# Women's Mobility Challenges and Solutions in Mexico City

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Feminist urban theory sustains that the built environment symbolizes and perpetuates patriarchal power relations; because cities were originally designed as industrial hubs dominated by men, they are hostile to women by design. This theory is exemplified by Mexico City, where women face a unique set of challenges while interacting with the built environment, especially in regard to urban mobility. The city is designed without consideration of womens' specific needs, such as their unique mobility patterns and their needs for illuminated, secure transportation nodes. Car-centric urban design inherently benefits men while putting women - who primarily walk, bike, or take public transportation due to economic inequities - at risk. Additionally, 9 out of 10 women who regularly use public transportation in Mexico City have experienced sexual harassment - a violent manifestation of the patriarchal value that women do not belong in the public sphere. Since 1977, Mexico City has introduced women-only cars on its metro and has since introduced women-only buses and taxis. While these initiatives are crucial to increasing women's safety and autonomy, they fail to address the root of the issue: the societal values that have allowed a patriarchal built environment to exist.

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Transportation is liberation. To be mobile is to access work, educational opportunities, cultural enrichment, and human connection - and to do all in an independent manner. To be mobile is to be empowered. Urban mobility is an issue that is often overlooked but notably significant in the fight for female autonomy. Unfortunately, it is especially problematic in Mexico City, the second largest city in Latin America and fifth largest in the world. According to the Thomas Reuters Foundation, Mexico City has the most dangerous public transportation system in the world for women (Reuters 2023). While some view mobility issues through a gender-neutral lens, many studies reveal that women in Mexico City experience a unique set of problems in public spaces and transportation, which the city government must address through ways that tackle the root of the problem: sexist culture and historical gender power relations.

### **Challenge #1: A Masculine Built Environment**

All of the problems that women face in their experiences with the city are rooted in one fact: the city was designed for men. Mexico City was founded in the 12th century, and Mexico industrialized during the 18th century. During these eras, while the urban industrial workforce was predominantly male, women were restricted to the domestic sphere. This confinement was touted as a means of protecting women from "terror, doubt, and division" by English writer and philosopher John Ruskin (Ruskin 1864). In his 1864 lecture "Of Queens' Gardens," Ruskin classifies women as delicate flowers and expounds that the home is their "garden, [a] private, domestic, feminine space, quite separate from the male sphere of waged work and politics" (Rose 1993). Based on these deeply rooted notions sustaining that women are private figures, many feminists connect "the public/private distinction with patriarchal power" (Rose 1993). Because women have been historically excluded from public space while men have dominated, feminist geography holds that the city was designed to accommodate male needs and mobility patterns. Now that women are in the process of gaining independence and empowerment, they are confronted with a masculine urban environment, which is hostile to them.

This complication is exemplified by public transportation routes that are designed to prioritize men. Traditionally, women and men move throughout the city with distinct purposes and needs. According to Franco Evans Morales, a sociology professor at the National University of San Marcos, the working man "performs linear or pendulum work-residence movements and vice-versa" (Evans Morales 2023) (trans. from original Spanish by author). Men's trips are "longer, but less intense" (Evans Morales 2023) (trans. from original Spanish by author). On the other hand, while men solely transport themselves to and from their "9 to 5," geographer Gillian Rose asserts that the "increased pressure that women face in combining domestic work with waged work" adds constraints to their time, encouraging a unique mobility pattern characterized by shorter, but more frequent trips from the home, referred to in urban studies as "trip-chaining"

(Rose 1993).<sup>2</sup> These trips include "trips for medical purposes, accompanying children and people with disabilities, and shopping" (Secretary of Mobility 2019) (trans. from original Spanish by

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<sup>&</sup>lt;sup>1</sup> For the purposes of this essay, "public transportation" includes metros, buses, taxis, and other non-private forms of transportation as well as their stations and nodes.

<sup>&</sup>lt;sup>2</sup> "Women do 75% of the world's unpaid care work and this affects their travel needs. A typical female travel pattern involves, for example, dropping children off at school before going to

author). According to a 2017 survey, women's primary motivation for moving throughout Mexico City is to make care trips. This pattern of "trip-chaining" results in women making 12% more trips than men. Without taking this demand into account, the public transportation system was designed without women in mind. Given that women travel through the city during off-peak hours, according to the Secretary of Mobility, "there is less-frequent public transportation, and women invest more time traveling and less working, resting, participating in recreation," etcetera (Secretary of Mobility 2019) (trans. from original Spanish by author).

