

WOMEN AND MOBILITY

A Case Study of Bhopal, Gwalior & Jodhpur







About the project: This report is part of a two-year project implemented by The Asia Foundation in partnership with Safetipin and the Centre for Social Research (CSR), on "Making Cities Safe for Women in India." The project goal is to engage diverse stakeholders tasked with improving public place safety for women in three Indian cities: Bhopal, Gwalior (Madhya Pradesh), and Jodhpur (Rajasthan). Supported by the Korea International Cooperation Agency (KOICA), the project initiates an evidence backed dialogue with policy makers, police, and civil society organizations about the challenges women face in accessing and enjoying public places and proposes implementable solutions to address these challenges.

Prepared by



For



Supported by



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Author

Ankita Kapoor

Editing and Layout

Shilpy Mehta

Raajpratap Singh Thakur

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EXECUTIVE SUMMARY

Recent studies across the globe highlight that safety is a major concern for women in public spaces, including public transport, public parks and markets. A study conducted by a women's NGO Jagori in 2010 in Delhi highlights that around 54 per cent women feel unsafe and vulnerable in crowded public transport and bus stops¹. In a similar study conducted in Mumbai in 2011 by an NGO Akshara, 43% of the respondents stated that they had faced sexual harassment in buses and 17% in trains². In studies done in Guwahati and Kerala, similar findings were seen. According to a newspaper article published in 2013, working women within the service industry in Bhopal preferred to not work rather than work until late due to lack of safe commuting options³. The concern for women's safety in public transport is important not just to prevent sexual harassment, but because the fear of violence prevents women and girls from accessing opportunities for work, study and leisure.

Safetipin, in collaboration with The Asia Foundation, and supported by Korea International Cooperation Agency, conducted research on women's safety in public transport and public places in three tier 2 cities of India: Bhopal, Gwalior, and Jodhpur. The studies in these cities aim to identify the issues and challenges faced by women commuters while accessing and using public transport in their everyday lives. This report focuses on highlighting the gaps in the current public transport scenario in these cities and suggesting recommendations to mitigate the issue of women's safety in public transport. The research also brings to the forefront that lack of safety in public transport restricts women's social and economic mobility.

Safetipin used a combination of quantitative and qualitative tools to conduct this research. This included safety audits using Safetipin applications, as well as structured surveys with women respondents, and focus group discussions with diverse urban transport providers. The findings from the study highlight that women from different age groups, educational backgrounds, and occupations rely on modes of available public transport, including Intermediate Public Transport (IPT) for their daily activities. This research also indicates that women commuters in these three cities feel unsafe while accessing and using the public transport. Sexual harassment in any form has a major impact on women's perception of safety while using public transport in these cities. This report identifies reasons which make women feel unsafe while using public transport and provides suggestions for improvement. This report will be relevant for policy and decision-makers at state and city levels, advocacy organizations, and urban professionals

¹Jagori, UN Women. (2011). Safe Cities Free of Violence Against Women and Girls Initiative. Report of the Baseline Survey Delhi 2010.

²AKSHARA. AKSHARA Annual Report 2016-2017. Retrieved from https://www.aksharacentre.org/wpcontent/uploads/2015/09/AksharaAnnualReport_online.pdf

³Sharma, T. (2013, January13). Bhopal women prefer quitting to working late. The Times of India

1.Introduction

1.1 Need for Study

India is rapidly urbanizing. Around 31per cent of India's population is living in urban areas as per census 2011⁴. People move to cities as they see them as centres for greater economic opportunities. Cities require integrated services to cater to the needs of its growing populations. Public transport is one such essential public service serving millions of people daily. Public transport plays a significant role in the economic and social life of both men and women and increasing pressure on urban transport services places burdens on both. Research in developed and developing countries suggest that women are more dependent on public transport as compared to men⁵. They have few or no other mobility choices. The need for a safe, reliable and comfortable mode of public transport is imperative.

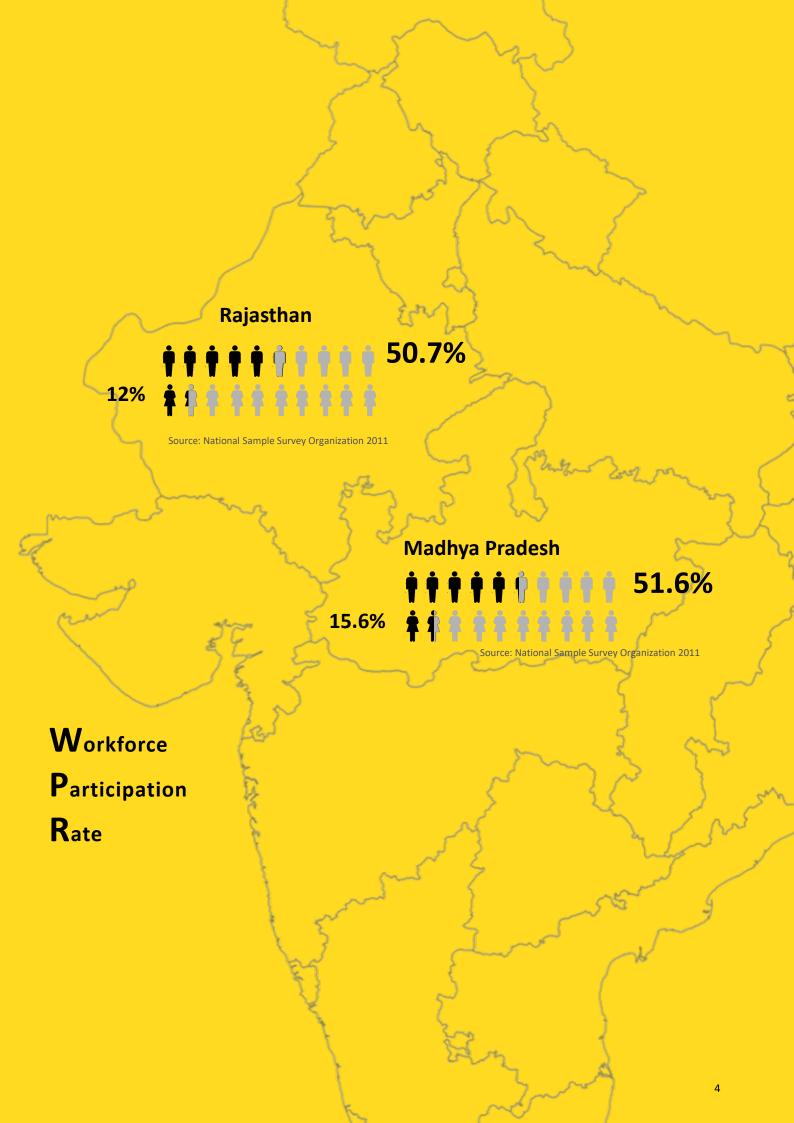
Crimes against women reduces their freedom and limits their participation in socio-economic activities outside the home. Recent statistics from the National Crime Records Bureau (NCRB) indicate that Bhopal, Gwalior in Madhya Pradesh and Jodhpur in Rajasthan recorded highest crime rates making these cities the most unsafe for women⁶. These statistics are only based on the crimes reported to police stations. There are high chances of underreporting of cases of crimes against women. The patriarchal attitude in communities and families pressurizes women to avoid reporting crimes due to concerns over family honour. It emerged from a study conducted by Sangini Gender Resource Centre in Bhopal in 2013, that a significant number of women and girls face harassment and/or violence in crowded spaces such as bus stops and markets. The study also highlighted that the main reasons for not reporting crimes were fear of family's reputation and low faith in the police. Another reason for low reporting of cases of sexual harassment is the normalization of such instances. Women face sexual harassment in public spaces and public transport in their everyday lives and often tend to ignore them or not respond. A survey supported by UN Women in Delhi in 2012 shows that 95 per cent of women and girls feel unsafe in public places⁷.

