

Metro-Mobility Infrastructure as a Catalyst for Placemaking: Theoretical Perspectives and Emerging Frameworks in the Indian Urban Context

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Abstract

Rapid urbanization in India has intensified the demand for sustainable transport systems that extend beyond functional mobility to foster vibrant, people-centered urban environments. Metro-mobility infrastructure (MMI), traditionally viewed as a mobility solution, holds untapped potential as a catalyst for placemaking, shaping accessibility, identity, and sociability in the built environment. This paper critically examines the theoretical underpinnings of metro-led placemaking by synthesizing insights from Transit-Oriented Development (TOD), urban design principles, theories of place attachment, and behavioral studies of liveliness. It argues that while TOD provides structural integration, it often neglects human experience, cultural identity, and community engagement, which are essential to placemaking. Building on this critique, the study proposes an integrated conceptual framework comprising five dimensions: accessibility, comfort and safety, sociability, identity, and vibrancy, to evaluate the placemaking potential of metro systems. The framework positions metro stations not merely as transit nodes but as civic anchors capable of enhancing inclusivity, cultural resonance, and urban vitality. The paper concludes by highlighting the research gap in Indian mid-tier cities such as Lucknow, where metro development is still nascent, and sets the stage for empirical validation and comparative research. In doing so, it advances a people-centered agenda for metro infrastructure as a transformative instrument of sustainable urbanism.

Keywords: Metro-Mobility Infrastructure, Placemaking, Transit-Oriented Development (TOD), Urban Design, Sustainable Urbanism

1. INTRODUCTION

Rapid urbanization has emerged as one of the defining features of the 21st century, particularly in developing nations such as India. By 2030, nearly 40% of India's population is projected to reside in urban areas, placing unprecedented pressure on housing, infrastructure, and transportation systems (United Nations, 2019). This demographic shift has intensified the need for efficient, sustainable, and people-centric mobility solutions. Traditional road-based systems are increasingly inadequate in addressing issues of congestion, environmental degradation, and accessibility inequities (Banister, 2011). In this context, mass rapid transit systems such as metro rail networks have become vital for enabling sustainable urban mobility and reducing dependency on private vehicles (Pojani & Stead, 2015).

Metro rail systems are not merely transport infrastructure but are transformative urban elements that shape land use, economic activity, and the overall quality of urban life. Globally, metro networks have been linked to transit-oriented development (TOD), enhanced accessibility, and revitalization of urban centers (Cervero & Murakami, 2009; Suzuki et al., 2013). In the Indian context, cities such as Delhi, Bangalore, and Mumbai demonstrate how metro infrastructure extends beyond its primary function of mobility to influence the morphology and functionality of the built environment (Butcher, 2011; Sreelekha & Raghuram, 2020). The recently developed Lucknow Metro Rail Corporation (LMRC) system represents another example where metro corridors are reshaping urban spaces, socio-economic interactions, and cultural identities.

1.1 Placemaking as a People-Centered Paradigm

Parallel to the growth of metro systems, placemaking has emerged as a critical paradigm in urban studies and design. Placemaking is the process of transforming spaces into meaningful "places" by incorporating elements of accessibility, safety, sociability, and identity (Project for Public Spaces [PPS], 2016). Rooted

in the seminal works of Jane Jacobs (1961) and William H. Whyte (1980), placemaking emphasizes the active role of people in shaping urban spaces, thereby prioritizing lived experiences and community engagement over purely technical design. The interdependence between metro infrastructure and placemaking lies in their shared focus on enhancing quality of life, fostering inclusivity, and building urban resilience.

1.2 Research Gap and Need for Integration

Despite global recognition of placemaking, its integration with metro mobility infrastructure in the Indian context remains underexplored. Existing TOD models prioritize density, land use, and connectivity but often neglect human-centric dimensions such as behavioral patterns, cultural practices, and perceptions of place (Soria-Lara & Valenzuela-Montes, 2015). Moreover, metro systems in Indian cities are typically evaluated through the lens of engineering efficiency and ridership numbers, overlooking their role as social and cultural spaces (Martha, 2021). This gap necessitates a re-examination of metro corridors as potential placemaking tangents, spaces that not only enable mobility but also foster belonging, social interaction, and local identity.

This paper positions metro-mobility infrastructure as a catalyst for placemaking in Indian cities, with a particular focus on the Lucknow Metro. By reviewing theoretical perspectives and international experiences, it develops a conceptual foundation to understand how transit corridors can evolve into vibrant urban places. In doing so, the paper seeks to contribute to broader debates on sustainable urbanism, people-centered planning, and the socio-spatial role of transport infrastructure.

