

# NATIONAL URBAN PLANNING & MANAGEMENT CONCLAVE LUCKNOW-2022



## Development Plan and Associated Issues and Challenges for Lucknow

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# Lucknow

## 01. The Capital City

01.

- Administrative State Capital
- Well connected with other cities & Countries via Rail, Road and Air

02.

- known as the “Golden City of East”, “Shirazi-Hind” and the “Constantinople of the East”
- 4 layers of Heritage era embedded with Culture

## 02. Heritage city with “Tehzeeb”

03.

- Chikankari Work famous all over the world
- Mango exporter, famous Malihabadi Mango

## 03. Chikankari & Mango Belt

04.

- La Martiniere Lucknow, founded in 1845, is the only school in the world to have been awarded a battle honour
- KGMU, SGPGI are world famous Medical Institutions

## 04. Education Hub & Medi-City

05.

- Identified potential for development as “State Capital Region”
- Established roots and potential of growth for Industrial & Commercial Hub

## 05. Centre for Industry & Commerce

# RECENT DEVELOPMENTS IN LUCKNOW

## New Malls



These include the Crown Mall opposite BBD University, the very new Phoenix Palladio mall near Shaheed Path and the under construction Lulu Mall- the biggest mall chains in the world.

## International Cricket Stadium



Formerly Ekana, the Atal Bihari Vajpayee Ekana Cricket Stadium was among the biggest developments to happen in Lucknow-a world class cricket and other sports complex with ultra-modern facilities.

## Riverfront Developments



Remodelling & development of Gomti Riverfront included cleaning up of Gomti (often referred to as the biggest 'drain' in Lucknow). It ensured a cleaner river and more developed shore.

## Development of IT City



Key transformational projects Pan city



## Startup Ecosystem

The UP government's lucrative startup policy is generating better job opportunities & enabling people to grow small businesses from the ground up. Knocksense, Trendsetterz, Purplehide and Ziffy are among the famous startups from Lucknow.



## Lucknow Smart City

Within a few years Lucknow has completed several major projects which include the laying of LPG pipelines, introduction of a smart Integrated Traffic Management System and introduction of several smart bus shelters.



## Development of IT City

After 2017, an IT City was developed in Lucknow with major investment from HCL & has made Lucknow an emerging hub of IT. This has created a number of job opportunities for the people of Lucknow.



# EXPANSION IN CONNECTIVITY TO AND FROM LUCKNOW

## Key transformational connectivity projects



### Lucknow Metro

The priority corridor was the fastest developed metro route in the country; current ridership of over 65000 people



### Lucknow- Delhi Tejas Express

A major undertaking that brought huge relief to passengers travelling between the two cities. This new and ultra-modern train facility has received great response from people in both of these cities.



### Expressways

The e-way was inaugurated in 2016 to lighten the traffic on congested roads of the city and shorten the distance between Lucknow and Agra. This connects to Yamuna e-way from Lucknow to Delhi and Noida.

### Flights to cities within UP

The project aims to introduce several new domestic flights from the Lucknow airport (under development) to establish air links between Lucknow and other major cities in UP - Varanasi, Ghaziabad, Bareilly, Hindon & Prayagraj



### New Airport Terminal

A new terminal with a capacity of handling 27 million passengers (still under development) is expected to be operational by 2021



### Kisan Path and Outer Ring Road Project

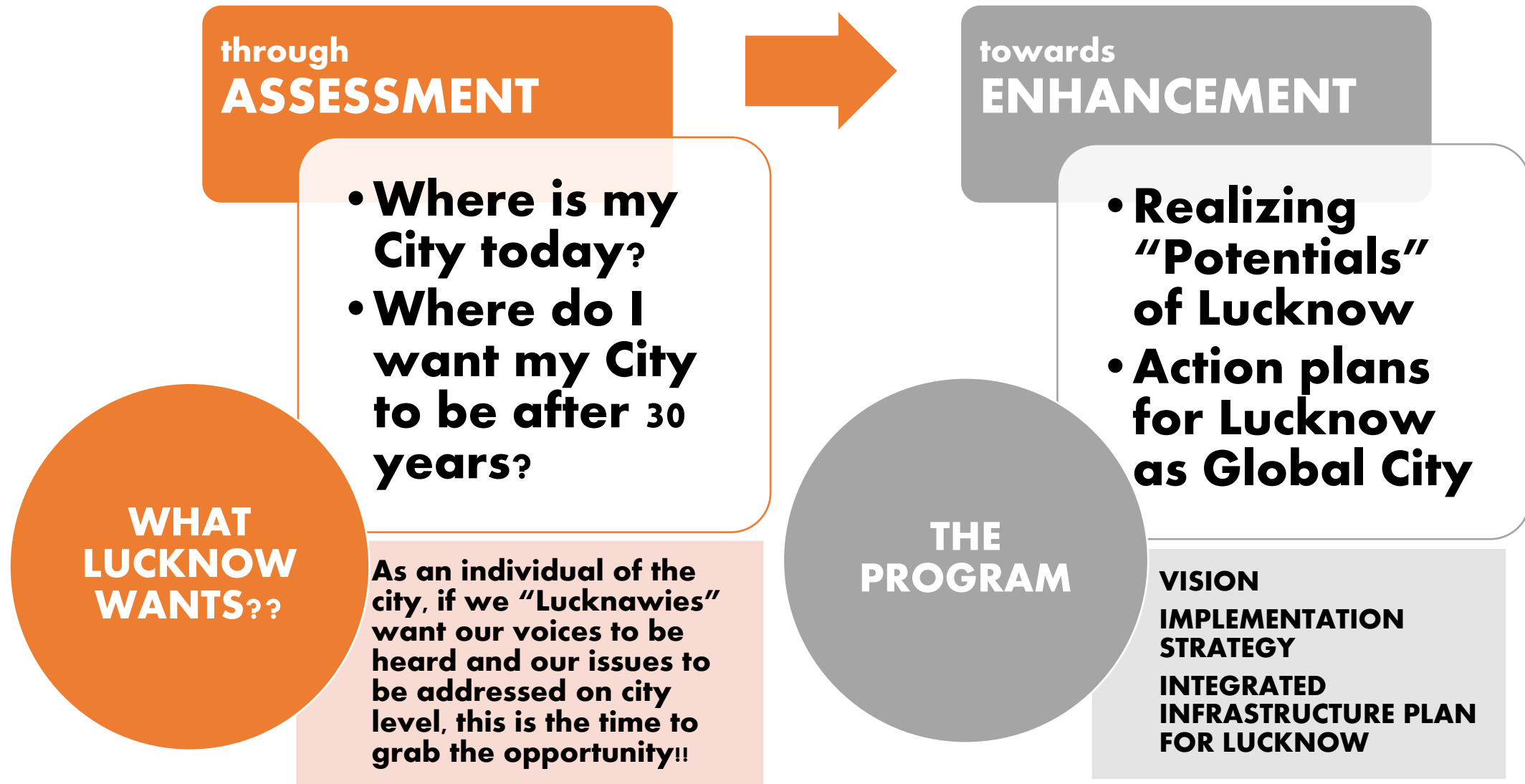
Part of the 108 km 'outer ring road project', this is a 15 km stretch connecting Sultanpur to Faizabad Road in Lucknow. It is expected to decongest the roads of Lucknow which are already brimming with traffic.



### Gomti Nagar Rly Station Redevelopment

GNRT is being reconstructed by RLDA in partnership with NBCC on PPP mode in Gomti Nagar with an aim to provide Lucknow with state of the art railway station. The new station aims boost real estate & local economy.

# COURSE OF ACTION



# ISSUES AND CHALLENGES

S

## STRENGTH

- **People-oriented city** with traditional character and higher heritage value
- Good road and railway connectivity to most of the important metropolitan cities
- Largest Literacy Rate 82.50% compared to district
- Medical facilities in city serve the neighbouring districts
- Famous for Chikankari, traditional embroidery style
- Famous for household and small-scale industries

## OPPORTUNITIES

- Potential to:
  - become the SCR (State Capital Region)
  - to develop a Film City with rich architecture & heritage
  - of hosting International Events if apt infrastructure is provided
- Development of **springboard** for **digital technology** application for ensuring better service delivery
- Potential for reliance of future stock in terms of housing, land banks and industrialization from developing neighboring cities
- Development of many **recreational** and **sports facilities** along river Gomti with efficient waste management
- **Upgrading** and **renovating** the **city parks**(city of gardens or baghs)

## WEAKNESS

W

- Qualitative and quantitative **deficiency in public transport**
- **No proper space** for **vendors** who contribute to 5% in economy
- **Negligence of Pedestrian oriented development**
- **Poor sanitation**; lack of proper **public toilets** and disposal of **solid wastes**.
- **26%** of population lives in **slums** where **42%** of the slums are on **encroached land**
- **No proper ward wise equal distribution of** social facilities such as hospitals, schools, community centers
- **Migration** of **educated people** to other cities for job opportunities

## CHALLENGES

- To provide **affordable housing** to constant migrants of **low-income group**
- **Highly congested road & poor pedestrian & traffic management** due to fast-pace growth
- **Overcrowding** in city due to lack of counter magnets
- Current **unemployment** rate as per Ministry of Statistics is 8.5%.
- Frequent **political movements within public areas** as administrative part being in center of the city
- **Rise in water pollution** due to **inefficient water waste management**

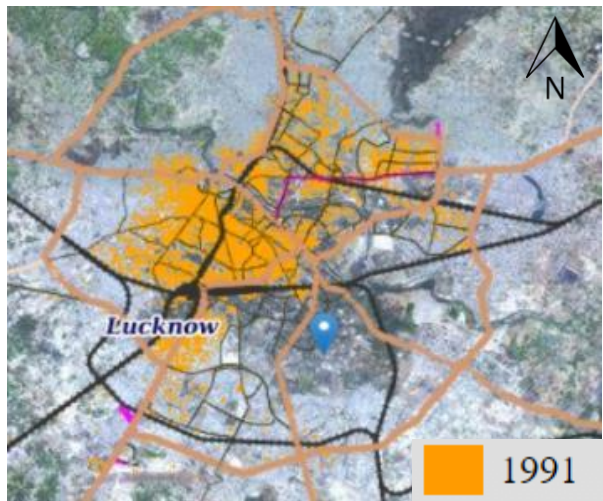
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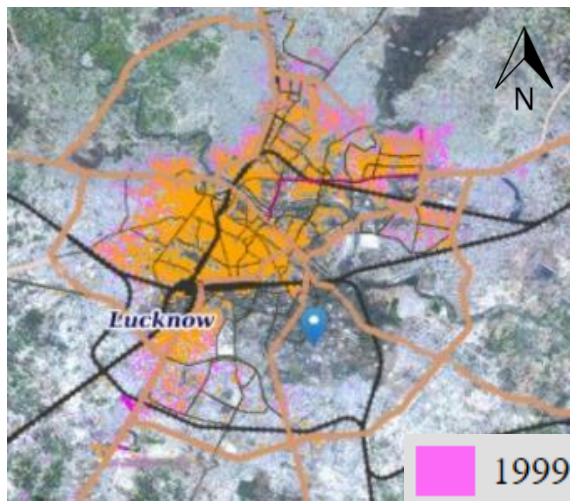
Development Plan and Associated Issues and Challenges for Lucknow

# GROWTH ISSUES: SPRAWL IN BOUNDARIES AND GROWTH IN POPULATION

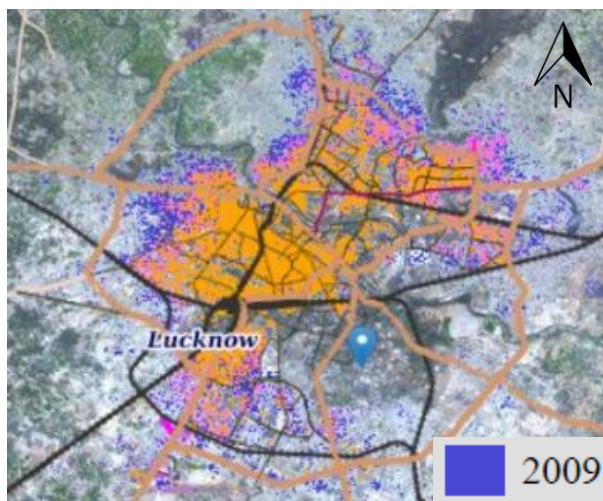
1991



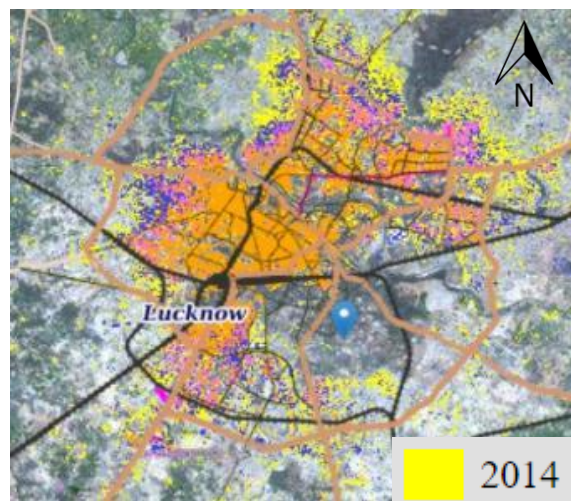
1999



2009

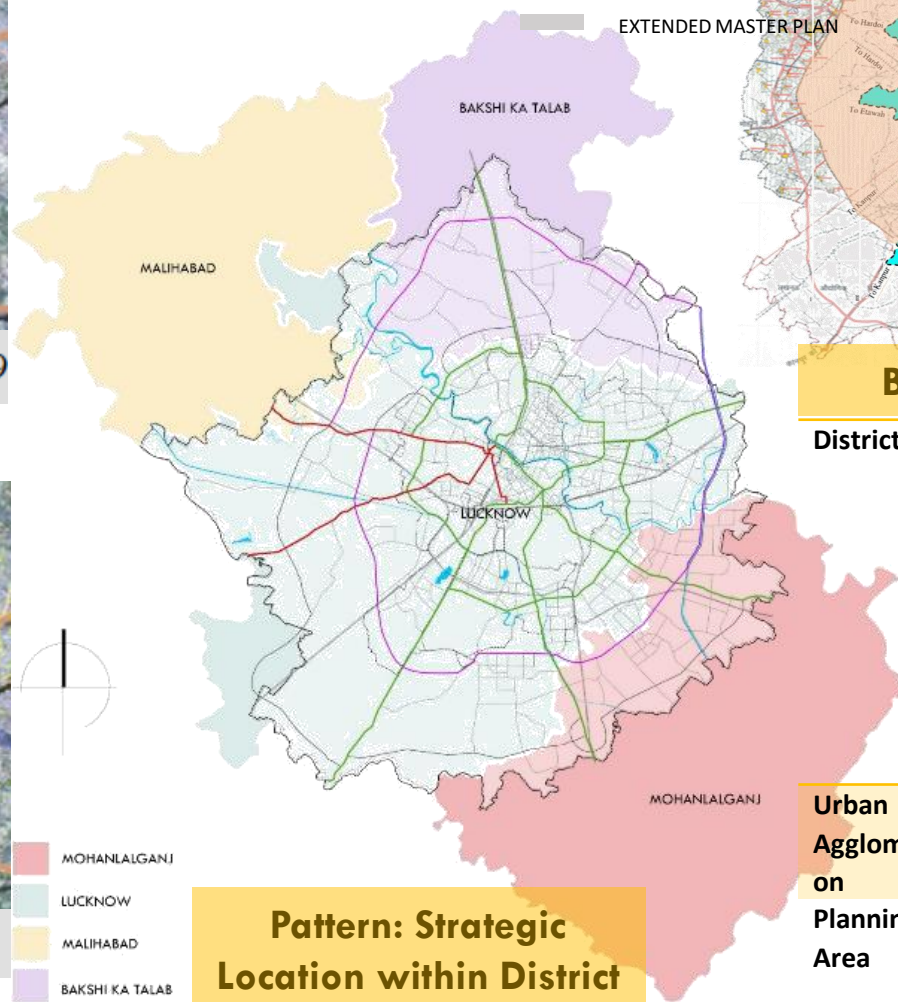


2014

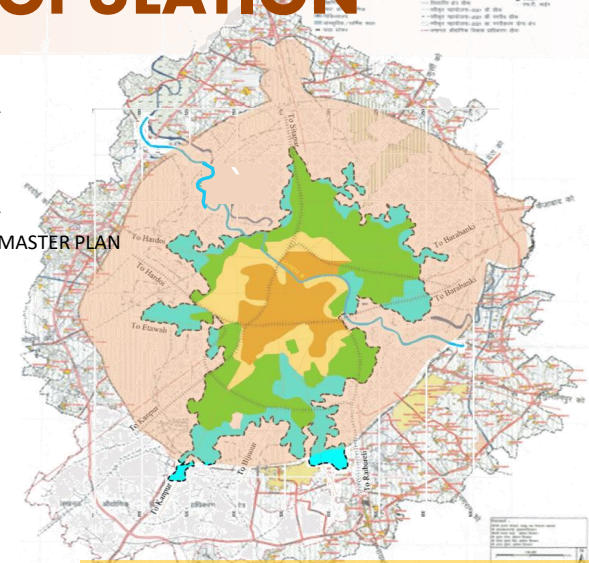


## Pattern: Spatial Development

- TILL 1971
- 1971 - 1981
- 1981 - 1991
- 1991 - 2011
- 2011 - 2031
- EXTENDED MASTER PLAN



## Pattern: Strategic Location within District



## BRIEF DESCRIPTION

<b>District</b>	<ul style="list-style-type: none"> <li>• 4 sub-districts – Malihabad, Bakshi ka Talab, <b>Lucknow UA</b> &amp; Mohanlalganj</li> <li>• 8 Nagar Panchayats</li> <li>• 1 Cantonment Board</li> <li>• 1 Municipal Corporation (93% of district population)</li> </ul>
<b>Urban Agglomeration</b>	Lucknow Metropolitan + Cantonment board
<b>Planning Area</b>	Lucknow UA + Kakori + Bakshi ka Talab + 277 villages



