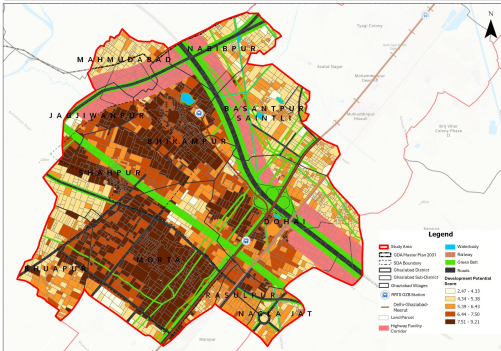


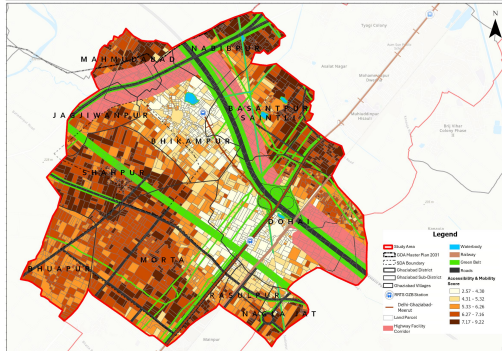
## Land Value Capture Readiness Index (LVC-RI) of RRTS Corridor, Ghaziabad

Development Potential Map



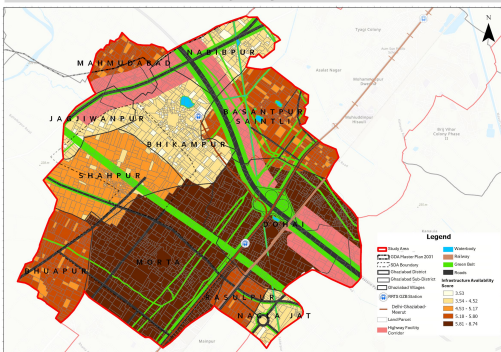
Maps shows that even within the same TOD buffer, development potential varies significantly across villages.

Accessibility & Mobility Map



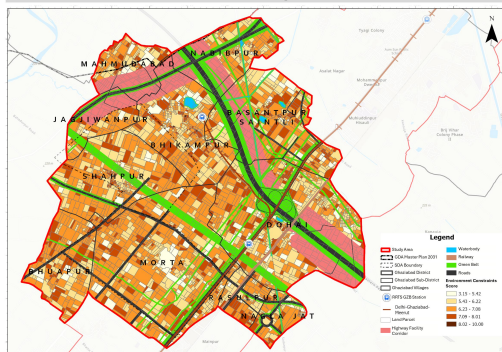
Maps shows that accessibility is not purely distance-based but corridor-driven.

Infrastructure Availability Map



Maps shows that infrastructure is not uniformly distributed and is concentrated in already developed.

Environmental Constraints Map



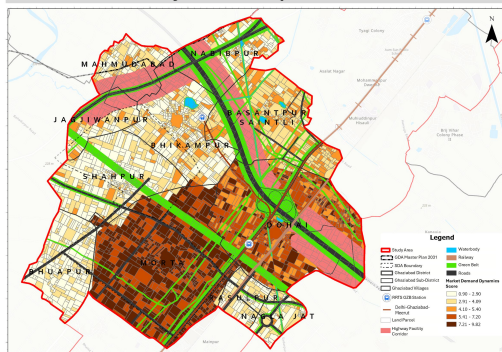
Environmental constraints are minimal across most of the study area and do not significantly restrict development.

Legal Readiness Map



Legal readiness is consistently high across all villages, which means institutional barriers are minimal.

