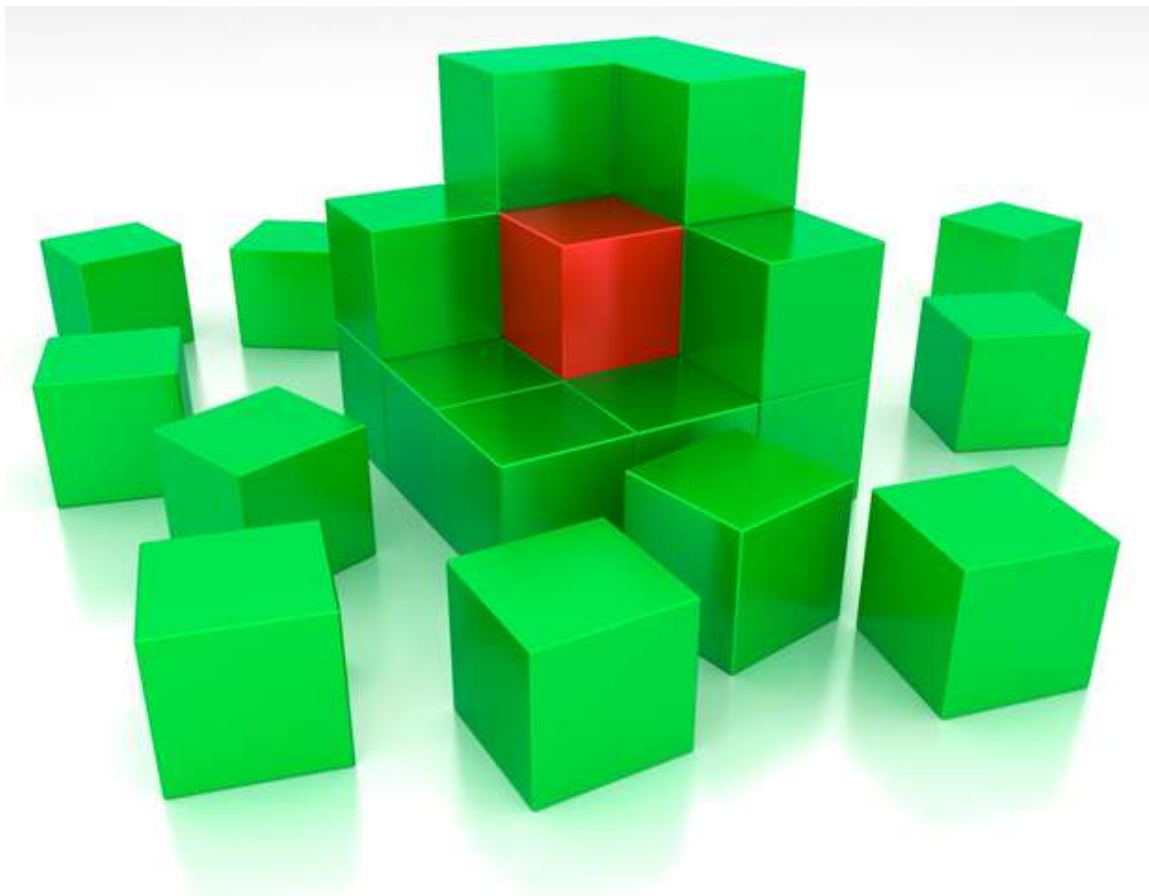




Sector Specific Inventory & Institutional Strengthening for PPP Mainstreaming

Directorate of Urban Land Transport, Government of Karnataka

Pre-Feasibility Report for Development of Bus Terminals at Belgaum and Hubli on PPP



Submitted By
Deloitte Touche Tohmatsu India Private Limited

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ACRONYMS

BOOT	Build Own Operate Transfer
BOT	Build Operate Transfer
BUDA	Belgaum Urban Development Authority
DBFOT	Design Build Finance Operate and Transfer
KRTC	Karnataka Road Transport Corporation
NWKRTC	North West Karnataka Road Transport Corporation
NEKRTC	North East Karnataka Road Transport Corporation
MRTC	Maharashtra
PWD	Public Works Department
FDI	Foreign Direct Investment
GoI	Government of India
GoK	Government of Karnataka
IDD	Infrastructure Development Department
MIS	Management Information System
PPP	Public Private Partnership
UDD	Urban Development Department
ULB	Urban Local Body
EOI	Expression of Interest
RFQ	Request for Qualification
RFP	Request for Proposal
FAR	Floor Area Ratio
FSI	Floor Space Index
KSHB	Karnataka State Housing Board
BRT	Bus Rapid Transit
CDP	City Development Plan

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1 Executive Summary

- 1.1 Karnataka has emerged as one of most successful Indian States having a large number of knowledge-based industries such as IT, biotechnology and engineering. It is considered as the science capital of India with more than 100 Research and Development (R&D) centres. More than 650 multinational corporations have a base in this state. Such all-round developments trigger the need for well-developed social, physical and industrial infrastructure, part of which can be built through Public Private Partnership (PPP).
- 1.2 Since PPP concept is relatively new and the implementing officers require necessary insight, orientation and assistance, Infrastructure Development Department (IDD), Government of Karnataka is keen to strengthen the project development process in the Directorate of Urban Land Transport for implementing infrastructure projects through PPP. IDD has therefore engaged Deloitte Touche Tohmatsu India Pvt. Ltd. to provide consultancy services in this regard.
- 1.3 Among the wider ambit of services, the engagement intends to arrive at sector-wise inventory, undertake pre-feasibility studies and develop a procurement plan for selection of Transaction Advisor (TA) / Technical Consultant for projects to be taken up for bidding. The information on projects that are generated out of this process shall be initially marketed through workshops before they are bid-out with the assistance of respective Transaction Advisors.
- 1.4 Considering that Bus Terminals are the interface between passengers and the public transport system, well-organized infrastructure is always desirable both from the economic point of view (timely services) as well as passenger safety. It also portrays a positive image/outlook of a city and its infrastructure. Both the cities under purview have bus terminals which are located at a prime location but are congested and unorganized. Thus, redevelopments of these are clearly justified and needs to be looked for its amenability for PPP to save initial investment requirements from the State Government.
- 1.5 As a part of the study mandate, we have inspected these two cities i.e. Belgaum & Hubli and their specific needs for upgrading the existing bus terminal facilities. Based on our interactions with NWKRTC officials, we understand that a new bus terminal is already operational at Hubli and the old city bus terminal at Rani Chennamma circle has been proposed to be developed under the BRT project connecting Hubli-Dharwad and thus one more new terminal is currently not required. In case of Belgaum, it was suggested that the City Bus Stand (CBS) and City Bus Terminal (CBT) which are located physically opposite to each other within the city center be analyzed and considered for development as modern bus terminal and commercial complex as a single project.
- 1.6 Based on our discussions with NWKRTC, 3 acres and 7 acres of land parcels have been identified for CBT and CBS for up-gradation of existing facilities and development of additional bus bays, passenger facilities, administrative block, worker's facilities and a new commercial complex. Based on standard market assumptions, the total project cost including civil cost, Interest During Construction (IDC), pre-operative costs and financing costs has been worked out to be INR 40.45 Cr. Two project development scenarios have been considered based on different revenue assumptions:

- **Scenario 1:** Concession period of 30 years (excluding construction period) excluding additional revenue considerations from “Day Adda Fees & Night halting charges” for the public buses using the terminal
- **Scenario 2:** Concession period of 30 years (excluding construction period) considering additional revenues from “Day Adda Fees & Night halting charges¹” for the public buses using the terminal

1.7 The bidding parameter which has been considered as a key variable for financial analysis is the “Upfront premium” to be paid by the concessionaire to the project authority, NWKRTC in this case. In order to achieve an Equity IRR of 15%, the upfront premium works out to be INR 0.55 Cr. and INR 9.5 Cr. for Scenario 1 & Scenario 2 respectively.

1.8 However, to choose between the two scenarios, the Net Present Value (NPV) of all the future cash inflows/outflows to/from Karnataka State Corporations to the Project Concessionaire has been considered. In Scenario 1, the NPV is INR 0.55 Cr. which is the net inflow in form of upfront premium earned by NWKRTC. In case of Scenario 2, NPV of all the future outflows in form of “Adda Fees” to be paid by the Karnataka State buses² for the entire concession period has to be considered. By discounting @ rate of 9% (assumed as cost of capital) the NPV of the total cash outflow works out to be INR 11.3 Cr. And after considering an inflow of INR 9.5 Cr. as the initial upfront premium earned by NWKRTC in Scenario 2, the NPV of all future inflows/outflows in case of Scenario 2, is (-) INR 1.83 Cr. Thus Scenario 1, which has a positive inflow of INR 0.55 Cr. is recommended for implementation. It is also recommended that NWKRTC, DULT and State Transport Department take a definitive view on this.

¹ Buses of NWKRTC, NEKRTC and KRTC will not be paying Night Halt charges since they will be parked in the Belgaum Depot.

2 Introduction

2.1 Project Need

- 2.1.1 Hubli and Belgaum are two of the important cities of Karnataka which have registered steady growth in the past decade. These cities have high influx of economic activities which have a positive correlation with travel demand. One of the important components to meet the travel demand needs of a city is well-organized transport infrastructure including public transport buses, bus terminals, bus stops, roads and intelligent transport systems.
- 2.1.2 Considering that Bus Terminals are the interface between passengers and the public transport system, an organized system is always desirable both from the economic point of view as well as passenger safety. It also portrays a positive image/outlook of a city and its infrastructure. Both the cities under purview have terminals which are located at a prime location but bear the look of being congested and unorganized. The need for up-gradation of these existing bus terminals is imminent and can be logically justified on the basis of the following considerations :
- Lack of appropriate passenger facilities
 - Lack of organized bus circulation, parking areas for buses and boarding & de-boarding arrangements for passengers resulting in passenger-vehicle conflicts
 - Increased journey time owing to traffic congestion within the premises
 - Lack of connectivity with other transit infrastructure viz: personal vehicles (4W, 2W), autos, etc.
- 2.1.3 As a part of the study mandate, we have inspected the city specific needs for up-grading the existing bus terminals of the two cities i.e. Belgaum & Hubli. Some of the key findings are as highlighted below:

Belgaum

- 2.1.4 Currently there are three bus terminals in Belgaum - City Bus Terminal (CBT), City Bus Stand (CBS) and Railway Bus Terminal. There was a Fort Bus Terminal adjoining Ramakrishna Mission used for mofussil bus operations within Belgaum district. However, mofussil service has also been shifted to CBT around 2 years back. Most of the services originating from the CBT also touch Railway Bus Terminal.
- 2.1.5 The intra-city operations and mofussil services are catered to by NWKRTC and originate from CBT and some which touch the Railway Bus Terminal. While long distance operations are from CBS and are catered to by State Transport Corporations of Karnataka, Goa and Maharashtra.
- 2.1.6 CBS doesn't have pedestrian crossing facilities or footpaths available. 3-W parking stand is present at the entrance of this terminal. It does have an allocated parking lot for cars



and scooters/ motor bikes but the same seems to be inadequate. There is imminent conflict between pedestrian and buses within the terminal. There are no defined parking bays for buses which results in haphazard movement of buses and pedestrians.

- 2.1.7 CBT does not have facilities for pedestrians and passengers. This results in major conflict between pedestrian and vehicles. It has 18 bays and the movement of the pedestrians within the terminal is not organized due to unavailability of organized facilities and lack of enforcement. It is also observed that there are no separate boarding/alighting gates for passengers leading to chaos at entry/exit doors of bus thus making it uncomfortable for the passengers to exit from the platform.
- 2.1.8 The Fort Terminal was used for bus operations within Belgaum district. However, there are no defined bays or facilities inside the Fort Terminal. The exit of city buses on Fort Circle / Ashok Sthamb caused lot of hindrance to the moving traffic and hence was shifted to CBT 2 years back.
- 2.1.9 Besides, we understand that owing to increase in the public travel demand needs, there are proposals to add new fleet i.e. 25 nos for Belgaum city operations and 30 nos for the regional long distance operations in the next 2 years which will also increase the demand for arrivals.
- 2.1.10 The city has 3 Bus Depots. Depot 2 is located at the backside of CBT and is for city buses, while Depot 1 & Depot 3 are located at the backside of CBS and near RTO office for long-distance buses.
- 2.1.11 In addition to the bus operations by public transport corporations, there are private bus operators from Belgaum operating long-distance services. In total there are 80 private buses operated by RR Travels, Samrat Travels and Rani Chinnemma. These private services originate from the private depot near Ramakrishna Mission on Fort Road. In addition to the above there are around 60 passing services of SRS travels and Ganesh travels.
- 2.1.12 There is distinct lack of passenger facilities at all these bus terminals leading to conflict between buses and transit passengers. There is a need to provide platforms with facilities like sitting arrangement, passenger waiting areas and intelligent transport systems like electronic display boards for the convenience of passengers.
- 2.1.13 In discussion with NWKRTC, considering the physical proximity of CBS and CBT and possibility of merging the two terminals as a single project to be taken up on PPP, the pre-feasibility for the same is being conducted.

