

The National Urban Digital Mission

Region	Asia and the Pacific
Award Scheme	Shanghai Manual
Themes	Data-Driven Process and Management Local Govts & decentralization Urban Governance and Legal Frameworks
Sustainable Development Goals	Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable Goal 16 - Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Summary

The National Urban Digital Mission (NUDM), launched in 2021 by India’s Ministry of Housing and Urban Affairs, represents a transformative step toward digitalizing urban governance nationwide. Building upon India’s robust digital public infrastructure; Aadhaar, Jan Dhan and the Unified Payments Interface, it extends e-governance access to over 4,800 municipalities that previously lacked digital capacity. NUDM provides a shared, open-source digital platform enabling cities to manage urban data, enhance service delivery, and build inclusive, citizen-centric governance. Its three pillars; people, process and platform ensure flexibility and scalability across municipalities of varying capacities. Key innovations include the Urban Platform for delivery of Online Governance (UPYOG), the India Urban Data Exchange, the City Innovation Exchange and the National Urban Learning Platform. Together, they integrate e-services, promote data-driven decision-making, and support knowledge sharing across government, academia, industry and civil society. Over 2,000 cities now use real-time dashboards, and 50 cities have joined the India Urban Data Exchange. NUDM demonstrates how open standards, capacity building and cooperative federalism can bridge digital divides, strengthen institutional collaboration and promote sustainable, efficient urban management—positioning India as a leader in digital urban transformation.

Background and Objective

India’s rapid urbanization and economic expansion have intensified the demand for efficient, transparent and inclusive city governance. Yet, most municipalities face digital and institutional gaps that hinder effective service delivery. The National Urban Digital Mission was launched to build a unified, interoperable and scalable digital ecosystem for urban India. Its objective is to extend e-governance capabilities to all urban local bodies, enhance coordination among city systems, and empower municipalities to leverage data for better planning and accountability. By providing open-source tools and digital capacity support, NUDM aims to standardize yet localize urban governance across diverse municipal contexts.

Actions and Implementation

NUDM builds upon the National Urban Innovation Stack and its flagship platform, UPYOG, which offers open-source software for municipal service delivery across tax, licensing, water, grievance and registration modules. States can choose from three engagement models based on their digital maturity. The India Urban Data Exchange facilitates secure, interoperable data sharing, while the City Innovation Exchange connects cities and innovators to co-create solutions. The National Urban Learning Platform supports continuous skill development among officials. Over 2,000 cities have implemented digital dashboards for data-driven governance, while 104 cities participate in open innovation challenges, driving nationwide e-governance standardization.

Outcomes and Impacts

NUDM has enabled over 2,000 cities to adopt real-time data monitoring, improving transparency, efficiency and public accountability. Municipalities now access standardized digital modules for core services, with over 50 cities sharing interoperable datasets through the India Urban Data Exchange. The initiative has strengthened coordination between government levels, supported innovation partnerships and empowered smaller municipalities through digital infrastructure and training. Enhanced data visualization tools support policy decisions, while the City Innovation Exchange has generated hundreds of local solutions. By promoting open data, cooperative governance and skill development, NUDM is narrowing the digital divide across India's urban ecosystem.

Sustainability and Scalability

NUDM's open-source, modular design ensures adaptability and long-term sustainability. Its tiered implementation model enables municipalities at varying stages of digital maturity to participate and scale progressively. The India Urban Data Exchange and Urban Monitoring Dashboard create feedback loops for continuous system improvement. Financial sustainability is supported by centralized cloud hosting, reusable digital components and shared service infrastructure. Institutional sustainability is reinforced through the National Institute of Urban Affairs, which sets governance and data standards. With its interoperable architecture and public-good ethos, NUDM offers a scalable model that can extend digital governance to every Indian municipality and beyond.

Gender and Social Inclusivity

NUDM embeds inclusivity by ensuring all municipalities—regardless of size or capacity—gain access to essential digital tools and e-services. The mission's citizen-centric approach promotes transparency and participation through online grievance systems, service requests and feedback mechanisms. Training under the National Urban Learning Platform includes gender-sensitive modules, ensuring women officials and

community members benefit equally from capacity-building. Digital public platforms expand accessibility for residents in remote and marginalized areas, reducing bureaucratic barriers. By democratizing access to urban data and services, NUDM fosters equitable participation, accountability and empowerment, helping bridge digital, social and gender divides in urban India.

Innovative Initiative

NUDM's innovation lies in its creation of a federated, open digital ecosystem that integrates technology, governance and citizen participation. Unlike isolated smart city initiatives, it builds a shared infrastructure that any municipality can adapt. UPYOG's modular architecture and open APIs allow for local customization while maintaining interoperability. The India Urban Data Exchange facilitates secure, standardized data sharing between institutions and innovators, accelerating digital service creation. Through the City Innovation Exchange, NUDM transforms cities into living laboratories for co-created solutions. Its public-good digital infrastructure approach establishes a globally replicable model for scalable, inclusive and cost-efficient urban transformation.

Resources devoted to delivery

NUDM is funded by India's Ministry of Housing and Urban Affairs with technical and institutional support from the National Institute of Urban Affairs. Resources include software infrastructure, cloud hosting, training, and collaboration platforms. Partnerships with state governments, urban local bodies, academic institutions and private sector innovators support implementation. The open-source nature of UPYOG and SmartCode minimizes development costs by enabling code reuse and shared innovation. Capacity-building is institutionalized through the National Urban Learning Platform. Financial and human resources are coordinated through dedicated state directorates and local programme cells, ensuring sustained delivery, monitoring and expansion across the national urban system.

Conclusion

The National Urban Digital Mission has laid the groundwork for a new era of digital urban governance in India. By integrating open standards, shared platforms and inclusive capacity-building, it has bridged systemic divides between large cities and smaller municipalities. Its federated structure promotes cooperative governance, while tools like UPYOG, the India Urban Data Exchange and the City Innovation Exchange transform service delivery and citizen engagement. NUDM exemplifies how digital public infrastructure can enhance transparency, efficiency and inclusivity at scale. As it expands, the initiative will continue to shape resilient, data-driven and citizen-focused cities across India and the Global South.