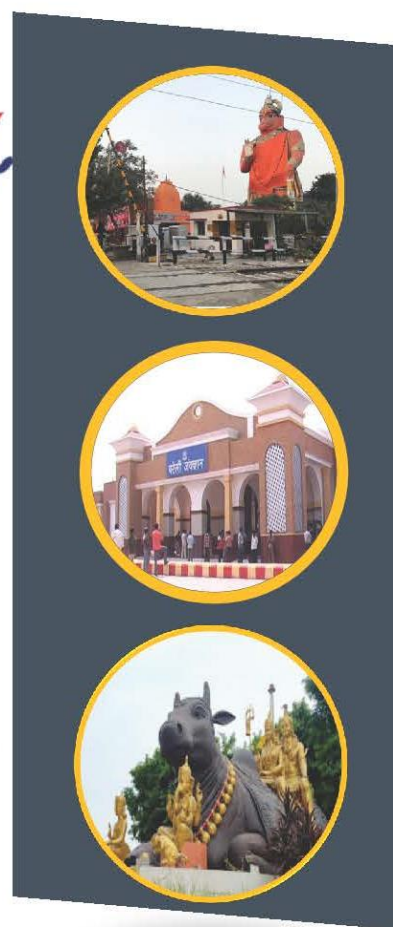
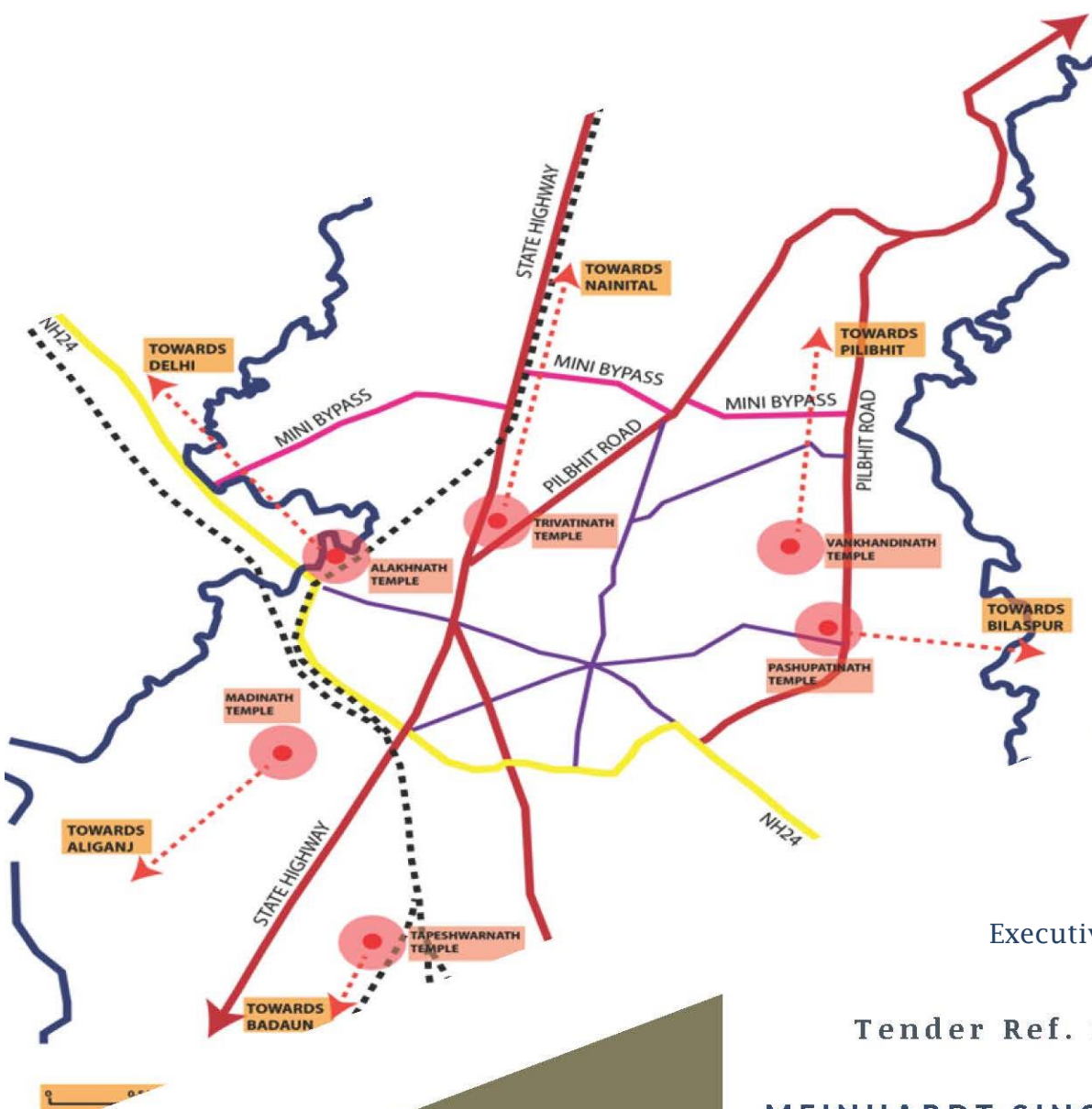


