

Integration of RRTS with existing settlements on the corridor



27.10.2023

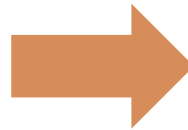
Impact of RRTS - Enhancing one-hour-reach

Creating Network of Networks - Polycentric Development

8 RRTS corridor proposed around NCR



**Area covered by
Metro in 1 hr
(R - 30 Km)**



**Area covered by
RRTS in 1 hr
(R - 100 Km)**

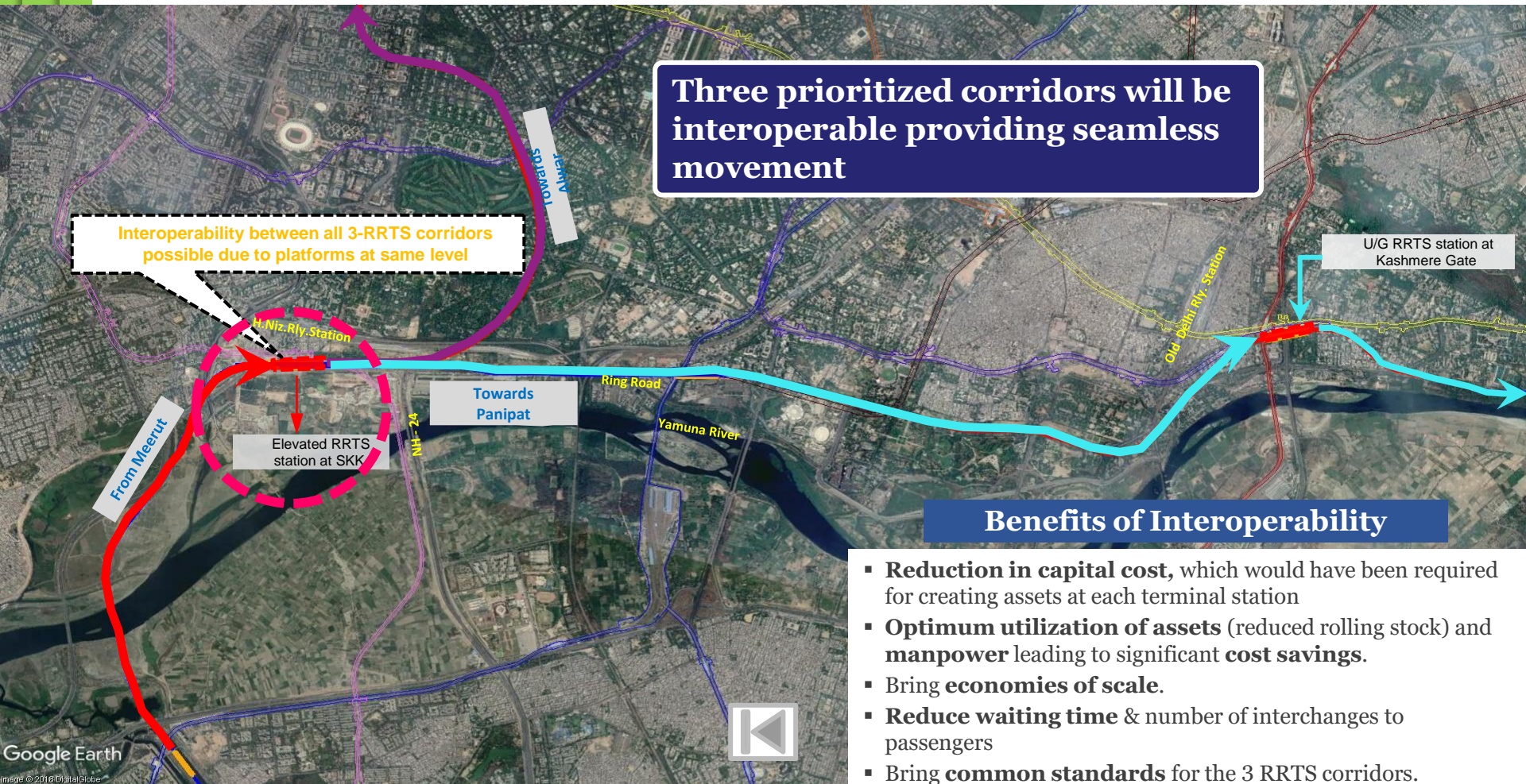
Inauguration of India's first RRTS

NamoBharat Trains

- ❑ Project sanctioned and approved by Govt. of India – March 2019
- ❑ Foundation Stone Laid by Hon'ble Prime Minister – 8th March 2019
- ❑ Construction started in June 2019
- ❑ **17Km Priority Section inaugurated by Hon'ble PM on 20th October 2023 and is now operational for public**
- ❑ Full corridor to be commissioned by June 2025



