NATIONAL HIGHWAYS & INFRASTRUCTURE DEVELOPMENT CORPORATION LIMITED

Leaders in Urban Transport Planning and Management programme (LUTP-7)

Name of project undertaken:
Development of Self-Sustainable BUS PORT at Salem, Tamil Nadu

16th November 2019,
Lucknow, India

National Highways & Infrastructure Development Corp. Ltd. - Background:

- National Highways and Infrastructure Development Corporation (NHIDCL) is a PSU under the Ministry of Road Transport & Highways (MoRT&H), Government of India. The company promotes, surveys, establishes, designs, builds, operates, maintains and upgrades National Highways in Northeastern and Northern parts of the country.

- NHIDCL has been designated as a Central Executing Agency (CEA) by MoRT&H for the development of bus ports throughout the country.

- NHIDCL shall have the following role in the Implementation of the Project:

  - Preparation of Pre-feasibility Report and DPR of the project.
  - Coordination with MoRTH for finalization of Documents
  - Executing the agreement with the selected developer.
  - Coordination with State Nodal Agency for implementation of project
  - Inspection and Monitoring of Construction Works
  - Inspection and Monitoring of Operations & Maintenance of the Bus Port.
  - Assisting Parties in resolution of disputes

Objective Of The Scheme :

Development of bus ports throughout the country is aimed to achieve the following objectives :

- Development of standardized bus ports in states/UTs with modern infrastructure and facilities, which would help in improving passenger comfort and give a much-needed boost to public bus transportation systems.

- An allied objective of the scheme is to bring private operators into the mainstream by allowing them entry into the bus-ports.

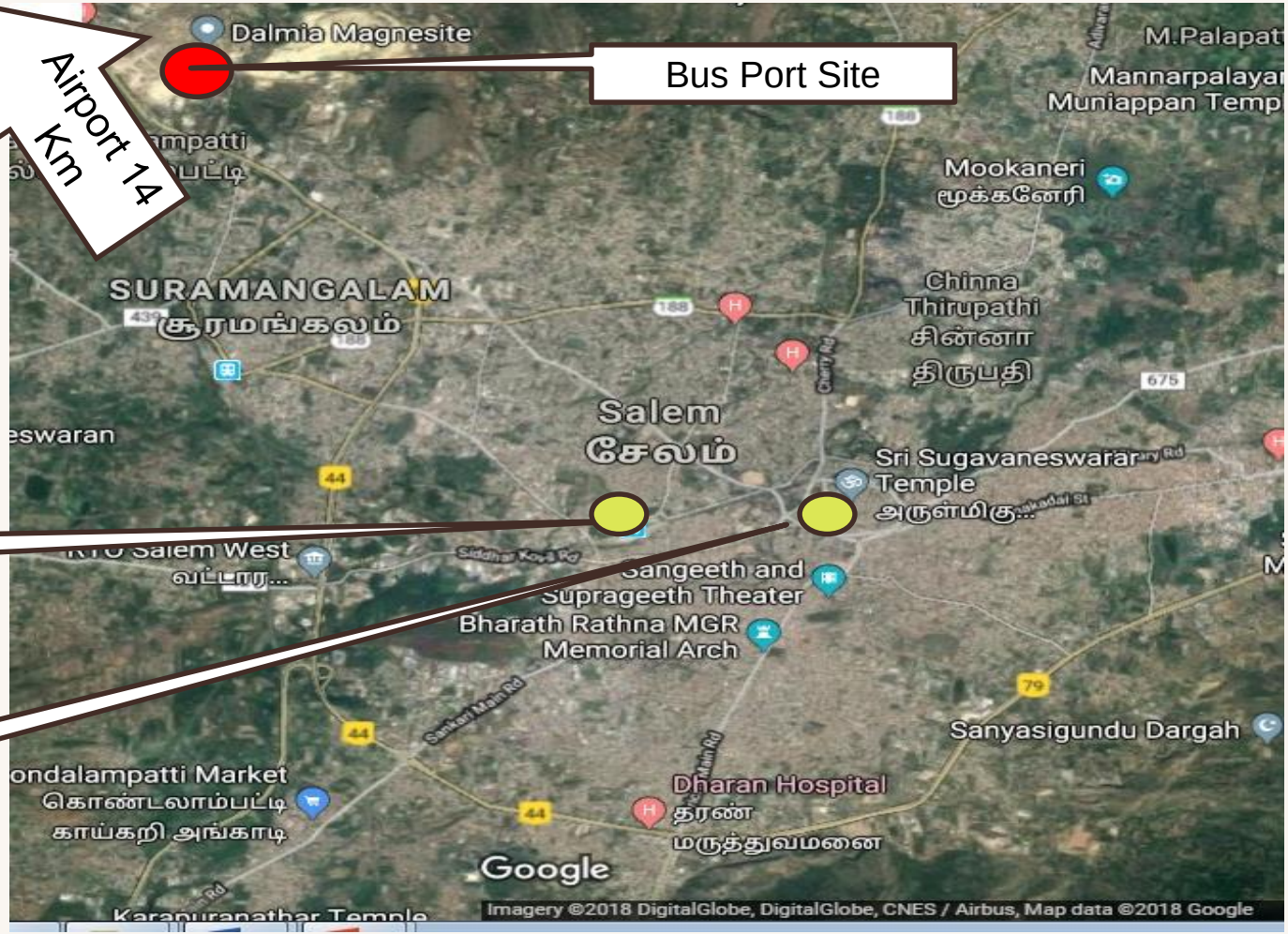
- Provide all the bus passengers access to safe boarding and de-boarding locations.