Vision, Implementation Strategy and Integrated Infrastructure Plan, Bareilly, 2071

EXECUTIVE SUMMARY REPORT



Executive Summary: Final Report

JULY 2023

Tender Ref. no.12-802021/BDA

MEINHARDT SINGAPORE PTE. LTD.

in association with

Mahindra Consulting Engineers Ltd

Ernst & Young Global Ltd

Tethys Development Services Pvt. Ltd.

EXECUTIVE SUMMARY

1.1 Introduction

Government of Uttar Pradesh envisions to promote “Bareilly” of the state by enhancing city’s comprehensive development of physical, institutional, social and economic infrastructure in accordance with modern and innovative Urban Planning principles. Since every city beholds unique characteristics and challenges, the Vision plans will provide the development direction by understanding these characteristics of the city.

According to National Capital Region Planning Board (NCRPB) 2041 plan Bareilly has been identified as Counter Magnet Area (CMA) for future development. It is equidistant from New Delhi with 250 kilometers and Lucknow with 252 kilometers. It is located as Eastern Dedicated Freight Corridor Node. It is famously known as the Zari Nagar for Zari zardozi handicrafts works on dress materials of Uttar Pradesh. It is the center for manufacturing of cane furniture and for trade in cereal, sugar, pulse and newly rice cultivation as well as IFFCO industrial footsteps carries industrial nodes in north west and southeast part of city.

1.2 Project Objectives

The purpose of Vision Plan is to drive economic growth, improve the quality of life of people by strengthening city's inherent potentials. augmenting existing infrastructure and plan its growth which is sustainable and resilient in nature. Key objectives of the Vision Plan are:

- Preparation of Vision plan to promote long term growth & development of the city.
- Adopting comprehensive development approach for the city to Improve quality of life, creation of employment, boost regional development. improved socio-economic and financial planning to guide city's planned expansion in the future.
- Preparation of City's Business Plan and identification of projects of importance that can be developed through private sector participation.
- Identification of programmes, stakeholders, institutional arrangements and resource requirements adopting project structuring mechanism.

1.3 City Characteristics

Bareilly is the fourth largest city in Uttar Pradesh located on the Ramganga River, serves as a gateway to the state of Uttarakhand. It is located on the National Highway 30, which connects Uttarakhand's Sitarganj with Andhra Pradesh's Vijaywada. The 2040-kilometer (1267.5-mile) highway begins at the NH 9 junction at Sitarganj and runs through Bareilly. Bareilly is connected to Pilibhit by National Highway NH30 and Shahjahanpur by NH730C on the east. National Highway 530B passes to the west of the city and connects the Badaun district. It is connected to the national capital New Delhi with NH530 till Rampur and with NH9 from Rampur to New Delhi passing through Moradabad. In the north lies Nainital which is connected with State Highway 39 till Kichha and with National Highway 109. It has 6 railway station and army air base.

Bareilly city is identified as the counter magnet of the National Capital Region along with nine other cities including Lucknow and Jaipur. The city has immense potential of growing as the major service provider in the region. It is also known as the educational and healthcare service hub to the surrounding districts of Uttar Pradesh and neighboring state Uttarakhand. It has a rich cultural history dating back to Mahabharata which is well depicted by Nath Temples. Bareilly is also base of industrial units producing various types of products ranging from chemicals, plastic agro etc.