⁴Census. 2011. Retrieved from http://www.censusindia.gov.in/DigitalLibrary/TablesSeries2001.aspx

⁵Sajjad, F, Anjum, G, Field, E, Vyborny, K. (2017). Gender equity in transport planning: Improving women's access to public transport in Pakistan. Retrieved from https://www.theigc.org/wp-content/uploads/2017/10/Sajadd-et-al-policy-paper-2017_1.pdf

⁶Retrieved from https://www.theigc.org/wp-content/uploads/2017/10/Sajadd-et-al-policy-paper-2017_1.pdf
Jodhpur recorded the highest rate of crimes against women, making it the most dangerous city in India for women as per government
statistics. According to the NCRB, there were 152 rape cases registered in Jodhpur in 2015, and 440 cases of assault including sexual
harassment and voyeurism. The same report also cites Gwalior and Bhopal as unsafe cities for women. Gwalior recorded 188 cases of assault
against women, while Bhopal recorded 133 rape cases and 322 cases of assault against women. Access NCRB's report here:
http://ncrb.nic.in/

⁷UN women supported survey in Delhi shows 95 per cent of women and girls feel unsafe in public spaces. (2013, February 20). Retrieved from https://www.unwomen.org/en/news/stories/2013/2/un-women-supported-survey-in-delhi



The Economic Rationale

Recent studies have shown a correlation between violence against women and women's work force participation. Of the major Indian cities, Delhi recorded the least female workforce participation rate of 10.6 per cent as against male participation rate of 53.1per cent as per the Census of India and National Sample Survey Organization's statistics of 2011. The situation is similar in the states of Madhya Pradesh and Rajasthan. As per National Sample Survey Organization 2011 statistics, Rajasthan and Madhya Pradesh recorded among the lowest female workforce participation rates in the country⁸.

Though safety and mobility are not the only factors for such female workforce participation rates, they contribute significantly towards the same. Women are less likely to participate in the workforce when the perceived threat of crime against them is high⁹. They tend to avoid places which are known to be unsafe or which they perceive to be unsafe. When women face any kind of violence or harassment in public transport, its impact is amplified and directly affects their economic and social access. Also, as women have traditionally played the role of primary caretaker of children and elderly, their lack of freedom of movement can have an adverse economic impact on their families.

The issue of safety for women, especially in public transport, has gained much media attention and importance in Delhi after the December 2012 brutal rape and death of a young woman while travelling in a bus with her male friend. The incident, known as the Nirbhaya case, gave rise to nationwide public outcry that resulted various responses from the government, police, judiciary, and civil society groups. Women's safety is also an important concern for smaller cities in India. However, crimes against women in these cities have not generated the same level of dialogue and coverage in comparison to the larger metropolitans such as Delhi and Mumbai. It is equally important to ensure availability of safe public transport in smaller cities to increase the presence of women in economic activities. To ensure sustainable urban development, it is imperative to understand and integrate women and girls' travel patterns and address their needs and concerns in urban transport



^{8.}http://www.mospi.gov.in/sites/default/files/reports_and_publication/statistical_publication/social_statistics/Chapter_4.pdf

⁹ Chakraborty, T, Mukherjee, A, Rachapalli, S, Saha, S. Crime and Women's Labour Force Participation. 2014. Retrieved from https://www.isid.ac.in/~epu/acegd2014/papers/SaraniSaha.pdf

2. CHALLENGES FOR WOMEN'S MOBILITY

2.1 Differences in Women's Travel Needs and Behaviour



Studies from around the world have shown that the travel patterns of women are different from men. Generally, women tend to make frequent, but shorter, trips (both in time and distance) as compared to men.

A safe public transit for women and girls is one which is reliable, easy to use, flexible and accommodates their travel needs 10 .



Mobility of Care

Generally, women's travel patterns are characterized by mobility of care. Women make more trips associated with their reproductive work in maintaining the household. They are more likely to "trip chain," meaning that they tend to travel for multiple purposes and make multiple stops before reaching their destination. For example, their destination might be the workplace but, on the way, they might stop at a day care or school to pick up or drop their child or stop at a grocery or medical store for daily household essentials. It also means that women may need to use multiple modes of public transport which would add to the cost of her journey.

Women, particularly in traditional societies, are expected to fulfil the additional responsibility of being the primary caretaker of the family. The trips made by women are not only characterized by trip chaining but also involve higher probability of carrying packages or being accompanied by dependents (elderly or children)¹¹ . In many developing countries, income generating trips (productive) are considered more important than reproductive (care giving) trips. As a result, men usually get access to motorized transport before women. Thus, majority of women in the developing world have limited access to transport both private and public. Mostly women either walk, use informal modes of public transport or use available public transport modes to fulfil their daily travel needs. 71 per cent of all trips made by women in Vishakhapatnam, Andhra Pradesh, India were by walking 12 . The trend is similar in other smaller cities in India. In Ranchi, 59 per cent women walked to work¹³ whereas in Hazaribagh 76 per cent women walked to their educational institute or workplace¹⁴.

¹⁴ Jagori.2016. Study on Violence against Women in Public Spaces in Ranchi & Hazaribagh: A Synopsis. New Delhi: Jagori.



¹¹ Recognise the barriers to women's safe, efficient and affordable travel. (2010, October 30). Retrieved from http://www.endwawnow.org/en/articles/286-recognise-the-barriers-to-womens safe-efficient-andaffordable-travel.html

¹² Tiwari, G. (2014). Planning and Designing Transport Systems to Ensure Safe Travel for Women. International Transport Forum. Discussion paper No.2014-04.

¹³ ITDP. Mobility for All: A Strategic Transportation Plan for Ranchi. Ranchi: ITDP, 2015. Retrieved from https://ltdpdotorg.wpengine.com/wp-content/uploads/2015/09/Mobility-for-all-A-strategic-transportation-plan-for-Ranchi.odf



Impact of Socio-Cultural Norms

Women's travel patterns and their perception of safety while using public transport is strongly influenced by cultural and social norms. In India, social norms against women coming into close contact with non-related men, and the social stigma and discomfort if they do so, limits their movement and use of public transport. This is a major challenge for women of marginalized social status who have limited mobility choices.

Also, the patriarchal nature of societies acts as a barrier for women's freedom of movement. A study conducted by the Center for Economic Research in Pakistan (CERP) in Lahore revealed that men played a critical role in determining whether and how female family members will travel. In a household survey in Lahore district, it was found that 21 per cent of men strongly discourage women whereas 50 per cent discourage female family members from using low occupancy vehicles.

"Poverty complicates mobility and lack of transport choices complicates poverty" 15

Allen, H. (2018).

¹⁵ Allen, H. (2018). Approaches for Gender Responsive Urban Mobility: Sustainable Transport: A Sourcebook for

Policy-makers in Developing Cities Module 7a. Retrieved from

 $https://sutp.org/files/contents/documents/News/2018%20May/TUMI_SUTP_GIZ_Module\%20Gender\%20and\%20Transport\%202018.pdf$

2.2 Impact of Poverty on women's mobility

Women face more restrictions to mobility as they are often juggling childcare, reproductive and other household responsibilities with income-generating activities. Due to this, women are more likely to be short of time and economically less active. Women are unable to take up fulltime and high paying employment opportunities. This makes them economically dependent on others.

Poverty is one of the biggest challenges to accessing public transport. People need to make choices about using different modes of public transport. Women and girls are more likely to be impacted by poverty. Women are known to forego an opportunity to work outside their neighbourhoods if they fear transport fares are expensive.

