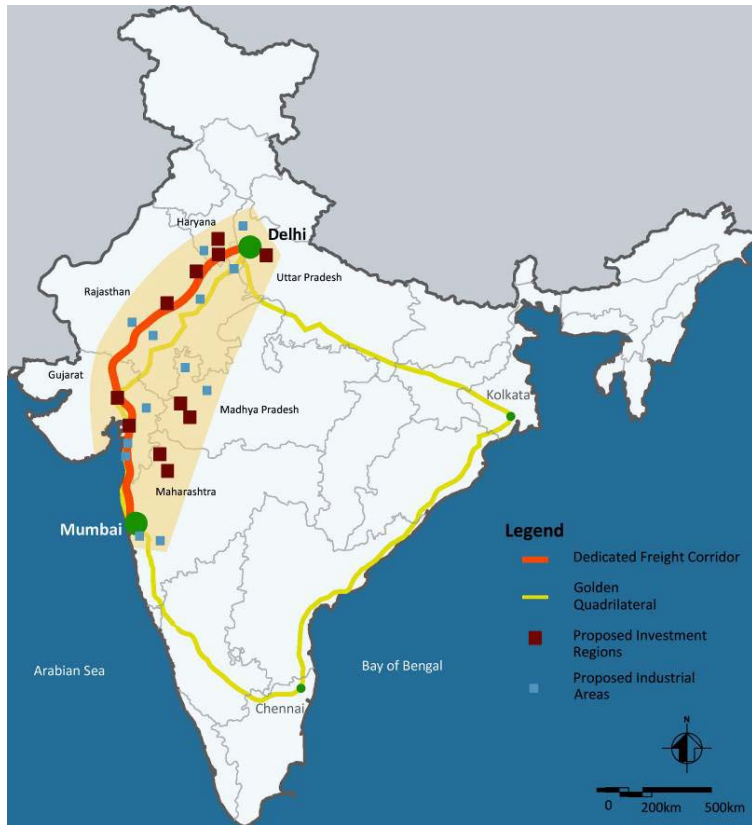


Delhi Mumbai Industrial Corridor Project

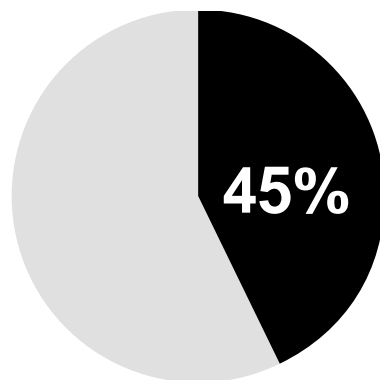


The DMIC Corridor

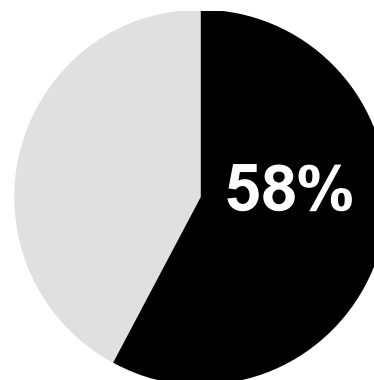


Contribution of DMIC States

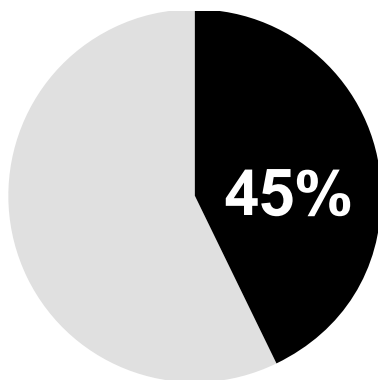
GDP



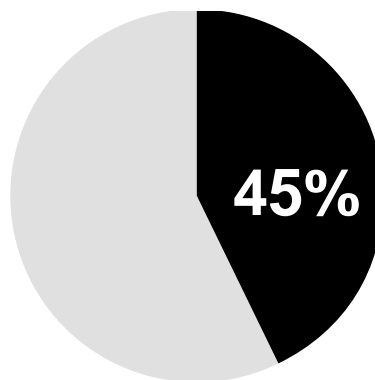
Value of Output



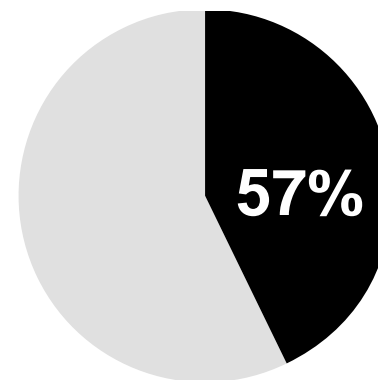
**No. of
Workers**

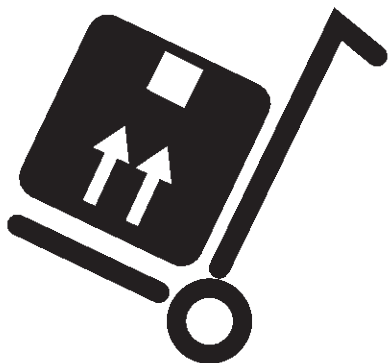


**No. of
Factories**



**Value of
Exports**



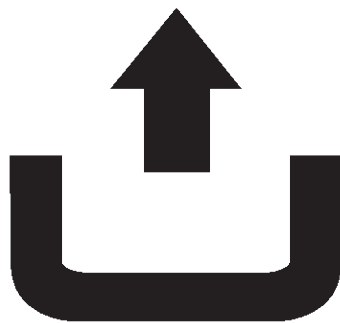


Exports

4

In 9 years

USD **720** billion
INR 43,20,000 crores



Value of Output

3

In 9 years

USD **3.3** trillion
INR 1,98,00,000 crores



Employment

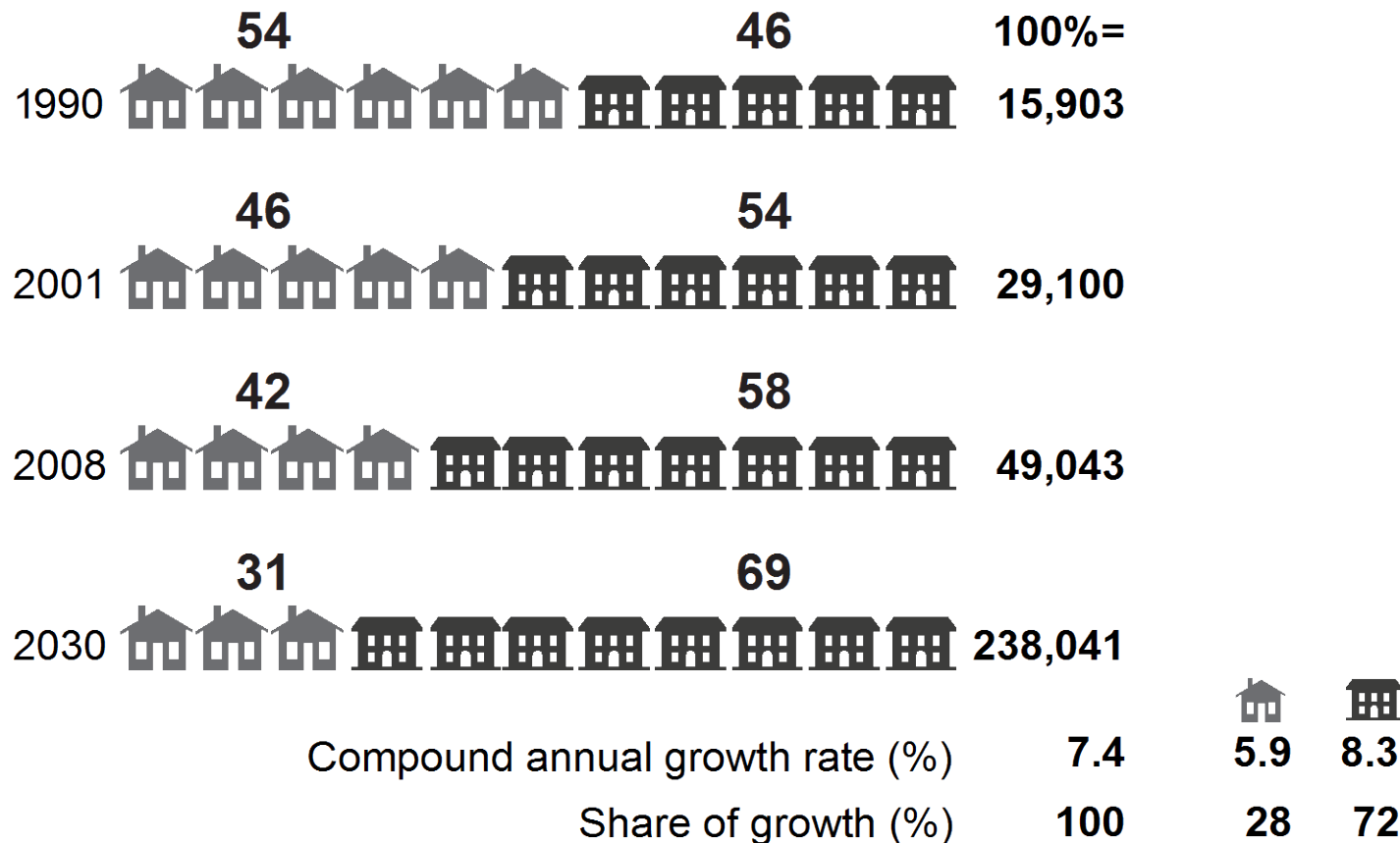
2

In 7 years

USD **25.5** million
INR 2,55,00,000 lacs

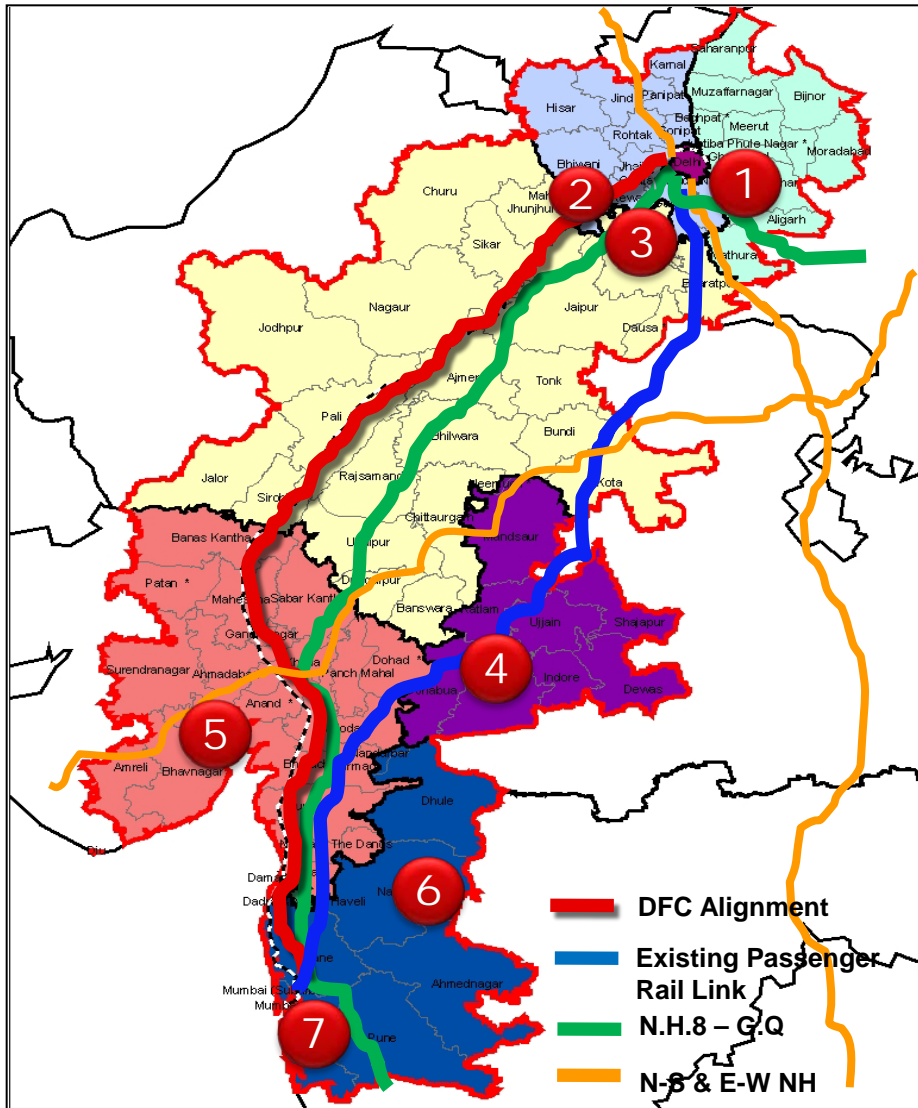
Cities will account for nearly 70% of India's GDP by 2030

Share of India's GDP %; rupees billion, real 2008



New DMIC Cities will help to meet pressures of urbanisation and also lead India's economic growth for the next 20 years

7 Nodes being developed in DMIC Phase 1



- 1 Dadri – Noida Ghaziabad IR, UP
- 2 Manesar – Bawal IR, Haryana
- 3 Neemrana – Khushkhera – Bhiwadi IR, Rajasthan
- 4 Pithampur- Dhar - Mhow IR, MP
- 5 Ahmedabad – Dholera IR, Gujarat
- 6 Shendra - Bidkin Industrial Park, Maharashtra
- 7 Dighi Port IA, Maharashtra

Best practices in Master Planning being brought in through international consultants

Node	Consultants	Area (sq. km)
Ahmedabad-Dholera Investment Region, Gujarat	Consortium led by M/s Halcrow, UK	920
Manesar-Bawal Investment Region, Haryana	Consortium led by M/s Jurong, Singapore	402
Khushkhera-Bhiwadi-Neemrana Investment Region, Rajasthan	Consortium led by M/s Kuiper Compagnons, Holland	165
Pithampur-Dhar-Mhow Investment Region, Madhya Pradesh	Consortium led by M/s Lea Associates South Asia	372.4
Dadri-Noida-Ghaziabad Investment Region, Uttar Pradesh	Consortium led by M/s Halcrow, UK	200
Dighi Port Industrial Area, Maharashtra	M/s AECOM, Hong Kong	253
Shendra Bidkin Industrial Park Maharashtra	M/s AECOM, Hong Kong	84

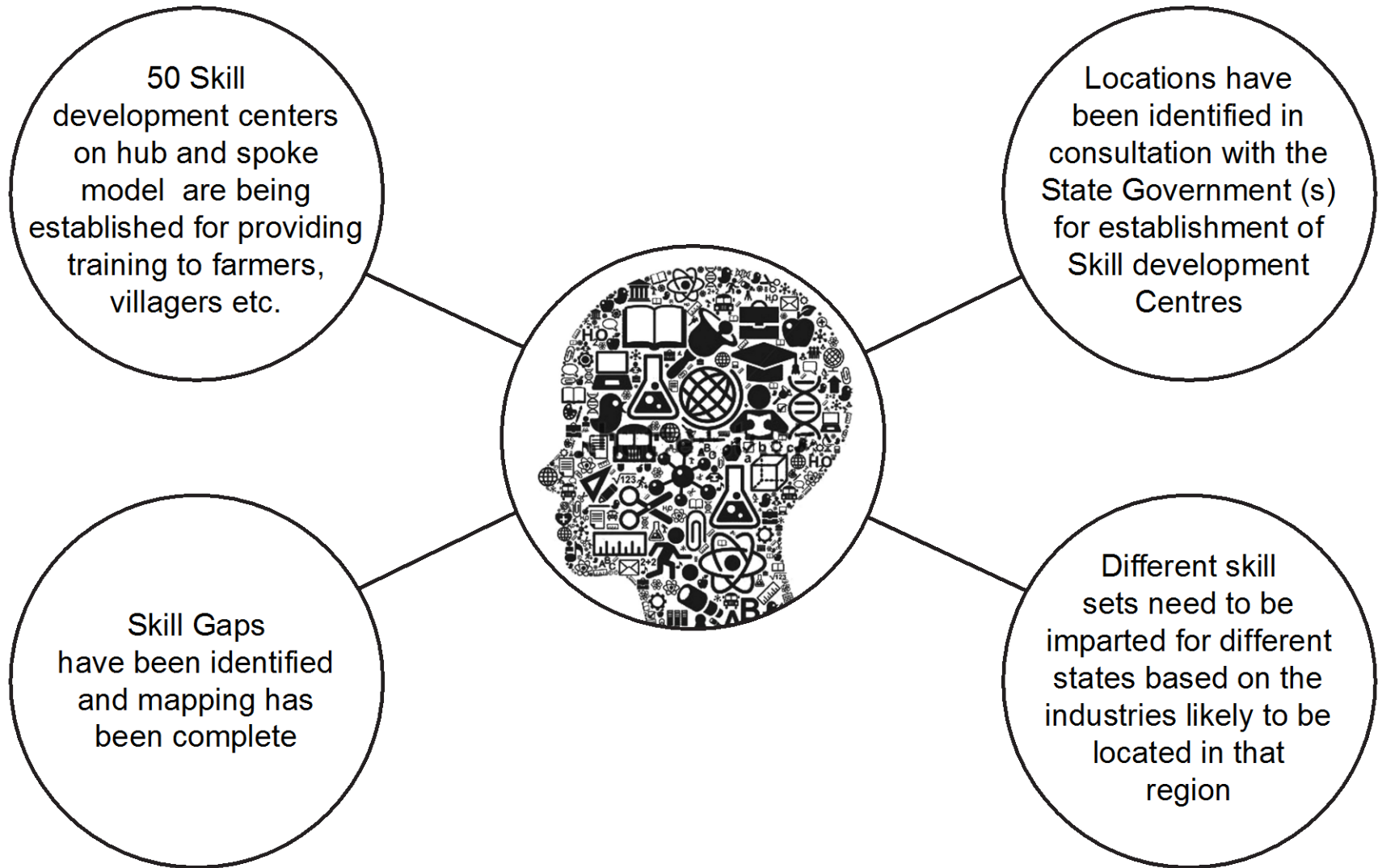
Master Planning - Key sustainable dev. concepts

- **Reduction of commuting needs for the workforce**
 - Polycentric structure – with multiple CBDs and Industrial zones
 - Integration of land uses encouraging mixed-use
 - Affordable Workers Housing located near the industrial zones
- **Neighborhoods distributed around High access Mass Transit Corridors**
 - Encouraging cycling & pedestrian modes over cars
- **Recycling and Reuse of water and solid wastes**

Master Planning - Key sustainable dev.concepts

- Energy sufficiency through use of renewables
- Conservation of better agricultural land & Protection of sensitive natural environment (Coastal zones, forests, sanctuaries)
- Integration of existing villages into the new city
- SMART City - IT based real time Control and Governance

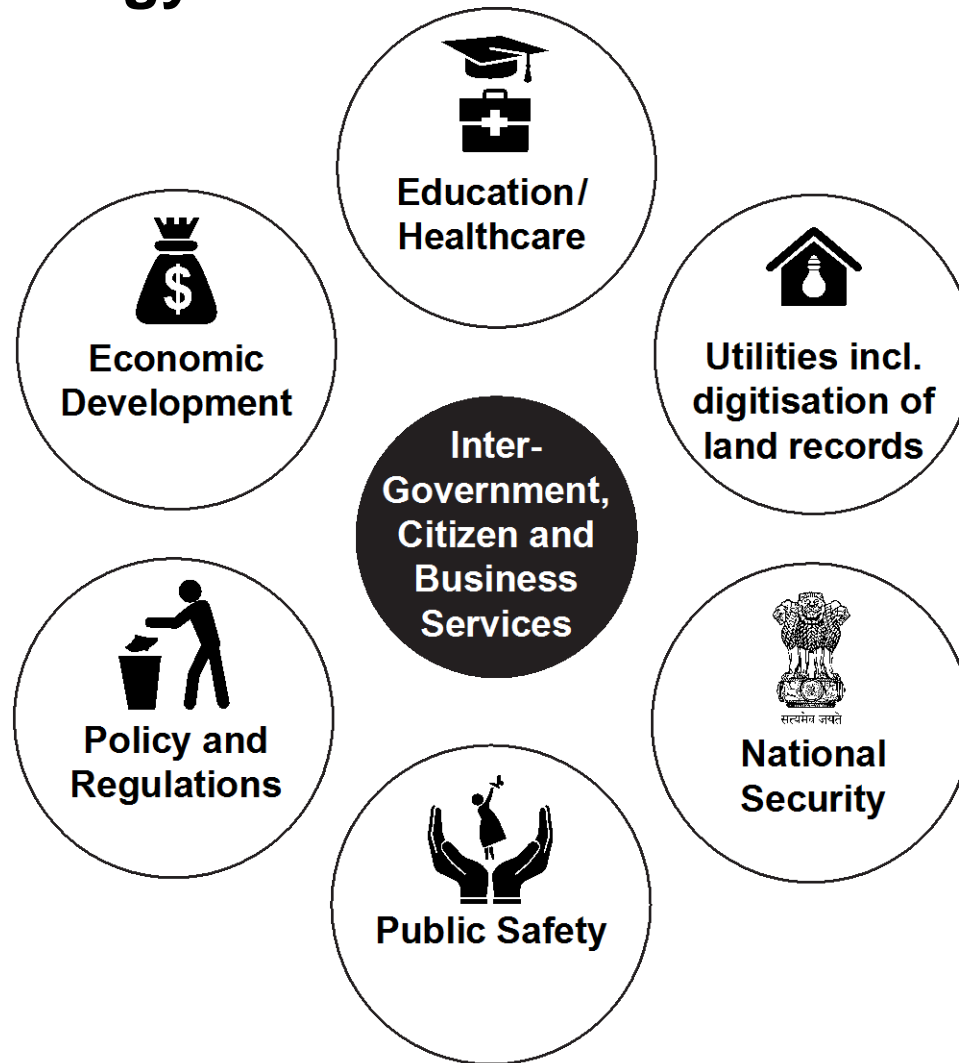
Availability of skilled workforce – imperative for the envisaged growth in DMIC