Bareilly's extent of urban expansion for the year 2021 is 8027.61 hectares or 39.03% against the area of 20563.82 hectares of development area boundary as sanctioned in Master Plan 2021. North West Bareilly city can be considered to be developing in a liner form because of major Industrial area in this quadrant which flourishes within 1-2 km radius parallel to National Highway 530 whereas, North-East part of Bareilly city organically shows evidence of development and small residential patches can be seen around the bypass roads which betters the connectivity of this zone but is hindered by Airport. South West region witness concentration of population and is reflected by coverage of more area. Ramganga river on the west is a major factor that limits the urban expansion in this direction. South-East part of the city is highly concentrated and the extent of the urban expansion is most in this quadrant only. It also houses major educational institutes which are located at the cordon point of the main arterial road and bye-pass road.

Core area of the city is the old densely populated area which mainly comprises of Sahukara, Kohadapir, Gulabnagar, Alamgirganj, Shahbad, Qutubkhana, Shayamganj, Subhash Nagar and the pre-built area of Madhinath etc. Due to cluster housing, areas adjacent to the Market Centre and historic area have intensive development. This is due to the accessibility of all services, cultural attractions, and employment opportunities. Due to a lack of organised growth, this area is under development pressure. Housing typology in Bareilly city can be categorised as low density low rise type of housing except for the core area where housing typology is high density low rise. According to the 2011 census, the city's total households (HHs) are 1,66,447, with a population of 8,98,167. The average household size is 5.3. In 2001, there were 1,19,767 HHs, with a population of 7,20,315 people and a household size of 6. The same procedure is used to calculate additional household units for the years 2031, 2041 and horizon year 2051 and 2071 based on population forecasts as 19,49,012, 24,22,433, 28,94,499, 30,29,478 and 37,02,015 respectively. To account that total housing demand is 400786 where as additional demand is 247525 in number by 2051. According to the Masterplan 2031, approximately 1257.20 Ha of land was demarcated for the use of public and semi-public requirements but around 531.1 Ha (7.16%) of land has been developed as per master plan 2021.

1.4 SWOC

It is crucial to carefully study all aspects of the city and evaluate them from the standpoint of planning perspective SWOC are been defined as under

STRENGTHS

- Location of Bareilly and its identification as Counter Magnet of National Capital Region
- Bareilly is an economic center and employment generator for people due to wood carving, hosiery, foundry and other industries.
- Only Municipal Corporation in the district
- Presence of Seven Nath temples envelope the seven major routes of the city, giving it the identity of Nath Nagri

- With massive market infrastructure, the city is also well known for its trade to all its neighboring cities.
- The city of Bareilly portrays a very strong religious & cultural identity.
- Bareilly is very well renowned for its native craft of Zari-Zardozi all over the country which initiates commerce & trade to the city.
- Bareilly is famous for Nath Temples and Dargah Ala Hazrat. Many people from the whole country to visit these religious sites and temples.
- The Heritage is a major attraction of Bareilly. Bareilly is an entry point for visiting Kumoun Region.
- *Presence of well-known handicraft sector and artisans in Bareilly. There are approximately 1.7 lakh Zari Zardozi artisans in Bareilly*
- *Existing Medical infrastructure base and Medical Staff. Bareilly is among one of the leading cities of Uttar Pradesh in terms of medical facilities, the city serves as a gateway to the patients of the nearby areas as well as Kumaon, Rohilkhand, and West Nepal region.*
- *Two sectors namely Food Processing & packaging, Beverages, and Petroleum & Chemical Products are the major contributing sectors across the district.*
- Presence of agricultural products for the raw material
- Proximity to upcoming Ganga Expressway
- Most of the road stretches in the Bareilly city are between 12 to 24 m RoW and thus there is a lot of scope for development.
- Holistic development of the roads along with the junction development project which will create a consolidated and uniform urban infrastructure system.
- Nearby reservoirs, Ramganga River are major surface source to substantiate demand with needful action.
- Subsequently waste management can be managed with technological intervention to wards 3R principle- Reduce, recycle and reuse.