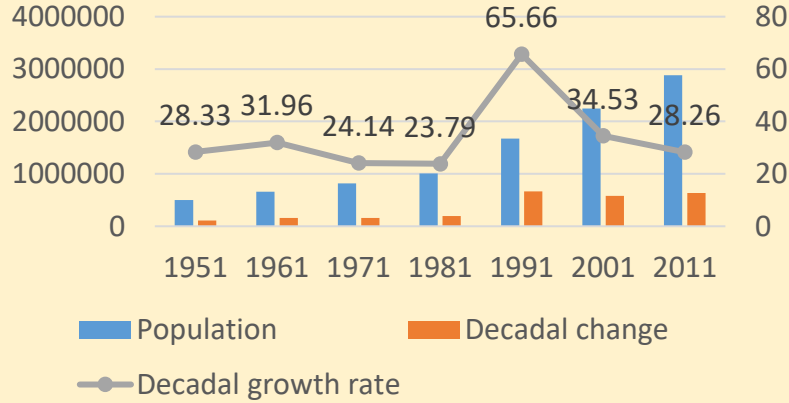
# Development Plan and Associated Issues and Challenges for Lucknow



# LAND USE PATTERNS AND ISSUES

## Pattern: Population Trend

### Lucknow UA Decadal population Growth Rate



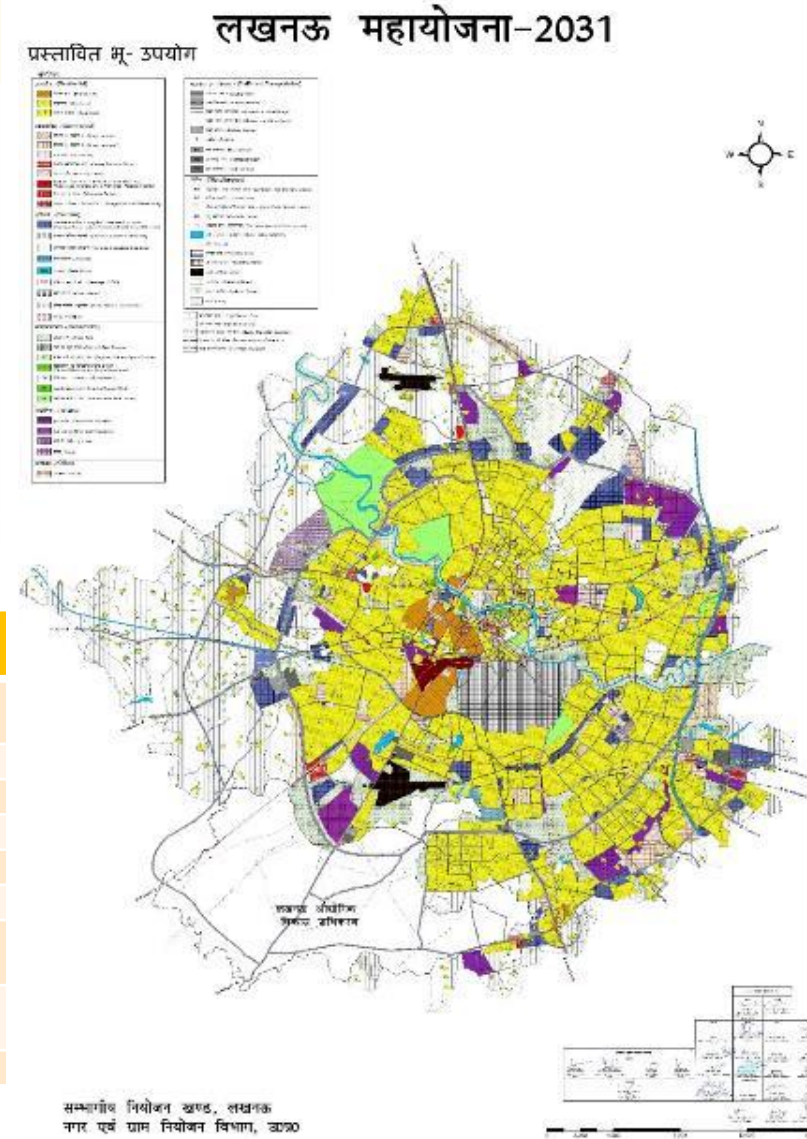
- Planning Area **increased** by 1.5 to 2-fold engulfing villages in periphery.
- Land-use division is **not according** to standards of **URDPFI**
- **No buffer land** in the form of **agriculture/ green belt** outside the proposed urban uses and **Parasitic uncontrolled/ unplanned** development in the adjoining areas outside the boundary

Land use Category	Master Plan 2021		Proposed in Master Plan 2031	
	Area in Ha	% in total	Area in Ha	% in total
Residential	21018.46	48.65%	33395.09	46.89%
Commercial	1345.84	3.11%	3672.82	5.16%
Institutional	421.47	0.98%	837.63	1.18%
Industrial	1647.61	3.81%	3683.59	5.17%
Recreational	9469.41	21.92%	13455.81	18.89%
Public Services	3970.69	9.19%	6967.77	9.78%
Transport	5332.54	12.34%	9207.67	12.93%
Agriculture, water bodies and special area.	balance			
<b>Total</b>		100.00%		100.00%

Proposed land use structure for Lucknow Masterplan 2031

S. No	Land use category	Proposed land use structure for Lucknow Masterplan 2031	
		Large cities	Metropolitan cities and megapolis
1	Residential	36-39	36-38
2	Commercial	5-6	5-6
3	Industrial	7-8	7-8
4	Public and semi public	10-12	10-12
5	Recreational	14-16	14-16
6	Transport and communication	12-14	12-14
7	Agriculture, water bodies and special area	Balance	Balance
8	Total developed area	100	100

(Source: revised based on UDPFI guidelines, 1996)



## Development Plan and Associated Issues and Challenges for Lucknow

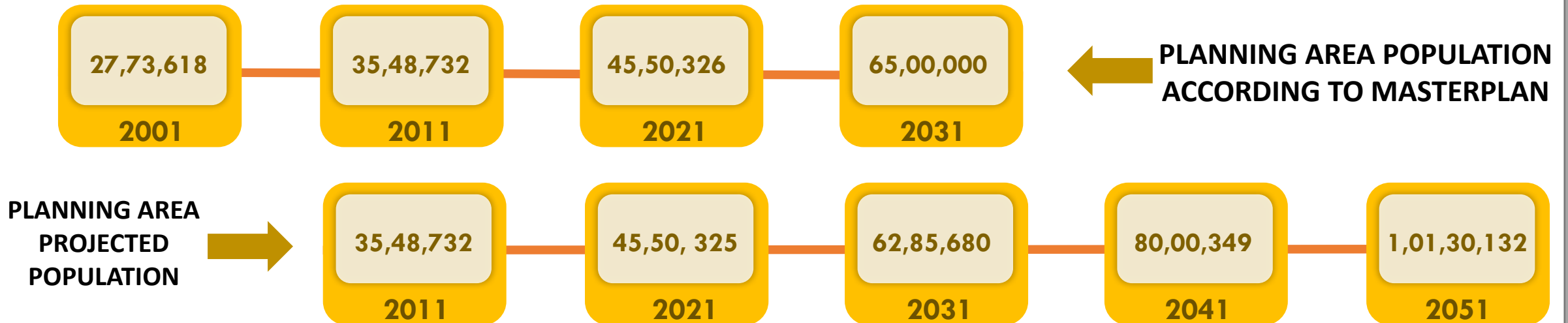




# DEMOGRAPHIC PROJECTIONS

## POPULATION PROJECTION WITH VARIOUS METHODS

Weighted Average	Weights	2011	2021	2031	2041	2051
Arithmetic Progression	20%	7,09,746	9,10,065	11,10,384	13,10,702	15,11,021
Incremental Progression	20%	7,09,746	9,10,065	12,20,559	15,31,053	18,41,546
Geometric Progression	40%	14,19,493	18,20,130	26,14,181	33,55,950	43,09,276
Industrial Push Method	20%	7,09,746	9,10,065	13,37,557	18,02,645	24,68,288
<b>Total</b>	<b>100%</b>	<b>35,48,732</b>	<b>45,50,325</b>	<b>62,82,680</b>	<b>80,00,349</b>	<b>1,01,30,132</b>



**30% PEOPLE FALL UNDER 15 – 29 AGE GROUP**

Projections-P3 (Analysis)



# ISSUES RELATED TO MOBILITY

Inefficient and disconnected transport network of Lucknow city



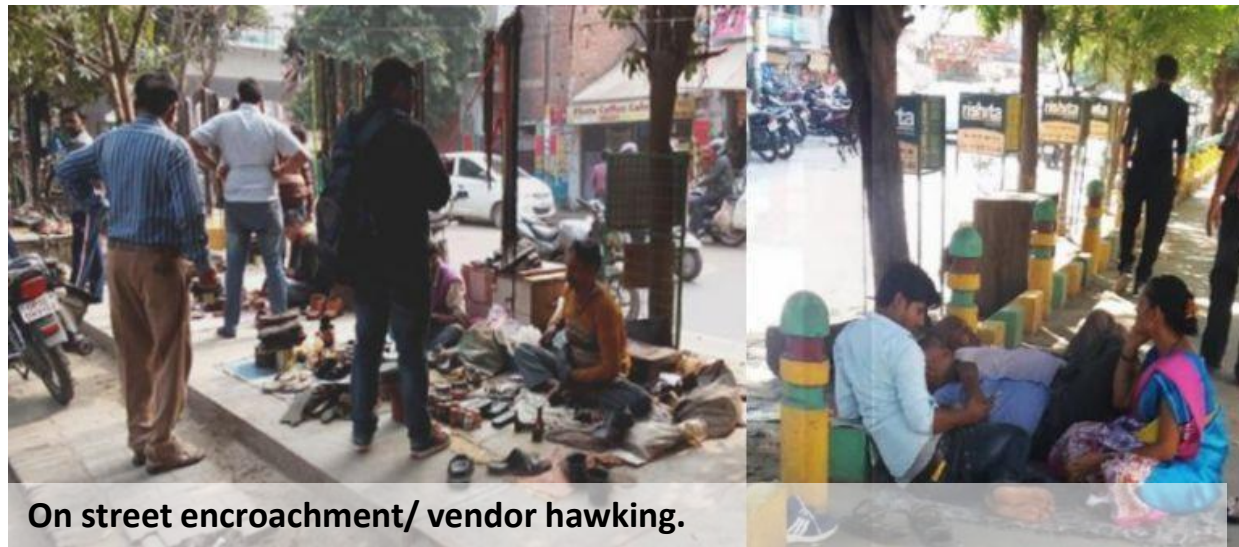
Emergence of auto-rickshaws as a public transport mode and increase in personalized vehicles



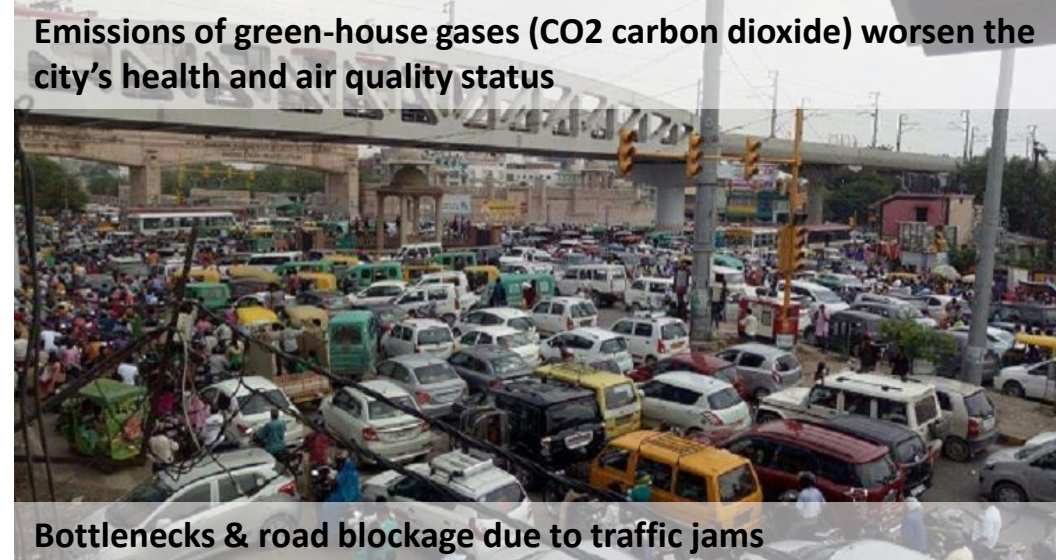
Decreases the attractiveness of the city



Lack of Pedestrian facilities on roads.



On street encroachment/ vendor hawking.

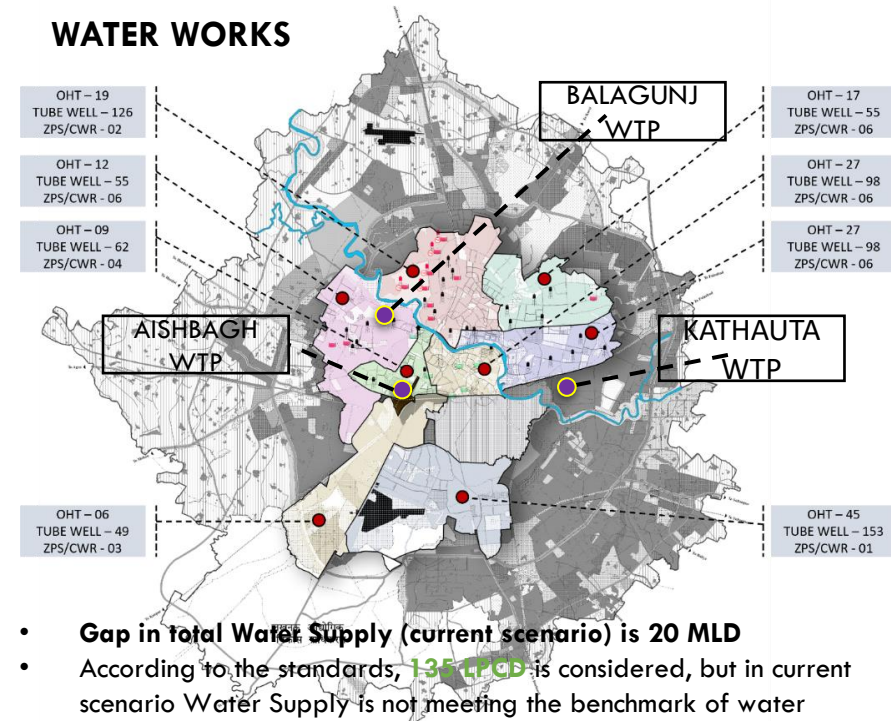


Emissions of green-house gases (CO<sub>2</sub> carbon dioxide) worsen the city's health and air quality status