2.3 Women's Safety concerns in Public Transport

Generally, women are more concerned about using public transport because of personal safety. Safety can be of various types. The perceived safety in the context of this research refers to women's level of comfort, ease and perception of risk during all stages of a public transport journey. Perceived safety includes security from intentional criminal or any anti-social acts, including harassment (physical, verbal, visual) burglary, vandalism, etc. while engaged in the journey¹⁶. There exists a co-relation between perceived safety and the use of public transportation. Often, the fear of crime creates a sense or feeling of insecurity, particularly in women and they try to avoid spaces where crime or anti-social behaviour are likely to occur.

Women encounter violence and harassment in some form in their everyday lives while using public spaces and public transport. Harassment can take various forms such as verbal harassment which may include cat calling, teasing; visual harassment such as staring or leering or physical or sexual forms such as touching, groping, etc ¹⁷. A study conducted by Jagori in Delhi in 2010 reveals that around 85.4 per cent of women said that sexual harassment is very common in public places. The same study also revealed that women face maximum harassment in marketplaces (84.9 percent), followed by 83 percent at metro stations, 82.4 percent, in areas around schools and colleges and 79 percent in industrial areas¹⁸. In Guwahati, sexual harassment occurred on roadside (49 per cent), using public transport (39 per cent), in marketplaces (39 per cent) and while waiting for public transport (28 per cent) 19.



3. Factors which contribute to women's safety perception

Various factors can influence women's safety perception in public places and public transport. Perceptions of safety are often likely to vary among different women-user groups based on their social, cultural and economic background, age, frequency of use of public transport, and duration of stay in the city. There may be few factors which are common and important for both men and women's safety.

The factors or causes which make women feel unsafe can broadly be divided into two categories;

Urban Planning, Infrastructure and Transport management related issues

Urban planning and design are central to building safe and inclusive public spaces. The specific issues include absence of streetlights, poor or no lighting at transport stops, poor infrastructure at stops, unavailability of adequate space, obstructions on footpaths, non-availability of public conveniences like public toilets, drinking water facilities, etc. In addition, there are also issues within the transport such as lack of seats, overcrowding and lack of lighting which have an impact on the feeling of safety.

These issues impact the everyday mobility of women in public transport due to which they may be forced to alter their travel patterns. In case of absence of streetlights, women feel scared due to dark streets, they fear harassment from strangers, or falling or slipping on the roadside. In such situations, women often prefer not going out after dark. Women try to move in groups, or take longer routes which are well lit. Many times, they feel the need to be accompanied by a known person, in most cases a family member if they need to go out after dark. Poor condition of footpaths is another factor which makes women's travel unsafe and uncomfortable. Due to lack of adequate space on footpaths, they are forced to walk on the roads where they are prone to accidents and injuries.

Overcrowding also makes travel unsafe, particularly for women. Women are forced to be near men in overcrowded vehicles who sometimes use this chance to sexually harass women. Overcrowded public transport provides men an opportunity to unnecessarily push and rub themselves against women. This is quite disturbing for women and may seriously impact them. To overcome such issues, women tend to wait for long hours for less crowded vehicles or choose more expensive modes such as autos.

For women to travel comfortably and fearlessly, it is important that they perceive their complete public transport journey to be safe. This includes journey to and from destination to stop, waiting at the stop, boarding and alighting the vehicle and the commute inside the vehicle. Lack of safety in any part of the journey can adversely impact women's self-confidence, thereby restricting their mobility and opportunities of growth.

Harassment and Sexual harassment

Apart for infrastructure, harassment and particularly sexual harassment has a great impact on safety perception. This includes harassment in any form; visual, verbal or physical, including staring, eve-teasing, stalking, molestation, etc., misbehaviour by co-passengers, bus driver or conductors, rash driving, etc. Harassment influences women's decision of taking up educational or other employment-related opportunities. To address these concerns, women often do many things such as move in groups or with acquaintances,, use safety apps, carry pepper spray, safety pins and the like.. . In many instances, women are forced to either take alternate routes or alternate mode of transport or in worst cases leave their education or jobs and not move out of home. The right to safe mobility in a city is strongly linked with public transport systems and their planning in cities. Therefore, it is important to ensure safety for all, particularly women as they are more vulnerable to harassment which affects them and impacts their access to opportunities, productivity, confidence and quality of life.

4. Approach & Methodology

The methodology adopted for this study comprises a two-pronged approach of reviewing relevant literature and primary data collection. A combination of quantitative and qualitative primary data has been collected for this study. The quantitative data includes data collected using Safetipin applications and through structured survey questionnaires administered with female respondents in the above mentioned three cities. The surveys focused on understanding women's perception of safety in public places and public transport. Qualitative data was collected through Focus Group Discussions with key urban transport providers in each city. Also, personal experiences of female respondents have been captured as part of this study to understand the impact of safety issues in public transport in women's social and economic mobility.

Data Collection

Field Surveys with Women

Total Surveys: 219

Bhopal: 77 Gwalior: 75 Jodhpur: 67

Total Audits: 9,13. Bhopal: 3,198 Gwalior: 2,387

Safetipin Applications

Focus Group Discussions

Total FGDs: 7
Government Buses,
Private Buses, Autos
(Shared and Private),
E-Rikshaws,
Ola & Uber



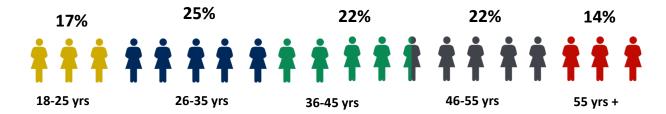
5. Findings

The research design ensured that women respondents came from diverse age groups, educational and socio-economic backgrounds. Given below is the profile distribution of the 219 respondents included in the primary survey across Jodhpur, Bhopal and Gwalior.

As shown below, most respondents surveyed belong to the age bracket of 26 to 35 years, whereas the lowest proportion of respondents surveyed fall within the age bracket of 56 years and above. Similarly, educational profile of the respondents demonstrates that amongst the 219 respondents interviewed, majority of them have completed education up to senior secondary followed by 23 per cent who never attended school. A large percentage of respondents constituted skilled workers (35 percent) followed by unskilled workers (32 percent). While teachers, professors, private and government employees constituted the skilled work force, the unskilled workers comprised domestic helps, construction workers and female vendors.

5.1 Demographic profile of women respondents

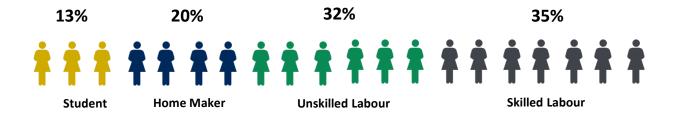
Age Groups



Education Level



Occupation



5.2 Key findings from the surveys

Our research strongly indicates that women in the cities of Bhopal, Gwalior and Jodhpur consider using public spaces and public transport unsafe. On a scale of 1-5, where 1- is completely unsafe and 5 is completely safe, all scored a mean of 2.

