

WOMEN, SAFETY AND PUBLIC TRANSIT



Women's public transit use

Public transit is a gender issue. Women have different needs and behaviours when it comes to public transit and mobility than those of men (Cresswell and Uteng, 2008; Grisé et al., 2022). Women are more likely to use public transit and face increased and unique barriers to accessing public transit, mainly, fears for their safety (Chowdhury and van Wee, 2020). In addition to gender, factors such as race, age, and income contribute to a person's access to and experience with public transit (Blumenberg, Brozen and Loukaitou-Sideris, 2018). Gender-diverse people similarly have unique transit needs and patterns rooted in gender inequity, however, this brief focuses on the experiences of women.

Mobility is key for people's access to and participation in employment, education, health, social and leisure activities (Matthewson and Kalms, 2021). Despite more women joining the workforce and a shift in household responsibilities (Rosenbloom, 2004), women continue to have less mobility than men. Restrictions to mobility indicate oppression and exclusion from opportunity. While women constitute the majority of public transit users and those with limited mobility, they are underrepresented in the transportation sector (Duchene, 2011) and their needs are often not reflected in transit

policy and planning (Loukaitou-Sideris and Fink, 2009).

Women are more likely to use public transit than men (Loukaitou-Sideris, 2016; Cresswell and Uteng, 2008), especially women on low income (Blumenberg, Brozen and Loukaitou-Sideris, 2018), immigrant women (Amar and Teelucksingh, 2015; Uteng, 2009; Heisz, and Schellenberg, 2004) and women who are older (Blumenberg, Brozen and Loukaitou-Sideris, 2018). They are more likely to use public transit for several reasons, primarily, because of affordability (Chowdhury and van Wee, 2020) and car ownership and access (Loukaitou-Sideris, 2016). In fact, studies show that even when households have a car, men are more apt to use it to access their work, even when both women and men in the household are employed (European Commission, 2014). The gender roles and norms in households and relationships impact women's access to and use of transit. Research suggests that among partners and households, men are more likely to make decisions related to transportation selection and use (Blumenberg, Brozen and Loukaitou-Sideris, 2018).

Travel patterns and behaviours differ across women and men. Women tend to take several short trips in one day and often link several trips together (Grisé et al., 2022; Loukaitou-

Sideris, 2016). These trips are often in relation to caregiving and household responsibilities, including trips to and from school and grocery stores (Rosenbloom, 2004). While combined trips are often necessary for women to complete multiple tasks under time constraints, this trip structure can create affordability challenges if transit systems require additional fares to do so (Grisé et al., 2022). Research demonstrates that women are regularly accompanied by children or other relatives when on transit and are often carrying shopping bags or have child-related items, such as strollers (Loukaitou-Sideris, 2016). In contrast, men have more linear and unchanging travel patterns, such as trips to and from the workplace with few disruptions, and are more likely to travel alone (sum4all, 2019).

Faced with greater household and childcare responsibilities, women often seek employment closer to their homes and therefore, commute shorter distances to work than men (Grisé et al., 2022; Loukaitou-Sideris, 2016). Studies show that this is more prevalent among low-income women who often rely on local and social connections to help them find employment (Blumenberg, Brozen and Loukaitou-Sideris, 2018). The shorter transit trips taken by women are also influenced by transit costs, as transit systems may charge distance-based fares or supplementary fares between regions (Grisé et al., 2022). To fully understand the gendered nature of women's public transit use and patterns, it is important to position the experience within the structural and family contexts and norms in which women live.

Women's safety on public transit

Across literature, fear and lack of safety on public transit is identified as the greatest

barrier to women's access and use of public transit. Studies show that women are at a greater risk of sexual harassment and unwanted attention when travelling by public transit than men (Chowdhury and van Wee, 2020; sum4all, 2019). Furthermore, research examining women's use and experiences on transit shows that racialized women feel more unsafe compared to white women (Chowdhury and Wee, 2020). Between 2013 and 2017 there have been almost 4,000 incidents of sexual assault or harassment reported across Canada's 22 largest transit systems and 90% of these incidents were perpetrated by men against women (Burns-Pieper, 2019). In Toronto, women account for 57% of public transit users (Toronto Transit Commission, 2020). According to data provided by the Toronto Police Service, between 2011 and 2015, there were 577 reports of sexual assault on public transit property or vehicles – almost 1 in every 3 days (Spurr, 2016).

Women experience violence on transit in many ways, such as being forcibly touched, sexually abused, intimidated, groped, exposed to sexual comments and harassment, threats, and other crimes often with sexual undertones (Loukaitou-Sideris and Fink, 2009). A study on women's transportation in two low-income neighbourhoods in Toronto found that 78% of participants experienced harassment on public transit with the most common types of harassment being strangers asking personal questions, unwanted sexual looks, whistling, and stalking (Rahim, 2021).