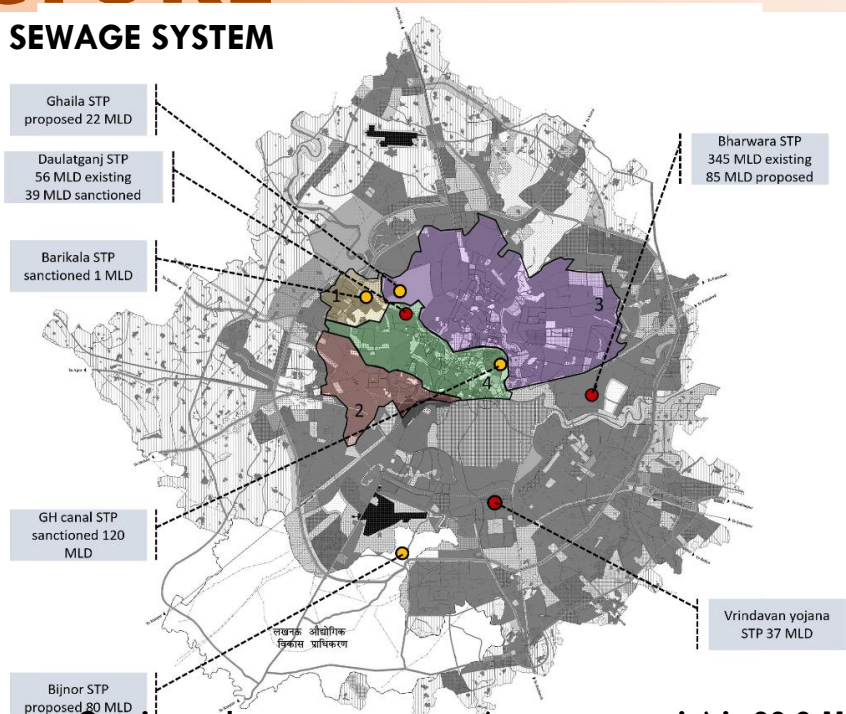
Bottlenecks & road blockage due to traffic jams

# CIVIC INFRASTRUCTURE

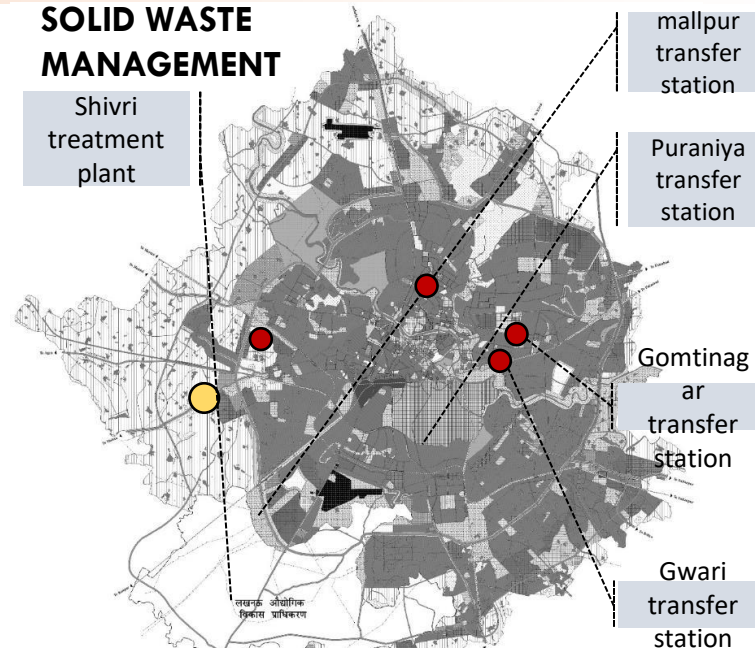
## WATER WORKS



## SEWAGE SYSTEM



## SOLID WASTE MANAGEMENT



- **Gap in total Water Supply (current scenario) is 20 MLD**
- According to the standards, **135 LPCD** is considered, but in current scenario Water Supply is not meeting the benchmark of water requirement, i.e., **112 LPCD**.

- **Gap in total sewage treatment (current scenario) is 80.8 MLD**
- Only, **10.30%** of the City's sewage gets treated.
- In existing scenario, if the **proposed and sanctioned STPs are started** then the current demand can be fulfilled.

- **No bio-medical waste treatment for Health care facilities**, leading to major contributors to the pollution in the city.

SOURCE OF WATER SUPPLY	SURFACE & GROUND WATER
Quantity of water extracted	725 MLD
Quantity of water supplied	705 MLD
Gap in total water supply	20 MLD
Water losses	45%
Water supply distribution hours	18-20 hours
Per capita water supply after total losses	112 LPCD (83%)
Total number of households with water connection	323585 HH (63.14%)

SEWAGE GENERATION	
Total Sewage Generation	784.20 MLD
Total treated Sewage	80.80 MLD (Bharwara STP & Daulatganj STP)
Total untreated Waste dumped in river Gomti	703.40 MLD
Current percentage treatment	10.30 %
Per Capita generation	172.33 L/day

SOLID WASTE MANAGEMENT	
Quantity of solid waste produced	1365 TPD
Total number of wards	110
Total number of zones	8
Per capita waste generation	300 g/day
Type of treatment	decentralized
Households with door-to-door collection	52% of households



## Development Plan and Associated Issues and Challenges for Lucknow



# ISSUES OF HOUSING AND SOCIAL INFRASTRUCTURE

Rapid growth of urban areas in cities and **lack of affordable housing** leading to **informal urban growth**.

The steady population growth has led to challenging urban conditions, including increase of **unplanned** and **unsafe areas**, **deficiency in public services, facilities, infrastructure** and **violation of building norms** and **increase of traffic congestions**.

SLUMS OF LUCKNOW



**Scarcity of land available for development** due to the **population concentration** within the **main urban mass** of the city.

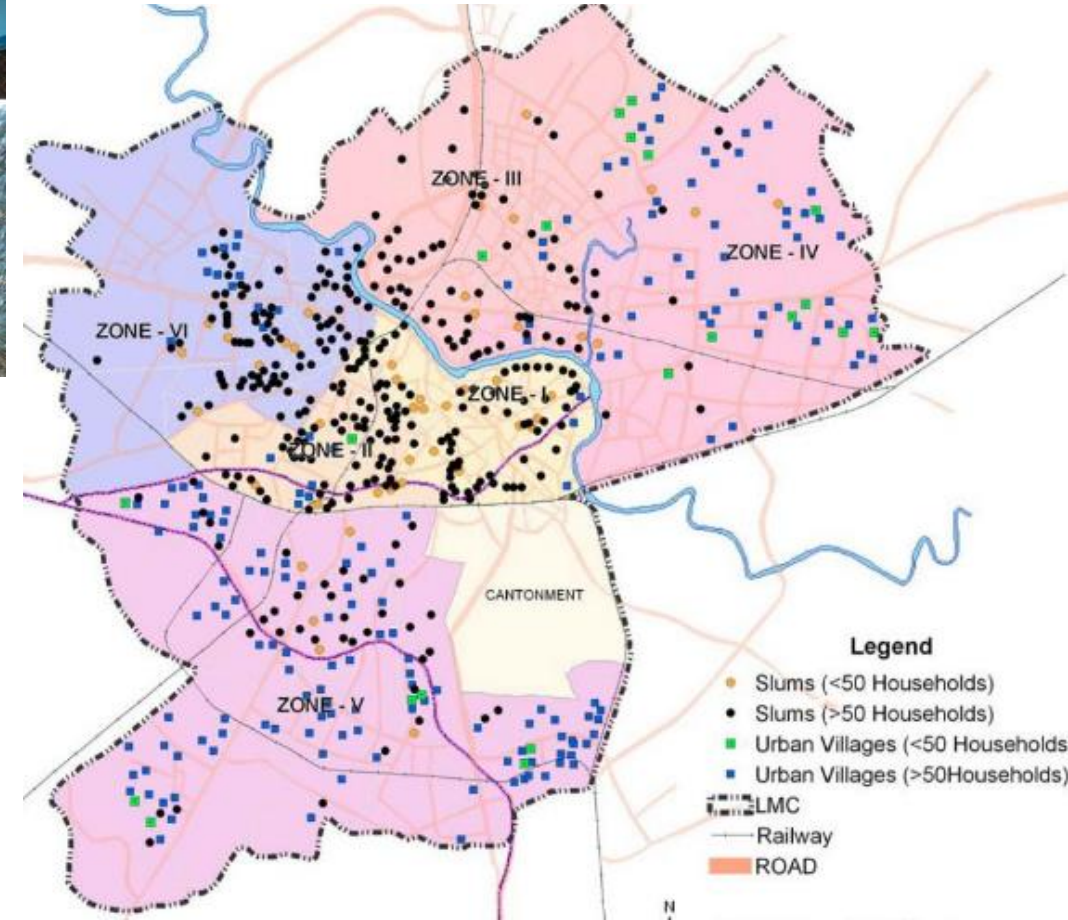


**Narrow streets** and their bad conditions led to **absence of good ventilation** to those areas, high pollution levels and **increased urban temperature**.



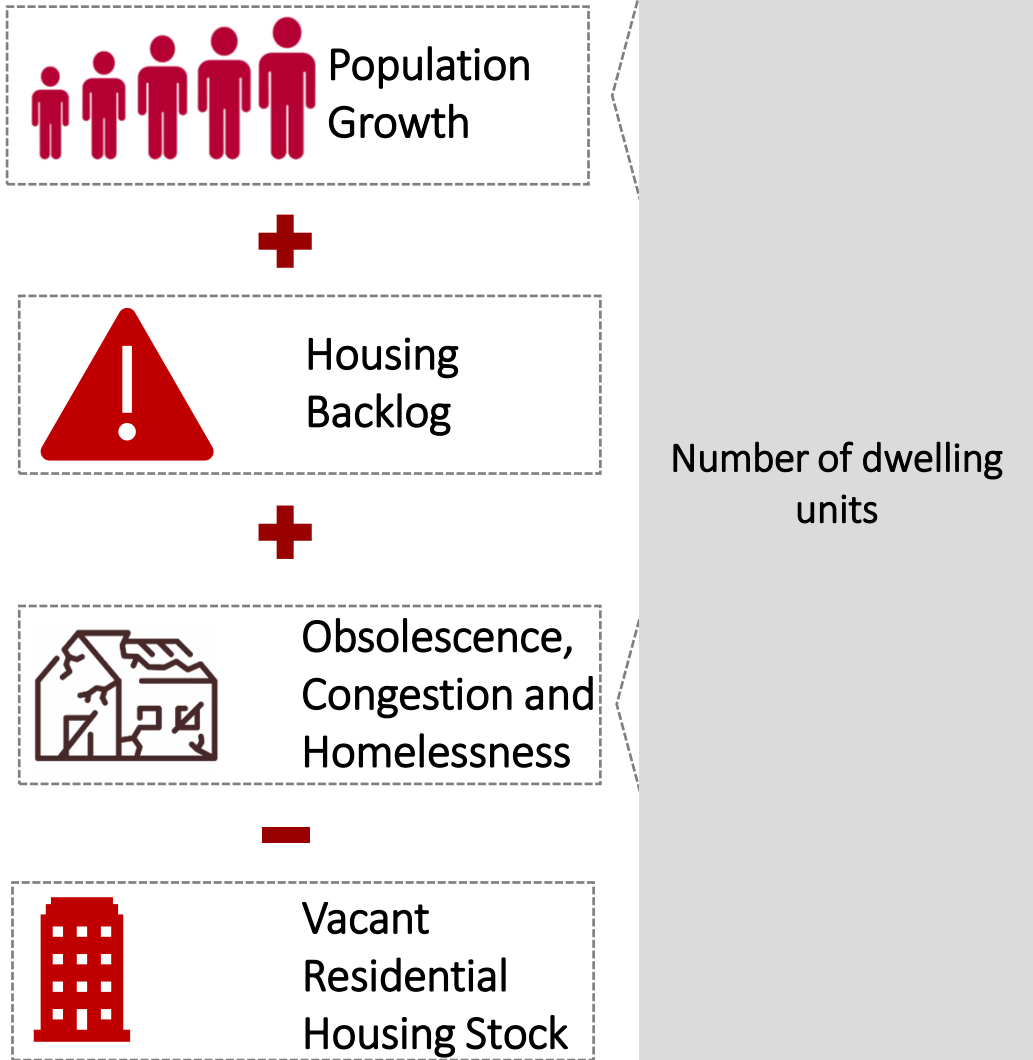
**Lack of awareness** in dealing with the waste and the lack of clear mechanisms for **garbage collection and disposal**.

**Increase in population density** area results in **lower socio-economic zones** thereby creating the composition of **socially, educationally and a weak society**.



# HOUSING DEMAND AND SUPPLY STRATEGY

## Housing Demand: Trend-based Estimation



## Housing Supply: Market-driven Resource-based Estimation



# ISSUES RELATED TO HERITAGE

Heavy traffic congestion, dense built fabric with restricted road widths.



HAZRAT ABBAS DARGAH



Poor maintenance of the surrounding areas leading to unhygienic conditions and makes the heritage off-putting

RUMI DARWAZA



DILKHUSHA KOTHI

The existing situation of the heritage building is deteriorating with time and the green spaces nearby lacks maintenance.



# HERITAGE AND TOURISM

Lucknow is known for its “Nawabi Shaan” which comprises of monuments and heritage sites.

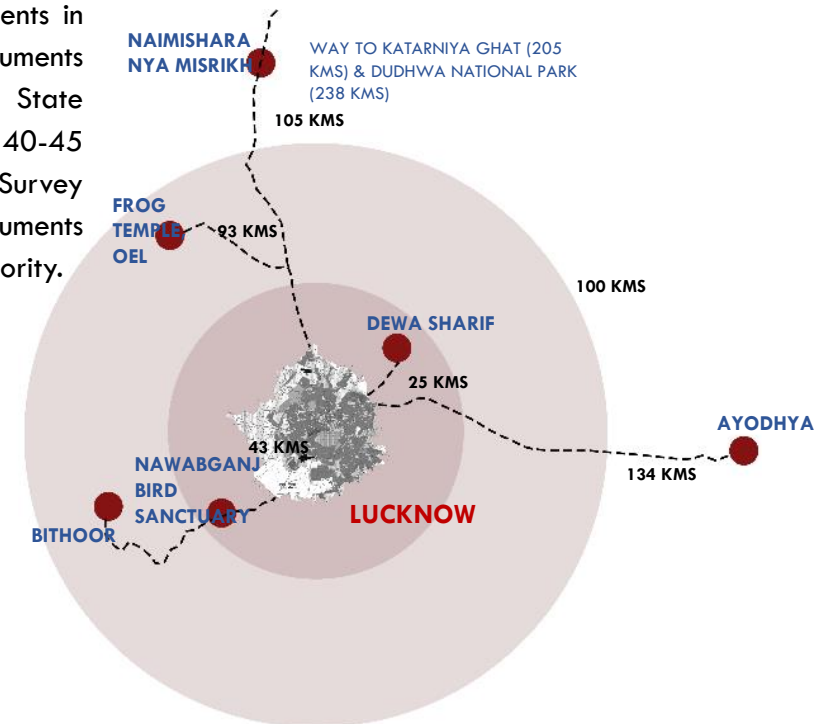
There are in total 60 key monuments in Lucknow, out of which 1-5 monuments are protected by UP State Archaeological Department, 40-45 monuments under Archaeological Survey of India and rest are other monuments not protected by either of the authority.

Area along both the side of Gomti River has been identified as Heritage Zone in Lucknow Master Plan 2031. The zone is divided into three parts namely: -

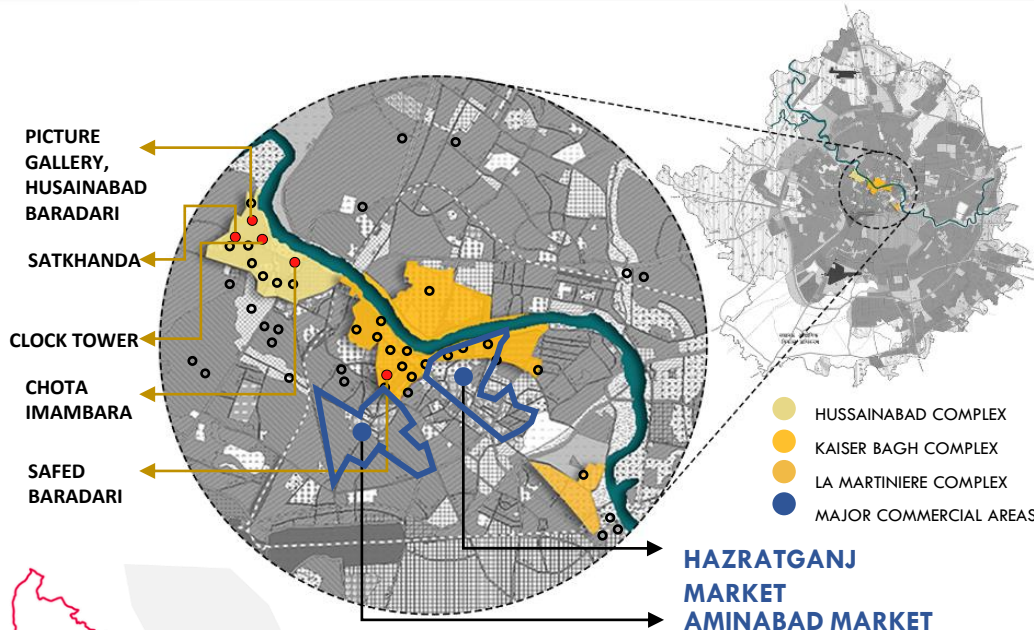
- Hussainabad Complex,
- Kaiser Bagh Complex
- La Martiniere Complex

## TOURIST FOOTFALL

Si. No.	Year	Indian Visitors	Foreign visitors	Total revenue collected
1	2015-16	368853	4917	2335965
2	2016-17	296994	3899	5234710
3	2017-18	128002	4556	2831230
4	2018-19	149149	4226	4420575
5	2019-20	116350	3367	3885175
6	2020-21	37070	14	930950



Excursions and places to visit - tourism near/around Lucknow



Lucknow is one of the cities which is been recognized in UP as a part of Heritage Arc. Lucknow has several places to visit which depicts the Heritage and cultural behavior of Lucknow.

