

**Intentional Informality in Gendered Spaces on the  
Mumbai Local Suburban Railway System**

BY

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## TABLE OF CONTENTS

<u>CHAPTER</u>	<u>PAGE</u>
I. INTRODUCTION.....	1
II. METHODOLOGY .....	7
III. CONCEPTUAL FRAMEWORK AND LITERATURE .....	10
1. Professionalization of planning practice .....	10
2. Unmapping and territorialized state power .....	13
3. Intentional informality by the subaltern .....	15
4. Gender and access to public spaces.....	17
IV. MUMBAI'S TRANSPORTATION LANDSCAPE .....	22
1. The development of the Mumbai Local .....	22
2. Governance and administration .....	31
V. CASE STUDY: THE LADIES COMPARTMENT AS A SPACE OF INSURGENT PLANNING.....	39
1. Social uses of the ladies compartment .....	39
2. Domestic uses of the ladies compartment .....	42
3. Livelihood uses of the ladies compartment .....	49
4. Contestation of space within the ladies compartment.....	56

## TABLE OF CONTENTS (continued)

<u>CHAPTER</u>	<u>PAGE</u>
VI. FORMALIZING THE INFORMAL AND ITS POLICY IMPLICATIONS .....	59
1. Formalizing vending in Mumbai .....	59
2. Vending policy limitations .....	65
3. Privatization of public transit in Mumbai .....	67
VII. CONCLUSIONS .....	74
1. Summary .....	74
2. Recommendations for further research .....	76
REFERENCES.....	82
VITA .....	85

## LIST OF ILLUSTRATIONS

<u>FIGURE</u>	<u>PAGE</u>
A: Crowds in the ladies compartment .....	4
B: Schematic map of the Mumbai Suburban Railway Network .....	22
C: Formal and informal residential land uses in Mumbai (2013) .....	24
D: Share of residential land uses that are informal (2013) .....	25
E: Residential land prices in Mumbai (2013) .....	26
F: Mumbai Suburban Local Railway governance structure .....	31
G: Passengers hang out of an overcrowded general boarding compartment .....	33
H: Markers for the ladies compartment .....	35
I: Street based vending around the Santacruz Western Line station .....	44
J: Safety placard in the ladies compartment .....	46
K: Sanctioned vendor stalls on a Harbour Line platform .....	48
L: Women shopping in the ladies compartment on the Western Line .....	50
M: Vendor working on the station platform .....	52
N: Postings forbidding vending outside of Chhatrapati Shivaji Terminus .....	59
O: Police patrol the Hill Road market .....	61
P: Signs discouraging vending in public parks .....	63
Q: Women in the Mumbai Metro .....	68
R: Regulated vending in a Mumbai Metro station .....	70

## **LIST OF ABBREVIATIONS**

ALM	Advanced Locality Management
BMC	Brihanmumbai Municipal Council
BPO	Business Process Outsourcing
CST	Chhatrapati Shivaji Terminus
DP	Development Plan
MMRDA	Mumbai Municipal Region Development Authority
NASVI	National Alliance of Street Vendors of India
R-INFRA	Reliance Infrastructure
TISS	Tata Institute of Social Sciences

## SUMMARY

A survey of the informal uses of gender-segregated spaces on the Mumbai Local Suburban Railway System was conducted through participant observation. Riding in the ladies compartment on the train during three specific time periods (morning rush, midday off-peak, and evening rush), counts were taken of the number of vendors utilizing the space to access informal labor markets, as well as the type of good being sold. Because of inconsistent governance practices, the spaces of the train are managed separately from the rest of the municipality, and thus the vendors who work in this space are not allowed the same legal protections as those vendors who work on the street or in other open public spaces.

In the absence of useful, friendly public spaces for women, female passengers on the Mumbai Local have created their own networks and rules of belonging that allow a marginalized group of largely low-income women to access both formal paid work, informal livelihoods, and space for domestic labor within the space of the commuter trains. These spaces exist because of the ongoing erasure of women's experiences and spaces in public spaces by the responsible municipality in an effort to wield greater control over urban development.

The spaces women have constructed for themselves in the space of the ladies compartment face two key threats; the uneven regulation of their informal labor, and the privatization of public transit infrastructure. The space of the ladies compartment presents an alternative vision for how community-led planning practice can better serve the needs of city residents.

## **I. INTRODUCTION**

Professionalized planning has historically located the politics that shape urban space neatly within the realm of a state-controlled bureaucracy and the public participation mechanisms that planners have designed for themselves. However, the limits of this type of planning practice are revealed in dense cities of the Global South such as Mumbai. The planning practice dominant in Mumbai is one that works to intentionally regularize and formalize particular spaces, especially ones that hold the potential to generate capital on the real estate market, while ensuring that other spaces remain firmly in the realm of the informal.<sup>1</sup> These spaces, which are not recognized by the state, exist outside of the framework of municipal policy and law but are vulnerable to later cooption by the state as the city expands and new opportunities for development arise.<sup>2</sup> Mumbai's density places land at a premium and thus the state conceptualizes issues of resource allocation as spatial problems and creates a heavily territorialized type of state power.

However, marginalized communities who have been excluded from planning processes rely heavily on Mumbai's informal spaces to meet their basic needs and foster informal economies of both financial and human capital. This thesis draws heavily on the theories of informality authored by Ananya Roy and Asef Bayat. Roy's work describes the mechanisms of the state that work to erase informal spaces through a process she calls unmapping. By unmapping contested spaces in Indian cities, the government is able to expand a territorialized power and undermine the spaces and resources that marginalized communities create for themselves, ensuring that the power to plan the city remains



firmly within the state.<sup>3</sup> Bayat's work addresses the other side of this power equation, that of the subaltern subject who subtly shapes the city around them. For Bayat, this "quiet encroachment of the ordinary" allows the subaltern to slowly but effectively reshape the urban fabric through small but consistent movements and pressures.<sup>4</sup> Both of these theories describe the process of insurgent planning that takes place in post-colonial cities. Unlike language that presents informality as a limited survival strategy that goes overlooked by the powers that be, Roy and Bayat's actors use the creation and erasure of informal public spaces intentionally in order to exert control over their city.

Insurgent planning, as theorized by Faranak Miraftab, provides a process separate from the state where vulnerable communities can participate in shaping the urban landscape despite their exclusion from formal planning mechanisms and stands in opposition to dominant politics of inclusion that work to depoliticize the actions of marginalized communities.<sup>5</sup> The informal spaces created through insurgent planning in Mumbai hold multiple use values, which can be seen clearly in the ladies compartment on the Mumbai Suburban Railway Local train system. The Mumbai Local is the lifeline of the city, connecting Mumbai's central business district with its most far-flung suburbs as well as the surrounding municipalities of Navi Mumbai and Thane, and is so densely overcrowded that the Indian Railways provides gender segregated coaches on each train. These spaces, known as the ladies compartment, represent not only a critical space of mobility for female Mumbaikars (as Mumbai's residents are known in the local Marathi), but also a space where women have quietly and cooperatively repurposed public infrastructure to meet their day-to-day needs in a city that is not designed for them. This thesis will present three distinct uses of the ladies compartment beyond its transportation

role: social uses, domestic uses, and livelihood uses. These uses have emerged as the result of the protracted and collaborative everyday actions of the subaltern and challenge the way planners derive their authority to change the urban landscape.

Figure A: Crowds on in the ladies compartments



Overcrowding is a constant issue on the Mumbai Local, so the Railways implemented gender segregated compartments to make female riders more comfortable and safe

This thesis presents a case study for insurgent planning and examines its implications for planning practice for both the state and the subaltern. This work is based on participant observation and interviews with professional planners and policy makers over the course of several visits to Mumbai. The ladies compartment is a unique space that has, as a result of small, unorganized, but collective actions on the part of its riders, created new infrastructure that supports women's labor outside of the home. These types

of accommodations are crucial for a growing female workforce with increasingly complex roles in society. First, this paper will examine the role of both the state and the subaltern in creating informal space in the post-colonial city and the implications of excluding gender as a lens for planning theory. It will then discuss the development and modern governance of the Mumbai Suburban Railway System, noting how its unique governance structure creates space for unmapping. Next, it will discuss the specific case of the ladies compartment, breaking down its three primary informal use values and examining how these uses, which are absent from other public spaces, contribute to women's citizenship and livelihoods. The paper will then present two major threats to the spaces of the ladies compartment and their policy implications. These threats are the uneven regulation of street vending, which leaves female vendors vulnerable to criminalization and the privatization of public transit, which creates new barriers to women's mobility. It concludes with potential sites of further investigation.

As the Mumbai municipal authority moves away from a model of state provision of public resources and embraces neoliberal policies that outsource service provision to the private market, new threats to the continued existence of the ladies compartment's informal uses emerge. In examining the struggle for street vendor labor protections and tracing the shift of that market from the informal economy into the formal market, we can see how increased recognition from the state can extend protections for vulnerable workers, but does not provide rights evenly to all workers. This is particularly true for women working in the informal sector. Simultaneously, Mumbai's transit systems are being modernized and privatized. The new Mumbai Metro system represents a public transit system that is more secure, and comfortable, but is also less accessible and more

heavily surveilled. Tracking these policy changes demonstrate how mechanisms intended to better formalize and administer public spaces in Mumbai serve those who already have access to resources while leaving vulnerable communities even further marginalized.

## II. METHODOLOGY

This thesis is based on research conducted in Mumbai as part of a Fulbright-Nehru Student Research award from August 2013 to June 2014, as well as a field visit from December 2016 to January 2017. Specific vendor counts presented in this paper were conducted during the December-January visit. The fieldwork represented here was conducted through participant observation and interviews with policy makers and planners affiliated with the Tata Institute of Social Science's School of Habitat Studies. Participant observation was conducted through ride along surveys, during which observations were tallied. Tallied data allowed for the collection of data on overall trends within the compartment while also protecting individual vendors, who are often subject to police scrutiny, as their work is not sanctioned by the Railway authorities.

Observations were collected on each of the Local's three lines during morning peak hours, midday off-peak hours, and evening peak-hours in order to represent changes in ridership and space usage in the compartment across different times of day. Each count was reproduced three times over the course of a month and counts were conducted from the southern most origin station to the northern most station within the limits of Greater Mumbai. Extreme overcrowding of compartments prevents vendors from working during peak rider hours, so data on vending largely represents the off-peak, midday hours. Additionally, observations present here were only collected when the train was travelling through greater Mumbai's municipal area. While this researcher did ride the Local through the neighboring municipalities of Navi Mumbai and Thane, data from those cities is not included here as this paper is focusing exclusively on the limitations of

Mumbai's municipal policies and how those specific protections are not extended to workers on the Mumbai Local.

Within the trains, data was categorized based on the type of use being observed within the ladies compartment. These were broken down into vending uses, domestic uses, and social uses. Within the category of vending uses, counts were kept at each station, recording how many vendors boarded and alighted from the train at each stop. For each vendor, it was also noted whether the vendor was male (as a small number of male vendors do use the ladies compartment to access work), whether the vendor was a child, and what type of good they were offering. These goods were often explicitly gendered and included costume jewelry, make up, hair accessories, small kitchen tools such as vegetable peelers, small children's toys, scarves, packaged snack foods, shrimp, and produce.

Of the vendors present, only 30 percent were male. It is estimated that 75 percent of street based vendors in Mumbai are male,<sup>6</sup> so this reversal of trends on the Mumbai Local reflects the importance of the ladies compartment to low-income women's access to livelihood. Additionally, male vendors were observed twice as many times on the Western Line than on the Central or Harbour Lines, which serve lower-income parts of the city, further reinforcing the significance of the Local to low-income women, both vendors and customers alike. Additionally, while only 2 percent of vendors observed were children, all of those observations took place on the Central Line. This relationship will be explored further in this paper's discussion of socioeconomics across the three train lines.

In addition to vendor counts, this thesis is also informed by conversations with planning practitioners based at the Tata Institute of Social Sciences (TISS), particularly Dr. Ratoola Kundu, a professor of planning at the TISS School of Habitat Studies, and an author of a recent study commissioned by the Indian Railways to investigate women's experiences of safety and mobility on the Mumbai Local. Unfortunately, Dr. Sharit K. Bhowmik, a key resource for this paper, passed away suddenly prior to the most recent field visit. His work, without which this thesis would not have been possible, is instead represented here through his extensive literature, including vendor surveys and policy papers.