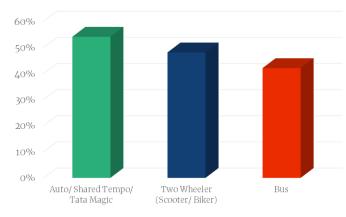


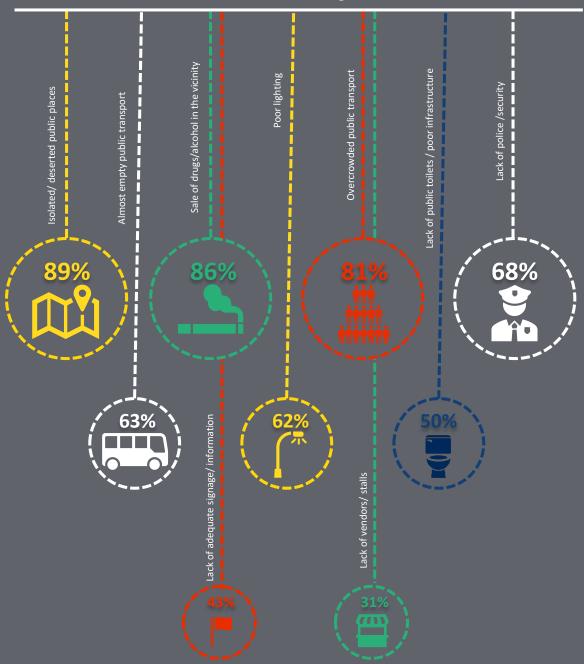
Figure 2: Top3 frequently used modes of public transport

Our study indicates that a considerable percentage of the female population in these three cities is dependent on bus and intermediate public transport such as autos, tata magics, e-rickshaws etc. for their everyday commute. 70% women respondents in Bhopal use buses followed by 43% respondents who use autos and tata magics. In Gwalior, 65% rely on autos and tata magics for their daily commute. Only 11% women reported using buses (public buses are a recent initiative in Gwalior).

In Jodhpur, 45% women reported using buses and 58% women using autos, shared autos, tata magics for traveling in the city. The results of the surveys clearly highlight that women in large numbers are dependent on public transport, including intermediate modes of public transport. However, majority of them feel unsafe while accessing and using public transport in their cities. Regarding identifying unsafe spaces in the city, amongst the top five unsafe places identified at an aggregated level, using public transport was significantly high as reported by 95% of respondents. This was followed by marketplaces and waiting for public transport as reported by 89% and 84% of the respondents respectively.



Reasons for feeling unsafe



Respondents reported several reasons that contributed towards making public places and public transport unsafe for women. Few pertinent ones listed by the respondents have been indicated in the diagram.

The results of the field surveys conducted in the three cities of Gwalior, Bhopal and Jodhpur highlights that many women perceive using and waiting for public transport as unsafe.

Majority of the respondents surveyed in these three cities reported similar reasons for feeling unsafe in public places and public transport. 96 % women respondents in Bhopal rated sale of drugs/alcohol in the vicinity as the most important reason for feeling unsafe, while being in a secluded or an isolated place was rated as the most important reason for feeling unsafe by 97% women in Gwalior and 78 % women in Jodhpur. About 65 % women in all three cities feel unsafe owing to poor maintenance of public infrastructure such as streetlights and public toilets.

Women's experience of sexual harassment in public places and public transport

Being active users of buses and shared autos, women often felt exposed to threatening and unwelcoming behaviour while using public transport. Of the 219 respondents interviewed across Jodhpur, Bhopal and Gwalior, 29 % (62 respondents) reported having experienced sexual harassment in a public place in the past one year. Findings indicate that instances of sexual harassment were significantly higher amongst students (57.1 %) and unmarried women (50.1%), highlighting their vulnerability. Overall, instances of sexual harassment were found to be highest in Bhopal (39 %) followed by Gwalior and Jodhpur (22 % each).

Figure 4 depicts various forms of sexual harassment experienced by women in public places. Even though forms of harassment such as visual (leering, staring), stalking, verbal (catcalling, whistling) and physical (touching, groping, feeling up) were reported to be rampant, they were not perceived as serious as sexual assault.

With respect to the kind of public spaces where harassment occurred most often, crowded spaces were reported to be where there were frequent occurrences. As shown in figure 5, about 50% and 39% of respondents listed public transport and marketplace as public places where harassment was most commonly experienced. 26% women reported facing sexual harassment on the roadside while 16% of the respondents reported facing sexual harassment while waiting for public transport.

Instances of sexual harassment faced by women while using public transport were highest in Jodhpur (67%) followed by Bhopal (50%) and Gwalior (35%). Discussions with women respondents during interviews revealed Instances of sexual harassment faced by women while using public transport were highest in Jodhpur (67%) followed by Bhopal (50%) and Gwalior (35%). Discussions with women respondents during interviews revealed

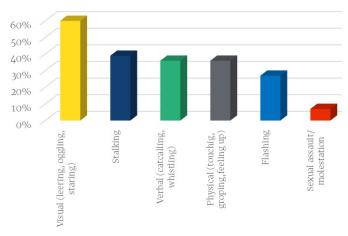


Figure 4: Forms of sexual harassment experienced

About 30% women reported having faced some form of sexual harassment in the past year. Out of these, 50% incidents took place while using some mode of public transport and 16% while waiting for public transport (Refer Figure 5).

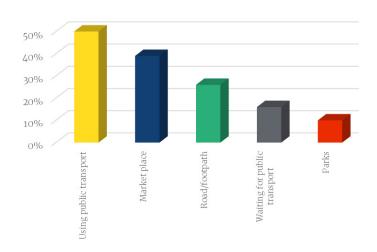


Figure 5 Places where women faced sexual harassment

The findings from the primary survey reveal that, at an overall level, out of all the respondents who reported having experienced sexual harassment, a significant proportion ranging between 30% to 40% stated confiding in a friend, followed by telling a family member or confronting the perpetrator as actions taken in response to incidents of harassment. 39% of the respondents mentioned that their parents discussed the incident with them and motivated them to deal with such situations. Almost 36% of the girls reported that their parents blamed her for the incident and 18% said that they restricted her mobility. Few of them were forced to leave college due to safety concerns.

It is noteworthy that none of the female respondents stated having reported incidents of harassment to the police. The most common reason for not reporting cases to the police was the frequent occurrence of such cases (65%). Other reasons included lack of trust and faith in the police, being afraid of the police and no action taken by the police.

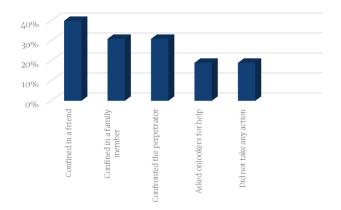
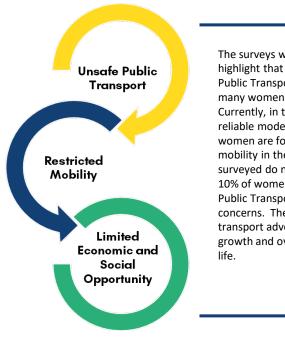


Figure 6: Actions taken in response to incidents of sexual harassment



IMPACT OF UNSAFE PUBLIC TRANSPORT ON WOMEN



The surveys with women respondents highlight that accessing and using Public Transport is a challenge for many women in these cities.
Currently, in the absence of safe and reliable modes of Public Transport, women are forced to restrict their mobility in the city. 12% of women surveyed do not go out after dark. 10% of women have stopped using Public Transport due to safety concerns. These challenges in public transport adversely impacts women's growth and overall development in

5.3 Key Findings from Focus Group Discussions

Focus Group Discussions (FGD) were conducted with various urban transport providers in Bhopal, Gwalior, and Jodhpur. A group of 10-12 participants of transport providers were recruited for each of the FGDs. A total of 7 FGDs were conducted across the three cities. Details of the FGD's are mentioned below.

Gwalior No. of FGD's: 2 Tata Magic (8-seater intermediate public transport vehicle), Vikram Tempo (3-wheeler ,8-seater) Autos, Erickshaws, Private taxi, Ola taxi (app based private taxi service)

Red bus, minibus, shared auto, reserved auto, tata magic, Cab (Ola, Uber)

Bhopal No. of FGD's: 3

Jodhpur No. of FGD's: 2 City bus (Private), shared auto, reserved auto, tata magic, Cab (Ola, uber)

FGDs provided valuable insights about male transport providers viewpoint regarding the issue of women safety in public transport. These were also instrumental in understanding the challenges faced by women in their everyday lives while using and accessing the public transport in these three tier 2 cities.