Technology (Skill Gap) Matrix

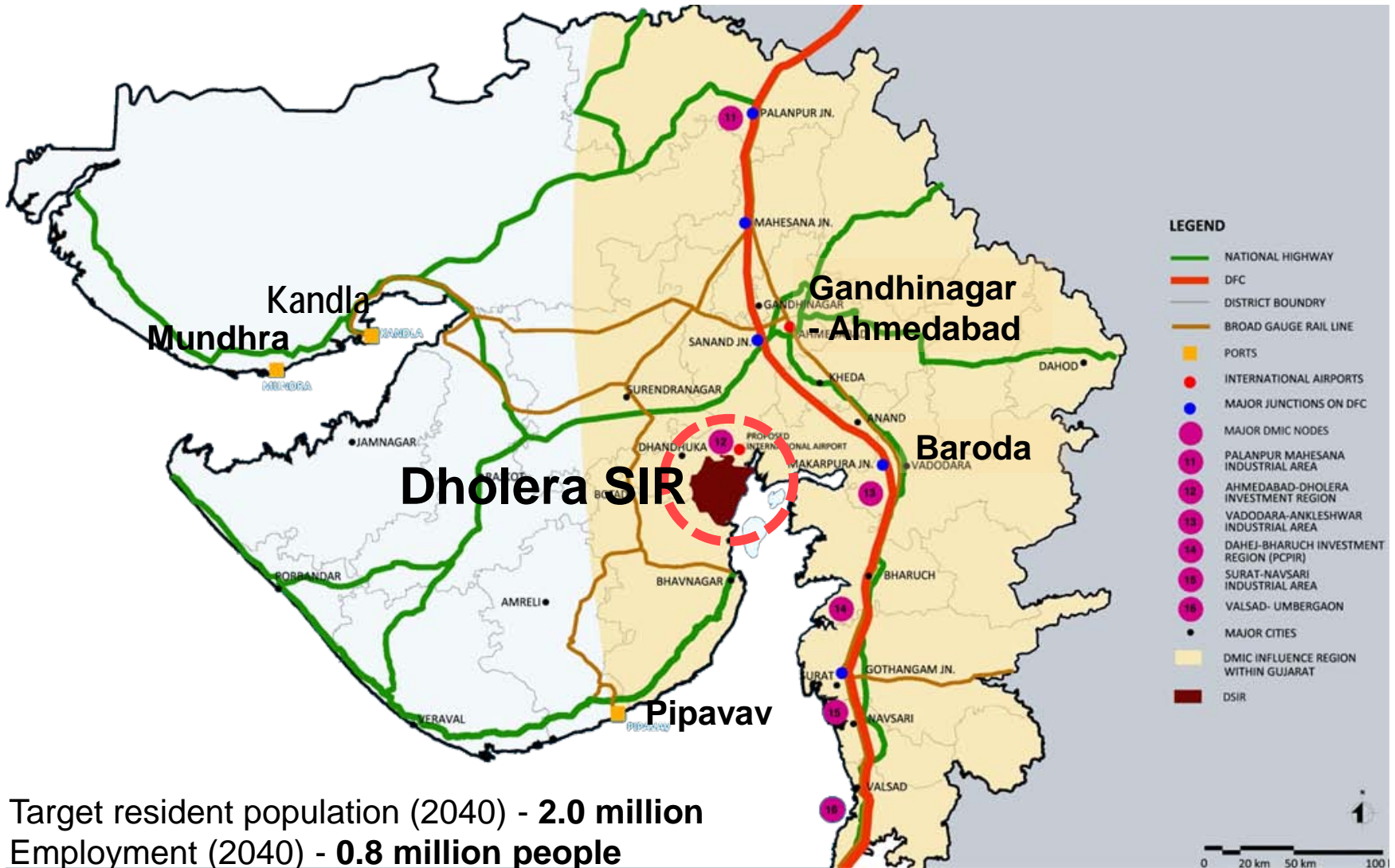
Investment Region Technical Areas	Manesar- Bawal IR	Pithampur-Dhar- Mhow IR	Dholera Special IR	Dadri-Noida- Ghaziabad IR	Khushkhea- Bhiwadi- Neemrana IR	Igatpuri-Nashik- Sinnar IR
Industrial automation & Process Control	√		√	√	√	
Design and Manufacturing	√	√		√	√	√
Automobile mechatronics	√	√		√		√
Hydraulics & pneumatic control	√		√	√	√	√
Electrical & Mechanical Maint.	√	√	√	√	√	√
Networking & Information Technology	√	√			√	√
Infrastructure and construction technology	√	√	√	√	√	√
Welding and fabrication	√	√	√	√	√	√
Garments- design and construction	√	√	√			
Food processing	√	√	√	√	√	√
Chemical and Pharma		√				
Environmental engineering	√		√			
Testing and Calibration	√	√	√	√	√	√
Soft Skills	√	√	√	√	√	√

Cities are being developed as Smart Cities with use of Digital Technology

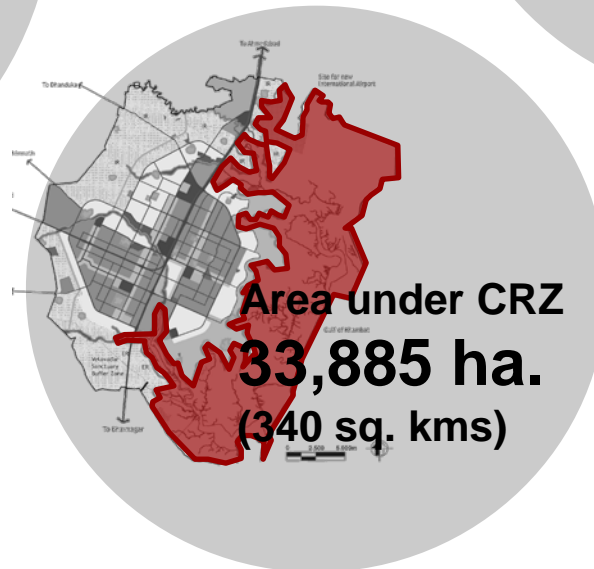


Information & Communications Technology

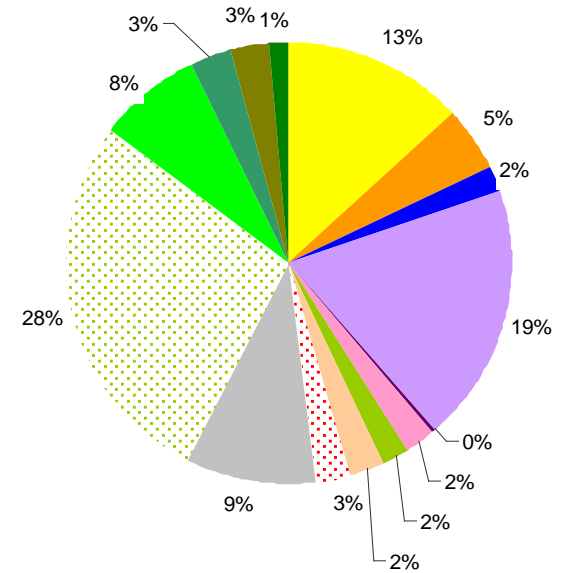
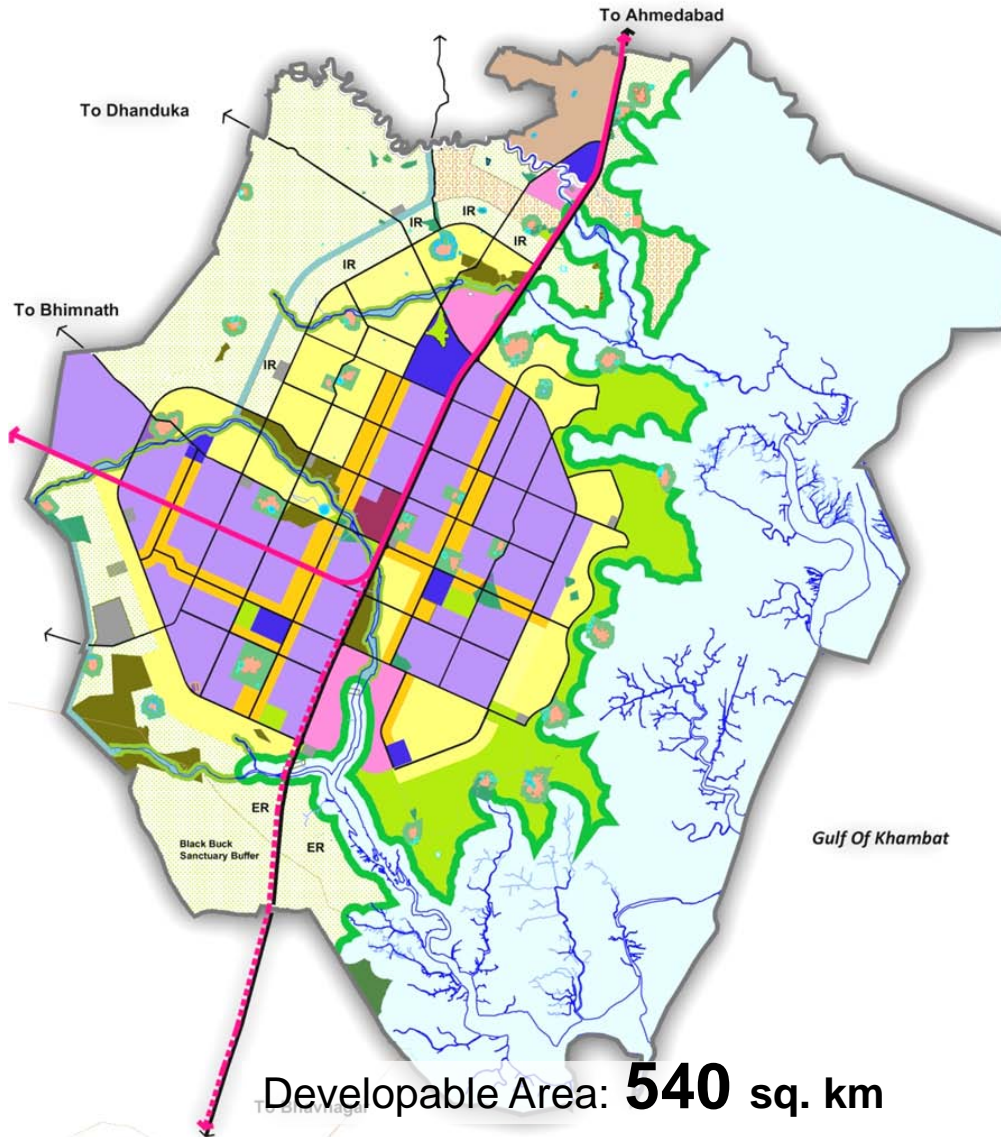
Dholera Special Investment Region



As per Development Plan



Master Plan



Key

LAND USE

- Residential
- High Access Corridor
- City Centre
- Industrial
- Logistics
- Knowledge and IT
- Entertainment
- Village Buffer
- Green Parkland & Canals
- Recreation & Sports
- Resorts

- Solar Energy Park
 - Strategic Infrastructure
 - Forest
 - Agriculture
- ### OTHER
- DSIR Boundary
 - Broad Gauge Railway
 - Roads
 - Land Under CRZ-I
 - Canal
 - Village Settlement
 - Black Buck Sanctuary Buffer
 - Rivers and Streams

Dholera SIR: Projections

Industrial,
Tourism &
other Jobs



343,000

Supported
Jobs

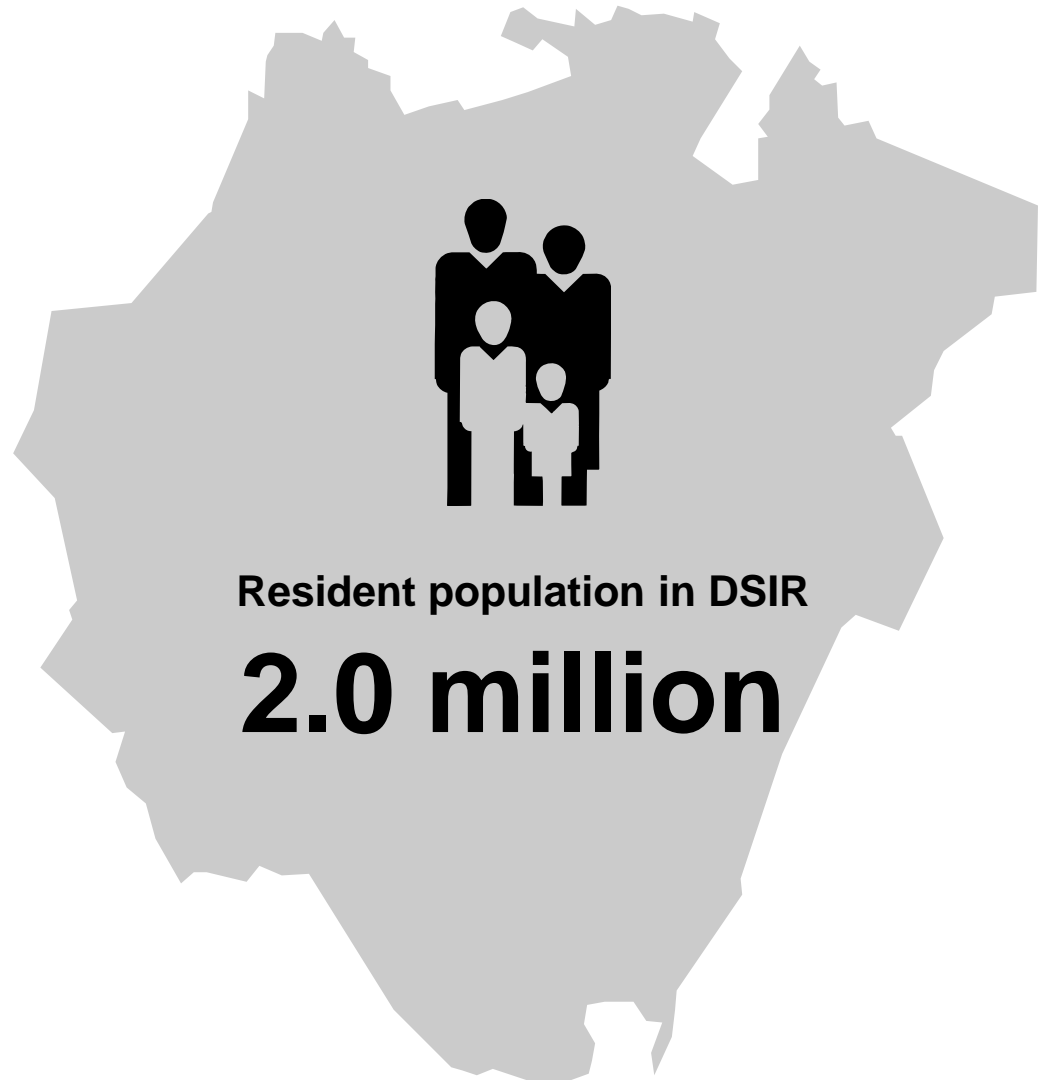


484,000

Total Jobs



827,000





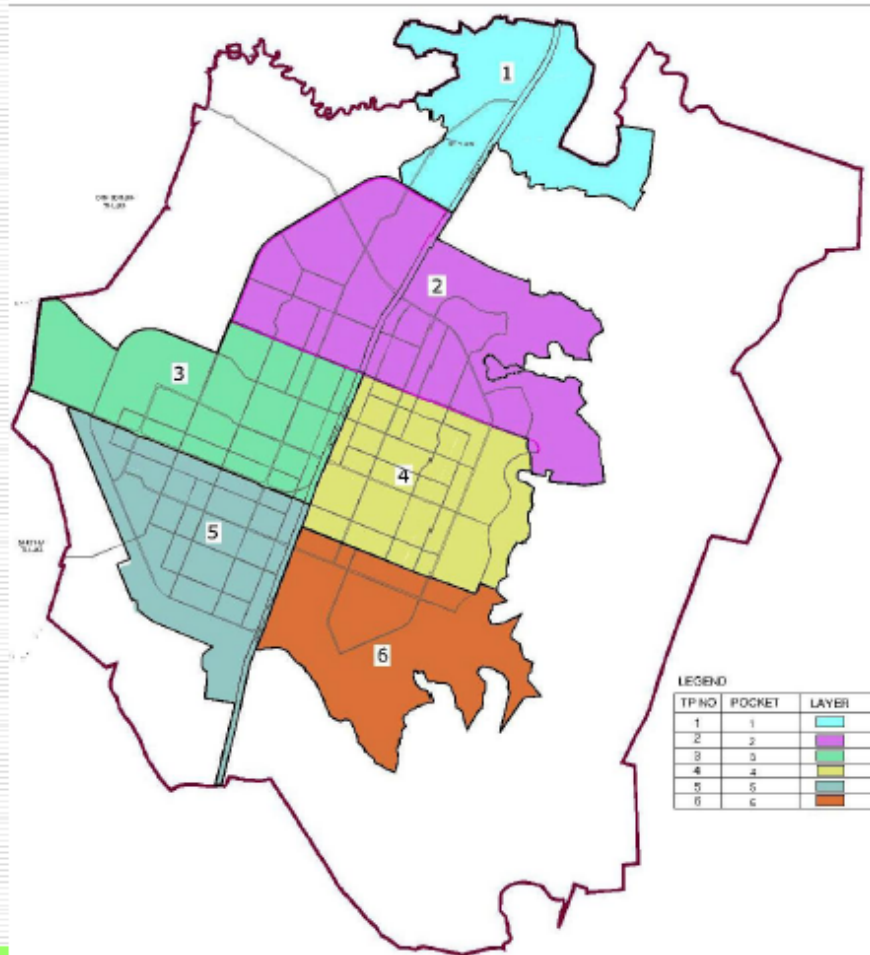




Draft Town Planning Scheme

DRAFT TOWN PLANNING SCHEME NO. 1 TO 6

DRAFT TOWN PLANING SCHEMES AREA/BOUNDARY DELINEATION



Draft Town Planning Scheme Area Table

SR. NO	T.P.S NO.	AREA IN SQ. KM
1	1	51.28
2	2	103.00
3	3	67.06
4	4	59.85
5	5	63.00
6	6	62.40
Total		406.59

Owners' meeting in Dholera Village to discuss Town Planning Schemes



Consultative meeting for Town Planning Scheme 2



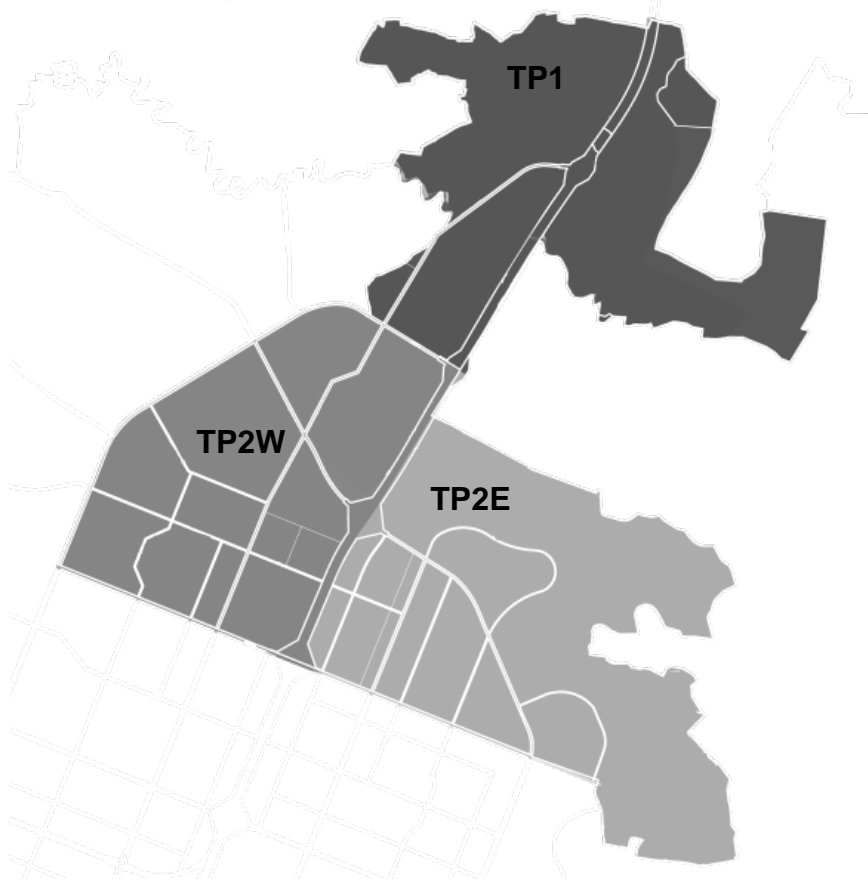
Phase -1 of Dholera

Area to be developed in phase 1a-

154 sq. kms

Validated Construction Cost (2013) ~

INR **20,000** Crores (USD 3333 million)