2. RESEARCH METHODOLOGY

This study adopts a conceptual research design, aimed at developing a theoretical framework that situates metro-mobility infrastructure (MMI) as a catalyst for urban placemaking. Rather than conducting field-based empirical analysis, the paper draws on a systematic review of scholarly literature, planning reports, and international case examples that examine the socio-spatial impact of metro systems. The methodology involved the identification of key themes, accessibility, comfort and safety, sociability, identity, and vibrancy, through iterative engagement with urban design, transport planning, and placemaking discourses. Foundational theories such as Transit-Oriented Development (TOD), place attachment, and behavioral approaches to liveliness were synthesized to establish the conceptual basis of the framework. This approach ensured a multi-disciplinary grounding that connects mobility studies with urban sociology, design theory, and sustainability debates.

The analysis was guided by a thematic synthesis approach, whereby insights from global precedents, including Stockholm, Singapore, and Seoul, were critically compared with the emerging Indian context. By juxtaposing international experiences with the specific realities of Indian cities such as Delhi, Hyderabad, and Lucknow, the study highlights both the transferability and the limitations of placemaking principles in diverse socio-cultural settings. This comparative and theory-driven methodology allowed for the construction of a holistic framework that moves beyond functional metrics of ridership and land-use integration to foreground human experience, cultural identity, and civic vibrancy. The resulting conceptual framework thus serves as a diagnostic tool for future empirical validation and provides a foundation for subsequent case-based and comparative studies.

3. Placemaking in the Built Environment

3.1 Evolution of the Placemaking Paradigm

Placemaking has evolved from a marginal design concept into a central paradigm in contemporary urbanism. The origins of the idea can be traced to the mid-20th century, when critics of modernist urban planning, most notably Jane Jacobs (1961), argued for the importance of vibrant street life, diversity, and community interaction in sustaining urban vitality. Jacobs' critique of top-down master planning emphasized the "sidewalk ballet" of everyday life, where people's interactions animated spaces and imbued them with meaning. Around the same time, William H. Whyte (1980) documented patterns of use in plazas and streetscapes, demonstrating how seemingly small design interventions, such as movable

seating, shaded corners, or food vendors, could significantly enhance sociability and comfort.

From these foundations, placemaking has been widely embraced by practitioners and organizations such as Project for Public Spaces (PPS), which define it as a multi-faceted approach to the planning, design, and management of public spaces that capitalizes on local assets to promote health, happiness, and well-being (PPS, 2016). Today, placemaking is regarded as both a design philosophy and a process, encompassing physical, social, cultural, and psychological dimensions of urban environments. Unlike conventional planning, which often prioritizes infrastructure efficiency or land-use control, placemaking insists on lived experiences and community involvement as primary criteria for evaluating urban success (Silberberg et al., 2013).

3.2 Core Principles and Dimensions of Placemaking

At its core, placemaking seeks to transform spaces, abstract, physical containers, into places imbued with identity, meaning, and emotional resonance. Scholars describe this transformation as contingent on three interrelated dimensions: people, space, and place (Carmona, 2019).

i. **People** bring life, vitality, and ownership to spaces. Their participation, whether through everyday practices or organized engagement, is what animates urban settings. Public involvement fosters inclusivity, civic pride, and a sense of belonging (Heath et al., 2021).

ii. **Space** refers to the physical setting, its accessibility, design, materiality, and environmental comfort. The layout of streets, quality of amenities, and integration of green or cultural features shape how people experience and use these environments.

iii. **Place** represents the deeper attachment people form to specific locations through memory, symbolism, and collective identity. Place-making strengthens this attachment, fostering environments where people not only pass through but linger, interact, and identify as part of a community (Relph, 1976; Lewicka, 2011).

PPS (2016) translates these principles into practical metrics such as sociability, uses and activities, access and linkages, and comfort and image. Similarly, Carmona (2019) frames placemaking as a product of design governance, highlighting that successful public spaces balance economic viability, environmental resilience, and social equity.

3.3 International Practices and Lessons

Placemaking has been globally applied across diverse contexts, producing instructive case studies for cities seeking to align infrastructure development with community-building. New York's High Line Park, for example, transformed a disused elevated railway into an iconic linear public park that catalyzed economic revitalization while preserving cultural memory (Loughran, 2014). Seoul's Cheonggyecheon River Restoration project reimaged an expressway into an ecological and social corridor, reconnecting citizens with nature and improving environmental quality (Cho, 2010). Similarly, Copenhagen's pedestrianization strategies demonstrate how prioritizing walkability, active transport, and street furniture can foster conviviality and inclusivity (Gehl, 2010).