Interoperability among all three prioritized RRTS corridors at Sarai Kale Khan



Benefits of Interoperability

- **Reduction in capital cost**, which would have been required for creating assets at each terminal station
- **Optimum utilization of assets** (reduced rolling stock) and **manpower** leading to significant **cost savings**.
- Bring **economies of scale**.
- **Reduce waiting time** & number of interchanges to passengers
- Bring **common standards** for the 3 RRTS corridors.

RRTS Alignment Diverted to Connect Multimodal Transit Hubs for Efficient Integration



Key components of multimodal integration



Network Integration

- Transit networks to be complementary not competing
- *RRTS (backbone) integrating with Delhi Metro, Meerut Metro, Gurugram Metro*
- *PM GatiShakti NMP*



Physical Integration

- Making transfers among transit systems more efficient
- *Integration with other modes – Sarai Kale Khan*
- *In-station facilities*



Operational Integration

- Coordination of routes, schedules and frequencies
- Integrated timetable of RRTS and buses
- All 3 RRTS corridors (Phase 1) – interoperable at SKK



Information & Ticketing

- Common fare ticketing
- Transit Information
- Integrated journey planner
- NCMC, MaaS

Institutional Integration

- To enable coordination among implementing agencies
- Committees of MMI, UTTIPEC, UMTA, NCRPB

Connecting existing settlements: Interoperability & Multimodal Integration



- 1 All three prioritized corridors will converge at Sarai Kale Khan
- 2 Three prioritized corridors will be interoperable providing seamless movement
- 3 Multimodal integration (MMI) with various modes of public transport
- 4 Local transit services on RRTS infrastructure over 21 Km with 13 stations in Meerut

Modes

MMI



Metro Rail Systems

Delhi Metro: With 7 metro lines, at Ghaziabad, Anand Vihar, New Ashok Nagar, SKK, INA, Aerocity, Indraprastha, Kashmere Gate, Munirka, Burari X-ing

Meerut Metro: At Begumpul

Gurgaon Rapid Metro: Udyog Vihar

Bawal Metro: At Panchgaon, Kherki Daula



Airport

At Indira Gandhi International Airport, Delhi – Aerocity Metro Station



Indian Railways

Hazrat Nizamuddin & Anand Vihar



ISBTs

Sarai Kale Khan, Kashmere Gate, Anand Vihar, Panchgaon, Panipat



Other Bus Terminal/Depot

Kaushambi (Ghaziabad), Sahibabad, New Ghaziabad, Muradnagar, Modinagar, Bhainsali (Meerut), Gannaur, Panipat