### III. CONCEPTUAL FRAMEWORK AND LITERATURE

#### 1. Professionalized planning practice

As a result of a Western oriented professional practice, planners often see Indian cities as sites of planning failure, where “urban growth is so dramatic and that it consistently outstrips... planners vision for it.”<sup>7</sup> This narrative of a chaotic mega-city allows for planners in Mumbai, from their position within the bureaucracy of the state, to draft and publish comprehensive development plans and then later penalize communities when the spaces they construct for themselves do not fit into the framework of that planning document. This process of dividing the city up into single, discrete land uses glosses over the myriad ways that Mumbai citizens actually use public spaces in their day to day.

Planning practice is often confounded by spaces that are intensive, dense, and represent multiple use values. This is especially true in post-colonial cities, where informality makes up a large percentage of land use and economic activity, despite not being intentionally designed by the municipality.<sup>8</sup> Instead, informal uses that do not adhere to planner’s recommendations become extra-legal and vulnerable to eviction by the state when those spaces become profitable sites for redevelopment.

Given the colonization of planning theory, which universalizes the history of urbanization in the West, it is no coincidence that these types of spaces that planners are least willing to understand are predominantly found across the Global South. The attempt to export a Western-referenced, rational planning model into the post-colonial world places urban development along a teleological line where Western cities are the standard

of a modern global city.<sup>9</sup> Cities in the Global South are often diagnosed and targeted for reform through the mechanisms of rational planning. However, the useful spaces in these same cities are rarely considered to be evidentiary material for better planning theory.<sup>10</sup> Miraftab argues that more effective, critical planning must, “decolonize the planning imagination by taking a fresh look at subaltern cities [and] understand them by their own values rather than by... the planning prescriptions of the West”.<sup>11</sup> This paper seeks to reposition insurgent spaces in Mumbai as key pieces of infrastructure that improve the lives of vulnerable citizens.

According to Ananya Roy, this crisis of planning in urban India is not tied to the failure of planning, but rather the idiom through which planners define their work. Roy defines this idiom as one in which rapidly growing cities are allowed to expand rapidly as citizens construct their own homes and infrastructure and the role of the planner is to later enter those spaces and attempt to impose order. Here, “good or better planning can not solve this crisis, for planning is implicated in the very production of the crisis.”<sup>12</sup> This process is reinforced through the development of comprehensive regional plans, which prescribe specific land uses but often only enforces those land uses after the given parcel has already become the site of some piece of informal infrastructure.

This process of regional plan making does not include collaboration with ordinary Mumbaikars, who are later asked to vacate their homes and neighborhoods to make way for future planned development under the guise of public purpose, as defined and led by the state.<sup>13</sup> The dominant idiom of planning seen here conceptualizes inclusion, participation, and politics as something that happens within the formal spaces of planning as directed and allowed by the state and thus positions the expansion of informal spaces

as extra-legal developments that need to be reorganized and regularized by the state to be legitimate. These kinds of perfunctory participation mechanisms can easily depoliticize community action and threaten to transform community-led movements into token public participation.<sup>14</sup>

The type of radical planning presented in this thesis relies on the work of Faranak Miraftab, who has conceptualized the process of space-making as a “complex terrain of contestation” which needs to be understood as the result of multiple actors representing intersecting values.<sup>15</sup> Miraftab’s work expands on the writing of James Holston and Arjun Appadurai (1999), who conceptualize citizenship as a condition that changes based on context and is rooted in histories of colonization. The continuing referencing of planning practice to cities in the metropole makes this concept useful to planning theory. For these subaltern subjects, for whom citizenship is conditional, building one’s own infrastructure works to build deep democracy when meaningful participation is not otherwise made available to them.<sup>16</sup> For Miraftab, these complex negotiations make up “radical planning practices that respond to neoliberal specifics of dominance through inclusion”, which she calls insurgent planning.<sup>17</sup> Insurgent planning directly confronts neoliberal policies that might extend political rights among marginalized groups, but prevent those same groups from accessing any meaningful access to material resources.. This process of simultaneous expansion of political representation and detracting of livelihood access will be further demonstrated later in this paper with respect to the formalization of vending policy in Mumbai. Insurgent planning seeks to confront the neoliberal state by demonstrating how meaningful community and urban infrastructure is produced through the day-to-day actions of the subaltern.<sup>18</sup>

Spaces of informality and insurgency that emerge from this planning landscape work to challenge professionalized planning and push back against state control of the urban landscape. Planning can be a tool for exerting power, but it can also be a process of mobilization and reshaping in pursuit of opportunity and justice. A better understanding of informality and the insurgence that emerges from it is crucial to redefining the idiom of planning. According to Roy, “informality reveals the unintended consequences of the law and provides openings to challenge and change planning policy for practical and political purpose.”<sup>19</sup>

## 2. Unmapping and territorialized state power

Mainstream planning practice conceptualizes politics and the creation of space as something that happens within the confines of government. In this vein, informal spaces must be registered and formalized in order to adequately plan and administer the city.<sup>20</sup> Particularly in cities in the Global South, the legitimacy of community-created space hinges on what is considered legitimate use of limited public space and who is allowed to operate outside of the confines of the law. By selectively regularizing some spaces and leaving others within the realm of informality, the state can confer different levels of citizenship rights upon different actors.<sup>21</sup>

Ananya Roy presents informality in India as a “mode of subjectivity [that] provides a different reading of mobilization, resistance, and agency in urban politics” to different subjects.<sup>22</sup> In Mumbai, it is important to identify not only where informal spaces are being created by subaltern subjects, but also spaces where the state is intentionally

creating and perpetuating informality. Roy refers to this process as the “unmapping of cities.”<sup>23</sup> In unmapped spaces, informality exists within a specific state of deregulation and creates spaces that are extra-legal. It is in this way that the Brihanmumbai Municipal Corporation (BMC), the local municipal agency, manages limited resources, particularly space, and leaves previously neglected spaces open to the threat of seizure and redevelopment. The process of unmapping urban space creates new territorialized flexibility for the state, allowing the municipality to convert land uses, even when that conversion requires the state to violate its own laws and policies, particularly in regard to due process and the rights of long-term slum settlement residents.<sup>24</sup> Unmapping is particularly useful in the implementation of the Mumbai Development Plan (DP), which advises large-scale land use changes but does not seek out substantial public input on those changes. Roy argues that while this process “seems to be antithetical to planning, it can and must be understood as a planning regime.”<sup>25</sup>

Cities in the post-colonial world are constantly changing, but planning practice is remarkably inflexible as it does not create space to question the delineation between public and private, formal and informal.<sup>26</sup> Project-based planning processes present narrowly defined problems and do not offer any space for discussion as to how and why problems are defined as such. Throughout all of this, the people who are most likely to be disproportionately impacted by flawed solutions to these very narrowly defined problems are also the least visible.<sup>27</sup> Instead of fighting for appeasement from planners, women in Mumbai have used the segregated space of the ladies compartment to create their own informal systems within their own specialized form of infrastructure. Insurgent planning often emerges out of a context of state-led unmapping efforts and where the muddying of

the lines between legal and illegal activities and formal and informal spaces are the cause of the counter-politics. In this way, women, particularly very poor women, have slowly and collaboratively created a new infrastructure where they can rely on one another to meet their day-to-day needs, which are ignored by state-led planning efforts.

### 3. Intentional informality by the subaltern

Historically in planning practice, informal spaces have been viewed as deviations from the planned city and require regularizing by the state in order to administer them. Under this assumption, those subjects who exist in and rely upon informal spaces for the majority of their needs are doing so out of desperation, not because their informal spaces are more functional than formalized ones. This survival strategy model suggest that marginalize groups operate within informal spaces because they do not have any other alternative and depoliticizes the actions of the subaltern, suggesting that politics or insurgency is limited to those with more material access and works to reproduce a language of control over a marginalized group.<sup>28</sup> Additionally, this limited framing of informality misidentifies the system of unmapping and control that are intentionally deployed by the state to extend or withhold resources.<sup>29</sup>

In order to understand the processes at work within the ladies compartment, it is helpful to turn to Asef Bayat's conceptualization of informal spaces as being a result of a "quiet encroachment of the ordinary that may provide a better model of the activism of marginalized groups in [the post-colonial city]".<sup>30</sup> It is important, however, to point out how the language of encroachment here differs from the extensive use of the term "encroachment" to criminalize street vending in Mumbai. In Mumbai policy language,

encroachment is the term used to indicate the formation of some informal space on public lands that is to become the target of punitive action. Unlicensed street vendors are commonly ticketed for “encroaching” upon sidewalks or footpaths. In Bayat’s understanding of informal space, encroachment does not hold the same power to make criminal. Instead, quiet encroachment consists of, “mundane acts, when continued over a long period, may create significant changes in urban structure... and in actors own lives.”<sup>31</sup> These ordinary, everyday actions create a space where a marginalized group can advance their own territorial needs against those of the state or the powerful. This type of slow but persistent grassroots activism is quiet and non-confrontational, but challenges many fundamental assumptions about how space is controlled.<sup>32</sup>

Bayat suggests that quiet encroachment has two primary goals. The first is the “redistribution of social goods and opportunities”, and the second is the attainment of “autonomy... from regulations, institutions, and discipline imposed by the state.”<sup>33</sup> This process is visible within the ladies compartment as female passengers use the space to strengthen their social ties to other women, access their livelihoods, and extend their sphere of domestic labor to better accommodate the demands of childcare and household management. At the same time, female vendors, who have been pushed into the informal economy as formal employment in the industrial sector has receded, are able to access work with low barriers to entry despite a regulatory landscape that keeps them out of other labor sectors.

Insurgent planning “constitutes radical planning practices that challenge the inequitable specifics of neoliberal governance operating through inclusion.”<sup>34</sup>

Mainstream planning practice commonly derives its mandate through public meetings,

however, these meetings rely on a politics of inclusion in which state-aligned planners seek out permission from a specific group of people. The subaltern is not among that group, and thus directly fulfills their needs themselves in the spaces accessible to them. The ladies compartment offers an opportunity for planners to reconceive how they identify political space, even if the political action that is taking place is made up of small-scale actions. There is no one uniform type of struggle and planning mechanisms that are intended to elicit public participation in the planning process rarely account for any type of collective concern that can not be organized and quantified in a town hall meeting. Nevertheless, informal spaces, even ones that are constantly mobile such as those on the Mumbai Local, are significant space for community-led planning.

#### 4. Gender and access to public spaces

From planning's origins, the specific ways that women use public space have been largely ignored. The built urban environment is the result of many users contributing to a space of multiple uses and thus a woman's experience of the city and her capacity to contribute to it is limited by hierarchies and power dynamics within the society that constructs the urban space.<sup>35</sup> For women living in urban environments, day-to-day life is "profoundly affected by the design and use of public spaces".<sup>36</sup> However, this does not mean that women's needs and specific uses of urban spaces and infrastructure are considered when planning the city. Rather, women, "have become an interruption in the city, a symptom of disorder, and a problem".<sup>37</sup> Access to particular spaces requires the performance of specific identities and thus planners who have the



power to design spaces also have the power to exclude those who can not adequately perform normative identities.<sup>38</sup>

Instead of integrating these varied experiences into a planning practice that might result in a richer urban fabric, rational planning models focused on turning the multiple lives of cities into variables that might be plugged into an equation, allowing planners to professionalize their trade and derive their legitimacy through supposedly objective scientific methods. However, in building models that attempted to calculate where residential areas ought to be located based on journey to work travel patterns, rational planners completely ignored the travel habits of women, who were largely restricted to suburban domestic spaces.<sup>39</sup> This assumption persists despite large increases in the female labor force and the complexity of women's trips as they juggle their domestic responsibilities with their participation in the labor force. Women's domestic work, though necessary to the reproduction of labor, is not priced on a market and thus not given any value in the formulas that shape travel prediction models.<sup>40</sup> Rational planners tended to overlook the fact that while the isolation of domestic spaces away from the city center was beneficial to men (who commuted into the city for work and sought a home that would be a haven from the disorder of the city), that same isolated denied their wives and daughters access to jobs, resources, and social ties.<sup>41</sup> The cloistering of female citizens outside of the purview of rational planning processes also tended to ignore the fact that women and children made up a large percentage of a city's poor residents. Effective feminist critiques of planning "point to [a history of] exclusionary decision making, cultural norms, and analytical methods that devalue women's work, the failure

of municipal governments to provide adequate services to women, and [planner's] obliviousness to the feminization of poverty.”<sup>42</sup>

This feminized poverty is exacerbated by social codes that keep women out of the formal labor market, particularly in Mumbai. The expectation that women stay behind closed doors, especially at night, is written into Mumbai's legal code and labor regulations. Protectionist discourses that prevent women from participating in the formal economy were formalized in Mumbai in 1996 when the conservative, right wing government under the Shiv Sena Party invoked the time regulation clause found in Section 66 of the Factories Act of 1948. This clause states that, “no woman shall be required or allowed to work in any factory except between the hours 6 A.M and 7 P.M.”<sup>43</sup> As its name indicates, the Factories Act originally regulated industrial labor practices in Mumbai's textile mills. The government re-invoked this clause to create new labor regulations almost fifty years later, rationalizing the move as a necessary measure to keep women safe at night. Instead of positing female employees as individuals with a right to labor, this re-instatement reflects the desire to regulate women's labor with respect to time, keeping respectable women geographically and temporally separate from the nightscape.<sup>44</sup>

This paternalist process of excluding women from urban life by positing them as a ward in need of protection is reflected in the design and administration of public transit systems in the city. When the ladies compartment was first introduced in Mumbai, there were female riders who opposed the gender segregated nature of the system. Women did not want their own separate public spaces; they wanted public spaces that are safe for all users, regardless of identity. On a practical level, however, most women will admit that

without the gender segregated spaces, they would be unable to use public transit.<sup>45</sup> This denial of access is directly tied to efforts to police women's activities and mediate their mobility through public spaces. The creation of parallel infrastructure for women only further points to how inaccessible most public spaces are for female Mumbaikars.