Destinations covered in the Heritage Arc are:

- Varanasi

## INFERENCES:

According to the reconnaissance survey, following observation were made-

1. The heritage area of Hussainabad complex lacks proper management and the nearby green spaces require maintenance.
2. The major commercial area of Aminabad market can be redeveloped/ street planning can be done since this area is congested and full of encroachment.
3. The major crossroad like Chowk Chauraha, Parivartan Chowk, Daliganj bridge crossing face gridlocks

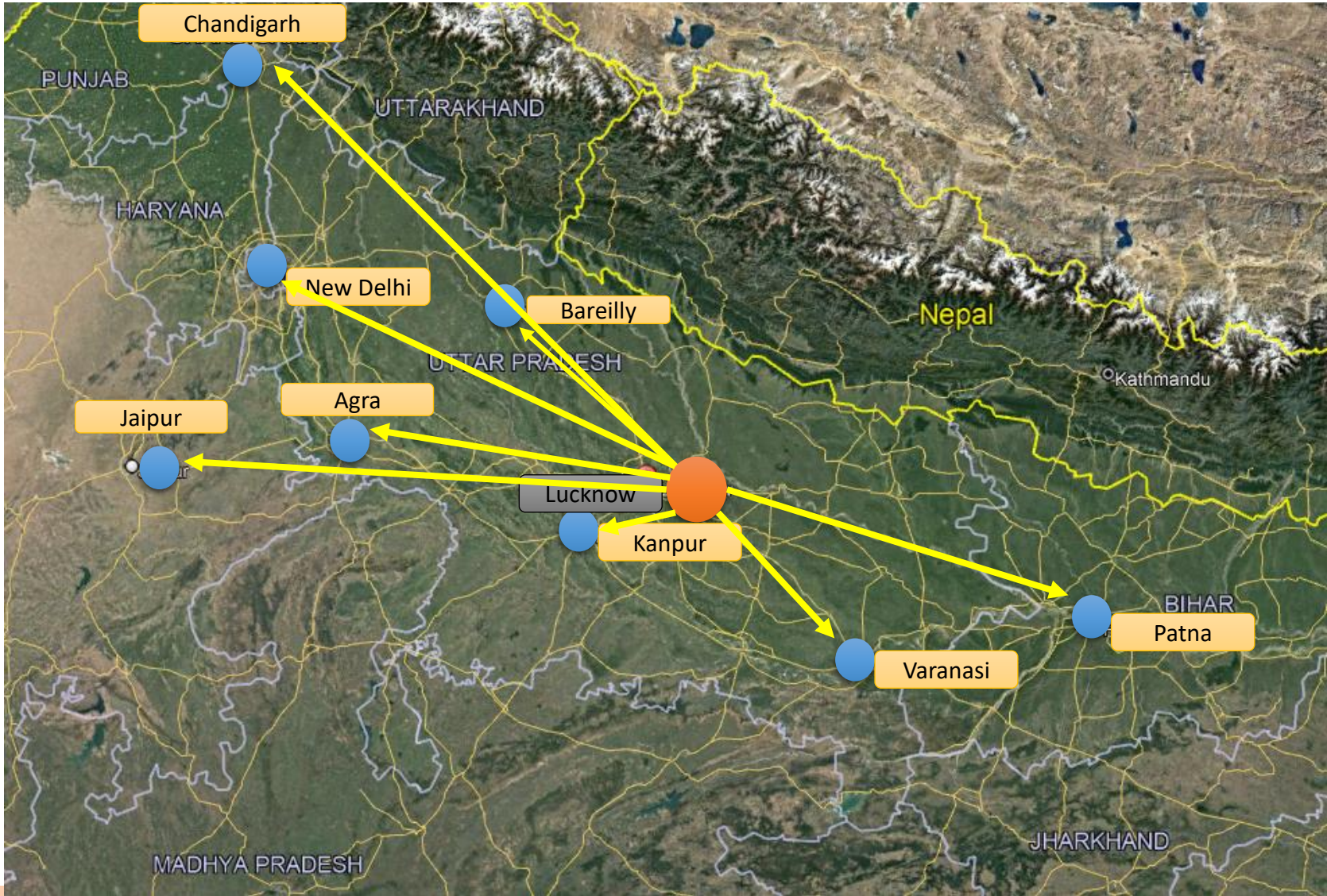


# ECONOMIC PROFILING

As Lucknow is well-linked with other cities like Jaipur, Delhi, Varanasi, etc. which are famous for potential goods for export, this will provide growth potential for the city.

S. No.	POTENTIAL FOR NEW MSMEs
1	Potentials areas for Service Sectors
2	Information Technology
3	Electricals & Electronics Services
4	Engineering Services
5	Civil Construction Services Multiplex & Malls
6	Hotel, Restaurants & allied Services.

Lucknow is famous for its Chickankari work, Zardozi work, Gota works and for terracotta and decorative items.



Nearby cities well-linked with Lucknow providing potential for growth of trade and commerce





# TRADE & COMMERCE

## Daily activities of the city's economic population

**Retail (CBDs)**  
 Hazratgunj  
 Aminabad  
 Chowk  
**Employment to around 3 to 4 lakh people.**  
 Other markets are Nishatganj, Gol Market, Indira Nagar, Gomti Nagar, Kapoorthala etc.

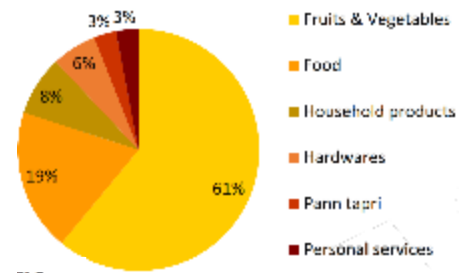
**Wholesale (grains & vegetables)**  
 Dubagga  
 Yahiyaganj  
 Fatehganj  
 Dollyganj  
 Pandey Ganj  
 Uday Ganj  
 Sadat Ganj

**Informal (unorganized)**  
 Weekly markets  
 Street vendors/  
 Hawkers  
**5% of economic population; 2.5% higher than standards**  
**No specific place marked** so bound to encroach on roads, footpaths etc.

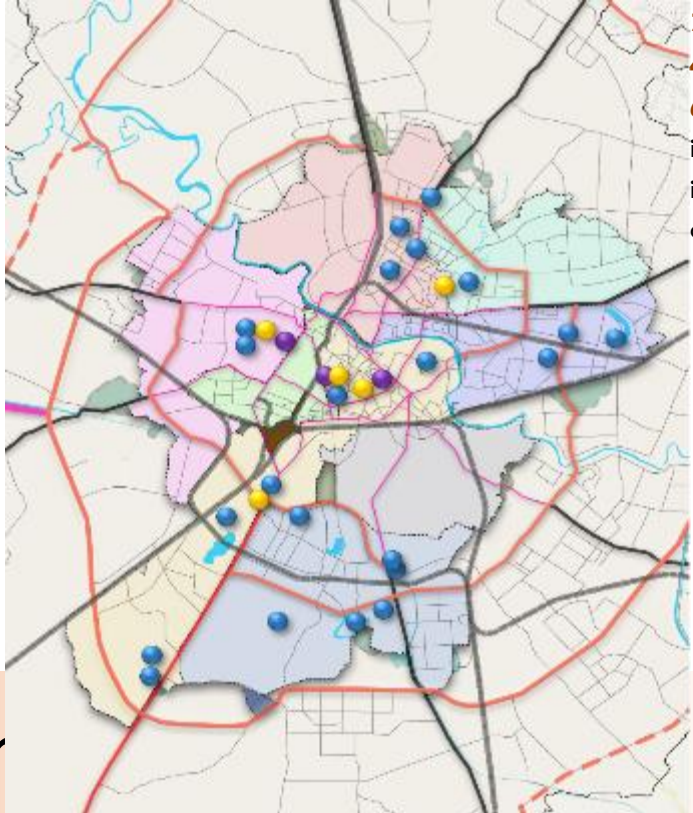
**Formal (organized)**  
 Bhootnath market  
 Patrakarpuram  
 Chowraha  
 Big showrooms & restaurants, **regular and plotted**  
 Mixed Use, owned/rented properties  
**Economy is Rs. 75 lakhs per day**

LAND USE	AREA	%
COMMERCIAL	623.14 ha	2.55%

**commercial activities:**  
 corporate offices/ headquarters for manufacturing and service units, business process outsourcing centers, call centers, banking, insurance, retail trading, shopping malls, entertainment, cinema theatres, health services, educational institutions, hotels, and restaurants etc.



**50%** of vendors in age group 20-40  
**15%** are elderly (above 60)  
**17%** are women  
**75%** have salary below Rs. 10000  
**40%** earn daily Rs. 300 to Rs. 500  
**61%** of the informal sector deals in fresh fruits & vegetables indicating the agro based nature of the economy



Name	Location
Tuesday	Alambagh
Wednesday	Nishatgunj
Thursday	Aminabad, Nazirabad
Saturday	Sadar
Sunday	Nakhas Chowk

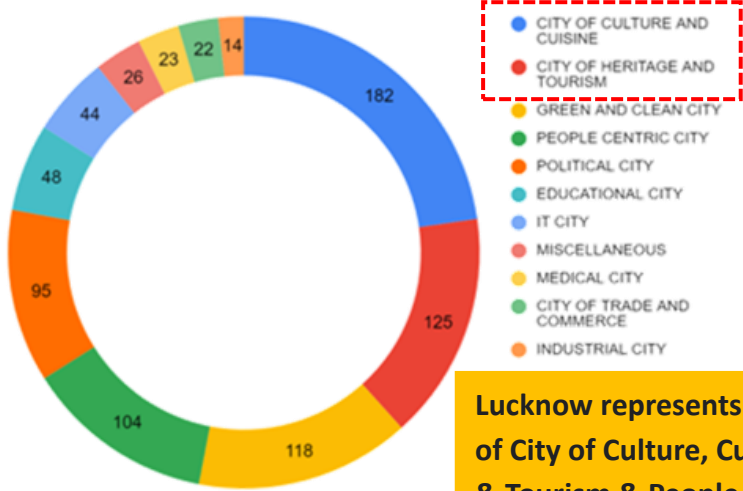
- Chikan shops
- Major chikan kari markets
- Weekly markets

Development Plan and Issues and Ch...



# PUBLIC SURVEY ANALYSIS

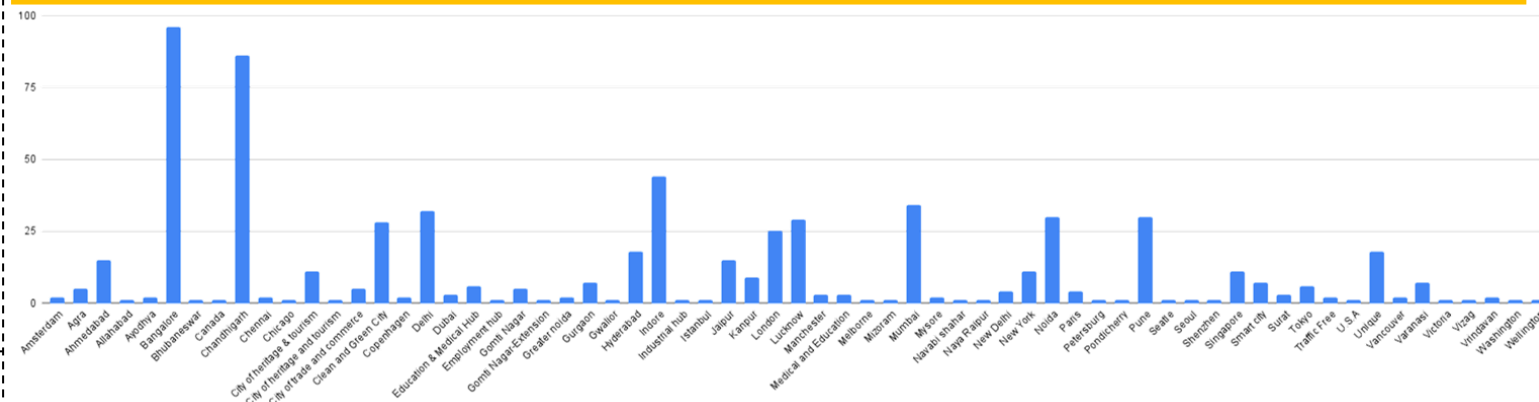
**QUESTION 1: What picture comes to your mind when your city name is mentioned/ strong "IMAGE OF YOUR CITY"?**



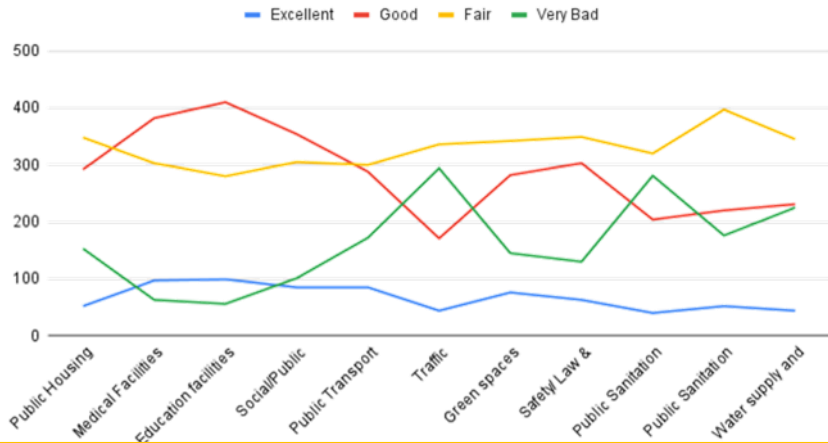
Lucknow represents a Strong Image of City of Culture, Cuisine, Heritage & Tourism & People Centric

**QUESTION 2: Which city would you want Lucknow to be like?**

- Planned Metropolitan cities like Bangalore & Chandigarh among others. Many want Lucknow to retain its character with adapting developments like Indore, Delhi, Pune, Hyderabad and Mumbai. London, New York are also mentioned in majority.
- The culture and heritage came out to be the most liked feature of the city and the residents do not want to change this in the future vision of the city.

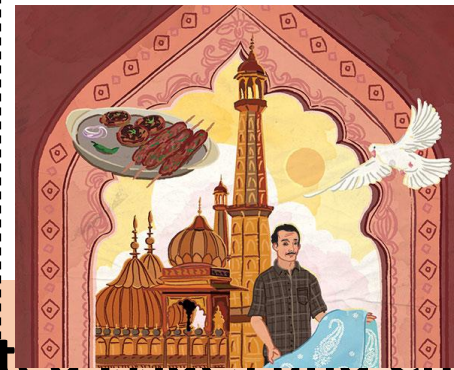


**QUESTION 5: How would you rate the following in the city?**



The city lacks good transport, cleanliness, law and order and good public housing but has been on the good side for medical facilities, education facilities and social and public spaces.

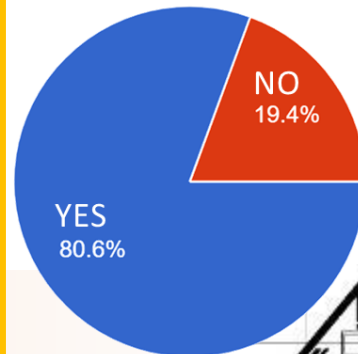
**QUESTION 4: Which aspect of Lucknow do you like most and would not want to change in the future vision for the city?**



The culture and heritage came out to be the most liked feature of the city and the residents do not want to change this in the future vision of the city.