Base (Flat) Infrastructure Include:



Roads and Utilities (TP 1 & 2) : 550 kms



Potable Water: Raw Water Pipeline from Periej Dam and Water Treatment



Sewage: CETP and STP (RecyclePlants)



Industrial Water: Effluent Pipeline from AMC & Tertiary Treatment Plant



Stormwater: Collection and Treatment



Flood: River Training and Bunding



Solid waste: Transfer and Treatment



Power: Transmission and Distribution



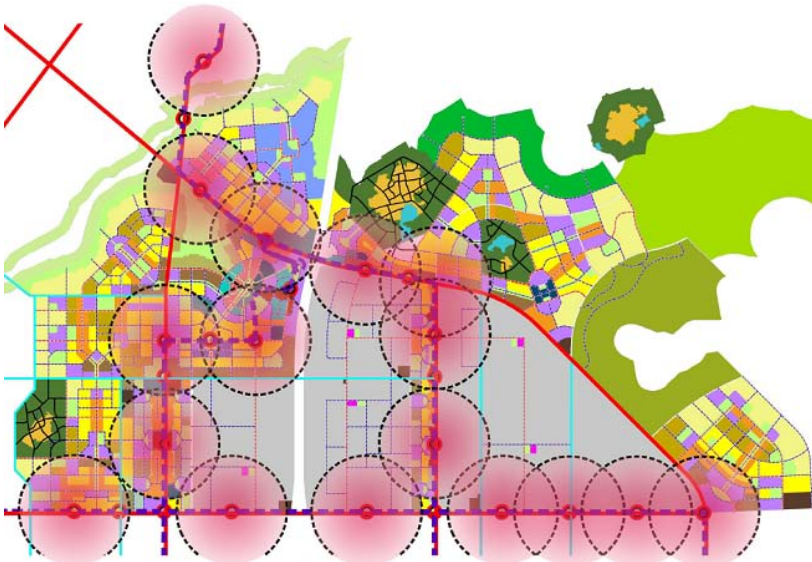
ICT: Networks



Related Projects (RRTS/MRTS, Airport)

Transit and Walkability

A Compact city that promotes the creation of neighborhoods and walkable places connected by transit



10 min walking distance

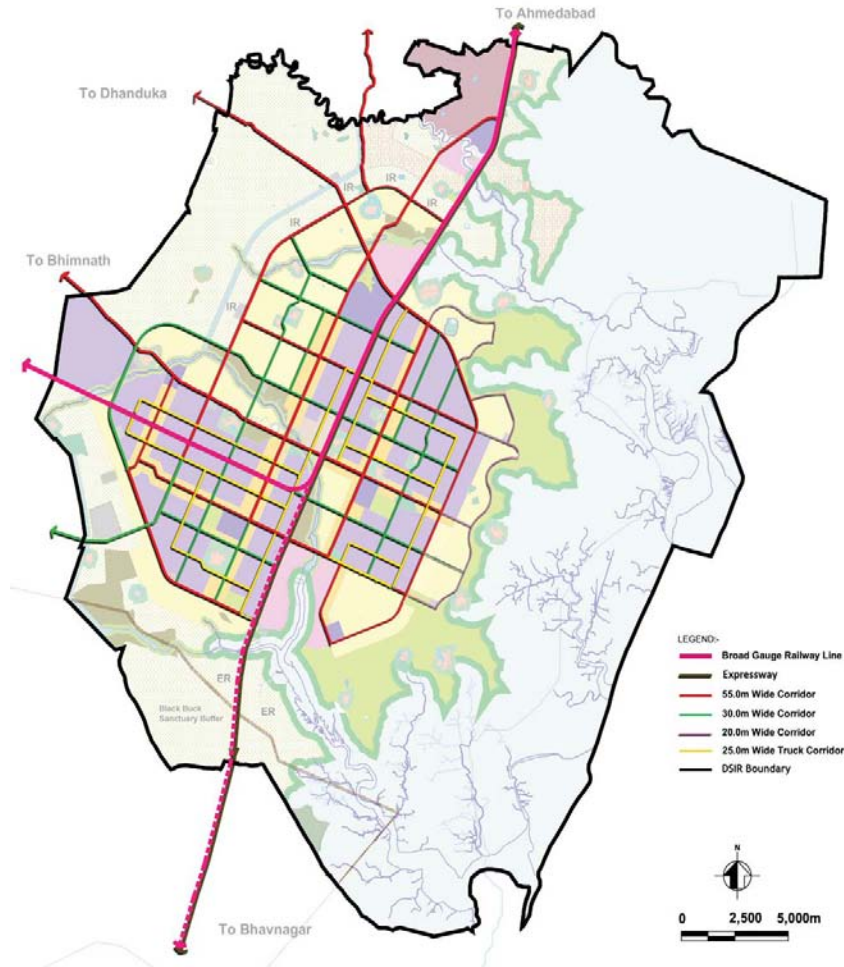


Proposed BRT In Phase I and...



LRT In the later phases

Building world-class infrastructure

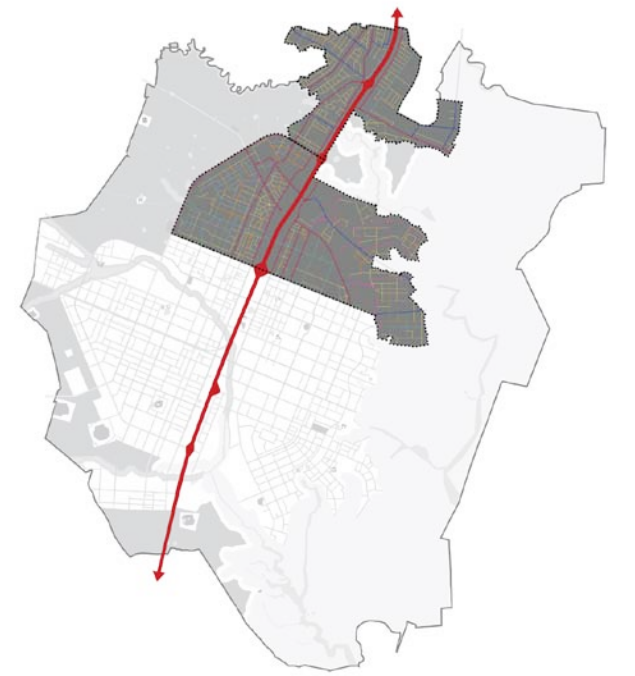
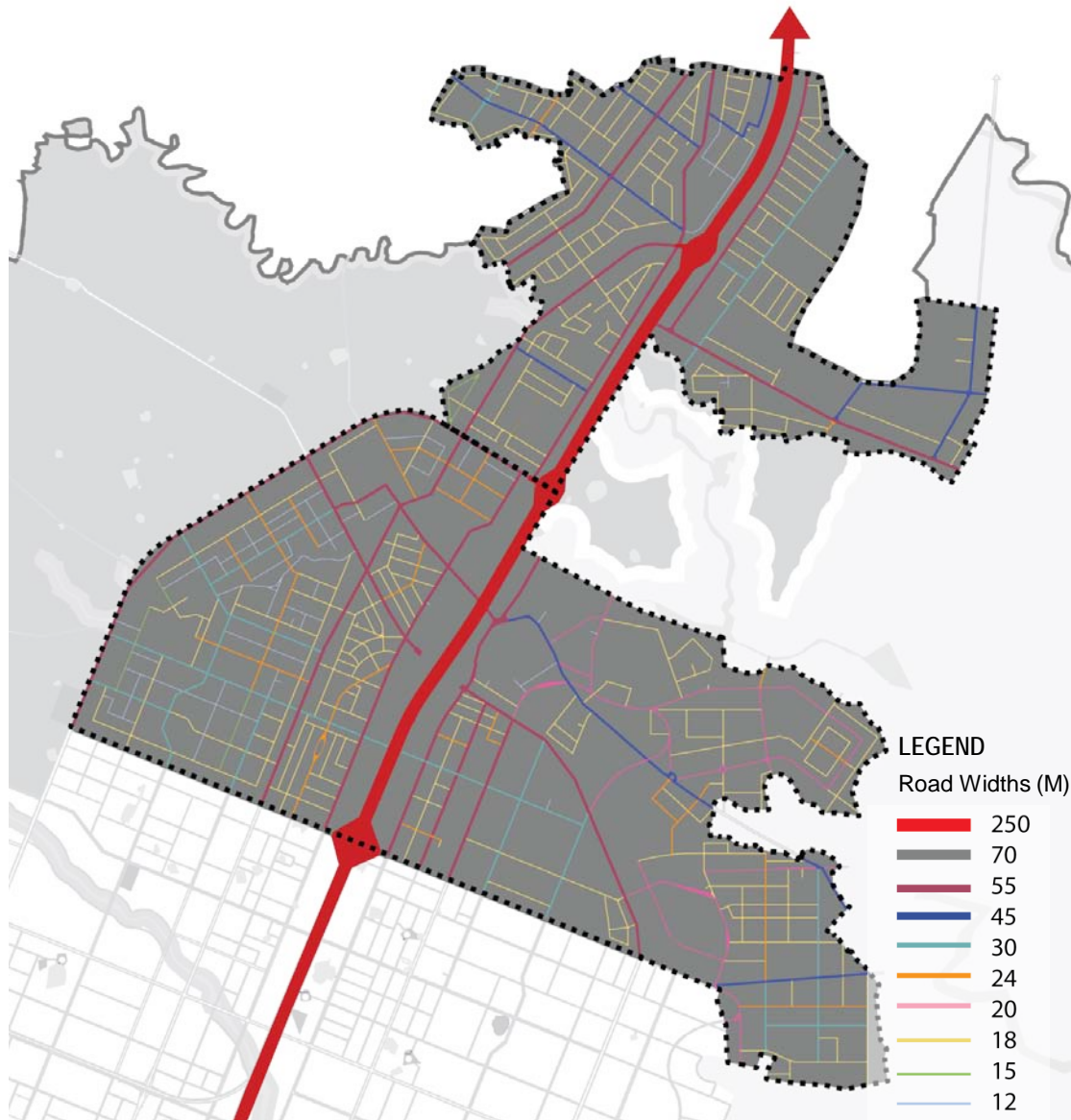


Roads

Hierarchy of Arterial and other Roads with dedicated lanes for Public Transport, Cycling, Walking

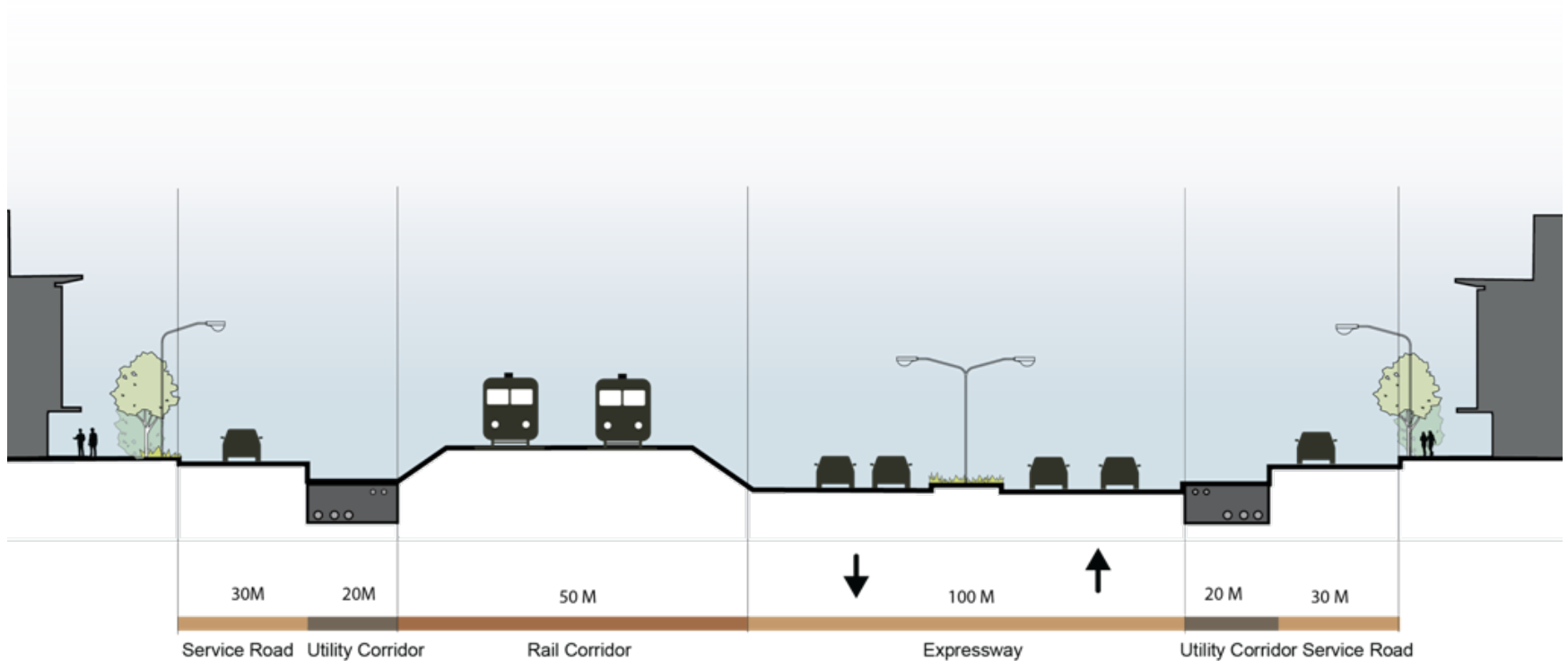


DSIR Road Network Hierarchy – TP Scheme 1&2



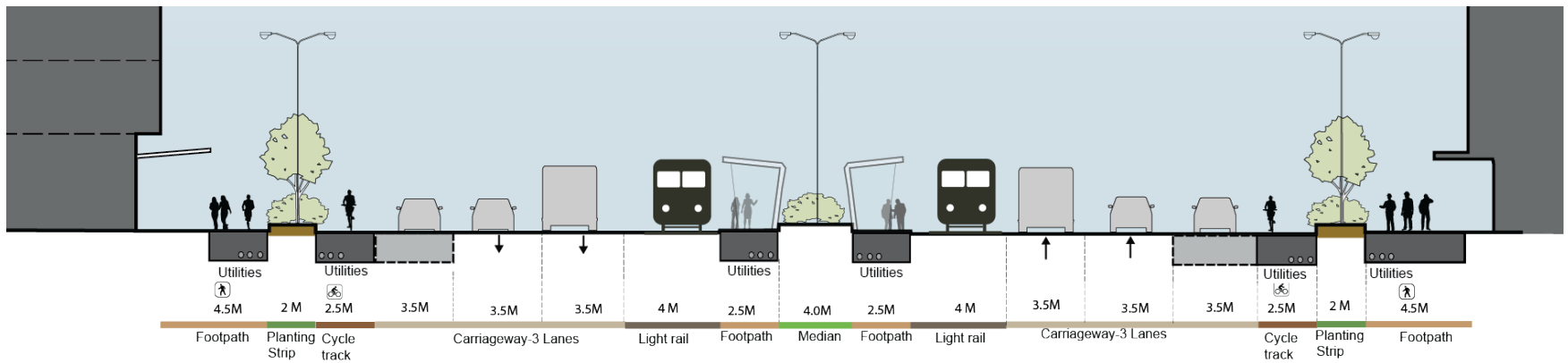
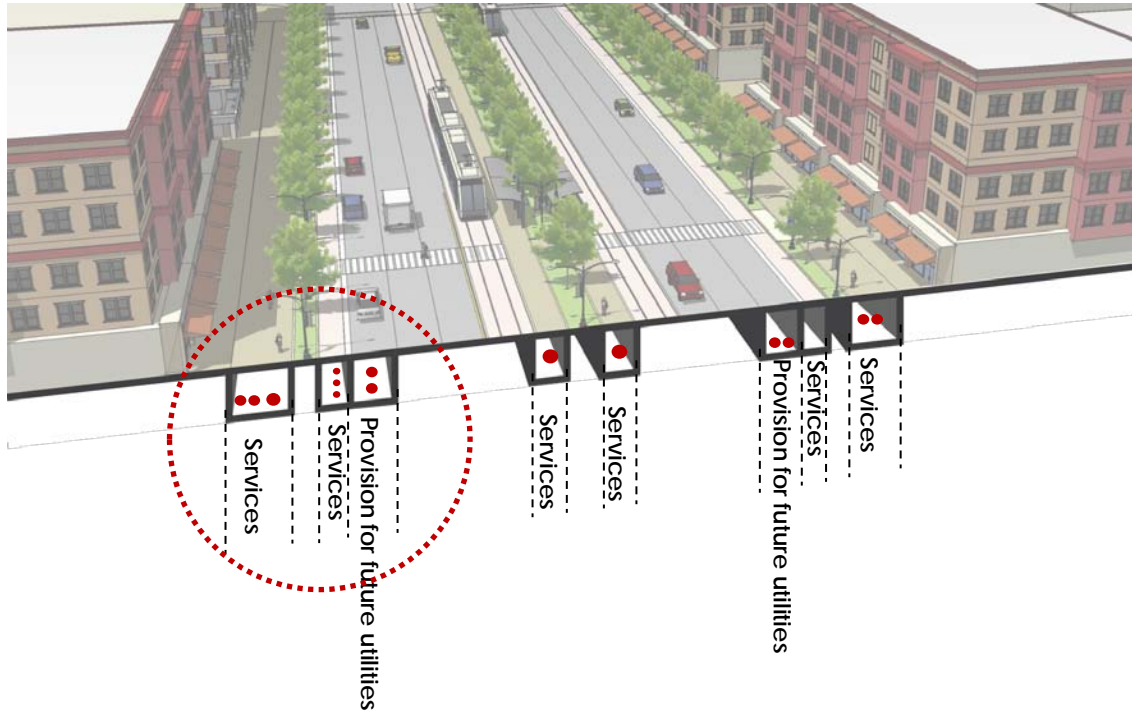
DSIR ROAD NETWORK HIERARCHY