These types of gendered behavioral standards are becoming increasingly problematized as growing numbers of educated women enter the workforce, where globalization fuels new job creation, particularly in the business process outsourcing (BPO) sector. BPO jobs are very lucrative for recent college graduates. However, they require commuting to suburban offices in the middle of the night in order to adhere to American working hours. As more young, educated, unmarried women pursue financial independence through these kinds of third shift jobs, they also radically deviate from social norms about how and when women should be moving through the city.<sup>46</sup> If modest women who exist purely in the realm of the private are symbols of societal ideals, then the emergence of working women, who enter the public sphere in the middle of the night in pursuit of financial independence from a father or husband, is a threat to dominant moral and civil codes.

As women become more conspicuous in public spaces, the city is also seeing more prominent cases of sexual harassment, generally known in India as "eve teasing".<sup>47</sup> While the term "eve teasing" often implies a kind of harmless male mischief, it actually encapsulates any form of street harassment, from vulgar gestures, to verbal harassment, to physical assault.<sup>48</sup> However, eve teasing activity is condoned in a way that sexual harassment is not. Eve teasing is underpinned by a logic of punishment for women's deviations from sexual norms and is marked by a sense of self righteousness on the part

of the harasser, who sees eve teasing as a way of enforcing moral order. It also clearly reveals social anxieties around the presence of women in public spaces. For the women who must negotiate their movements through public spaces under the threat of sexual violence, even minor experiences with street harassment remind women of the possibility of victimization and inhibit their mobility as well as infringe on their right to openly access the city.

## IV. MUMBAI'S TRANSPORTATION LANDSCAPE

### 1. The development of the Mumbai Local

Today, Mumbai is India's financial capital and a city of an estimated 18 million people, 41percent of whom live in informal settlements and slums across the metro region, which is divided into 24 administrative wards.<sup>49</sup> The metropolitan area occupies only 375 square kilometers, making it one of the densest cities in the world. The city of Bombay\* was originally developed out of a series of seven swampy islands by the British East India Company as a commercial port city intended to rival indigenous trading routes out of the city of Surat to the north.<sup>50</sup> As a result of its history as a trading post and textile production site, Mumbai's transportation landscape still reflects that of an industrial town, not a global megacity. The Mumbai Suburban Rail Network, known commonly as the "Mumbai Local", emerged from a transportation infrastructure designed to move raw materials and goods and has become one of the world's most complex and heavily utilized public transportation systems, despite not being designed to accommodate passengers and their particular travel patterns.

Despite its lack of intentionality, the Local is key lifeline for commuters who travel from the surrounding areas into the southern most tip of the peninsular city, which has been the main central business district since the colonial era.<sup>51</sup> The rail system has continued to have enormous influence on the social and economic geography of the city since independence. Until the 1960s, economic activity was restricted to Bombay's island

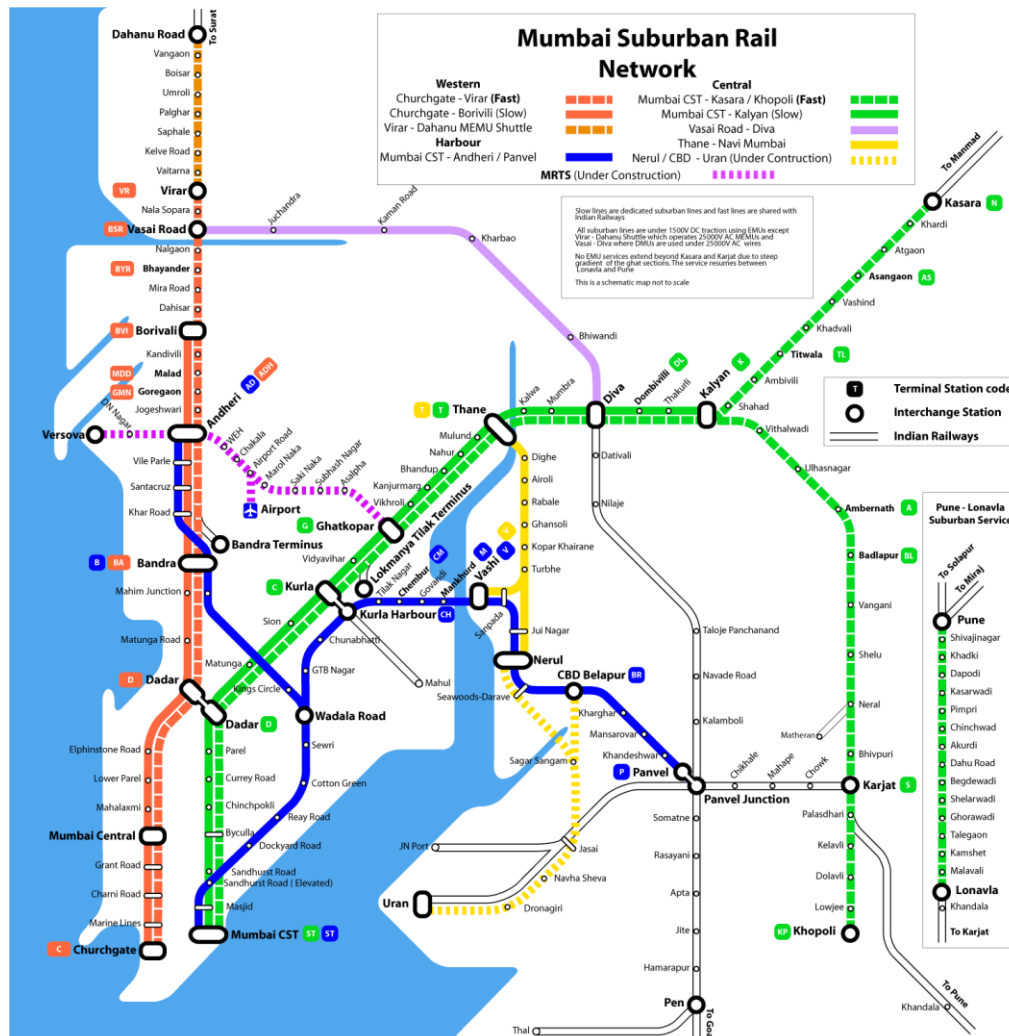
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\* Until 1995, Mumbai was known as Bombay. In this paper, any references to the city prior to 1995 will refer to "Bombay" while references to the post-1995 city will refer to "Mumbai".

city and the economic district was well connected by train and bus, but large population shifts led to the growth of new, unplanned towns in the northern suburbs. These towns developed around the existing rail networks and the accessibility of the Local expedited development of these new neighborhoods. This growth was further supported by India's economic liberalization policies of the 1990s. With the new influx of foreign capital, Bombay began shifting towards a service based economy and economic centers developed in the suburbs.<sup>52</sup> While this growth of new business nuclei has created demand for better East-West connectivity in the public transit system, the Local has not expanded to meet that need. Instead, the city has entered a number of public private partnerships to develop new privately administered, modernized Metro service along the city's East-West corridors, as will be discussed further later in this paper.

Spread across 376 kilometers through the city, its suburbs, and Mumbai's neighboring municipalities of Thane and Navi Mumbai, the Mumbai Local consists of only three lines, the Western, the Central, and the Harbour and runs two types of train. Fast trains run express between specified high traffic stations while slow trains stop at each station along the line. The load share of these two services is distinctly gendered and reflects the different travel patterns of men and women. The railway ministry reports that of all passengers who use fast train services, 77 percent are male.

Figure B: Schematic map of the Mumbai Suburban Railway Network

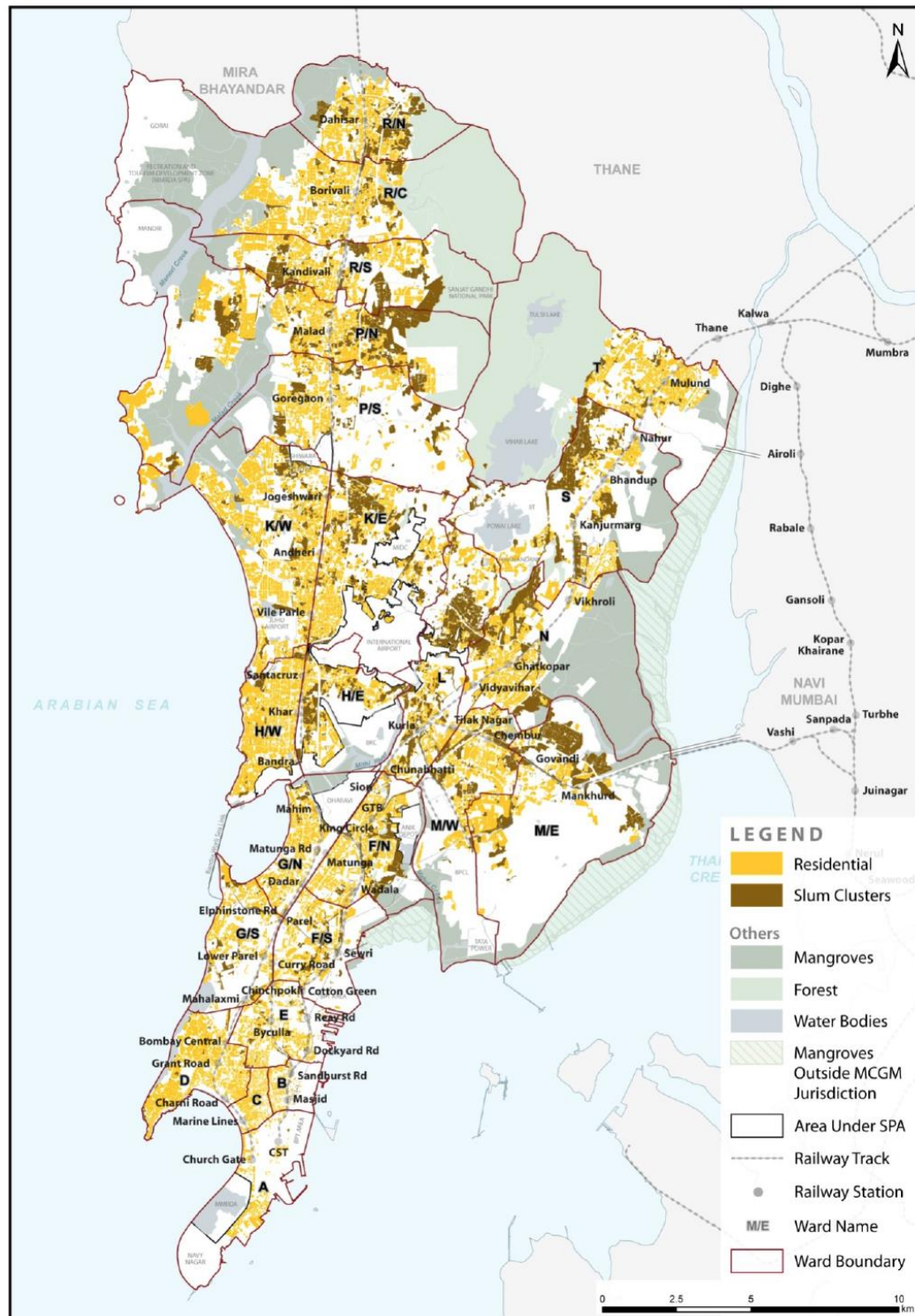


Source: Transport for Mumbai, "Mumbai Local Train"