**QUESTION 3: Are new buildings and developments in Lucknow improving the character, attraction and comfort of the city?**

The residents of the city understand the fact that in order to keep pace with the ongoing modernization, the city needs to evolve and are ready to adapt to new interventions.



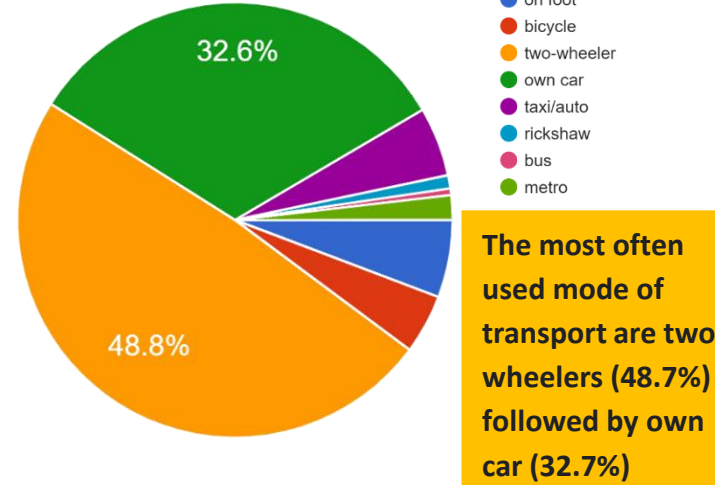
iated issues and challenges for Lucknow

# PUBLIC SURVEY ANALYSIS

**QUESTION 6: What do you think would be required to change all the VERY BAD options to GOOD/ EXCELLENT in the previous question?**

- Providing public housing that is better planned keeping connectivity in mind. The prices should suit the dwellers for which the housing is being planned.
- Providing more green spaces to curb pollution and to check the flow of polluted water in the river Gomti.
- The fare of Lucknow Metro is quite high; conditions of public buses are not good enough and private auto-rickshaws/E-rickshaws are the main reason for traffic-jams on main roads.
- City's 70% population have no sewage connection, no S.T.Ps for the mostly residing population, during rains the waterlogging is the main problem for most of the population of the city.

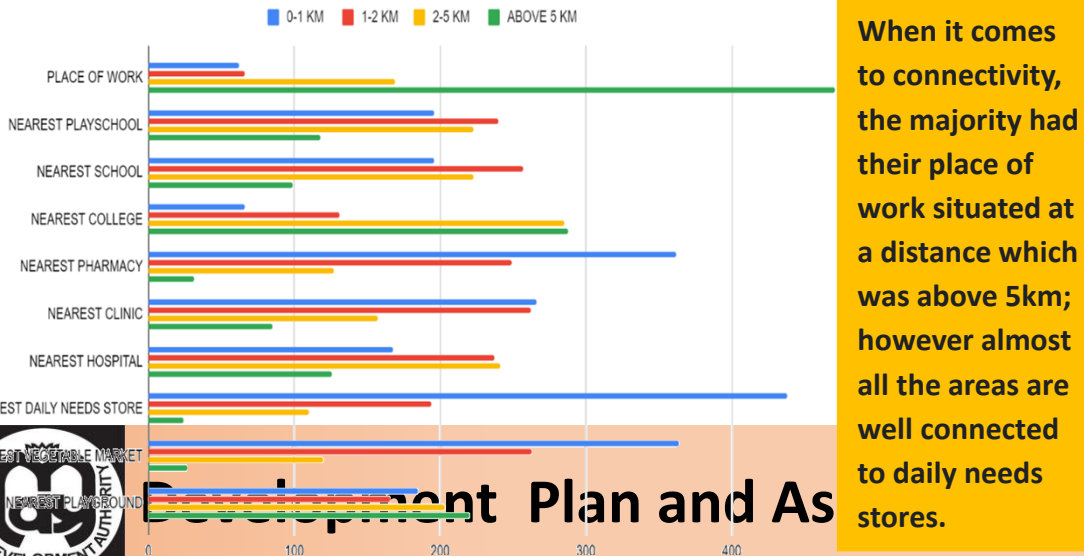
**QUESTION 8: What is your usual mode of commute?**



**QUESTION 9: Do you use Public Transport often? If not, why?**

- The majority answered with a 'No'. The reason being -
- Poor connectivity of the public transport to various parts of the city
  - Public transport takes more time and is often crowded.

**QUESTION 7: What is the distance between your Residence and below mentioned community facilities?**



**QUESTION 10: If you are using Private Vehicle, would you like to switch, if efficient Public Transport is easily accessible?**

**76%** of the people were ready to switch to public vehicles if efficient public transport is made easily accessible to them

**7.1%** still do not want to change their mode of transport

**16.8%** were still confused whether they will or will not change their mode of transport

**QUESTION 11: Which Intermediate public transport you would prefer to see more on Lucknow roads?**

**41.7%** wished for non-polluting autos followed by cab and taxis (25.1%)

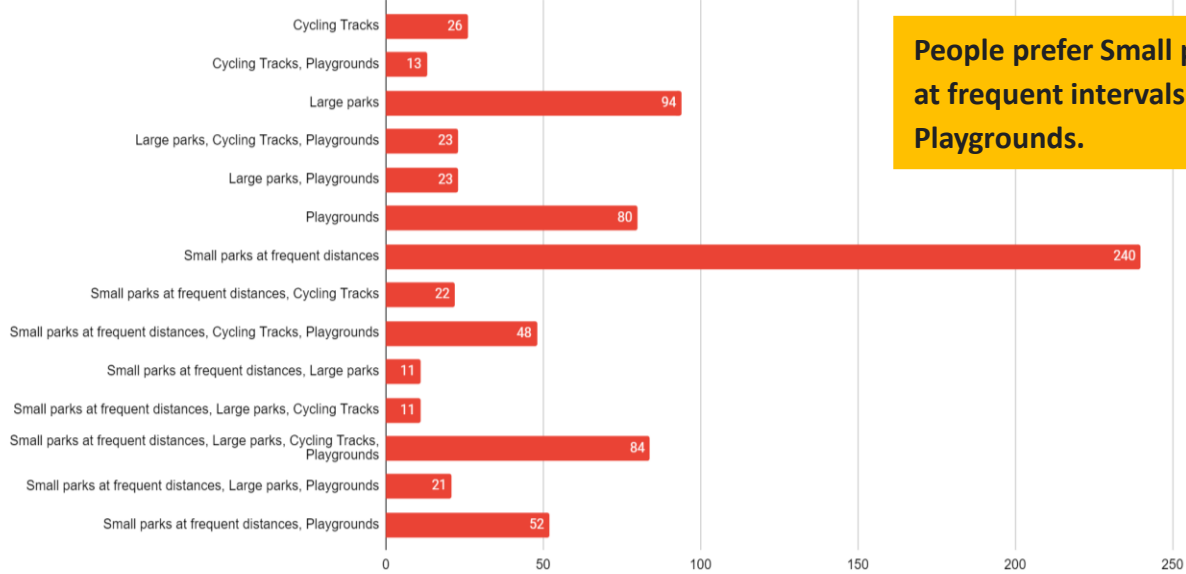
**14.6%** wants to see more E-rickshaws

**5.8%** wants to have more metro routes



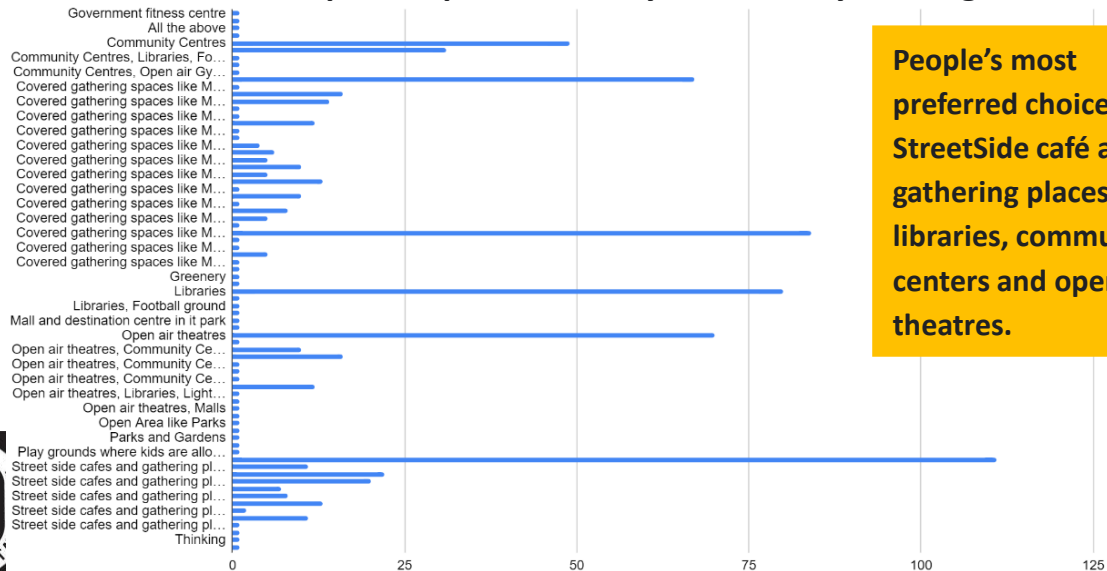
# PUBLIC SURVEY ANALYSIS

## QUESTION 12: What kind of Green Spaces would you prefer in your neighbourhood?



People prefer Small parks at frequent intervals and Playgrounds.

## QUESTION 13: What kind of public spaces would you want in your neighbourhood?

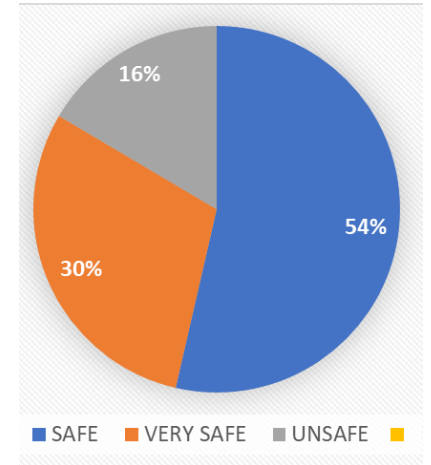


People's most preferred choices are StreetSide café and gathering places, libraries, community centers and open-air theatres.

## QUESTION 14: Do you feel safe on the city streets, especially if you are a woman?

The following were the reasons mentioned for 'not' feeling safe on the streets –

- Criminals and chain snatching
- Most of the cameras at public areas are still not functioning.
- Lack of security and poverty.



The following measures are suggested for increased safety and security on the streets –

- Strict rules are required, more women police officers
- Public awareness and prompt action by local administration may help
- Regular surveillance and cctv cameras in every 50-100 meters like Delhi
- In order to feel more safe, places need to identify which should be having the proper street lighting where it does not feel safe for the women.
- Security system to be strong with implementation of AI



# VISION LUCKNOW

G 1

G 2

G 3

## 6 AREAS OF INTERVENTION (MAJOR POLICY AREAS)

**Prioritizing Environmental Sustainability**

1



**Improving Housing & Social Infrastructure**

4



**Facilitating Economic Development**

2



**Moving towards Low Carbon Mobility**

5



**Enhancing Heritage, Culture & Public life**

3



**Developing Resilient Physical Infrastructure**

6



## SPATIAL STRATEGIES

**Urban Regeneration**



**New Development Areas**



# THE 4 P's: STUDY FRAMEWORK

## INCEPTION & EXISTING SITUATION ANALYSIS

Time to PONDER- Strengths, Weaknesses, Opportunities, Threats!!

**IT'S NOW A BIGGER & SPACIOUS CITY**  
 The expansion of municipal limits of Lucknow means that a larger population of the district will now avail urban amenities provided by civic agencies like LMC and LDA

402.65 sq km  
 Total area under LMC since 2009

631 sq km  
 Total area after addition of 88 villages

Total increase in urban area | 56%  
 Growth rate of city's population in last 10 years | 25%

**ANGER ZONES**  
 In 3 cities where women were unsafe in public transport

City population in 2019 | 35 lakh  
 City population in 2009 | 28 lakh

**CRIME RATE**  
 Lucknow 5.1  
 Ghaziabad 1.1  
 Nagpur/Pune 0.8  
 (Crime rate is incidence per lakh population)

**OTHER PROPOSALS APPROVED**  
 - Redevelopment map of Gomtinagar railway station  
 - Construction of 3000 flats on 10-acre land in Alambagh  
 - Detailed project report of Hi-tech township on Rae Barail Road  
 - NDC to 1.2 km subway at Ram Manohar Lohia Hospital  
 - Map of IT City at Chak Ganjarla

**IT City Lucknow Highlights**

**the two faces of the coin**

patterns

1

potentials

2

## EXISTING SITUATION ANALYSIS & DEMAND ASSESSMENT

- PEOPLE Oriented City
- QUALITY LIFE, to raise Livability Index.
- HERITAGE CITY with 'TEHZEEB'
- CULTURAL LEGACY (Heritage + Culture + Food)

**INTANGIBLE**

- 01. Soul
- 02. River Passing Through
- 03. Language
- 04. Literature
- 04. Cultural Legacy

**TANGIBLE**

- 01. Administrative Capital
- 02. Medical City
- 03. Educational Hub
- 04. International Airport
- 05. National Highways & Expressways
- 06. Commerce & Industry

- ADMINISTRATIVE State Capital
- Well Connected with other cities & Countries via Rail, Road and Air.
- KG MU, SGPI famous Medical Institutions
- IET, IIM, Lucknow University, educational institutions
- Chikankari, Mango belt, famous world wide

4

3

projects

projections

**MISSION: LUCKNOW "R.I.S.E."**

Enabling Policies

Potential strategies

**VISION LUCKNOW**

**BASE WORK**

ENVIRONMENT

ECONOMY

CULTURE

SHELTER

MOBILITY

SOCIAL + PHYSICAL INFRASTRUCTURE

PUBLIC SPACE

BASELINE STUDIES

EXPERT INPUTS & CASE STUDIES

CITIZEN ENGAGEMENT

STAKEHOLDER CONSULTATIONS

**VISION LUCKNOW**

MISSION: LUCKNOW "R.I.S.E."

ENABLING POLICIES

POTENTIAL STRATEGIES

**SPATIAL STRATEGIES**

1 Provision of Diverse Housing Infrastructure

2 Integrated Sustainable Mobility & Connectivity

3 Facilitating Economic Development

4 Developing People-Centric Social Infrastructure

5 Enhancing Heritage, Culture & Retaining "Soul" of City

6 Resilient & Sustainable Physical Infrastructure

Urban Regeneration

New Development Areas

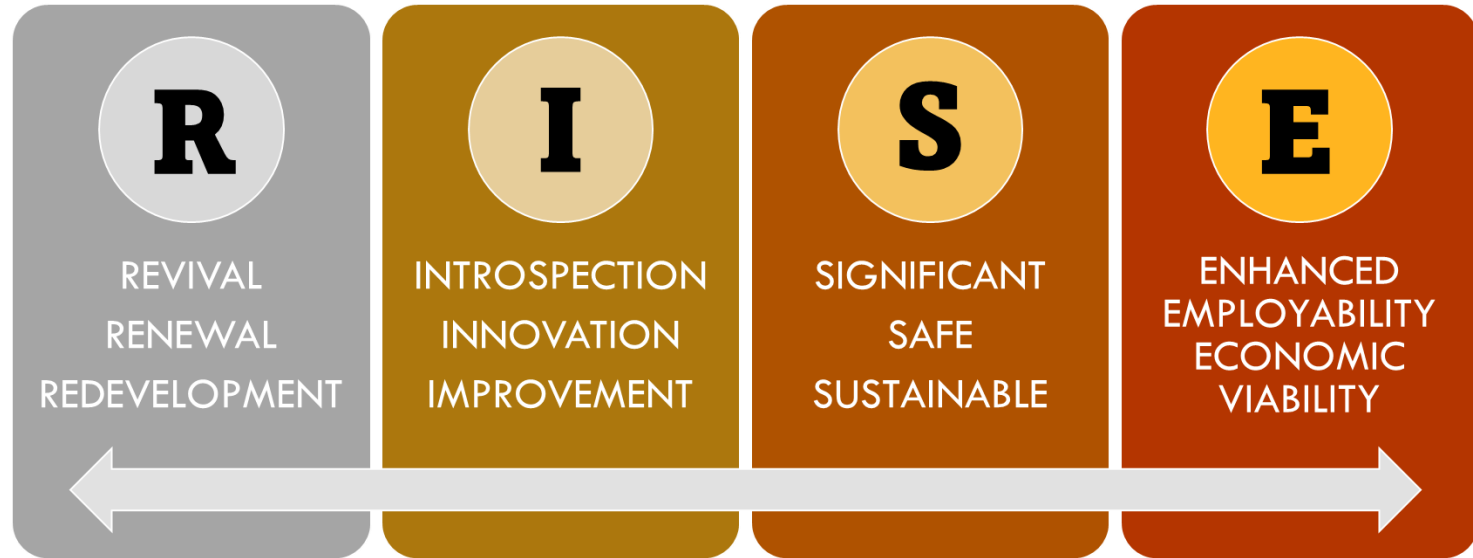
**6 MAJOR GOAL SPECIFIC AREAS OF INTERVENTIONS**

## Development Plan and Associated Issues and Challenges for Lucknow DEMAND ASSESSMENT & VISION PLANNING

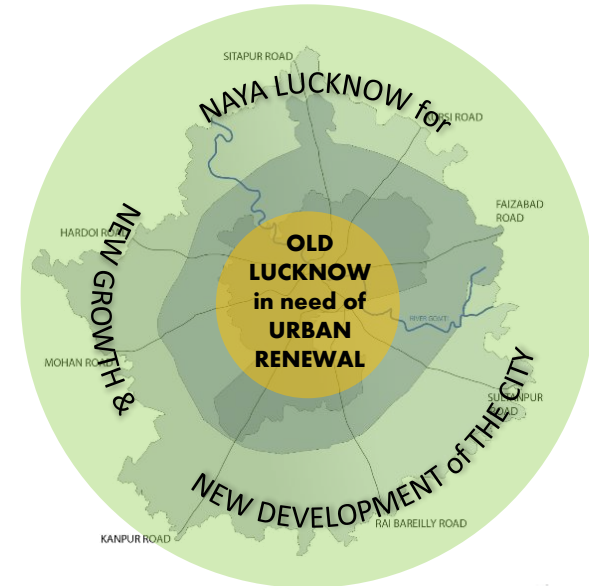
# LUCKNOW R.I.S.E. : PLANNING FRAMEWORK

## LUCKNOW R. I. S. E.

- R. - Revive, Renew & Re-develop  
*through*
- I. - Introspection, Innovation & Improvement  
*creating*
- S. - Significant, Safe and Sustainable City  
*based on*
- E. - Enhanced Employability and Economic Viability



Lucknow is foreseen as a State Capital Region.