- To improve passenger comfort and convenience by provision of drinking water, clean washrooms, rest/waiting area etc.

Development of Self-Sustainable Bus Port at Salem, Tamil Nadu :

- Salem is the headquarters of Salem district and is the 5th largest city by population in the state of Tamil Nadu comprising of 8,29,267 population as per 2011 census.
- Salem has Salem Steel Plant (a unit of the Steel Authority of India) for production of cold-rolled stainless steel and a hot-rolled stainless-carbon steel alloy.
- The proposed Site for the Bus Port has an area of 60 acres and is located at an approximate distance of 4.7 km from Salem Railway Junction, 13.4 km from Salem Airport 6.1 km from existing Salem Bus Stand.
- There is a mixed development of residential and commercial area at the vicinity of the proposed site. Also, an IT park is located adjacent to the proposed site.
- The proposed site is located adjacent to the NH 44 (New NH 7) which is at a distance of approximately 500 m.

Salem


Airport 14 Km
Bus Port Site
Railway Station 5 Km
Salem New Bus Stand 6 Km
Dalmia Magnesite
SURAMANGALAM
சூரமங்கலம்
Mookaneri
மூக்கனேரி
Chinna Thirupathi
சின்னா திருபதி
Salem
சேலம்
Sri Sugavaneswarar Temple
அருள்மிகு...
Sangeeth and Suprageeth Theater
Bharath Rathna MGR Memorial Arch
Sanyasigundu Dargah
Dharan Hospital
தரண் மருத்துவமனை
Google
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Site Surroundings :

MANIPAL HOSPITALS SALEM
0.67 KM

KONGU NADU TEACHER TRAINING INSTITUTI
0.67 KM

ISKON TEMPLE
1.23 KM

MAGNESITE JUNCTION
1.69 KM

GOLDEN SPARK MARTICULATION HIGHER SECONDARY SCHOOL
1KM

IT PARK
0.66 KM

Status of Project :

NHIDCL has appointed M/s Delhi Integrated Multi-Modal Transit System Ltd. (DIMTS) as a consultant to carry out the Pre-Feasibility study, Preparation of Detailed project Report for development of Bus Port in Salem, Tamil Nadu.

Presently, the consultant in working on the preparation of Detailed Project Report.

