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Issues and Challenges in Inclusive Planning and Governance of Public Spaces

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1. Abstract

Urban public spaces are foundational for civic and economic life, yet translating inclusive policy into reality remains uneven. This paper evaluates how governance and planning dictate inclusivity, moving beyond design-centric evaluations to a multidimensional framework rooted in spatial justice. Analyzing Varanasi (organically evolved), Chennai (infrastructure-led), and Singapore (state-regulated), the study reveals inclusivity is shaped by institutional capacity, environmental responsiveness, and socio-economic integration. Historic cities offer socio-cultural vibrancy but lack universal design. Metropolitan models prioritize vehicles, often displacing informal economies. High-capacity states achieve near-universal accessibility but regulate public life heavily. Achieving spatial equity requires integrated governance that prioritizes universal design and guarantees the right to the city for all demographics.

2. Introduction

Public spaces, parks, plazas, and transit nodes-are democratic "shared commons" essential for civic identity and livelihoods (Carr, Francis, Rivlin, & Stone, 1992; Gehl, 2011). Despite global mandates like Sustainable Development Goal 11 (UN-Habitat, 2020), access remains stratified by gender, age, socio-economic status, and ability (Madanipour, 2010).

Technocratic planning often reduces inclusivity to mere physical accessibility. While infrastructural elements like ramps are indispensable, they are insufficient for producing genuinely equitable spaces (Imrie, 2012). True inclusivity requires "spatial justice"-the fair distribution of resources and civic participation (Harvey, 2012; Mitchell, 2003). Without it, cities face "dual urbanism," where affluent areas enjoy accessible infrastructure while peripheral settlements face systemic neglect (Mitra, 2020). This report deconstructs the spatial, social, and institutional mechanisms through which governance facilitates or inhibits equitable public spaces.

3. Literature Review

3.1. Spatial Justice and the Right to the City

Inclusive planning is rooted in the "right to the city" (Harvey, 2012). Modern discourse expands traditional evaluative frameworks (Project for Public Spaces, 2015) to incorporate intersectionality, recognizing how race, socio-economic status, and cultural background compound spatial exclusion (Kern, 2020). Accessibility removes physical barriers (Imrie, 2012), while equity addresses the socio-economic conditions necessary for meaningful participation (Low, Taplin, & Scheld, 2005).

3.2. Universal Design as an Economic Imperative

Universal design creates environments inherently accessible to all (Mace, 1997). The discourse is shifting toward economic strategy: integrating inclusive features during initial construction increases costs by less than 1% (ADA National Network, 2025), whereas retrofitting inflates costs by 2% to 20% (Ielegems & Vanrie, 2024). Universal design is a critical investment to avoid exorbitant retrofit expenditures (Centers for Disease Control and Prevention, 2024).

3.3. The Informal Economy

In the Global South, public spaces are vital micro-economies (Bhan, 2016). Modernist planning frequently criminalizes these activities for aesthetic order (Amoah et al., 2023; Dube, Mphambukeli, & Gumbo, 2026), deepening spatial injustice (Guyer, 2011). Progressive frameworks must recognize the spatial claims of informal workers (Chant & Pedwell, 2008; Maluleke, 2020).

3.4. Technological Ecosystems

Assistive technologies dramatically enhance independent mobility (MoHUA, 2021; Rebernik, Marušić, & Bahillo, 2019). However, uncritical deployment risks exacerbating digital divides and disproportionately surveilling marginalized groups, thereby chilling democratic expression (Carr et al., 1992).

4. Research Design and Analytical Framework

This study evaluates Accessibility (Physical, Design, Transport) and Equity (Social, Economic, Governance, Environmental, Technological) variables across three distinct typologies (Dutta, 2012; UN-Habitat, 2020):

1. **Varanasi (India):** Historic, organically evolved; vibrant informal economies but lacking centralized universal design (AT2030 Programme, 2021).
2. **Chennai (India):** Expanding metropolis highlighting friction between progressive mandates and vehicular dominance (Banerjee, 2001).
3. **Singapore:** High-capacity, state-led model serving as a global benchmark for integrated planning (Centre for Liveable Cities, 2018).

