

An Approaches to Improve Security of Urban Women: Planning Proposal for Pink Police Station in Bardoli.

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Abstract—Women's safety in urban areas continues to be a major concern, especially in fast-developing towns like Bardoli. This study focuses on improving women's security by proposing a planning-based approach centered around the development of a Pink Police Station. It looks into current safety issues, unsafe locations, and social challenges that limit women's movement and use of public spaces.

Both qualitative and quantitative methods are used in the study, such as field surveys, public perception analysis, and identification of crime-prone areas. The research highlights the importance of gender-sensitive policing, proper accessibility, visibility, and active community involvement in creating a safer environment. It also suggests planning measures like selecting suitable locations, improving infrastructure, adding surveillance systems, enhancing connectivity, and conducting awareness programs.

The proposal underlines the role of women-focused police services in building trust among citizens, encouraging crime reporting, and supporting victims. It also stresses the need for coordination between planners, police authorities, and the local community.

Overall, the study shows that proper planning and design of a Pink Police Station, along with supportive policies, can improve women's sense of safety and strengthen urban security. It also provides a model that can be applied in other similar towns.

I. INTRODUCTION

1.1. General:

Urbanization is responsible for socially and economically exciting developments; along with the economic development there has also been some safety driven concerns especially related to women issues. Urban cities, towns & Metropolitan Cities is

where women generally face problems such as harassment, unsafe environment, poor illumination & marginalized access to immediate help.

The safety of women is not merely a policing issue but also an issue to be addressed through city planning and design. Urban planning and design through better land use, transportation, street design and public facilitation, till now considered as urban planning issues, contribute significantly to resilient, welcoming, attractive and just urban environment. In the fast-expanding towns like Bardoli the planning for the integrated safety is the vital issue.

To overcome these problems, the notion of Pink Police Stations has come into existence in different parts of India. These are women centric police stations, which provide a safe, friendly and approachable atmosphere for a woman to contact police for her grievances. These stations not only serve as agencies for law-and-order maintenance, but also serve as counselling, legal, social institutions.

Apart from the physical infrastructure, a range of schemes and helpline facilities have been set up by the government to ensure that the women are safe in all parts of the country: Women Safety Helpline Numbers (India)

112 – National Emergency Helpline

1091 – Women Helpline (Police)

181 – Women Helpline (Support Services)

1098 – Child Helpline

1930 – Cyber Crime Helpline

These helplines offer anonymity and immediate assistance for victims, and links to police and other legal and support services.

Key Government Schemes for Women Safety:

- Nirbhaya Fund: Supports projects that address women 's safety, including surveillance systems, emergency response, safe city.
- Safe City Project: Concentrates on enhancing of safety infrastructure including CCTV, lighting and security of public transport in certain cities.
- One Stop Centre Scheme: Offers a comprehensive support (legal, health, mental health) to abused women
- Mahila Police Volunteer Scheme: Mobilizes community involvement by using women volunteers to conduct safety and awareness programs.
- Smart Cities Mission: Supports for the implementation and development of smart technologies towards making a safer, friendlier and more-inclusive urban society.



Figure 1 Police Vehicle



Figure.2

1.2. Aim:

The objective of this research is to investigate the impact of the Pink Police Station on women's security and spatial justice through the assessment of its role in deterring crime, solving grievances, and creating safe public space for women in Bardoli.

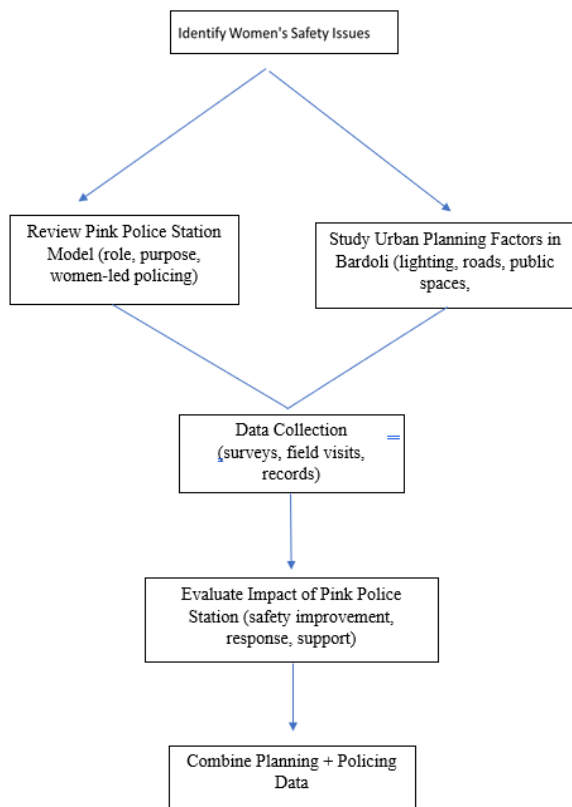
1.3. Objective:

- For analysis of the effect of various factors related to road, lighting, and public spaces that come under town planning on women's security.
- For finding out more details regarding the impact of the Pink Police Station on making women secure.
- For exploring the location and accessibility of the Pink Police Station in Bardoli.
- For developing strategies for town planning and policing in Bardoli for securing women.



Figure.3 Pink Police Station

1.4. Methodology:



II. LITERATURE REVIEW

2.1. Background:

Pink police stations in India represent a unique initiative that seeks to improve police service by making it a safe and friendly environment for female victims and their children. The concept was developed based on the previous all-women police stations and evolved through the implementation of similar stations in other states, such as the Pink Police Station Kozhikode in Kerala. Unlike traditional police stations, pink ones are less threatening places, characterized by a positive ambiance and staffed primarily with qualified and experienced female officers specializing in dealing with sensitive issues related to gender.

Pink police stations seek to facilitate the reporting process for domestic violence, harassment, stalking, and rape. Women avoid visiting police stations due to the lack of confidence and fear of being ridiculed. In this case, pink police stations serve to address these barriers. As opposed to police stations, the former centers not only accept victims' complaints but also

provide counselling services, legal consultations, and even immediate assistance. States like Tamil Nadu have built on this idea by adding pink patrol units and help booths to busy public places like markets, bus stops, and train stations. These steps make things easier to see and let people respond to emergencies faster.

2.2. Research Paper:

1) Title: Street harassment is marketplace discrimination n: The impact of street harassment on young female consumers' marketplace experiences. (102-220, 2020)

Author: Mark S. Rosenbaum, Karen L. Edwards, Binayak Malla Jyoti Regmi Adhikary, German Contreras Ramírez

The significant contribution of this research on retail and consumer services is to highlight street harassment, an issue that has been overlooked in the marketing literature. Street harassment involves individuals unexpectedly engaging each other in public spaces, already existing between residents and between customers, in a manner that is often influenced by gender identity and expression, sexual orientation or sexual identity. This study extends the idea to include real-world commercial and service settings (e.g., theatres, public markets, play spaces, shopping malls), in which similar events are common but inadequately studied academically.