These examples underscore several lessons: (i) placemaking thrives on adaptive reuse of existing infrastructure, (ii) it relies on community participation to shape outcomes, and (iii) it integrates cultural narratives into urban form. However, the direct transfer of such models to the Global South is often problematic due to differences in socio-economic contexts, institutional capacities, and cultural norms (Watson, 2009). Hence, in India and similar contexts, placemaking requires careful adaptation that accounts for informality, density, and the contested nature of public space.

3.4 Relevance to the Indian Urban Context

In India, placemaking carries particular significance given the pace of urban transformation and the diversity of its urban populations. Public spaces in Indian cities often serve multiple overlapping functions, as markets, transport nodes, cultural arenas, and informal meeting places. Yet, rapid infrastructure projects, including metro systems, frequently prioritize technical efficiency over social vibrancy (Kumar & Agarwal, 2013). The Delhi Metro, while successful as a transport system, has been critiqued for creating sterile environments that limit opportunities for social interaction (Butcher, 2011). Conversely, smaller initiatives such as "Raahgiri Day" in Gurgaon demonstrate how reclaiming streets

for pedestrians and cyclists can foster temporary but powerful experiences of community belonging (Bhowmick, 2016).

Thus, the integration of placemaking principles into metro corridors offers both an opportunity and a challenge. On one hand, metro stations and surrounding public realms can anchor urban vitality by providing accessible, safe, and multifunctional spaces. On the other hand, the risk of exclusionary design and commercialization must be mitigated to ensure equitable access and community ownership. The Lucknow Metro, as a relatively new system embedded in a mid-tier Indian city, presents a unique laboratory to explore these tensions and possibilities.

4. Metro-Mobility Infrastructure and Placemaking

4.1 Metro Systems as New Urban Public Spaces

Metro systems, often conceptualized primarily as transport infrastructure, increasingly function as new urban public spaces that mediate mobility, sociability, and place identity. Beyond their role in enabling efficient movement across metropolitan regions, metro stations and corridors generate opportunities for interaction, commerce, and cultural expression (Graham & Marvin, 2001). Their strategic location within city cores or dense neighborhoods transforms them into nodes of accessibility and symbolic markers of modernity. Scholars have argued that transport hubs often act as “third places”, sites outside home and work that foster social connections and community engagement (Oldenburg, 1999).

In Asian cities, metros have become emblematic of contemporary urbanity. The Tokyo Metro, for instance, combines transport with cultural consumption through integrated shopping concourses. Similarly, Singapore’s MRT seamlessly blends transit with pedestrian linkages, commercial arcades, and green plazas, creating hybrid environments of mobility and place (Chang, 2016). Such cases highlight that metros are not neutral conduits of flow but actively reshape urban form and experience, often serving as anchors for placemaking.

4.2 Transit-Oriented Development (TOD) and Placemaking

The Transit-Oriented Development (TOD) model has been widely adopted as a planning strategy to maximize the benefits of mass transit investments. TOD emphasizes high-density, mixed-use development within walking distance of transit nodes, supported by pedestrian-friendly environments (Calthorpe, 1993; Suzuki et al., 2013). While TOD addresses structural and spatial efficiencies, its integration with placemaking introduces an additional layer of human-centric values, emphasizing comfort, identity, inclusivity, and cultural resonance.

Research indicates that TOD projects that foreground placemaking principles tend to foster more vibrant and resilient communities. For example, in Stockholm, metro-linked TOD projects intentionally integrated public art, cultural spaces, and interactive landscapes, reinforcing place identity (Monheim & Nagel, 2018). In contrast, TOD projects that privilege commercial intensification without addressing public life often produce sterile and exclusionary environments (Cervero, 2014). For Indian metros, the TOD model presents an untapped opportunity: extending beyond ridership optimization to actively cultivate social vibrancy and urban belonging.