Hubli

- 2.1.14 Buses feature as the dominant mode of public transport in the city. People going to offices and school & college students are the major users of public transport. There are three types of bus services in Hubli-
- Inter-city bus between Hubli and Dharwad – 150 buses (40 private and 110 NWKRTC) operating across 40 routes
 - Intra-city and sub-urban bus service within Hubli– 110 buses covering 104 routes within city limits and 46 buses for sub-urban services covering 39 routes
 - Inter-city Long distance services – 750 buses across more than 200 routes

2.1.15 The city has three city bus terminals located with a radius of 5-6 km. The central bus terminal is located at Maratha Galli near the railway station from where all the intra-city and sub-urban buses operate. The old city bus terminal is at Rani Chennamma circle from where all the intercity buses operate i.e. Hubli-Dharwad. The third one is the new bus terminal at Gokul Road spread over 25 acres with infrastructure accommodating more than 120 bus platforms, parking space for the buses and other allied passenger amenities.



2.1.16 We also understand that the old bus-terminal is already proposed to be developed under proposed development of 23 km BRT corridor connecting Hubli and Dharwad with World Bank funding. Once this is developed, only the intercity operations and mofussil services are expected to be operated from this terminal.

Old Bus Terminal at Rani Chennamma Circle



New Bus Terminal at Gokul Road



2.1.17 Considering development of old bus terminal at Rani Chennamma circle is already being planned for implementation and with the presence of the well-developed intercity bus terminal at Gokul road within a catchment of 5 km there is no inherent need for a new bus terminal. The same has been inferred and discussed with the NWRTC officials at Hubli division.

2.2 Approach & Methodology, studies, surveys including Data collection, analysis

Our broad approach and methodology for conducting pre-feasibility study is presented in form of the Table below:

S No.	Steps By Step Approach	Broad Methodology	Data/Decision Points
1	Project Inception	Meetings with key officials of the NWKRTC, ULB and other stakeholders	
2	Macro overview of Town: Insights on spatial growth/expansion of the town, zoning, demographic profile, tourism, connectivity & linkages, upcoming & planned developments, traffic pattern and growth and understanding the local industry and commercial activities	Secondary Research, review of Master Plan/City Development Plan, Development Control Norms (DCN) of the ULB/Town & Planning Division	Master Plan/CDP, DCN as per Belgaum Urban Development Authority(BUDA)/Hubli Urban Development Authority(HUDA)/Local ULB
3	Project Site Analysis: Location and its zonal configuration, land use characteristics, site dimensions & boundaries, connectivity, accessibility, frontage roads, upcoming & planned developments in the vicinity, circle rates of land, commercial/ residential space	Site Visits, Press/Document Review, stakeholder interactions and secondary research	Circle Rates, Site maps
4	Market Assessment a) Understanding the demand pattern of use of public transport, the traffic characteristics etc. b) Commercial Units- Demand, Trends, Construction Cost, Market rates, Lease types escalations, assessment of facility requirements etc. c) Exploring feasible project development framework/models	Primary data on the rentals on shop located at CBT and CBS in Belgaum. Secondary research and interactions with real estate developers, owners of commercial spaces like small shops, food joints etc.	Support in arranging meetings with the real estate developers, hotel owners
5	Facility Planning and the Base Project Cost Estimation	Based on the market data, broad technical specifications and stakeholder inputs	Discussion with NWKRTC officials on proposed plan, broad technical specifications and Schedule of Rates
6	Development of Base Financial Model : Base project cost, options for revenue generation, assumptions on financial structuring	Discussion with the Stakeholders and market insights	
7	Preliminary assessment of PPP options and Final Recommendation on Project Structuring	Based on financial analysis, sectoral PPP best practices and market insights	

2.3 Study of earlier reports in this sector in the relevant area

- 2.3.1 The Directorate of Urban Land Transport (DULT), Government of Karnataka, has mandated preparation of the Comprehensive Traffic and Transportation Plan (CTTP) in line with National Urban Transport Policy (NUTP) 2006 for all the major cities of Karnataka. This document provided important indicators on the transportation issues pertinent to these cities.

3 Sector Profile

3.1 Industry Overview

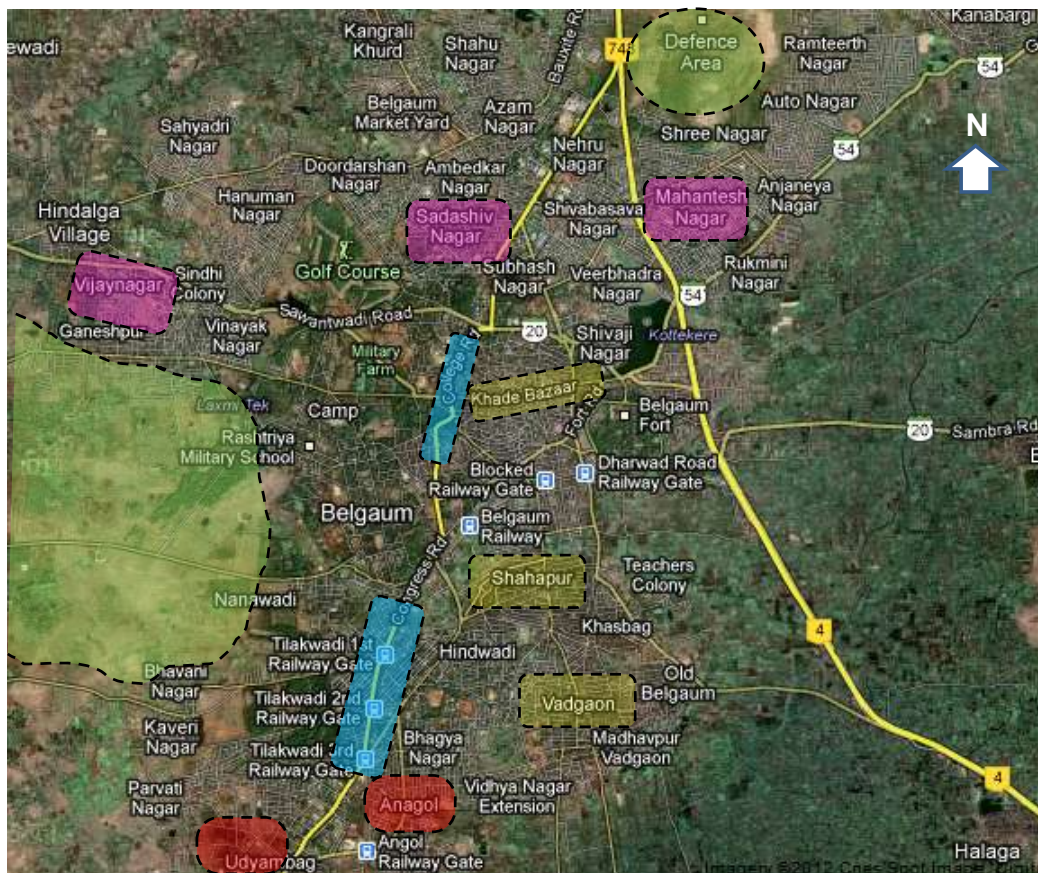
- 3.1.1 The Indian economy witnessed robust growth in the last few years and is expected to be one of the fastest growing economies in the coming years. Demand for commercial property is being driven by India's economic growth. As per India Brand Equity Foundation research, Real estate in India contributed about 5 per cent to India's gross domestic product (GDP) in 2010-11.
- 3.1.2 Urbanization and growing household income are some of the major factors that influence demand for growth in the urban infrastructure requirements. As per Dr. Ahluwalia Committee Report 2011 on Urban Infrastructure, India's urban population is expected to reach a figure close to 600 million by 2031.
- 3.1.3 Karnataka is making significant investments in real estate and industrial infrastructure developments, such as setting up IT parks, industrial clusters and Special Economic Zones (SEZs) through Public Private Partnership (PPPs) projects to provide an impetus to further industrial development. As per Urban Development Policy of Karnataka 2009, urban population of Karnataka will reach 42% by 2025. As per the policy, the land requirement for urban use in Karnataka is estimated to be 5, 67,285 hectares by the year 2025. According to this estimate, about 1, 40,262 hectares of additional land would be required. While meeting land requirements for the purpose of housing, industry and infrastructure, it is thus important to ensure optimum utilization of land available with the state government.

3.2 Regional Profile- Belgaum

- 3.2.1 Belgaum District has rich cultural heritage, favourable agro-climatic conditions, industries, educational institutions and tourist spots. It is well connected by air, road and rail. Belgaum district population is 4,778,439 as per Census 2011 covering an area of 13415 sq km. The aforementioned aspects have made Belgaum popular as industrial and tourist destination and have influenced the tourist population inflow into the city.
- 3.2.2 Belgaum city is the district headquarters of Belgaum district, which borders the states of Maharashtra and Goa. It is situated nearly 2,500 ft (762 m) above sea-level. Belgaum city has a geographical spread of 98.04 sqkm reflecting the character of a small town governed Municipal Corporation which comes under Belgaum Urban Agglomeration. As per Census 2011, Belgaum city has population of 488,292 its urban/metropolitan population is 610,189.
- 3.2.3 Owing to its location, Belgaum city has acquired the finer points and cultural influences from both its neighboring states. Belgaum is a mix of the old city and modern day culture and lifestyles. The city has the blend of the local Kannada culture that creates a rich heritage, which is unique in its manifestation. It is famous for its history and natural beauty and is known as Malendu or Rain Country.

3.2.4 As per the land use plan of 2004 residential area which constitutes 32.29% of the total developed area of 4,232.21 Hectares while commercial and industrial establishments occupy 1.84% and 11.89% respectively of the total developed area of the city. There is a concentration of density of population in central area with nearly 20% of the total population residing in 200 hectares which is hardly 5% of the developed area. Owing to congestion in the central area, a recent trend in development of new extension areas in the peripheral areas of the city aimed at decongesting main city area has been observed. The local planning area (LPA) comprise 182 Sq km. of Belgaum out of which the corporation limit is 94.00 Sq. km and the proposed land use 2021, with 42% to be residential area.

3.2.5 The existing land use of the City exhibits two distinct patterns – one is specific or defined land use and other is mixed land use. Specific or defined land use means one particular land use appearing predominantly in a given area, other land uses account for negligible coverage. New extension areas like Rani Chennamma Nagar, Vijay Nagar, Sadashiv Nagar, Mahantesh Nagar etc., have residential function as specific land use. Mixed land use means an area where different land uses like commercial, industrial, public- semi public/ residential etc. exists together and each land use is predominant. For e.g. C.B.D., Khade Bazaar, Shahapur, Vadgaon etc., have mixed land use pattern, where one land use overlaps the other land use and in certain cases, segregation itself becomes difficult. One such example is Khade Bazaar road facing portion of the land is commercial, while the hinder part is used for residential use. Defined land use is predominant in newly developed areas of the City.



3.2.6 Belgaum city is well-connected by road via the National Highway 4 (connecting

Maharashtra, Karnataka, Andhra Pradesh and Tamil Nadu) and NH-4A (connecting Karnataka and Goa). Belgaum is on the main Indian Railways grid being part of Hubli-Division and is well connected by rail to major destinations such as Bangalore (via Hubli), Mumbai, Pune/Delhi (via Miraj) and Goa. Raichur- Bachi (SH-20) road cuts across Belgaum connecting the states of Andhra Pradesh and Maharashtra. The city also has a civilian Airport located at Sambra (about 7-8 km from the city).

- 3.2.7 It is the fourth largest city in the state of Karnataka, after Bangalore, Mysore, Hubli-Dharwad. INDAL (Indian Aluminium Company) is located at Belgaum. Belgaum is also known for its foundry clusters specialized in making machine tools, oil engines, electricity machinery and pump sets for automobile industry. These clusters are located in the Industrial estates of Udyambagh, Honga, Shinnoli and Angol Industrial Area/Estate. Belgaum city is also known for the being a prime education center with two medical colleges, two dental colleges, three engineering colleges. The city also houses Vishweshwaraiah Technological University and a Post Graduate campus of Karnataka University and KLE education institutes. The city also has a number of training centres of the Indian Armed Forces, and an air base of the Indian Air Force.
- 3.2.8 Belgaum has a large number of places of tourist importance in and around which makes it a stop-over for the tourists. Some of the prominent tourist places are Belgaum Fort, Safa masjid, Kamala Basthi, Saundatti Fort, Hooli Panchalingeshwar Temple, St. Mary's Church, Vajrapoha Falls, Naviltirtha.