Essence of what emerged from the FGD's Victim **Blaming** Fear of shame and stigma Lack of women working in transport sector Issues faced by Transport Providers Instances of harassment "If they (women) don't wear modest clothes, people are bound to stare or pass comments at them."Transport Provider, Bhopal

"I have seen girls smoking and drinking with boys in public.

They invite trouble for themselves."

.....Transport Provider, Gwalior

Majority of the FGDs participants felt that instances of sexual harassment were low in public transport. Many of them mentioned that such instances have neither occurred in their vehicles nor have they heard of such instances. Very few of them spoke candidly about the issue of sexual harassment and women's safety in public transport. The reaction of public transport providers on the issue of sexual harassment with women in public transport is in stark contrast to what women reported in the surveys. This suggests that there is a clear difference in perception of what is being considered as unsafe by men and women. Actions and behavior such as staring may make a woman uncomfortable and even unsafe under certain situations. However, men, including bus drivers, conductors and co-passengers, may not even notice such behaviors by other male passengers.

Victim blaming

The most common reason for instances of sexual harassment with women that emerged from the Focus Group Discussions was **inappropriate clothing and behavior of female passengers**. Transport providers believe that women and girls can easily escape being victims of such instances if they avoid wearing certain kind of clothing (tight fitting clothes, short dresses) and take preventive measures such as not stepping out alone after dark

Fear of shame and stigma

It emerged from discussions with transport providers that majority of women in these cities prefer not to talk about incidents of harassment due to fear of shame in society. Women choose to remain silent to avoid bringing a bad name to themselves and their families .

"Many women remain silent about incidents of harassment to avoid bringing bad name to their families ."

......Transport Provider, Bhopal

Not enough women working in the transport sector

Women's role in many societies is linked to the patriarchal mindset which prescribes women to adhere to traditional roles such as that of housewives and mothers. This patriarchal mindset strongly influences the behavior and thinking of transport providers who feel that the transport sector is an unconventional one for women due to reasons like long and unpredictable working hours and interactions with people from diverse socio-economic backgrounds.

Though male transport providers are willing to work with females in this sector, they do not encourage them to join the transport sector due to the above-mentioned reasons

Issues faced by the transport providers

Transport providers in Bhopal said that they face challenges from BCLL (Bhopal City Link Limited) or the private contractor if they try to interfere or help women in their vehicles when they face any issues of harassment from male co-passengers. The drivers and conductors do not get any support from the authorities. Instead, they had to compromise on their workdays. In case of an incident, if the driver takes the bus to the nearest police station or to the bus stand, no one is aware of the standard operating procedures or guidelines which should be followed in such situations. Drivers and conductors have to wait for long hours because of which their work hours are often compromised. No compensation is provided to them in such situations. The drivers mentioned that, at times BCLL does not provide them duty for the next day as well. Drivers and conductors also face threat from the perpetrators in case they try to help the women. Other passengers in the bus hardly support the driver and conductor. People do not want to get involved in such matters. Such challenges faced by the drivers and conductors refrain them from raising their voices even if they witness any incident of harassment in their vehicles.

Response to instances of harassment

Transport providers in Focus Group Discussions had a divided opinion on women's response to issues of sexual harassment. While some felt that such instances, as they occur on a frequent basis, were best, ignored, others felt that ignoring even something as minor as staring will further encourage the perpetrator.



"They (women) can be drivers and conductors if they want to but we will advise them against it. This is a difficult job which requires a lot of physical strength and time which women are generally not capable of"

.....Transport providers, FGD, Jodhpur



5.4 Key Findings from Safetipin Applications

Safetipin is a technology platform that uses apps to collect data to make cities and public spaces safer and more inclusive for women.

At the core of the app is the Safety Audit. A Safety Audit is a participatory tool for collecting and assessing information about perceptions of safety in public spaces. The audit is based on nine parameters – Lighting, Openness, Visibility, Crowd, Security, Walkpath, Availability of Public Transport, Gender Diversity and Feeling. Each parameter is rated 0/1/2/3 with 0 being Poor rating and 3 being Good. All parameters except Feeling are completely objective and are rated based on a well-defined rubric.

Safetipin Applications; My Safetipin and Safetipin Nite were used to collect data in Gwalior, Bhopal, and Jodhpur. Over 9,000 safety audit pins were generated, and the collected data has been analyzed to assess the existing condition of public transport in these cities.

Safety Score

The Safety Score of a point reflects the perception of safety at that particular location. For each audit point it is a number between 0 and 5, 0 being Poor i.e. very unsafe and 5 being Good in terms of overall safety. Indicated in the pie charts below is the percentage distribution of pins in each range in Bhopal, Gwalior and Jodhpur. For the safety score maps for these three cities. As shown in the above pie charts, all the three cities have an average Safety Score in the range of 2.1-3 indicating scope for further improvement.

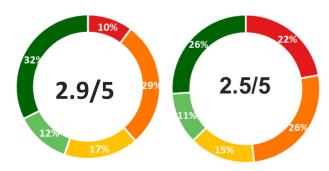


Figure 7: Safety Score of Bhopal Figure 8: Safety Score of Gwalior

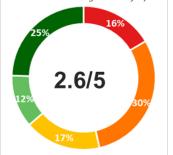


Figure 9: Safety Score of Jodhpur

Correlation Graphs

The correlation graph illustrates the co-relation drawn between each of the eight parameters of the safety audit with respect to feeling, the ninth parameter. The data collected by My Safetipin app (user generated audits) suggests that Gender Usage, People, Lighting, Walkpath and Visibility are highly rated parameters when correlated with Feeling in these three cities. This shows the importance of these parameters in contributing to auditor's perception of safety. As shown in Figure 12, the feeling parameter in Jodhpur is strongly linked to parameters of Walkpath and People. The auditors feel comfortable and safe at places where more people are present and where footpaths are available for pedestrians to walk comfortably.

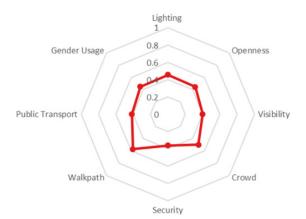


Figure 12: Correlation graph of Bhopal

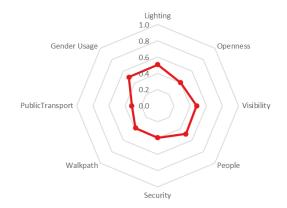


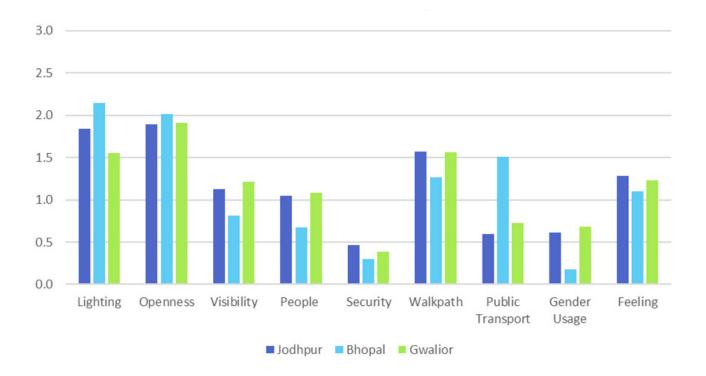
Figure 13: Correlation graph of Gwalior



Figure 14: Correlation graph of Jodhpur

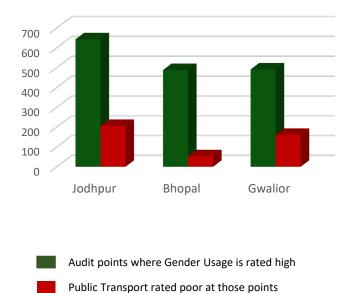
"Mostly men walk around in these areas. There are hardly any women. I feel unsafe here" (Auditor at Deendayal Nagar, Gwalior)
"It is risky to travel alone in this area especially after dark. I feel uncomfortable"(Auditor at BJS Colony, Jodhpur)
"Sabrinagar to D sector route is not safe for girls after 7 pm because there is no light"(Auditor in Bhopal)