4.3 Metro Infrastructure as a Social and Cultural Space

In developing contexts, metro systems are frequently experienced as arenas of negotiation where diverse social groups encounter one another. Butcher (2011) describes the Delhi Metro as a site where class, gender, and cultural identities are contested and renegotiated. Such findings reinforce the argument that metros are not merely technical systems but socio-cultural spaces that reflect broader dynamics of urban change. Metro stations and corridors also facilitate placemaking by hosting everyday micro-practices: vendors occupying station plazas, students gathering around entry points, or informal performances that transform transit nodes into cultural stages. These practices, though often marginalized in formal planning discourses, contribute to the liveliness and identity of metro precincts (Bissell, 2018). From this perspective, placemaking in metro contexts is not only a matter of design interventions but also of recognizing and legitimizing spontaneous community-led appropriations of space.

4.4 Environmental and Economic Dimensions

Metro systems further intersect with placemaking through their environmental and economic impacts. As sustainable mobility infrastructures, they reduce dependence on private vehicles, lower emissions, and mitigate urban air pollution (Pojani & Stead, 2015). These ecological benefits enhance the quality of urban life and contribute to the creation of healthier, more resilient public realms. Moreover, metro-linked development often stimulates local economies by generating commercial activity, increasing property values, and attracting investments (Suzuki et al., 2013). Yet these transformations are double-edged. Metro projects risk contributing to gentrification, displacing vulnerable groups, and producing sanitized spaces that exclude informal economies (Shatkin, 2017). To align with placemaking principles, economic and environmental gains must therefore be balanced with inclusivity and equity, ensuring that metro spaces remain accessible to diverse communities and socio-economic groups.

4.5 Towards Metro-led Placemaking Frameworks

Integrating placemaking with metro infrastructure calls for interdisciplinary frameworks that combine transport planning, urban design, and community participation. Key dimensions include:

- i. **Accessibility and Connectivity:** seamless integration with walking, cycling, and feeder systems to enhance equitable access.
- ii. **Safety and Comfort:** design strategies addressing lighting, visibility, seating, and microclimate comfort.
- iii. **Sociability and Identity:** creating plazas, cultural installations, and community programs to foster belonging.
- iv. **Flexibility and Adaptation:** allowing spaces to accommodate informal activities and evolving community needs.

Recent scholarship points to the potential of participatory planning tools, behavioral mapping, and liveliness indices as ways to evaluate and enhance the placemaking potential of transit nodes (Soria-Lara & Valenzuela-Montes, 2015; Carmona, 2019). The Lucknow Metro, situated in a rapidly urbanizing but relatively less-studied Indian city, provides a critical testbed to operationalize these frameworks and contextualize global theories in local socio-cultural realities.

5. Theoretical Lenses for Understanding Metro-led Placemaking

5.1 Transit-Oriented Development (TOD) as a Structural Lens

The concept of Transit-Oriented Development (TOD) provides the first and most widely adopted theoretical framework to interpret the relationship between transit systems and urban form. Originally articulated by Peter Calthorpe (1993), TOD emphasizes compact, mixed-use, and pedestrian-friendly neighborhoods centered on high-capacity transit nodes. In practice, TOD projects aim to reduce car dependence, promote sustainable land use, and create livable communities.

While TOD primarily concerns the structural integration of land use and transport, recent scholarship highlights its limitations in addressing human experience and the socio-cultural dimensions of space (Dittmar & Ohland, 2012). Many TOD projects have been critiqued for focusing narrowly on real estate intensification and ridership maximization while neglecting placemaking qualities such as sociability, inclusivity, and local identity (Cervero, 2014). From a placemaking perspective, TOD must therefore be reinterpreted not simply as a design principle but as a socio-spatial strategy that positions metro stations as civic anchors, enabling cultural exchange, public gathering, and a sense of belonging.

5.2 Urban Design Principles and Public Realm Quality

Urban design theories provide another critical lens for understanding how metro corridors can evolve into places. Gehl (2010) emphasizes that quality public spaces are those which invite people to walk, linger, and interact, supported by micro-design elements such as seating, lighting, human-scale facades, and transparent edges. Carmona (2019) advances this by framing public space design around six key dimensions: accessibility, inclusivity, comfort, safety, sociability, and visual quality.

Applying these insights to metro-led development highlights the importance of designing station precincts as multifunctional public realms, rather than sterile transit nodes. Well-articulated street frontages, shaded seating, pedestrian permeability, and integration with civic spaces can enhance both

functionality and emotional attachment. Conversely, poorly designed metro stations with blank walls, restricted access, and over-surveillance risk producing placeless environments that discourage community ownership.