WEAKNESS

- Lack of planned residential spaces
- Lack of planned industrial areas
- Lack of supporting infrastructure for cane and bamboo industry
- The city lacks the identity in terms of entrance gateways.
- Loss of Imageability of the city is seen beyond the old city core.
- Despite of having a very rich cultural background; the religious precincts still lack the sense of Identity
- The traditional craft work trade is declining due to lack of display infrastructure and tax systems.
- Highly traffic congested urban area and lack of public and tourist facilities.
- Unmanaged public transport for visiting Heritage sites.
- Unauthorized development and Encroachment.
- Narrow connectivity to the Heritage site.
- Location is located in the dense city areas.

- Lack of work sheds in hygienic condition with supporting infrastructure such as sanitation, lighting and appropriate place for their tools, equipment, raw and processed material as well as finished products etc.
- Discussions with Health Associations and health sector bodies, it has come up that there is a need of an organized healthcare facility in the Bareilly. As currently, the existing healthcare facilities are present in various parts of the city which are facing issues such as parking, traffic and proper access.
- Encroachment of footpath area in present state by vendors and shop owners may put the proposal at risk if enforcement is not done properly
- Common pattern noticed in Bareilly is, the citizens prefer on-street parking over off-street parking primarily because the former is cheaper than the latter. This leads to irregular parking all over the road width especially during the peak hours. In addition to this there is lack of parking bays due to which the commuter parks the car on road.
- It has been observed in the Bareilly city that a large no. of citizens commutes via two-wheelers and auto rickshaws though detailed survey of all the roads have not been done. These rickshaws tend to create a havoc on the road sides and regulate the fares according to their conveniences. Also, the citizens commuting by cars are not able to move freely due to hindrance caused by the e-rickshaws.
- The citizens generally park their vehicles on the roadsides. So, during peak hours, i.e., the morning and evening there is congestion on the roads creating unmanaged situation if not under policing.
- Footpaths do not exist, as they are either too narrow for people to walk on, or have been encroached by hawkers, forcing pedestrians onto the roads.
- Parking availability and the parking needs have huge gap and thus most of the roads are occupied by vehicles blocking the carriageway.
- The growth pattern of city is not planned, so laid of new network in old area places are troublesome.

OPPORTUNITIES

- To develop Bareilly as the major industrial city in the state
- To develop Bareilly as a major educational and medical hub
- To provide residents of Bareilly a better quality of life
- Development of Nath temple circuit & reviving religious precincts as the symbolic identity of Bareilly.
- Creating a platform to preserve & elevate the city's local manufacturing industries.
- Development of infrastructure that provides work opportunities & initiates startups for city's economic growth.
- Bareilly is located between national capital and state capital, also one of the counter magnets of NCR.
- Potential for revival of existing handcraft ecosystem through cluster development
- Development of working shed for Zari Handicraft artisans along with supporting infrastructure.
- As per norms, there will be requirements of additional multi-specialty hospitals and specialty hospitals in Bareilly. The existing health facilities needs to be upgraded in terms of technologies, resources, and facility. Development of "Medi City" designated area with multiple health business and activities.