This research is sensitive to the experiences of young women of Nepal and provides concrete examples of men 's harassment of them within the public spaces of the marketplace. The harassment exists through verbal comments and cat-calling, through physical and visual harassment. The paper investigates how women might react to these types of harassment through modifying behaviours, avoiding certain spaces and ignoring the incitements of others. While such reactions can be costly and provide temporary relief, they can also serve to restrict the agency of women and bar them from the public and market spaces.

The study also considers men 's perceptions and reveals that a few of the men are candid about abusing through shops and services. This indication reveals how this behavior can become normalized and also reflects how vital awareness and responsibility are.

Finally, the study concludes on the impacts it has on theorization, management practice and society. It calls on firms and service providers to take the issue of

street harassment seriously because of its impact on safety and customer experience. It recommends actions such as improved security, staff training and more efficient reporting processes. It also urges lawmakers to criminalise street harassment and strengthen legislation and enforcement processes in order to ensure safer society and commercial environments.

2) Title: The personal safety burden for women taking public transport in Australia and implications for provision of equitable public transport (100 118,2025)

Author: Julie A. King a Dominique A. Greer Rae S.M. Danvers, Byron W. Keating

This qualitative research explores women 's perceptions of safety when travelling on public transport, with particular attention to how fear of harassment and violence influences their own travel behavior. The research involved fifty-eight women living in Sydney and Melbourne and used focus group sessions to explore women 's perceptions of risk and protective strategies. The findings suggest that most women avoided public transport or changed their travel behavior because they were concerned about safety.

This article introduces the idea of the 'personal safety burden'; the ongoing, often daily, work women do in attempt to stay safe. The burden can be broken into five areas: mental (considering and anticipating who she might encounter while walking, and how she might respond), temporal (additional time spent planning safe routes or waiting for safe transport), feelings (choice to control emotions such as fear and anxiety), monetary (more money spent for safer transport), and social (fewer activities or social encounters). Women repeatedly foresee possible harassment, plan to counteract the risk, and resort to practice strategies such as paying attention, avoiding particular areas or having a specific travel schedule. The survey indicates that women are more willing to accept the failings of our public transportation system and believe that their own personal safety is their own responsibility, rather than the situation improving. For this reason, women do not put forth compelling proposals to improve transportation companies. However, at the same time, women cite various safety measures such as lighting and trained staff and others of the sort, but these safety measures are becoming less

and less prominent as our transportation systems become more and more automated and reliant on technology.

As this research indicates, public transportation companies are responsible for resolving this issue and ensuring that women aren 't marginalized. It recommends that transportation companies put in place and continue to add features that women find safer-- better lighting, increased staffing, etc.-- and begin exploring future, innovative safety measures as technology advances.

3) Title: Assessing and Modelling Perceived Safety and Comfort of Women during Ridesharing (2852 2869,2020)

Author: Aditi Meshrama, Pushpa Choudhary, Nagendra R Velaga

This research explores women's attitude of feeling safe and comfortable while using ridesharing services as well as reasons for the limited use of ridesharing among women. This happens despite the fact that ridesharing services provide benefits such as reduce Traffic congestion and environmental degradation. The study highlighted the importance of safety concerns and discomfort and little planning to avoid these issues as major barriers to the proliferation of ridesharing among women in developing countries.

Our research design consists of a detailed questionnaire with questions grouped into six focal areas for example, demographic information, perceptions of safety with different types of co-riders, importance of cost and privacy and other situational considerations for rideshare. We obtained responses from 293 women and used statistical techniques such as factor analysis and ordered logistic regression to determine what accounted for the factors influencing women's perceptions.

The results identified 4 major factors that determine women's feelings of being safe/comfortable in ridesharing situations. Younger women are less trusting of ride sharing because of fear of being a victim. Unemployed women are less trusting of ride sharing because they don 't use ride sharing services very often.

Women seemed to feel more vulnerable when they were in a vehicle with unidentified men or when they were out after dark.

In addition, we used focus groups to validate survey findings and gain additional insight into the concerns

of women. The study proposes that improving safety standards, educating, and addressing comfort-related issues are imperative in fostering higher levels of female involvement in ridesharing, thus enabling its growth and benefits for developing countries.

4)Title: Remedial, institutional or radical? Explaining community responses to violence against women in an NGO program to prevent violence in Mumbai, India (106 602,2024)

Author: Lu Gram, Sukanya Paradkar David Osrin, Chatush Singh, Nayreen Daruwalla

This paper explores community reactions to violence against women (VAW) as part of an NGO-led community-level prevention program implemented in Mumbai in order to examine the complexities of engaging communities on these issues. Despite global health and development agendas that seek to improve the lives of women and girls at risk, we continue to be uncertain of what community-based initiatives are effective.

A grounded theory approach is adopted in the research, where the detailed data set includes 30 focus group discussions and 36 semi-structured interviews with community members and NGO staff, in addition to over 170 hours of fieldwork observation. In exploring community response to violence against women, the researcher compares the experiences of six neighbourhoods of informal settlements

Local conditions such as the degree of social capital, the level of crime or gang activity, and the strength of state institutions influence these distinctions. Citizens are more apt to call on institutional remedies, such as contacting the police, in communities with strong state institutions and high social trust. Those living in communities with weakened social bonds or limited state support tend to utilize “remedial” measures such as informal family or community mediation. In some cases, “radical” measures, such as extra-judicial violence are used.

This research also shows that institutional actions such as police are sometimes forceful and sometimes as brutal as the most extreme community actions. It raises interesting questions regarding the power of the government in applying such force and whether such power has any ceiling. I find that policy makers and researchers in this case should carefully study a local context and what they might be asking people to do

with care, instead of enthusiastically insisting on community involvement without direct instructions.

5)Title: Improving young women’s access to safe mobility in a low-income area of Tunis: Challenges and opportunities pre- and post-Covid (266 273,2022)

Author: Gina Portera, Emma Murphya, Saerom Hana, Hichem Mansourb, Hanen Keskesa, Claire ungeya, Sam Clarkc, Kim van der Weijde

This paper explores the everyday mobility and transportation constraints experienced by young women in a low-income area of Tunis, with a focus on safety and risk-reduction strategies. The research is conducted over two years, with a comparative discussion of pre-COVID-19 and COVID-era conditions. An approach of participatory methods is used, with young Tunisian women from the community being trained as peer researchers and working with the academic team to share their personal perspective about mobility experiences.