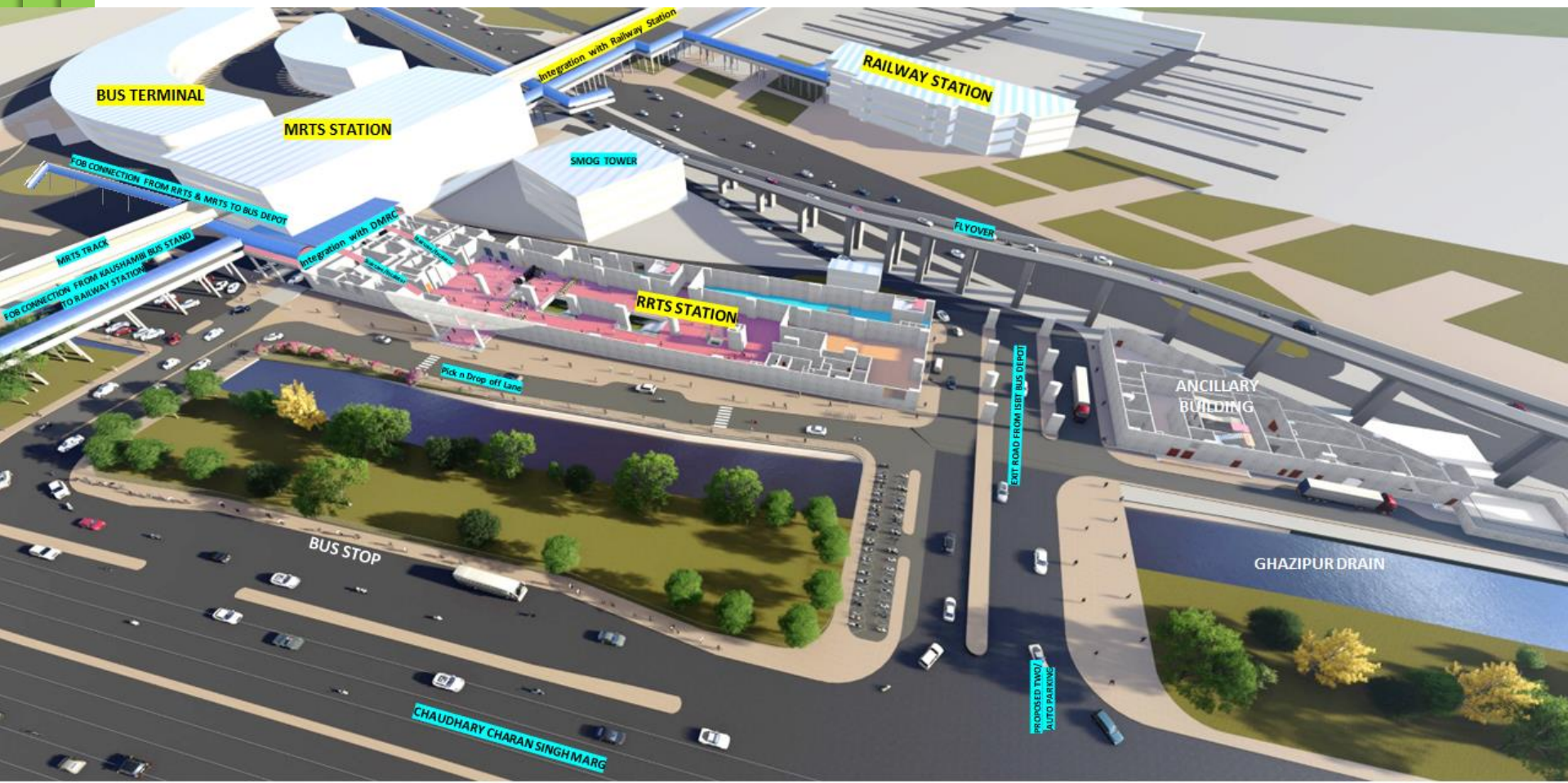
Roads

Ring Road, Eastern Peripheral Expressway, Delhi-Meerut Expressway

Multi Modal Integration at Sarai Kale Khan RRTS Station



Multi Modal Integration at Anand Vihar RRTS Station

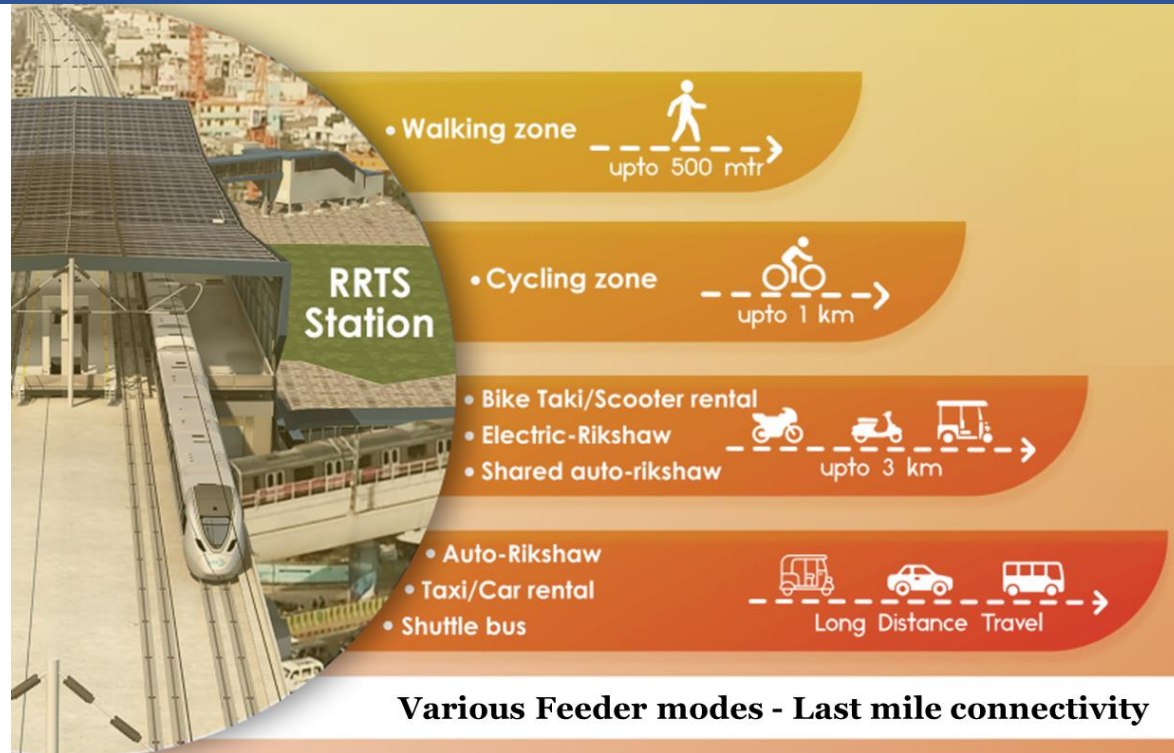


Door to Door Mobility – Key Enabler for Mode Shift



Integration of Feeder Modes at Station & Catchment area

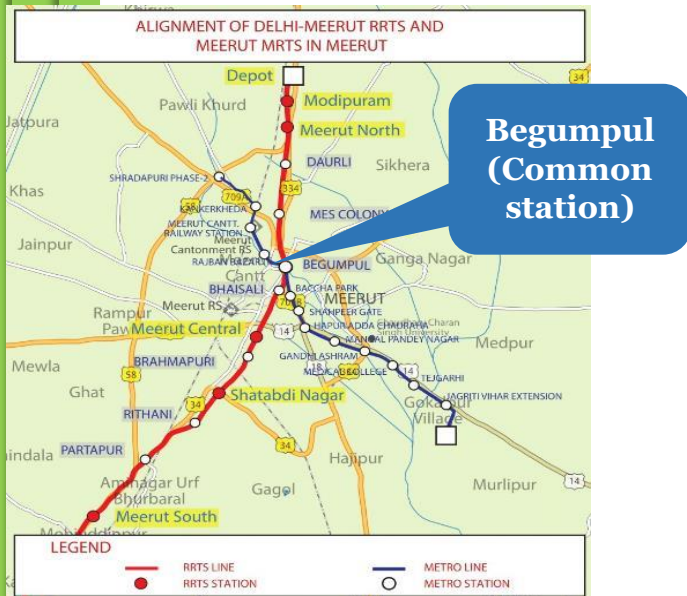
- Developing multiple mode options to connect catchment in various distance range.