The nature of women's travel and the physical design of transit systems contributes to the heightened anxiety and safety concerns of women. Women feel more unsafe walking to and from their stop or waiting for public transit during evening or nighttime hours compared to

the daytime. Research shows that most crime incidents take place at the train station, transit stop or in the vicinity, while a quarter of incidents happen on transit vehicles (Loukaitou-Sideris and Fink, 2009). Interestingly, because of the nature of the types of trips taken by women, women are more likely to travel during off-peak times (Blumenberg, Brozen and Loukaitou-Sideris, 2018; Gris  et al., 2022). One study (Chowdhury and van Wee, 2020) found that as a result of travelling during off-peak times, women spend a greater amount of time waiting for public transit than men. This increased waiting time was associated with high levels of anxiety among women due to safety concerns while waiting.

The physical design of transit systems, especially bus stops, can heighten the anxiety among women because of their desolate locations, absence of appropriate lighting, and the lack of formal and informal surveillance. In addition, transit stops that have not been upkeep can make women feel unsafe and nervous while waiting for transit (Loukaitou-Sideris et al., 2009). The design of transit systems, poor servicing, and the lack of connectivity to transit networks often fall short in meeting the transit needs for women (Amar and Teelucksingh, 2015). Disconnected transit systems make it so that women sometimes need to walk in dark and isolated settings for long distances to reach their desired location. Moreover, the absence of visible staff and other riders on station platforms, bus stops, and trains add to safety concerns, with women reporting feeling fearful when they are on their own (Loukaitou-Sideris and Fink, 2009).

Perceived safety risks are one of the most influential factors in women's transit decisions (Chowdhury and van Wee, 2020). Fear of

experiencing harassment impacts women's mobility, including how they use transit, when they use transit and which type of transit they use (Loukaitou-Sideris and Fink, 2009). The lack of access to safe transit places often leads to women developing coping mechanisms to avoid or deal with feeling unsafe. For example, women avoid using specific transit routes or bus stops, get off at an earlier stop (Graglia, 2016), avoid going out at certain times of the day or decide not to use transit at all. When women do use transit, they often have to be on high alert to their surroundings, appear confident and use mobile phones and headphones to thwart unwanted attention (Chowdhury and van Wee, 2020).

Improving safety on transit

Systems that support the collection and reporting of violence in and around public transit can support women's perception of risk and the appropriate responses. Data captured on riders' safety through surveys or other collection methods can help inform systems and policies (Ceccato, 2017). Victims perceive a lack of systems and supports around reporting as a deterrent from sharing their experiences (Rahim, 2021). Security personnel and transit authorities should work closely with the police to provide protection. One study found that knowledge of enforcement can help women feel more safe while waiting at stops and terminals (Chowdhury and Wee, 2020). More effective information sharing and coordination between police, transit agencies, and other stakeholders can also improve safety in transit systems. This coordination can be improved with connections made to community organizations, especially women's groups (Ceccato, 2017).

In addition to system and policies, education

and training for transit operators can help equip and encourage workers to respond to the fear of transit harassment and violence and increase women's safety. Women transit riders in Toronto have reported that in their experience, transit operators were not prepared to respond to harassment reports or incidents (Rahim, 2021). Public awareness campaigns, safety initiatives, and public information signs can be used to promote safe transit environments and encourage drivers and passengers to intervene and report sexual assaults and violence (Ceccato, 2017). Public bystander campaigns have also been shown to encourage transit users to help or intervene when they see violence occurring.

Altering the design of transit systems, vehicles, and stops can create feelings of safety for women. This includes strong transportation connections, pedestrian-friendly local routes, good lighting in and around bus stops, platforms, parking lots, and streets, and the placement of bus stops that offer surveillance by bystanders (Loukaitou-Sideris, 2016; O'Leary, 2011). Maintenance of transit facilities has also been found to provide comfort to transit users and deter negative behaviours.

Technology solutions can improve women's safety in transit. Interventions, such as emergency stop buttons, security cameras and reliable real-time information about vehicle schedules for trip planning can play a role in easing concerns. However, studies show that while women transit users appreciate technological solutions, they generally prefer solutions that incorporate people (Loukaitou-Sideris and Fink, 2009). For example, women prefer to have visible staff at station entrances and exits rather than technological devices, and safety agents

present as opposed to security cameras.

Safety policies, including request-stop programs that allow riders to get off transit at locations closer to their destination during late evening hours support women's safety, in addition to more frequent services on the weekends, evenings, and nighttime.