5.3 Theories of Place, Place Attachment, and Sense of Community

Humanistic geography and environmental psychology provide theoretical tools to interpret how people form attachments to transit environments. Relph's (1976) concept of "place and placelessness" underscores the importance of identity and meaning in urban settings, while Tuan's (1977) notion of "topophilia" explains the emotional bonds between people and places. In the context of metro systems, such attachments emerge not only from physical design but also from the cultural practices, memories, and symbolic meanings embedded in transit spaces.

Lewicka (2011) argues that place attachment is multi-dimensional, shaped by physical qualities, social interactions, and individual experiences. For metro stations, this implies that designing for comfort, inclusivity, and cultural resonance can foster stronger community bonds. Indeed, stations can evolve into "social landmarks" that embody urban identity, as demonstrated by Stockholm's art-filled "Metro Museum" or the culturally symbolic Doha Metro stations (Bodnar, 2015).

5.4 Liveliness, Behavior Mapping, and Everyday Urbanism

A further theoretical strand stems from studies on **urban liveliness** and behavioral observation. Whyte (1980) pioneered the use of systematic behavioral mapping to evaluate how people use plazas, documenting factors such as duration of stay, stationary activities, and informal encounters. Jacobs (1961) emphasized "eyes on the street" as a key determinant of urban vitality, linking surveillance, safety, and sociability. Contemporary researchers build on these traditions by quantifying liveliness indices to measure vibrancy in public spaces (Mehta, 2014). For metro corridors, behavioral mapping provides a powerful evaluative tool: identifying whether stations attract social activities beyond transit, how long people linger in adjacent spaces, and what micro-interventions foster interaction. Such metrics allow planners to assess whether metro systems function merely as mobility conduits or as true placemaking catalysts.

5.5 Towards an Integrated Theoretical Framework

Taken together, these theoretical lenses suggest that metro-led placemaking cannot be captured by any single disciplinary approach. Instead, it requires an integrated framework that:

- i. Embeds TOD principles for structural efficiency and land-use integration.
- ii. Applies urban design theories to enhance the quality, safety, and inclusivity of public realms.
- iii. Recognizes place attachment and cultural identity as fundamental to long-term community engagement.

Uses behavioral and liveliness measures to empirically evaluate vibrancy and user experience.

Such an integrated perspective positions metro systems not merely as infrastructural projects but as urban catalysts, shaping how people live, interact, and identify with their cities. For India, and Lucknow in particular, this framework offers a novel way to examine the socio-spatial impacts of metro development within rapidly transforming urban landscapes.

6. Towards a Conceptual Framework for Metro-led Placemaking

6.1 Rationale for a Framework

The preceding sections highlight that metro-mobility infrastructure operates at the intersection of transport planning, urban design, and socio-cultural processes. While the Transit-Oriented Development (TOD) model ensures structural efficiency, it often neglects human-centric experiences. Similarly, urban design theories emphasize the qualities of the public realm but may overlook mobility imperatives. Place attachment and behavioral mapping add insights into social dynamics but lack integration with infrastructural performance. This disciplinary fragmentation underscores the need for an integrated conceptual framework that brings together these strands to assess metro-led placemaking. In this framework, metro stations are not conceived as isolated engineering entities but as urban catalysts capable of shaping accessibility, fostering social cohesion, and reinforcing cultural identity. The goal is to move

beyond “transport efficiency” as the sole evaluation criterion toward a multidimensional assessment of place quality.

6.2 Dimensions of the Framework

Based on a synthesis of TOD principles, urban design literature, and placemaking theories, the following five core dimensions are proposed for evaluating metro-led placemaking:

(a) Accessibility and Connectivity: Accessibility is fundamental to both mobility and placemaking. Well-designed metro stations should offer seamless connections to multiple transport modes (bus, rickshaw, walking, cycling) and ensure equitable access across age, gender, and socio-economic groups. Accessibility also includes wayfinding, legibility, and permeability of surrounding public spaces (Cervero & Murakami, 2009; Carmona, 2019). Without this, stations risk becoming enclaves rather than integrated urban nodes.

(b) Comfort and Safety: Physical and environmental comfort, including climate-responsive design, shading, seating, lighting, and protection from noise, strongly influence how long people linger in metro precincts. Safety, both real and perceived, is equally critical, with gender-sensitive design and natural surveillance (“eyes on the street”) playing a major role (Gehl, 2010; Loukaitou-Sideris et al., 2019). Stations that prioritize comfort and safety encourage not only transit use but also everyday socialization.

