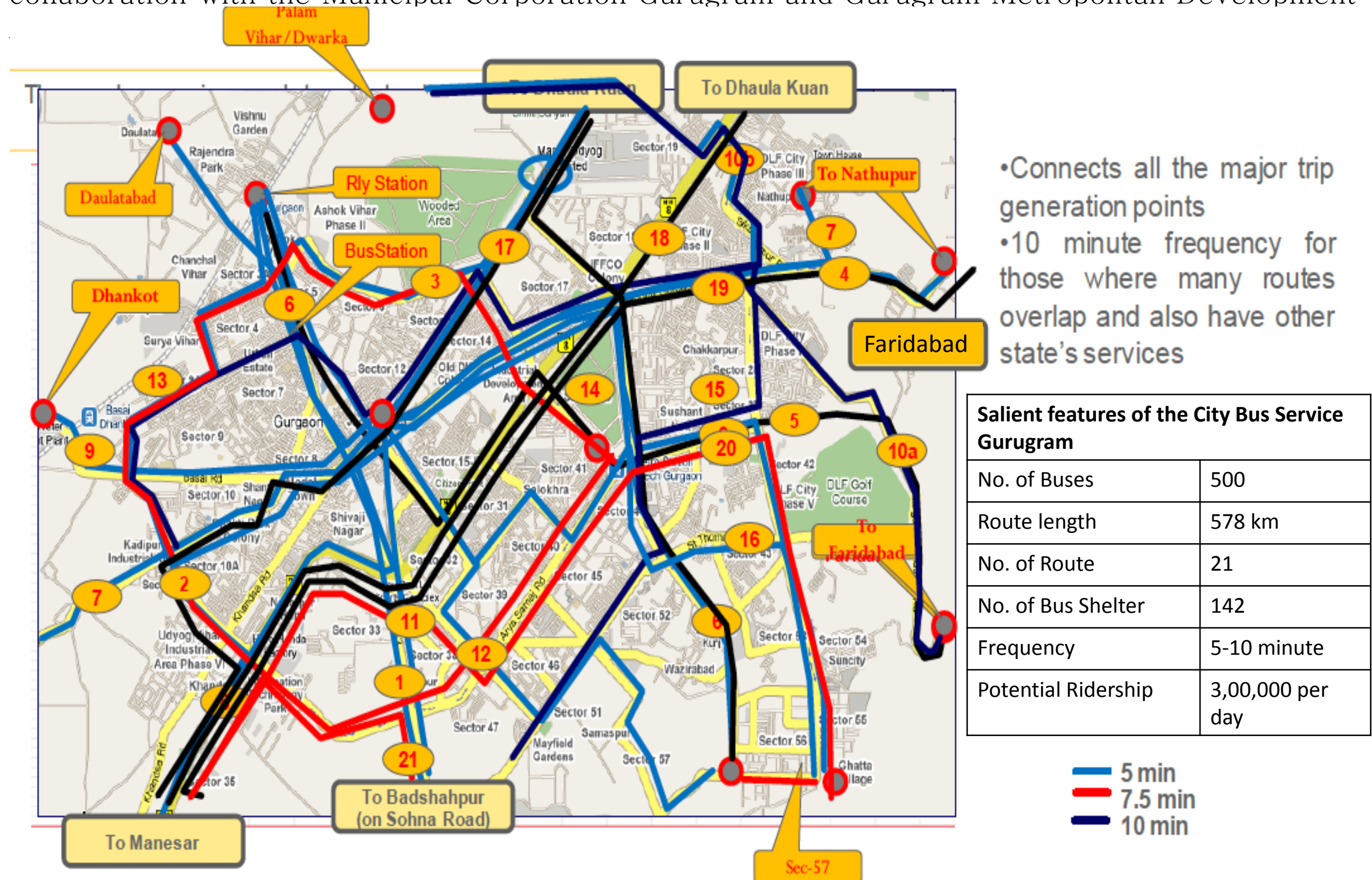
❑ **Promoting Public Transport : To promote the use of public transport, door to door journey should be planned in terms of time, cost and convenience. This involve the following steps:**

- Walk facility to be upgraded within 500 m of station/ stop
- Vehicle access within 3 km of station/ stop
- Feeder service within 5 km of station/ stop
- Drop off & pick up facility at stations
- Park and ride facility at stations
- Land use control around stations for unrestricted entry
- Facilities for less enabled for universal access
- A pleasant ambience in and around stations/ stops
- Safety and security
- Centralized Control with Intelligent Transport System

Door to door planning is essential so that public transport becomes the favoured choice and the commuter is assured that he can complete his journey all the way by public transport. Therefore there is need to integrated various modes of transport so as to reduce the distance and travel time between the interconnecting modes when changing from one mode to other is involved and City Bus Service can fulfil that need.

PUBLIC TRANSPORT IN GURUGRAM – WAY FORWARD

Hence in order to provide the feeder service to the metro and to provide the another mode of public transport in term of city bus, the Department of Urban Local Bodies, Haryana in collaboration with the Municipal Corporation Gurugram and Gurugram Metropolitan Development



Thanks