- Harnessing Private Partnership in providing organised Last Mile Connectivity.
- Provision of Pickup/drop off areas and Park & Ride Facilities



Integration of Feeder Modes at Station – Pickup/ Drop off and holding areas



Integration of Metro Services in Meerut on RRTS Infrastructure



Outcomes

Savings in capital costs ~ ₹ 6,350 Crores

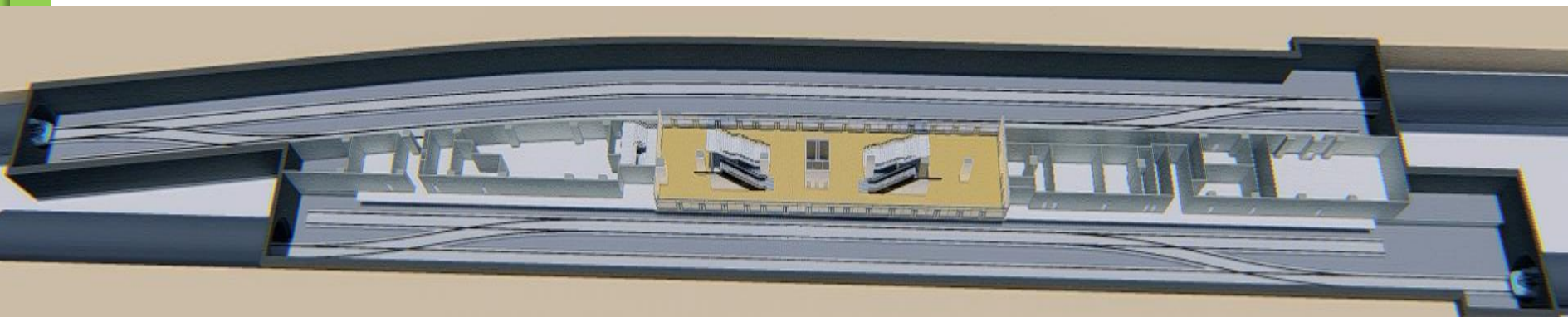
Synergies between RRTS and Metro in Meerut