3.3 State Transportation Sector

- 3.3.1 Transport sector in Karnataka is looked after by the State Transport Department (Secretariat). It has under it the following line departments which look after public transport needs of the state along with the allied infrastructure:
- Four State Transport Undertakings, viz; Karnataka State Road Transport Corporation (KSRTC), Bangalore Metropolitan Transport Corporation (BMTC), North East Karnataka Road Transport Corporation (NEKRTC) & North West Karnataka Road Transport Corporation (NWKRTC) for providing road transport services and associated infrastructure across Karnataka. The functions of State Transport Undertakings are governed by the Road Transport Corporation Act, 1950 and Karnataka Road Transport Corporation Rules, 1961. All issues involving finances and all functions to be carried out by Government as per the Road Transport Corporation Act, 1950 & Karnataka State Road Transport Corporation Rules, 1961 are being discharged in the Transport Secretariat.
 - Dr. Devraj Urs Truck Terminal Ltd that is responsible for setting up truck terminals, wherever required in Karnataka
 - Office of Transport Commissioner: Also called as the Road Transport Department that is responsible for tax collections and registrations of vehicles, issue of permits, driver's and conductor's licenses and enforcement of vehicles at the check posts, highways and city roads etc. in Karnataka. It has 56 Regional Transport Offices across the state, RTO-Belgaum looks into the above aspects for Belgaum Taluk.
- 3.3.2 The Karnataka state budget 2011-12 defined a total expenditure of INR 85,319 Cr with a Plan Outlay of INR 38,070 Cr. At present, a total of ninety-one projects with an investment outlay of INR 67,792 Cr are being pursued through Public-Private Partnership mode. The plan outlay for Transport sector has been set for INR 3,743 Cr

(10% of total outlay). In this regard, it is worth mentioning that a state level Transport Fund has been proposed to be constituted with an annual contribution of INR 60 Cr to fund the urban transport initiatives. Annual accrual to this fund is to come through INR 20 Cr from the budgetary sources, cess on local taxes collected by Urban Local Bodies and cess on Motor Vehicle Taxes.

3.3.3 Some other ongoing projects, being handled by the Transport Department, GoK include:

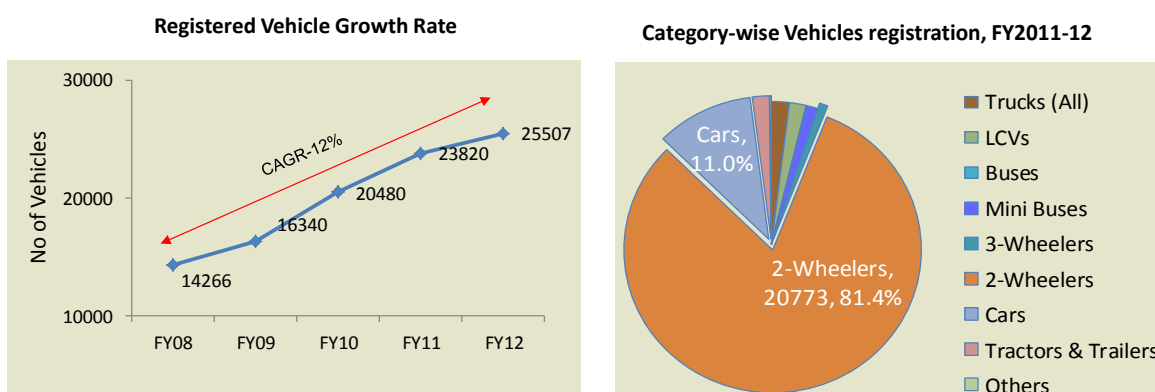
Project Name	Nodal Agency	Capacity	Status
Modern Bus Terminal & Commercial complex at Hassan	KSRTC	Commercial Complex (1,50,000 sq ft)	Agreement signed
Modern Bus Terminal & Commercial complex at Mangalore	KSRTC	KSRTC Guest House (3000 sq ft) & Commercial Complex (90,000 sq ft)	Agreement signed
Modern Bus Terminal & Commercial complex at Puttur	KSRTC	Integrated Bus Station & Commercial Complex	Agreement signed
Development of Modern Bus Station & Commercial Complex at Gulbarga	NEKRTC	Modern Intra City Bus Station - 12 Platforms in 3 Bus Bays & Commercial development - 72,000 sq.	Signing of Concession Agreement

3.4 Belgaum City Transportation Characteristics

- 3.4.1 The city is located in the north-west of Karnataka and lies on the NH4 connecting Bangalore to Mumbai. The city is the gateway to both Mumbai and Goa from Karnataka. Belgaum is at a distance of 520 km from Bangalore and 320 km from Pune. It is well connected by road and rail. The transportation system in the city is primarily dependent on the roadway system. Development of the city which is governed by proposals of the Master Plan of BUDA proposes a comprehensive circulation pattern for establishing an efficient traffic and transportation system.
- 3.4.2 About 743 km. of road network connects various parts in Belgaum. The city has a road density of 7.90 km per sq. km and 1.56 km road length per 1000 persons. Out of the total road length of 743 km., about 138 km. are un-surfaced roads. About 95% of the roads are maintained by Belgaum City Corporation, while the remaining is maintained by the PWD. Most of the roads especially in CBD area are unplanned and organic in nature. Khade bazaar road running in east-west direction connecting Pune-Bangalore road and Belgaum-Panaji road, Ganapati Galli road running north-south are the important roads in the CBD area of Belgaum.
- 3.4.3 As far as the regional connectivity is concerned, National Highway 4 i.e. Pune Bangalore Road and Belgaum–Panjim (NH 4A) are the two major roads passing through Belgaum city. The city is inter-spread on either side and between these two highways. In between these two National Highways, Vengurla – Bagalkot State Highway separates the CBD on the north. The two National Highways traverse through developed areas of the city and with heavy traffic movement on them, they function as inter-city roads also. The relation of these highways with important internal roads of the city is not orderly. The Central Business Area is bounded by these highways on North, East and West. But, there are no regular internal roads for the fast moving regional traffic to inter-connect these highways.

As a result, these highways particularly the Pune Bangalore Road are subjected to heavy regional and city traffic. However, in order to have speedy and smooth movement of regional traffic, four lane bye-pass of NH-4 has been constructed along the Eastern boundary of the city recently. However, there is no direct through fare connecting Pune Bangalore Road (NH 4) and Belgaum–Panjim road (NH 4A).

- 3.4.4 Belgaum falls on one of the main Indian Railways grid being part of Hubli Division and is well connected by rail to major destinations such as Bangalore (via Hubli), Mumbai (via Miraj) and Goa. The city comes under South Central Railway. The Railway station area is in Cantonment Area. Belgaum city is well connected by Railways to other parts of the State and country. The broad gauge line is passing through the middle of the city. There are six level crossings at different parts of the city, of which three are in Southern and other two are in the old part of the city. Among them one level crossing that crosses Pune – Bangalore road (NH 4) has road over bridge.
- 3.4.5 Belgaum city has a large number of two wheelers among the fast moving vehicles and bicycles account for the major share of slow moving vehicles. The figures below represent the growth rate of vehicles registration for Belgaum Taluk in last 5 years and category wise vehicles registered (in % & numbers) in 2012.



As can be seen from the figures above, the total number of vehicles registered has grown at a CAGR of 12% in the last five years. It has also been noted that of the total 25,507 vehicles registered in FY2011-12, 81% are two wheelers, 11% are cars and rest are in the range of 1-2%.

- 3.4.6 The Public Transport system in Belgaum consists of city buses and Intermediate Public Transport (IPT) system. There are about 200 bus routes connecting city and sub-urban areas operate from 3 different bus terminals in the city. Most of the commuters are office employees, school students, college students, business people and village people, who come to the city to sell vegetables. Industrial laborers using public transport is less since major industry is situated in northern and southern part of the city.
- 3.4.7 The IPT system present in Belgaum consists of auto rickshaws and taxis. The auto – rickshaws are often used as mode of transport for school children. With the upsurge of the city area, the public bus transport system has not been able to justify the mobility needs of the Belgaum citizens. Thus, there is an increase in usage of auto-rickshaws and taxis.

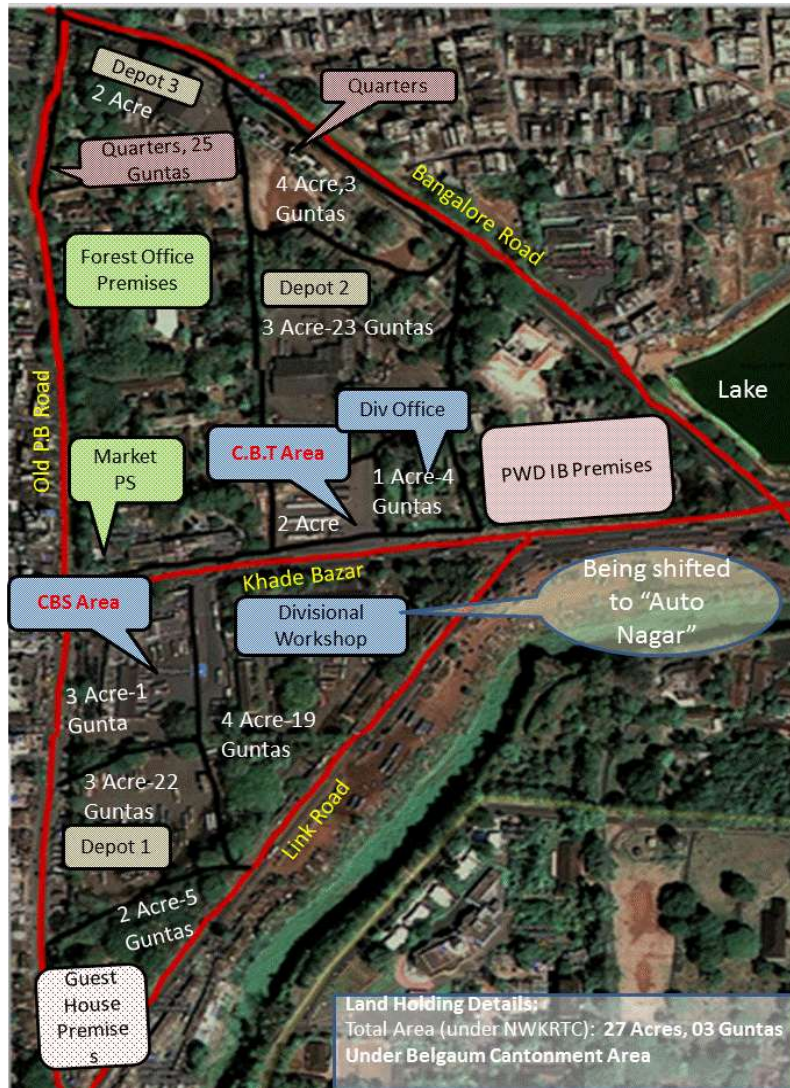
4 Project Brief

4.1 Description of the Project

- 4.1.1 The project is envisaged from the need to refurbish/decongest two of the existing terminals in Belgaum i.e. City Bus Terminal (CBT) and City Bus Stand (CBS) located physically opposite to each other. Considering the physical proximity of these two existing terminals, it can be conceptualized as a single project for bidding and evaluated for its amenability on PPP basis.
- 4.1.2 The Bus Terminal would serve as a common facility to:
- Local city and sub-urban buses for Belgaum operated by NWKRTC originating from CBT
 - Govt. owned inter-state / inter-city buses, i.e. KSRTC, NEKRTC, NWKRTC, other State transport operators like Kadama Transport (Goa) and MSRTC operating from CBS
- 4.1.3 The existing facilities of these terminals are proposed to be upgraded along with development of additional bus bays, organized bus circulation and parking zones, auto-rickshaw lane, parking for transit vehicles (4W & 2W), passenger entry/ exit, terminal building consisting of passenger circulation and waiting areas, ticket/ reservation counters, cloak room, first-aid room, waiting rooms, passenger amenities like drinking water, Pay & Use Toilets, Yatri Nivas etc., restaurant, shops, kiosks and administrative offices, crew restrooms, parcel office and other facilities. A skywalk has also been conceptualized for the passenger inter-transfers between CBT and CBS.

4.2 Description of the Project Site

- 4.2.1 The CBT & CBS are located opposite to each other separated by a 4-lane divided Khade Bazar road.
- 4.2.2 CBT is located in a 2 acres plot, located north of the 4-lane Khade bazar road leading to Old-Pune-Bangalore road and adjacent to the west of Divisional office, NWKRTC, Belgaum.
- 4.2.3 CBS is located at the corner plot in the junction of Khade Bazar road and Old Pune-Bangalore road measuring 3 acres & 1 Gunta.
- 4.2.4 The region is surrounded by large residential colonies with Subhash Nagar, Shivaji Nagar and Veerbhadra Nagar towards north-east direction and other residential areas towards its west. The region is well connected by roads. The site has a number of tourist locations nearby with the Kottekere Lake and the Belgaum Fort located nearby.
- 4.2.5 The Inspection Bungalow is located to the east of the Central Bus Terminal (CBT) and towards the west of the CBT are the Forest Office Premises and Police Station.
- 4.2.6 These terminals are located in the Belgaum cantonment area. The land is leased to NWKRTC by Belgaum Cantonment Board. The map below provides a regional perspective of the site which comprises of various facilities under NWKRTC measuring 27 acres.