Furthermore, Mexico City has consistently congested transport systems, which the national newspaper *Excélsior* describes as the second most overcrowded in the world (López 2018). This congestion renders public transportation inhospitable for women with children and strollers. In addition, transportation nodes (ex. bus stops, subway stations) without adequate illumination do not address the safety needs of women. Mexico City's transportation system, from its bus routes to its physical appearance, was designed with zero consideration for the needs of women. This restricts women's mobility, and thus, restricts their access to the resources and opportunities they need to prosper.

### Challenge #2: Car-Centric Urban Design

Another structural obstacle to women's mobility in Mexico City has been car-centric urban design. Due to women's mobility patterns and accessibility issues, car-centric design inherently prioritizes men and leaves women less mobile and more physically vulnerable. Franco Evans Morales writes that a private automobile "is not utilized by the majority of the population, given that its possession depends on economic resources" (Evans Morales 2023) (trans. from original Spanish by author). This disparity is especially true for women, who historically have been granted less economic independence. As a result, according to a 2007 survey titled La Encuesta Origen-Destino de los Viajes de los Residentes de la Zona Metropolitana del Valle de *México*, "out of all trips made by women, 73.9% occur on modes of public transportation" and 21.6% are private, while 63.7% of men's trips occur on public transportation and 36.3% are private (Alvarado Mendoza et al., 2021, p. 76). Furthermore, women have a greater propensity to use bicycles and walk. According to the Mexico City Secretary of Mobility, 32.46% of women primarily travel by foot - a fraction much greater than the 19.46% of men (Secretary of Mobility 2019). Additionally, the Secretary states that there is a wide gap between the amount of men and women who use bicycles. Because women compose the majority of cyclists and pedestrians, who rely on walkable and bikeable infrastructure to move securely, design that places these modes of transportation in a second class after automobiles leaves women vulnerable. When listing the mobility challenges that disproportionately impact women in Mexico City, Eduardo Alcántara, an urbanist who researches public transportation planning in developing countries, includes "a lack of adequate sidewalks and pedestrian crossing points" and "a lack of adequate infrastructure and signage for cyclists" based on these statistics (Alcántara 2010) (trans. from original Spanish by author). Car-centric urban design does not only leave women without adequate transportation options but also places them in danger. In the book La movilidad y la violencia contra las mujeres en los espacios públicos de la Ciudad de México, urbanists Emelia Nava García and Jaime Ramírez Muñoz affirm that "if women make their trips on foot or by bike more frequently, they are more vulnerable, as the majority of accidents with fatal consequences affects pedestrians and users of non-motorized transport" (Alvarado Mendoza, et al., 2021, p. 73). These deaths

work; taking an elderly relative to the doctor and doing the grocery shopping on the way home." This is called 'trip-chaining,' a travel pattern of several small, interconnected trips that has been observed in women around the world" (Criado-Perez 2019, p. 30).

result from deficient design, such as a lack of sidewalks or bike lanes. In an analysis of sustainable urban mobility in Mexico, the consulting firm Oliver Wyman states that Mexico City is largely car-dependent, with over 75% of its passenger kilometers traveled by car (Oliver Wyman Forum 2022). Meanwhile, the city lacks adequate infrastructure for alternative modes of transportation, which disproportionately harms women by decreasing their access to the city and all it has to offer.

### Challenge #3: Sexual Harassment on Public Transportation

The most evident challenge to women's mobility in Mexico City is sexual harassment on public transportation.<sup>3</sup> In a 2018 survey by UN Women, the organization discovered that, out of 3,214 users surveyed, 88.5% had been victims of some kind of sexual violence on public transportation or in public spaces in the city in the past 12 months (Mexico City and UN Women 2018) (trans. from original Spanish by author). Specifically, 71.4% of women had received "morbid looks," 70% had received "obscene or offensive sexual comments," and 51.1% were "leaned on with intentions of a sexual nature" (Mexico City and UN Women 2018) (trans. from original Spanish by author). An alarming 14% of transport users had experienced men touching their genitals in front of them or men "pursuing them with intention of a sexual attack" (Mexico City and UN Women 2018) (trans. from original Spanish by author). According to the National Institute of Women, 9 out of 10 women who regularly ride public transportation in Mexico City have suffered sexual harassment (Cities Alliance 2022).