OBJECTIVES OF THIS ASSIGNMENT:

- ❑ Question the need for the Bus Port
- ❑ Re-assess the site suggested by the State Government
- ❑ Assess the facilities required
- ❑ Suggest a Business model for implementation (PPP/Non PPP)

❑ NEED FOR BUS PORT IN SALEM :

Limitations of Existing Bus Stand :

- The existing bus stand is constructed in an area of approximately 6-7 acres.
- The existing bus stand lacks of basic passenger amenities such as toilets, drinking water facilities, food outlets, seating area, waiting rooms etc.
- The existing bus stand also experiences immense traffic congestion at the vicinity due to large number of bus trips per day and lack of infrastructure to cater to such large inflow of traffic.
- There is no proper technological assistance giving indication of current location, estimated time of arrival to destination and other details for the passengers.
- The bus bays at the existing bus stand is unorganised which leads to congestion and chaos for the passengers to alight and board the buses.

Existing Bus Stand at Salem :

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Need for Modern Bus Port :

- There are more than 4,500 bus trips that either originate, pass through or terminate at Salem.
- There are approx. 2.5 lakh passengers commuting daily from existing bus stand at Salem.
- The current infrastructure is on its brink overflowing with traffic and at the same time, lacking in terms of the basic facilities and comfort provided to the passengers. Therefore, there is a need to provide a modern bus port at Salem catering to enhance the comfort and experience of the passengers that will help decongest the existing bus stands and areas around them.
- The modern bus port proposed at Salem is aimed to be self-sustainable which would include modern facilities like kiosks, commercial area shopping complex, food joints, hotels etc.
- The bus port would also provide safe boarding and alighting facilities to the passengers.

❑ Re-assess the site suggested :

A Site visit was conducted and the information collected is provided below.

Address	Ammapalayam Village Owner of Land Government of Tamil Nadu
Land Details : :	Three land parcels for development of Bus Port: SN Survey No. Area (in hectares) 1 163/1 17.920 2 2/10 2.895 3 1/4 4.030 **Total 24.845 hectares**
Declared Land use	Existing Government Poramboke land i.e. uncultivated barren land in village accounts
Shape of Site	Site is a rhombozoidal patch of land with a protruding southernmost tip.
Site orientation	NH 44 (New NH 7) forms west side boundary of the site
Level of undulation	Site has high level of undulation of upto 30 m from ground level.

❑ Site suitability Justification:

•The proposed site for bus port is located at an approximate distance of 2 km from the heart of the Salem City.

• It is located at a distance of 4.7 km from Salem Railway Junction, 13.4 km from Salem Airport 6.1 km from existing Salem Bus Stand.

•There is a mixed development of residential and commercial area at the vicinity of the proposed site. Also, an IT park is located adjacent to the proposed site.

•Site is readily available with state government and hence there is no need for acquisition.

•The site is adjacent to NH 44 (New NH 7).

•The site is close to existing Salem new bus stand i.e. approximately 6.1 km.

❑ Site suitability Justification:

- Salem Airport is just 13.4 km away from the site and is on the same road.