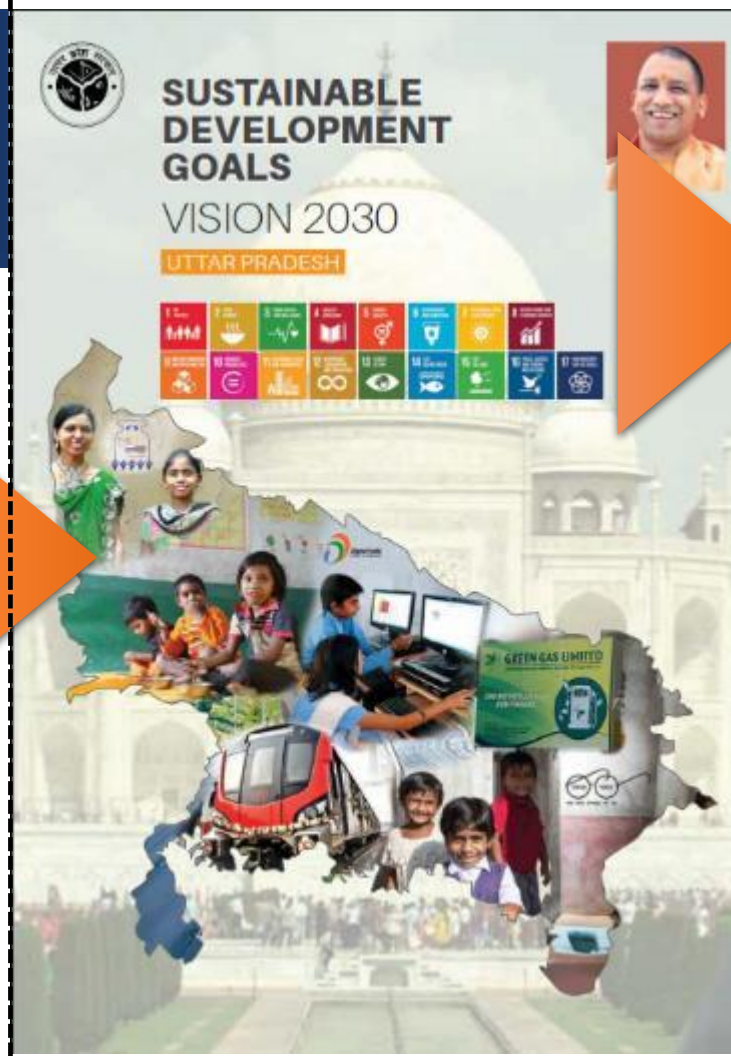
Development Plan and Associated Issues and Challenges for Lucknow



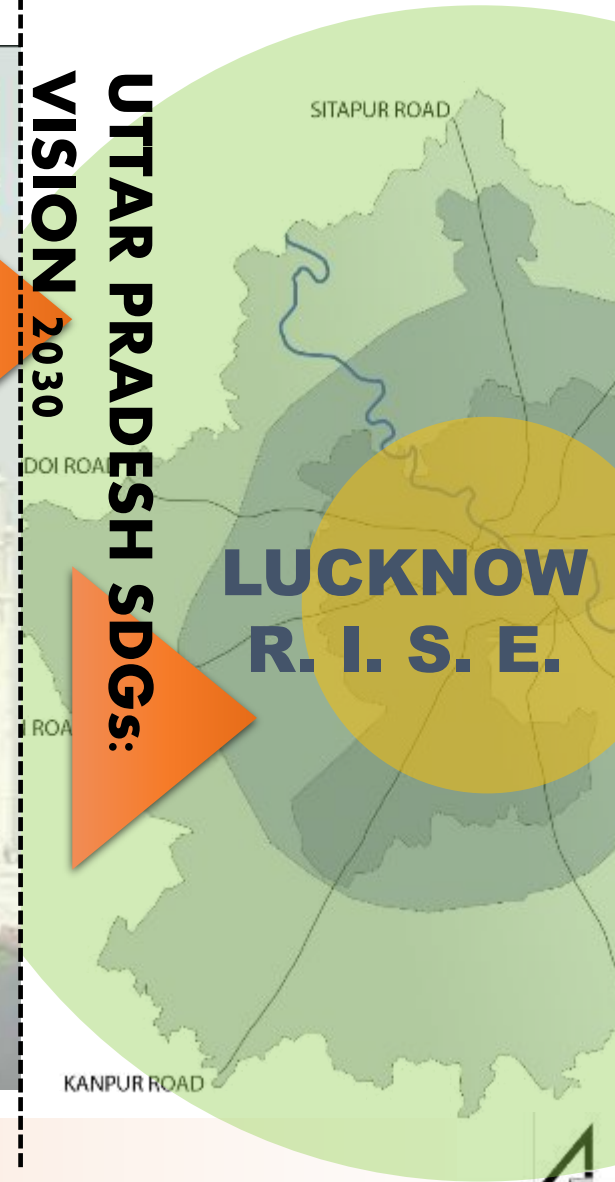
# The BASELINE



**UNITED NATIONS  
SUSTAINABLE  
DEVELOPMENT GOALS**



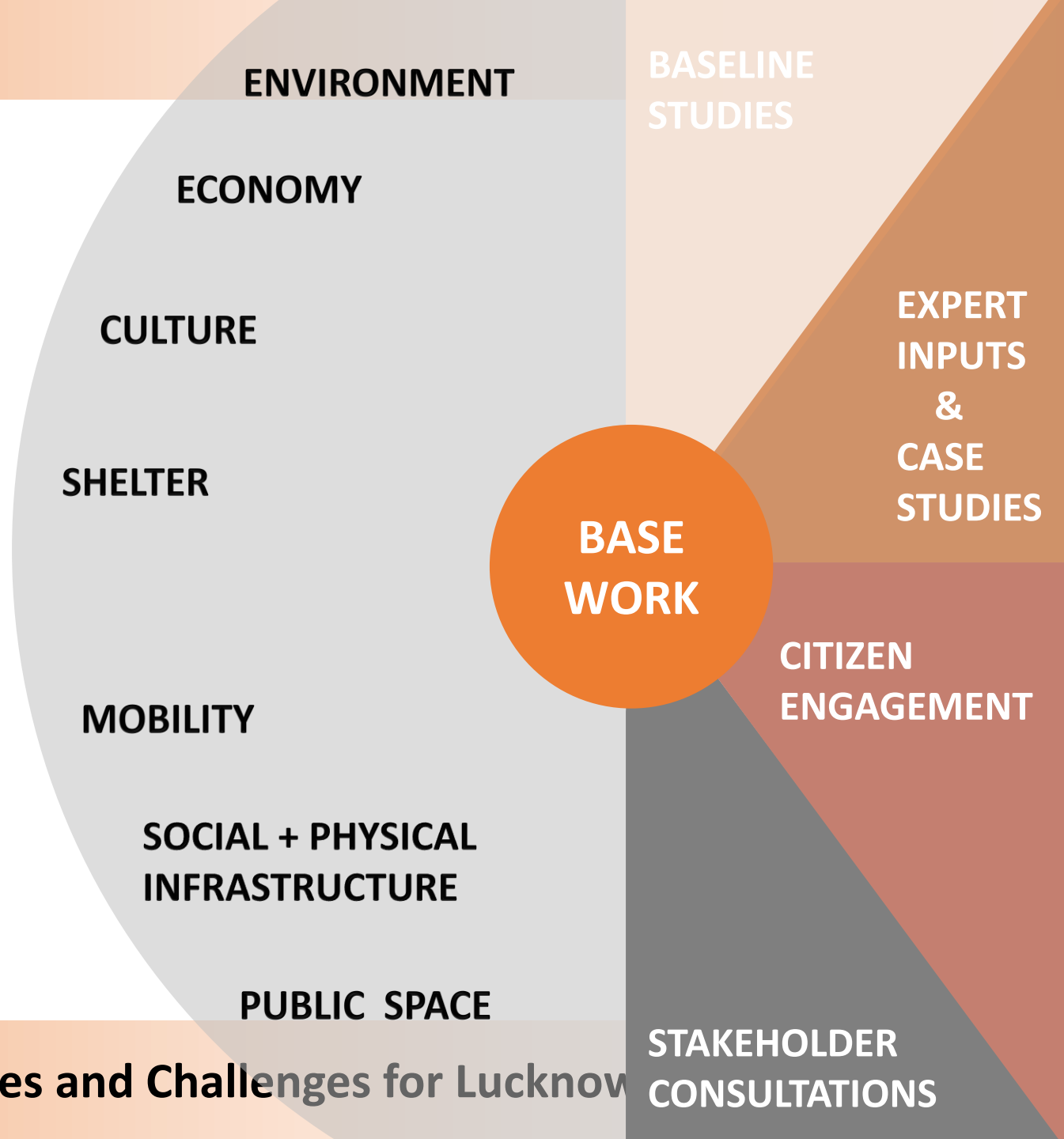
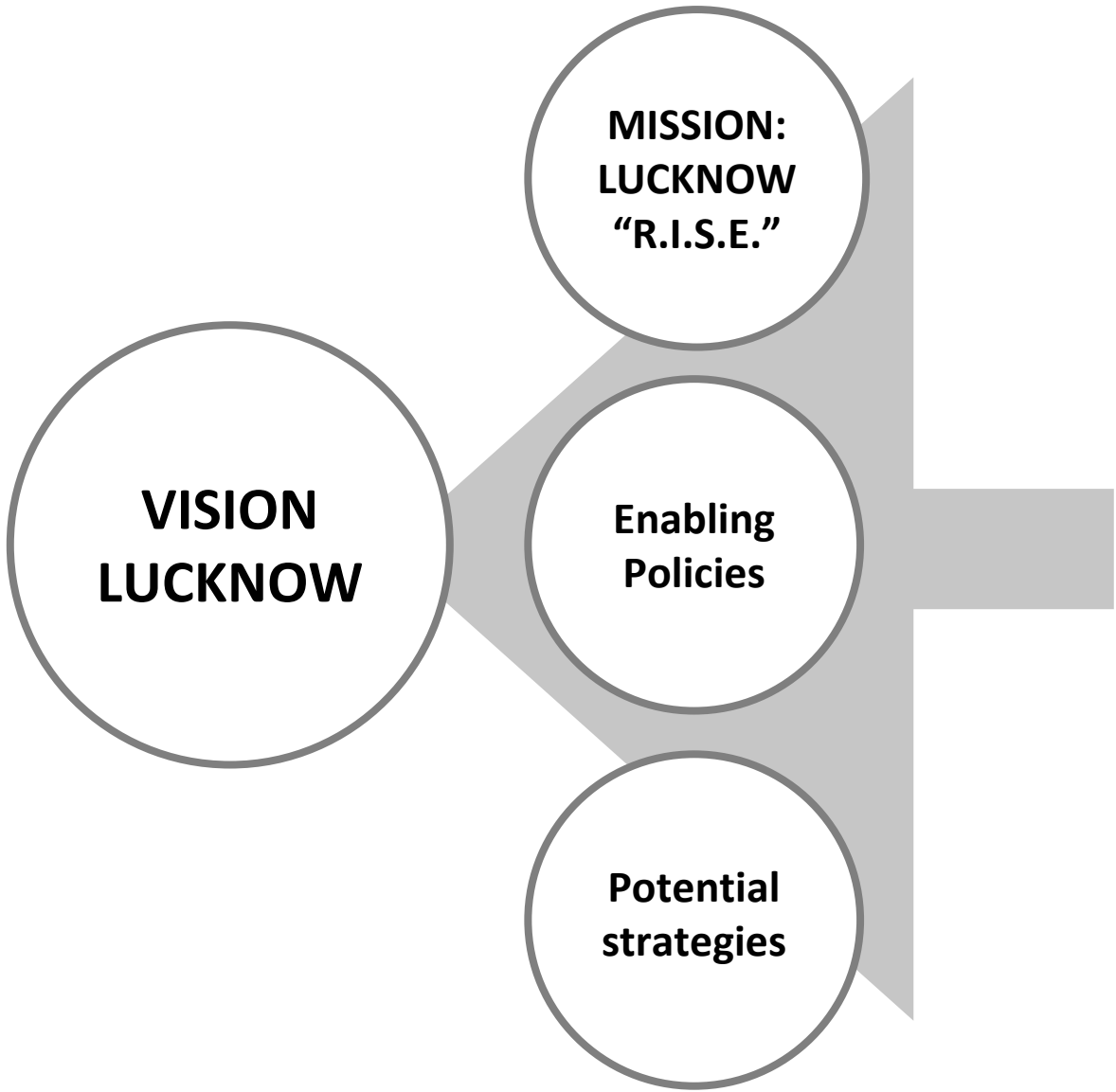
**UTTAR PRADESH SDGs:  
VISION 2030**



