

National Spatial Governance for NSDF and NSDO: Sector Analytics including Security, Climate, and Social Outcomes (Post-2025)

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SUMMARY

This paper presents a National Spatial Governance model that activates the National Spatial Development Framework (NSDF) and the National Spatial Data Observatory (NSDO) as a single policy, data, and performance system from 2025. The aim is practical and measurable. There is one national spatial reference that directs priorities, one catalogue of authoritative layers that supports decisions, and one performance scorecard that reports results to the executive on a fixed cycle.

The architecture has four components. Policy alignment: the NSDF sets the reference for corridors, nodes, environmental constraints, rural service points, and settlement typologies. Sector plans and municipal SDFs use the same reference to maintain coherence. Data custodianship: the NSDO maintains authoritative layers with named custodians, quality gates, update cadences, lineage, and versioning so comparisons across cycles are auditable. Planning–budget linkage: screening rules bring NSDF logic into annual performance planning and the MTEF so that capital bids and grant frameworks are tested for spatial fit before allocation. Results management: a spatial scorecard tracks coverage of NSDF application, data currency and completeness, decision-cycle times, and the share of public expenditure mapped to NSDF priorities.

The model elevates sector analytics as the engine of delivery and adds three domains that are often missing from spatial governance discussions:

- Security and public safety: crime and disorder hot spots, built-form risk factors, police and EMS response-time isochrones, social infrastructure safety buffers around schools and clinics, resilience of critical facilities. Use in station planning, patrol zoning, event risk permits, and capital safety upgrades.

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- Climate and environmental resilience: coastal and riverine hazard exposure, heat-stress surfaces, wildfire interfaces, ecosystem condition and connectivity, nature-based options. Use in risk reduction pipelines, settlement controls, restoration targeting, and climate-budget tagging.
- Social sectors and human development: access to primary health, schools, ECD centres, social grant service points, food-system nodes, and public transport. Track service backlogs, equity of access by income and gender, and programme placement in relation to NSDF nodes and corridors.

A minimum viable analytics stack underpins these domains: an authoritative-layers list with service-level targets, indicator definitions, automated NSDF-alignment checks, and reproducible dashboards for provinces and metros. Within 12 months the system delivers a baseline of NSDF alignment by sector, the first public authoritative-layers catalogue with update cadences, and an executive dashboard that links spend, outputs, and spatial outcomes on one map. The paper provides the templates, screening rules, and performance dictionary required to operate this system at national scale while improving accountability across spheres.