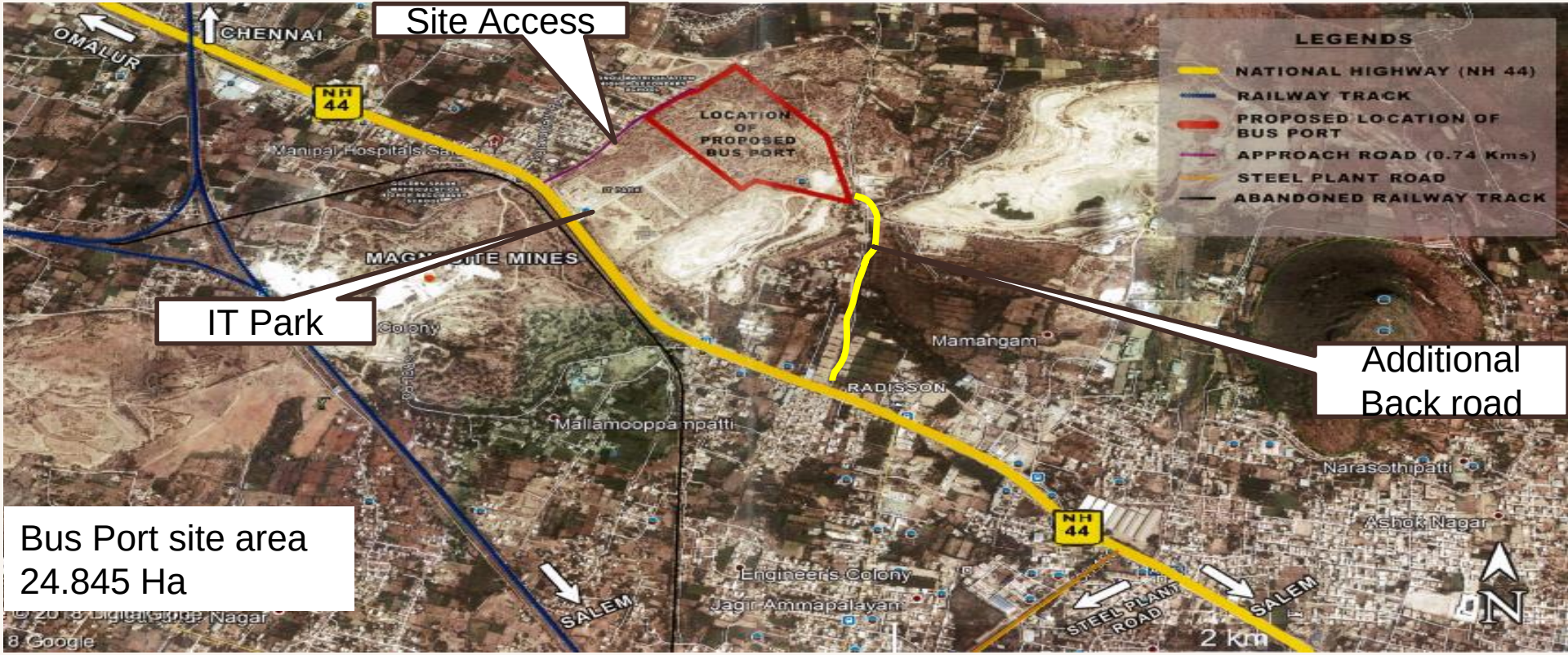
- IT Park and banks are developing just besides the proposed site which may in future, develop into a huge hub for the people.

- Site is undulated and hence levelling is required.

- Change in land use would be required for development of bus port.

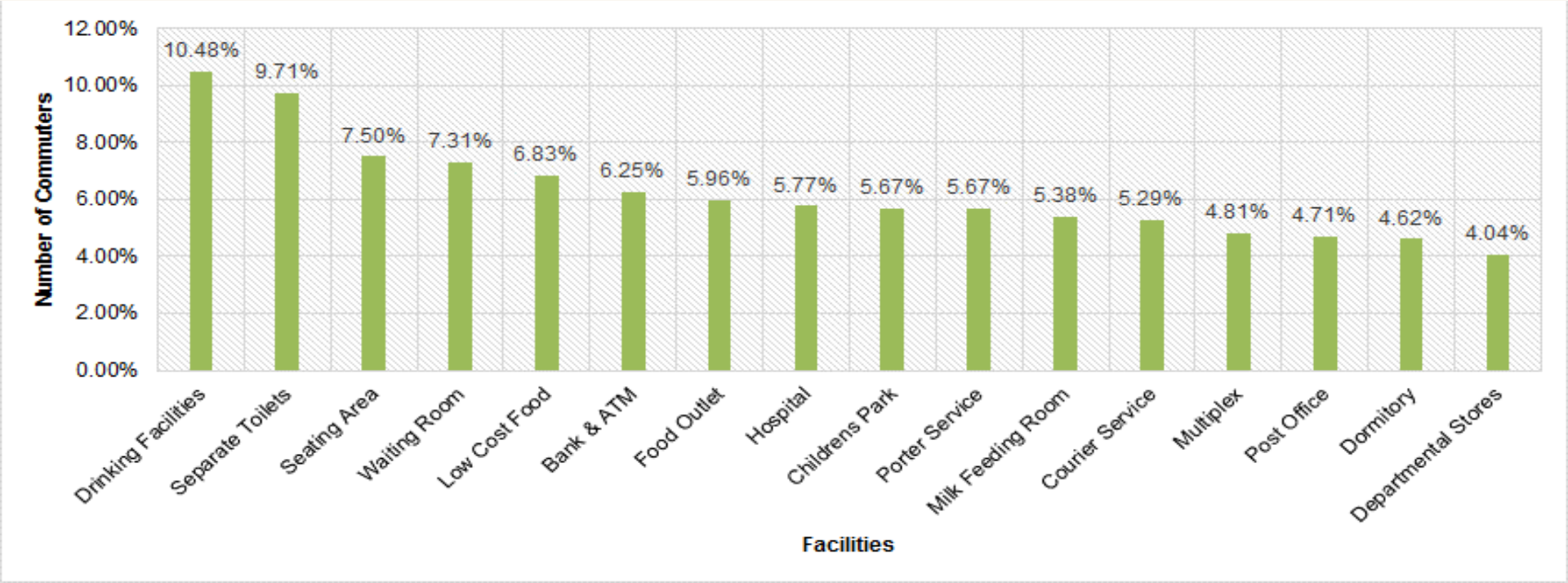
- Back road of proposed site may be strengthened to provide additional connectivity from NH 44 (New NH 7).