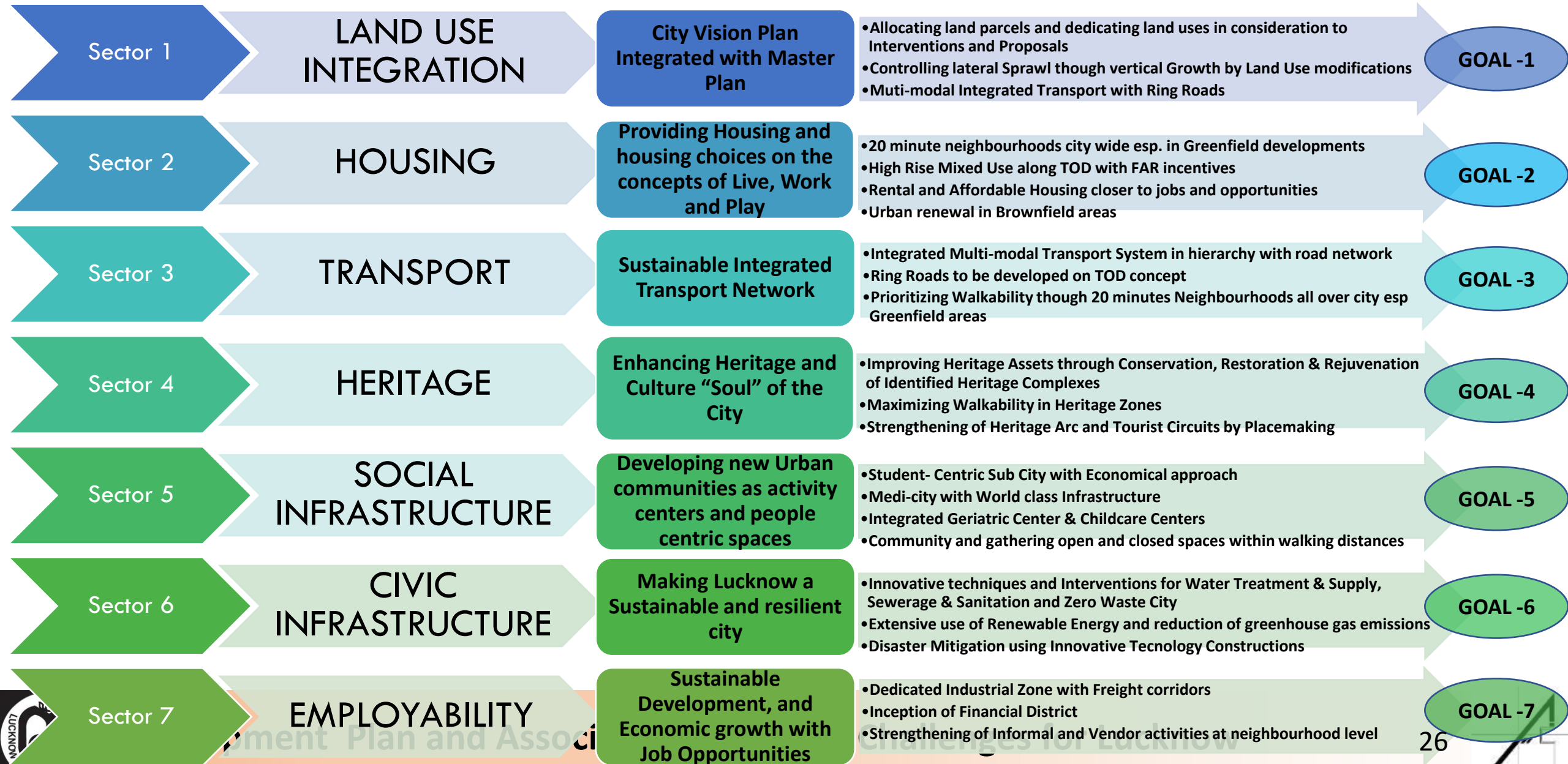
**Development Plan and Associated Issues and Challenges for Lucknow**







# SECTORAL GOALS & STRATEGIES



- Allocating land parcels and dedicating land uses in consideration to Interventions and Proposals
- Controlling lateral Sprawl though vertical Growth by Land Use modifications
- Muti-modal Integrated Transport with Ring Roads

- 20 minute neighbourhoods city wide esp. in Greenfield developments
- High Rise Mixed Use along TOD with FAR incentives
- Rental and Affordable Housing closer to jobs and opportunities
- Urban renewal in Brownfield areas

- Integrated Multi-modal Transport System in hierarchy with road network
- Ring Roads to be developed on TOD concept
- Prioritizing Walkability though 20 minutes Neighbourhoods all over city esp Greenfield areas

- Improving Heritage Assets through Conservation, Restoration & Rejuvenation of Identified Heritage Complexes
- Maximizing Walkability in Heritage Zones
- Strengthening of Heritage Arc and Tourist Circuits by Placemaking

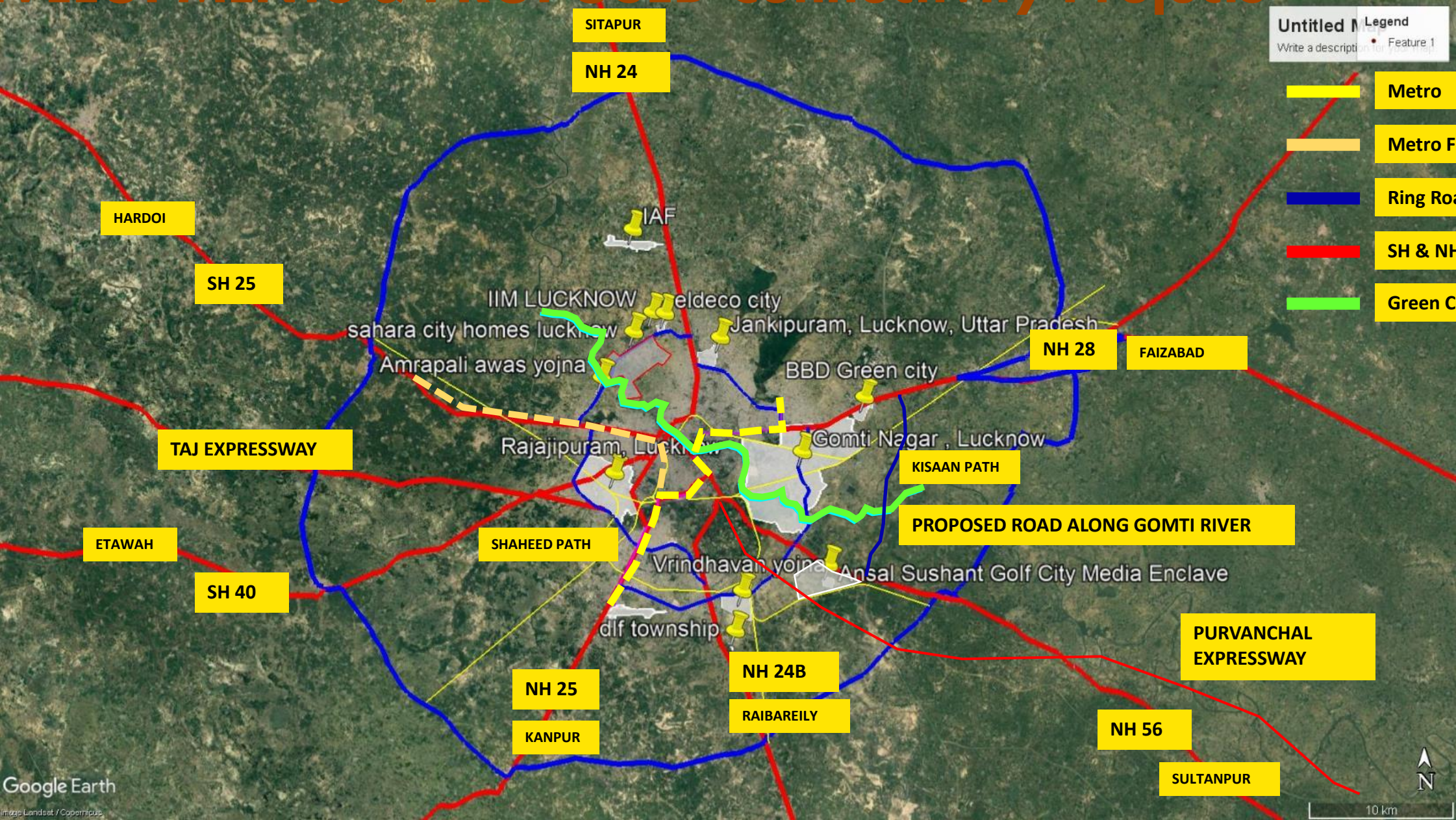
- Student- Centric Sub City with Economical approach
- Medi-city with World class Infrastructure
- Integrated Geriatric Center & Childcare Centers
- Community and gathering open and closed spaces within walking distances

- Innovative techniques and Interventions for Water Treatment & Supply, Sewerage & Sanitation and Zero Waste City
- Extensive use of Renewable Energy and reduction of greenhouse gas emissions
- Disaster Mitigation using Innovative Tecnology Constructions

- Dedicated Industrial Zone with Freight corridors
- Inception of Financial District
- Strengthening of Informal and Vendor activities at neighbourhood level



# DEVELOPMENTS & PROPOSED Connectivity Projects



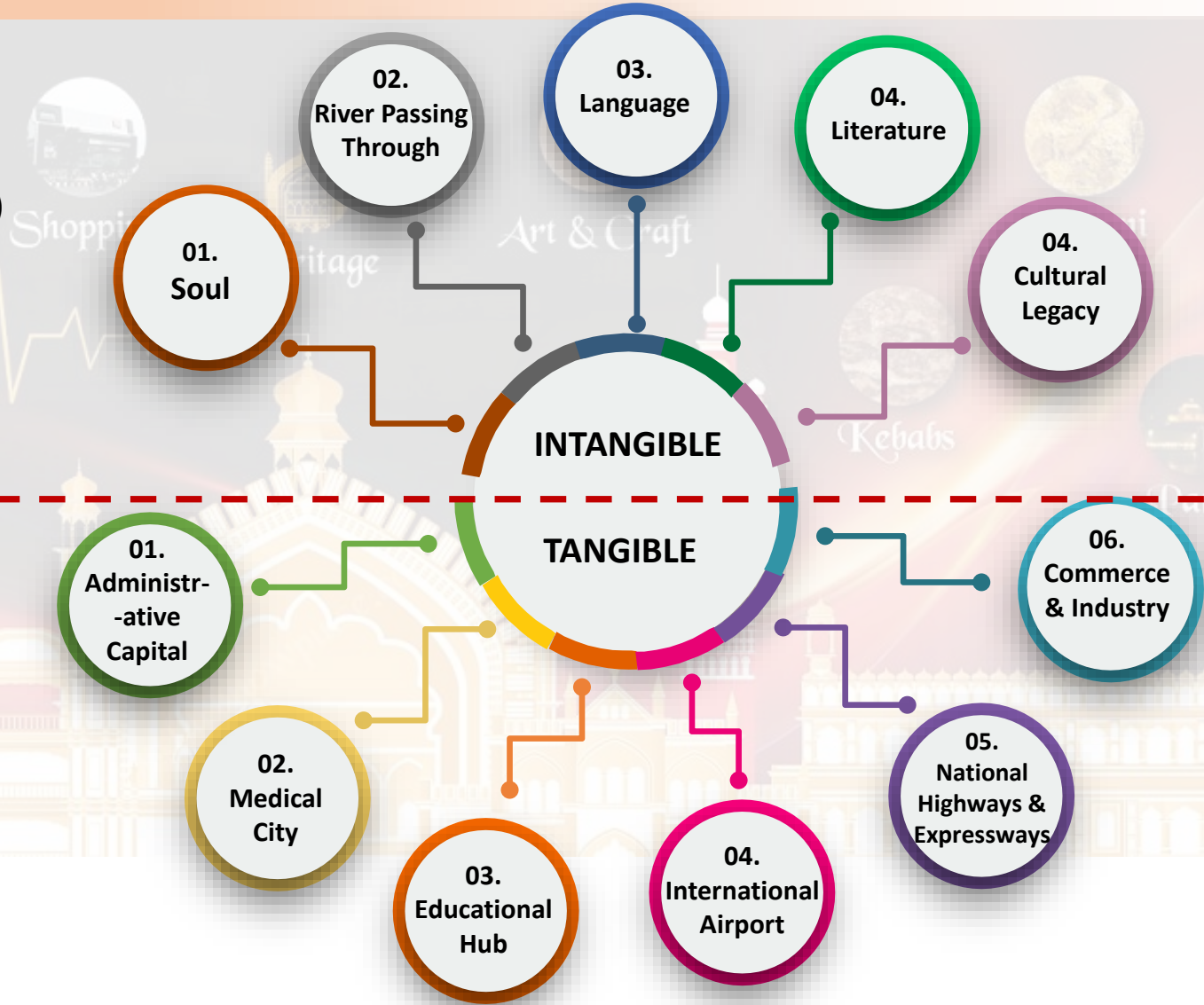
Google Earth  
Image Landsat / Copernicus

## Development Plan and Associated Issues and Challenges for Lucknow



# POTENTIALS

- **PEOPLE Oriented** City
- **QUALITY LIFE**, to raise Livability Index.
- **HERITAGE CITY** with 'TEHZEEB'
- **CULTURAL LEGACY** (Heritage + Culture + Food)



- **ADMINISTRATIVE State Capital**
- **Well Connected** with other cities & Countries via Rail, Road and Air.
- **KGMU, SGPGI** famous **Medical Institutions**
- **IET, IIM, Lucknow University,** educational institutions
- **Chikankari, Mango belt,** famous world wide

# POTENTIALS AND OPPORTUNITIES

➤ High-Tech City/ Medi-city/Educational hub

- better healthcare and educational infrastructure in terms of City sectors as Medical, Educational And IT Hubs

➤ retention of water bodies & renovation of existing greens

- rejuvenation and Riverfront development
- Bio-Diversity park, Recreation / renovation of open space,

➤ Water Supply, Rainwater harvesting & City Drainage Plan

- Augmentation Water supply network, Roof water harvesting at community level, Singapore's NEWater Strategy, Water sensitive urban design, Integrated urban water management

➤ Renewable Energy Development

- Solar Parks, Floating solar parks
- Solar rooftops installations
- Biomass Energy, Geothermal Energy

➤ Sewerage & Sanitation, Reuse of treated wastewater

- STPs, Household level pre-sewage treatment, 'Zero waste' / 'Zero Land-fill', Decentralized Wastewater Treatment, Faecal Sludge Management, Household level pre-sewage treatment

# POTENTIALS AND OPPORTUNITIES

➤ Improving Transport linkages within the city and for the city, road improvements/ Development including smart roads

- Freeways , New linkages , bye pass road , road widening , junction improvement , NMT ,

➤ Disaster risk reduction

- Flood Management plan

➤ Solid Waste Management

- Door to door collection
- waste segregation
- waste to energy
- Plastic to fuel

**Development Plan and Associated Issues and Challenges for Lucknow**



# POTENTIALS AND OPPORTUNITIES

## ➤ Housing

### Housing policies

- ✓ National Urban Rental Housing Policy (NURHP), 2015
- ✓ Integrated Township policy, 2014

### New interventions for housing

- ✓ Stacked student housing
- ✓ Green Township
- ✓ 3-D printed concrete houses
- ✓ Sustainable housing development- the ecovillage will make use of recycled glass, concrete, and wood
- ✓ Modular Building Systems
- ✓ Prefabricated Homeless Housing Plans

## ➤ Heritage And Tourism

### • The Heritage Arc

### • Policies

- ✓ Sustainable Tourism/ Eco Tourism.
- ✓ UP pro poor tourism development project
- ✓ UP tourism policy
- ✓ The Homestay scheme
- ✓ Including more tourist experiences along the heritage walk route

## ➤ Urban Environment

- Net Zero Energy
- Solar Parks/ Energy
- Street Planning

### • Strategies

- Environment Management Plan
- Eco- Sensitive Zones
- UJALA scheme
- Deen Dayal Upadhyaya Gram Jyoti Yojana

# VISION LUCKNOW 2051 MASTER PLAN

## REGIONAL & GLOBAL CONNECTIONS

Improving Inter-city and Regional Connectivity

## ADMINISTRATIVE CENTRAL COMPLEX

Strengthening Administrative Identity of the Capital City

## SOCIAL AND COMMERCIAL INFRASTRUCTURE

Reforming the city structure by strengthening and creating growth centers

## INDUSTRIAL & COMMERCIAL ACTIVITY CENTERS

Planning for dedicated Industrial Zone and Logistics Sub-City

## UTILITIES & ENERGY

Innovative Civic Infrastructure Technologies and Productive use of Renewable Energy