- 4.2.7 The roads leading to the site include Old P.B road, Bangalore Road, Khade Bazaar Road. These roads provide regional connectivity to the Belgaum city and there is substantial traffic flowing on the same.
- 4.2.8 There is a Divisional workshop of NWKRTC measuring 4 acres 19 Guntas located alongside CBS which is being shifted to the outskirts at Auto Nagar located north of the Belgaum City where a new workshop has been constructed.
- 4.2.9 The CBT has a number of leased commercial shops in the passenger waiting area. Similarly, CBS has a number of small commercial outlets- small kiosks, Yatri Niwas, eating joints etc. situated in the premises. The pictures below show some of these commercial units in this area.



4.2.10 Currently the stand has 11 Platforms and the Bus Terminal has 18 platforms. However, they are insufficient due to increasing bus traffic and passenger growth. With the growing population the up-gradation and construction of new facilities i.e. bus bays/platforms, passenger waiting areas, commercials, organized parking zones are of utmost requirement

4.2.11 Currently parking is available for 2-W and 4-W at CBS which is not organized and has an imminent shortage of parking spaces. The parking space at CBS is auctioned to a private agency at a lease rental of around INR 1.5 lakhs per month. The pictures of the existing parking area within CBS is provided below:



4.3 Interaction with Key Stakeholders & Findings

Interactions with the stakeholders formed a critical component of the site visits. The list of key stakeholders consulted during and after the site visit is presented in **Annexure A**. The interactions with these stakeholders were aimed at understanding the city spatial characteristics, broad-level market assessment of real estate and hospitality sector, development control norms, traffic demand and the facility planning for CBS and CBT, cost & revenue assumptions and inputs on project structuring. The important findings from these interactions included:

- The development control regulations of the city are governed by the BUDA Zonal Regulations 1993, however land falling under within Cantonment Area is regulated by Cantonment Board, Belgaum. The Draft Master Plan 2021 for Belgaum is yet to be approved by GoK. Both CBT and CBS fall in the Belgaum Cantonment Area with an applicable FAR restriction of 0.5.
- The Circle Rates- post June 2011 for land and the built-up-area located around CBS and CBT is indicated in the Table below:

Site	BUA (Bldgs.) Rs./Sqft		City Limits (Land) Rs/Sqft	
	Mosaic Floor.	Granite Floor	Residential	Commercial
CBS&CBT	1254	1474	445	860

- It has been observed that the real estate market rates are however much higher than the circle rates indicated in the Table above. For residential units, the price varies in the range of

INR 2000 to 3500 per sft of BUA while for commercial establishments the prices are in the range of INR 4000 to 12000 per sqft. of BUA. The commercial properties on College road, Congress road, Kirloskar road, Khade Bazar Tilakwadi area would fetch market values as high as INR 10-12,000 per sqft for outright sale and INR 80-100 per sqft per month as lease rentals.

- The Belgaum city has witnessed quite a well-organized commercial real estate along the main arterial corridor. There are a large number of high street commercial complexes on College road, Congress road and Khanapur road. There is Nucleus Mall on Kirloskar road, Big Bazar retail on Khanapur road and few Birla “More” retail shops spread across the city. Considering that that city is not new to organized retail, presence of high disposable income group, youth brigade from the city colleges and saturation of the prime lands within city limits organized commercial center in the outskirts of the city would be viable. Besides, we also understand that there are no way side amenities alongside NH-4 for almost a 150 km spread in the north -south direction and many highway travellers do enter the city for lunch/refreshment at a good restaurant/food joint. Thus there is considerable potential for a commercial hub with food joints in the city center area where CBT and CBS are located.
- Based on the discussions with NWKRTC officials, we understand the CBT currently has 18 bays and has a requirement of 30 bays with passenger waiting area and parking space for the buses. The CBS which has 11 bays needs 16 additional bays. There is also a need to connect CBT and CBS by either a skywalk or a sub-way.
- We understand that the Divisional workshop located adjacent to CBS is currently being shifted to Auto Nagar in the outskirts of Belgaum which unlocks 4 acres 19 Guntas of land. The combined land parcel at the CBS can be used for redevelopment of the bus terminal with separate bus bays for corporations of different states. We also understand that a bid process was initiated for redevelopment of the CBS on PPP. However in spite of interest shown by some bidders, successful transaction couldn't be initiated. Currently, NWKRTC has sought help of CEPT, Ahmedabad for developing the master plan for the CBT and CBS area.
- As per the Notification No: UDD 249 BcMaPra 2008 dated 12.02.2009 (amendments made by the Government of Karnataka to the Zoning Regulations, in the exercise of the power conferred by the section 13-E of the Karnataka Town and Country Planning Act, 1961), uses that are permissible under special circumstances under the traffic and transportation use are as follows i.e. retail shops, restaurants and hotels, showrooms, offices, boarding and lodging houses, banking counters, indoor recreational uses, multiplexes, clubs. The uses given above are permissible provided that total area for such ancillary uses shall not exceed 45% of the allowable floor area ratio of the project when taken up by Central and State Government and Public undertakings.
- Currently the premises within CBT and CBS are leased for commercial stalls, both open and permanent types, on a lease and license arrangement. The total collection from these lease rentals is in excess of INR 15 lakhs per month.

- As per the order generated by Managing Director NWKRTC in 2006, which is yet to be revised, parking fees in INR for different categories of vehicles within the bus stations are as given below:

Type of Vehicle	< 1 Hr.	1 to 4 Hrs.	4 to 8 Hrs.	8-24 Hrs.
Cycle	1.0	1.0	2.0	3.0
Scooter	1.0	2.0	4.0	6.0
Car	2.0	4.0	6.0	10.0

- Based on our discussions with the Revenue Officer- Belgaum Municipal Corporation, for using advertisement rights on private premises the owner has to be pay an advertisement tax of Rs 3 per sqft per month. For advertisements on public owned properties, the advertisement rates are determined on the basis of auction.

- Zonal regulations provided by Belgaum Development Authority (BUDA) don't specifically state the parking norms for traffic & transits centres. However, it sets a parking regulation for providing a space not less than 18 sqm for cars. As per the Urban Development Plans Formulation & Implementation (UDPFI) Guidelines and general zoning regulations prepared by the Karnataka State Planning Board, 25% of the parking should be provided for park and ride facilities. Based on the discussion with NWKRTC, the land parcel indicated alongside out of the available 27.05 acres can be identified for the redevelopment of the bus terminal under PPP format.



4.4 Case Studies for similar projects in India

In this section we would try to look at the practices/examples of developing Bus Terminals with mixed land-use in the Indian scenario. This will provide broad indicators to design facility and PPP options which can be considered for analysis.

Majestic Bus Stand, Bangalore

Project Description: KSRTC decided to modify the existing Kempegowda Bus Terminal or the Majestic Bus Stand into an Inter Modal Transit Centre to be developed on a PPP basis. For this, 19.9 Acres had been earmarked for the transit centre and 12.5 Acres for the development of commercial complex. Out of the total 40 acre plot, 7.5 acre has already been transferred to BMRCL for development of Metro rail. The project is to be developed on Design, Build, Finance, Operate and Transfer (DBFOT) model. The concession period shall be 33 years including construction and the main bid variable shall be the upfront premium. The project has been under bidding stage for more than a year, and has received one bid in February 2012, which is under consideration of the GoK. At the RFQ stage, ten firms had been shortlisted which included companies like L&T, HCC, NCC, Gammon, GMC, TRIL-Shriram Properties, Soma, IVRCL, Essar Projects, and Ramky Infra.

Greater Mohali Bus Terminal with Commercial Development

Greater Mohali Area Development Authority (GMADA), Government of Punjab (GoP) and PIDB awarded the contract to C&C constructions for undertaking a full-fledged bus terminal and commercial complex at Mohali through Design, Build, Operate and Transfer (DBOT) basis. The estimated potential bus trips per day would be ~1940 buses / day when the project becomes operational. The project envisaged development of three towers on an area of ~ 7 Acres with a project cost of INR 432 Cr along with the bus terminal operations.

- Tower A = Bus Terminal and passenger amenities with a BUA of 1.17 lakh sq.ft
- Tower B = Hotel cum retail with BUA of 2 lakh sq.ft
- Tower C = Commercial cum retail with a BUA of 4 lakh sq.ft

The landmark of the project is the development of a 17 storey building with Helipad. The project was awarded to C&C constructions on the basis of highest upfront consideration of INR 57 Cr. (reserve price was INR 52 Cr.) for 20 years. Further following payments were made:

- INR 1.25 Cr was project development fee to GoP
- INR 2.85 Cr was annual concession fee with 15% escalation every 3 years

The concession period is 20 years for Bus terminal with "Right of First Refusal" for further extension and 90 years for commercial complexes including 18 months of construction period for Bus Terminal and 30 month construction period for commercial complexes. The private player shall earn revenue via "Adda fee" for private and public sector buses and also by collection of rentals from commercial and Hotel facilities, Parking fee for cars, two wheelers etc and by lease of advertisement rights on the terminal. The private player can also levy Helipad charges which would be developed as a part of the project.

Intercity Bus Terminal of Amritsar

Project Description: The Intercity Bus Terminal of Amritsar city was developed at the same location as the existing bus terminal. The project involved demolishing the existing terminal building and complex and development of a modern state of the art Intercity Bus Terminal to cater to the growing demands of the city. The project is under operation by a private operator since 2005 after an initial construction period of 2 years (2003-2004). At the end of the concession period, the project will transfer back to the concessioning authority free of all encumbrances.

- Subsequent to signing of the concession agreement, the private operator established a Special Purpose Vehicle (SPV) called the Rohan Rajdeep Infrastructure (India) Pvt Ltd. for executing the project on DBFOT basis with a concession period of 11 years and 5 months including construction.
- Private operator required to pay a project development fee of INR 35 lakhs for the project site lease and a lease rental of INR 50,000 per month for use of the project site over the concession period.
- Revenue streams identified by the developer-
 - Collection of "adda fees" i.e. charges payable by buses for use of terminal facilities, and
 - Revenue from commercial rentals from shops located within Terminal complex
 - Other sources of revenue included the sale of advertising rights as well as parking fees.
- The Amritsar Intercity Bus Terminal complex was commissioned in October 2005 and on an average, 1,100 normal buses and 600 mini buses a day and about 80-100 buses are parked within the Terminal complex overnight. At the project conceptualization stage, it was thought that 2000 to 3000 buses / day would be using the bus terminal.
 - One of the reasons for the lower bus numbers is the inability of the concessionaire to ensure that all buses use the Intercity Bus Terminal facilities - some buses started operating from outside the bus terminal to avoid paying adda fee.
- The project cost for the Amritsar Intercity Bus Terminal was expected to be approximately INR 19 crores at the time of project conception, but the project cost finally worked out to INR 21.34 crores. Of this amount, the debt component was INR 12 crores of 11 years tenure while the equity component was INR 9.34 crores.

5 Market Assessment

5.1 Commercial Real Estate Market

5.1.1 Traditionally, the commercial real estate in the Belgaum city has been unorganized in nature, characterized by regional shopping centres and commercial markets with an ad-hoc mix of tenants ranging from small traders, showrooms and offices. In terms of regional spread, Tilakwadi area on Khanapur road has been the heart of all major commercial activities in form of high street retail, shopping complexes located on both sides of road. Over the years this area has become saturated and has resulted in lack of frontage and parking spaces resulting in undue road congestion. The other dimensions to these shopping complexes have been the absence of quality facilities and management. Some of the district shopping centers have also been built by Belgaum City Corporation and are also located on the approach road to Shahapur area from Khanapur road east of Tilakwadi area. However, the same do not seem to be as popular as the ones on Tilakwadi area.

Commercial centers-Tilakwadi



5.1.2 In the last 3-4 years, owing to congestion and lack of available commercial retail space in the Tilakwadi region, the commercial vectors have been slowly shifting to the north of city along both sides of Congress road, Club road and the north Chinnema circle towards JMC College which offer better frontage and look of a modern city. A typical characteristic of the recent commercial activity in Belgaum is the mushrooming presence of mixed use developments. There are numerous shopping complexes in the city which feature a mix of commercial and residential components with a structured maintenance/upkeep facility. Most of these developments are established by local builders and region specific developers. While the lower floors (typically ground plus one-two floors) comprise of retail related shops, the upper floors comprise of residential apartments. However, owing to constraint of quality spaces and the limitation of developable land in the city, organized retail malls have been limited except for “Nucleus Mall” on Kirloskar road east of college road, Big Bazar on Khanapur road south of Tilakwadi area, and few Birla “More” retails spread across the city which have been very popular and have attracted lot of footfalls.