Salem Bus Port Site :



❑ Assess the facilities to be provided:

A commuter perspective survey was carried out among 50 passengers in existing Salem Bus Stand wherein the facilities which should be provided at the proposed Bus Port was inquired. The results are displayed below:



FACILITIES TO BE PROVIDED AT THE BUS PORT :

Passenger Facility	Value Added Passenger Facility	Other Facility
▪ Enquiry, Ticketing Office (AC) ▪ Concourse Area designed for peak time boarding passenger ▪ Tourist Information Centre (AC) ▪ Store Room, Parcel Room, ▪ Cloak Room ▪ Public Relation Office ▪ Digital Display Boards ▪ Public Address System ▪ Surveillance & Security System (CCTV) ▪ Parking	▪ Television, WiFi at suitable places ▪ Stainless Steel Seating ▪ Furnished waiting halls (General, Ladies Premium and Deluxe (Paid)) ▪ Dustbins ▪ Toilets and Drinking Water Chambers ▪ Trolleys and Wheel Chairs ▪ Retail Kiosks	▪ Administrative Offices (AC) ▪ Fire Detection System ▪ Tow Away Vehicles ▪ Rest Room, ▪ Guest House (AC) ▪ Parking Areas

Contd.

Transport Infrastructure	• Parking and integration for Intermediate Para Transit (IPT) • No conflict of pedestrian movement with vehicles • Provision for charging of electric buses
Passenger Amenities	• Baby care room, • Easy access for specially abled and senior citizens • Bus port information broadcast system (PA system) • Low cost food, dormitory ,First aid facilities, Wi-Fi, mobile charging station • Complaint Redressal and feedback collection system
Sustainability	• Solar power generation and usage • Proper waste management system • Recycling and reuse of waste water, Rain water harvesting/ collection
Stakeholders	• A portion (say 10%) of the commercial area to be reserved for local Micro Small and Medium Enterprises. • Office space for project proponent.
Real Time Communication	• Mobile app providing information about the bus port and the real time bus timing • Real time signage

❑ Analysis on a suitable Business Model for implementation:

To analyse the suitable Business Model for implementation of the Bus Port project in Salem, a few cases were studied.

CASE STUDY 1 : PPP BUS TERMINAL: AMRITSAR :

Amritsar : (one of the first BOT Terminals)

- 2000 bus arrivals at old bus station spread on 8.5 acres
- Intercity Terminal built on same site by demolishing existing building
- PPP Concession with Rohan Rajdeep Infra Pvt. Ltd.
- Concession Period of 11.5 yrs incl. construction period
- Developer to pay Rs. 35 lakh for project site lease (one time) and Rs. 50,000 pm as lease rentals

- **Revenue model**
  - **"Adda Fees"** from bus operators for use of the facility, **Rentals** from shops , **Advertisement Rights, Parking Fees**

Contd.