The Western line, which runs from Churchgate in the downtown central business district, to Dahanu in the northwestern peri-urban area, includes 36 stations. The Central line, which runs from Chhatrapati Shivaji Terminus (CST) to Kalyan with bifurcations to serve Kasara and Khopoli, includes 51 stations. The Harbour line, which originates at CST in the south and splits into two separate arms, one running west to Andheri and another running east to Panvel, stops at only 22 stations.<sup>53</sup> Differences in services between the three lines reflect the economic geography of the neighborhoods they serve. The Western Line, which is administered through the Western Railway, serves many of Mumbai's wealthiest neighborhoods, connects many well established nodes along the peninsula's west coast, and offers the most frequent and reliable services.<sup>54</sup> Meanwhile, the Harbour line, which services many low-income settlements and few economic nodes, provides uneven services, utilizes the oldest rolling stock, and services fewer stations with greater travel times and distances between those stations. Much of the area serviced by the Harbour line is a patchwork of planned and unplanned settlements and much of its catchment area is not regularized by the municipality.<sup>55</sup> This is demonstrated in Figure C, D, and E from the Mumbai Development Plan, which identifies predominantly residential spaces as well as the percentage share of those spaces that are made up of slum settlements as well as land prices. The Harbour and Central Line serve wards with the largest share percentage of slum population, including wards S, N, L, M West, and F North.

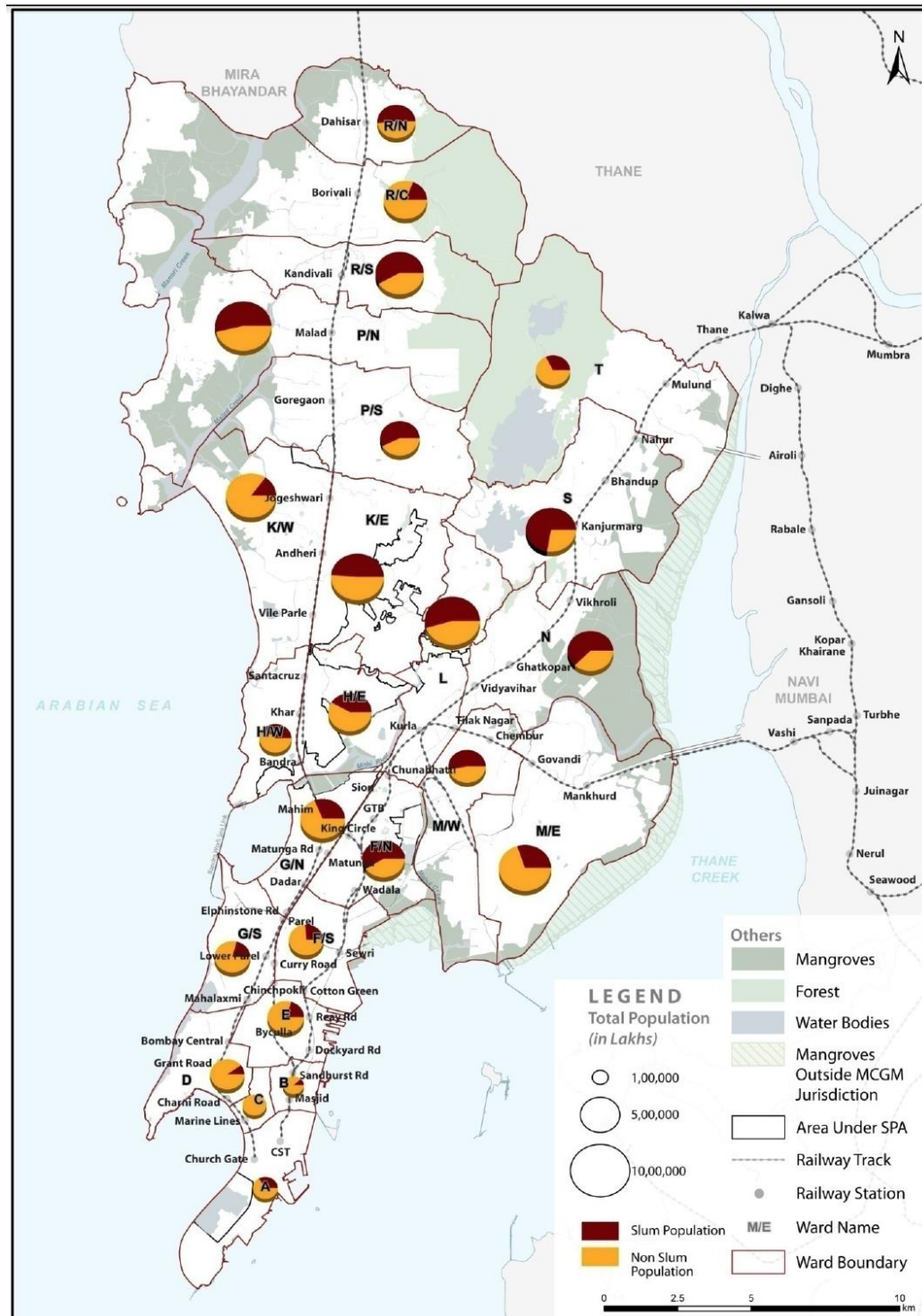


Figure C: Formal and informal residential land uses in Mumbai (2013)



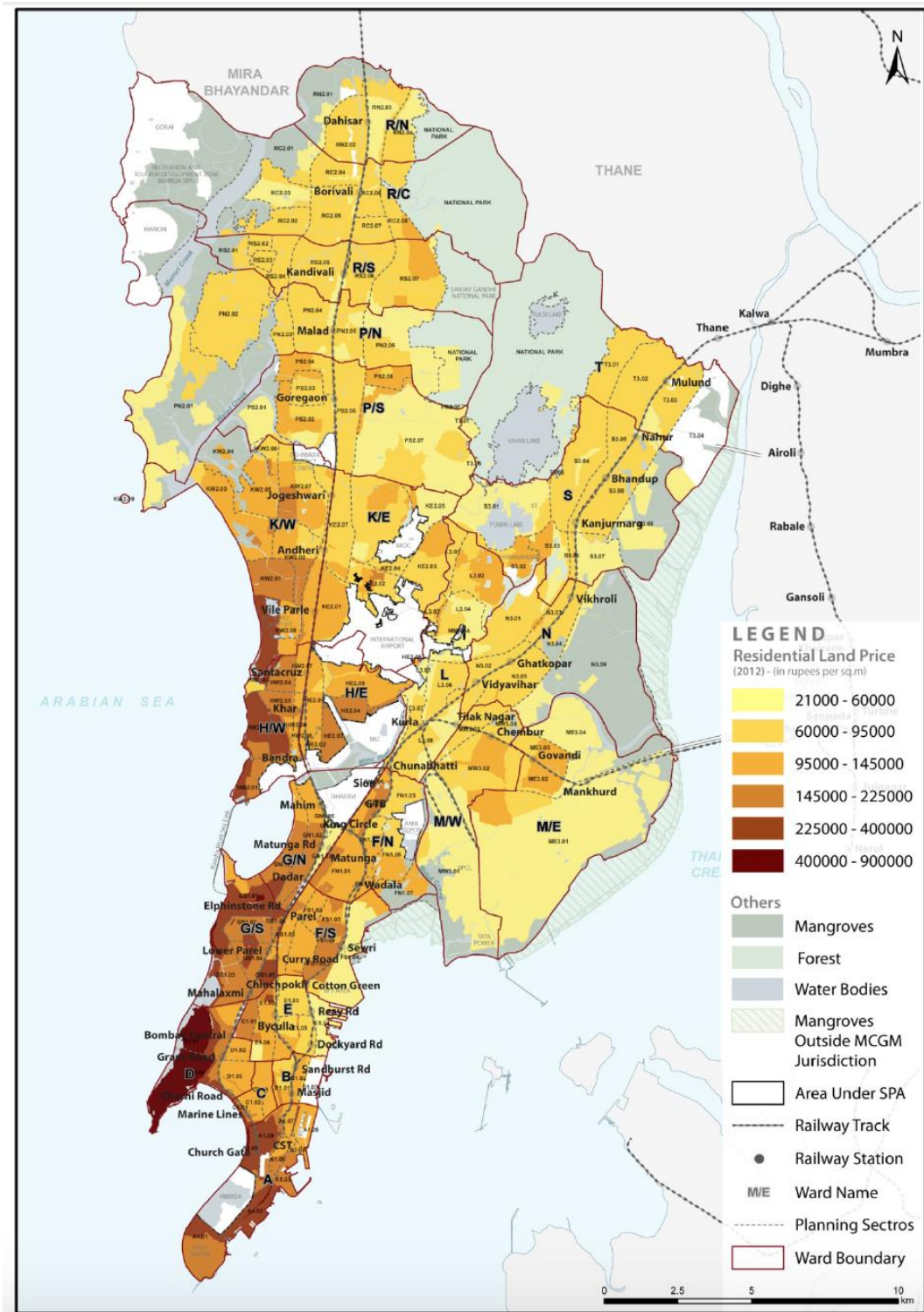
Municipal Corporation of Greater Mumbai, “Draft Development Plan 2034”, 399.

Figure D: Share of residential land uses that are informal (2013)



Municipal Corporation of Greater Mumbai, “Draft Development Plan 2034”, 405.

Figure E: Residential land prices in Mumbai (2013)



Municipal Corporation of Greater Mumbai, “Draft Development Plan 2034”, 406.

The density of vendors changes between lines in response to the needs of commuters on different lines. While “most station areas... are also visibly informal commercial areas” and thus offer shopping opportunities for arriving passengers, smaller stations, particularly those along the farthest reaches of the system, are less likely to have substantial development around the station area.<sup>56</sup> For commuters using the Central or Harbour lines, there is greater demand for an informal market of practical goods, particularly groceries, inside the train compartments themselves, as commuters have fewer shopping options around their destination station. In vendor counts, vendors on the Central line were the most likely to be hawking produce, while vendors on the Western line were the most likely to offer small luxuries like costume jewelry or nail polish.

Despite this uneven service provision, the system, as a whole, is largely accessible due to its affordability. Fares are structured around distance traveled and class of travel and range between 5 and 35 rupees for a second class ticket and between 50 and 245 rupees for a first class ticket. Despite the large discrepancy in price, first class service does not guarantee any enhanced service provision. It is largely a pricing mechanism to discourage overcrowding in cars designated as first class. In a recent study funded by Indian Railways, more than three fourths of commuters in the lowest income bracket surveyed reported that they considered travel on the Mumbai Local to be affordable. The same survey also noted that, “the proportion of women who find travel by suburban rail affordable is the same across [all] expenditure classes.”<sup>57</sup> However, when broken down by line, “there is a difference of more than 10-15 percentage points in the affordability perception of women commuters who travel by Western line and those who travel by the



other two rail lines”, further emphasizing the differing socioeconomics of the three lines.<sup>58</sup>

The link between overall service provision and economics has important safety implications for women who commute to the city’s peripheral areas, particularly on the Central and Harbour lines. Stations in the city and suburbs are well integrated into the surrounding landscape and are often served by pedestrian footbridges, auto-rickshaw or taxi stands, bus stops, and market stalls, which facilitate travel from home to the station. However, many peripheral stations lack any connective infrastructure to help commuters complete the last leg of their trip to their doorstep. At these same stations, the lack of vendors or market space means fewer protective eyes on the street and less opportunity to access goods and services along women’s routes. In the aforementioned Railways study, personal security on trains and around stations continually came up as one of women’s most pressing concerns, regardless of income or age, just as women commuters consistently acknowledged links between physical security and the presence of vendors around stations.<sup>59</sup>

In response to concerns about women’s safety on public transit, Bombay expanded the availability of female only compartments on the local trains in the 1980s and then again in the 1990s in an attempt to increase women’s feelings of security. These spaces were added to train services as a direct result of sustained organizing and campaigning by women’s groups across the city that advocated for expanded infrastructure specifically for women. The addition of ladies exclusive cars as well as a handful of “ladies special trains”, which are devoted entirely to female riders during rush hours, demonstrate a crucial expansion of city infrastructure that is specifically

designated for female passengers as a direct result of women's increasing demands for enhanced mobility. During peak hours, 20 percent of the train is reserved for ladies only but this number decreases to 15 percent after 11 pm.<sup>60</sup> The general boarding cars are, in theory, also open to female riders. However, the space of the trains, "articulate the difference between formal equality and substantive equality,"<sup>61</sup> where although women are allowed to ride in the general boarding compartments, the marker of infrastructural success is whether or not women actually ride in general cars, and the majority do not. These service cut backs make little sense, from a density perspective, as more female-specific compartments are available during rush hour, when there are substantially more riders on the system. Instead, these cutbacks work to reinforce notions of appropriate time and place for women and suggest that women ought not to be riding the train at night without a male escort.