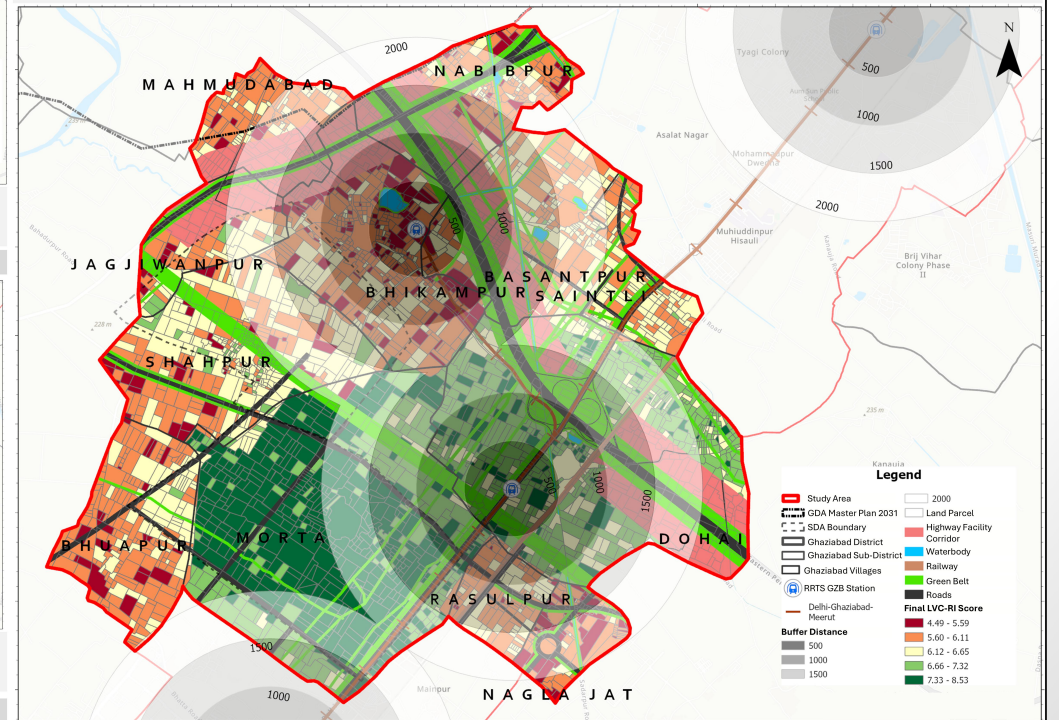
Market Demand Dynamics Map



Market Demand Dynamics shows the maximum variation across all villages in the study area.

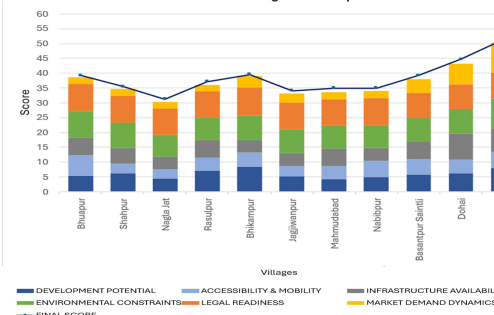
**Map Description:** This map presents a GIS-based Land Value Capture Readiness Index (LVC-RI) for public land parcels surrounding the **Duhai RRTS Station in Ghaziabad**. The objective is to evaluate the **readiness of land assets for value capture** and transit-oriented development by **integrating six planning dimensions: development potential, accessibility and mobility, infrastructure availability, environmental constraints, legal readiness, and market demand dynamics**. Each criterion was standardized, **weighted using the Analytical Hierarchy Process (AHP)**, and combined through **Weighted Overlay Analysis** in ArcGIS Pro to generate a **composite readiness score**.

The **resulting map identifies spatial variations in development readiness**, highlighting high-readiness clusters near the station and strategic transport corridors while identifying areas constrained by infrastructure, environmental, or market limitations. The map supports evidence-based planning, prioritization of public land investments, and sustainable transit-oriented urban development.



**HIGH READINESS** **MEDIUM READINESS** **LOW READINESS**

LVCRI Final Score - Village-wise Comparison



### Clear Spatial Differentiation in LVC Readiness:

- High readiness is clustered in core TOD zones, particularly in Morta and Dohai
- Peripheral areas show moderate to low readiness, indicating spatial inequality

### Market Demand Emerges as Key Differentiator:

- High-scoring villages consistently show: Strong market demand, High absorption, Active economic activity
  - Confirms market dynamics as the strongest determinant
- The **final LVC-RI** demonstrates that land value capture readiness is a **function of multidimensional convergence** rather than proximity to transit infrastructure alone, with **market demand, development potential, and infrastructure availability emerging as the primary drivers**, while legal and environmental factors act as enabling conditions.

ESRI Tool used: ArcGIS Pro

Data Source: GDA (Master Plan 2031), NCRTC RRTS station and corridor, Survey of India administrative boundaries, OpenStreetMap road network, Bhuvan/NRSC land use data, Census village boundaries, and publicly available planning datasets.

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