Performance is measured against global Key Performance Indicators (KPIs) sourced from URDPFI (2015), ITDP (2022), and MoHUA (2021).

5. Results: Empirical Assessment

5.1. Varanasi: Organic Informality and Fragile Inclusion

Varanasi's *ghats* and streets exhibit exceptional social intensity and cultural inclusion (Mitra, 2020). However, this masks severe physical deficits. The steep, uneven steps of the *ghats* systematically exclude wheelchair users and the elderly (Imrie, 2012). Less than 5% of infrastructure is barrier-free, and only 15% of footpaths are usable (AT2030 Programme, 2021; Patrick et al., 2021). Governance is deeply fragmented across municipal and temple entities, causing uneven resource allocation (Gehl, 2011). Technological interventions, like the $9 million Sustainable Cities Challenge, focus on operational crowd control rather than structural physical accessibility (Toyota Mobility Foundation, 2024).

5.2. Chennai: Infrastructure-Led Growth and Uneven Equity

Chennai illustrates the friction of retrofitting inclusivity into an automobile-dominated landscape. Despite a progressive Non-Motorised Transport (NMT) Policy (Greater Chennai Corporation, 2022) and successful corridors like Pondy Bazaar (ITDP, 2024), implementation is highly fragmented. Only 30–35% of the city features walkable footpaths, and merely 10–15% complies with universal design (Greater Chennai Corporation, 2023). Peripheral neighborhoods lack pedestrian infrastructure entirely (Banerjee, 2001). Active mobility mode share is declining (Gopalakrishnan & Singh, 2020), reflected in 1,445 bicyclist fatalities nationally in urban India (MoRTH, 2022). Economically, beautification projects frequently displace informal vendors, substituting inclusive spaces with consumption-oriented environments (Bhan, 2016).

5.3. Singapore: State-Led Universal Design and Regulated Inclusivity

Singapore embeds inclusivity through integrated master plans (Centre for Liveable Cities, 2018). Driven by the Enabling Masterplan 2030, ~95% of infrastructure is barrier-free, >95% of residents live within 400 meters of transit, and a 47% equitable green canopy mitigates heat stress (Ministry of Social and Family Development, 2017; Urban Redevelopment Authority, 2019). The Enabling Village serves as a global benchmark for intersectional inclusive design (SG Enable, 2025). However, this spatial equity is heavily regulated by behavioral codes and pervasive surveillance (Carr et al., 1992). Economic inclusivity is hyper-formalized into subsidized hawker centers, which prevents displacement but strips away organic adaptability.

6. Discussion

6.1. The Accessibility-Equity Nexus

The data reveals the fallacy of physical determinism. Varanasi demonstrates that deep socio-cultural equity can remain exclusionary due to a lack of physical accessibility (AT2030 Programme, 2021). Conversely, Chennai proves that localized, flawless pedestrian plazas do not offset systemic exclusion in a motor-centric city (Banerjee, 2001). Accessibility allows physical presence; the scaffolding of spatial justice is required to convert presence into meaningful civic participation (UN-Habitat, 2020).

6.2. Institutional Capacity and the Implementation Gap

Singapore's success relies on integrated governance aligning land transport, urban redevelopment, and national parks (Centre for Liveable Cities, 2018). In contrast, fragmented governance in Indian cities prevents complex frameworks from penetrating local bureaucratic silos. This is particularly pronounced in "medium-sized towns," which lack the technical autonomy to implement recurrent accessibility audits (Center for Excellence in Universal Design, 2014; MoHUA, 2021).