SPINE Road - SH-6 Road Section and Utility Corridor

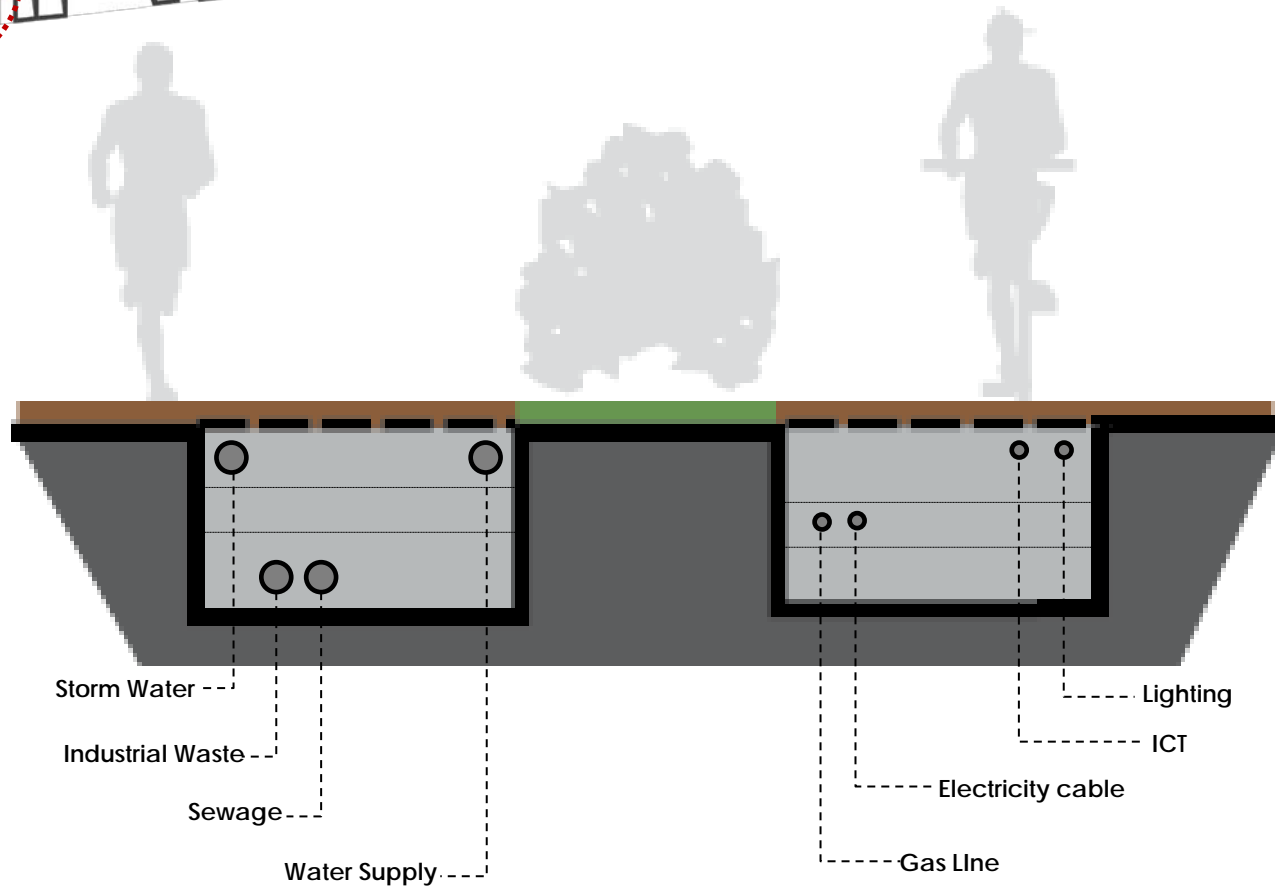
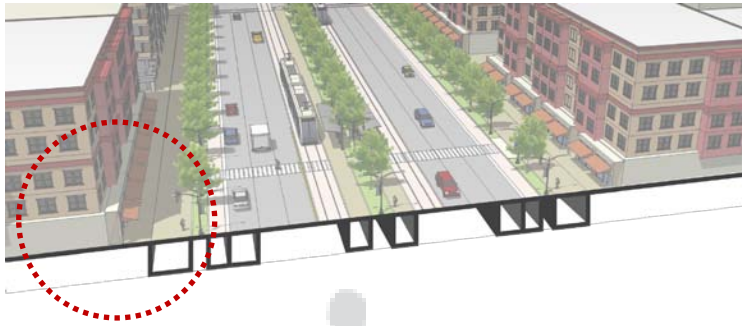


Not to scale

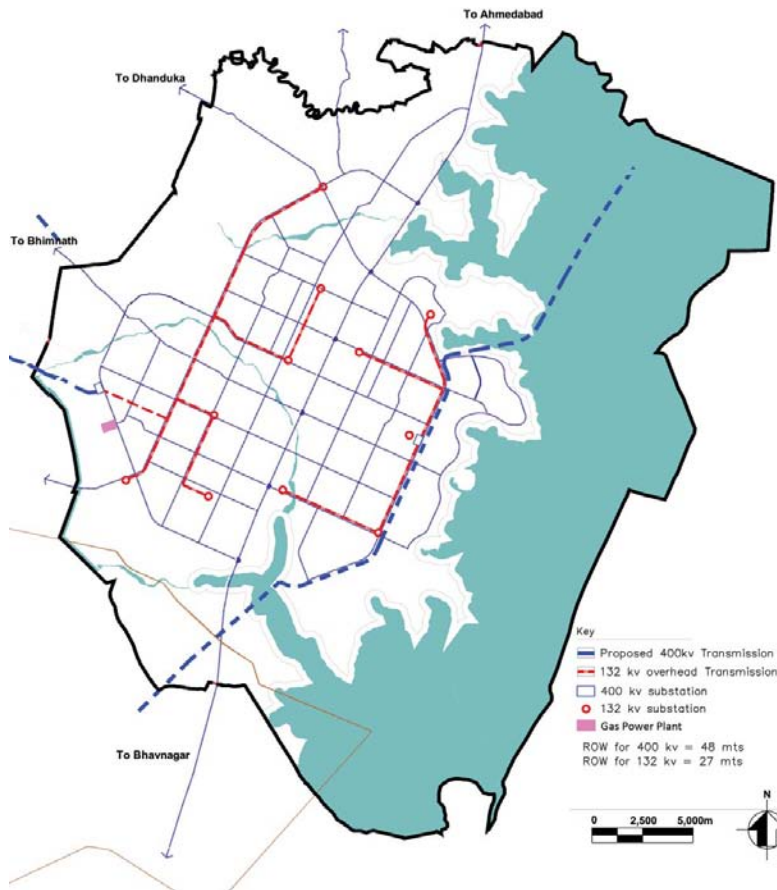
Typical Road Section (55 M & 70 M) with Utility Corridor



Typical detail of Utility Corridor



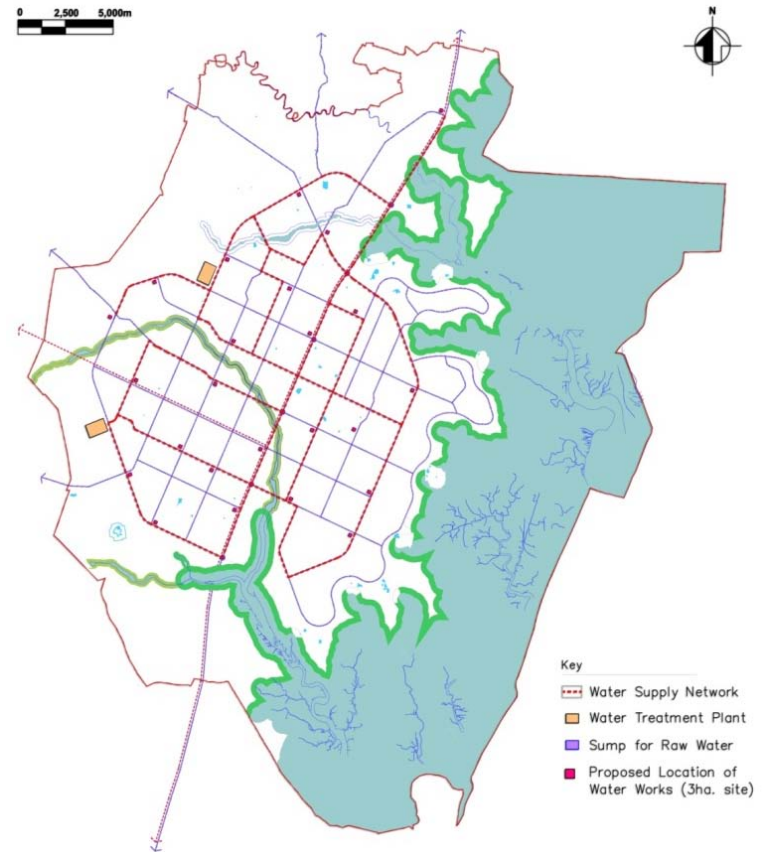
Building world-class infrastructure



Power

Total Requirement: **1,700 MW**

Phase I: **400 MW**

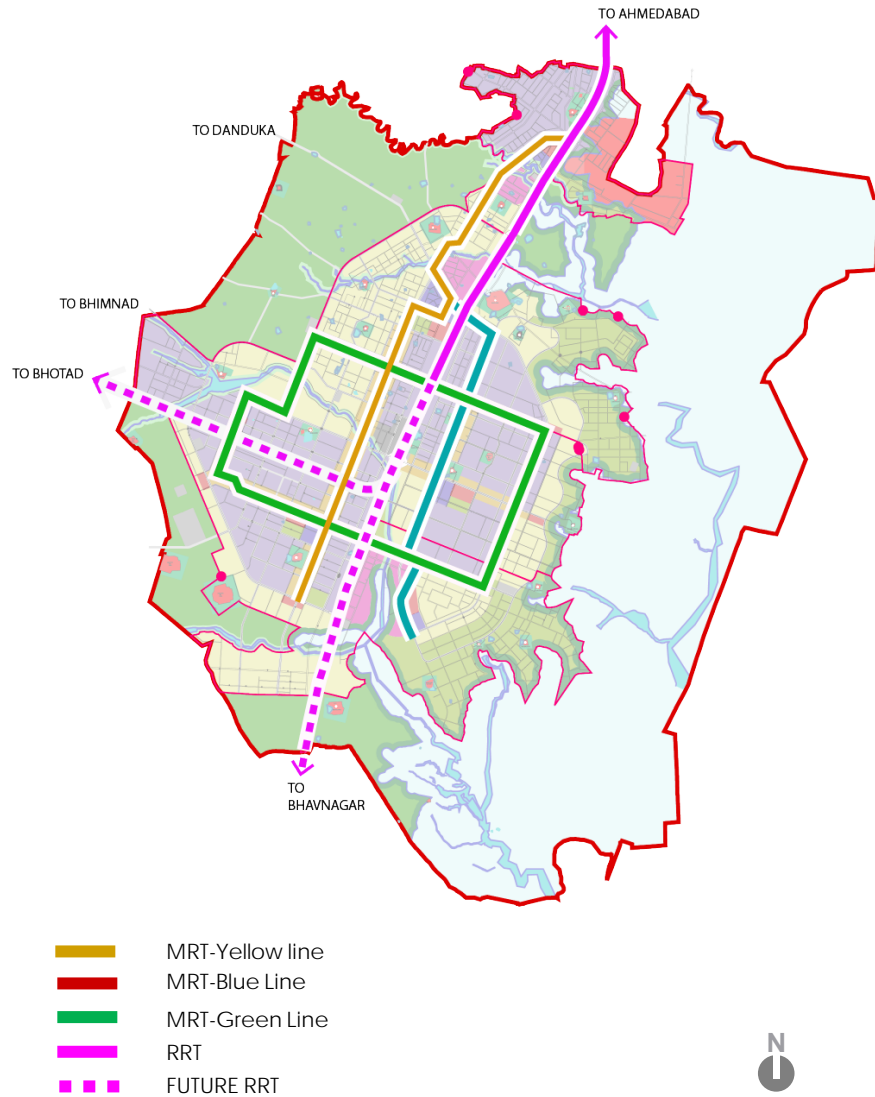


Water

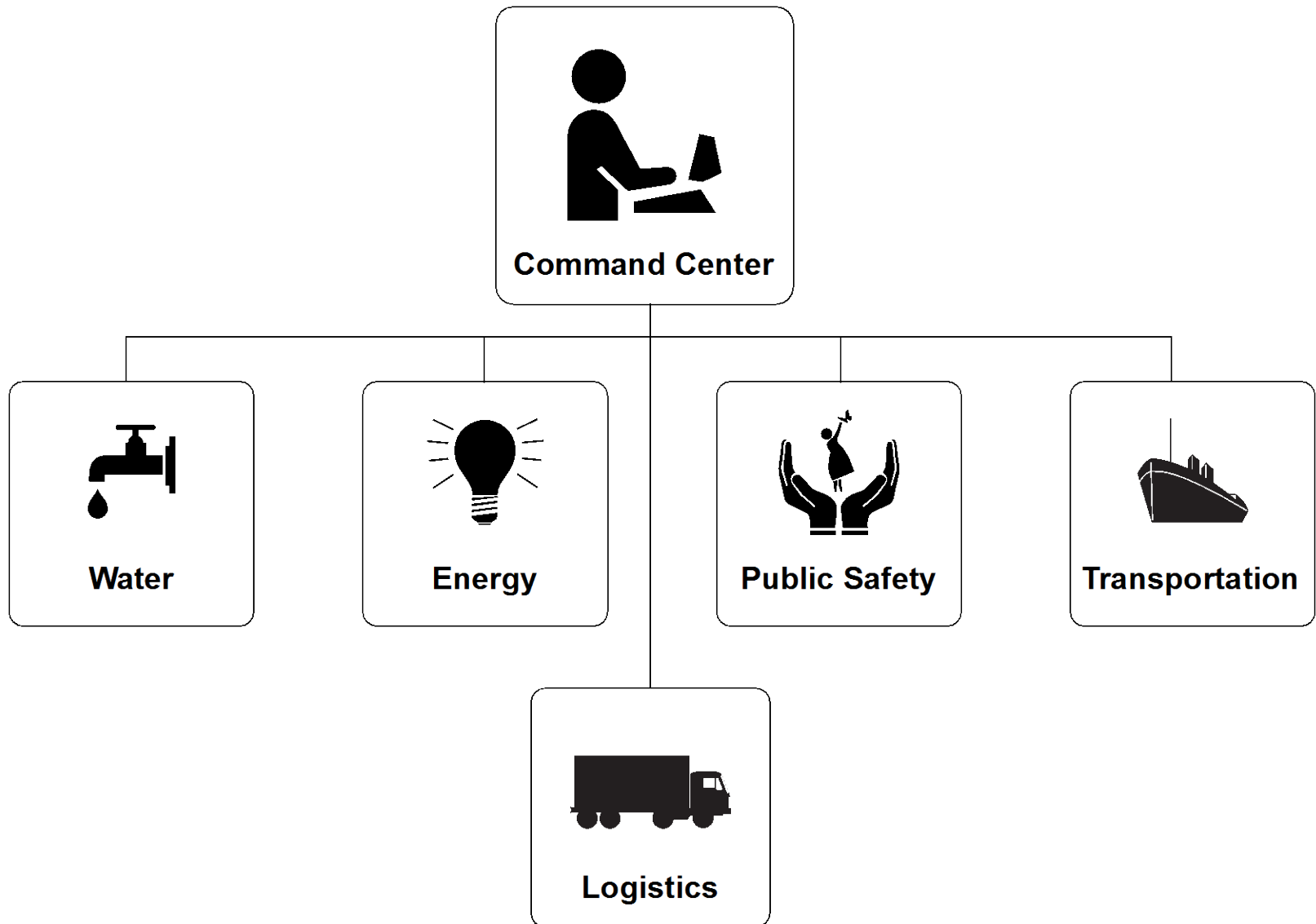
Total Demand = **950 mld**

Phase I = **260 mld**

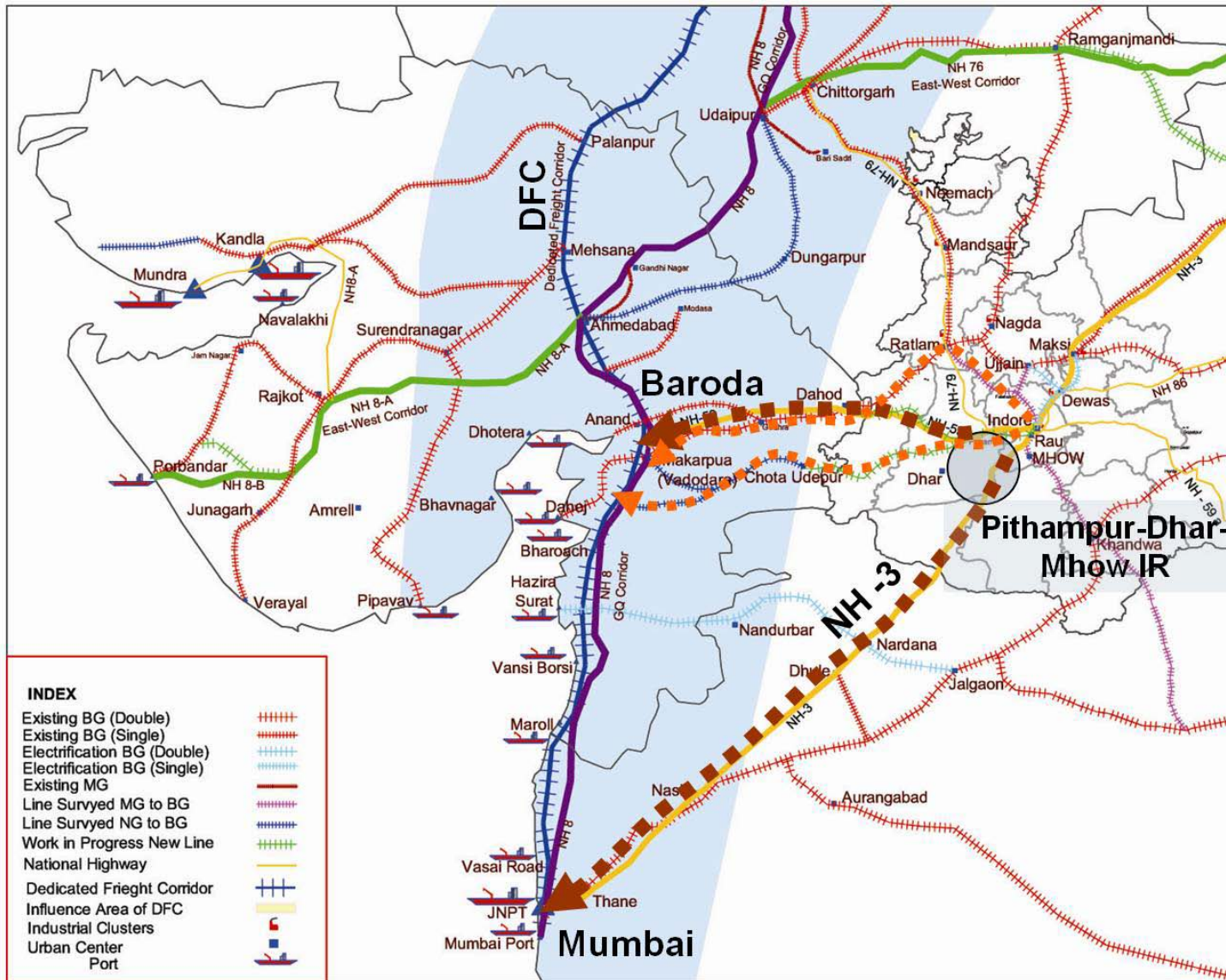
MRTS/RRTS from Ahmedabad to Dholera



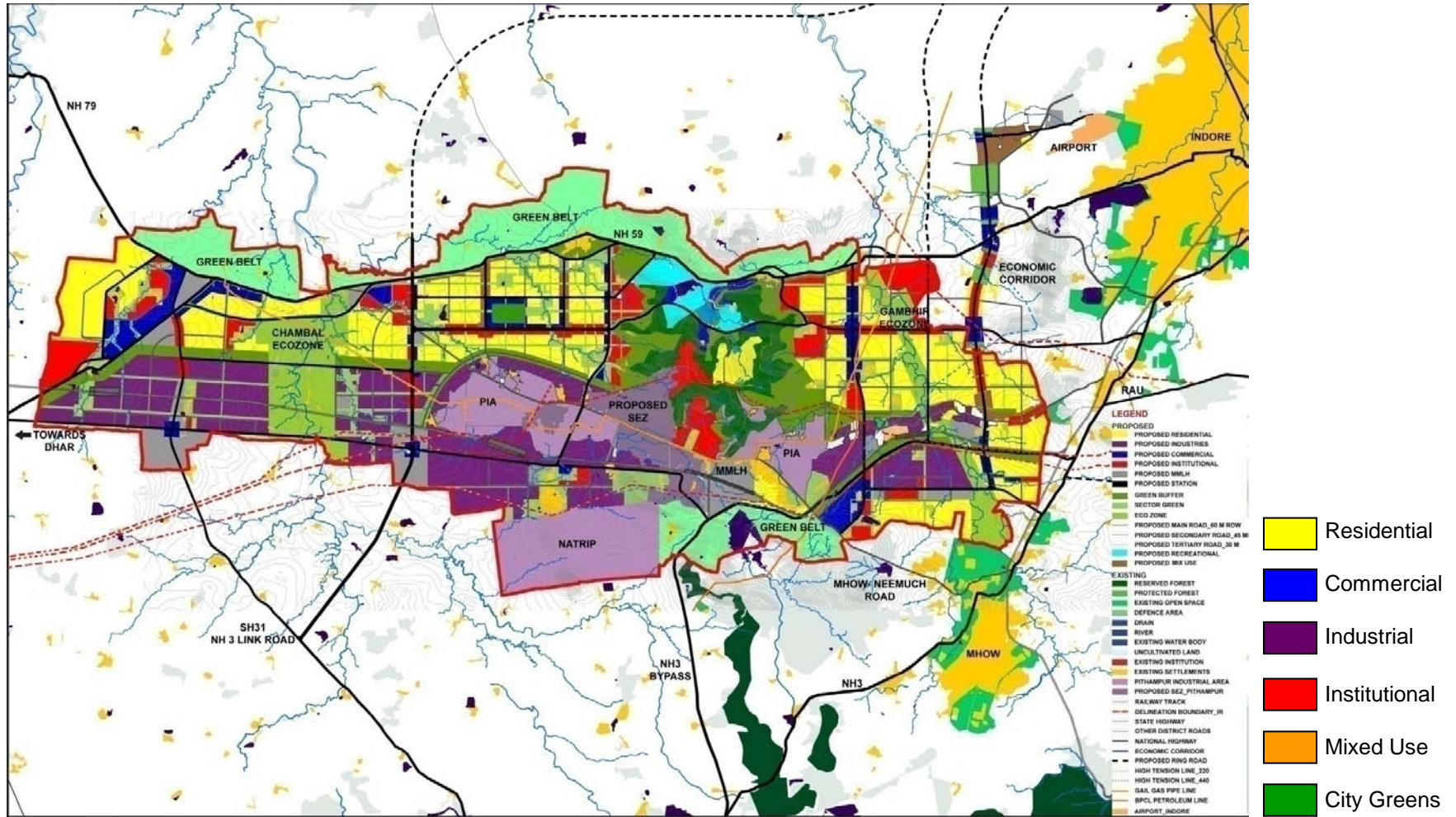
IT Based City Operations & Governance Platform