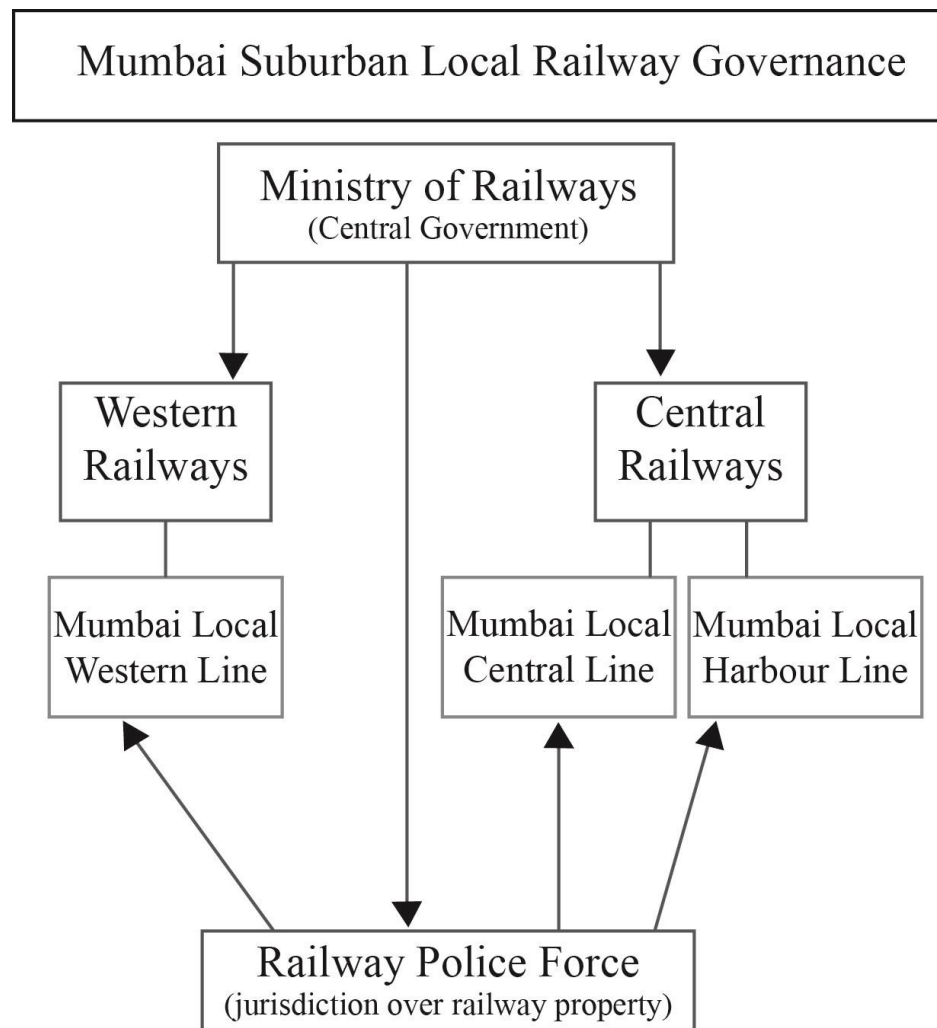
## 2. Governance and administration

The Mumbai Local is unique among other Indian urban public transportation systems in that it is owned and operated by the national railway authority via the central government. All of the land, tracks, rolling stock, and stations are owned by the central government and administered completely separately from the municipality. Meanwhile, the rest of the city's infrastructure is maintained and overseen by the Mumbai Metropolitan Region Development Authority (MMRDA). The MMRDA is a minority owner of the city's new Metro system, which has been developed as part of a public private partnership with the private corporation, Reliance Infrastructure. This public private partnership deal, along with the separation of transit infrastructure across different

levels of government, stands in the way of substantial integration of the two public transportation systems, despite being represented on MMRDA system maps as a seamless network.

The much larger and more heavily utilized Mumbai Local is part of the Indian Railways under the central government. The Mumbai Suburban Railway is just one small piece of the national network of railways that stretch across the Indian subcontinent and are administered out of the capital of New Delhi. In addition to being administered nationally, the Mumbai Local is also split between two separate railway infrastructures. The Mumbai Local Western line is part of the larger national Western Railway while the Local Central and Harbour lines are run on the Central Railway, as depicted in Figure F below.<sup>62</sup>

Figure F: Mumbai Suburban Local Railway governance structure



The Mumbai Local runs a total of 2,855 trains per day across the three lines and serve an nearly 8 million passengers per day, one fourth of whom are women.<sup>63</sup> This



huge ridership makes the Mumbai Local notorious for its density problems. During rush hour, the trains run what engineers refer to as, “super dense crush loads”, where trains designed to carry 1,710 passengers carry up to 5,000 passengers.<sup>64</sup> These crowds also ensure that train compartment doors remain open, even when the train is in motion, allowing the elements in and making the ride risky for passengers who are crowded around the doorways. Likewise, windows are not glass paneled, and thus rain can enter the compartment during monsoon season and the coaches lack any climate control mechanisms, save for circular fans that have been installed along the ceilings. These huge crowds elicit concern for female passengers especially. Densely packed train cars mean women become worried for their physical safety. Women frequently report concerns about groping from anonymous hands in such large crowds and often carry small defensive items, such as safety pins, so they can retaliate against unwanted physical contact.<sup>65</sup>

Figure G: Passengers hang out of an overcrowded general boarding compartment



Men hang out of the doors on an overcrowded Harbour Line train

In addition to the rail cars and stations themselves, the Indian Railways also oversees a separate Railway Police Force that has jurisdiction over train compartments and station areas, but does not have jurisdiction outside of the rail system. Likewise, the local Mumbai Police, who are responsible for policy enforcement across the city, do not have jurisdiction over the Mumbai Local.<sup>66</sup> This means that crimes that occur on women's commutes, particularly those such as sexual assault and harassment, are difficult to report and pursue across multiple jurisdictions. It also challenges how local policies, particularly those that focus on making informal spaces legible to the municipality, are enforced on station platforms or within the space of the train itself, as will later be discussed with respect to informal vending.

Figure H: Markers for the ladies compartment



Markers on the train compartments indicate the ladies compartment. On the top, the hours of ladies compartment operation are presented in all three of Mumbai's official languages, Hindi, Marathi, and English. On the bottom, a pictorial symbol indicates the ladies compartment for riders who are illiterate. The woman in the illustration is marked with several symbols of her status as a modest, married woman, moving through public in a way that is socially acceptable.

She wears *sindoor* in the parting of her hair to indicate her status as a married woman and covers her head in a gesture of modesty.

While the gender segregated spaces of the Mumbai Local cater officially to women, these spaces also serve those passengers who exist outside of the gender binary that was imposed upon Indian society by English colonists. In traditional Indian society, there exists a third gender called *hijra*. This “institutionalized third gender role in India is neither male or female, containing elements of both.”<sup>67</sup> Traditionally, *hijra* played an important ceremonial role in society and earned a living by collecting alms and performing at births, festivals, and weddings and held a special place in society based belief in their ability to curse or confer blessings on male children. *Hijra* commonly adopt female styles of dress, take on women’s names, use female kinship terms amongst themselves, and claim seating reserved for women on public transit.<sup>68</sup> However, the *hijra* community is rapidly losing their traditional means of livelihoods and “modernity has been inhospitable to *hijra*”, whose identities do not fall neatly into the gender binary of male and female around which society is now structured.<sup>69</sup>

While the long history and politics of gender identity and role of the *hijra* in post-colonial India is beyond the scope of this paper, it is important to acknowledge the importance of the ladies compartment to this community in order to fully understand how these spaces can serve Mumbai’s most marginalized. The presence of *hijra* passengers creates anxiety in the minds of male commuters on the Local, where *hijra* often panhandle and as a result, *hijra* sometimes act as gatekeepers within the ladies compartment. In chasing unwelcome male passengers out of the ladies car, *hijra* not only act as a layer of protection for female passengers, but also lay claim to the space as one of their own, which they have the right to defend and from which to exclude others.

## **V. CASE STUDY: THE LADIES COMPARTMENT AS A SITE FOR INSURGENT PLANNING**

Just as the state works to intentionally exclude particular groups of people and leaves certain spaces in a legal grey area, the subaltern subjects who rely on informal spaces to meet their day to day needs are also creating space and infrastructure in a way that is collaborative and intentional. The ladies compartment not only offers women a safer space for commuting, but also acts as an extension of the domestic sphere where women can work and socialize in a way that is not allowed in other public spaces in the city. The ladies compartment and the unsanctioned infrastructure that exists inside of it represent a space of insurgent planning, where marginalized communities build their own citizenship among themselves rather than rely on the state to grant it.<sup>70</sup> The following section catalogs three primary informal uses of the ladies compartment as observed over many months ride along surveys. All three uses rely on the infrastructure of the ladies compartment as not only a space that is inherently mobile and gender segregated, but also one that is under-policed and visually separate from the general compartments, thus outside of social surveillance mechanisms that limit female mobility through public space.

### **1. Social Uses of the ladies compartment**

The Mumbai Local serves not only the city of Mumbai and its immediate suburbs, but also stretches into neighboring municipalities and peri-urban areas. As a result, two thirds of female passengers on the Mumbai Local spend at least 45 minutes on a single

one-way trip.<sup>71</sup> As Mumbai's female labor force grows and more women are made to balance their traditional domestic duties of homemaking and childcare with long commutes and full work days, the time spent with other women on the train becomes an increasingly important time for women commuters to socialize with other women. For many women in Mumbai, the ladies compartment on the train represents not only mobility, but also important social space. While men are allowed to use public space in their pursuit of what is colloquially known as, "timepass", such as loitering in corner chai shops and chatting with other men, women are expected to move through public space purposefully.<sup>72</sup> The term timepass can also be a euphemism for harassing women as they walk past as a form of male entertainment. Women are discouraged from occupying public space for too long or else become timepass for loitering men, doubling as both a means of social control of women's movements and mechanism for men to reassert their position at the top of a social hierarchy. However, women are able to claim their own space for timepass within the ladies compartment.

The space of the ladies compartment is governed by an informal but collectively understood set of social rules. On crowded rush hour trains, these rules dictate who is allowed to sit and when they are allowed to do so. These decisions are not made based on age or ability, but rather, who claimed a seat first. When women boarding the train find all of the compartment benches filled, they move around the car asking other seated passengers where they will alight. Once they've found someone who is disembarking before them, the interrogator has effectively claimed the spot of the seated passenger. Other ladies may ask her for her seat, but she will be turned away with a simple, "claim

*kiya*”, a Bombay flavored mix of Hindi and English that means someone has already laid claim to the spot. This process is repeated at each stop.

These shared rules of behavior enforce security and rules for belonging for female passengers who are used to navigating a hostile public sphere. While the clearest sign of commonality between riders is their gender, *hijra* are also accepted into the space of the ladies compartment. Rather than being a marker of who is allowed in, gender is more often a marker of who is chased out and who is allowed to chase away outsiders. When men seeking relief from overcrowded general compartments do attempt to hitch a ride in the ladies compartment, it is usually older ladies and *hijra* who take on the responsibility of gatekeeping. It is also these two groups who are, in society’s collective mind, desexualized and thus less dangerous. While *hijra* adopt traditionally female names, clothing, and mannerisms, these adoptions are typically “exaggerated... expressing sexual overtones that would be considered inappropriate for women in their roles as daughters, wives, and mothers.”<sup>73</sup> Similarly, elderly women beyond their childbearing years are allowed to deviate from norms around appropriate female behavior as the embodied and sexed subject is also one that is particularly aged.<sup>74</sup> Rather than being granted less ownership of the space of the ladies compartment due to their particular identities, these riders are permitted to act as gatekeepers who push back against male appropriation of the space.