6.3. Reconciling Informality with Formal Urbanism

Contemporary planning remains structurally hostile to the informal economy. In Chennai and Varanasi, informal vendors face spatial precarity under the guise of "city beautification" (Dube et al., 2026). Informal workers activate public spaces and provide crucial "eyes on the street" (Jacobs, 1961). While Singapore hyper-formalizes these economies, Global South planning must integrate informal livelihoods via flexible zoning and legal protections (Maluleke, 2020).

6.4. Technological Integration

Smart City paradigms require recalibration. Data democratization tools (Civic Data Design Lab, 2024) and AI crowd predictions (Toyota Mobility Foundation, 2024) cannot act as panaceas for missing physical infrastructure. Reliance on digital governance threatens to deepen spatial inequity for populations lacking digital literacy, and surveillance must be governed transparently to prevent the disproportionate monitoring of marginalized groups (Carr et al., 1992).

7. Comparative Indicator Synthesis

Key Performance Indicator	**Norm / Standard**	**Varanasi (Historic)**	**Chennai (Expanding)**	**Singapore (Regulated)**
Public Space Equity	Balanced across planning wards	Highly concentrated in core	Uneven; biased toward commercial cores	Balanced and distributed across all precincts
Per Capita Open Space	10–12 sq.m (URDPFI) / 8 sq.m (WHO)	~1.2 to 1.5 sq.m	~2 to 3 sq.m	~7.8 sq.m
Public Transport Proximity	90% within 400m of transit	~40 to 45%	~60 to 65%	~95%
Walkable Footpath Coverage	60% continuous network	~15%	~30 to 35%	~90 to 95%
Universal Accessibility	100% barrier-free	<5%	~10 to 15%	~95%
Green Cover/Heat Resilience	25% equitable distribution	~8 to 9%; High vulnerability	~13 to 14%; Moderate-High vulnerability	~47%; Strong mitigation via extensive canopy
Night-Time Safety	High perception / lighting	Moderate-Low; severe gaps	Moderate; dependent on infrastructure	High; uniform lighting and surveillance

8. Conclusion

Inclusivity in urban public spaces is dictated by the complex interplay of spatial justice, institutional governance, and economic policy. Physical accessibility and socio-economic equity must be pursued simultaneously. High-capacity models like Singapore prove universal accessibility is achievable city-wide through legislative integration. However, the organic vibrancy of Indian cities underscores the necessity of preserving flexible, community-driven spaces. Municipal governments must transition to systemic accessibility frameworks, treating universal design as a non-negotiable economic baseline. Legal frameworks must also be reformed to protect the informal economies sustaining the Global South's public realm. Inclusive public spaces are the fundamental prerequisite for democratic, resilient, and just cities.

9. References

ADA National Network. (2025). *Is it expensive to make all newly constructed places of public accommodation and commercial facilities accessible?* ADA National Network.

Amoah, A., et al. (2023). Formal land governance and urban layouts according to modernist planning ideals. *Urban Studies*.

AT2030 Programme. (2021). *Inclusive urban mobility and accessibility in historic cities: Case of Varanasi*. Global Disability Innovation Hub.

Banerjee, T. (2001). The future of public space: Beyond invented streets and reinvented places. *Journal of the American Planning Association*, 67(1), 9-24.

Bhan, G. (2016). *In the public's interest: Evictions, citizenship, and inequality in contemporary Delhi*. University of Georgia Press.

Carr, S., Francis, M., Rivlin, L. G., & Stone, A. M. (1992). *Public space*. Cambridge University Press.

Centers for Disease Control and Prevention. (2024). *Disability Impacts All of Us*.

Center for Excellence in Universal Design. (2014). *Building for everyone: A universal design approach*. National Disability Authority.

Centre for Liveable Cities. (2018). *Public space in Singapore*. Ministry of National Development, Singapore.

Chant, S. H., & Pedwell, C. (2008). *Women, Gender and the Informal Economy: An Assessment of ILO Research and Suggested Ways Forward*. Geneva: ILO.

Civic Data Design Lab. (2024). *Spatial Equity NYC*. Massachusetts Institute of Technology.