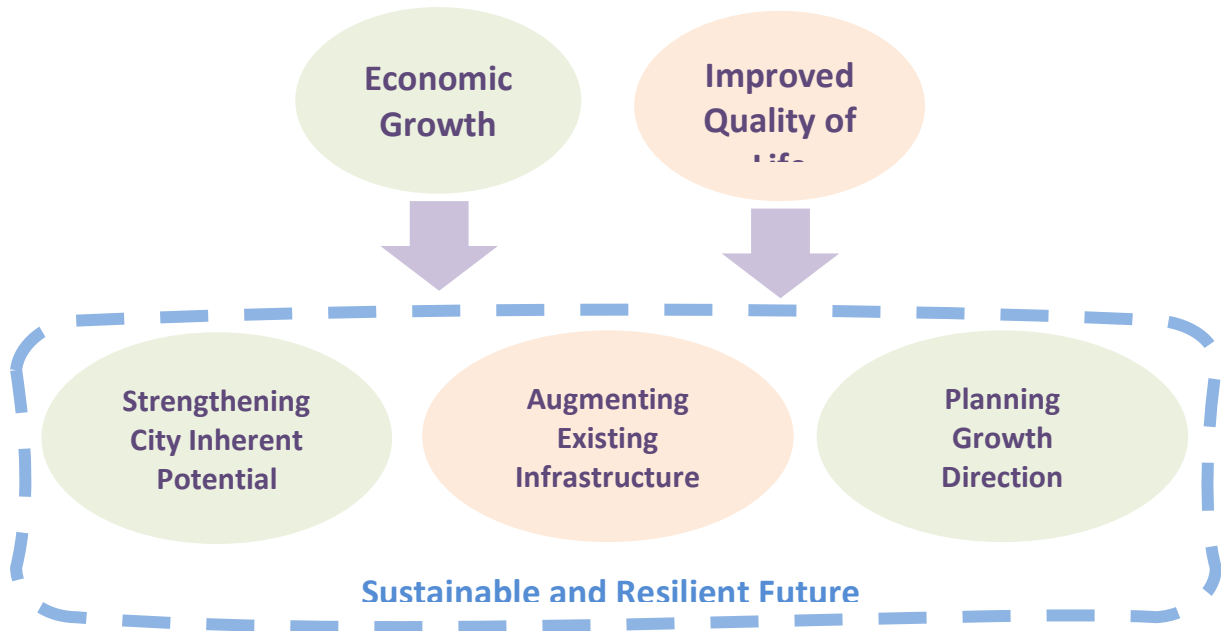
- Potential for Food Processing, Beverages, and packaging sector based on industrial output trend.
- Development of ring road for improved connectivity and development of southern area.
- Spaces along the Road carriageway could be made into public realm which will not force the pedestrian to use the roads and hence provide safety.
- There is a chance for provision for several activity zones respecting the local nature of the city and providing to all irrespective of class.
- With this proposals road can be envisioned more than just infrastructure for movement and can become one of the public spaces for the people of Bareilly
- Intelligent traffic management, clear crossings, foot over bridges, signage displays at every interval, street furniture such as dustbins bollards.
- Govt policy and Citizen charter makes city clean green city to sustain resilient city.

CHALLENGES

- Lack of industrial growth impacting economic growth
- Congested core areas
- Lack of transport infrastructure
- The mobility infrastructure in main markets like Bada bazaar, Kutubkhana & Shyam ganj relentlessly lacks management.
- The current street scenario lacks the safety & security aspect of the residents which further affects nightlife for women & children.
- The local Zari-Zardozi art could vanish with time if there's no infrastructure proposed to revive it.
- Lack of celebrated public life and underutilized public assets.
- Physical constraints of the city in southern direction with respect to presence of river Ram Ganga for physical growth of the city
- Unavailability of large vacant land parcels for development of infrastructure
- As it is clear the sewer trunk line shall be made before the roads proposals and the carriage way shall be disturbed.
- Encroachment on the roads needs to be controlled through effective policing. Unavailability of which may lead to design failure
- Illegal parking may continue, if parking spaces provided are not enough to cater to the demand.
- New land acquisition policy restricts spatial growth of city to laid new world class infrastructure for new city. So, retrofitting in places will only make city clean city in core area and new parts may be substantiate requirement to achieve future goal.

1.5 Vision Statement

“Drive economic Growth, Improve Quality of life by Strengthening city’s inherent potentials, augmenting existing infrastructure and plan its growth which is sustainable and resilient in future.”



1.6 Proposals focusing Bareilly’s Vision Statement:

<p>Economic Growth</p> <ul style="list-style-type: none"> • Industrial Growth Centers • Development of Global Zari and Zardozi Design and Development Center • Development/ extension of industrial area in Bareilly City – multi – product 		<p>Quality of Life</p> <ul style="list-style-type: none"> • Residential Housing Node • “Medicity” – designated area with multiple health business and activities • Ramganga riverfront development • Development of National Level Naturopathy Center
<p>Strengthening City Inherent Potential</p> <ul style="list-style-type: none"> • Ahichchhatra - Tourism infrastructure upgradation of A.S.I site • Development of Handicraft Cluster/ Common Facility Centre (CFC) – Zari & Bamboo • Bareilly District Jail land parcel monetization through redevelopment. • Developing trade cum business expo centers near transit nodes • 	<p>Augmenting Existing Infrastructure</p> <ul style="list-style-type: none"> • parking policy and construction of off-street parking lots • Strengthening of Radial Road connecting to Ganga Expr • Development of new solid waste treatment plant • Development of new Tertiary Sewage Treatment Plant (STP) • Riverfront and ghat development for Ramganga and Chowbari • Urban Renewal of all Seven Nath Temples 	<p>Planning Growth Direction</p> <ul style="list-style-type: none"> • Industrial Growth Centers • Development medical infrastructure for naturopathy and eco-tourism • Development of Lite Metro Rail network for Bareilly