The consistency across trains and times of day that allows for the growth of support networks and trust among riders also fosters friendships between commuters who may see one another in the same compartment in the same train each day, but whose relationship is restricted to the space of the ladies compartment. Commuters will speak of



“train friends”, their social group that is specific to the time and place of the train during their commutes. It is not uncommon, especially on morning rush hour trains, to find groups of older ladies singing *bhajans* (Hindu devotional songs) together to pass the time, or women bringing boxes of sweets to share with her friends in celebration of a holiday or an important life event, such as a family wedding or the birth of a child.<sup>75</sup> In one anecdote (that also points to the dangers of relying on such strained infrastructure), a daily train rider reported that after she was injured falling from a moving train car, it was her friends from her daily commute who were among her first and most frequent visitors during her recuperation.

In urban India, male loitering is such a common and widely accepted form of entertainment that it has its own terminology. However, access to “timepass” is a, exclusive privilege of male citizens. The expectation that men may loiter and socialize in public, while women must move purposefully between private spaces, is so engrained that even sexually harassing women in public spaces is condoned as a means to pass the time while also working to ensure women do not venture into similar spaces in order to access their own social networks. In the absence of female friendly chai stalls or roadside cafes, women in Mumbai have formed their own social space within the confines of the ladies compartment.

## 2. Domestic uses of the ladies compartment

The creation of social space for women operates as an extension of the domestic sphere, to which women are expected to be restrained. Where planners neglect women’s social needs through the creation accessible public spaces, women have instead extended

their own domestic sphere into public infrastructure spaces. Likewise, domestic duties often spill into the ladies compartment. These domestic duties can be categorized in three primary ways: childcare, personal care, and meal preparation.

As previously discussed, transportation planning has, historically, focused primarily on the travel patterns of predominantly male workers who commute during a morning and evening rush hour. However, this practice largely elides the different and substantial travel needs of female commuters, who are more likely to use public transportation than their male counterparts. Women's travel patterns also tend to include more chain trips, where the commuter makes multiple stops along their travel route in order to run errands. While men predominantly travel between two main stations and thus are more likely to select fast trains on the Local, women are more likely to rely on slow trains, which stop at more stations and allow more opportunities to run errands and complete domestic and childcare related tasks.<sup>76</sup> This divide in travel patterns is clearly demonstrated on slow trains during midday, when the ladies compartment is suddenly filled with women accompanied by uniform clad children, coming and going from school. This particular rush on the ladies compartment is not considered a peak time for travel, despite the large number of youth (and often times, their mothers) who use the Local consistently, but at different times of day than adult commuters.

For many mothers, however, childcare-based travel is not limited to the ferrying of children from home to school. As mentioned previously, 41 percent of Mumbaikars live in informal settlements, including on the sidewalks. For these women, the ladies compartment, particularly in the evening, can be a place of refuge. Women riding the Local after dark use the handholds and seats within the train to put together makeshift

beds for their children, sometimes even stretching fabric across aisles to create cradles for babies. For women who can not recede into a private, domestic space after dark, the ladies compartment can be a crucial space of quiet and rest. However, the female-only designation of the ladies car does not guarantee safety for these women, particularly at night. As the number of compartments designated for women declines after 11 pm, it also creates space for men to further appropriate public infrastructure and the Times of India has reported large increases (up to 110 percent) in the number of men reported to be riding in female-only compartments after 11 pm in recent years.<sup>77</sup> Just as women rely on friendly eyes in market spaces around stations for security, they also rely on one another in late night trains. While large groups of women can collectively chase male passengers out of a ladies compartment during the day, male riders take advantage of low nighttime female ridership as an opportunity to claim the ladies compartment as their own. As fewer female passengers use the ladies compartment after dark, women who rely on the train throughout the night become increasingly insecure.

Structural divisions in the police force make securing the ladies compartment difficult. While Maharashtra has more female police officers than any other state in India, women still only make up about 10 percent of the overall force.<sup>78</sup> The RPF, which is responsible for the Local and surrounding railway properties, positions officers, both male and female, at police booths on station platforms, but officers rarely ride in the train compartments themselves. Because of the open nature of the Local's rolling stock, at-grade rails, and the frequency of unplanned stops between stations, it is not difficult for passengers, particularly men looking to take advantage of a sparsely populated ladies compartment, to hop on a train without ever entering a station. Despite the presence of

late night female-only train service, poor women still overwhelmingly rely on unsafe public spaces to meet their most basic needs.

Another major extension of the domestic sphere within the ladies compartment is cooking and meal preparation. The spaces of the Local stations and the compartments themselves are crucial pieces of women's daily rounds. Women can pick up their groceries from street vendors around the station as they begin their trip home and often use the time and space of the ladies compartment to peel and chop vegetables or clean herbs on their way home.

Figure I: Street based vending around the Santacruz Western Line station

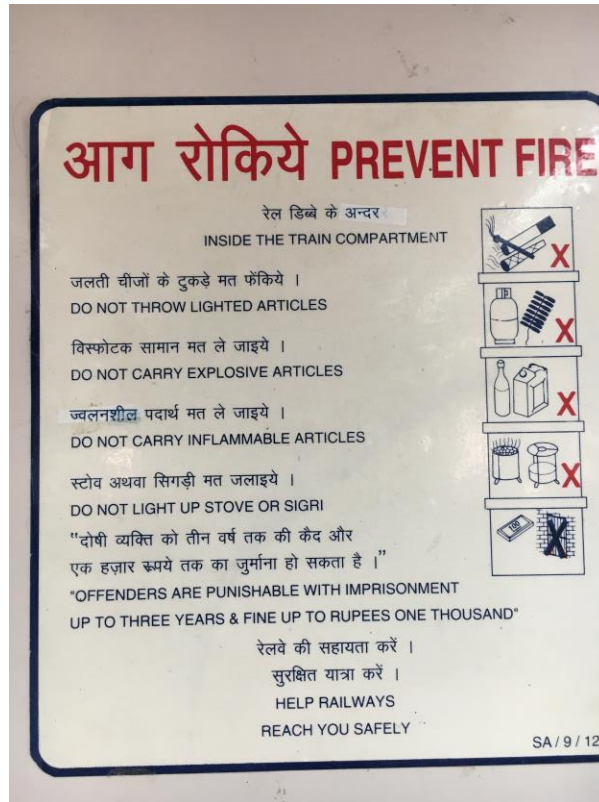


Street vendors offer produce in the market immediately surrounding Santacruz station on the Western Line in a scene typical of Mumbai station areas

This practice is explicitly gendered, especially when compared to routines in the general boarding compartments. During rush hour, vendors frequently board the general compartment at its origin station to sell books and packaged or prepared snacks to male

passengers. These vendors are often male and usually do not ride along with their customers when the train leaves the station. In the ladies compartment, however, female vendors usually ride along on the train with commuters to offer highly gendered goods, like nail polish, hair accessories, or small children's toys. They also offer some groceries, such as bundles of cilantro, fruits, and sometimes even fish or shrimp to women who are travelling home to prepare dinner for their families. While men are offered a book and a warm, cooked snack like *samosa* to tide them over until they arrive home for dinner (prepared for them by their wives or mothers), women are doing the work of obtaining and preparing the ingredients for the dinner they will cook for their families when they arrive home.

Figure J: Safety placard in the ladies compartment



A safety placard in a ladies compartment reminds passengers that they are not permitted to light cooking stoves on the train.

These domestic uses are inextricably tied to the ladies compartment as a piece of gendered public space. Childcare and meal preparation are duties that are assigned to the domestic sphere and thus become women's responsibility. As Mumbai's workforce becomes increasingly female, women must move seamlessly between the public sphere

and the private sphere as they shoulder both the responsibilities of employment and caring for family. The ladies compartment, an inherently mobile and gendered segregated piece of public infrastructure, allows women to build the spaces they need to effectively move between public and private life throughout the day.

### 3. Livelihood uses of the ladies compartment

The need for women to straddle multiple spaces and responsibilities can be seen by more closely examining the women who work within the space of the ladies compartment. The ladies compartment is not only a space of domestic labor such as meal preparation, but is also a space of work and livelihood for women who work in the informal economy as vendors. For the sake of clarity, this paper will refer to workers in the informal economy who sell their wares on sidewalks and streets owned by the municipality as street vendors and refer to women working within the railway infrastructure as train vendors. Here, train vendors refers specifically to those vendors who are working extra-legally in spaces where vending is not formally sanctioned by the railway authorities. Most Mumbai Local station platforms do have some degree of sanctioned vending, usually in the form of government contracted bookstalls or snack bars that offer fresh juice and prepared and packaged snacks to commuters. Train vendors are not part of that sanctioned group.



Figure K: Sanctioned vendor stalls on a Harbour Line platform



A sanctioned contractor stall on a Harbour Line platform

Train vendors are a crucial element of the ladies compartment, allowing female commuters to conveniently access goods as they travel, and the ladies compartment is a critical piece of how female train vendors access their livelihoods. Despite their visibility

within the ladies compartments, large scale studies and surveys of street vendors in Mumbai have largely ignored vendors who work on the trains or station platforms, given that those areas of the city are administered separately from the municipality. As a result, poor women who rely on the ladies compartment to access jobs within the informal economy are largely left out of conversations around street vending policy and protections and are left out of vendor organizing and unionization efforts. Women working in the informal economy within the space of the ladies compartment are doubly marginalized, left out of both the formal economy as well as the dominant discussion around street vendor policy.

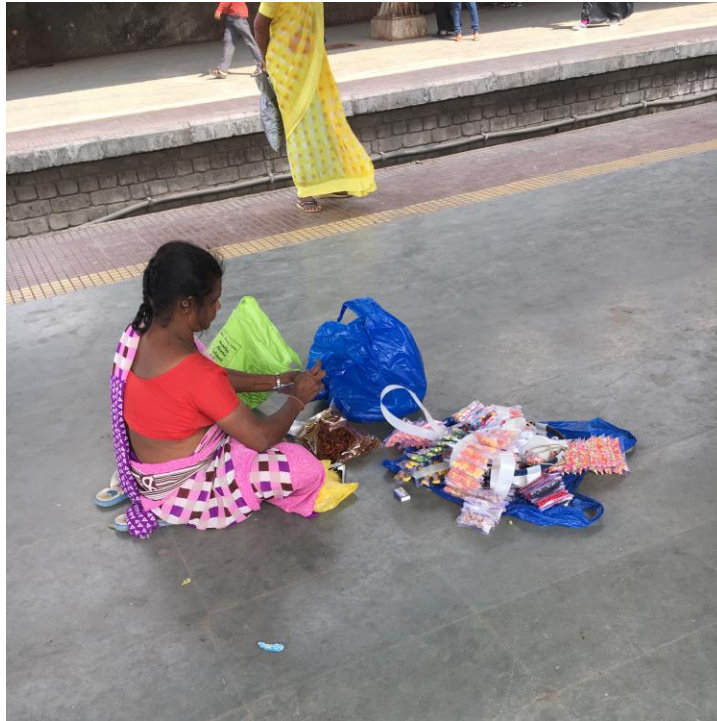
Figure L: Women shopping in the ladies compartment on the Western Line



Women in a ladies compartment pass the time browsing a mobile earring display, carried on board by a train vendor

The number of women participating in the informal economy in Mumbai has recently increased for two primary reasons. The first is the influence of urbanization and globalized capital, which have undermined the availability of gainful employment in the rural areas in Mumbai's hinterland. As a result, large numbers of migrants move into the city seeking work.<sup>79</sup> The second force pushing women in particular into the informal economy is the elimination of formal, industrial sector jobs in Mumbai's textile mills. According to a survey of street vendors produced by the National Alliance of Street Vendors in India (NASVI), many female street vendors took up work in the informal economy after their husbands were laid off from their jobs in industrial mills as textile plants, which were once Bombay's primary economic driver, shut down. These factory workers were unable to find jobs in the new globalized formal economy, so they or their wives (or both) have since taken up street vending to support their families. Many female street vendors reported that they were forced to become their family's primary wage earner as formal sector jobs left the city.<sup>80</sup>

Figure M: Vendor working on the station platform



A vendor sits on a Harbour Line platform and portions bulk nuts and dried fruit into individual packets to sell on the train.