A series of studies have intended to explore this phenomenon. Why are men committing these atrocious acts, and especially at particularly high levels on public transportation? Many have pointed to the congested, transitory nature of public transportation that permits impunity. Offenders can intimidate women with the shield of a crowded metro car. If someone were to have witnessed the act, they would likely remain quiet due to the bystander effect, in which the presence of a crowd dissuades an individual from intervening in problematic situations. Then, the offenders can leave the car at the next stop and remain anonymous. UN Women found that 10,771 of the offenders reported in their survey were strangers to their victims. Additionally, Miguel Ángel Vite Pérez, a Mexican sociologist, points out that the infrastructure of a city "determines mobility or the daily routes of its inhabitants, creating geographical patterns that are subsequently identified by the offenders to establish the stations where it is easier to commit crimes and protect themselves with impunity" (Vite Pérez 2022) (trans. from original Spanish by author). These stations that permit harassment are created by an amalgamation of the problems previously discussed: poor illumination, a lack of space, and other inadequate conditions for women's safety that result in an environment built for men.

The most alarming aspect of the phenomenon of sexual harassment on public transportation might be that it is considered normal. A survey by Amy Dunckel-Graglia, a North American academic specializing in urban gender theory, finds that violence and harassment against women is considered normal, inherent, and immutable (Dunckel-Graglia 2013). In the same sentiment, another survey found that men "de-gender" the issue, maintaining that public transportation is dangerous in general and therefore "not necessarily the best place for women to be commuting," blaming women for their "weakness" and "inability to survive in the city" (Dunckel-Graglia 2013). However, it is not normal that a rate of 9 out of 10 women have been harassed in public. When behavioral patterns such as this are normalized, women receive the message that they are not secure nor welcome in public spaces. When women fear public

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<sup>&</sup>lt;sup>3</sup> For the purposes of this essay, sexual harassment refers to unwanted physical, verbal, and sexual conduct displayed towards women.

transportation, their access to mobility, and thus, their autonomy is compromised. The Secretary of Mobility cites a 2017 study that affirms that "the fear of violence is one of the most influential factors on women's mobility," limiting their social, economic, and cultural opportunities (Secretary of Mobility 2019). A report from the Partido Acción Nacional, a political party in Mexico, lists some of the consequences for victims of public harassment: "the fear, the sense of being a victim, feeling unsafe and impeded from free movement, which profoundly affects their human rights, their participation as citizens in democratic processes, as well as the development of the common good that our Nation-State pursues" (Maldonado Maldonado 2022) (trans. from original Spanish by author). This is not a normal situation but an enormous problem that directly prevents the empowerment of women and the progress of Mexico City as a whole. It must be treated as the catastrophe it is, immediately and effectively.

### **Analysis of Government Responses**

An initiative in which Mexico City has sought to improve women's mobility is women-exclusive transportation cars. According to a report from Cities Alliance, exclusive cars on the Sistema de Transporte Colectivo (Mexico City's metro) were introduced in 1977, and other cities around the world have since followed, including Cairo, Tokyo, and New Delhi (Cities Alliance 2022). Subsequently, in 2008, women-only buses called "Atenea-buses" were introduced. In 2013, women-only taxis with female drivers were implemented. Recent additions to women-only transportation also include pink vehicles as a form of spreading awareness about challenges for women in the city. Amy Dunckel-Graglia found that 51% of surveyed women use women-only transportation almost always or always, and 51% of women feel more secure in a taxi driven by a woman, while 66% of women agree that female-exclusive transportation is more safe than regular transportation. Female-exclusive transportation, or "pink transport," is beneficial for the immediate security and comfort of women while they commute through the city.