Dube, B., Mphambukeli, T. N., & Gumbo, T. (2026). Exclusionary and livelihood-disrupting spatial reconfiguration of informal trading in Bulawayo, Zimbabwe. *Frontiers in Sustainable Cities*.

Dutta, A. (2012). *Urban development in India: Planning, governance, and sustainability*. Oxford University Press.

Gehl, J. (2011). *Life between buildings: Using public space* (6th ed.). Island Press.

Gopalakrishnan, R., & Singh, A. (2020). Pedestrian infrastructure and walkability in Indian cities. *Journal of Urban Design*, 25(4), 512-530.

Greater Chennai Corporation. (2022). *Non-motorised transport policy and street design guidelines*. Government of Tamil Nadu.

Greater Chennai Corporation. (2023). *Accessible public infrastructure audit report*. Government of Tamil Nadu.

Guyer, J. (2011). Repressive governance and the informal economy. *African Studies Review*.

Harvey, D. (2012). *Rebel cities: From the right to the city to the urban revolution*. Verso.

Ielegems, E., & Vanrie, J. (2024). The cost of universal design for public buildings: exploring a realistic, context-dependent research approach. *Archnet-IJAR*, 18(4), 719-736.

Imrie, R. (2012). Universalism, universal design and equitable access to the built environment. *Disability and Rehabilitation*, 34(10), 873-882.
Institute for Transportation and Development Policy (ITDP). (2022). *Walkability metrics and frameworks*.
Institute for Transportation and Development Policy (ITDP). (2024). *Chennai adopts NMT Policy*.
Jacobs, J. (1961). *The death and life of great American cities*. Random House.
Kern, L. (2020). *Feminist city: Claiming space in a man-made world*. Verso.
Low, S., Taplin, D., & Scheld, S. (2005). *Rethinking urban parks: Public space and cultural diversity*. University of Texas Press.
Mace, R. (1997). *Universal design in housing*. Center for Universal Design, North Carolina State University.
Madanipour, A. (2010). *Whose public space? International case studies in urban design and development*. Routledge.
Maluleke, M. (2020). The informal economy and the right to the city. *Athens Institute for Education and Research*.
Ministry of Housing and Urban Affairs (MoHUA). (2021). *Street design guidelines*. Government of India.
Ministry of Road Transport and Highways (MoRTH). (2022). *Road accidents in India 2022*. Government of India.
Ministry of Social and Family Development. (2017). *Enabling Masterplan 3*. Government of Singapore.
Mitchell, D. (2003). *The right to the city: Social justice and the fight for public space*. New York: Guilford.
Mitra, A. (2020). Informality and public space in Indian cities. *Economic and Political Weekly*, 55(12), 45-52.
Pain, R. (2000). Place, social relations and the fear of crime. *Progress in Human Geography*, 24(3), 365-387.
Patrick, M., McKinnon, I., Mishra, S., Gupta, S., Roy, P., Choudhury, U., Murugkar, K., & Raheja, G. (2021). *Inclusive Design and Accessibility in Varanasi, India*. AT2030 Inclusive Infrastructure Case Studies. Global Disability Innovation Hub.
Project for Public Spaces. (2015). *What makes a great place*. Project for Public Spaces.
Rebernik, N., Marušić, B., & Bahillo, A. (2019). Understanding the complexity of inclusive public spaces design, Reflections on the case study of Slovenia. *Neighbourhood & City*.
SG Enable. (2025). *Enabling Village: A model for universal design and inclusive living*. SG Enable.
Toyota Mobility Foundation. (2024). *Varanasi selects 10 semi-finalists for global $3 million mobility challenge*.
UN-Habitat. (2020). *World cities report 2020: The value of sustainable urbanization*. United Nations Human Settlements Programme.
Urban Redevelopment Authority. (2019). *Master Plan 2019*. Government of Singapore.
URDPFI Guidelines. (2015). *Urban and regional development plans formulation and implementation*. Ministry of Urban Development, Government of India.