The report indicates that the safety concerns of women (during the conduct of their daily lives using public transit and being out in the city) are every day and on the forefront of their minds. Women are concerned with public transit safety issues, and are taking precautions by avoiding high risk situations (crowded areas), planning their trips carefully, avoiding being alone, and being cognizant of the potential for harassment. With the advent of COVID-19, harassment concerns took a backseat to fears of contracting the illness. Lockdowns, social distancing, and reduced use of public transit curtailed mobility and also reduced the risks of harassment, since people were in less This article emphasizes that women require special assistance to ensure that traveling is safer post-pandemic. Some measures include granting women priority siting and boarding, providing enhanced transportation alternatives to low-income locations, and increased monitoring at transportation venues, on pathways, and within the transportation systems themselves. This will assist in making the transportation system safer for women and dealing with emerging public health problems and pre-existing problems.

6)Title: Young women’s travel safety and the journey to work: Reflecting on lived experiences of precarious mobility in three African cities (and the

potential for transformative action) (104 109,2025)

Author: Gina Porter, Emma Murphy Bulelani Maskiti d, Fatima Adamu, Ariane de Lannoy, Plangsat Bitrus Dayil , Sam Clark f , Hadiza Ahmad g , Claire Dungey , Mshelia Jummai Yahaya

This multidisciplinary research looks at the link between women use of everyday transportation and working opportunities, a almost-never-researched field in African urban contexts. It innovates using an action research methodology with young women (18–35 age group) living in low-income neighborhoods in three urban centers: Abuja, Cape Town, and Tunis. It examines the issues they face when commuting to work, strategies for safety and dignity while traveling and impacts on job and health.

The first theme, on mobility scheduling, shows how women alter their mobility schedules to compensate for the demands of the household, caregiving and chaining trips. The second theme, of harassment, shows how experiences of harassment matter very much in terms of mobility and opportunities. The findings show how women constantly worried about mobility security in urban environments, which directly constrains women's ability to pursue employment opportunities as well as their upward mobility and health.

7)Title: Sexual harassment in public transport in Bogotá (54-69,2020)

Author: Lina Marcela Quinones

It is meant to provide an overview of sexual harassment and its' effect on women in public spaces, both in BBL and especially on public transport, including vehicles, stations/stops and the way to and from the time of destination. Women have made great strides in the past few decades, but gender violence/sexual harassment in particular is still a huge issue in the countries of the Global South.

The research paper used a mixed-method method which incorporated an online self-administered questionnaire complemented by in depth semi-structured interviews in order to identify women's experiences. The results indicate that sexual harassment occurs frequently in public transportation and public spaces in Bogota. The two key factors influencing the likelihood and type of sexual harassment were age and socioeconomic class. Additionally, the results reveal that reporting sexual

harassment is rarely done as women "reason that reporting is useless" as evidenced by women who attempt to make a complaint but are dismissed or found uncooperative.

Existing politics in Bogota have not been able to take much action to stop harassment in public transportation because of the angles they approach it form. The study shows that a comprehensive policy framework needs to be put in place right away to stop and ease sexual harassment in the many different places that public transportation goes, so that women can travel more safely and fairly.

8)Title: Women in public spaces: Perceptions and initiatives to promote gender equality (105 346,2024)

Author: Ariane Pereira, Emília Malcata Rebelo

This paper addresses the under-representation of women in public spaces and the influence of their perceptions and experiences on the planning, design and management of perceived 'public' places. It aims to define the main characteristics of public space; identify gender differences in various perceptions and experiences and/or use; and suggest approaches for creating a more inclusive, user friendly public realm. Indicators dashboard has compiled information about the user demographics, economy, society, culture, experience and interaction in public spaces. The framework, 'Portal da Amazonia' explaining as it can help people achieve the goals of gender equality. The above paragraph suggesting steps are for the participatory, sense of awe-feeling/ in support of independence, diversity and integration, lively environment, security-citizenship and language-orientation and symbolic representation.

This report proposed the introduction of a digital registration of user to monitor public space utilization and measure individuals' satisfaction. After the above-mentioned measures. Repeat the survey system in other cities may ensure more inclusive, just and women-sensitive public spaces.

9)Title: Implementing Interventions to Address Gender and Power Inequalities in Early Adolescence: Utilizing a Theory of Change to Assess Conditions for Success (S5 S14,2023)

Author: kristin Mmari, Dr.P.H., M.A., Jennifer Gayles, M.Sc., Rebecca Lundgren, Ph.D., M.P.H., Katherine Barker, Sc.D., M.P.H., Karen Austrian, Ph.D., Ruti

Levtov, Ph.D. Jane Kato-Wallace, M.P.H. f, Miranda van Reeuwijk, Ph.D., M.Sc., M.A., Lisa Richardson, Ph.D., Jakevia Green, M.P.H., Anna E. Kågestan, Ph.D., M.P.H., and Astha Ramaiya, Dr.P.H., M.Sc.

This research established benchmarks for exploring what factors for successful (or unsuccessful) gender-transformative programs with very young adolescents in diverse cultural contexts. Using a Theory of Change and a 'Conditions of Success' framework, the research identified common facilitators and barriers to program implementation. Findings indicated that most challenges occur during program delivery and facilitation, and multi-sector support must be sustained to bring about gender norm change. Time and emphasis are also placed on the importance of involving parents and caregivers within programs - either as participants or co-designers- to enhance delivery and program impacts.

10)Title: Challenges and barriers for gender inclusive public transport policies and practice in Delhi, India (101 201,2024)

Author: Ankita Sil, Subeh Chowdhury, Roselle Thoreau

This paper explores the barriers to designing gender sensitive public transport systems in South and South East Asia, using Delhi as a case study. It analyzes how global organizations such as the World Bank or the Asian Development Bank in general recognize the centrality of integrating women into transp. E systems, but also how the realities of transport systems often not catering to women's needs. The paper explores why international gender directives and guidelines are rarely incorporated into national policy or local practices.

Semi-structured interviews with transportation officials and national policy officials also exposed a great deal of opposition to treating women as a user group. This was because of the fact that "women are a minority in the transportation community." Policies and policies do not have any travel mandates specific to women and are often lumped with other "vulnerable users." This prevents practitioners from designing transportation services to cater to female travel needs. Inadequate funding was another problem.

Furthermore, the study reveals significant gaps in the pathway from international standards to national policy and on to local implementation. Due to these insufficiencies, it is impossible to implement gender-

specific measures into place. This means that women's mobility needs are mostly not met in public transportation systems.

11)Title: Women's Perceived Precautionary Safety on public transit — A life course perspective on harassment experiences, anxiety, and coping behaviour (103 415,2026)

Author: Rumana Sarker, Graham Currie, Subeh Chowdhury

This research considers the impacts of harassment experiences on women's perceptions of safety as well as their travel behavior, with a specific focus on women who use the rail network, in Melbourne. This research acknowledges the susceptibility of women to harassment, especially sexual harassment, and defines the novel concept of PPS, Perceived Precautionary Safety, which is a measure of safety strategy deployment after harassment incidences or just experiences, including those that have occurred through adolescent stages (less than 18 years of age).