Pithampur-Dhar- Mhow IR



Pithampur-Dhar- Mhow – Master Plan



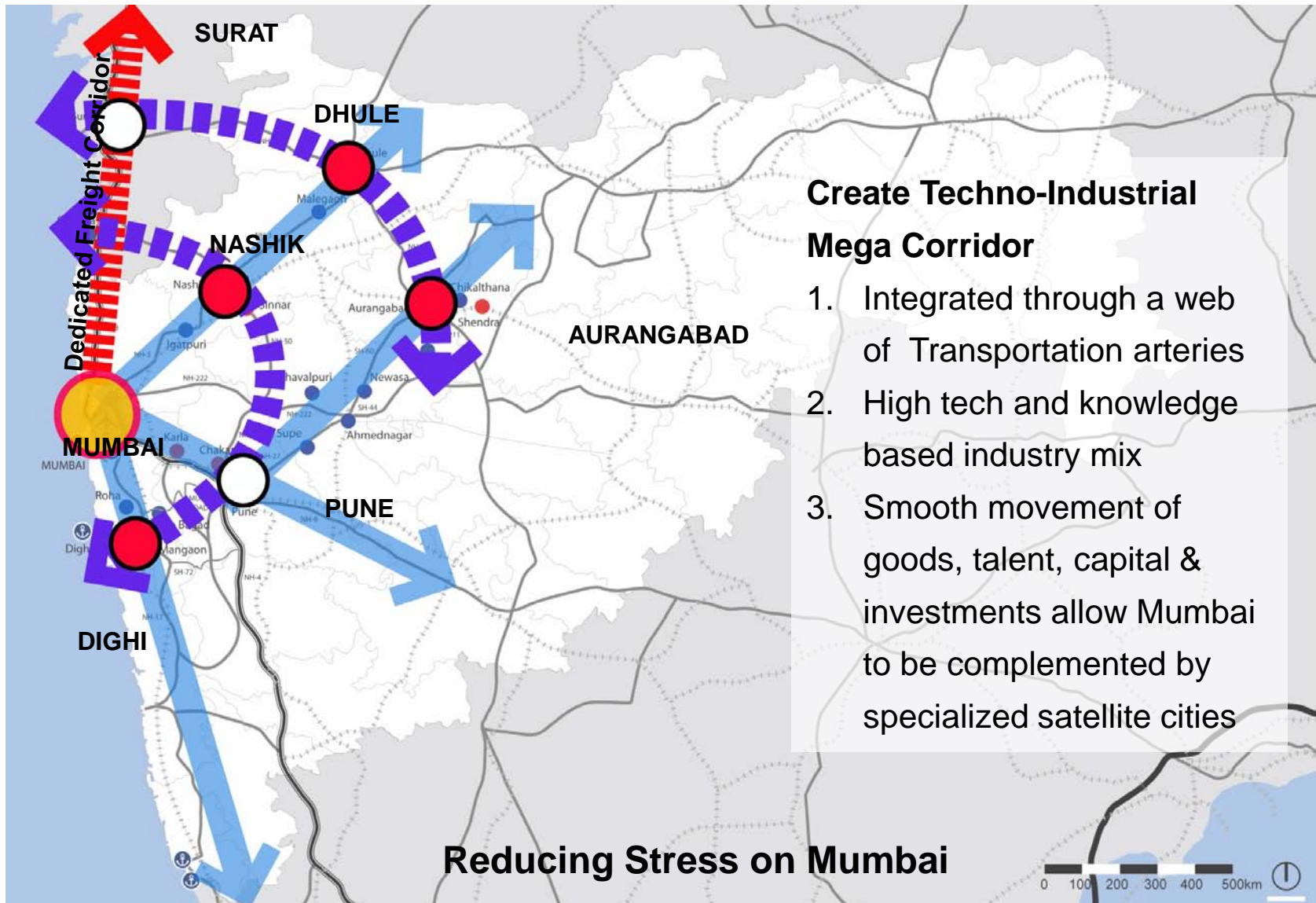
Total Area – **372.4** sq. km Population – **1.16** million

Multimodal Logistics Hub at Pithampur

- Site Area : ~**1.8** sq. km
- Design Capacity: **0.63** million TEUs
- Indore-Dahod railway link under implementation will connect it to the DFC

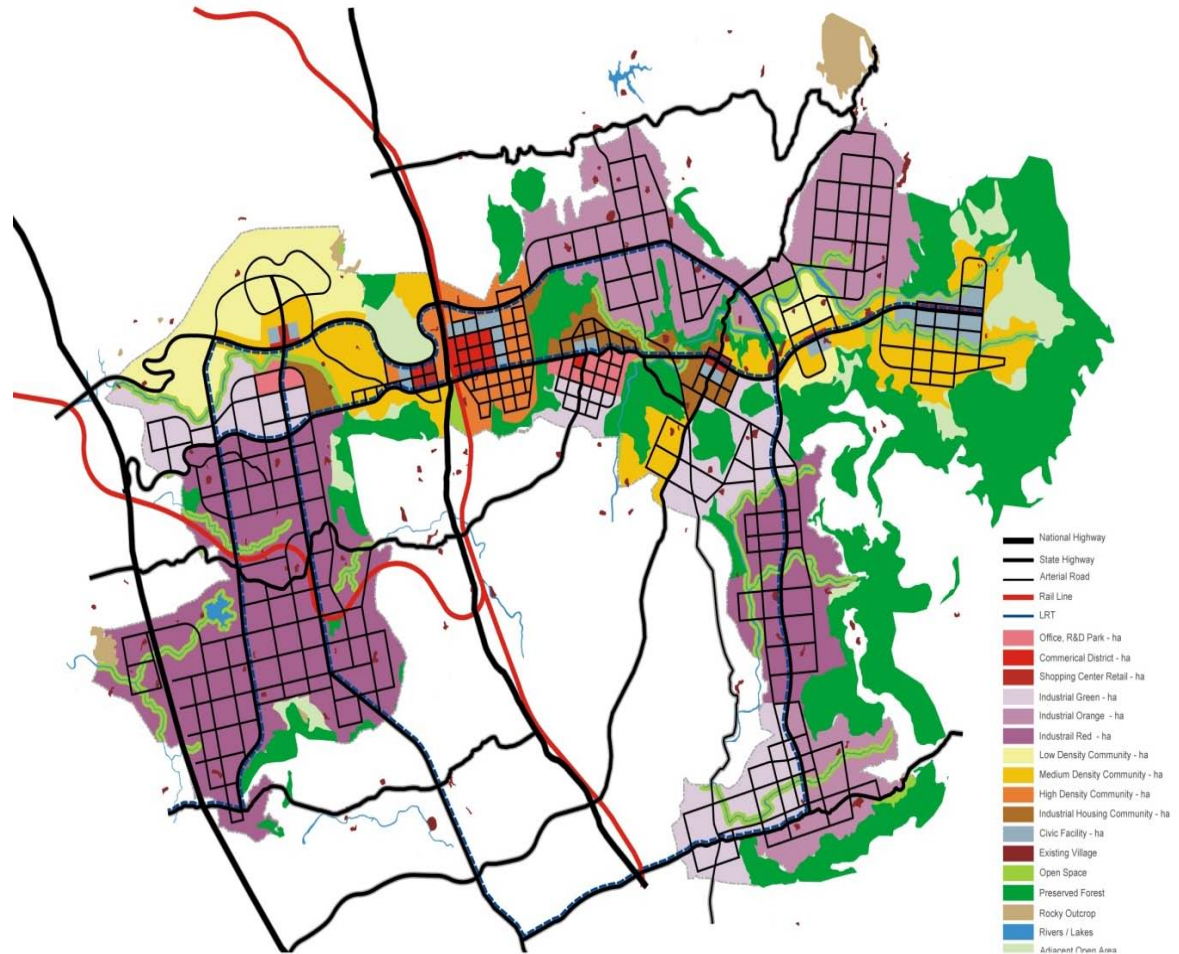


Philosophy - Decentralised Regional Development



Dighi Port Industrial Area

- Population (2042): **1.6 mn**
- Total area: **253 sq. km**
- Phase **1:50** Sq. km
- New integrated industrial and township enclave
 - 71% area under industries
 - Balance - residential & commercial use.
- Three major industrial clusters,
 - Engineering, Heavy Industry and Food Processing Park.
- Smaller, mixed-use centres in between



LAND USE AND URBAN DESIGN FRAMEWORK

DIGHI PORT INDUSTRIAL AREA

0 1 km 3 km 5 km 10 km



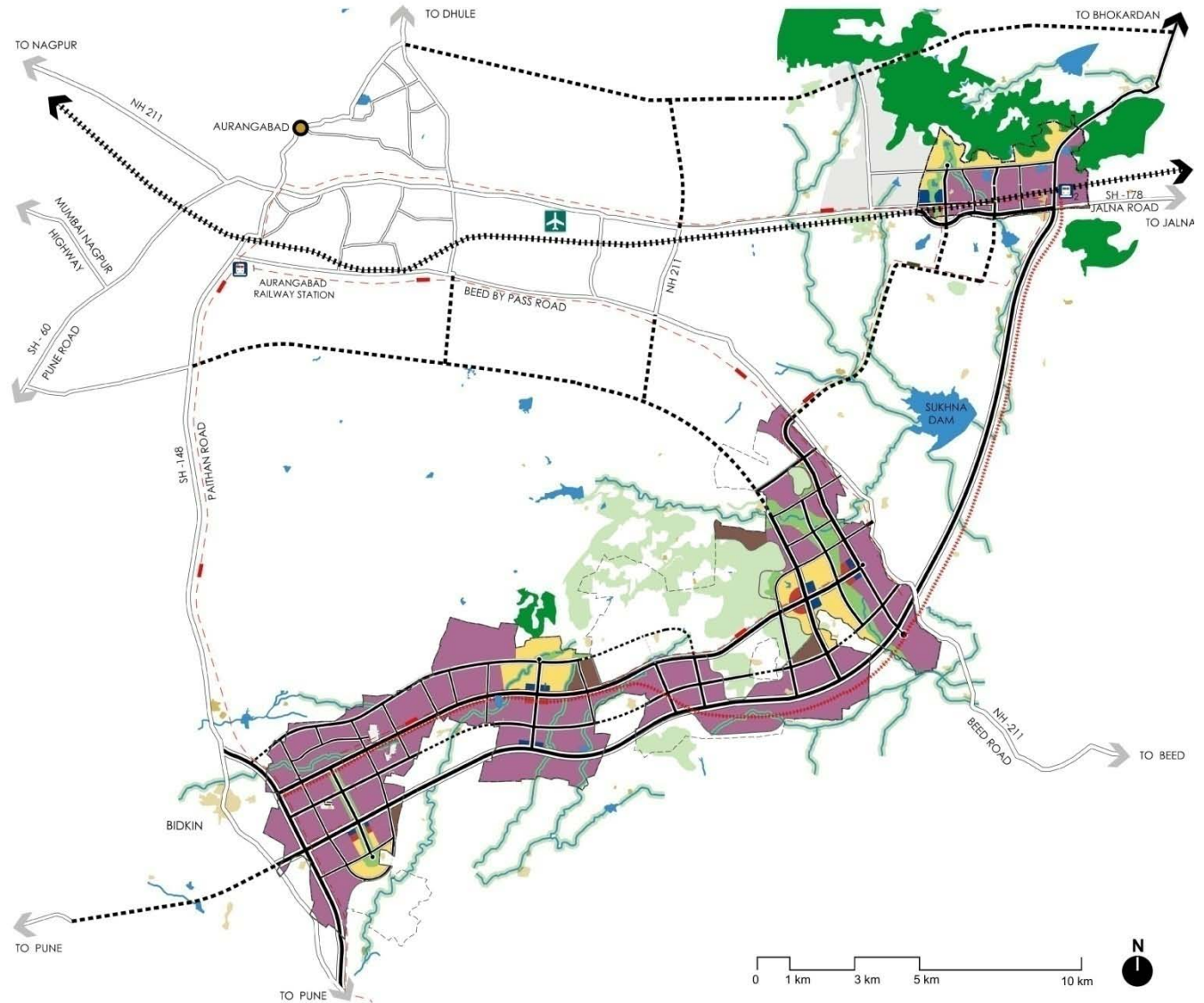




Shendra-Bidkin Industrial Park

Area: **84** sq. km

Population: **0.5** mn





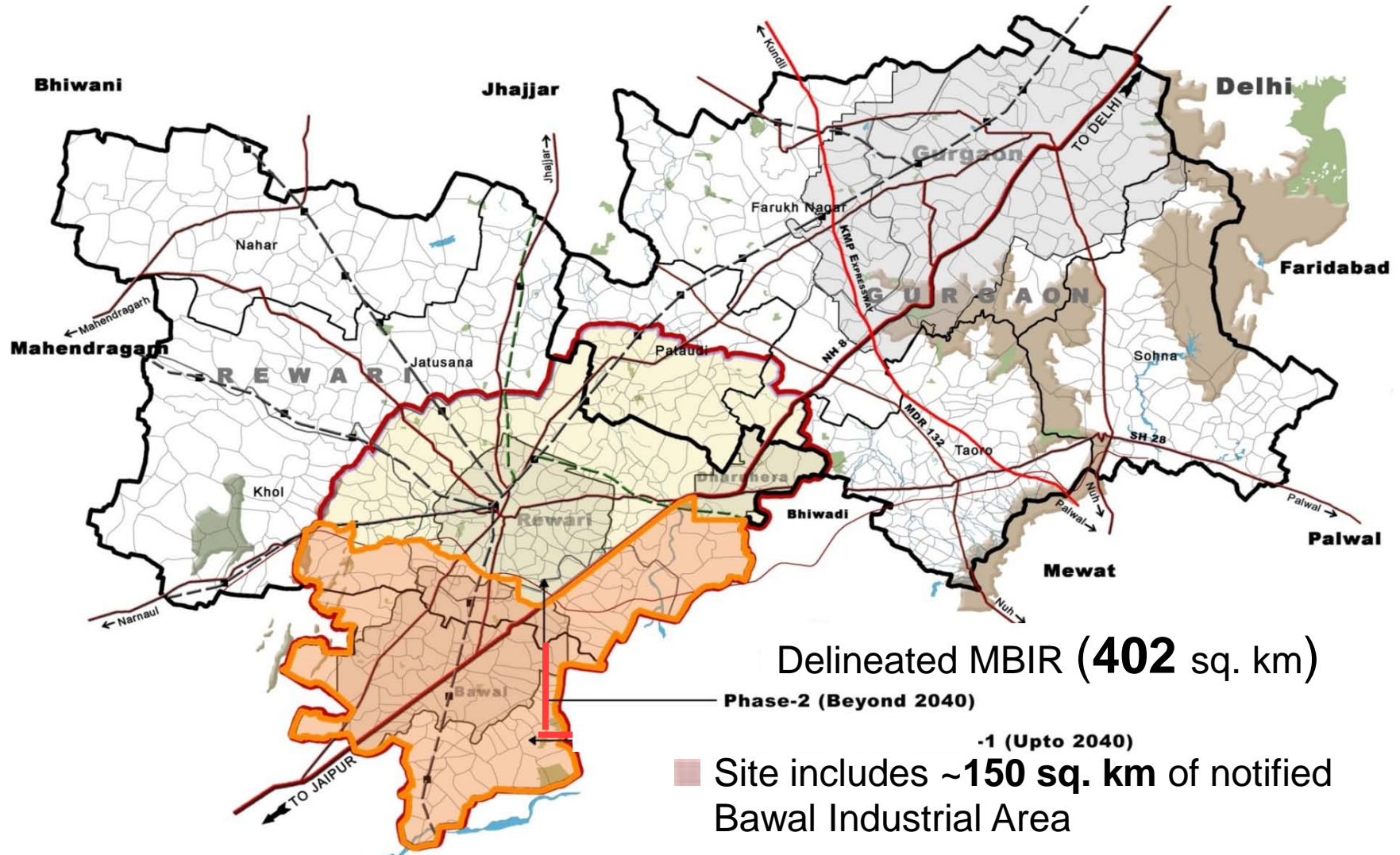


Exhibition cum Convention Centre, Aurangabad

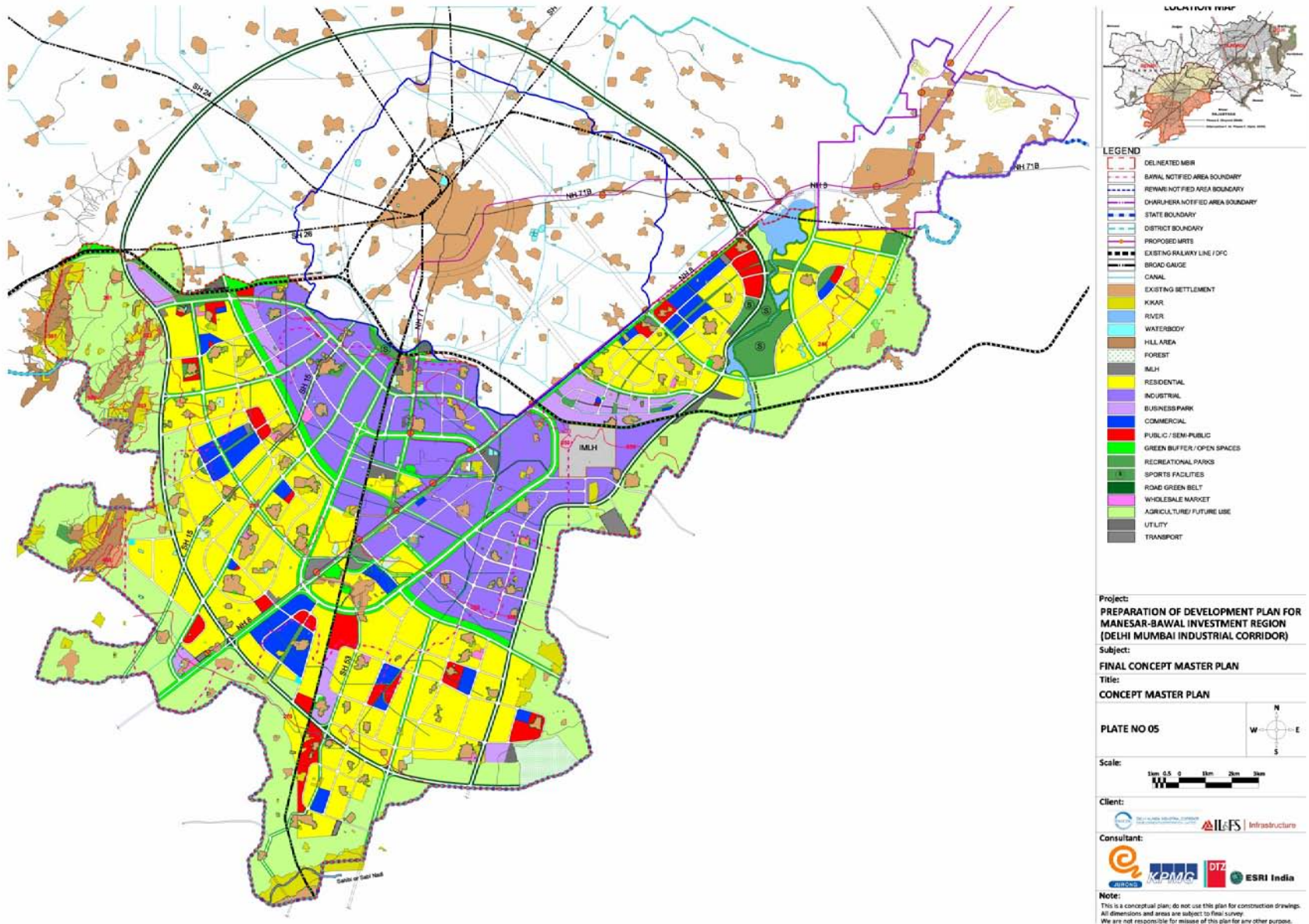
- Early Bird Project
- Site: **50 acres**
- Built up area: ECC:
30,000 sq. m