However, it is crucial to simultaneously recognize the benefits that have been achieved while acknowledging that pink transport is a bandage, not a cure. This initiative addresses a symptom of a sexist urban culture without attacking the root. In *La Movilidad y la Violencia Contra las Mujeres en los Espacios Públicos de la Ciudad de México*, Arturo Alvarado Mendoza, a sociology professor in the College of Mexico, writes that female-exclusive cars are "palliative... this does not affect the organization of masculine dominance" (Alvarado Mendoza et al., 2021, p. 351). In accordance with this declaration, Dunckel-Graglia suggests that the fear of women is a product of gendered power relations instead of actual crime. Her survey found that sometimes, men attempt to board exclusive cars and intimidate women. From this it is clear that the lack of respect for women continues to exist regardless of the color of the cars in which they travel. Of those surveyed, 77% of women agree that "pink transport" would not need to exist if men were educated to respect women. Although exclusive cars help women feel more secure on public transport, this initiative is not a panacea. We need to adopt not a segregate, but a systematic focus.

A more systematic initiative is exemplified by the *Plan Estratégico de Género y Movilidad*. This plan was created by Mexico City's Secretary of Mobility in 2019. It is a comprehensive plan, traditional to the style of urban planning, and it has 3 axes that describe the primary problematic areas that the plan hopes to address, 8 lines of action, and several specific action steps for each line. Its first axis - which hopes to reduce sexual violence and aggressions against women on public transportation - includes many action items which range from increased illumination to training for operators and other workers on the Sistema Integrado de Transporte. Another axis, called "attending to the needs and mobility patterns of women in an effective manner," includes the prioritization of care trips and the promotion of alternative modes of

transportation, such as cycling (Secretary of Mobility 2019) (trans. from original Spanish by author). It is not solely a detailed and comprehensive plan, but it has also resulted in real action. In a document of results published by the Secretary of Mobility in 2022, the organization reviewed each axis and shared concrete updates on its progress. For example, on the Metro, "275 lights and 350 lampposts in 59 stations" were installed, improving illumination and, therefore, the security of users (Secretary of Mobility 2022) (trans. from original Spanish by author). Additionally, they have installed camera kits and help buttons in buses to improve accountability of offenders. In addition to security within transportation systems, "117 safe intersections" and "181 kilometers of cycling infrastructure" have been constructed, improving the safety of pedestrians and cyclists, the majority of which are women (Secretary of Mobility 2022) (trans. from original Spanish by author). A new form of transportation - a cable bus, called "Mexicable" - carries an average of 18,000 passengers per day from the outskirts to the city, reducing congestion on public transportation and improving accessibility. According to the New York Times, a housekeeper named Nancy Montova saved around 2 hours of transportation every day by using Mexicable (Burnett 2016). Clearly, the initiatives launched by *Plan Estratégico* have tangible impacts on the mobility and safety of women in Mexico City. While these initiatives adopt a much more structural and durable approach, they still do not address the root of the problem. We need to recognize that problems in human behavior and urban design stem from problematic cultural norms and historic power relations.

In this case, the cultural norm that we must change is, in the words of Dunckel-Graglia, "a lingering perception in Mexico that women are household figures and not public ones" (Dunckel-Graglia 2013). Expanding on this, Vite Pérez writes that "the sexual violence that women face on public transportation is a manifestation of masculine domination... where women have the responsibility of reproduction and not of production" (Vite Peréz 2022) (trans. from original Spanish by author). What is found on the bus routes is found in the stories of intergenerational violence, femicides, and all forms of oppression against women throughout the nation. Regardless of how many help buttons are installed or how many pink buses run, we will not see the end of harassment while there are men who feel that they have the right to harass. Women will not feel secure and empowered in the public space if they perceive to have an "inability to secure an undisputed right to occupy that space" (Hamner and Saunders 1984). Notwithstanding of how the design of the routes or the city itself is changed, these efforts must be realized in conjunction with efforts to change the mentalities that have created sexist spatial divisions in the first place. These patterns could potentially be disrupted by increasing gender parity in policy and planning, which *Plan Estratégico* is already implementing by increasing diversity within the Secretary of Mobility, as well as through educational programs that teach future generations to respect people of all genders.

By no means must we stop improving cycling infrastructure, nor installing lampposts, nor training public transportation operators - of course, these initiatives are taking grand steps. However, in the efforts to combat the symptoms, policymakers and planners must not lose sight of the real disease: patriarchal societal norms, especially in relation to access to public space. We are not private or domestic figures. We are not weak. Women around the world have the right to the city.

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