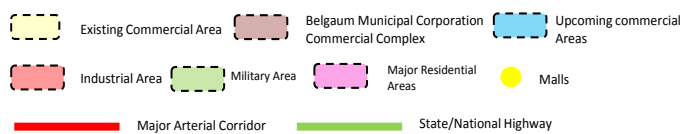
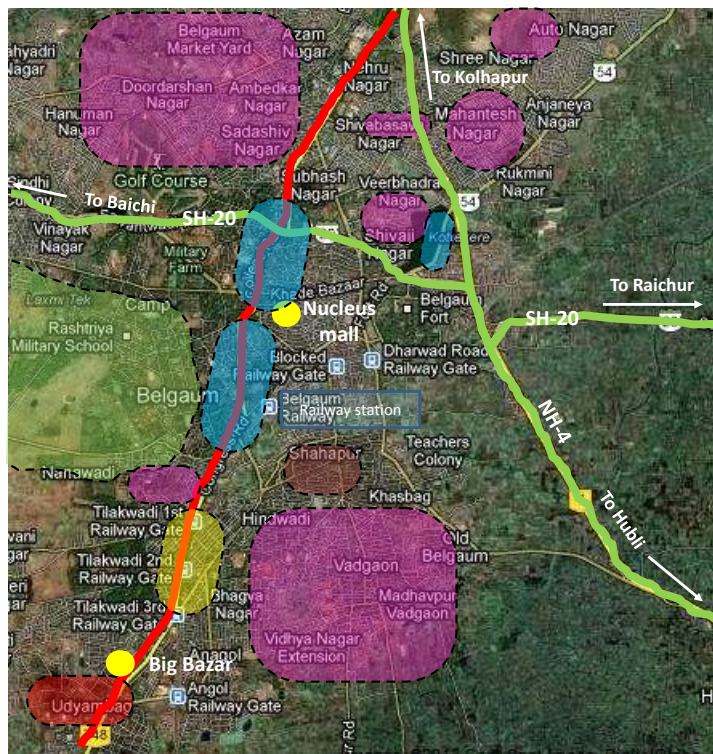
Nucleus Mall on Kirloskar Rd.



5.1.3 From a business perspective, the local economy has opened up for suitors owing to better economic, political and social opportunities in the region because of the presence of industrial activities, educational institutes. A large part of this commercial office/retail space demand is driven by the Telecom, Mobile showrooms, Banking, Financial & Insurance services companies. Banks like ICICI, Axis, Corporation Bank, Kotak Mahindra, HDFC etc. and insurance companies like ICICI, Standard Life, LIC, etc. have been opening new branches in Belgaum. Telecom majors like Vodafone, Idea, Airtel, Reliance, Tata and mobile shops like Nokia, Blackberry are targeting the city and have opened retail spaces in Belgaum. Automobile showrooms are looking to establish their regional presence in Belgaum with brands like Toyota, Hyundai, Maruti Suzuki and Tata having already opened the showrooms in the city.

5.1.4 The developers of the mix of residential & commercial space follow a mixed model of leasing & outright sales, with initial spaces within the development being transacted on an outright sale model. The outright sale is particularly for the residential space where sale rate in the areas referred above have been in the range of INR 3400-3800 per sqft. The commercial spaces are mostly retained by the developers to take advantage of future lease escalations. With respect to pricing, an average quoted rental for vanilla retail spaces on ground floor in Tilakwadi, college & club road is in range of INR 80-100 per sft where in case of outright sale it would be in the range of INR 10-12,000 per sqft.

Similarly, an average quoted rental for anchor spaces of “Big Brands” on the ground floor is in the range of INR 70-80 per sft. The developers also charge INR 5-10 per sft per month as advertising rentals from the building frontage. In addition, Common Area Maintenance or CAM charges taken from tenants are in the range of INR 3-5 per sft per month, and these too are considered acceptable by the tenants. The quoted rentals for retail space on first floor are generally offered at a discount of 5-10% from the ground floor rates. In addition to major commercial hubs, there are various pockets of small to medium scale commercial retails which realized lease rentals in the range of INR 40-50 per sft per month.



5.1.5 The lack of availability of developable land is a constraint for commercial real estate development in the city. As indicated above, there have been gradual shifts in the evolution of commercial activity in the city, wherein the unorganized haphazard development was followed by high street and mixed use developments towards north of Tilakwadi on college & congress road. Under the present circumstances, the positive income-spending outlook and economic buoyancy among the Belgaum residents and presence of large number of colleges have driven the demand for quality organized formats for commercial activity. The catchment in and around CBS and CBT registers a high degree of commercial activity including budget hotel, restaurants, travel agents, food joints and commercial retails.

5.2 Hospitality Market

5.2.1 The hospitality market in the city is dominated by business travelers to the various foundry units in the Industrial estates/ INDAL factory/Renuka Sugars/ Quest and also owing to the fact of Belgaum being the district headquarter. In addition to the business tourist, Belgaum is a town with rich cultural heritage with tourist places in and around thus is also a tourist stop/halt over place. The city of Goa which is one of the most popular tourist destinations is only 120 km from Belgaum and is approachable both by rail and road in 3-4 hours. Besides, a large number of residents come over the weekend to the town for shopping and stay over.

5.2.2 In order to have a perspective on the geographical spread of the Hotels in Belgaum we have tried to map the existing locations of the hotels and the same is presented below.



5.2.3 As can be seen from the figure above most of the hotels are both located alongside the college road, club road, Kirloskar road and alongside the main road leading to the

Central Bus stand. The hotels in and around CBS and CBT include Keerti, Pai, Niyaz which can be considered budget hotels. The Yatri Niwas located at CBS has a 30 room inventory with night halt charges of INR 150-200 per room.

5.2.4 In terms of hotel categories, the city is yet to have a formal 3/4 star category hotel located. Eefa Hotel is close to a 3 star rating hotel under Orchid Group on Club road having 59 rooms inventory with 80% being standard rooms, 10% Deluxe and 10% suites and the room tariff is in the range INR 3000-5000 per day excluding tax. The other premium hotels are Sanman, Aadarsha on the College road and Sanman residency and Krishna Inn mostly having a 50-80 room inventory. The room tariff for premium hotels are mostly in the range INR 1000-3500 per day.

5.2.5 The budget hotels in the same locality generate tariffs in the range of INR 600-1500 per day. The basic room rents for the different hotels in Belgaum are provided in the Table below.

Hotel	Base Rates*
Hotel Eefa	3000-5000
Sanman Hotel	1100-3500
Adarsha Palace Hotel	1000-2500
Sankam Residency	1000-3500
Kshema Inn	900-3500
Sai Sangam International Hotel	700-2000
Rakshit International Hotel	700-1500
Ramdev International Hotel	600-1400
Pai Hotel	500-1000
Keerthi Hotel	500-1000
Surya Yatri Niwas	500-1300
Anupam Hotel	600-900
Milan Hotel	500-900
Shiva Hotel	400-900
Pavan Hotel	400

* excludes tax

5.2.6 Based on interactions with the proprietor of Adarsha hotel we understand that it is further adding a room inventory of 30 deluxe rooms and has also initiated a project for development of 50 rooms 3 –Star category hotel with swimming pool in its adjacent plot. Interactions also indicated that the average occupancy is in the range of 70-80%, with close to full occupancy during weekends. The prime season for tourist is in the months of October to January. The average food & beverages bills per guest are in the range of INR 300-500 per day.

5.3 Traffic Analysis

5.3.1 Public Transportation in Belgaum is handled by City Buses. There are about 115 routes connecting city (within 5 km) and 73 routes in sub-urban areas (within 10-15 km). 90% of these operations originate from CBT and touch the Railway station registering more than 2644 arrivals & departures per day. There are no private players in the city for intra city bus services.

Operational Characteristics	Intra City Bus Service
Fleet Size(Intra- City)	67
Fleet Size(Sub-Urban)	77
Number of Routes in the City and Operating km/day	115 routes, 14043 km
Number of Suburban Routes and Operating km/day	73 routes, 19646 km
Accident for Breakdown per 10,000kms	0.006
Number of Terminals	01
Number of Depots	01
Working Hours	0800 – 2300
Peak Service Hours	0800 – 1100 (Morning) 1600 – 2000 (Evening)
Seating Capacity per Bus	40
Number of Trips Daily	1322

Source: NWKRTC, Belgaum Division

5.3.2 CBS on the other hand registers the intercity operations originating/destination to Belgaum and also a large number passing services through the city. The operators are those including 3 Public State Transport Corporations (STCs) of Karnataka including NWKRTC, NEKRTC and KRTC and also STCs of Goa and Maharashtra (Kadamba Transport and MSRTC). There are more than 2560 arrivals and departures from CBS per day.

5.3.3 Parking is a critical dimension in the road network in Belgaum. Demand for parking is on the increase due to increased vehicle ownership On-street parking is almost exhausted in the city centre.

5.3.4 Parking Surveys were conducted at various locations in Belgaum as part of CTPP. As per our location analysis, the following two locations are closest to the CBS and CBT. The peak hour parking is given in the table below-

Name of the Road	Length of Parking Stretch (m)	Parking Demand For		
		2W	Cars	3W
Club Road	1000	119	65	124
D&G and SP Office on NH-4	350	40	15	20

5.3.1 Based on stakeholder interactions we understand that current parking space for personal vehicles (2W, 4W) at CBS is insufficient and CBT currently doesn't have a designated parking space. The parking demand that needs to be created for CBT & CBS is based on stakeholder consultation and are as follows:

Type of Vehicle	CBT	CBS
2-Wheeler	200	400
4-Wheeler		50
3-Wheeler		50

6 Project Financials

6.1 Project Facility Design

Based on our discussion with stakeholders, understanding of the site consideration and project needs, the following facilities are planned for CBT and CBS with total combined area of 10 acres.

Facilities Planned		CBT- 3 acres Proposed Area (Sqft)	CBS- 7 acres Proposed Area (Sqft)
Renovation of the Existing facilities		6842	8070
Bus platforms/bays	√	4842	
Passenger Waiting Area and Commercials	√	2000	√ 8070
New Construction			
Bus Platforms/Bays		7532	9442
Flooring	√	7532	√ 9442
Roof Cover with space frame & columns	√	7532	
Concrete Roof with columns	x		√ 9442
Parking (Rigid Pavement)			
Buses	√	10760	√
4 W	x		√
3W	x		√
2W (Motorized)	√	12374	√
Passenger Facilities		6700	17800
Public Convenience (Pay Use Toilets/d)	√	1000	√ 1500
Reservation Counter	√	500	√ 1000
Cloak Room	x		√ 1000
Passenger Waiting Lounges	√	3000	√ 3000
ATMs	√	200	√ 300
Food/Beverage Stalls	√	2000	√ 4000
Yatri Nivas (50 Rooms)	x		√ 7000
Administrative Block (2- Floors)	√	9000	√ 12000
Workers Facility (2- Floors)		4500	7000
Change Room with Dormitory	√	2000	√ 4000
Locker Room	√	1000	√ 1000
Canteen Area	√	1500	√ 2000
Commercial Complex (Basemnet+4)			80000
Shopping Mall	x		√ 30000
Food Courts	x		√ 20000
Hotels & Restaurants	x		√ 10000
Retail Showrooms	x		√ 20000
Skywalk between CBT & CBS		√ (Common facility for CBS & CBT)	

Since the land falls under Belgaum Cantonment, development control norm restricting the FAR restriction to 0.5 has been considered for facility design.

6.2 Project Scenarios

6.2.1 Project feasibility has been analyzed for two different project revenue scenarios as described below:

- **Scenario 1:** Combined development, operation & maintenance of the modern bus terminal (CBT and CBS) in a combined 10 acres of land with commercial complex for a concession period of 30 years (excluding construction period) without considering additional revenues from “Day Adda Fees & Night halting charges” for the public buses using the terminal
- **Scenario 2:** Combined development, operation & maintenance of the modern bus terminal (CBT and CBS) in a combined 10 acres of land with commercial complex for a concession period of 30 years considering additional revenues from “Day Adda Fees & Night halting charges³” for the public buses using the terminal

6.3 Cost Assumptions

The project cost estimate and recurring expenditure in form of O&M expenses has been based on the following unit rates worked out from the market assumptions, consultants own experience and the PWD Schedule of Rates.