Street vending work is an important means of earning a living for India's urban poor because it has low barriers to entry and requires little start up capital. Mumbai has India's largest population of street vendors, who are estimated to make up about 2 percent of the city's population. According to the NASVI survey, which excluded women who participate in rail vending on the Local and thus undercounted a large portion of the

female workforce in the sector, 25 percent of Mumbai's street vendors are female.<sup>81</sup> It is important to note that while a quarter of vendors are female, the informal vending sector, as a whole, supports many more women when suppliers are taken into consideration. Many vendors rely on small, home-based industries to supply the goods that they vend. Like most labor that occurs in the domestic sphere, home-based manufacturing work is largely female.<sup>82</sup> Despite the fact that so many female vendors are the main wage earners for their households, women in this sector make significantly less per day than their male counterparts. At the time of the NASVI study, women reporting earning up to 50 percent fewer wages than male vendors, even though vendors of both genders spent the same amount on their average daily expenditures. Additionally, vendors across income levels reported working over 10 hours per day.<sup>83</sup>

While the implementation of the ladies compartment itself was a result of concentrated, large-scale activism on the part of female Mumbaikars who demanded access to public transit, the use values visible in the ladies cars today rely on its ability to stay quietly outside of the interest of the Railway Ministry. The Railway is aware of the many ways passengers use the space of the ladies compartment, however, it does not have to take on the administrative burden of managing the space if it neglects to acknowledge those uses. By turning a blind eye to women's uses of the ladies compartment beyond commuting, the Railway does not have to attempt to reorganize an already overstrained transit network and the BMC does not have to respond to women's efforts to make public spaces more friendly and useful for them. Allowing this kind of encroachment within the ladies compartment benefits the BMC as it shifts the onus of service provision onto the women themselves.<sup>84</sup> In return, women are allowed to continue

to do work that is not state-sanctioned within the train compartments. Any large scale action or direct confrontation on the part of the ladies compartment users would threaten the continued existence of a space that they rely on to get through their days. As demonstrated by street vendor's fight for legal protection against the BMC, the informal encroachers that rely on informal spaces are conscious of the value of the spaces they have built and are willing to fight together to protect them if they are threatened.<sup>85</sup>

#### 4. Contestation of space within the ladies compartment

As will be discussed further in this paper, voluntary neighborhood groups known as Advanced Locality Management (ALM) groups, which largely represent middle and upper-class residents, have become an influential force in determining how neighborhood resources are allocated and how public spaces are used in Mumbai. However, these specific conflicts over the proper use of public space do not necessarily spill over into the ladies compartment or station platform areas on the Mumbai Local. The middle and upper class ladies that largely make up ALM membership have the financial resources to opt out of using the overcrowded Mumbai Local. While the Local does include a specific first class ladies compartment, the increased fares for first class compartment do not include any additional amenities. The first class compartment may be less crowded than the second-class ladies compartment, but its passengers who pay 200 rupee fares are just as exposed to the elements, uneven services, and overcrowded station platforms as passengers who pay 20 rupee fares.

Instead, affluent women are much more likely to rely on private vehicles to move around the city. The 2034 Mumbai DP reports that private motorized transportation is



growing at an annual rate of 15.5 percent, despite the city's already enormous traffic congestion.<sup>86</sup> This rise in private transport is largely attributed to the "intolerable crowding levels on the Suburban trains" and private vehicle usage is highest in parts of the cities that also have the highest land prices.<sup>87</sup> Full-time domestic help is not uncommon among middle and upper-class Indian households and as such, affluent Mumbaikars who rely on private vehicles as their primary mode of transportation also often have their own drivers as well. This pattern of expanded private vehicle transport has also recently included the entry of ride-hailing mobile applications, such as Uber and Ola, into the transportation market. These applications allow riders to book and pay for rides from private vehicle owners. Given the choice between the Local and an air-conditioned private vehicle, those who can afford it will often opt to be driven rather than use public transportation.

Instead, disputes in the ladies compartment are more likely to be intergenerational ones. With young women's increased mobility has come pushback from older riders who wish to see young women moving through the city in a way they find appropriate and modest. On more than one occasion, disputes were observed in the ladies compartment after older ladies riding the train commented on younger women's apparel. In each case, the older passenger was concerned about the modesty or appropriateness of the younger rider's dress, commenting that young women ought not to be moving through public space while wearing jeans or while bearing her shoulders. In each case, the younger woman pushed back against their accusers, often in English, while the older women appealed to other older passengers for support in Hindi or Marathi. The bilingual nature of these disputes does little to slow the argument, as both parties understand what is being



said even if neither wishes to switch languages. These disputes are densely packed with multiple meanings beyond the general discomfort of riding such crowded trains. The common complaint of too-revealing Western clothes (jeans, tank tops, shorts) and the divide in preferred language of dispute (younger women preferring English while older women prefer Hindi or Marathi), reveal larger anxieties around the proper place of a young woman in a globalized Mumbai.

## **VI. FORMALIZING THE FORMAL AND ITS POLICY IMPLICATIONS**

The informal uses of the ladies compartment face two main threats from the BMC and from market forces. The first is the process of formalizing and recognizing street vending. While recent policy changes have acknowledged the important economic and social role of street vending and advocate for better worker protections for vendors, these policy changes do not benefit the train vendors who work in the ladies compartment. As policy makers and union organizers work to build up the capacity and security of street based vendors, the heavily female vendor population that works within the spaces of the Railway continue to be excluded and left vulnerable to criminalization. The second process is that of privatization. The Mumbai Local has long been overburdened and the municipality has recently turned to the private market to design, construct, and administer new, modernized metro rail infrastructure that can operate above and below ground level throughout the city. While the Metro promises more amenities and more comfortable service, it is also much less accessible than the Local. High ticket prices and increased surveillance ensures that the Metro remains inaccessible to the poor women who rely on the Local for its multiple use values. Both of these policy changes have disproportionately large impact on the women who rely on the Local for their livelihoods.

### **1. Formalizing vending in Mumbai**

The BMC addresses street vending as a spatial question above all else. In a city as dense as Mumbai, open space is at a premium and street vendors have been framed as a policy problem, accused of encroaching upon or misusing public spaces. In an attempt to

regularize and formalize the vending sector, NASVI, the Indian Government, and policy researchers came together in 2014 to create a new National Policy for Street Vendors that would both ensure the safety and livelihoods of informal sector workers while also managing how they use public space. This policy document defines vendors as “a person who offers goods for services without having a permanent built up structure” and the policy language specifically includes vendors who work onboard public transport among this category.<sup>88</sup> This explicit mention of train vendors in the policy document affirms their right to access their labor and be protected from police harassment, but in practice, the municipality does not have the power to enforce that policy on the train. Train vending is inherently mobile and thus lacks the same kind of spatial concern as street vending. As policy makers have attempted to deal with vending as a spatial problem, mobile train vendors have been left out of the conversation and thus, also excluded from the protections that policy attempts to extend.

Prior to the implementation of the National Vendor Policy, most Indian municipalities regarded street vending as an illegal activity and vendors were constantly under threat of extortion and harassment by local police. Instead of restricting vending explicitly, cities imposed restrictions on the use of public spaces. In Mumbai specifically, municipal code stated that no individual was permitted to “erect stall or structure on streets that obstructs passage” and if police demolished stalls, the vendor was responsible for covering the cost of the demolition. Additionally, all street vendors were required to carry a license from the municipal commissioner and the commissioner’s office maintained the right to inspect and seize a vendor’s goods at any given time.<sup>89</sup> Raids on street vendors in public markets were commonplace. During these raids, police vans

would pull into market spaces and confiscate goods from vendor stalls. Vendors were permitted to later buy back their goods, but at exorbitantly inflated prices. Police rarely kept lists of seized goods and thus vendors were left to pay huge fines without recovering any goods at all.<sup>90</sup> According to the NASVI study, 76 percent of street vendors pay daily bribes to the police or municipal representatives to keep themselves safe from raids.<sup>91</sup>

Figure N: Postings forbidding vending outside of Chhatrapati Shivaji Terminus



In order to regularize street vending, the city began developing hawker zones across the city, which are designated corners and buildings, primarily in the central business district, where licensed vendors are allowed to operate. These hawker zones disrupt both vendor's ability to access their customer base and consumer's daily rounds. One of the city's most visible, expensive, and ineffective attempts at creating designated vendor spaces was the construction of Hawker's Plaza Market in the suburban neighborhood of Dadar. The Dadar railway station is a main artery for the city, connecting the Western and Central rail lines and is also home to many of the city's largest markets, including a flower market and several wholesale markets. The large market area immediately outside the station can become congested during rush hour and was a primary target for vendor clearance raids.

In an attempt to alleviate some of this congestion, the BMC spent 29 crore rupees (approximately 4.3 million US dollars) to construct a 5 story building that would house 1,488 permanent stalls for vendors. However, when construction was finished, few vendors were willing to move into the new building. Vendors reported being charged nearly 1 lakh rupees for a 15 square foot vending stall.<sup>92</sup> Vendors complained that their customers would not be willing to climb four flights of stairs to buy 75 rupees worth of potatoes from their new stalls in Hawkers Plaza. As of December 2016, Hawkers Plaza was still largely empty. While there is a small cloth market on the first floor and the rear of the building has been transformed into a vegetable wholesale market, most of the building remains vacant and few customers browse the stalls. Most vendors who work around Dadar station continue to work on the street. BMC efforts to manage public space have rarely taken into consideration how people actually use public spaces and instead

are largely reactionary attempts to manage informal development. The Hawkers Plaza Market was no exception.

Figure O: Police patrol the Hill Road market



A Mumbai Police van chases away non-licensed vendors in the busy Hill Road clothing market

Laws that criminalize informal workers are primarily the result of advocacy by and for middle and upper class neighborhood organizations. The most prominent citizen groups that have taken over responsibility for neighborhood management are Advanced Locality Management (ALM) groups.<sup>93</sup> ALM formation began in 1996 as the BMC began deputizing volunteer neighborhood groups to manage their own local maintenance and sanitation issues.<sup>94</sup> Today, ALMs are responsible for making recommendations for ward expenditures and approving new projects in their neighborhoods. The municipality has stepped back from neighborhood governance and handed over disproportionately large influence to a handful of volunteer organizations around the city. This abdication of the state's accountability to the individual neighborhood highlights the ways in which the state works to "stabilize state-citizen relations by implicating civil society in governance" and thus weaken citizen resistance.<sup>95</sup>

ALMs proliferated between 2002 and 2005, but they are spread unevenly across the city and are not correlated to local population. As a result, higher-income neighborhoods tend to have the highest concentration of ALMs and their priorities tend align with those of the neighborhood's most economically advantaged residents, who have the time and resources to participate in voluntary organizations. ALMs largely frame their efforts as public "beautification", however this type of beautification focuses less on maintenance of green space and more on criminalizing visible poverty. Clearing public right of ways and open spaces has been a particular priority of ALMs.

Figure P: Signs discouraging vending in public parks



Policing the use of park space is a favorite activity of ALMs.

This sign in front of the Carter Road Promenade in the well-off neighborhood of Bandra West asks park visitors to not purchase goods or snacks from the vendors that line the street along the park in the evening.

The sign is not particularly effective in discouraging people from purchasing street food and bringing it into the park.

## 2. Vending policy limitations

In response to the language often used by ALMs to evict the poor from public spaces, the 2014 National Policy explicitly forbids attempts to clear street vendors as a part of street “beautification” programs. Instead, new policy emphasizes that, “if properly regulated... the small traders on the sidewalks can considerable add to the comfort and convenience of the general public” and that, “the right to carry on trade of business



mentioned [in the Indian Constitution] cannot be denied on the ground that the streets are meant exclusively for passing.”<sup>96</sup> The 2014 National Policy lays out several key protections for vendors as laborers, focusing in particular on creating more participatory decision making that includes vendors and identifying street vending and vendor protection as a mechanism for poverty alleviation.