Better utilization of
resources & no
competition for
ridership

In conformity with
New Metro Policy to
join City Centre to
City Centre by RRTS

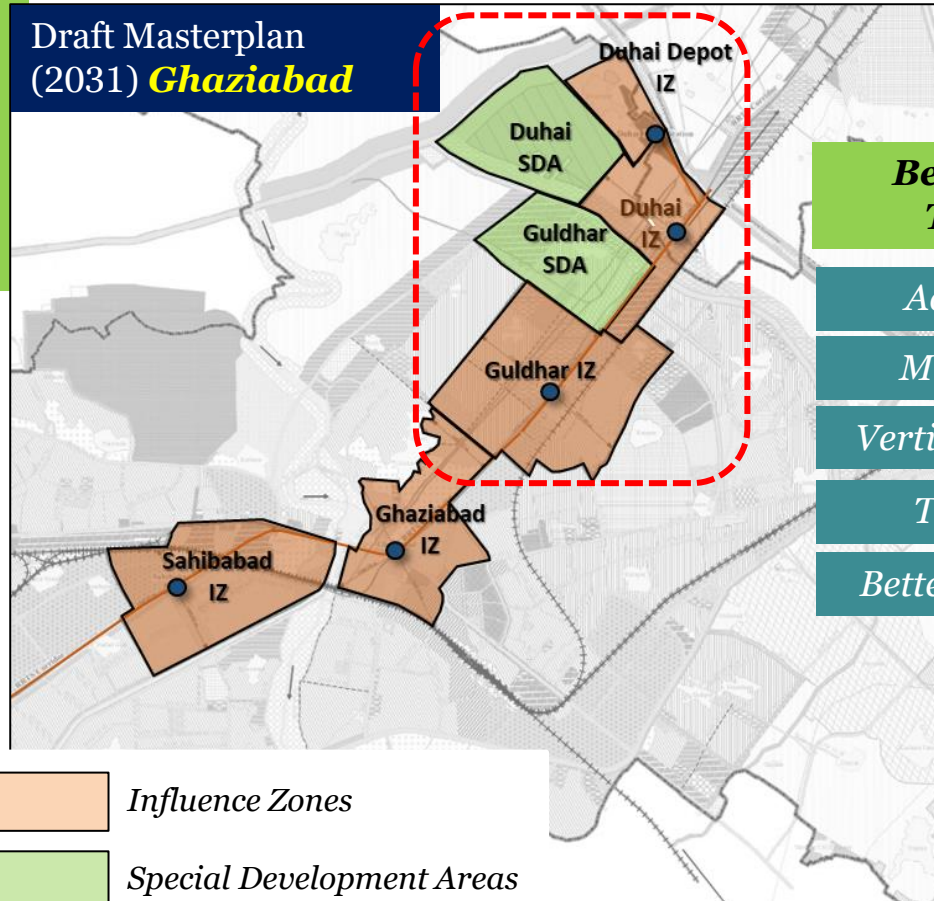
In line with scheme in Delhi and other places