Construction Component	Value	Unit	O&M Components	Value	Unit
Renovation of existing facilities	400	INR/Sqft	O&M Expenses for		
Bus Platforms	950	INR/Sqft	– Administrative Block	1.5	INR/Sq ft/ Month
Rigid Pavement	350	INR/Sqft	– Passenger Facilities		
Flexible Pavement	150	INR/Sqft	– Worker’s Facilities		
Administrative Block	1400	INR/Sqft	Escalation of O&M cost for buildings	5%	% per anum
Passenger Facilities	1200	INR/Sqft			
Worker’s Facilities	1300	INR/Sqft	Periodic Maintenance Expenses	10	INR/sqft/3 years
Commercial Complex	1500	INR/Sqft	Flexible & Rigid pavement		
Sky Walk	0.60	INR(Cr.)			
Landscaping, Gantry Signs, Markings, Utilities, idle parking area, boundary wall	2.32	INR(Cr.) Lump-sum	Escalation of O&M cost for buildings	15	% every 3 years

³ In case of Scenario 2, no night halting charges have been considered for NWKRTC, NEKRTC and KRTC buses which will be parked in Belgaum Depots

6.4 Revenue Assumptions

Revenue assumptions for the two development scenarios are based on site analysis and preliminary market demand assessment already discussed in previous chapters. Following is the detail of revenue related considerations:

Revenue Heads	Value	Unit	Applicable to	
			Scenario 1	Scenario 2
Parking Fees	70% occupancy considered and escalation @ 5% per annum			
Cars	INR 10,20,50 & 80 for 0-1,1-3,3-8,8-24 Hrs slabs		√	√
Two wheelers	INR 4,6,10 & 15 for 0-1, 1-3, 3-8, 8-24 Hrs. slabs		√	√
Three Wheelers	INR 4,8 for 0-1, 1-3 Hrs slabs		√	√
Lease Rentals	Escalation @ 15% every 3 Years		√	√
Terminal Passenger				
Public Convenience	15	INR/sqft/month	√	√
Cloak Room	25	INR/sqft/month	√	√
ATMs	40	INR/sqft/month	√	
Food/Beverage Stalls	80	INR/sqft/month	√	√
Yatri Nivas	30	INR/sqft/month	√	√
Commercial Complex				
Shopping Mall	35	INR/sqft/month	√	√
Food Courts	40	INR/sqft/month	√	√
Hotels & Restaurants	40	INR/sqft/month	√	
Retail Showrooms	40	INR/sqft/month	√	√
Day Adda Fees	40	INR/Day/Bus (escalation @ 15% every 3 years)	x	√
Night Halting charges	50	INR/Day/Bus (escalation @ 15% every 3 years)	x	√
Advertisement	0.20	INR in Cr. per Annum (Lump sum) (escalation @ 5% per annum)	√	√

6.5 Other Assumptions

- 6.5.1 It has been assumed that the construction of all the developments will take two years to complete.
- 6.5.2 It has been considered that an annual lease payment of INR 0.1 Cr. per annum will be paid to NWKRTC by the concessionaire for 30 years with an escalation of 15% every 3 years.
- 6.5.3 The capital structure assumed for the project under both scenarios is given below-

Financing assumptions	
Debt to equity Ratio	70:30
Tenure of debt (year)	10
Interest rate	13%
Moratorium on bank loan (years)	2

6.5.4 The tax assumptions are as follows

- Income tax (including surcharge & cess) is taken at the prevailing rate of 32.45%.
- Minimum Alternate Tax (including surcharge & cess) is taken at prevailing rate of 20.01%.

6.5.5 The following are the Depreciation rates assumed for the analysis of the Project financials:

- Schedule rate assumed for calculation of depreciation of buildings as per Company's Act is 1.63% on straight line method.
- Schedule rate assumed for calculation of depreciation of other assets as per Company's Act is 1.63% on straight line method.
- Schedule rate as per the IT Act for calculation of depreciation of buildings is 10% on written down value basis

6.6 Total Project Cost

6.6.1 The total project cost based on the above assumptions is as provided in the following table.

Cost Heads	INR in Cr.
Total Civil Construction Cost- CBT	6.58
Total Civil Construction Cost- CBS	25.77
Total Civil Construction Cost- Sky Walk between CBT & CBS	0.60
Sum Total of the Civil Cost	32.95
Contingency @ 2%	0.66
Pre-operative expenses Engineering Surveys, Design DPR and IC @ 4%	1.32
Financing Cost @ 1.5% of the Debt (At a D:E ratio of 3:1)	0.37
IDC (13% per anum for 2 years)	5.15
Total Project Cost	40.45

6.7 Viability Assessment

6.7.1 The key financial indicators for the two scenarios considering an upfront premium to be paid to NWKRTC by the concessionaire as bid variable are indicated in the table below.

Indicator	Scenario 1	Scenario 2
Project IRR (Post Tax)	14.12	14.12
Equity IRR	15.00%	15.00%
Average Debt service coverage ratio	1.21	1.20
Upfront Premium (INR Cr.)	0.55	9.50

6.8 Recommended Scenario and Sensitivity Analysis

- 6.8.1 Based on the above analysis, it is observed that to achieve 15% equity IRR in both the scenarios, NWKRTC would realize more upfront premium in case of **Scenario 2** which considers “Adda Fees” and “Night Halting charges” as revenue stream for the concessionaire.
- 6.8.2 However, to choose between the two scenarios, the Net Present Value (NPV) of all the future cash inflows/outflows to/from Karnataka State Corporations to the Project Concessionaire has been considered. In Scenario 1, the NPV is INR 0.55 Cr. which is the net inflow in form of upfront premium earned by NWKRTC. In case of Scenario 2, NPV of all the future outflows in form of “Adda Fees” to be paid by the Karnataka State buses⁴ for the entire concession period has to be considered. By discounting @ rate of 9% (assumed as cost of capital) the NPV of the total cash outflow works out to be INR 11.3 Cr. And after considering an inflow of INR 9.5 Cr. as the initial upfront premium earned by NWKRTC in Scenario 2, the NPV of all future inflows/outflows in case of Scenario 2, is (-) INR 1.83 Cr. Thus Scenario 1, which has a positive inflow of INR 0.55 Cr. is recommended for implementation. It is also recommended that NWKRTC, DULT and State Transport Department take a definitive view on this.
- 6.8.3 Considering that the key project viability variables are project cost and revenue envisaged, sensitivity analysis for **Scenario 1** has been conducted with respect to these two variables. Results for the same are presented below:

Capital Cost Sensitivity

	-20%	-10%	0%	10%	20%
Project IRR (Post Tax)	17.31%	15.61%	14.12%	12.94%	11.92%
Equity IRR	20.26%	17.36%	15.00%	13.23%	11.78%
Average DSCR	1.51	1.34	1.21	1.10	1.01

Revenue Sensitivity

	-20%	-10%	0%	10%	20%
Project IRR (Post Tax)	11.26%	12.76%	14.12%	15.50%	16.87%
Equity IRR	10.88%	12.98%	15.00%	17.18%	19.49%
Average DSCR	0.96	1.09	1.21	1.33	1.46

6.8.4 It can be observed that the project returns are highly sensitive to both revenue and capital cost. Thus it would be important to take up a detailed market assessment survey and project feasibility study before the project can be implemented.

6.8.5 Detailed Financial Evaluation Sheets for **Scenario 1** (cardinal years) is provided in **Annexure B**.

7 Statutory & Legal Framework

7.1 Applicable laws & Rules

7.1.1 The Karnataka Municipal Corporation Act, 1976

The Act provides for creation of Municipal Authority in the state of Karnataka. It confers certain powers on Mayor and the deputy Mayor. It specifies the obligatory and specific functions of the corporations. It also provides for strengthening the administrative machinery of the corporations.

The Authority can acquire, any land designated in a Master Plan for specified purpose or for any public purpose either by agreement with the land owners or under the provisions of the Land Acquisition Act, 1894.

7.1.2 Karnataka Urban Development Authorities Act, 1981

Objective of this Act is to establish the Urban Development Authorities in the state of Karnataka for the purpose of providing planned development of major and important urban areas in the State.

Power of Authorities to take Developmental Works

Under this Section, the Authority has the power to undertake works and incur expenditure for development and in execution of that power; the Authority has the power to draw up detailed Schemes for the development of the urban area and also for the framing and execution of development schemes. The Authority may also take up any new or additional development schemes.

Authority to have power to acquire land by agreement

This Section empowers the Authority to enter into agreement with owner of any land or any interest therein, situated within the urban area for the purchase of such land. Further land may also be acquired under the provision of the Land Acquisition Act, 1894.

Power of the Authority to levy of betterment tax

Where, as a consequence of execution of any development scheme, the market value of any land in the area comprised in the scheme which is not required for the execution thereof has, in the opinion of the Authority, increased or will increase, the Authority shall be entitled to levy on the owner of the land or any person having an interest therein a betterment tax in respect of the increase in value of the land resulting from the execution of such scheme.

7.1.3 Karnataka Town and Country Planning Act, 1961

The objective of this Act is to regulate planned growth of land use and development by preventing unequal and chaotic growth of towns and cities in Karnataka. The Act gives power to the state government to declare any area to be a local planning Area through

notification and may constitute a planning authority for such area. The Planning Authority so notified shall be responsible for the implementations of Act within such declared local planning areas. Such Authority shall initially be responsible for providing the Master Plan outlining the development and improvement plan for the entire local planning area. The Planning Authority may formulate one or more town planning scheme in order to implement such Master Plan. The Act confers sufficient power in the hands of Town Planning Authority for the purpose execution of Master Plan. Master Plan shall consist of maps and documents indicating the manner in which the development and improvement of planning area to be carried out and regulated. Section 66 of the Act empowers the Planning Authority to enter an agreement with any person in respect of any matter relating to implementation of town planning scheme. This Section thus, provides scope for seeking private sector participation in implementation of the town planning scheme by making suitable agreement in this regard.

7.1.4 Karnataka State PPP Policy & Implementation

As per the amendments of the Infrastructure policy, 1997 in 2007 (Government Order No.IDD 32 IDM 2003 Bangalore dated 16th July 2007); Government of Karnataka has introduced the concept of involvement of private players through public private partnerships (PPP) for the implementation of major infrastructure projects. The projects would be implemented through open competitive bidding for the up gradation, expansion and development of new infrastructure projects.

The policy comprises different sectors and their rules and legislations including The Indian Tolls Act of 1851, The Land Acquisition (Karnataka) Amendment Act of 1988, Dispute Settlement Act of 1940, National Highways Act of 1965, Motor Vehicles Act of 1988, National Highways Authority of India Act of 1988 and the Central Road Fund Act of 2000.

Karnataka Infrastructure Development and Regulatory Bill of 2011 was also drafted with a purpose of providing a legal framework for infrastructure through Public Private Partnerships, 'incorporating contractual arrangements to design, finance, construct, operate and maintain Infrastructure Projects, provide for a fair and transparent selection process, set out rights and obligations of the Government and private sector in the implementation of Infrastructure Projects, reduce administrative and procedural delays, set out incentives, specify project delivery process, establish an Infrastructure Authority with a view to present bankable projects to the private sector and generally to improve the delivery of public services in the state of Karnataka and for matters connected therein or incidental thereto'.

7.2 Legal & Regulatory framework

7.2.1 Public Transport in the north west of Karnataka is managed by NWKRTC. NWKRTC was established in the year 1997, under provision of the Road Transport Corporation Act 1950, upon bifurcation from Karnataka State Road Transport Corporation to provide adequate, efficient, economic and properly coordinated transport services to the

commuters of North Western part of the Karnataka. The Corporation jurisdiction covers the Belgaum, Dharwad, North Canara, Bagalkot, Gadag & Haveri districts.

- 7.2.2 NWKRTC operates its services to all villages, which have motorable roads in its jurisdiction and also covering intra and interstate operations. We also understand that the stage carriage transport service in Karnataka is a nationalized sector and essentially provided by the state- run Transport Corporations. The private transporters operate in the space of contract carriage and also occupy a fair share of the stage carriage by unfair means.
- 7.2.3 The corporate office of NWKRTC is situated at Hubli, under which seven division headquarters situated at Belgaum, Hubli, Sirsi, Bagalkot, Gadag, Chikkodi & Haveri and 46 Depots are functioning under the administrative control of respective divisions and one Regional workshop at Hubli having one bus body building unit, one Regional Training Institute at Hubli.
- 7.2.4 Any development for bus terminals would require approvals and authorization from the NWKRTC. Apart from this the Belgaum Urban Development Authority (BUDA) plays an important role in development of a commercial establishment.
- 7.2.5 The planning functions of BUDA in brief involve the following:
- Preparation of development plan for city
 - Preparation of Scheme Plans.
 - Approval of Development Plans for Group Housing and Layouts.
 - Approval of building plans.
 - Other statutory functions under KTCP Act. 1961
- 7.2.6 In addition to the planning functions, the BUDA also performs the following development functions:
- Planning and implementation of schemes to provide for Residential sites, Commercial sites, Industrial sites, Civic Amenity sites, Parks and playgrounds.
 - Construction of Commercial complexes
 - Construction of houses for Economically Weaker Sections, Low Income Group, Middle Income Group, High Income Group
 - Development of major infrastructure facilities
- 7.2.7 The building and development control norms for the BUDA planning area including the Belgaum City Corporation is governed by Zonal Regulations 1993. BUDA has prepared a Master Plan 2021 with proposed land use for the planning horizon and submitted it to the Government for approval.
- 7.2.8 The building and development control norms for the BUDA planning area including the Belgaum City Corporation is governed by Zonal Regulations 1993. BUDA has prepared a Master Plan 2021 with proposed land use for the planning horizon and submitted it to the Government for approval.
- 7.2.9 Owing to this land falling within the Belgaum Cantonment area, regulatory clearances would also be required from their end.
- 7.2.10 It is envisaged that for development of the Bus terminal, the following regulatory approvals/clearances would be required which the Concessionaire has to arrange supported by the engaging authority

- Approval for import of equipment and machinery for construction and operation, if required
- Exemption of excise duty on construction material, if required
- Permission / clearance for setting up of wireless system, if required
- Clearance / permission for the use of optical fibre cables of DOT, if required
- Quarrying Permits
- Permission from SEB for installation of DG, for electrical connection, if power source is available
- If water has to be taken from river/ reservoir, permission from State Irrigation Department
- Batching Plant:
 - License from inspection of factories
 - NOC from pollution department
- Asphalt Plant: Clearance required from State Pollution Control Board
- Borrow Earth:
 - Permission from irrigation department if land taken from irrigation land
 - Permission required from Village Panchayat and ADM mines for Government & private land
 - Permission from Local Municipalities and Development Authorities
- Environment Clearance from MoEF and State Pollution Control Board
- Sewage Lines and Water Mains:
 - Permission from Local Municipalities and Development Authorities.