The graph below compares the rating for all the nine parameters across Bhopal, Gwalior and Jodhpur. This graph clarifies how each of these nine parameters are rated for these three cities. The Public Transport parameter has been rated below 2 for all the three cities. Bhopal has an average rating of 1.5 out of 3 which is considered as average. However, the rating for Public Transport in Gwalior and Jodhpur is below 1 out of 3 which is considered as below average. Also, it is evident from the graph that parameters of Lighting, Visibility, People and Gender Usage which largely contribute to the perception of safety have been rated either Poor or Below Average



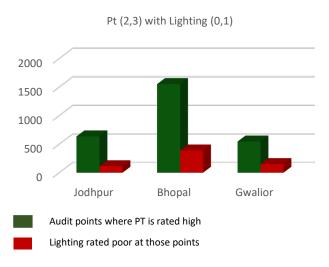
No Public Transport where women are present

The bar chart on the right illustrates the gap in the provision of public transport services at audit locations which are frequently used by women. This clearly shows that public transport services in all three cities should be extended to all major areas in the city to support women's mobility needs.



Poor Lighting where Public Transport is available

The graph below compares the rating for all the nine parameters across Bhopal, Gwalior and Jodhpur. This graph clarifies how each of these nine parameters are rated for these three cities. The Public Transport parameter has been rated below 2 for all the three cities. Bhopal has an average rating of 1.5 out of 3 which is considered as average. However, the rating for Public Transport in Gwalior and Jodhpur is below 1 out of 3 which is considered as below average. Also, it is evident from the graph that parameters of Lighting, Visibility, People and Gender Usage which largely contribute to the perception of safety have been rated either Poor or Below Average



Poor Walkpath where public transport is available

The bar chart depicts the poor condition of Walkpath at audit points which have been rated Good in Public Transport parameter in the three cities. The analysis shows that the condition of Walkpath needs immediate attention. Walkpath must be clear of any hindrances such as vehicular parking or encroachments from shops. Well maintained walkpath improve walkability and increase access for pedestrians.

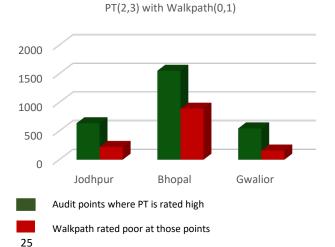




Figure 15 showing a stretch in Gwalior where streetlights are nonfunctional

The shown graphs and images illustrate the existing condition of Public Transport Infrastructure in the cities of Bhopal, Gwalior and Jodhpur. It is evident that currently, there exists a huge gap in the provision of infrastructure facilities. It is important that adequate and well-maintained infrastructure including streetlights, proper footpaths clear of any hindrances with street furniture are provided to increase women's mobility in the public spaces. Other parameters like Visibility which measures how visible one is to others while walking on the streets is important and positively impacts women's perception of safety.

Figure 16 showing a bus stop in Gwalior where lighting is not available





6. Overall Findings

1. Women feel unsafe while using and accessing public transport

The research indicates that women across different age groups and socio-economic backgrounds generally perceive public spaces and public transport in these three cities as unsafe. They constantly fear facing harassment of various forms: verbal, visual, physical or sexual in their everyday lives.

2. Poor public transport infrastructure

Safety audits revealed that the availability of public infrastructure facilities like provision of streetlights and public toilets influences the perception of safety of women and girls. The surveys conducted with women respondents indicates that absence of streetlights make a public space unsafe for women.

3. Normalization of sexual harassment by women

Another key finding of the research is the normalization of harassment or violence against women in public spaces. Women start believing that sexual harassment is an inevitable reality and, therefore, should be accepted is widely prevalent. Unfortunately, this acceptance prevents many women and girls from raising their voice against harassment and sharing their experiences with family members and reporting such cases to the police.

4. Lack of trust in police

The results of the surveys reflect that women and families lack trust in the police. They fear that their complaints may not get registered and addressed as the system of grievance redressal is long and tedious. This, in turn, results in further low reporting of cases of harassment to the police and makes the problem invisible

5. Victim blaming

The transport providers stated that incidents of harassment occur because of women's behavior and sense of dressing. They believe that in most cases women invite trouble for themselves through hints, gestures and signals, and hence perceived it unfair to place the onus squarely on men. This victim blaming furthers notions of shame and honor which prevent women from speaking out.

6. Social stigma and shame

Many women and girls choose to stay quiet and not share their experience of sexual harassment with anyone, including family members. They fear that it would bring a bad name for them and their family's reputation in the society. Further, they fear that families would restrict their freedom of movement which would adversely affect their access to social and economic growth.

7. Conclusion

Women across different age groups, socio-economic backgrounds share a common perception of feeling vulnerable and unsafe in public spaces and public transport in Bhopal, Gwalior and Jodhpur. The research suggests that sexual harassment in these cities is a widespread problem deeply rooted in gender-biased attitudes. Overcrowding, misconduct by drivers and conductors, poor infrastructure like lighting, public toilets and lack of effective grievance redressal mechanisms were cited as common reasons that rendered public transport unsafe. While discussions and interactions with transport providers and women brought forth the widespread prevalence of sexual harassment across these three cities, a proportion of only 29 percent respondents (amongst the 219 surveyed) reported having experienced harassment in the past one-year. This points towards the stigma surrounding sexual harassment. Women and girls avoid talking about their experiences for fear of family reputation and honor. Also, families downplay incidents of harassment to protect the honor of their family as well as that of the woman or girl. Women fear imposition of restrictions on them if they report harassment, which can impact their freedom of movement be it education, work or leisure.

Occurrence of daily instances of sexual harassment leads to acceptance and normalization of such issues. When women are regularly subject to harassment in public spaces, many of them learn to ignore it, believing that such issues are not severe enough to be talked or discussed about which eventually leads to nonreporting in many cases. Another reason for low reporting of cases of sexual harassment is the lack of trust and faith in the police and criminal justice system, more broadly. Women feel that the entire process of reporting a crime such as sexual harassment while using public transport is too long and tedious. They are not sure if the police would register their complaint, or if any action would be taken against the offenders. As a result, most women who experience such incidents prefer not to take any action. Another important element is the transport sector is largely male dominated. While this comes as no surprise, there is no doubt that the lack of women in the entire public transport ecosystem has a significant impact on women's perception of safety in public transport. The absence of women across all levels in the transport sector, be it operational, managerial or executive, makes women less confident to raise their concerns about issues of safety in public transport. Women and girls across many cities around the world are constantly battling fear of being harassed in public spaces which affects several aspects of their lives. They tend to alter their travel patterns and behavior while using the public

The research conducted in the cities indicates that a comprehensive set of interventions and programs are needed to address the issue of women's safety in public transport. Creating safer cities for women needs to be strongly embedded in the agenda of many stakeholders, including national and state governments, public transport providers, police, urban planners, designers, and local communities to drive change.