Data from a panel-based online survey of 528 women were collected and examined using Structural Equation Modelling (SEM) to determine the impact of verbal and physical harassment on perceived safety and anxiety traits. It was found that both physical and verbal harassment had a negative effect on perceived personal safety (PPS) as respondents were more cautious when verbally harassed than when physically assaulted however there was a correlation with increased anxiety levels. Physical harassment although statistically less frequent had a greater detrimental effect on perceived safety even with the implementation of precautionary measures. Physical harassment in adolescence and being a low-frequency nocturnal user of trams and originating from a multi-ethnic background were significant with regard to PPS.

Regression analysis confirms that harassed women at a young age now tend to utilize public transportation less as adults. This illustrates the long-term impacts of harassment on travel. The findings highlight the psychological toll from harassment and call for trauma-informed safety planning of transit that instills confidence and increases accessibility.

12)Title: Real-Time Sign Language Gesture Recognition for Women's Safety Using Dynamic Time Warping and Voting Algorithms (100 428,2025)

Author: Akansha Tyagi, Vaidya S. Prasanth, Poonam Lunawat , S. Ashok

This paper presents a gesture recognition system implemented in real time as a way to help protect deaf and hard-of-hearing women. This work uses modern computer vision technology in order to help ease safety fears by providing a way of recognizing gestures used by women for their protection. It uses MediaPipe to extract keypoints based on the movements of the hand, body, and face. Gestures are then transformed into feature matrices allowing both spatial and temporal data to be recorded. Dynamic Time Warping (DTW) compares each feature matrix with every other feature matrix and a voting algorithm then makes a prediction label for each gesture.

The system is tested on one new dataset, WSISL-28, composed of 28 unique safety-related gestures proposed solely for female people. Experimental results revealed the that the approach performs quite successfully in online gesture recognition, with a 98.45% recognition rate. It could be an effective instrument that could empower deaf and mute females all over the world for their day-to-day security and empowerment.

13)Title: Location Tracking and Self Defence of the Women/Elderly Person using Smart Safety Device without Internet Connectivity (836 843,2025)

Author: Yashaswini K S, J Sangeetha

A safety system is described here that alerts women against threats of harassment, assault and other forms of violence. Despite the enhanced rights of women, they are vulnerable everywhere, be it at home, workplace or outside. Hence personal safety becomes a crucial issue. The system that is proposed here is based on real time tracking of location and self Defense that provides on an immediate basis.

The system consists of an Arduino Uno, GSM, GPS, a buzzer, a vibrator, ultrasonic and force sensors, a relay and a power source. It automatically detects possible dangers and notifies the victim and the victim's parent or guardian (whose information is previously stored) with a message. Also, it has shock-inducing gloves that can be used by women if necessary. As it is portable, it can fit in a handbag with ease and, therefore, can be

used whenever and where ever. This system is a user-friendly and independent safety measure. This method ensures that women are given warnings early and can defend and protect themselves actively. It also solves the problems with the previous systems which required an internet connection or had no self-defence properties.

14)Title: Security perceptions in ride-sharing services: Influencing factors and effective solutions (101 689,2026)

Author: Marzieh Afsari, Salar Salehi, Lory Michelle Bresciani Miristice, Guido Gentile

This paper studies the perception of security in ride-sharing in Iran, a country with a rich history of ride sharing. We have employed factor analysis on the survey data of 270 individuals to identify the main determinants of perceived security such as personal experiences, social influence, family norms, and religion. These determinants and demographics are then used as independent variables in the ordered logit model.

The findings indicate that Gender is the most significant factor towards how safe people feel, as women feel less safe than men but also men with feeling unsafe for example in the evening or when driving in the country. Age, history of harassment, media exposure and family norms are also significant findings. People claiming low security are less likely to respond to the measures taken instead of moderate or high security.

Another factor the study analyzed was people's interest in safety measures. Many who participated seemed to be very supportive of cameras and tracking systems, and many were also interested in increasing this safety by paying more money. While security specific applications seemed promising, people said they wanted more privacy controls, preventative measures, and live response. The results show that ride-sharing services need to use both gender-neutral and gender-sensitive strategies to meet the different security needs of their customers.

15)Title: From crime scene to courtroom: A review of the current bioanalytical evidence workflows used in rape and sexual assault investigations in the United Kingdom (206-228,2023)

Author: Nick Dawnay , Kayleigh Sheppard

Provides a comprehensive account of how sexual assault is investigated in the United Kingdom with the emphasis on the number of agencies involved. Sexual assault investigations apart from the conventional police investigations involve clinicians and forensic experts such as body-fluid analysts, DNA specialists and chemical analysts.

The review begins with a brief overview of sexual assault laws within the UK. It then discusses the process of investigation and how the staff working within the Sexual Assault Referral Centre (SARC) setting, who are often first to arrive at the scene, play a vital role within this process. SARCs provide health care, support and co-ordinate the forensic evidence collection and analysis. The article considers the various types of forensic evidence collected at the site, such as biological material and trauma markings, and describes the main forensic tests used to locate and identify this evidence. It also considers the potential use of secondary DNA testing in suspect identification and the forensic analysis of Drug Facilitated Sexual Assault (DFSA).

Finally, the article discusses the Rape and Serious Sexual Offence (RASSO) path that the Crown Prosecution Service uses to take a case from collecting evidence in order to get it into court. It concludes with a brief discussion about the potential future of forensic investigation. It highlights the need for multi-disciplinary teams to efficiently manage rape and serious sexual offence cases.

16)Title: Gender gaps in urban mobility and transport planning (2543 0009,2021)

Author: Tanu Priya Uteng

This paper explores the male or male-centered contradictions in urban transportation and the extent to which they meet the needs, desires, and lifestyles of women. There has been however, limited understanding of what variables influence women's mobility and the nature of men's engagement and development of their transportation use over time, despite compelling evidence of gendered differences in travel behavior. Much of the discourse focuses on superficial binary oppositions (i.e., Private vehicular versus public transport) that minimize the complex, contextualized, and multiplicative nature of gendered living.

The study inquires whether the "smart" mobility ICT solutions that we have today are enough for men and

women. Drawing on the literature the paper suggests there are large gaps in current research and practice on urban and transportation planning with illustrative examples from cities in the Global North and Global South. The results highlight the need for gender-sensitive planning approaches to the development of transportation systems that genuinely enable safe, equitable, and accessible mobility for women.