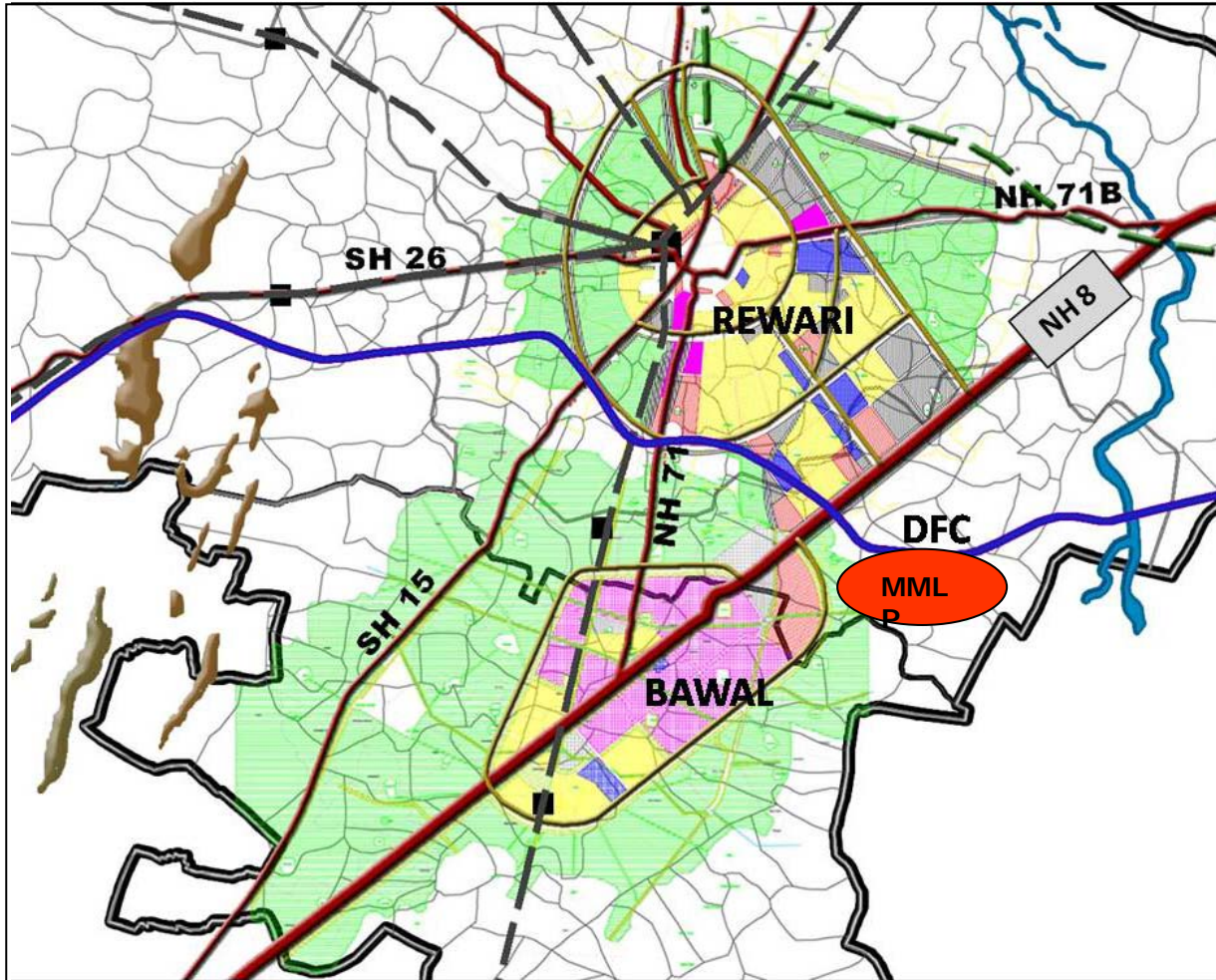
Manesar – Bawal Investment Region



The Concept Master Plan

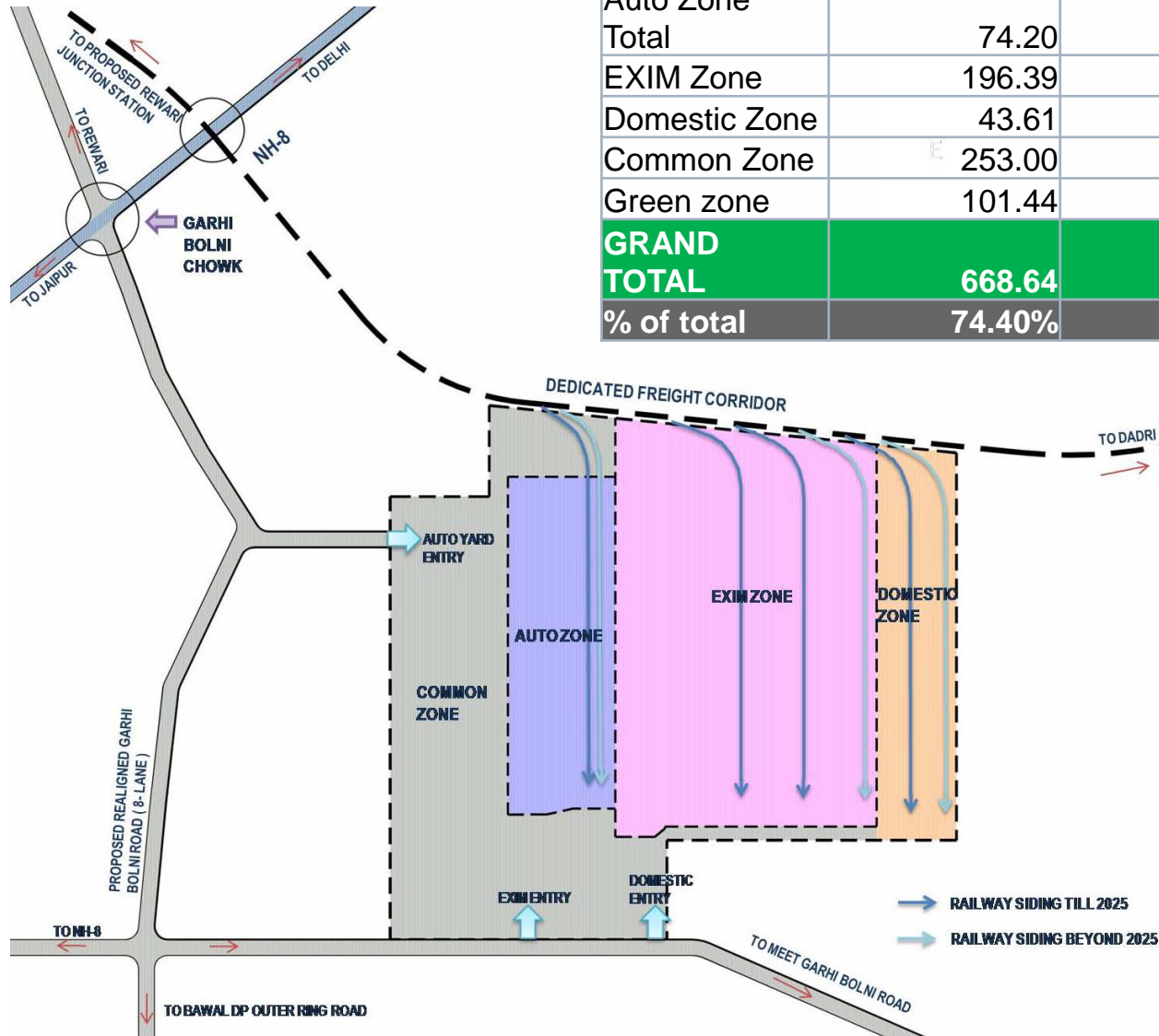


Multi Modal Logistics City at Rewari



- Strategically located at intersection of National Highway 8 and DFC
- Potential to become a Regional Hub serving NCR, especially Gurgaon, Bhiwadi and DMIC Manesar-Bawal & Neemrana Investment Regions
- Capacity: >**1.39** mn TEUs per yr plus Automobile traffic
- Site: ~ **900** acres

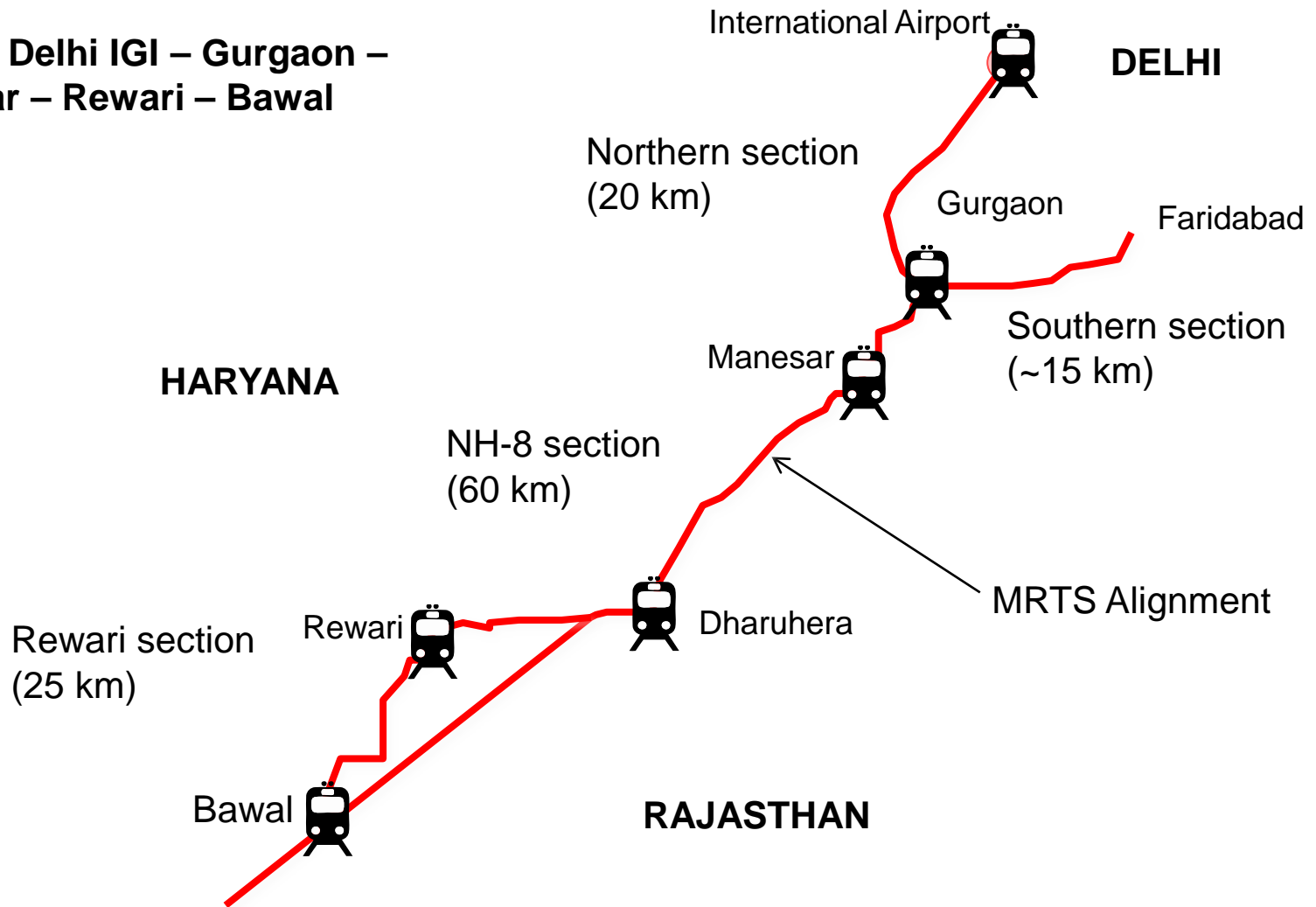
Zoning Plan



Description	2025 (Acre)	Beyond 2025	Total Area	%
Auto Zone				
Total	74.20	52.56	126.76	14.11%
EXIM Zone	196.39	118.62	315.01	35.05%
Domestic Zone	43.61	44.28	87.88	9.78%
Common Zone	253.00	14.58	267.58	29.77%
Green zone	101.44	0.00	101.44	11.29%
GRAND TOTAL	668.64	230.04	898.67	100.00 %
% of total	74.40%	25.60%	100.00%	

MRTS: Delhi IGI – Bawal

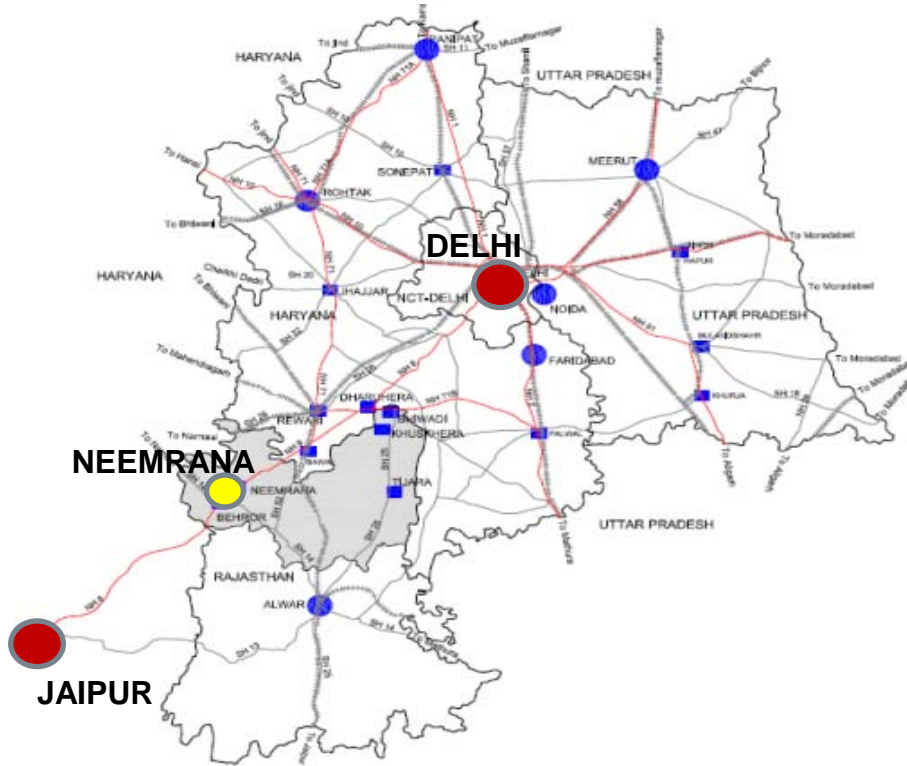
Route : Delhi IGI – Gurgaon –
Manesar – Rewari – Bawal



Total route length ~**120** km

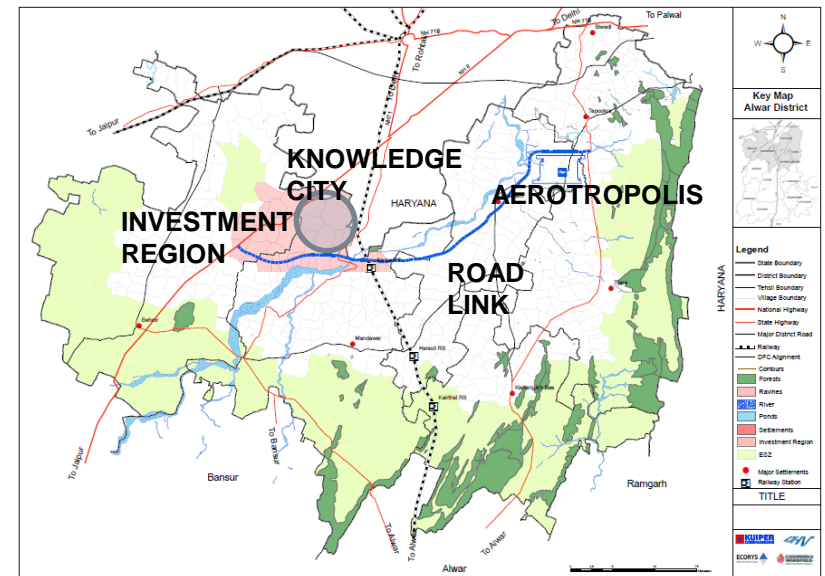
Can be extended upto Neemrana Node in Rajasthan

Khushkhera-Bhiwadi-Neemrana IR



Early Bird Projects:

- Aerotropolis
- Knowledge city
- Neemrana - Bhiwadi Road link (50 km)



Concept Master Plan for KBN Investment Region

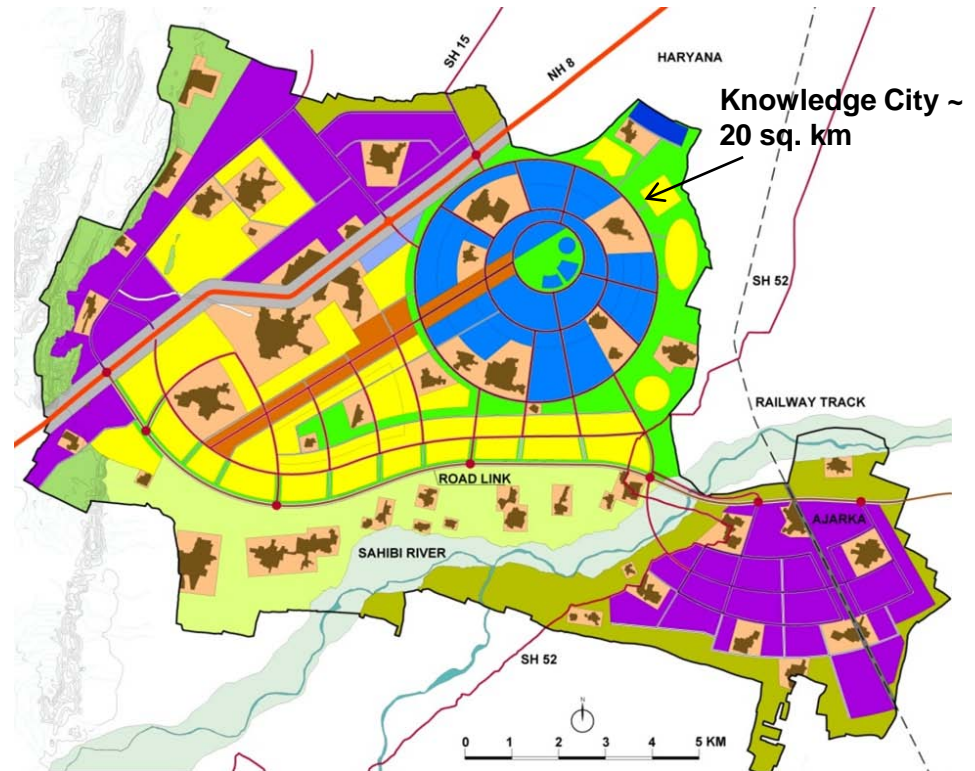
Area: **165** sq. km

Urbanisable Area – **101** sq. km

Target Population: **1.3** million

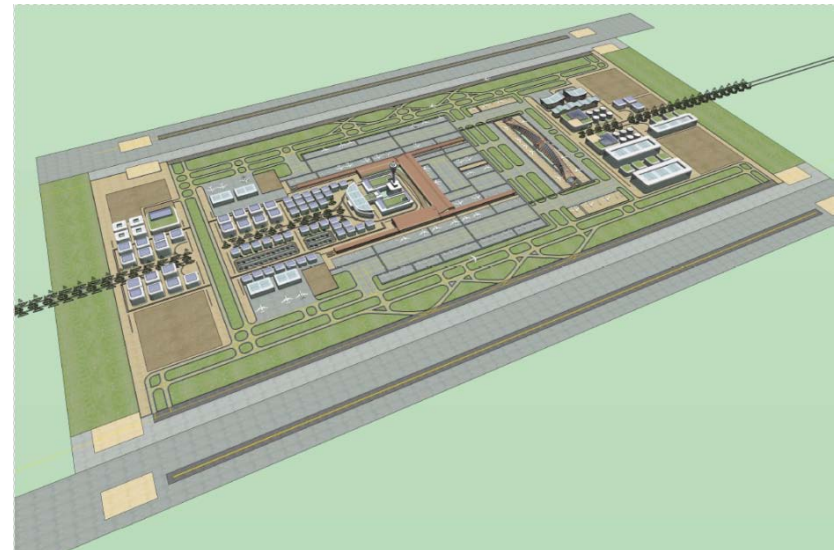
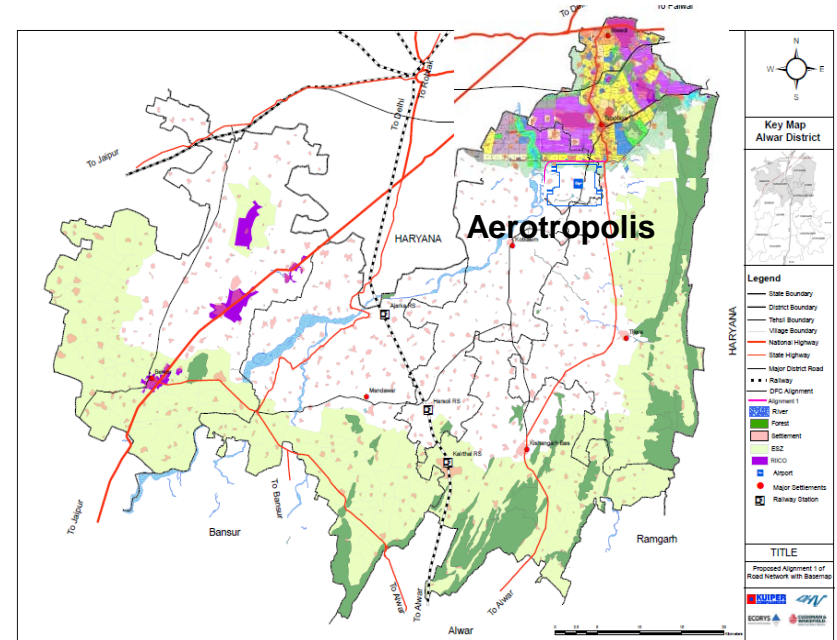
Projected Employment – **0.55** mn