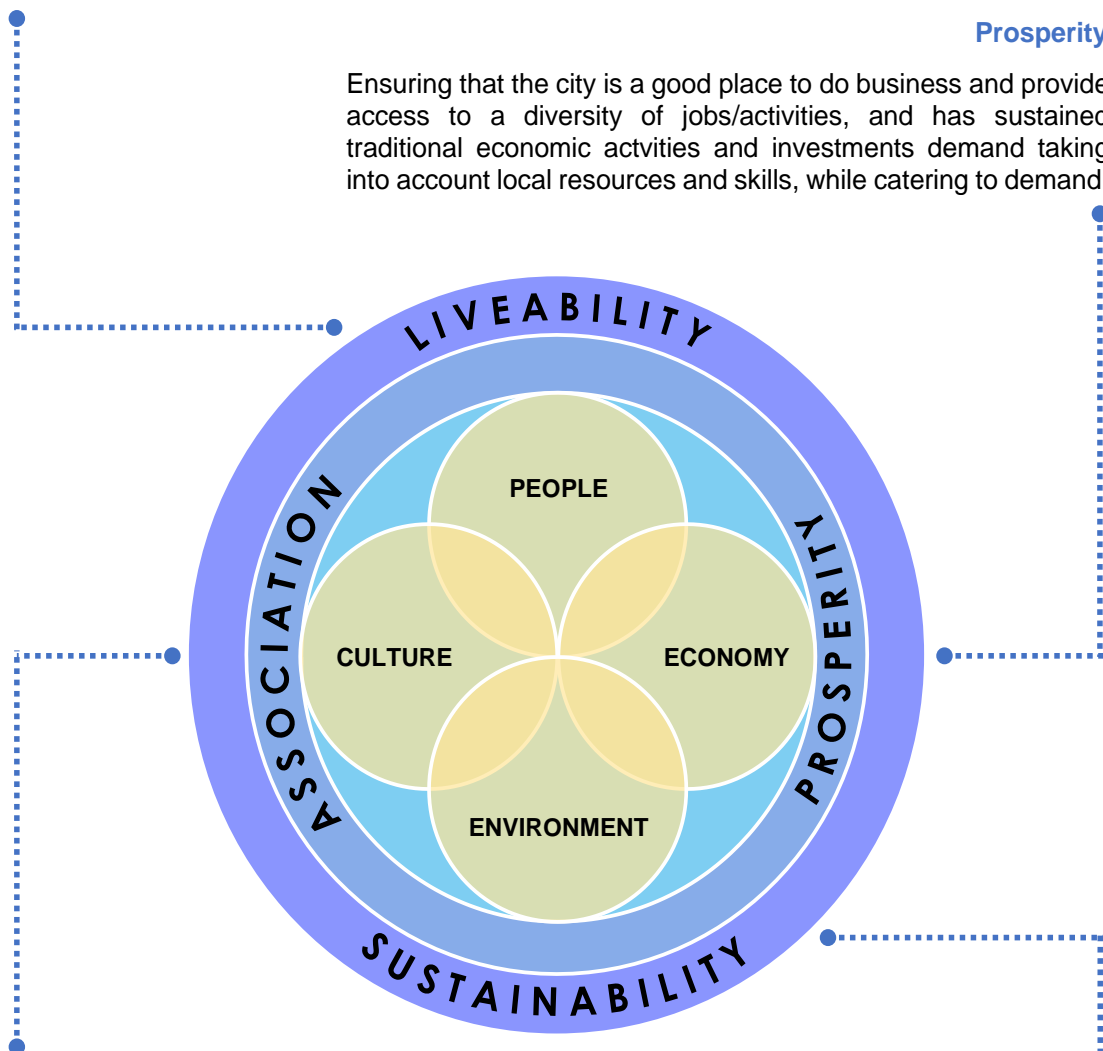
1.7 Expected Outcome

Liveability

Enhancing aspects of social well-being of a city that enable citizens to live a decent life ranging from access to basic services, safe streets and public spaces, public transport, facilities for health and education, places for recreation and fun. For better happiness index, healthy life and right to live.