1. PHYSICAL INTERVENTIONS (INFRASTRUCTURE)

Urban environment

2. AWARENESS AND CAPACITY BUILDING

Education

3. INSTITUTIONAL REFORM

Enforcement,
Implementation and
Monitoring and Evaluation

4. POLICIES AND MOBILITY PLANS

Enforcement,
Implementation and
Monitoring and Evaluation

8. Recommendations

To ensure safe transport services for all, particularly women, it is important that principles of gender equality are mainstreamed into all aspects of public transport planning and operations. Initiatives such as ladies' special buses and reservation of seats have been proposed in the past. However, such services could not be sustained for long due to operational challenges like limited route coverage and low frequency of these buses. Moreover, as women in these cities generally travelled with family or friends, they could not use such services while traveling with a male. In the long run, gender segregated spaces rarely lead to true equality between men and women. Instead, the existing public transport ecosystem must adapt to the increased numbers of women who will be using it in their own way to serve their own unique needs. As described in the initial section, the core of the problem is that women's travel patterns, their needs and expectations from a public transport system are different from men. This is yet to be integrated in the current transport systems in most of our cities.

Gender must be considered in all stages of the planning process: data collection, planning and design, implementation, and monitoring. Key issues such as supporting women's participation in decision-making, improvements in accessibility, safety and comfort, and the planning of gender- friendly transport services needs to be addressed.

Recommendations under the following heads have been suggested for improving women's safety in public transport:

8.1 Physical Interventions

1. Improve lighting in and around the transit stops

Availability of streetlights is one of the most imperception of safety. This is of even higher importance for women. It is extremely important that sufficient street lighting is provided at all transit stops (bus stops, auto and e-rickshaw stops) so that women can move out and access public transport after dark without fear and hesitation. Pedestrian scale streetlights should be installed so that footpaths are well lit. Also, maintenance of the streetlights needs to be ensured. Periodic checks should be carried out to ensure uniform and unobstructed illumination

2. Provide safe, clean and comfortable walking environment

To enhance women's safety in public transport, it is important that women feel safe while walking to a station or stop. Providing well-lit streets, clean and adequately spaced footpaths with street furniture as per recommended guidelines (IRC103:2012 Guidelines for Pedestrian Facilities and UTTIPEC, DDA street design guidelines) can be helpful in encouraging more people to walk, especially women who are much more conscious of their safety and image. "Creating eyes on streets" by introducing hawker and vendor zones will help women to feel more comfortable while walking to their homes, especially during late evening hours.

3. Strengthen intermediate public transport

First and last mile connectivity is one of the most critical links of a public transport journey. Intermediate public transport modes like autos, rickshaws, tata magics act as feeder service to public transport. Considerable proportion of people, particularly women in many tier 2 cities, are largely dependent on Intermediate Public Transport (IPT). It is important to extend their coverage in tier 2 cities to include larger parts of the city. Provision of designated IPT stands with enough lighting, parking space and public toilets will enhance women's perception of safety.

4. Formalize and regulate intermediate public transport modes

Many IPT modes like tata magics, shared tempos are currently not formalized and registered. All IPT modes should be registered and linked to a GPS system and a central transport control room. Emergency panic buttons should also be provided. These measures will help in improving the overall safety of passengers.



Figure 17: Image showing the absence of "Eyes on street"
Source: Safety, Freedom and respect for women in Delhi, Few Action Points
by UTTIPEC, DDA.

Figure 18: Solution for creating "Eyes on street"
Source: Safety, Freedom and respect for women in Delhi, Few Action Points by UTTIPEC, DDA.





Figure 19 showing a bus stop with side advertisement panel.



Figure 20 showing a bus stop without side advertisement panel



Figure 21 showing a stretch in Jodhpur which is used as men urinals



Figure 22 showing example of a public toilet Source: Safety, Freedom and respect for women in Delhi, Few Action Points by UTTIPEC, DDA.

5. Promote mixed use activities near transit stops

Areas around bus stops should preferably have multiple activities such as residential, commercial, etc. Small hawker and vendor zones should be created near bus stops. Vendors and hawkers act as natural surveillance systems. This would help in addressing the issue of safety of women near bus stops. Presently, many women in the cities of Bhopal, Gwalior, and Jodhpur have reported feeling unsafe near bus stops due to the presence of men, under the influence of drugs.

6. Provide information about bus routes, schedule

Information about bus timings, routes should be provided at all bus stops. Providing real-time information on the arrival of buses through mobile applications and websites can help in reducing waiting time at bus stops. It can also improve passengers experience of using public transport. Additionally, helpdesks with a staff/timekeeper should be provided at bus stops in areas which are frequently visited by people like markets, etc.

7. Provide signage and advertisements in public transport

Signage and advertisements warning against sexual harassment should be displayed in public transport and even IPT modes. Emergency helpline numbers should also be mentioned along with them.

8. Information sharing, and communication strategies needs to be strengthened

Public transport users should be aware of when and how to use emergency services provided inside the vehicles. Most of the women travelling in buses in cities like Delhi do not know about the presence of emergency panic buttons in vehicles. Information about such facilities needs to be conveyed to the users travelling in the public transport. Announcements should be made in buses guiding passengers on how to respond in case of an emergency.

9. Location and design of bus stops

Bus stops and other IPT stands should not be located in isolated or deserted places. All bus stops should be well lit. Women feel more vulnerable to crime and violence in dark and isolated areas. Also, the design of bus stops should not obstruct the view of passengers waiting at the stop. Advertisement panels on the side or back of the bus stops act as a barrier and can obstruct movement. Such panels, if required, should be made transparent to enhance visibility.

10. Provide and maintain more public toilets for women

Lack of public infrastructure, including poorly maintained public toilets emerged as a reason which make women feel unsafe in public places. Public toilets with proper lighting should be provided near bus stops. It also needs to be ensured that these toilets are operational during all hours and a female staff is available for providing assistance

8.2 Capacity and Awareness Building

1. Gender sensitization training

Trainings for bus conductors, drivers and depot managers should be conducted periodically (biannually or annually).

2. Training programs for police

Periodic gender sensitization training sessions and workshops should be conducted for police officers. The police training manual, "Gender Sensitive Policing in Public spaces" authored by our partner The Centre For Social Research explores ways in which the police can better respond to women's safety and security. This manual can be used as supplementary material for conducting training sessions for the police.

3. Communication campaigns on women safety

City-wide campaigns should be conducted to increase civic awareness about women's respect and safety. These campaigns should encourage women to report harassment and bystanders to assist women. Such campaigns can be initiated by local NGO's or as part of CSR (Corporate Social Responsibility) initiatives.

4. Change patriarchal attitudes

It is evident from the research that strong patriarchal mindset has a deep bearing on the status and role of women in these tier 2 cities. To drive change, it is imperative to change the mindset of people which is rooted in gender biases and behaviour. The message of gender equality should be spread to all and at all levels; home, school, colleges, workplace. Inclusion of gender education in school and college curriculum can be one way to bring change. Efforts must be made to ensure gender equality at all places. Women advisory committees and help groups may be formed to spread awareness about women's rights and equality



8.3 Institutional Reforms

Increasing women's employment in the transport sector

To address the concern of women safety in public transport, it is important that women participate in transport planning, design, implementation and execution. There is a dire need for more women in public spaces not just as commuters but also as transport service providers to get involved. According to a report by the International Labour Organization, in 2005, 6.85 per cent women were employed in the transportation sector in India compared to 19% men. Women constitute around 2 per cent of Delhi Transport Corporation's workforce. The Bengaluru Metropolitan Transport Corporation has around one-third women employees²⁰. The percentage of women employees in the transport sector at all levels: managerial, operations, and executive needs to be increased. Consistent efforts will have to be made to gradually increase the share of women employees in the transport sector. It needs to be ensured that supporting infrastructure for women such as public toilets, creches are provided to retain them in the transport sector.