17)Title: Women's perceived safety in public transport: Insights from the Middle East (104 413,2025)

Author: Ali Soltani, Mohsen Roohani Qadikolaei, Dorina Pojani, Marjaneh Moeini , Kamyar Abdekhoda
This study investigates the relevant factors that influence Iranian females' perception of safety using public transportation, with a focus on physical, social and temporal factors. The analysis was based on a primary survey data on 680 women users of a city's (Shiraz) subway system and a secondary geographical information system (GIS) data, analyzed with Partial Least Squares Structural Equation Modelling (PLS-SEM) to reveal 34.4% of variance of perceived safety. From these results it would seem that access, demographics, design and surveillance all have a direct impact upon perceived safety whereas timing only has an indirect impact. Of all the significant factors it is the measures of surveillance that had the greatest impact. These accounted for 43% of the variation in perceived safety. Women passengers can feel significantly safer by improving these measures however excessive surveillance could be a moral dilemma.

The report recommends that apart from development of infrastructure, sharing responsibility for women's safety and empowering women to report and take action against harassment should also be encouraged in order to make public transport safer.

18)Title: Reporting sexual harassment in nursing education: A theory of planned behavior study (1557 3087,2025)

Author: Merav Ben Natan Prof. RN, PhD, MBA, Rotem Klein, RN, BA, Sapir Levi, RN, BA

This paper explores the extent of sexual harassment among Israeli nursing students and investigates through factors affecting disclosure. Sexual harassment in nurse education is a current issue, which causes emotional effects and disengagement from

study, yet, the reports tend to be under-reported. A survey of 200 undergraduate nursing students was co-administered using validated questionnaires based on the Theory of Planned Behavior (TPB). 49% of students felt they had experienced harassment but only 27% of them reported abuse, though 77.5% would be willing to report it in the future. Attitudes and perceived behavioral control were found to be significant factors in reporting intention, while subjective norms and organizational climate were not. The research points out a gap between intention to report and the actual reporting behavior that is affected by several psychological factors, such as self-efficacy and attitude, along with systemic barriers placed within institutions. The findings indicate a need for targeted efforts to reduce this gap and to foster safer educational environments for nursing students.

19) Title: Young Women's Perception of Safety in Public Buses: A Study of Two Indian Cities (Ahmedabad and Bangalore) (3254 3263, 2020)

Author: Meghna Verma, Nikhita Rodeja, M. Manoj, Ashish Verma

This study examines young women's perceptions of safety on bus stops and on buses and their effect on young women's choice of commuting by public buses in Bangalore and Ahmedabad. Questionnaire method, using structured questionnaires, was used to examine socio-demographic profile, perceptions of safety at bus stop and on bus, bus use and factors related to it. 422 questionnaires from Bangalore and 192 from Ahmedabad were analyzed.

The factors influencing safety identified by factor analysis included safety at bus stops, anxiety while on a bus, and amenities at bus stops in both cities, with trust being another factor in Ahmedabad. Further analysis tests the association between these factors and women's perceptions of safety with controls for socio-demographic factors. Women in Ahmedabad with higher education were more likely to say they felt safe on buses compared to women with less education. Women in Bangalore who said bus stops were safe were more likely to say they felt safe feeling safe in general when they commuted.

The outcomes that have a strong impact of women perception of safety are travel experience and condition of physical infrastructure. This highlights the importance of improving bus stop facilities and

security as well the transportation infrastructure in general.

20) Title: How will women use automated vehicles? Exploring the role of automated vehicles from women's perspective (101 228, 2024)

Author: Soyeon Kim a, Shabila Anjani, Dea van Lierop

This will make sure that everyone can benefit from this new technology.

21) Title: Women's Safety in Public Spaces: Examining the Efficacy of Panic Buttons in New Delhi (4503 4655, 2017)

Author: Naveena Karusala & Neha Kumar

This research investigates women's perceptions of personal safety in New Delhi from a feminist Human-Computer Interaction (HCI) standpoint. After the highly publicized gang-rape incident in 2012, women's safety became a big issue in India. To address this, the government required that all mobile phones sold from 2017 onward have a panic.

This project explores women's opinions about automated vehicles and their potential impact on urban mobility. The study examines existing urban mobility systems and must-be, might-be, and want-to-be future autonomous vehicle systems by means of focus groups and detailed interviews.

The outcomes reveal that women are really worried about safety in using current systems of transportation. This reveals that there is insecurity about personal safety and stereotypes about female drivers. When mature women consider halting driving, they consider safety and their driving qualities degradation. Mums have hard time to control their children and requirements of traveling. Women who already use the transportation have some expectations of AVs. For instance, they believe that driverless cabs are more secure, but they are concerned about automated public transit safety. Mothers prefer the matter efficiency, and aged women can't move without any uncertainty.

The findings demonstrate the relevance of integrating safety and interaction at the core of AV design. If women's perspectives are considered, researchers, transportation agencies, and vehicle manufacturers will be able to develop automated mobility solutions that are more inclusive, accessible, and built around the user. The results show that safety is not based on

just one thing; instead, it is affected by a mix of personal, social, public, and technological factors. These things need to work together to make people feel safe. The study concludes by examining how these insights can enhance the efficacy and redesign of panic buttons and analogous safety technologies.

22)Title: Behind the Badge: How Perceptions of Women Police Officers Shape the Impact of All-Women Police Stations in India (2555 8834,2024)

Author: Amisha Sharma

This paper will explore how patriarchy, gender norms, and social stigma influences the functioning of all-women police stations (AWPS) in India. The stations have been instrumental in enabling larger numbers of people to come forward and report gender-based offenses, but have not resulted in any increase in the number of arrests and prosecutions. This is mainly attributable to a hyper-masculine police culture which is often dismissive of and inhospitable to such cases. The findings also found that policewomen working for AWPS are often dissatisfied as they can only intervene on gender related topics. This results in a demotivation and inefficiency, limiting the impact of these stations.

23)Title: How Women's Police Stations Empower Women, Widen Access to Justice and Prevent Gender Violence (2202 8005,2020)

Author: Kerry Carrington, Nacional del Litoral, Argentina María, Victoria

The women's police stations is a relatively new phenomenon, originating in postcolonial countries from the Global South in the late twentieth century, which was set up to address violence against women. This paper predominantly discusses a research study focused on a of a particular model of these stations operating in Buenos Aires Province, Argentina, of which one out of every five police stations is Combatting Violence against Women.

These centres operate differently from traditional police station. They follow an integrated approach by having a system of multi-profession such as police, social workers, lawyers and psychologists. This approach helps many more women to access justice and assistance. The article explains in detail how the approach differs from traditional police systems, discussing both its merits and flaws.

The evidence demonstrates that these types of dedicated stations facilitates access to justice, assists

women to escape violent relationships, as well as reduces violence against women at the community level by addressing patriarchal mindsets and in turn creates employment opportunities for women, hence, gender sensitive police practices.