(c) Sociability and Community Engagement: Metro spaces act as potential “third places” (Oldenburg, 1999), where strangers can interact, and communities can form shared identities. This dimension assesses whether metro environments provide opportunities for gathering, events, informal economies, or cultural expression. Sociability is not only shaped by design (e.g., plazas, open fronts) but also by community participation in shaping and programming space (Silberberg et al., 2013). Without such engagement, metro areas risk becoming transactional and alienating.

(d) Identity and Place Attachment: For metros to evolve into places, they must reflect local culture, history, and meaning. This may include architectural symbolism, public art, or cultural programming that resonates with community narratives (Relph, 1976; Tuan, 1977). The Stockholm Metro’s integration of art and Delhi Metro’s emerging role as a symbol of modernity exemplify how infrastructure can acquire place identity. In Lucknow, where heritage and cultural memory are deeply embedded in urban life, aligning metro design with place attachment becomes especially significant.

(e) Vibrancy and Liveliness: The liveliness index, derived from behavioral mapping (Whyte, 1980; Mehta, 2014), provides empirical grounding to placemaking evaluation. Indicators such as stationary activities, duration of stay, diversity of uses, and intensity of social interactions help determine whether metro precincts generate vitality or remain passive transit corridors. Vibrancy thus serves as a measurable proxy for placemaking success.

6.3 Integrative Framework Model

Bringing these dimensions together, the framework proposes a matrix of evaluation where:

- Accessibility ensures functional integration.
- Comfort and safety foster usability and inclusivity.
- Sociability enables interaction and engagement.
- Identity creates cultural resonance and attachment.
- Vibrancy provides empirical validation through observed activities.

This integrated approach not only bridges theory and practice but also provides a diagnostic tool for policymakers, designers, and transport authorities to assess how metro systems contribute to the quality of urban life. It explicitly recognizes that placemaking is not a one-time design intervention but a continuous, participatory process requiring periodic evaluation and adaptation.

6.4 Relevance to the Lucknow Case

Lucknow Metro, as a relatively new system in a rapidly urbanizing city, represents a fertile ground to test this framework. Unlike megacities such as Delhi or Mumbai, Lucknow offers the opportunity to integrate placemaking principles early in the evolution of metro infrastructure. Applying this framework to Lucknow can reveal how local contexts, characterized by dense neighborhoods, informal economies, and cultural heritage, mediate the translation of global theories into grounded urban practices. In this

sense, Lucknow serves as both a case study and a laboratory for refining the conceptual model of metro-led placemaking in India and beyond.

7. CONCLUSION

The expansion of metro-mobility infrastructure in rapidly urbanizing cities provides an unprecedented opportunity to rethink the relationship between transport systems and the broader urban environment. This paper has argued that metro systems must be conceptualized not solely as engineering solutions to congestion but as placemaking catalysts capable of shaping accessibility, sociability, identity, and vibrancy within cities. Drawing on Transit-Oriented Development (TOD), urban design principles, theories of place attachment, and behavioral approaches to liveliness, the study has synthesized an integrated conceptual framework that positions metro precincts as both mobility hubs and civic anchors.

The framework proposes five interdependent dimensions, accessibility, comfort and safety, sociability, identity, and vibrancy, through which the placemaking potential of metro systems can be systematically understood and evaluated. By bridging structural efficiency with human experience, the framework advances urban scholarship beyond traditional TOD metrics, responding to the need for more people-centered, context-sensitive approaches in planning and design.

In doing so, this paper contributes to two levels of discourse. At the theoretical level, it enriches the literature on placemaking by embedding mobility infrastructures into the debate, an area historically dominated by discussions of parks, plazas, and community-led interventions. At the practical level, it offers a diagnostic tool for policymakers, planners, and transit authorities seeking to integrate social, cultural, and environmental dimensions into metro development.

The arguments developed here also underscore the importance of contextual grounding. While global examples highlight the transformative potential of metro-led placemaking, their direct transfer to Indian cities requires adaptation to local socio-cultural realities, informal economies, and governance structures. The Lucknow Metro, as a mid-tier city transit system, exemplifies such a context and will form the empirical testbed for validating the framework in subsequent research.

Ultimately, this paper concludes that metro systems, when aligned with placemaking principles, have the capacity to transform beyond their utilitarian function into inclusive, vibrant, and identity-rich urban spaces. Yet, this transformation is contingent on moving beyond technical efficiency toward participatory, interdisciplinary, and equity-driven approaches. The next stage of this research agenda will empirically examine these dimensions in Lucknow, followed by comparative studies across multiple urban contexts, thereby contributing to a more holistic and globally relevant understanding of metro-led placemaking.

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