

CONCEPT NOTE

Parallel Session: **Integrated Urban Development and Infrastructure Delivery**

National Urban Conclave
24-25 October 2026

1. Background

Cities are the engines of national growth, yet the way they are planned and built often works against the very integration that makes a city function. Integrated urban development begins from a simple proposition: a city is a single, interconnected system — its land use, mobility, housing, economy, environment and social fabric are inseparable, and the infrastructure that serves them must be conceived as one. In practice, however, each of these dimensions is planned and delivered separately. Most often, the spatial plans are prepared in isolation from investment plans; physical infrastructure is designed apart from the social, economic and ecological systems that give a place its life; and sectoral agencies, each with its own mandate and budget, build in parallel rather than in concert.

This creates a fundamental paradox: a chasm between the grand ambitions of city master plans and the fragmented reality of delivery on the ground. When water boards, power utilities, transport agencies and the departments responsible for housing, health, education and the environment operate with independent budgets and disconnected records, the city is managed as a collection of isolated engineering projects rather than as an integrated organism. This fragmentation erodes the municipal tax base, inflates capital expenditure, extends the 'time-to-value' for citizens, and most critically, produces places that are not liveable, inclusive, and resilient.

Integration is therefore needed along two axes. Horizontally, across sectors, align land use with transport, water, energy, housing, livelihoods, blue-green systems, and social services so each reinforces the others. Vertically, across tiers of government and the hierarchy of plans, national missions, state priorities, the statutory Master or Development Plan, local area plans, and the annual municipal budget all pull in the same spatial direction. Crucially, the 'infrastructure' to be integrated is not only physical (roads, water, sewerage, power); it is equally social (schools, health facilities, public spaces), economic (markets, logistics, workspaces) and ecological (water bodies, drainage, green cover), the full fabric that determines whether development translates into quality of life.

Realising this vision requires both a shared spatial foundation and modern delivery tools. Dynamic Geographic Information Systems, satellite imagery, and Digital Twin technology can create a single, multi-layered repository of surface and subsurface infrastructure, eliminating spatial clashes and duplicated work. Transit-oriented and corridor-based development can concentrate growth and services where they are most efficiently served, calibrating density and land use against infrastructure capacity. Modular, incremental delivery can replace long-gestation mega-projects with interventions that are executed rapidly and scaled over time while remaining aligned to the overall plan. By capturing the land-value appreciation that upgraded corridors generate, asset monetisation can establish self-sustaining financing for development.

These are powerful instruments/ tools that can operationalise an integrated development vision focused on creating cities that are more liveable, inclusive, economically vibrant, and climate-resilient.

2. Objective

This discussion aims to address the challenges of fragmented urban development and execution, and to evaluate how an integrated, deliverable framework that is anchored in a shared spatial vision and geospatial data can produce liveable, inclusive and resilient cities. It seeks to deliver actionable recommendations for urban local bodies, state urban development departments and financial institutions on the planning approaches, governance structures, technical tools and financing mechanisms required. The key objectives are:

- Examine how the statutory Master or Development Plan can further integrate land use, transport, housing, economy, environment and social infrastructure, and how these can be linked directly to capital investment plans and municipal budgets;
- Explore strategies for establishing a shared geospatial database and Digital Twin platform across municipal utilities and departments. This will consolidate legacy records, eliminate redundancy, and provide complete cross-agency visibility before execution;
- Analyse frameworks for operationalising corridor-based and transit-oriented development across a defined influence zone, calibrating density, land use and street design against utility and transport capacity, while integrating social, economic and blue-green infrastructure such that corridors become places, not merely conduits;
- Evaluate governance and financial mechanisms, budget pooling, 'invest-once' policies, convergence of central and state scheme funds, and Land Value Capture, to consolidate investment, eliminate redundant expenditure and improve municipal asset utilisation;
- Formulate approaches to decompose complex programmes into modular, 'bite-sized' interventions that lower financial risk, accelerate execution, and broaden contractor participation, while ensuring alignment with long-term plans through digital tracking; and
- Identify the institutional and governance arrangements, metropolitan or unified planning bodies, empowered urban local bodies (ULBs), and cross-agency coordination, needed to sustain integration across sectors and tiers of government.

3. Challenges

Urban development in India is planned sector-by-sector and delivered by multiple disconnected agencies, resulting in overlapping investments, poor sequencing and infrastructure clashes, often leading to underutilisation of the development potential. This fragmentation stems from four structural gaps:

- Lack of shared information base: Agencies lack a single, reliable repository of existing

surface and subsurface assets, so everyone plans without visibility of what others have built or intend to build;

- Lack of shared spatial vision: Land use, density and the full range of municipal services evolve without coordination along growth corridors, and without a common development framework to anchor them;
- Disconnect between development planning and provision: Infrastructure is often provided without reference to an integrated development vision (economic, social and environmental), while plans are prepared without reference to deliverability, phasing or financing; social, economic and ecological infrastructure are frequently left out of the picture altogether; and
- Rigid and slow delivery mechanisms: Traditional approaches struggle to convert large-scale ambitions into fundable, executable interventions, and statutory plans remain disconnected from capital investment plans and annual budgets.

Consequently, cities continue to plan and build in silos, without a unified picture of physical reality, a shared spatial vision for growth, or a practical framework to execute complex programmes. The result is severe capital inefficiency, repeated road excavations, prolonged timelines, and development that too rarely advances inclusion, affordability or resilience. Addressing these failures requires a decisive shift to an integrated, spatial-first governance framework that establishes full digital visibility of assets, aligns spatial planning with sectoral investment and scheme convergence, embeds social, economic, and ecological infrastructure in the plan, and uses modular delivery to bridge institutional silos.

4. Guiding Questions

- How can the statutory Master or Development Plan be transformed from a static document into a living framework that integrates land use, mobility, housing, economy, environment and social infrastructure, and that is linked to capital investment plans and annual budgets?
- What spatial-data rules, system structures and inter-agency agreements are needed to map municipal utility and departmental assets into a single platform for citywide, integrated land-use planning?
- How can data-governance policies maintain information security and privacy while allowing regular updates and shared access for local authorities and the public?
- How should planning authorities define the boundary of a corridor influence zone across different spines, rail transit, major arterials or utility trunk routes, and how can density, land use and public-utility capacity be aligned within it through statutory tools such as local area plans or corridor development-control rules?
- How can municipal capital investment plans across service departments be aligned and scheduled within the same planning corridor, and how can multiple central and state scheme funds converge on common spatial priorities rather than being spent in silos?

- Which financing models- Land Value Capture, municipal bonds, land pooling or public-private partnerships- are best suited to funding integrated corridor development rather than isolated sectoral projects?
- How can integrated development be made inclusive and resilient, safeguarding affordability, equity and climate resilience as explicit outcomes of the planning and delivery process?
- How can digital spatial platforms and urban dashboards track, sequence and evaluate multiple small-scale neighbourhood interventions against the long-term city plan?
- What institutional and governance reforms- metropolitan/ unified planning bodies, empowered ULBs, cross-agency coordination mechanisms- are required to sustain integration across sectors and across the three tiers of government?