The COVID-19 pandemic and women's transit use

The COVID-19 pandemic has had significant impacts on urban mobility, including public transit service levels and ridership. In line with women's unique transit patterns and experiences prior to the pandemic, these impacts have been gendered. Not only has women's transit use during the COVID-19 pandemic changed in distinct ways from men, but women have also experienced a greater burden to their daily activities and safety as a result of these changes.

While some research has found that women were generally more likely to continue riding public transit during the pandemic, other studies have reported that this fluctuates based on the level of pandemic restrictions (Palm et al., 2020; Palm et al., 2021a; Palm et al., 2021b; Transit, 2020). For example, women transit riders in Toronto were more likely to stop riding transit during the first lockdown and then return to transit either later in the pandemic or not at all, whereas men were more likely to have consistently ridden transit throughout (Palm et al., 2020; Palm et al., 2021a). These findings may reflect the connections between women's labour force participation and transit use. The role of women – especially racialized and immigrant women – in the essential care workforce has likely kept them commuting throughout the pandemic; however, during lockdowns and

school closures, women's mobility may be limited by increased domestic responsibilities and men's priority access to household vehicles (Caselli et al., 2021; Palm et al., 2021b; Scott, 2021).

Differences in pandemic transit ridership have also been observed along other sociodemographic factors, where racialized and lower-income communities were more likely to continue riding public transit (He et al., 2021; Mashrur et al., 2021; Palm et al., 2020; Palm et al., 2021a; Palm et al., 2021b; Transit, 2020; Toronto Foundation, 2021). One study that conducted an intersectional analysis found that racialized women maintained the highest levels of public transit ridership in the early days of the COVID-19 pandemic (Transit, 2020). In Toronto, transit usage has dropped more for higher-income households and those who can work from home, while Fair Pass users, a discount program for low-income residents, have had almost twice as high pandemic ridership compared to other public transit users (Mashrur et al., 2021; Toronto Foundation, 2021).

Transit ridership changes have had differential impacts based on gender. Women who reduced or stopped using public transit during the pandemic were more likely to experience disadvantages than men who did the same. These disadvantages included reduced independence, reduced access to childcare, healthcare, prescriptions, and groceries, deferred medical appointments, and greater difficulty taking care of family or friends (He et al., 2021; Palm et al., 2021b; Palm et al., 2021c). In some cases, these disadvantages were more pronounced for those who were racialized, low-income, a recent immigrant, or had a disability (Palm et al., 2021b; Palm et al., 2021c). Women

reported that differences were largely driven by the need to coordinate car use with a male partner with vehicle priority and the inability to use active transportation when travelling with children (Palm et al., 2021b). There were no gender differences in the impact of transit use reductions on access to work or transportation costs.

Transit safety has also been affected by reduced ridership. Sharp declines in public transit use and social distancing measures on vehicles have resulted in fewer bystanders, which can increase the risk of violence against women and decrease perceived safety (UN Women, 2020). In a study of transit decision-making factors during the pandemic, women and gender-diverse people were more likely than men to report that the risk of harassment on transit made them reduce their public transit use (He et al., 2021).

Considerations for gender-responsive transit systems

Developing gender-responsive transit systems take a multi-pronged approach. Improving women's access and safety on transit requires action across socio-cultural change, policies, and transit infrastructure and service. While there is increasing awareness across Canada about the need to conduct gender-based analysis of transit decisions, many public transit agencies have yet to apply the intentional policies and practices needed to respond to the gendered nature of transit mobility (Grisé et al., 2022).

- **Social cultural change campaigns** to address gender-based violence on transit, including campaigns that engage men and boys (Sur, 2015; Loukaitou-Sideris, 2009; O'Leary, 2011) and bystander education for the public.
- **Evidence-based and community-engaged policy development** that incorporates consultation with diverse groups of women and data collection on differences in local transit access, usage and safety. (Grisé et al., 2022; World Bank Group, 2010).
- **Continuous assessment of transit** through the development of gender metrics for transit planning and performance indicators (Grisé et al., 2022) and regular safety audits (Loukaitou-Sideris, 2009).
- **Employment and engagement of women in the public transit workforce** (World Bank Group, 2010).
- **Gender-responsive transit infrastructure**, including increased lighting in and around transit, (Sur, 2015; Loukaitou-Sideris, 2009); seating and space for women (International Labour Organization, 2011; Sur, 2015); security technologies such as cameras, emergency phones, and panic buttons (World Bank Group, 2010) and real-time transit information accessible through smart phones and information displays (Loukaitou-Sideris, 2009).
- **Gender-responsive transit services**, including increased services on weekends and off-peak hours (Grisé et al., 2022; World Bank Group, 2015), fare structures that align with women's transit use (Grisé et al., 2022) and request-stop programs that allow riders to get off transit at locations closer to their destination.

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