The most important mechanism created by the Policy is the Town Vending Committee, which must approve all changes to hawking zone designations and licensing guidelines. The Policy language specifies that each Town Vending Committee must include representatives from the municipal authority, the police, resident neighborhood associations, worker’s organizations, street vendor representatives, and a representative from the National Bank. Additionally, the National Policy recommends that 25-40 percent of Town Vending Committee membership be made up of street vendors, 1/3 of whom should be female.<sup>97</sup> The Vending Committee is responsible not only for approving any policy that might spatially reorganize vendors, but also licensing programs. Revenue produced through licensing is to be used to support worker training programs and workshops to help vendors organize themselves internally. Additionally, the policy language specifies the need for the expansion of credit access, social security, and secure housing for workers in the informal sector.<sup>98</sup>

Although the 2014 Policy represents a seminal shift in the way the BMC conceptualizes street vending, the results of these programs fail to create new protections for rail-based vendors. Because train vending lacks the spatial component that motivates vending policy making in Mumbai, mobile vendors on the Local, a disproportionate amount of whom are women, are again marginalized, even among other informal

workers. Even as vendors are being allowed further symbolic representation within the policy discussion, they are not necessarily gaining access to expanded livelihoods.<sup>99</sup>

Here, the process of unmapping again works to exclude train vendors from these new legal protections by maintaining separate policy and enforcement mechanisms between the Local and the city it serves.

The presence of the RPF guarantees that Indian Railways administrators are aware of the significant number of vendors who utilize their properties as spaces of labor. Train vendors are often harassed by RPF officers who solicit bribes, but the Indian Railway stops short of creating any actionable policy that might prevent ladies compartment spaces from being transformed into rolling markets. At the same time, municipally allied activists, organizers, and policy makers are unable to organize the workforce within the space of the Local and thus these workers are not able to access the same protections that have been extended to street vendors who work on public lands governed by the BMC. As a result, train vendors are left in a space where they operate outside of the law and are vulnerable to seizure or extortion from Railway representatives through the RFP. Poor women who work within the ladies compartment on the Local continue to be excluded from organizing efforts that seek to protect vendors via the BMC.

### 3. Privatization of public infrastructure

As the city moves to expand the Metro system, Mumbai's transportation landscape is changing in a way that increasingly privatizes and surveils public transit spaces. The Mumbai Local is unlike any other local public transit system currently

operating in India, in both its governance structure and in the age and capacity of its facilities and rolling stock. The historical development of Bombay's suburban neighborhoods that are immediately adjacent to older railway infrastructure created a system that is impossible to expand today. Land is at such a premium in the city that the Indian Railways can not build any new ground level tracks or stations. While the Railways did, at one point, propose replacing the rolling stock with double decker cars, but the plan was ultimately scrapped.<sup>100</sup> As the city learns during periodic railway strikes, taking even one line on the Local out of commission, even for a few hours, brings the entire city to a standstill.

Instead of expanding the capacity of the Local, the BMC has turned to constructing new, modernized Metro infrastructure that can operate above and below ground level. This change in infrastructure priorities also represents a large shift in how the city now looks to private business and capital markets to allocate services and resources. While the Metro falls under the jurisdiction of the MMRDA, that agency is a minority owner in the project. Reliance Infrastructure (R Infra), part of a private conglomerate that deals in infrastructure development, utilities, entertainment, and telecommunications, owns 69 percent of the Mumbai Metro. The MMRDA owns only 26 percent and the remaining 5 percent is controlled by a European-owned joint venture called Veolia Transport, which is contracted to operate and maintain the Metro in its first five years of service.<sup>101</sup> Currently, the Mumbai Metro only operates a single line that runs between Versova, Andheri, and Ghatkopar, linking technology and outsourcing business centers along a west-east axis. This line is only 11 kilometers long, but the completed Metro network is planned to span 146.5 kilometers across the Mumbai peninsula.<sup>102</sup>

Although MMRDA maps represent the Metro as a seamless piece of Mumbai's overall public transit network, there is no natural transfer between the Local railway and its stations and the Metro. The stations are completely separate facilities, linked by pedestrian footbridges that carry commuters over the lanes of traffic below. The ticket systems of the two networks are also separate, necessitating two different passes. The shift in service provision responsibility from public to private sector has also come with increased barriers to entry. Metro fares, which, like Local fares, are pegged to travel distance, can be as much as 110 rupees despite the fact that the current Metro system only serves an 11 kilometer long corridor. (In comparison, an 11-kilometer trip on the Local Western line from Churchgate to Dadar would cost only ten rupees.) Entry to the Metro system, unlike the Local, includes heightened surveillance, including metal detectors and passenger pat downs upon entry to the station. While there is a specific ladies compartment at the rear end of the Metro trains, the space is not visually separate from the general compartment, allowing men to look in and surveil women in a way that isn't possible on the Local.

Figure Q: Women in the Mumbai Metro



Women quietly ride the Metro while men look on from the general boarding compartment

These increased barriers to entry that exist on the Metro mean that the informal uses that make the Local such a crucial piece of infrastructure for poor women in Mumbai are not being reproduced as infrastructure is expanded and updated. Vendors looking to access commuter customers are barred from entry to the Metro, both by the security teams that scan passenger's bags as well as the high cost of a single ticket. A 110-rupee fare on the Metro costs more than the average net daily income for female street vendors.<sup>103</sup>

While there are some vending stalls present inside of some Metro stations, these carefully constrained and sanctioned vending spaces offer much more expensive goods than those available on the Local. Vendors on the Local commonly offer inexpensive hair accessories and fruit, but stalls inside of the Metro station offer much more expensive goods such as clothing and sneakers. Additionally, the more affluent ridership on the Metro means that the domestic uses of the Local are not being reproduced because commuters do not need to straddle the line between domestic and formal work in the same ways that poor women do. Just as many well-off Mumbaikars opt for travel in private vehicles, often driven by hired drivers, the type of women who rely on the Metro to get to technology sector jobs off the Metro are more likely to have hired help at home to tackle their domestic tasks. Domestic workers at home allow women working in the formal economy to leave their domestic responsibilities to their maids or cooks and eliminates the need to expand those spaces into public transit spaces.

Figure R: Regulated vending in a Mumbai Metro station



Authorized vendors set up shop inside the Metro station at Ghatkopar

The Mumbai Metro provides a glimpse of what Mumbai's transportation landscape may look like in the future and how efforts to modernize the public transit system in the city threatens the livelihoods of women who rely on the specific infrastructure of the Local. Increased barriers to entry mean not only that the system is

less accessible to the very poor, who make up nearly half of Mumbai's population, but also necessitates a kind of performance of middle class politics in order to enter public transit spaces.. On the Metro, even within the women's compartment, female passengers are still firmly entrenched in a male-coded public space that restricts their movement and behavior. Paired with the need for a specific type of class performance, the Metro prevents female passengers from taking full ownership of a shared space.



## **VII. Conclusions**

### **1. Summary**

The BMC has increasingly moved away from a model of direct government service provision to its citizens in favor of outsourcing decision-making and resource allocation to elite citizen groups such as ALMs and private corporations seeking to maximize profit rather than promote access. When this happens in the context of a state that systemically utilizes a system of unmapping to keep particular communities and spaces outside of the protection of its own laws, the most marginalized communities in the city are left the most vulnerable to future land grabs and the violence of redevelopment. The Mumbai DP document ensures that those informal spaces that contain the greatest density of uses for the poor are the same spaces that are erased from the landscape and turned into future sites of construction and development.

Compared to other Indian cities public transportation networks, the infrastructure of the Local is archaic and under its current operating standards, the Mumbai trains are downright dangerous. The Local's outdated infrastructure, paired with its national level ownership, makes the existing Local an unlikely candidate for any private business looking to push its way into the public service provision market, but also limits its capacity to expand to meet Mumbai's changing transportation needs. Instead, the city has turned to infrastructure giant Reliance to create a new transportation network above and below the ground. While the new system provides a new level of safety and comfort for its riders, that safety is limited to those who can afford the much higher ticket fares.

Particularly for low-income women, the Metro represents an additional challenge of producing a type of middle class behavior that ensures that the space of the Metro is

used for commuting exclusively. This behavior is reinforced through extended mechanisms of surveillance that do not exist on the Local. Metro passengers must pass through a metal detector and submit to a pat down by security officials, allowing their bodies to be physically policed before they even reach the platform. On the platform, Metro staffers are present to ensure that passengers maintain proper distance from the tracks and line up in an orderly, single file queue before being allowed onto the train. Even within the ladies compartment, the open compartments allow men in the general compartment to look on into the ladies compartment, further ensuring that women's movements within the Metro are policed and restricted as they would be in any other public space. The ladies compartment on the Metro exists as a concession to women's physical safety, not as a space for them to assert any ownership or control.

The ladies compartment creates space for women to slowly and collectively shape a public that meets the particular needs of female citizens. These are needs that are not otherwise being built into the urban landscape. The Indian Railways turns a blind eye to these practices, which allows women to maintain the spaces they have created for themselves and on which they rely to meet their needs each day. However, the erasure of these spaces also ensures that women's needs will continue to be neglected as the city evolves. The ladies compartment presents a clear picture of what a female-friendly urban public space might look like, but the state continues to unmap and informalize those spaces in its own effort to exert territorialized control over a rapidly changing city. This female dominant space, created by and for women, is only allowed to exist within the closed confines of the ladies compartment walls.

## 2. Recommendations for further research

This project presents several opportunities for further research. The most obvious gap in the existing literature is the lack of any comprehensive survey of Mumbai's street vendors that includes those people who work on or around railway owned property. The Local and its station areas are an important space for vendors to build their livelihoods, but their particular needs and voices have not previously been included in the literature. This omission is particularly important if researchers hope to better understand how women, in particular, rely on vending. Train vending tends to be more female dominated than street vending, and thus their exclusion from surveys and policy-making results in the further underrepresentation and marginalization of women. Additionally, the unique design and operation of the Local present opportunity to compare how class interacts with the uses of ladies compartments in other Indian cities. While there is some emerging research on social networks and the production of space in the Delhi Metro, access to spaces on the Delhi Metro requires a different performance of class that is not present on the Mumbai Local. This type of comparison would be particularly useful in attempting to better understand the implications for the expansion of the Mumbai Metro, which, from a design and security perspective, is very similar to the Delhi Metro. Finally, this work presents opportunities for further research on the impact of gender segregated transportation across the globe. Further work might compare the experiences of female Mumbaikars with those of female public transport passengers in other rapidly developing cities, such as Cairo or Tehran. The role of gender-segregated transportation, while sometimes in conflict with women's demands for long-term and substantive equal access to public space, has huge implications for women's safety.

Insurgent planning and spatial practices, such as those visible within the ladies compartment, provide planners with a glimpse into what a more just, useful city might look like, particularly for those communities who are the most marginalized and are the most impacted when public spaces are commodified and redeveloped. The case of Mumbai's street vendors presents a warning of how the type of informal practices that produce insurgency in urban public space can be formalized and simultaneously erased. Informality can not exist separate from law and when the law is extended to explicitly govern what was previously an informal practice, it may provide protection for some, but it also directly criminalizes those who do not have access to that protection. While some vendors are awarded licenses and allowed operate within their own sanctioned spaces, others who do not have the resources to pay their way through the licensing mechanism suddenly no longer occupy a legal grey area where there is space for negotiation. They are instead outright criminalized.

The case of the ladies compartment on the Mumbai Local presents a possibility of how a piece of utilitarian mobile infrastructure, installed as the result of organizing demands from a marginalized and underrepresented community, can be further transformed into a space of resistance for a group whose actions and mobility is incessantly and often violently policed. Sites such as the ladies compartment demonstrate how citizens, through their everyday actions, can push the boundaries of urban planning practice and produce spaces and politics that are more inclusive and more useful while also warning of the dangers of state cooption of these grassroots mechanisms.

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- <sup>84</sup> Bayat, "Politics of the Informals", 95.
- <sup>85</sup> Bayat, "Politics of the Informals", 94.
- <sup>86</sup> Municipal Corporation of Greater Mumbai, "Draft Development Plan 2034", 48.
- <sup>87</sup> Ibid.
- <sup>88</sup> Ministry of Urban Employment and Poverty Alleviation, "National Policy for Urban Street Vendors", (New Delhi: Government of India, 2014): 2.
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- <sup>91</sup> Bhowmik, "Street Vending in India", 22.
- <sup>92</sup> Aarefa Johari, "The Ghost Bazaar", *Hindustan Times*, May 28, 2010.
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