Prosperity

Ensuring that the city is a good place to do business and provide access to a diversity of jobs/activities, and has sustained traditional economic activities and investments demand taking into account local resources and skills, while catering to demand.



Association

Any settlement from its past carries associational characters in the form of tangible and intangible (historic and cultural places) assets which are of significance to maintain emotional rhythm within the city for its people and for the coming generations.

Sustainability

Maintaining the balance between natural and built ecosystems in a city to address and prevent issues like rising temperatures, deteriorating air and water quality, more frequent floods and droughts, and declining urban biodiversity.

This vision Plan has been prepared for a design period of 50 years with the initial stage taken as the year 2021, mid stage as the year 2036 and ultimate stage as the year 2051 and 2071 for monitoring and evaluation phase. For outline development next 30 years plans perspective vision has been addressed and demand has been assessed.

1.8 Stakeholders Consultation

Stakeholder consultation forms a critical part of the vision development and they were consulted and engaged at every stage of development for suggestions, review and discussions for.

- Consultation
- Data collection
- Data for ongoing and existing proposals
- Discussion of Issues and concerns
- Review and suggestions

Stakeholder list and Meeting work have been appended with List of formats to obtain details of works.

For Bareilly, the major stakeholders were listed as under:

National Level

- National Highways Authority of India (NHAI)
- Dedicated Freight Corridor Corporation of India Limited (DFCCIL)
- Ministry of Railways (Northern Railways)
- Ministry of Tourism (MoT)
- National River Conservation Directorate (NRCD)
- Central Pollution Control Board (CPCB)
- Central Ground Water Board, Ministry of Jal Shakti
- Ministry of Environment and Forests Wildlife
- Department of Economic Affairs, Ministry of Finance
- Indian Industries Association (IIA)
- Unified Regional Land Use Transport Authority (URLTA)

State Level

- Uttar Pradesh Irrigation & Water Resource Department (UPIWRD)
- Uttar Pradesh Jal Nigam
- Uttar Pradesh Public Works Department (P.W.D)
- Uttar Pradesh Metro Rail Corporation (UPMRC)
- Uttar Pradesh Awas Vikas Parishad
- Uttar Pradesh Tourism Department (UPTD)
- Uttar Pradesh State Road Transport Corporation (UPSRTC)
- Uttar Pradesh Power Corporation Limited (U.P.P.C)
- Uttar Pradesh Town & Country Planning
- Uttar Pradesh Housing & Development Board
- Uttar Pradesh Pollution Control Board (UPPCB)
- Uttar Pradesh State Bridge Corporation Ltd. (UPSBC Ltd.)
- Uttar Pradesh Energy Development Agency (UPEDA)
- Uttar Pradesh State Industrial Development Corporation (UPSIDC)
- Infrastructure and Industrial Development Department, Uttar Pradesh (IIDDUP)
- Uttar Pradesh Forest Corporation
- A.S.I

City Level

- Bareilly Development Authority
- Bareilly Municipal Corporation (BMC)
- Bareilly District Administration
- Market Associations
- Transport Associations
- Industry Association
- Vendor Associations
- Resident welfare association (RWA)
- Police
- Traffic Police
- Religious Boards
- NGOs
- Nath Nagri 's Temple Priests and Trusts
- National Heritage Conservation Society

1.9 Proposed List of Projects

After the discussion with Divisional Commissioner and various stakeholders on the total identified projects the following projects were discussed for the further working:

Table 0-1 Project list finalized and endorsed by Mandal Commissioner on 13th July 2022

Bareilly Vision Plan 2071				
Project list finalized by BDA and Mandal Commissioner on 13th July 2022				Total cost in INR Lakhs
Sr. No.	Project List under Bareilly City Vision Plan 2051	Domain	Nodal Department	
1	Residential Housing Node, a) Greater Bareilly- 240 ha b) Sri Janki Puram- 300 ha c). Nekpur (Phase 1 - 2022-23) & Gangora Pikariyam , d) Kargaina , e) Tehtajpur (Area - 100 Ha each)	Urban Planning	BDA / Awasthis / Private Builder	1,85,822.96
2	Industrial Growth CenteINR, a) Rajau Paraspur Phase 1 (2022-23) b) PaINRakheda (2025-30) c) Kurtara (2030-35) (Area - 100 Ha each)		BDA / UPSIDC / Private BuildeINR	59,280.00
3	Integrated Freight Center cum Logistic Hub , Faridpur (35 Ha each)		BDA / Private BuildeINR	6,918.95
4	Access to Ganga Expressway through Radial Road and Outer Ring Road	Transportation	NHAI / PWD	53,555.61
5	Bareilly Lite Metro facility		BDA	17,35,374.90
6	Proposed Bridges, FoBs, Footpaths, Cycle Track		Nagar Nagam	18,000.00