## HERITAGE & TOURISM

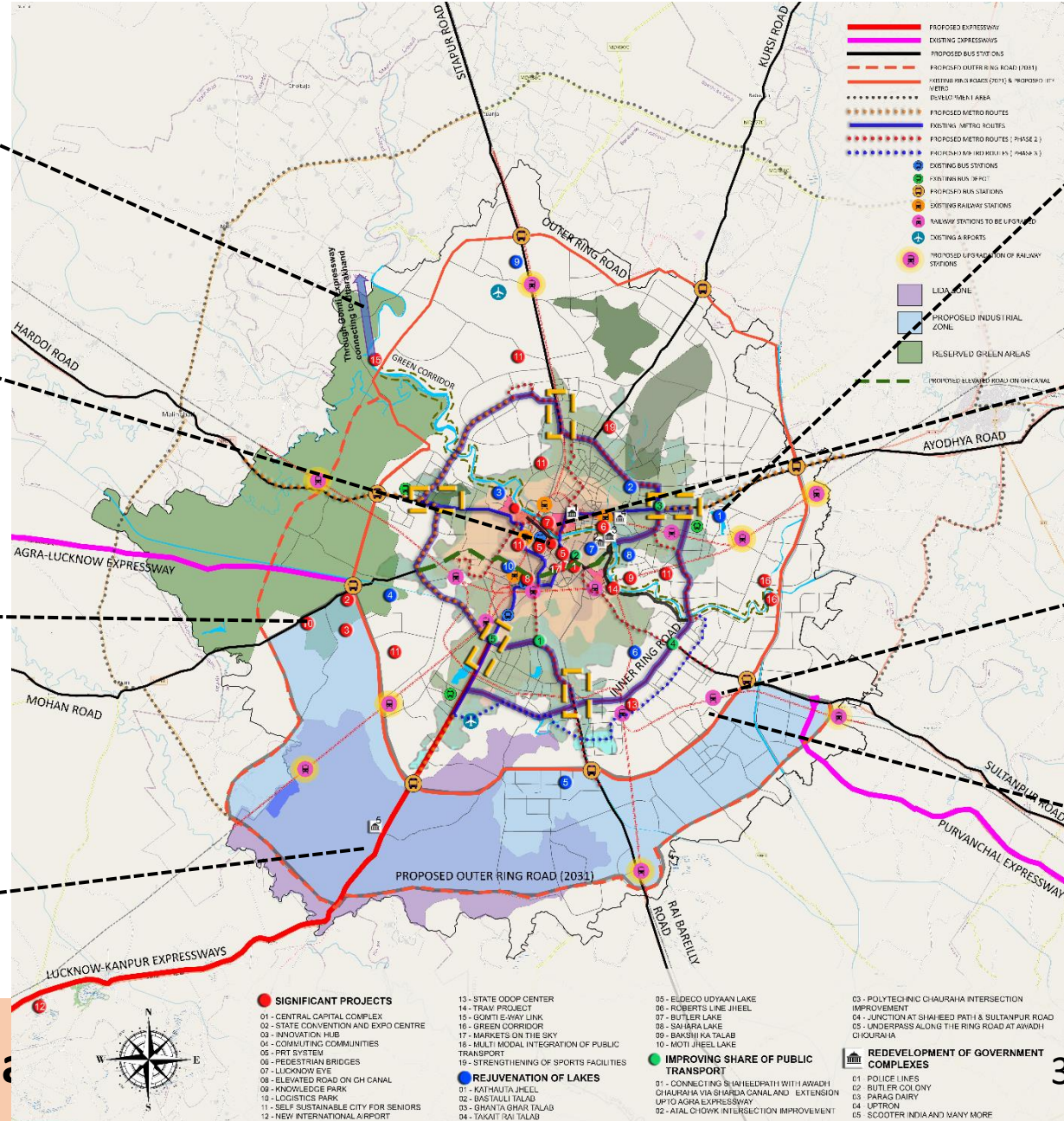
Strengthening "Heritage and Cultural Identity" of the City

## CITY MOBILITY

Improving Intra-city access to jobs and closer to residential areas

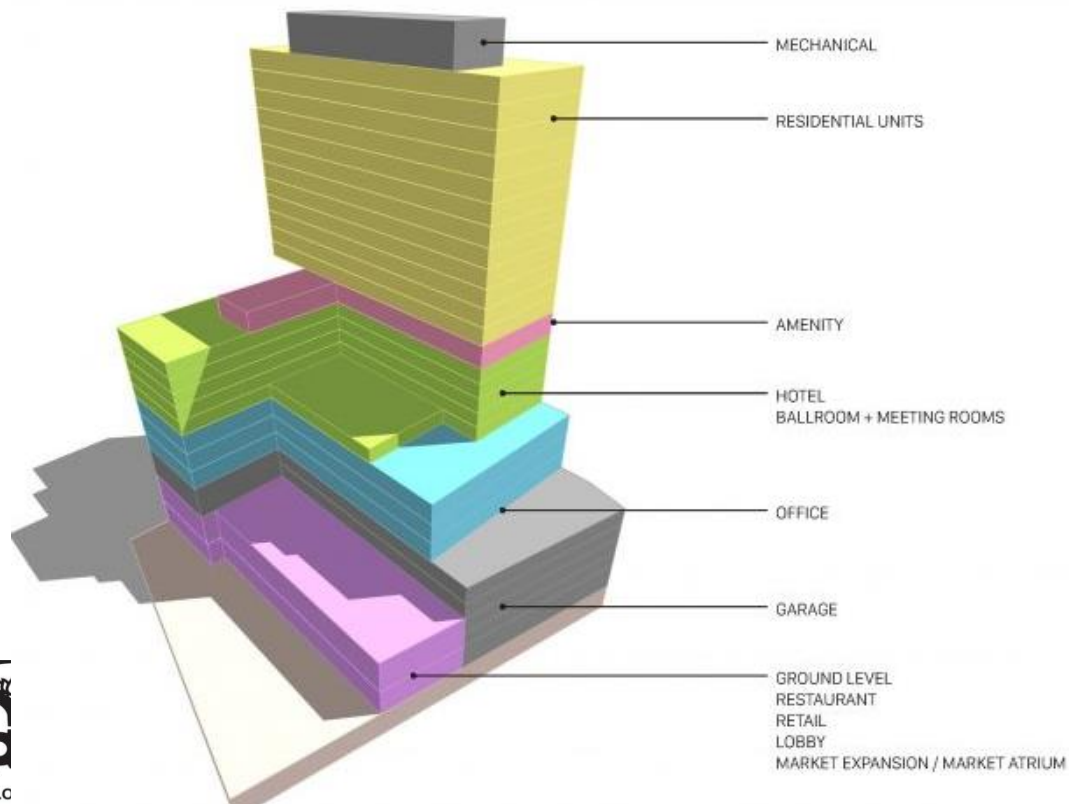
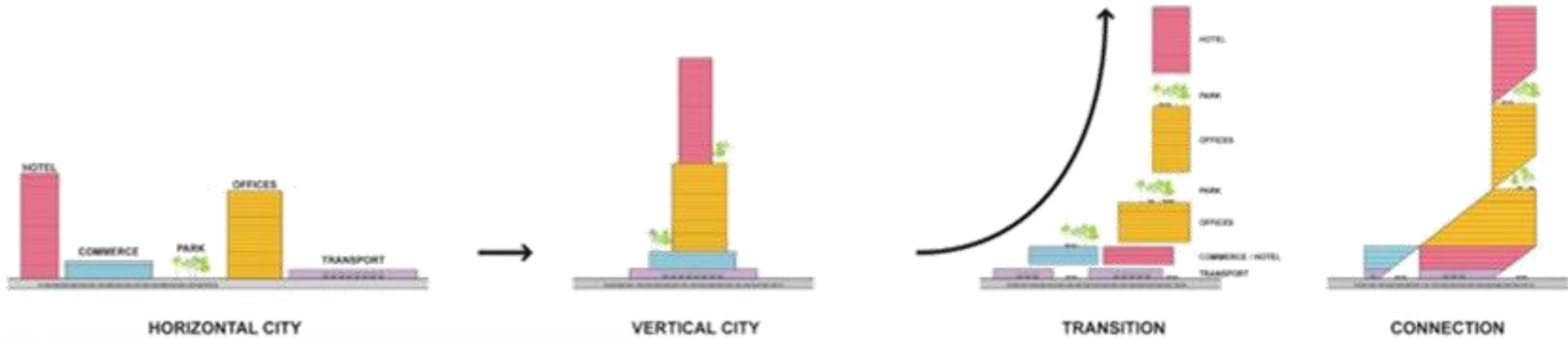
## HOUSING

Diverse Residential Supply





# PROPOSALS : INTERVENTIONS

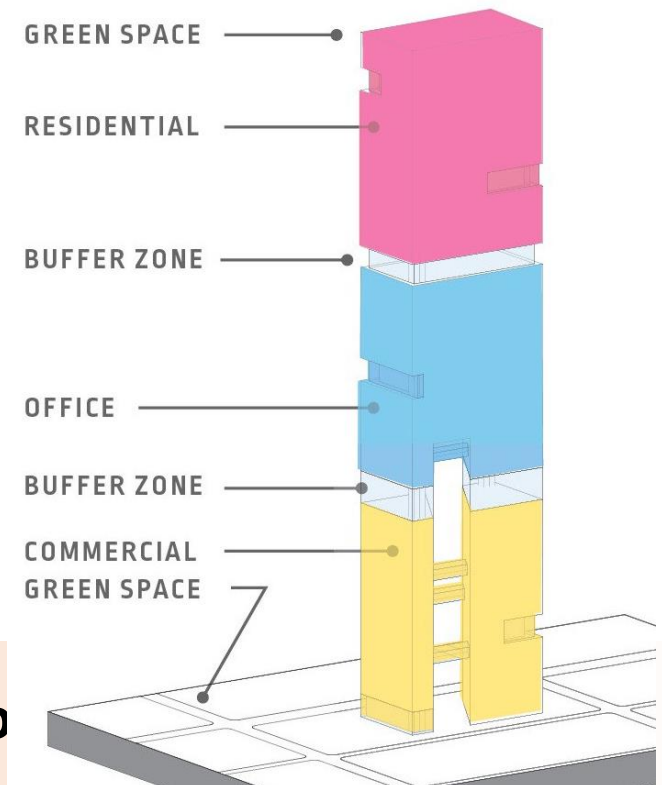


### Economic Benefits of Mixed-Use Development

- Revitalize Downtown
- Increase Private Investment
- Lead to Higher Property Values
- Promote Tourism
- Support Good Business Climate

TRANSITION

CONNECTION



es fo

# ENHANCEMENT OF SOCIAL INFRASTRUCTURE

## FOR INSTANCE: Project 1: CENTRAL HERITAGE PARK- HERITAGE AND TOURISM

### Interlinking Identified/Unidentified Heritage Parks Of City with Surrounding Greens

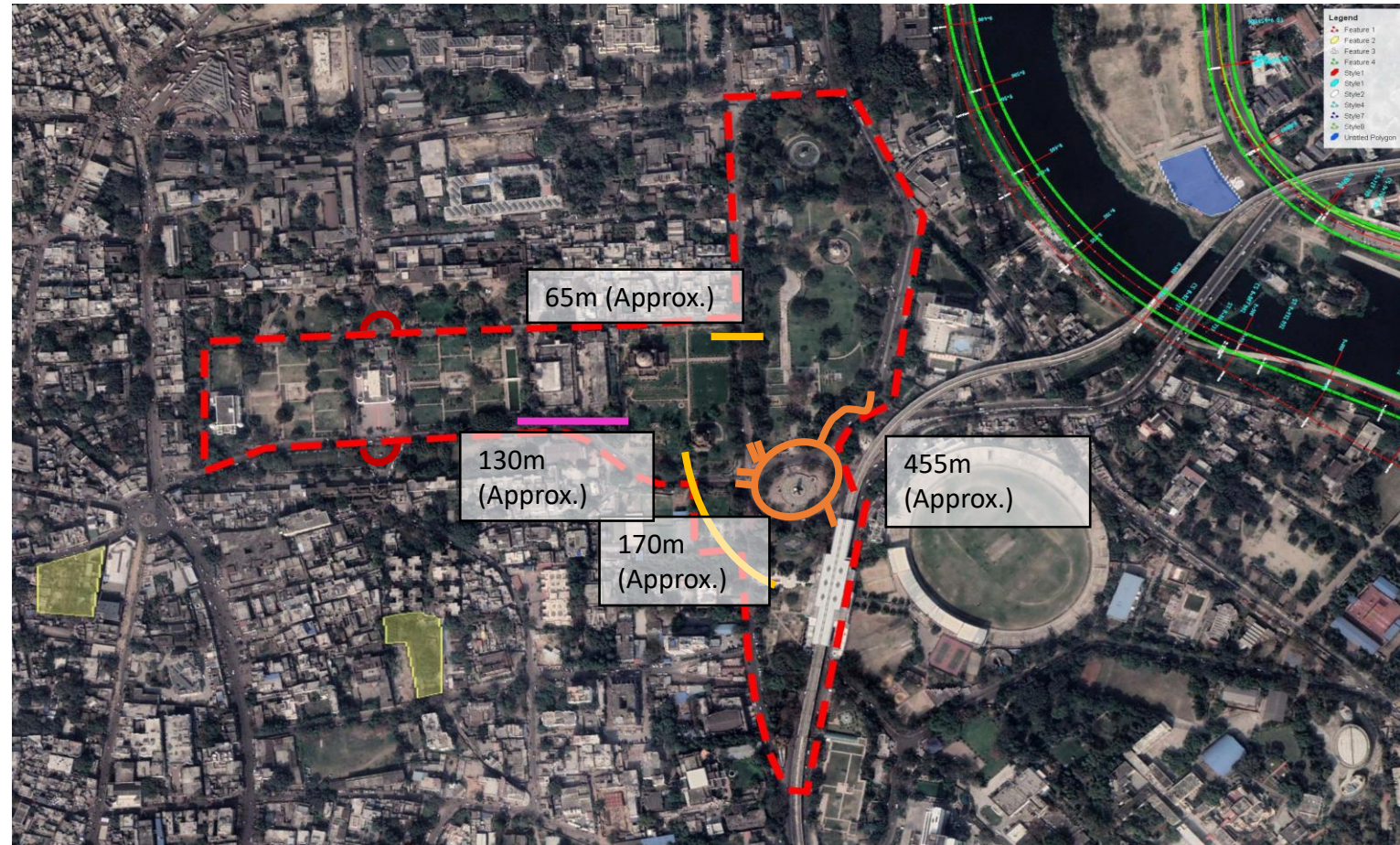
- To **integrate** the **disconnected parks** to form a central green park with public plazas which enhance sustainable mobility
- **Reviving & Renovating** city parks, as the city is famous for its **gardens/baghs**.
- Provide **Safe Zones** for Children and old-age people
- **Developing civic space** including urban plazas, water features, jogging tracks, lawns, vending zones, hardscape surfaces facilitating a range of uses

Land- 35-40 Acres

Capital Investment- Rs.225 Cr.

Department- UP Tourism

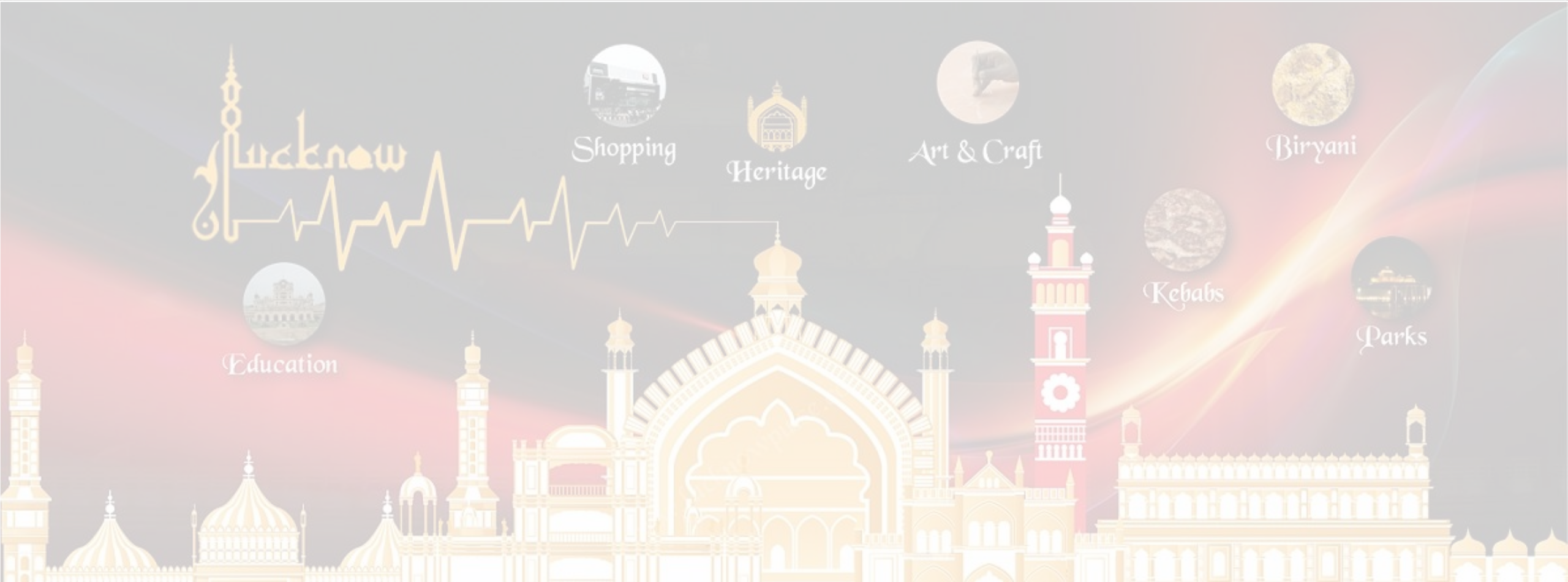
Phase- Short Term (2022-2026)



— Pedestrian F.O.B

— Pedestrian Subway  
Under the road

— Markets on the site



# THANK YOU

Vision, Implementation strategy and Integrated Infrastructure plan for **Lucknow**

**PREPARE**

**DEFINE**

**DESIGN**