2. Checklists for women safety in public transport

Detailed women safety guidelines and checklists should be prepared for all concerned authorities (transport providers and operators- public, private, police, etc.). Compliance to this checklist should be mandatory. Few points that should be part of the checklists include availability of emergency helpline numbers both inside the vehicle and at the stops, frequency of public transport service at night, condition of lighting at the bus stops and location of bus stops.

3. Increase police patrolling in vulnerable areas in the city

Presence of police or security guards' influence women's perception of safety. Increasing police patrolling near bus stops (and pickup points for IPT) is likely to have a positive impact on women's safety perception. Police infrastructure needs to be upgraded and number of female police staff should be increased.

4. Efficient complaint redressal mechanisms

The research suggests that women's belief and faith in police is quite low. Many women do not report cases of harassment to the police because the entire process is tedious and long. Efficient complaint redressal systems needs to be created and the complaints should be addressed within a stipulated time frame. While laws to address sexual harassment exist, their implementation needs to be strengthened and the system of legal redressal has to be seen to work for women.

5. Collection of gender disaggregated data

City transportation authorities should be required to collect disaggregated data by gender, occupation, time of travel, etc. The methodologies such as interviews and questionnaires designed to capture data on public transport should be useful to understand how men and women use transportation systems, public spaces and cities differently. The details on women's travel patterns using public transport needs to be captured for ensuring safe, efficient and reliable transportation systems.

8.4 Policy Recommendations

Efforts have been made in the past to plan cities that focus on people and not on vehicles. National policies such as the National Urban Transport Policy (2014) were formulated with the aim of providing sustainable mobility to all citizens. Women's concerns and needs in public transport have primarily been addressed through technology-centric solutions such as Closed-Circuit cameras (CCTV) and Global Positioning System (GPS) in all public transport infrastructure. Similarly, other missions such as Jawahar Lal Nehru National Urban Renewal Mission (JNNURM) and The Smart City Mission remains gender-blind towards service level benchmarks for urban transport. The existing service level benchmarks for urban transport covers indicators for transport facilities, pedestrian infrastructure, non-motorized facilities, intelligent transport systems, street infrastructure, road safety, parking facility.

There is a need to create benchmarks and indicators such as women's ridership, cases of sexual harassment in public transport. Such indicators can be useful in creating safe, accessible and comfortable public transportation systems for women. Integrating gender issues in public transport planning is essential for sustainable mobility. Gender Action Plans (GAP) should be set up as part of city's mobility plans. These mobility plans should include a holistic approach as outlined in the figure

The very first step in integrating gender concerns in urban transport planning must be measuring the gendered mobility patterns which include understanding the trip purpose, trip origin and destination, mode of transport, travel cost, and time and duration of travel. Methodologies such as household surveys, travel diaries, Focus Group Discussions should be used to capture the differences in the travel patterns of men and women. These would also help in assessing women's perception of safety and understanding their aspirations from the public transportation systems. Women's safety audits at bus stops, IPT stands will help assess the existing condition of transport infrastructure. The next steps require defining clear targets and identifying indicators and benchmarks that will help mainstream gender concerns in transport planning within a defined time period and by a specific department or agency. It is important to involve women in the planning and decision-making process from an early stage so that their concerns and perspectives are integrated in the mobility plan. Gender should also be an integral part in

operations. Women's share of employment in the transport sector should be increased. After implementation, periodic monitoring and evaluation of the mobility plan focused on gender is highly recommended. This step is crucial to measure the performance of each indicator and benchmark towards women's concerns in transport. If required, indicators and benchmarks can be re-adjusted. Gender Action Committees comprising multiple stakeholders should also be setup to monitor the development of gendered mobility plans.

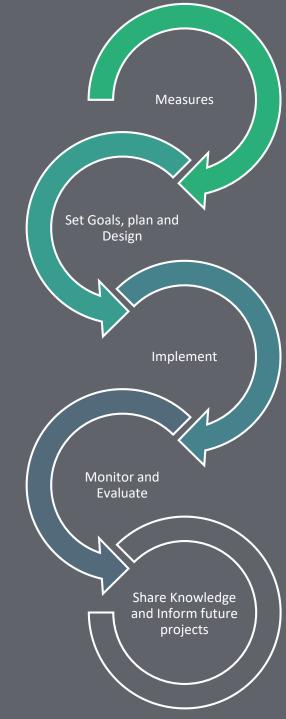
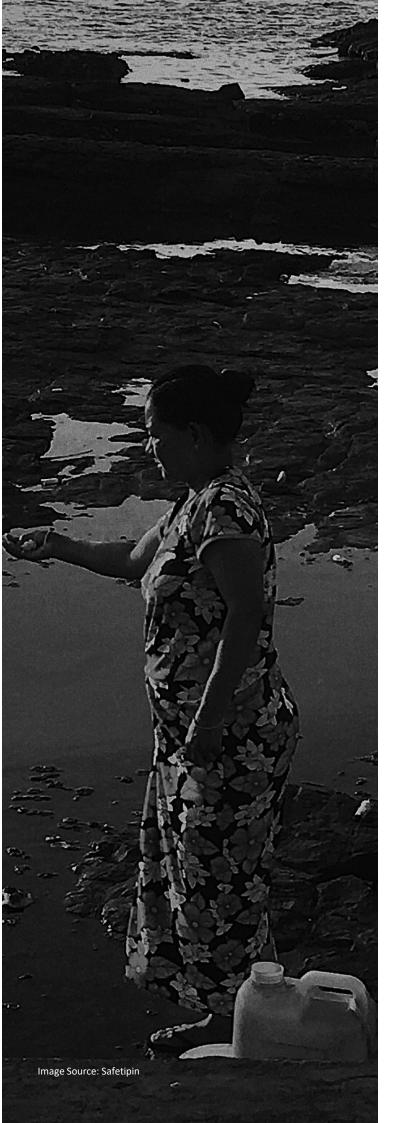


Figure 23: Suggested approach to integrating gender in mobility

Source: Adapted from Women and Transport in Indian Cities Policy Brief, 2017 (ITDP, Safetipin)



9. Way Forward

Our findings from this research strongly suggest that lack of safe mobility options prevent girls and women in these cities to participate in economic activities as freely as men. Despite being rated as unsafe, currently public transport is the only available choice with many women and girls due to concerns of affordability and limited independent access to private two wheelers.

Each city is unique and has different dynamics. Hence, there is no single solution to solving issues of safety on public transportation systems. In scenarios where multiple stakeholders and organizations are involved in the planning, design, implementation and operations of public transportation systems, women safety cannot be a concern for any one institution in particular, it has to be the collective responsibility of all the stakeholders, including the national and state governments, local urban bodies, police, transport departments, city planners and designers, women organizations and citizens. The challenge of providing safe and equitable transport for women is not easy and shall require systematic and planned efforts from all concerned stakeholders in a city. In addition to providing safety during commute, safe first and last mile connectivity also needs to be ensured. Robust first and last mile connectivity, coupled with good lighting, accessible, walkable pavements and public amenities provides women with the confidence to use public transport even during off peak hours without fear. Successful implementation of measures discussed in the previous section of this report are likely to have a positive impact on women's perception of safety. Monitoring and evaluation of measures with a specific gender focus is highly recommended. This shall be useful to assess how well a measure meets women's needs. Mainstreaming gender in mobility planning shall have a long-term positive impact not only for women but for society at large.

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Safetipin is a technology platform that uses apps to collect data in order to make cities and public spaces safer and more inclusive for women. Safetipin works with city governments to use data for improvement, and specific initiatives to address women safety in public spaces.