Win-Win situation

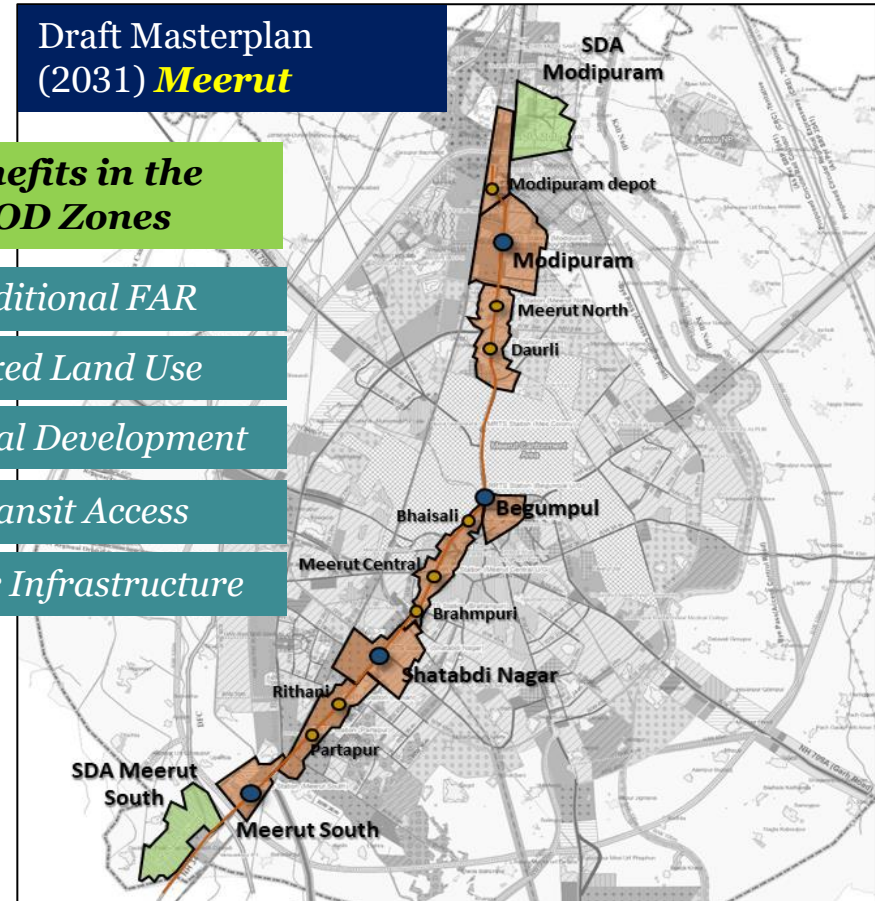


Existing/ new settlements – densification TOD Zones on the RRTS project

Draft Masterplan
(2031) **Ghaziabad**



Draft Masterplan
(2031) **Meerut**



Benefits in the TOD Zones

Additional FAR

Mixed Land Use

Vertical Development

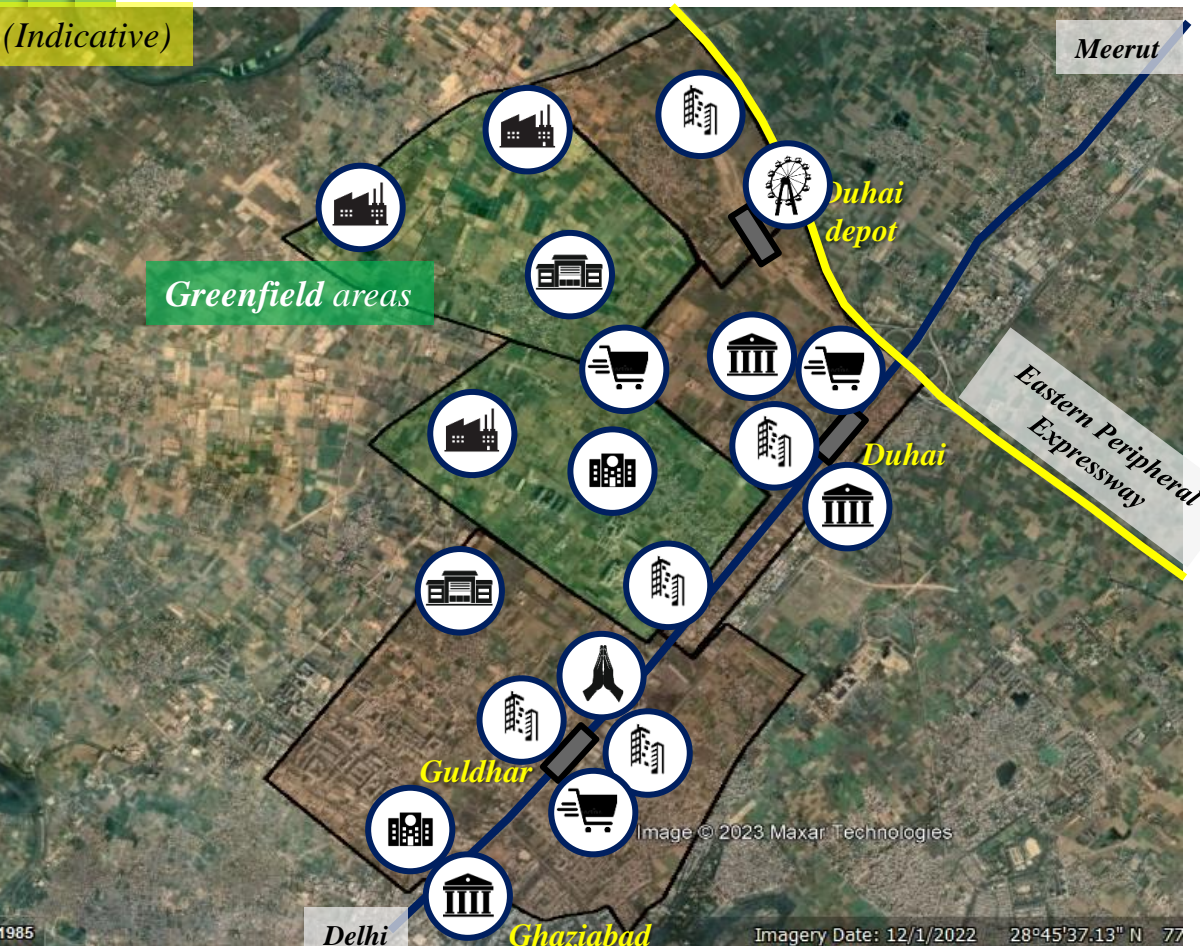
Transit Access

Better Infrastructure

Existing/ new settlements – densification

TOD Planning along the RRTS corridor

(Indicative)



TOD Zones be planned in an integrated manner through **Zonal Development Plans**, ensuring **mixed use development**

High to Mid Rise Residential



Commercial – Offices & Retail



Hospitality



Healthcare



Recreation & Entertainment



Industries



Warehousing



Public Amenities



Institutional

Government's focus on MMI

S.No.	Reference Letter & Date	Nodal Department	Salient Content
1.	ST-18011/2/2022-DM&A dated 05.05.2022	Niti Aayog (Data Management & Analysis vertical)	Integrated Platform for Passenger Mobility Stack – Initiating discussion within Working Group
	K-14011/15/2022-MRTS-Coord dated 30.05.2022	MoHUA (MRTC Coord Desk) as Working Group Member	For integrating information of Metro/RRTS Projects
2.	No. K-14011/06/2022/ MRTS-Coord dated 20.05.2022	MoHUA (MRTC Coord Desk)	Constitution of Committees on Multi-Modal connectivity between MRTS and Railway Stations/Urban Buses, RRTS in Delhi & Other States