7	Junction Improvement Plan		Nagar Nagam/ PWD/ BDA	4,000.00
8	Missing Links		PWD/BDA/ UP Bridge Corporation	12,000.00
9	Ahichchhatra Tourism Infrastructure upgradation		Tourism Department	2,800.00
10	Fist War of Independence (1857) museum : a) Bareilly College Campus		Tourism Department	4,400.00
11	Urban Renewal of Nath Temple circuit & Infrastructure improvement of all Seven Nath Temples		Tourism Department	3,666.85
12	River front development (Ramganga & Nakatiya)		PWD / Irrigation Department / BDA	1,421.74
13	Aerocity integrated office complex near Airport development : Area - 30 Ha		BDA / Private Builder	1,76,070.00
14	Development of new solid waste treatment plant for 2041, (Area -15 Ha)		Nagar Nigam	9,000.00
15	City Plan for Water Logging / stagnant spots and flood prone areas	Infrastructure	Jal Nigam / Nagar Nigam	9,000.00
16	Development of new Tertiary Sewage Treatment Plant (STP): Near Industrial Area.		Jal Nigam / Nagar Nigam	1,68,000.00
17	“Medicity” – designated area with multiple health business and activities		BDA / Nagar Nigam	35,132.50
18	Development of Handicraft Cluster/ Common Facility Centre (CFC) – Zari & Bamboo	Economy	BDA / Nagar Nigam	7.59
19	Demonstration of Solar Energy for streets and Gov. buildings.	Solar	UPNEDA	15.40
Total Project Cost in Lakhs				24,84,451.10
Total Project Cost in Cr.				24,844.51

More than 50% of the total investment is planned in Short Term spanning from 2022-28 while 26% has been planned for Medium Term spanning from 2028-27 and rest of the 20% in the Long Term spanning 2037-51-71. Majority of the investment is required for mobility, connectivity, water, sewerage, and electricity related projects however this is the consolidated investment requirement through various sources.

1.10 Report Structure

The report structure is divided into Eight Deliverables:

D1: Inception Report: Data Collection, Stakeholders meetings, Finalization of Approach & Methodology

D2: Existing Situation Analysis Report: Existing condition of city with emphasis of Heritage, Urban Planning, Transport Planning, Services, Physical and Social Infrastructure, Urban Designing,, energy and Fiscal condition assessment

D3: Demand Assessment Report: Basis of estimated population and market demand total services demand have been derived

D4: Vision Plan Report: Basis of existing condition and demand for city vision chariot has been framed

D5: Identification of Bouquet of Project and Prefeasibility Report: To achieve the Vision target total 19 projects have been identified

D6: Integrated Infrastructure Development Plan: Strategy and Action plan have been framed and budgetary needs have been identified.

D7: Draft Business Plan: Project phasing and funds requirement have been framed .

D8: Final Report consists of three Volume. Volume (i) summarize existing and Demand of city, vision plan and bouquet of project with pre-feasibility analysis report in final version after incorporating stakeholders view and clients suggestion. Volume (ii) refers final report of strategy and action plan report of Integrated Infrastructure and Development Plan, Volume (iii) explains detail Business plan report.

Every reports are also attached with annexures, stakeholders minutes of meetings and animation of the Vision Plan.

1.11 Implementation Strategy

Implementation plan has been frame out under three project horizon:

- i. Short Term: 2022-27
- ii. Mid Term: 2028-2037
- iii. Long Term: 2038-2051-71

City's project need have been put forth after consultation and analysis and priorities the projects, prepared phasing of cost expenditure. Component wise bulk cost have been derived and project implantation strategy have been framed by under Govt policies , rules and public mode of operation. Different stakeholders have been identified to framework the execution plan. Revenue model have been framed for Operation and Maintenance cost and viability analysis of project. At end mode of operation have been framed basis of revenue model of the project.