- **Present Status**
  - Concession Agreement signed in Feb 2004. Facility commissioned in Oct 2005 at Project Cost of Rs. 21 crore v/s expected Rs 19 crore.
  - Around 1700 buses use the facility v/s expected 2000-3000 buses

- **Learning**
  - Existing concept of adda fees used effectively in the revenue model
  - Elasticity of demand must be factored in properly in the viability assessment
  - Govt Support (Notification making it mandatory for all intercity buses to visit Terminal)
  - Bankable concession agreements allowing charge on adda fee revenue stream
  - Comprehensive design specifications and O&M performance parameters are a must
  - Role of different stake holders such as State Govt., NHIDCL, to be brought out clearly

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AMRITSAR BUS TERMINAL:

CASE STUDY 2 : PPP BUS TERMINAL: DEHRADUN:

Dehradun (ISBT inter State Bus Terminal): (DBFOMT Model)

- Land area for project 10.40 acres
- Design, Build, Finance, Operate, Maintain and Transfer Concession with Ramky Infrastructure Ltd
- Concession Period of 20 yrs extendable to 30 yrs
- Developer to pay annuity of Rs. 81 lakhs pa (inflated every year by 5%)
- Modern Bus Terminal with all facilities and amenities. Phase I was ISBT Terminal and Phase 2 was entertainment cum commercial complex
- Bus Bays : 50 (Interstate) + 10 (Local) + 45 (Parking)

- **Revenue model**
  - **"Adda Fees"** from bus operators for use of the facility,
  - **Lease Rentals** from commercials
  - **User fee** from value added services

Contd.

- **Present Status**
  - Concession Agreement signed in July 2003. Phase I operational in 2004

- **Learning :**
  - One of the first Bus Terminals on BOT Basis.
  - Separate phasing for Bus Terminal and Commercial Complex allowed quick availability of Terminal.
  - First mover advantage as it is first mall cum Multiplex in Dehradun.

POSSIBLE PPP MODEL FOR SALEM BUS TERMINAL :

MORTH has published " Guidelines for Development of Bus ports in States/ UTs on BOT/ HAM basis " dated 13-11-18 with following key features:

- At least One High Quality Bus Port to be developed in each State/UT, which can act as a model
- State / UT to apply to Central Executing Agency (NHIDCL) with details of Land Parcel, admin arrangements and **commitment to provide access to public and private bus operators.**
- NHIDCL will then commission Pre – feasibility study. This would be followed with DPR and tendering to appoint concessionaire / contractor based on model suggested in DPR.
- Developer will pay premium / receive grant if there is a Viability Gap.
- State could consider providing higher FSI
- Cost of Pre- Feasibility, DPR, PMC and VGF if any (max 40% of Project Cost) will be paid by Central Executing Agency
- Bus Port to be developed as Green Field or Brown Field with all amenities.

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The project may be implemented through private participation on the following methods:

- **Build, Operate and Transfer (BOT) with/without VGF**
- **Design, Build, Operate, Maintain and Transfer (DBFOMT) basis with/without VGF**
- **Hybrid Annuity Model (HAM)**

Kind of construction that can be permitted to the operator under above models :

- **Only Bus Terminal without any commercial space**
- **Bus terminal with commercial space**
- **Higher FSI could be considered if required for Revenue**

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- **Revenue Scope for Operator**
  - Adda fee
  - Advertisement Rights
  - Lease/Rental commercial space

- **Revenue Options for Authority (any combination can be used)**
  - Annual License Fee
  - Lease Rental for Land
  - One time Premium

The Final PPP model shall be designed based on further analysis and data.

Justification:

- The mobilisation of finances, design of the project, would be the responsibility of the private developer. The entire finance required for the project would have to be raised by the private developer within a pre-specified timeframe. Therefore, the project proponent would not be responsible for raising the funds for meeting the initial capital expenditure.

- The project will be implemented in a fully competitive bidding situation and therefore, it would get constructed at the lowest possible cost by the private developer.

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- The risk of time bound completion of the project would be passed on to the private developer. Since the revenue streams from the project would commence only after completion of the project, it would be in the interest of the private developer to complete the project as early as possible. Project proponent may also stipulate a penalty to be paid by the private developer in case of delay in implementation of the project.

- The risk of overruns in construction cost and operational expenses would be passed on to the private developer. Since the private developer would be responsible for the implementation of the project, any increase in cost of the project would also be borne by him.

- The developer would be responsible for operations, maintenance and management of the project for the entire concession period.

THANK YOU

Presented by:

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NHIDCL, New Delhi