Investment Region target industries -
Electronic, Automotive, Pharmaceuticals,
Bio- tech and ICT

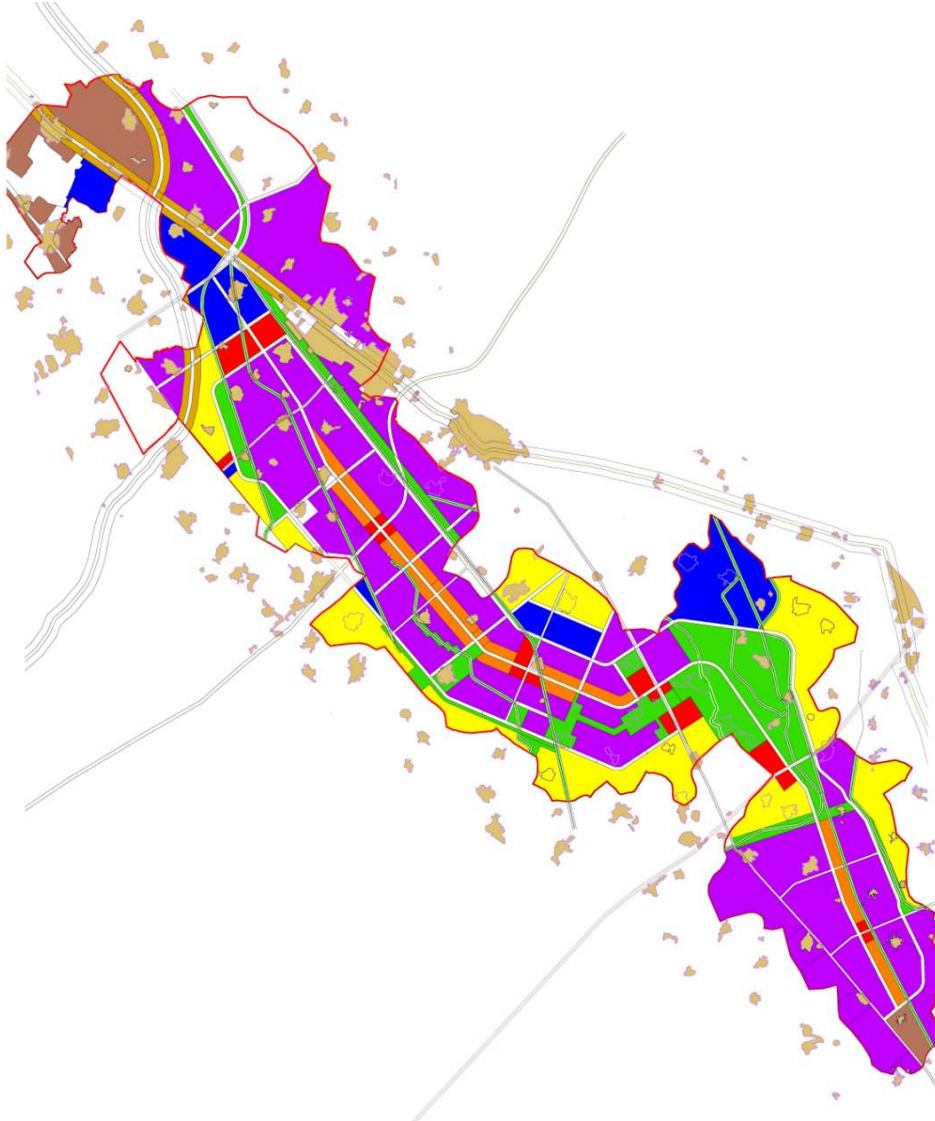


Aerotropolis

- Strategically located between Delhi and Jaipur , south of Bhiwadi Master Plan Area
- Total Area: **24 sq. km**
- Total Cost: **Rs. 4000** crores
- **Components:**
 - Passenger & Cargo traffic handling
 - Non aviation - Business Parks, Hotels, Distribution centers etc.
 - Maintenance Repair Overhaul (MRO)



Dadri Noida Ghaziabad Investment Region – Master Plan



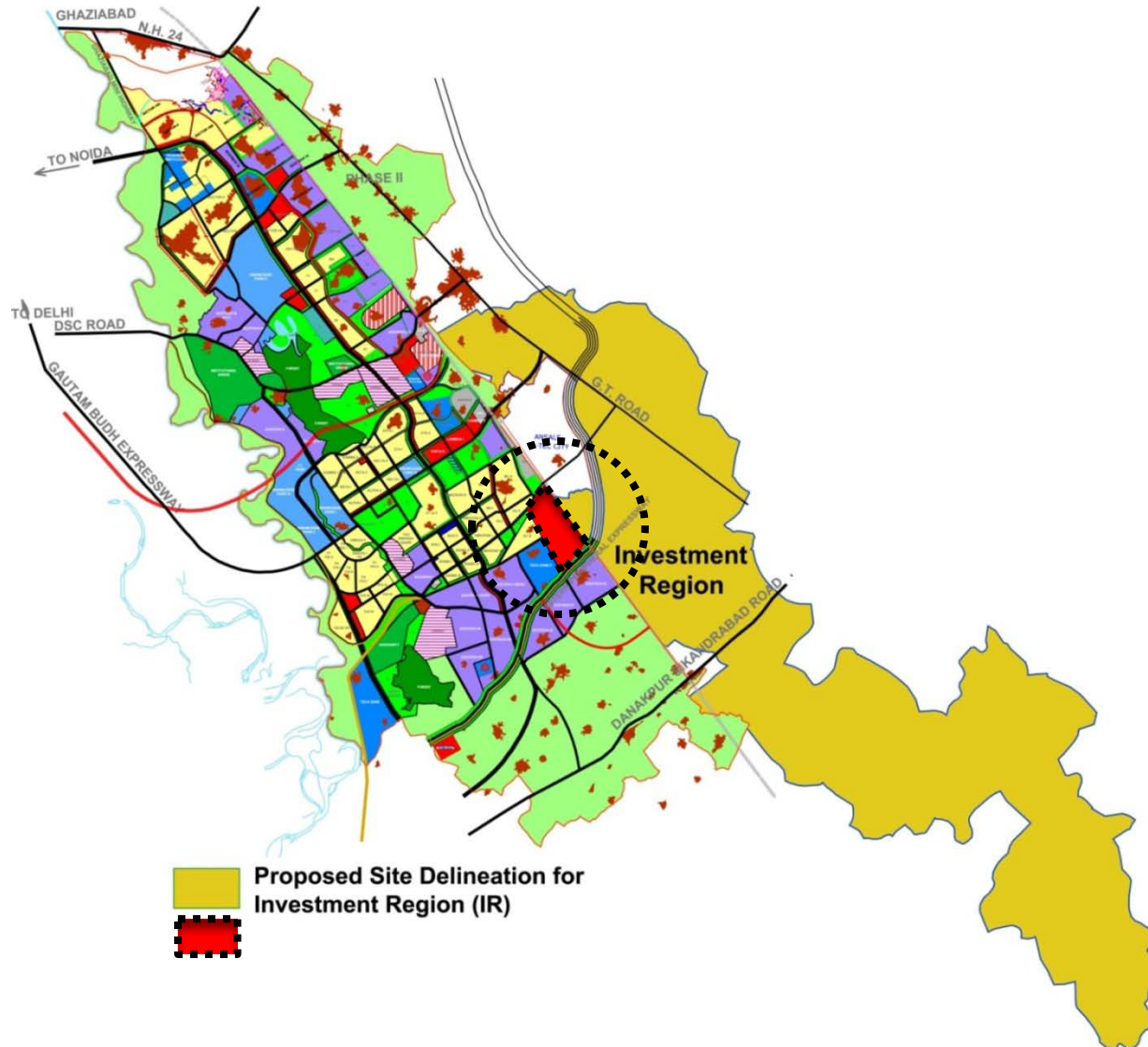
Total Area: Approx 210 sq kms

Land Use	%
Industrial Area	37
Residential	14
Commercial	4
Public - Semi Public Facilities	6
Utilities	1
Transportation	14
Green Areas / Agriculture	17
Non Developable area	7
Total	100

Integrated Industrial Township- Site Location

Hi Tech Integrated Township

Located in Greater Noida
Spread over an area of
747.5 acres



Villages :

1. Rithori,
2. Raipur Bangar,
3. Dhabra,
4. Gohri Bachera
5. Ajaibpur
6. Maycha

Integrated Industrial Township-Project Components

Promoting Knowledge – based Hi-tech Industries



New age industry sectors

R&D Services

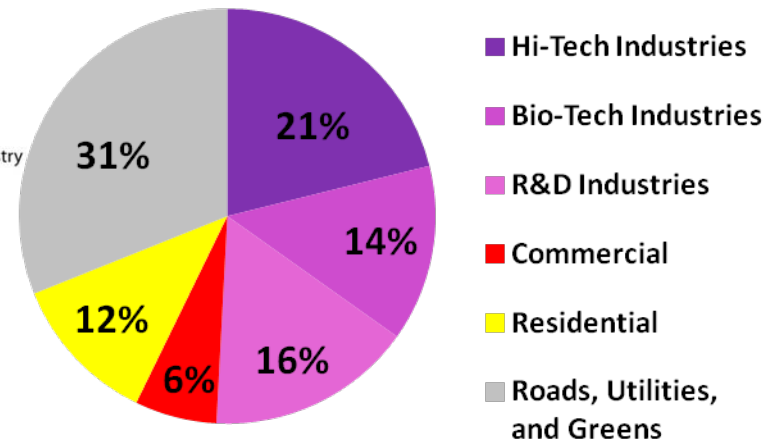
Auto, Electronics, ICT

Hi-tech Industries

Fabrication
(semiconductors)
industries,
Nanotechnology,
Optoelectronics

Bio-technology

Bio-Pharma,
Bio-Services
(clinical research),
Bio-Agri,
Bio-Industrial,
Bio Informatics

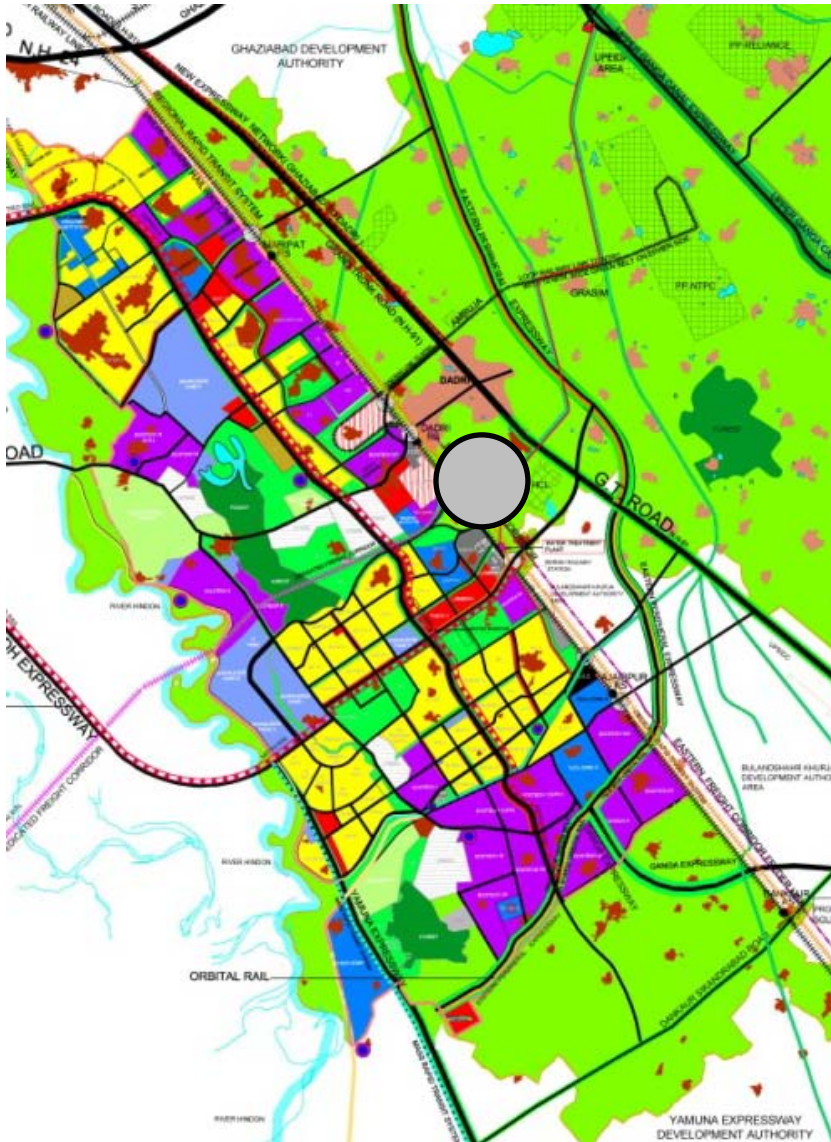


51% Industrial Land Use

Total Built-up- 6 Million sq. m

Total Employment- 58,000

Multi-Modal Logistics Hub- Site Location



Located in Greater Noida

Located on NH-91 and Delhi-Howrah
BG Line

Power Plants



Gas based Power Plants

Capacity: **1000-1200** MW each.

Sites:

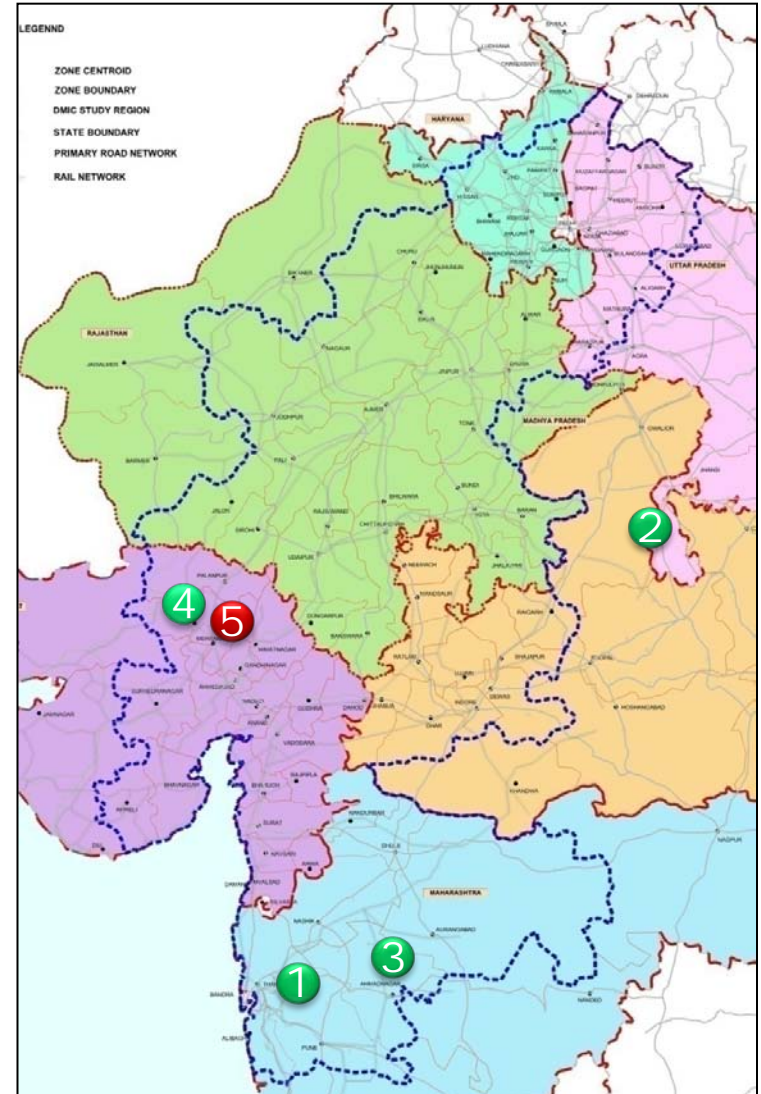
Ville Bhagad, District Raigad, Maharashtra

Chainpura, District Guna, Madhya Pradesh

Indapur, District Pune, Maharashtra

Vaghel, District Patan, Gujarat

Rajpur-Shahpur, District Mehsana, Gujarat



Dahej Desalination Project

Project	Construction of a sea water reverse osmosis (“ SWRO ”) desalination plant in Dahej, Gujarat.
Sponsors	Hitachi, Hyflux and Itochu
Production Volume	75 million gallons per day (“ MGD ”) / 336 MLD
Total Project Cost	USD [606] Million*
Offtaker	Dahej Special Economic Zone Ltd. (“ DSL ”), a JV of ONGC Petro Additions Ltd (“ OPaL ”) and Gujarat Industrial Development Corporation
Water Purchase Agreement (“WPA”)	[30]-year WPA with DSL on 100% take or pay guarantee backed by GIDC
Tariff	INR [37]* per cum +6.25%* p.a. Escalation + WPI on the variable costs



*Indicative only

Model Solar Project-Neemrana



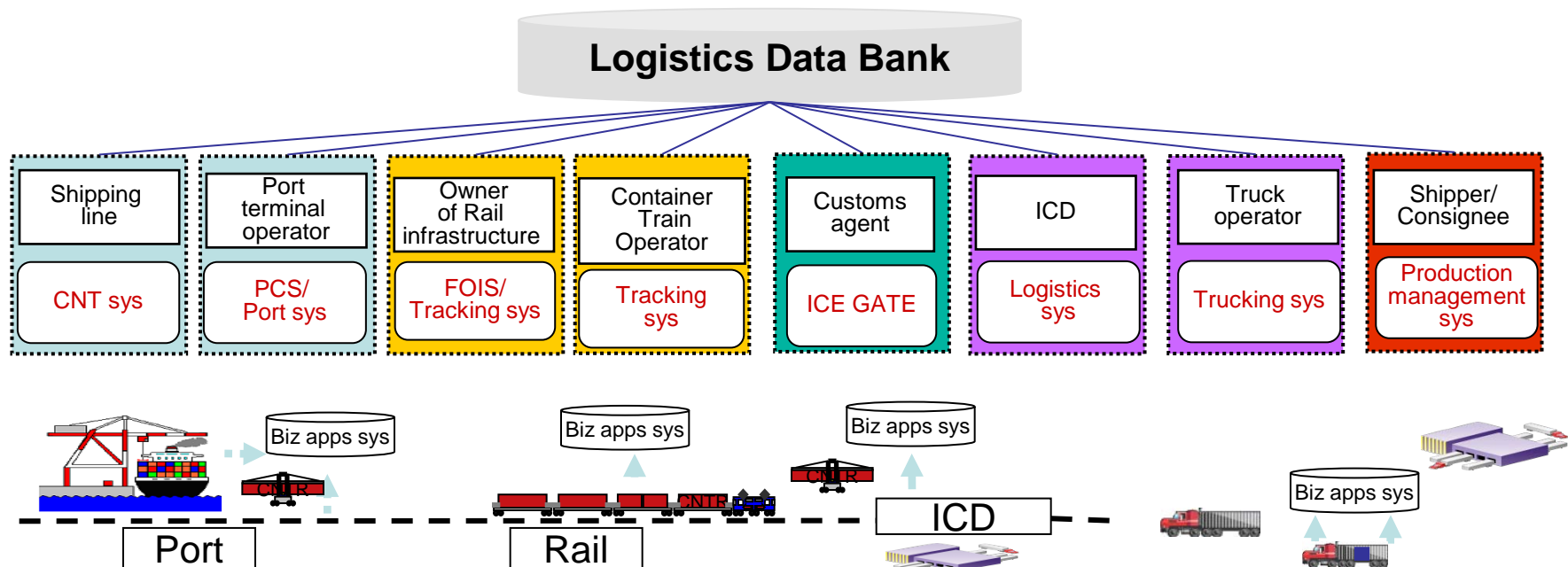
- **MoU:** New Energy & Industrial Technology Development Organization (NEDO), Ministry of New & Renewable Energy (MNRE), Ministry of Finance (MoF) and DMICDC dated April 30, 2012
- **Location:** Neemrana Industrial Park, Japanese Zone, Rajasthan, INDIA
- **Project Scheme:** 6.00 MWp Solar PV & 1.6 MW DG Power
 - 5.00 MWp Solar Power Project Feeding Power to the Commercial Grid under JNNSM scheme
 - 1.00 MWp Solar Power Project and 1.60 MW Diesel Generator Set integrated with Smart Micro Grid, Feeding Power to Industrial Consumers in Neemrana Industrial Park



DMIC Logistics Data Bank

Aimed at improving competition, reducing transportation lead time and cost by **sharing container movement information on real time basis among all agencies in the Supply Chain using an IT based platform.**

Necessary to create an extensive database at an early stage to generate rapid changes in supply chain.