The research is informed by the concept of southern criminology, which contests the notion that knowledge and policies exclusively emanate from the Global North to the Global South.

24)Title: Women-led police stations: reimagining the policing of gender violence in the twenty first century (1043 9463,2021)

Author: Kerry Carrington, Máximo Sozzo, Vanessa Ryan & Jess Rodgers

It was an advance to learn that nations like Australia, the US and the UK, had administered the crime of domestic violence, because this indicates that the state was beginning to do something about protecting women. However, the enforcement was carried out by men police, who worked within a traditionally masculine context and were often unable to support survivors of gender-based violence in the most effective way.

Meanwhile, another number of Latin American countries created female-only police stations dedicated to assist survivors. This research explores this model, especially one designed in Argentina during the 80s, to explore processes to encounter gender-based violence.

These fields leaves them to be a police effort directed more at preventing crime than punishing it. Instead of simply sending revenge victims into the criminal justice system, they assemble teams of police, social workers, psychologists, and lawyers.

The study further sought the opinions of experts in gender violence and members of the general public to determine this model was workable in Australia. The findings suggest that if police station with women PAs and targeted toward survivors are introduced in tandem with training and gender- and culturally-sensitive practices, some of the harmful effects of increased criminalization could be alleviated.

From a perspective of southern criminology, the research questions the notion that policies should be transferred exclusively from the Global North to the Global South. What it illustrates, is the importance of

adopting lessons learned from ways of practicing implemented in the Global South.

25)Title: Empowering Women: Enhancing Police Preparedness for Women Safety and Security (1005 1538,2025)

Author: Komal Yadav, Jatin Saini, Vaishali, Aaeen Alchi

The police are the first barrier for the law, and are vital for the safety of women. This article discusses how to improve policing in India in order to more effectively combat crimes against women. The topics discussed are, gender-sensitive training and policies, more women, building relations with communities and improving the use of technology.

Lanzar, ne examines the safety of women at present and finds that the police are unprepared to address such cases. It also offers valuable solutions on how to improve the system and make police work more responsive to women's needs.

The paper outlines a plan for making police more effective, more woman friendly, and the country more secure by describing the problems that exist and proposing solutions.

26)Title: Legal Empowerment t through Nari Adalat: A Study of Women's Courts in India (2582 7421,2025)

Author: Chandra Shekhar

In this paper, the author discusses the women's courts (Nari Adalats) in India as one localized solution that addresses these issues as notably fast resolution of conflicts, community rest, and women's awareness of legal rights. This is illustrated by the author using cases, statistics, and interviews.

The other hand, the study also raises some issues. Some of these problems are: lack of legal authority, social/cultural challenges and limited resources.

The paper made the case that the participation of Nari Adalats in the formal legal system might lead to their efficiency and provide women with better legal aid.

27)Title: Behind the Badge: How Perceptions of Women Police Officers Shape the Impact of All-Women Police Stations in India (2455 8834,2024)

Author: Amisha Sharma

This paper investigates the impact of the police perception of women police officers, under the framework of gender norms, social stigma and

patriarchy in India, on the effectiveness of these women police stations. It counters the claim made by the Lok Sabha that these stations would have a positive impact on public confidence in the police and shows that their impact on the ground has been minimal in terms of changing public perception.

AWPS were intended to lower the threshold of reporting gender crimes, yet failed to lead to an increase in arrests or proceedings. This raises more serious issues within the criminal justice system. An overly masculine culture in the police often contributes to the lack of seriousness when dealing with gender-based crimes, or ignoring them.

The paper continues to say that police women are very dissatisfied because they can only take on cases that are related to gender. This decreases the police women's motivation to do their job because they feel as if their work is trivial or doesn't even make an impact and degrades the effectiveness of the stations.

28)Title: Women police stations: have they fulfilled their promise (18209827,20 20)

Author: Mangai Natarajan & Dhanya Babu

Gender-sensitive policing has dependence on WPS as regards domestic violence cases. The establishment of Women Police Stations in many developing countries was for two-fold purposes; a response to crimes against women and for providing women officers broader career opportunities.

The paper looks at how well these goals are being achieved. When countries are considering whether to adopt the model, information is needed on the strengths and weaknesses of the systems they are considering to ensure resources are allocated effectively to respond to violent crime and other incidence.

Employs interviews, literature and governmental sources in order to clarify how these stations operate and how they are set up. investigates their impact on victims, reducing repeat victimisation, increasing women's representation within the police.

Other part of this paper is discussing about some major impacts on theory, policy and the future research.

29)Title: Towards a 'Women Oriented' Approach to Post-Conflict Policing: Interpreting National Experience(s) and Intergovernmental Aspirations. (2202 8005,2020)

Author: Staci Strobl

According to the UN, the integration of more women into the police remains an issue on a global level in terms of gender equality in policing. In countries which have had women police officers for a significant time, there are still extremely low numbers in the police at a comparative level to other types of work, despite the numerous papers/studies which have proved the necessity of them, particularly post-post-war.

This article discusses the political, social and institutional stigmas that keep women from entering a large police force. As it implies, these issues can be addressed by focusing on women.

These types of efforts too not only help the UN advance its aim of parity, but also vastly improve policing from a real-world perspective. It discusses the advantages of utilizing women's skills to the fullest extent, a more judicious use of force, corruption eradication, and improvement of the police force's handling of gender issues.

The article also provides helpful advice on how to attract more women to work in the police.

30)Title: Legal and Administrative Frameworks Governing Women Safety Helplines: Gaps, Reforms, and Best Practices (2250 3552,2025)

Author: Anshu Sharma

Women safety helplines are crucial as they provide safety, support and assistance to women in need of help, harassed and in emergencies. The following paper attempts to analyze the legal and administrative system under which they function in India, their history, mandates and functioning, problems faced and suggestions for improvement.

It mentions constitutional acts to save women such as Articles 14, 15 (3), 21, 23 and 39A. It refers to key legislations such as the Criminal Law Amendments (2013 and 2018), the Domestic Violence Act, the POCSO Act along with laws to prevent trafficking.

Further, the paper analyzes the various government agencies and organizations' level of involvement, for example, the Ministry of Women and Child Development, Ministry of Home Affairs, state governments, district level agencies and institutions. The paper also discusses Multi agency response systems.

A range of problems have been identified. These include poor communication between agencies, a variety of procedures, low levels of technology use, lack of training.

The paper states that the law has to be changed, a national law has to be made for a women safety helplines and clear uniform procedures needs to be made for the same. It also makes recommendations (for what has been successful in the Indian states and other countries) such as integrating digital systems, 1 emergency number, improved gender sensitivity training and stronger monitoring.