3.	DO No. 2/1/2022-PPU dated 21.06.2022	Ministry of Finance (Deptt. of Economic Affairs)	GIS Based Database (Gati Shakti Portal) for Integrated Information of all Infrastructure/ Utilities/ Economic Zones – Request for providing .kml or project coordinates for Bird Eye View on Google Earth
	No. K-14011/07/2022/ MRTS-Coord dated 24.06.2022	MoHUA (MRTC Coord Desk)	For integrating information of Metro/RRTS Projects
4.	No. 1181/8-7-2022 dated 20.09.2022	Housing & Urban Planning Department – 07 (GoUP)	Multimodal Integration of Metro Network with Indian Railway Network/Urban Buses for the cities of Lucknow, Kanpur, Noida & Gr. Noida – Initiating discussion for preparing mechanism & implementation plan for spending Budgetary provisions on Multi-modal connectivity
5.	No. K-14011/06/2022-MRTS –Coord dated 27.09.2023	MoHUA (MRTS Coord Desk)	Multimodal Integration of Metro Network with Indian Railway Network – Requesting nomination of Nodal officer for initiating discussion of feasibility of Multi-modal connectivity with Indian Railway Stations
6.	No. K-14011/10/2023-MRTS Coord dated 09.10.2023	MoHUA (MRTS Coord Desk)	Multimodal Integration of Metro Network with Airport – Requesting Metro/RRTS PIAs to discuss and review Multi-modal connectivity of MRTS/RRTS network with Airport



गति से प्रगति

Thank you



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