8 Indicative Environmental & Social Impacts

8.1 Environmental Impact Assessment

- 8.1.1 As per the Environmental Impact Assessment Notification 2006, large projects in specified sectors and projects lying in environmentally sensitive areas require Environmental Clearance from the Government of India which involves preparing an Environment Impact Assessment Report and conducting public hearings. Smaller projects in the specified sectors do not require EIA report but still will require clearance at the state level.
- 8.1.2 The proposed project does not fall under any project category as specified under the EIA, 2006 notification. Further, as per our preliminary assessment, the proposed sites do not lie in any environmentally sensitive area, hence the Consultants do not see any need for a detailed EIA study for this project.
- 8.1.3 The Government of India has formulated various policy guidelines; acts and regulations aimed at protection and enhancement of environmental resources. The table below summarizes the existing legislations pertaining to the project, depending upon which various environmental clearances may be required.

Law /Regulation / Guidelines	Area of Relevance	Implementing / Responsible Agency
The Environmental (Protection) Act. 1986, and the Environmental (Protection) Rules, 1987-2002 (various amendments)	Umbrella Act. Protection and improvement of the environment. Establishes the standards for emission of noise in the atmosphere	MoEF, State Department of Environment & Forest, CPCB and SPCB
The Water (Prevention and Control of Pollution) Act, 1974	Central and State Pollution Control Board to establish/enforce water quality and effluent standards, monitor water quality, prosecute offenders, and issue licenses for construction/operation of certain facilities.	State Pollution Control Board
The Air (Prevention and Control of Pollution) Act. 1981	Empowers SPCB to set and monitor air quality standards and to prosecute offenders, excluding vehicular air and noise emission.	State Pollution Control Board
Noise Pollution (Regulation And Control) Act, 1990	Standards for noise emission for various land uses	State Pollution Control Board
Ancient Monuments and Archaeological sites and Remains Act 1958	To protect and conserve cultural and historical remains found.	Archaeological Survey of India, State Dept. of Archaeology

8.1.4 Some of the indicative environmental impacts and mitigation measures envisaged during project construction phase are also indicated below which the concessionaire needs to adequately mitigate:

Activity	Possible Environmental Impact	Suggested Mitigation Measure
Construction activities	<ol style="list-style-type: none"> 1. Deterioration of air quality due to earth work excavation 2. Soil contamination 3. Water contamination 4. Disposal of excess earth 5. Disturbance to other services 6. Safety of road users in the implementation area 7. Noise pollution due to the use of machinery and movement of traffic 	<ol style="list-style-type: none"> 1. Frequent watering of construction sites to suppress dust emission and transport of earth in covered vehicles 2. No spillage of oil/ diesel from the construction equipment 3. Any construction activity should ensure that the underground water pipe lines are not contaminated 4. The excess earth should be transported to designated place and shall be used for filling and covers 5. Any shifting of cable / utility lines should be attended with minimum period of disturbance 6. Proper signs/traffic aids guard rails to be provided 7. Use of less noise generating equipment and avoiding activities during night

8.2 Social Impacts & Mitigation

8.2.1 The project aims at creating a modern bus terminal with improved passenger facilities. The development of this brownfield terminal will help to improve the circulation of traffic in and out of the terminal and also reduce traffic congestion on the abutting Khade bazar road. A commercial complex is also proposed to be developed in the terminals complex which will provide one stop shopping for the transit passengers as well as the city population.

8.2.2 There is no requirement for fresh land acquisition. Further, in cases of the commercial establishments operating from these locations, the adequate provisions of commercial space have also been factored in the facility planning.

8.2.3 Even though the consultants have provided for adequate parking spaces for cars, two-and three wheelers at the site, coordination with respective Belgaum Municipality/PWD will be required for a detailed assessment of impact on traffic movement.

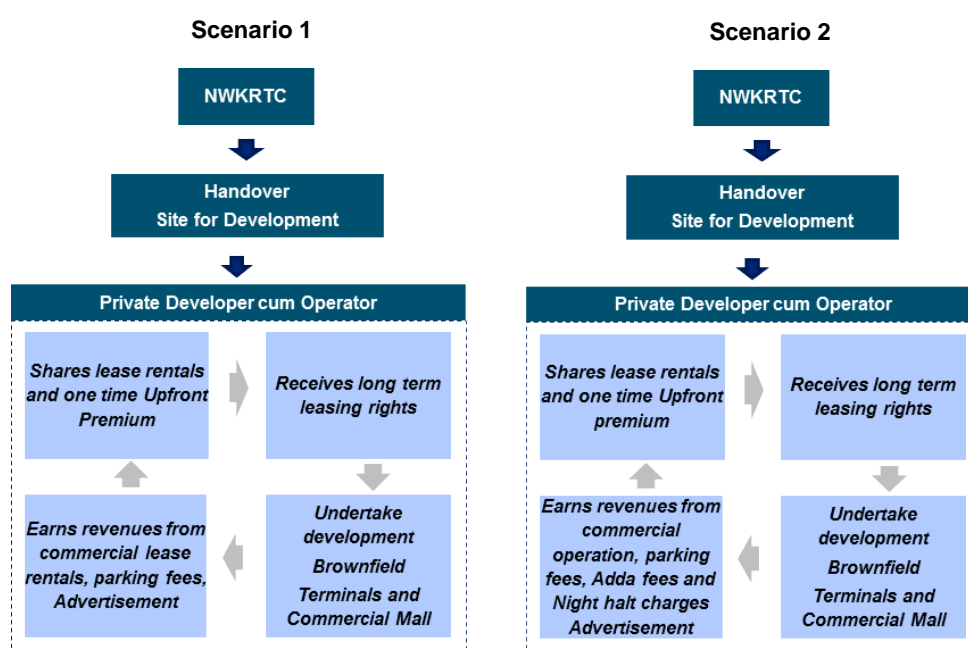
9 Structuring and Project Packaging

9.1 Background

Project structuring and packaging involves distribution of risks and returns efficiently and reduces the total cost of financing. The art of effective project structuring requires balancing the interests of the diverse stakeholders, and optimal capital structuring. This is then converted into contracts that clearly define the roles, responsibilities, and risks allocated to each partner.

9.2 Project Structure & Bidding Framework

9.2.1 Based on the above premise, the indicative project structure for the development of the modern bus terminal with commercial development by NWKRTC (envisaged Concessing Authority) is as indicated below:



9.2.2 The basic components of the project structure are as indicated in the table below:

Project Components	Description
Structure	<ul style="list-style-type: none"> The project is a brownfield project and the required land is available with the NWKRTC. The Concessionaire would develop the modern terminal and commercial mall under DBFOT pattern The concessionaire to recover its investments over a period of time from revenues from property development created under the project and any other applicable sources.
Concession Period	30 years excluding a construction period of 2 years
Payment by Concessionaire	Combination of Upfront Premium & Recurring Rental

Project Components	Description
Role of Concessioneing Authority (NWKRTC)	<ul style="list-style-type: none"> Grant of lease hold rights of the project site to the concessionaire Provision of adequate rights to the concessionaire for collection of user charges, parking fees and rentals from commercials. Provide assistance in getting all the required clearances For the concession period, the authority should not permit any future development of a similar Intercity Bus Terminal within 8-10 km radius of this project considering the spatial characteristic of the town and cased studies for similar projects in India. Additionally, notification as required should be issued to the effect that all intercity and intra buses would be required to halt, drop and pick up passengers from this Bus Terminal
Role of Private Sector Developer	<ul style="list-style-type: none"> Detailing the Project components Detailed designing and Engineering of facilities based on Concept Achieving financial closure and making the necessary capital investment Construction, Marketing, Operating, Maintaining and Managing (Utilities, Facilities, Equipments etc.) the Project during the Concession Period Obtaining all clearances/approvals from the concerned Govt. Department, handling legal issues etc.

9.2.3 The project specific risks, degree of impact, indicative mitigants for the project are presented in the Table below:

Risks	Impact	Risk Mitigants	Risk Bearer
1. Pre-completion Risk			
Engineering	Low	Detailed Technical Engineering	Concessionaire
Timing or Delay	Low	Fixed Cost contracts with EPC contractors with Performance Guarantee	Concessionaire
Cost Over-run	Medium		Concessionaire
Regulatory risk (Land availability, Govt. Approvals)	Low	Concession Agreement	NWKRTC
2. Operating Risk – Post Completion Risk			
Revenue	Medium	Proper Market Study and Demand forecasting	Concessionaire
Change In scope	Medium	Suitable provisions in the concession agreement	NWKRTC and Concessionaire
Policy Risk	Medium	Suitable provisions in the concession agreement	NWKRTC
Performance	Low	O&M metric with Performance Indicators	Concessionaire
Fire, Theft	Medium	Insurance Cover	Private Insurance Company
3. Sponsor Risks			
<ul style="list-style-type: none"> Credit history 	Low to	Defining suitable Bid Strategy &	NWKRTC

Risks	Impact	Risk Mitigants	Risk Bearer	
<ul style="list-style-type: none"> Proposed stake, ability to fund own equity Ability to <ul style="list-style-type: none"> – arrange third party equity – implement an subsequently operate projects – provide limited recourse 	Medium	Concession Agreement <ul style="list-style-type: none"> Suitable qualification criteria Track record Credit references, market feedback Minimum level of equity stake Bank guarantees / undertaking for equity contribution Balance sheet analysis 		
4. Political & Legal Risks				
<ul style="list-style-type: none"> Granting of approvals Change in law HR issues, past history 	Low	<ul style="list-style-type: none"> Political Risk Insurance Provisions in Concession 	Private – Insurance Company NWKRTC and Concessionaire (Risk Sharing)	
5. Financial Risk		Low to Medium	Loan Syndication/Sub-Debts	Concessionaire , Financial Institutions
6. Force Majeure				
<ul style="list-style-type: none"> Non-political events Acts of God Strikes or boycotts affecting supplies and services Indirect Political events Strikes: Industry wide, state/country wide public agitation 	Low	<ul style="list-style-type: none"> Contractual provisions Termination payments Insurance cover 	Private – Insurance Company NWKRTC	

10 Way Forward

- 10.1.1 The project as analysed above prima facie seems to be viable for implementation on PPP basis. The above sections recommend certain detailed studies to be undertaken before taking the project to the next stage, i.e. invitation of tenders
- 10.1.2 The concerned agencies/authorities should freeze the project design in terms of components, facilities, its PPP structure and the exact physical sites that will be made available for the development.
- 10.1.3 NWKRTC should initiate formal discussions with Belgaum Cantonment Board and initiate regulatory clearance process for the conceived project.
- 10.1.4 A detailed market assessment survey and feasibility study would enable unlocking the full potential of the project and also facilitate the bidders in putting across a competitive bid.
- 10.1.5 Also, a qualified transaction advisor should be engaged to further develop and market the project and select a suitable concessionaire.
- 10.1.6 An indicative Terms of Reference for selection of the Technical Consultant and Transaction Advisor is provided in **Annexure C & D** for reference.

Annexure A: List of Stakeholders Met

Name	Designation
Mr. Hemaraj	Managing Director, NWKRTC
Mr. Ganesh Rathod	System Manager, NWKRTC, Hubli
Mr. DB Kalagi	Traffic Assistant, NWKRTC, Hubli
Mr. Praveen Kumar	M3 Depot Manager, NWKRTC, Hubli
Mr. Prakash Ranjan Garg	Superintending Engineer, Hubli Dharwad Municipal Corporation
Mr. AS Kamble	Deputy Director, Hubli Dharwad Municipal Corporation
Mr. Sashi Dhar	Divisional Traffic Officer, NWKRTC, Belgaum
Mr. Mayank Kutti	Junior Traffic Assistant, NWKRTC, Belgaum
Mr. Urtikoppa	Assistant Engineer, NWKRTC, Belgaum
Mr. Chauhan	Junior Engineer, NWKRTC, Belgaum
Mr. RS Naik	Executive Engineer, City Corporation Belgaum (North)
Mr. Halgi	Executive Engineer, City Corporation Belgaum (South)
Mr. PN Ravindra	Commissioner, BUDA
Mr. V N Karekar	Town Planner Member, BUDA
Mr. Prakash	Town Planner, BUDA
Mr. Deshpande	Assistant Engineer, BUDA
Mr. CL Kulkarni	Revenue Officer, City Corporation Belgaum
Mr. Vijay Rajak	CEO, Cantonment Board, Belgaum
Mr. Vikas Patil	Manager, Nucleus Mall
Mr. Harish Gulabani	Owner, Adarsh Palace Hotel
Ms Preeti	Manager, Eefa Hotel
Mr. Sachin N Kallimani	Real Estate Developer, Belgaum
Mr. Abhinandan	Real Estate Developer, Belgaum
Mr. Mahesh	Real Estate Developer, Belgaum

Annexure B: Project Financial Evaluation Sheets

All figures are in INR Cr.