The papers central message is that in order to improve women's safety helplines, we need stronger laws, good management, innovation and community participation. To ensure that the safety helplines become responsive, accessible and survivor-centric, they should be comprehensive and well-coordinated services.

31)Title: Safety in the Urban Outdoors: Women Negotiating Fear of Crime in the City of Kolkata (212 226, 2014)

Author: Piyali Sur

In this article on: '1, 2, 3...is anyone out there?', the question of women's security in public spaces is raised in the context of Kolkata. The emphasis on the public sphere illustrates the position of the woman in the city in relation to that of men; the woman is constantly burdened with the insecurity that comes along with sexual violence, which is an apprehension of the possibility of the occurrence rather than of its actual existence.⁸

Some feminist studies have revealed that much of the narrative regarding crime and violence tends to portray the city as unsafe space for women, whereas threats at home are minimized or are portrayed as a matter of individual privacy. This thesis focuses on women responses to perceived threats of crime in public space. It explores how women take measures to protect themselves that is reflective of their class and education level.

However, this apparent restriction on women's freedom to roam, express themselves and socialize as a means of safety ultimately also reifies their perceived risk, that by placing themselves in danger to reach

public space (by going out in the evenings alone, drinking in public, cladding in contravening ways, etc) women challenge fear, gendered traditionalisms, and the potential of the city.

32)Title: What makes female commuters ‘unhappy’? Harassment, fear of crime, and unsought travel behavioral adaptations in public transport against life satisfaction (101 835,2024)

Author: Elisa Alfaro, Francisco J Llamazares , Sergio A. Useche

Taking all of this into account, this paper looks at the effects of sexual harassment, fear of crime, and the unwanted modifications of travel behavior on life satisfaction among women who use public transport in Spanish cities. It uses data from a survey of 720 women travelers showing that there were high and statistically significant correlations between harassment, fear and behavioral modifications (route, schedule or transport mode changes) and that women have a higher propensity to carry out these annoying modifications if they are harassed. Thanks to structural modeling, the work shows that it is the burden of coping with the forced modifications of travel behavior which, in turn, leads to lower happiness. Overall, the paper finds that negative commuting experience has a significant effect on the women’s quality of life. It highlights the need for context-based strategies to reduce harassment and fear and improve women’s mobility and access.

33)Title: Women Safety Device and Application FEMME (0974 5645,2016)

Author: D. G. Monisha, M. Monisha, G. Pavithra and R. Subhashini

In this report, they discuss “FEMME,” a combined security device which is intended to increase women’s safety. FEMME is optimized for low power consumption and offers a number of safety features combined into 1 system so women no longer need to carry multiple devices. FEMME can connect to a cell phone using Bluetooth and each of the messages and alerts can be sent independently by the app and the device. Some key features include recording audio that can be used as evidence in an event, an auto dial text, call message system that can send updates on location every two minutes, and RF signals that can be used by a covert camera detector to ensure privacy. The researchers conclude that FEMME is an integrated

package that offers a comprehensive safety system much better than stand-alone devices.

2.3. Cash Study:

1.Pink Police Station in Kerala.

Kerala initiated the Pink Police program to make public spaces safer for women and children through gender sensitive police work. The Kerala Police started Pink Patrol and Pink Protection Project which as part of larger safety initiatives.

The project began around 2016 with the goal of:

Reducing crimes including harassment against women
Increasing the number of women police officers in the force
Encouraging the police to be more accessible to women.

➤ Important Things About the Pink Police in Kerala

a. The Pink Patrol System

Special patrol cars (pink) sent to some cities like Thiruvananthapuram, Kochi etc. Works mostly in busy public places like, Bus stops Markets Colleges/schools. Agency with female police officers employed from 8 AM to 8 PM

B. Placing Women Police Officers on the Job

On a daily basis, there would be anywhere from 20 to 25 of us on the beat in teams; keep track of the speed of your response to complaints and your attitude toward the public on the street.

c. The Pink Protection Project (2021):

All kinds of patrol vehicles include cars, bikes and bicycles, and so on to notice Internet security, problems of dowry, harassment of people in public.

D. Using technology:

The use of technology can include the use of computer-placed text and graphics. This also includes using multimedia such as films and sound clips. Emergency response systems and helplines
Connections to control rooms and services for emergency calls

➤ Goals

Take action to make the women feel safe in the public places. Halt eve teasing and harassment. Amp up the availability of police protection for women Don’t just support a reactive police force demand a preventive policing.

➤ How it works

Known problem areas for patrol Taking care of unexpected events Tracking unfamiliar activities identifying them to arrive at solutions¹¹. Taking effective action in responding to all instances of harassment, assistance for victims, explaining to victims how to proceed under the law and partnerships with local police stations.

➤ Accomplishments / Good Effects Better Visibility

There is now a higher number of women police officers. Explain from a mental health perspective that MADE woman feel safe in their minds Preventive Approach

Concentrate on deterrence rather than purely FIR-oriented policing. Multi-dimensional Safety Not only did it deal with physical crimes, but it also dealt with Harassment in internet.

2.4. Cash Study on Women Police Station in Delhi.

➤ Introduction and Background

In Delhi where there are not many different women police stations existing but most of the women related cases have to be registered and be taken care of by some special unit like SPUWAC or Crime Against Women (CAW) Cells, because of the growing crimes against women like domestic violence, dowry harassment, rape, woman and child abuse, etc., which need to be handled more delicate way. SPUWAC is a nodal agency which is present in all the 15 districts of Delhi gradually.

More recently there's been a push to have separate women police stations established in each district so that all the crimes against women and children can be dealt within one roof.

➤ Objectives of Women Police Stations

- Create an environment where women victims feel safe and comfortable
- Encourage reporting of crimes without fear or reluctance
- Press for quick response and legal support.
- Introduce and promote gender-sensitive policing

➤ Organizational Structure

The functioning of women police units in Delhi includes:

Under the command of a Station House Officer (SHO) (envisaged as a woman in specialized stations)

- Staff inspectors, sub-inspectors, constables and counsellors.
- Liaising with NGOs, legal advisory services and social services
- Linkages with district-based policing system.
- At this stage though, women representation is still very small about 10% of the entire Delhi Police forces and no women officers are in senior positions.

➤ Functions and Services

Women police stations and CAW cells perform multiple roles, Crimes such as harassment, domestic violence, dowry cases, assault etc., are reportable by women.

➤ Counselling and Mediation

A large number of cases, matrimonial disputes being prominent among them, are considered and attempted to be settled amicably through conciliation and reconciliation even before the institution of proceedings.

➤ Investigation and Legal Action

The FIRs are filed and the legal procedures are taken in case of unresolved disputes.

➤ Child Protection Services

Child victims are given special attention through child friendly policing approaches.