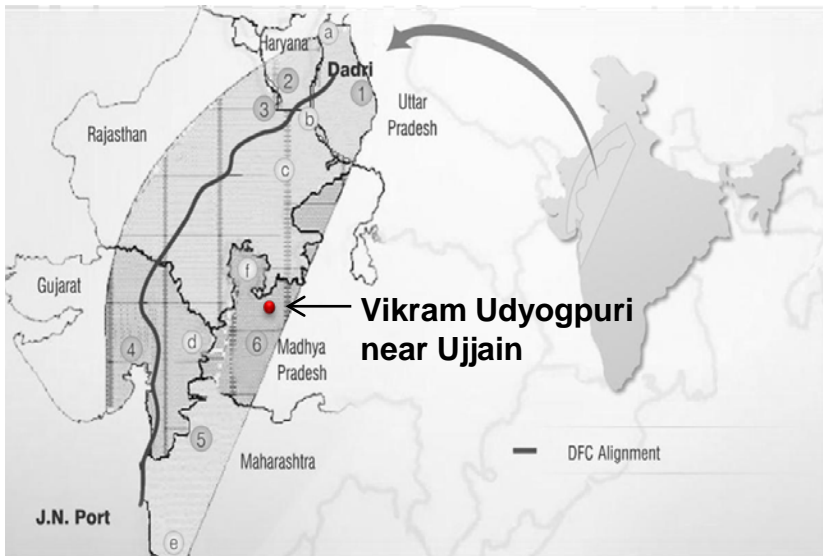
Early Bird Projects

Integrated Industrial Township at Greater Noida

- Strategically located near Delhi and spread over an area of 747.5 acres in Greater Noida
- Employment generation capacity of over 2 lakh jobs
- Will attract investment to the tune of Rs. 35000 crores
- Complete plug and play factories with vertical manufacturing
- Suitable for High Tech, R & D, Bio –tech industries



Vikram Udyogpuri



- Integrated Industrial Township (IIT) is an Early Bird Project to initiate industrial development for the takeoff of the Pithampur-Dhar-Mhow Investment Region while providing essential infrastructure and services to support establishment of institutions that would create a skilled and employable workforce
- The project is located about 8km from Ujjain and 12km from Dewas and has a total area of 443.79 Ha (1096.63 acres)



Global City project, Haryana

- Spread over an area of **1100** acres close to Gurgaon
- Has the potential to generate **25%** more GDP than that of Gurgaon
- Will generate over to **200000** jobs



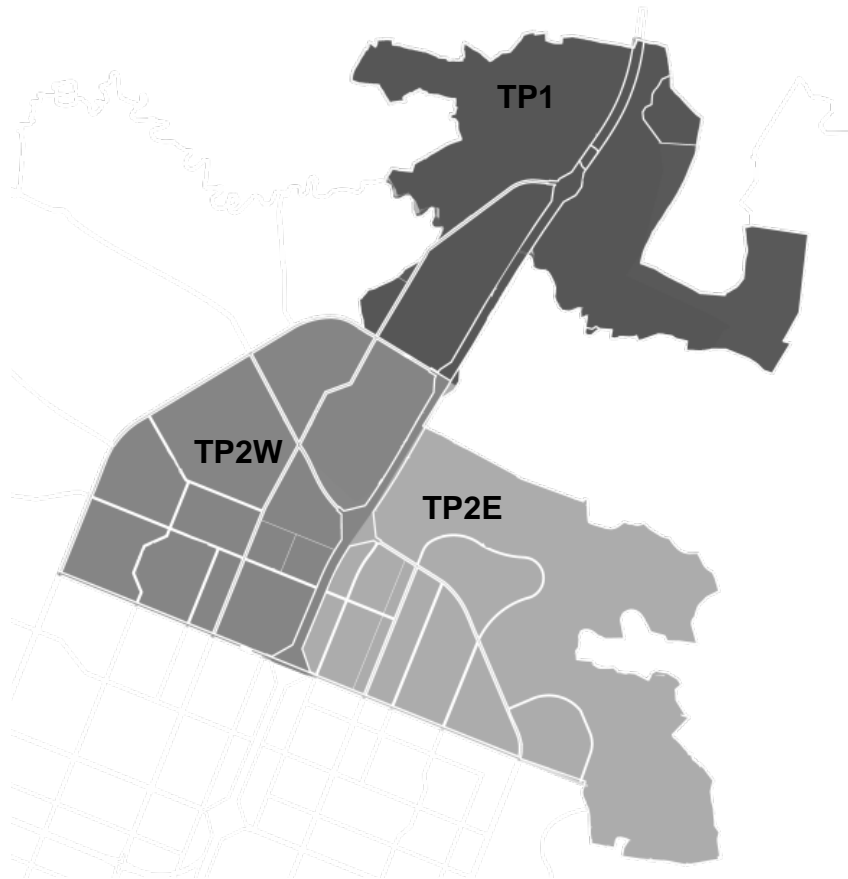
Dholera Phase -1 in Gujarat

Area to be developed in phase 1a-

154 sq. kms

Validated Construction Cost (2013) ~

INR **20,000** Crores (USD 3333 Million)



Base (Flat) Infrastructure Include:



Roads and Utilities (TP 1 & 2) : 550 kms



Potable Water: Raw Water Pipeline from Periej Dam and Water Treatment



Sewage: CETP and STP (RecyclePlants)



Industrial Water: Effluent Pipeline from AMC & Tertiary Treatment Plant



Stormwater: Collection and Treatment



Flood: River Training and Bunding



Solid waste: Transfer and Treatment



Power: Transmission and Distribution



ICT: Networks



Related Projects (RRTS/MRTS, Airport)



Phase – 1 of new industrial city at Shendra, Maharashtra (24 sq. kms)



Multi Modal Logistics Park at Karmad (125 acres)

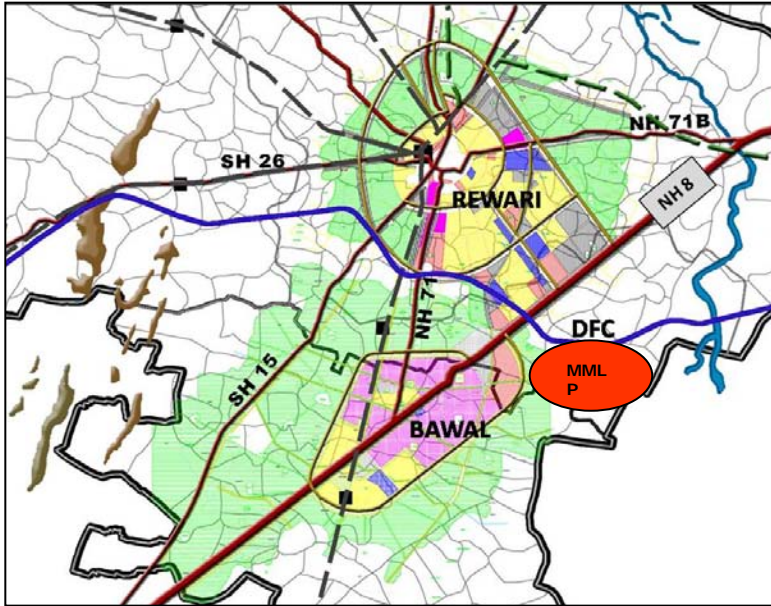


Water Supply Scheme for Shendra



Mixed used development over an area of 50 acres

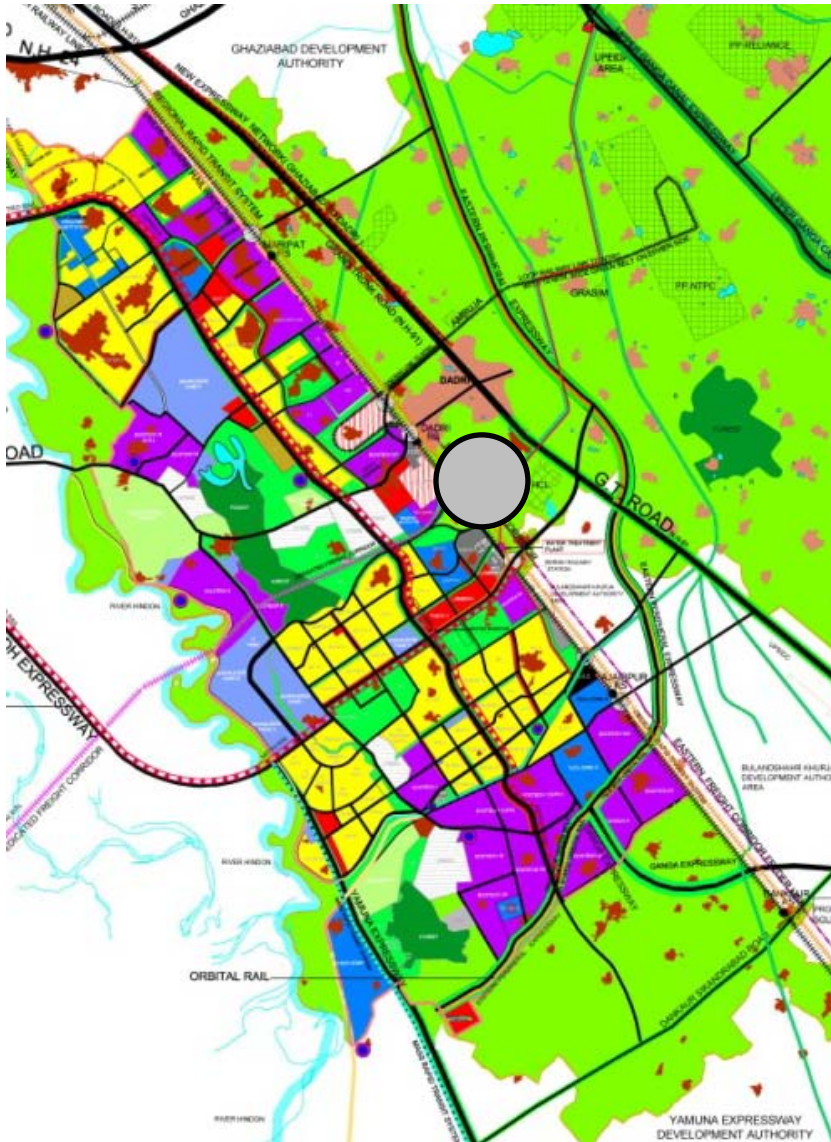
Multi Modal Logistics City at Rewari



- Strategically located at intersection of National Highway 8 and DFC
- Potential to become a Regional Hub serving NCR, especially Gurgaon, Bhiwadi and DMIC Manesar-Bawal & Neemrana Investment Regions
- Capacity : **>1.39 mn TEUs** per yr plus Automobile traffic
- Site: ~ **900 acres**



Multi-Modal Logistics Hub- Site Location



Located in Greater Noida

Located on NH-91 and Delhi-Howrah
BG Line

Other MMLPs being planned in DMIC Region

- MMLP - Pithampur, Madhya Pradesh - 175 acres
- MMLP - Karmad, Maharashtra - 125 acres
- MMLP - Sanand, Gujarat - 500 acres

Key components:

- Integrated systems accessible by multiple modes of transport
 - Container terminals
 - Warehouses
 - 3rd Party logistics players
 - ICD/CFSs
 - Banking and Insurance
 - Facilities for manufacturing, packaging, parking, mechanized handling, inter-modal transfers, sorting and grading.
 - Aggregation/disaggregation to handle domestic and EXIM Freight.
- Integrated systems accessible by multiple modes of transport.



Exhibition cum Convention centre at Dwarka, New Delhi



- Strategically located in Sec 25-26, Dwarka near Delhi IGI Airport
- Will generate approx 200,000 jobs by 2040

ECC & IFC at Dwarka- Concept Plan



**Total Site Area- 154 Ha
(380.53 acres)**

- **Exhibition halls** – 2 million square feet
- **Convention centre-** 6000 fixed seating capacity
- **Multi-purpose Arena-** 18,000 capacity
- **3500 hotel keys-** 4-5 star, business hotels, service apartments
- **Commercial office space**
- **Multi-level parking**
- **Green open space**
- **IFC** – to be developed as Air Cargo Complex

Institutional & Financing Structure approved by the Cabinet

GoI Capital Grant, leveraged through Infra Bonds, Multilaterals

GOI Grant will be Revolving in nature to enable development of more cities

The Fund will be set up as a Trust, administered by a **Board of Trustees**. It will be chaired by Secretary, DEA and will comprise Secretary, DIPP, FA (DIPP), representatives of Dept. of Expenditure, Planning Commission, and CEO & MD, DMICDC, who will also be the CEO of the Fund/Trust.

DMIC Apex Authority at GoI
(chaired by FM)

State Apex Authority
(Chaired by CM)

State Govt.

DMIC Project Implementation Revolving Fund

Board of Trustees

DMICDC
(Knowledge Partner to the Fund)

Equity

Fund will contribute Debt & Equity to SPVS on a case to case basis after investment proposals submitted by DMICDC are appraised, approved and sanctioned by the Board of Trustees.

Debt

Debt Service

DMIC Investment Node Nodal/ City Level SPV

Land

Equity / Debt

GOI funding to SPV to be utilised for Non- PPP projects

Non PPPable Projects

Logistics Holding Co.

SPV 1

SPV 2

SPV 3

Power Holding Co.

SPV 1

SPV 2

SPV 3

Water Holding Co.

SPV 1

SPV 2

SPV 3

Transport Holding Co.

SPV 1

SPV 2

SPV 3

Infra SPV

Infra SPV

Infra SPV

Infra Project SPV

Infra Project SPV

Infra Project SPV

PPP-able Infra Projects

Concessions to be granted by the Nodal/ City Level SPV (for internal infra) and State Govt. (for external infra)

Opportunities across the value chain...1/2

PPP

- The policy and regulatory frameworks (concession agreements) are well established
- Substantial scale-up in the last 5 years which has created opportunities for various companies to venture as “Project Developers

Contractors/ Consultants

- Business Opportunities from implementing agencies who will sub contract construction
- Skilled manpower and sophisticated construction technology available
- Mega projects like Delhi Metro, Highway, airports, ports projects have already showcased business opportunities for contractors

O&M Operators

- Emerging area of opportunity and has few players
- Going forward, the sectors will require equipments, systems and software

Opportunities across the value chain...2/2

Equipment Suppliers

- Consistent demand of equipment due to mega infrastructure development across sectors
- Huge business potential for overseas players to enter the market

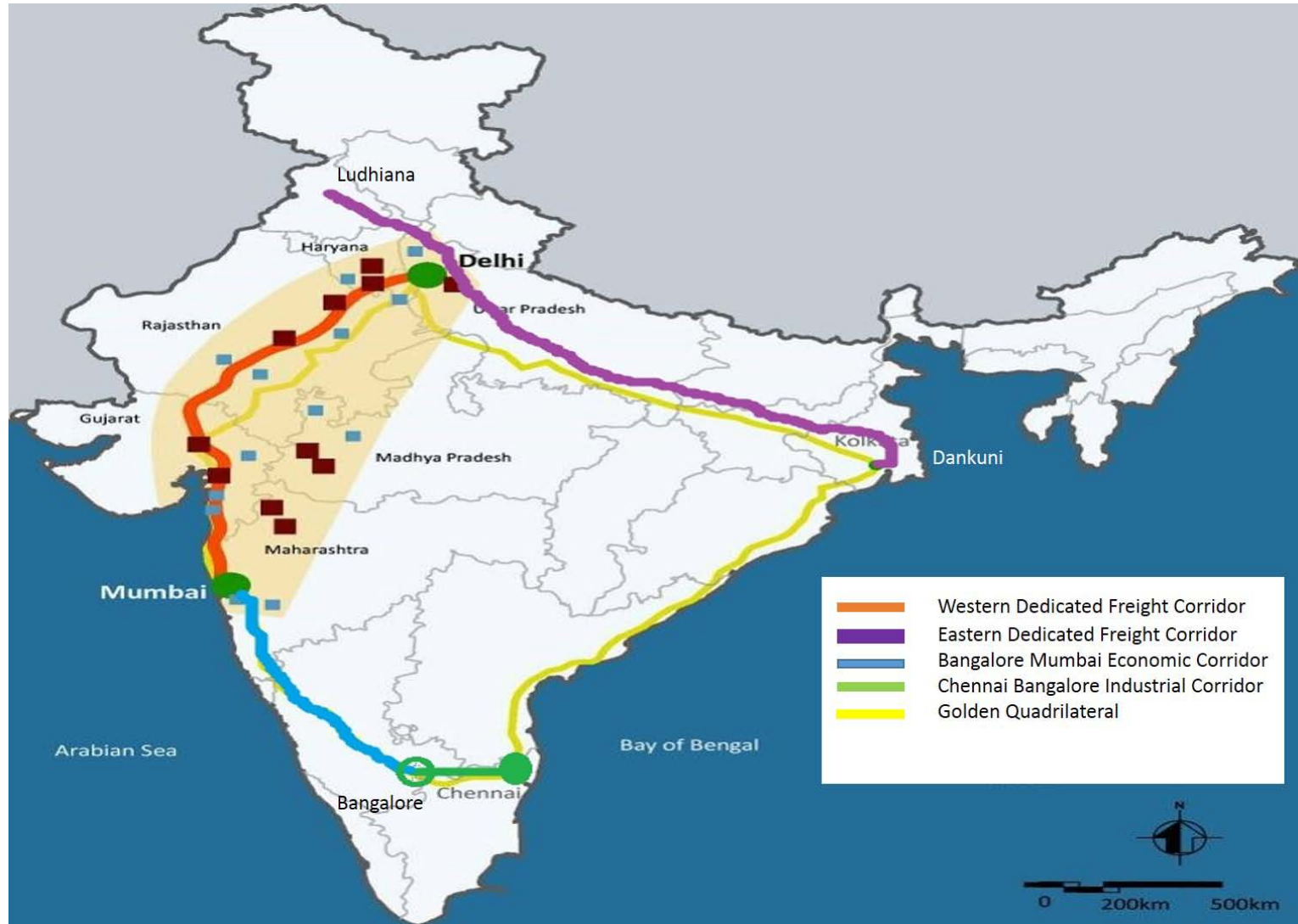
Rolling Stock Suppliers

- Increasing demand for various types of passenger & freight rolling stock
- Current domestic capacity caters half the demand and hence increasing imports
- Attractive opportunity exists for private players

Financing

- Various Financial Institutions and PE firms have already entered into the development area, incl. several Japanese banks
- Attractive opportunity exists for FIs, PE firms, private investors

Other Industrial Corridors being planned in India



These corridors will transform India as a manufacturing hub in next one decade.

Thank you