P&L Statement	Year 1	Year 5	Year 10	Year 15	Year 20	Year 25	Year 30
Total Receipt (Rs Crores)	6.22	7.24	9.50	11.18	14.67	19.25	22.67
Receipts from Lease Rentals from Mall	3.90	4.49	5.94	6.83	9.03	11.94	13.73
Receipts from Rentals on Commercials in Terminal area	1.02	1.18	1.55	1.79	2.36	3.13	3.60
Receipts from Adda Fees and Night Halting charges	-	-	-	-	-	-	-
Receipts from Parking	1.10	1.34	1.70	2.18	2.78	3.54	4.52
Receipt from Advertisement	0.20	0.24	0.31	0.40	0.51	0.65	0.82
Total Operating Expenses	0.86	1.04	1.68	1.69	2.16	3.46	3.50
Annual Lease payments to the NWKRTC	0.10	0.12	0.15	0.17	0.23	0.31	0.35
Periodic Operating Expenses	-	-	0.34	-	-	0.68	-
Insurance, Property Taxes and other Regulatory charges	0.41	0.50	0.64	0.81	1.04	1.32	1.69
Routine O&M	0.35	0.43	0.55	0.70	0.90	1.14	1.46
Total non-operating expenses	4.31	2.82	0.95	0.72	0.72	0.72	0.72
Interest Expenses	3.59	2.10	0.23	-	-	-	-
Depreciation Expenses	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Total expenses	5.17	3.86	2.63	2.41	2.88	4.17	4.22
PBT	1.05	3.38	6.88	8.78	11.79	15.08	18.45
Income Tax	0.21	0.64	2.06	2.84	3.92	5.04	6.17
PAT	0.84	2.74	4.82	5.94	7.88	10.04	12.28

All figures are in INR Cr.

Cash Flow Analysis & IRR	Year 1	Year 5	Year 10	Year 15	Year 20	Year 25	Year 30
Net Cash flow from operations	5.15	5.56	5.77	6.65	8.59	10.76	13.00
Net Cash flow from Investment activities	(41.00)						
Net Cash flow from financing	39.13	(6.46)	(4.97)	(3.10)	-	-	-
Proceeds from Equity	12.30						
Loan Taken	28.70						
Principal paid	(2.87)	(2.87)	(2.87)				
Interest during construction (IDC, considering steady drawdown)	(1.87)						
Interest paid	(3.59)	(2.10)	(0.23)	-	-	-	-
Net Increase and Decrease in Cash & Cash Equivalent	(1.87)	(1.31)	0.59	2.67	6.65	8.59	10.76
Opening Cash balance	(1.87)	(4.63)	1.93	29.44	66.62	112.92	171.54
Closing Cash Balance	(1.87)	(3.18)	(4.04)	4.59	36.09	75.21	123.68
EBDITA	5.36	6.20	7.83	9.50	12.51	15.80	19.17
Cash Outflow	(41.00)						
Net Cash Flow (Post-Tax)	(41.00)	5.15	5.56	5.77	6.65	8.59	10.76
Project IRR (Post-Tax)	14.12%						
Free Cash flow to equity (PAT+Depreciation- principal payment)	(1.31)	0.59	2.67	6.65	8.59	10.76	13.00
Equity Outflow	(12.30)	-	-	-	-	-	-
Total Cashflow to equity	(12.30)	(1.31)	0.59	2.67	6.65	8.59	10.76
Equity IRR	15.00%						
Average DSCR	1.21						

Annexure C: TOR for Technical Consultant

Objective of the Consultancy Service

The work for the Technical Consultants will comprise of three distinctive phases as described below:

- **Phase 1:** Market Assessment and Techno-economic feasibility Study for the commercial complex within the Bus Terminal
- **Phase 2:** Engineering Design & Documentation of the Modern Terminal and Commercial Complex
- **Phase 3:** Technical assistance during the transaction phase

Scope of Services

The **Detailed scope of consultancy** services shall thus cover the following major tasks:

- i. Carry out a detailed assessment of the commercial real estate market for Belgaum followed by techno-economic feasibility study for setting up a commercial complex at CBS with a proper mix of facilities.
- ii. It is envisaged that the Consultant shall be provided with a master development plan for the bus terminals area prepared by NWKRTC with the help of CEPT, Ahmedabad. The Consultant shall need to make an assessment of traffic demand for the bus terminal for 30 years and plan and design the terminal facilities and phase the construction of these infrastructure facilities in accordance with the same. For the sake of clarity, the project can have two phases of development recommended for the bus terminal facilities, **Phase I** to cover 15 years of design horizon and **Phase II** to cover 30 years of design horizon.
- iii. The Consultant would prepare the architectural layout, design documentation, engineering drawings, technical schedules and item-wise cost estimates for the following i.e. passenger terminals, circulation layout, parking area, administrative block, passenger platforms, pedestrian skywalk connecting CBS with CBT, pavement design for both rigid & flexible and the proposed commercial complex with basement parking.
- iv. To develop above project documents, the Consultant shall conduct all relevant site investigation and evaluation based on research necessary. This shall include but not be limited to topographic surveys, geotechnical research, pavement analysis, hydraulic and hydrological studies, drainage investigations, environmental research, and assessments of all existing conditions and the applicable development control norms.
- v. The Consultant shall also provide the necessary details for all electrical systems necessary for the proposed facilities along with drawings which will show the development of panels and circuits for all electrical systems. Electrical elements comprise all items associated with electrical service and distribution, including but is not limited to, conduits, telephone service, fire alarm systems, cable, emergency back-up power, communications, lighting.
- vi. The Consultant shall design and prepare drawings, details, specifications and calculations for all mechanical improvements and systems which shall include, but not limited to, all items associated with the plumbing, water supply, waste water disposal, garage, storm water collection, heating, air conditioning and ventilation.
- vii. The Consultant shall undertake environment impact assessment of the Project as per provisions of the Applicable Laws on environment protection and identify a package of measures to reduce/eliminate the adverse impact identified during the assessment. An environmental impact assessment report and environmental management plan shall be prepared based on such assessment. The management plan shall include project specific mitigation and monitoring measures for identified impacts as well as management and monitoring plans to address them.

- viii. The Consultant shall provide assistance to the Transaction Consultant during preparation of transaction documents in terms technical schedules, cost estimates, layouts. It shall also attend pre-bid meetings with the developers, answer questions related to the design, and provide technical information to the bidders and prepare contract documentation for addenda, if any.

Study Deliverables

The study is to be completed within 16 Weeks. The deliverables are listed below. The consultant may also submit working papers for comment as required.

Deliverable	Submission Date (max time in weeks)	No. of Copies (Hard copies)
Draft Inception Report	2	1
Final Inception Report	3	3
Market Assessment and Techno-economic Feasibility Study Report for commercial development at the Bus Terminal along with Facility layout of the Commercial Complex	8	3
Traffic Assessment Report and the Proposed Bus Terminal facility Layout	12	3
Preliminary Design Report along with all engineering drawings & design documentation	18	3
Environment Impact Assessment & Management Plan Report	18	3
Final Design Report with all engineering drawings & design documentation	20	5

Annexure D: TOR for Transaction Advisor

Objective of the Consultancy Service

Directorate of Urban Land Transport (the "Authority") is engaged in the enhancement of the transport infrastructure facilities in major cities of Karnataka. As part of this endeavour, the Authority has decided to undertake the development of the subject project on PPP mode. The primary objective of the services is to assist the Authority in selecting a concessionaire for the same.

Scope of Services

The scope of services shall include:

- (i) assisting the Authority in the entire bidding process up to the signing of the concession agreement;
- (ii) evaluation of the strategic objectives of the Authority in relation to the Project and advising on the commercial and capital structuring, especially with reference to Applicable Laws;
- (iii) review cost estimates contained in the Feasibility Project Report (FR/DPR);
- (iv) prepare a reasonable estimation of the likely revenues;
- (v) assisting the Authority in identification of project risks and in allocation of the same in an efficient and economic manner;
- (vi) identification and quantification of estimated financial impact of the Project on government resources;
- (vii) development of various possible alternatives for revenue maximisation and preparation of revenue model for the project;
- (viii) advising on tax-related issues arising out of the Project structuring;
- (ix) Prepare the draft Concession Agreement;
- (x) preparation of a consolidated list of approvals/consents/clearances required from Government Instrumentalities;
- (xi) assist in preparation of Bid documents
- (xii) Assist in invitation and evaluation of bids.
- (xiii) Assist the Authority in negotiations with the bidders till signing of the agreement
- (xiv) Assist the Authority till financial closure

In making its projections, recommendations and Reports, the Consultant shall identify the underlying assumptions and reach an agreement with the Authority in relation thereto. The services to be rendered by the consultants are briefly explained hereunder:

A) Transaction Advisor

The Consultant shall be responsible for review of the financial parameters and examination of the viability of the Project. The Consultant will render advisory services for preparation of bidding documents and in conducting the bidding process for selection of the concessionaire for the project. The Consultant shall also maintain, update and disseminate the necessary data and information related to the Project and the bid process. During interaction with the bidders and stakeholders, the Consultant shall assist the Authority in responding to all queries satisfactorily and within the specified time. The Consultant shall render advisory services up till Financial Closure by the selected Concessionaire.

B) Review of costs

The FR/DPR will indicate the nature and extent of infrastructure, facilities and services to be provided by the Concessionaire. The Consultant shall review and comment on the cost estimates contained in the FR/DPR. He shall ensure that appropriate provisions have been made for physical and price contingencies, financing costs, interest during construction, etc. The Consultant shall also make a broad assessment of O&M expenses to be incurred by the Concessionaire during the entire Concession period based on appropriate standards.

C) Estimation of revenue

The Consultant shall evaluate the available data and information with a view to prepare a reasonable estimation of the likely revenues of the concessionaire from the charges to be collected from the Project and from other sources of revenue, if any. It shall propose various options for optimising such revenues.

D) Development of Financial Model

The Consultant shall identify and quantify all costs, expenses and revenues of the Project, and shall prepare cash-flow statements for an appropriate concession period. Based on the above, the Consultant shall prepare the Financial Model which will indicate the possible capital structure, likely sources of financing, the costs of financing, the cash flow, debt service, return on investment etc. This would also include sensitivity analysis in relation to the critical parameters of the Financial Model.

E) Impact of Project on Government Resources

The Consultant shall also identify and quantify the estimated financial impact of the Project on the resources of the Central / State Governments and the Project Authority.

F) Project Appraisal

Based on the above analysis, the Consultant shall prepare an Appraisal Report for the Project outlining the salient features of the Project, its financial viability and its social and economic benefits. The Consultant shall work out the financial viability of the Project with a view to estimating the likely IRR over the entire concession period. The consultant would identify and suitably allocate the risk factors affecting the Project.

G) Finalization of Project Structure:

The consultant shall prepare a final project structure which will be capable of achieving sustainable operational and financial viability, thereby balancing the risks for the Authority and viability for the Concessionaire. Various commercial and legal options for Project structuring shall be examined to recommend a suitable PPP model and implementation structure. The analysis should include feedback on potential acceptability of the PPP structure by developers and lenders.

H) Drafting a Concession Agreement

The Consultant shall prepare a draft Concession Agreement (CA) based on Department of Economic Affairs, Ministry of Finance, Government of India guidelines.

I) Preparation of Bid Documents

The Consultant shall assist in preparing the bid document including Request for Proposal based on the Model RFP published by the Planning Commission, available at www.infrastructure.gov.in.

J) Assistance in the Bid Process

The Consultant shall assist the Authority in the bid process for selection of the Concessionaire from among the Bidders. This will primarily relate to participation in pre-bid meeting and answering questions or issuing clarifications with the approval of the Authority. The Consultant shall also assist the Authority in engaging with the bidders on different aspects of the Project such as its assets, the process of the transaction, the Financial Model and the structure of the Project. It will also assist the Authority in preparing internal notes and projections for securing governmental approvals, if any.

K) Assistance in selection of the preferred Bidder

The Authority intends to select the preferred bidder on the basis of the Proposals received from pre-qualified bidders. Only financial proposals will be invited as part of the Bidding Process. The Consultant shall also assist the Authority in evaluating the financial proposals and in engaging with the selected bidder till execution of the Concession Agreement and financial closure.

Study Deliverables

In pursuance of this TOR, the Consultant shall undertake/deliver the following deliverables (the "Deliverables") during the course of this Consultancy. Each deliverable shall include an executive summary, analyses, assumptions, results of computations, tables, charts, recommendations, and such other contents that generally comprise deliverables for similar consultancy work by way of best practices. The deliverables shall include:

S. No.	Deliverable	Submission Date (max time in weeks)
1	Inception Report	2
2	Draft Appraisal Report	6
3	Final Appraisal Report	8
4	Submission of Draft Bidding Documents	12
5	Assistance in conducting the RFQ process	14
6	Evaluation Report of the Bids	20
7	Signing of the Concession Agreement	22
8	Financial Closure by the Concessionaire	32



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