➤ Awareness and Outreach

- Awareness programs for schools, colleges and communities are conducted by units to make women aware about their rights.
- SPUWAC additionally offers programs on self-defence and legal rights, thus boosting preventative policing.

2.5. Case Study on Hyderabad SHE Teams.

➤ Beginning

The Hyderabad City Police started the SHE Teams program in 2014 to stop harassment of women in public places. It is thought to be one of India's most creative and effective models for preventive policing, with a focus on, Stalking and eve-teasing, Sexual harassment (both online and offline).

➤ Goals

- Make sure that women can safely use public spaces
- Stop harassment and violence against women
- Encourage people to report crimes
- Instead of taking action after the fact, encourage preventive policing.

➤ Important Features

a. Policing in secret

Officers wear regular clothes at work Blend in with places like, Colleges, bus stops, and markets Catch criminals in real time.

b. Using Technology

Cameras and other tools for spying Watching social media (complaints on WhatsApp and Facebook) Dedicated phone lines and mobile reporting

c. System for Quick Response

Take action right away on complaints Working together with local police stations Intervention on the spot.

d. Legal and Counselling Approach

People who break the law for the first time, Counselling and warning, People who do it again and again FIR and tough legal action.

➤ How it works

Find places where crime is likely to happen Send out undercover, SHE teams Keep an eye on strange behaviour Catch people doing wrong things Give Advice Legal action if needed

➤ Achievements / Impact

- Reports say that the number of eve-teasing cases has dropped a lot.
- Women are more likely to report incidents because they feel more confident.
- People are less likely to harass others in public when they are afraid of being watched.

➤ Problems

- Using hidden cameras raises moral issues

- Too much reliance on monitoring systems

III. STUDY AREA PROFILE

This chapter provides a detailed profile of the Bardoli and its region in the Surat district of South Gujarat.



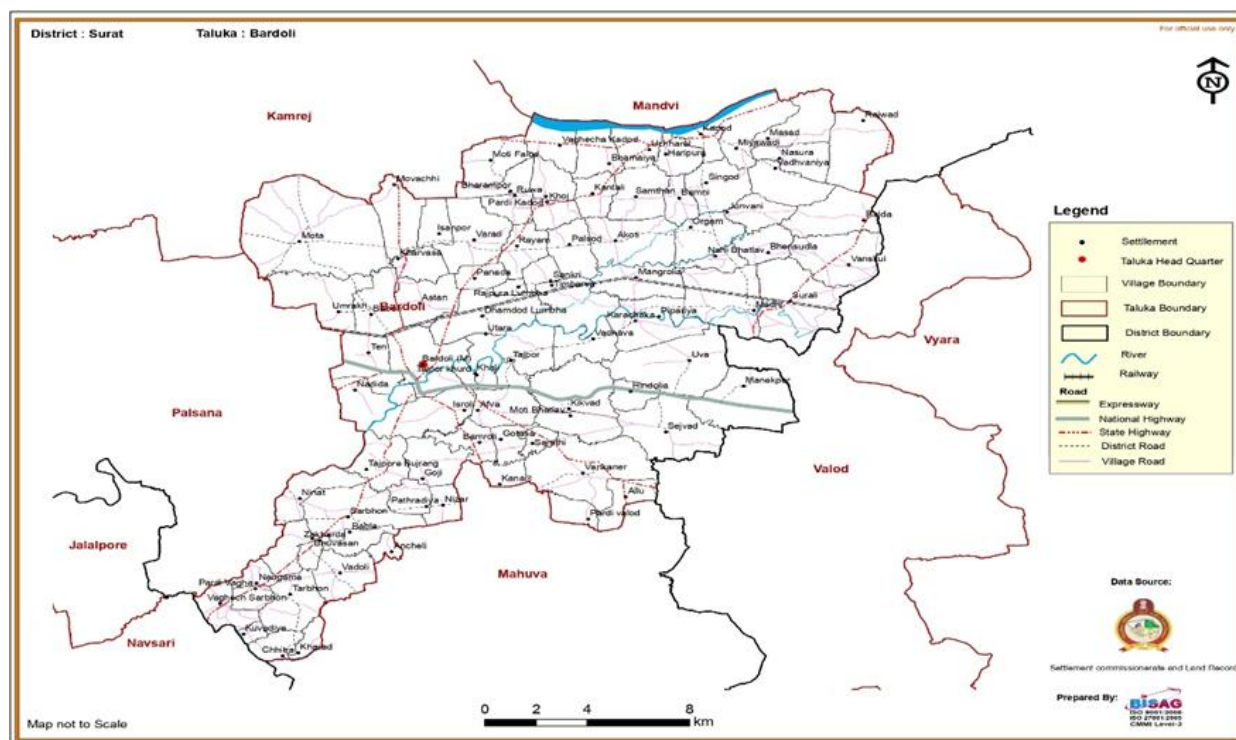


Figure 4: Location of Bardoli

3.1 History of Bardoli.

Bardoli is a town in the district of Surat in the state of Gujarat. It was in this town, that the Bardoli Satyagraha, became famous in Indian history, as it was one of the greatest farmers movements in Indian history. Originally, the place of Bardoli was a large vegetable as well as farming area. The farmer's life was the primary activity in the region. Their main livelihood was farming. Under the rule of the colonial masters, the farmers had to pay a good amount of tax on their land. In the year 1928, the money collected as the land tax was increased by 22% by the British government, and this too without any prior warning. This was quite a problem as the crops were not good and many of the farmers and their families were already facing a huge problem. The farmers did not agree to pay this amount and believed it was unfair. The farmers of Bardoli decided to protest without any physical violence and they relied on the help of Sardar Vallabhbhai Patel; 'an iron man' and a well-known leader. The farmers commenced the practice of non-violent and peaceful protest with Sardar Patel as their leader.

After months of protests, the British government saw that the farmers were strong and united. In the end,

they agreed to lower the tax increase and give back the land they had taken.

3.2 Physical and Geographical Character:

3.2.1 Topography:

Bardoli, in the Surat district of Gujarat, is at 21.12°N 73.12°E. The land is mostly flat and low-lying, with an average height of 22 to 31 meters (72 to 102 feet) above sea level. The area is located on the banks of the Mindhola River and has fertile, alluvial soil. It is also close to small hills. The Bardoli topographic map shows that the land goes from a low of 14 meters to a high of 40 meters.

3.2.2 Geology and Soli Condition:

Bardoli is a flat area with land that is smooth and even. Farming and living here are easy because there aren't any big hills. The soil in Bardoli is mostly fertile alluvial soil, which helps crops grow well. In some areas, there is black soil that is good for growing crops like sugarcane and cotton.

3.3 Climate:

The weather in Bardoli, Gujarat, is tropical, with three main seasons: hot summers from March to May, a wet monsoon season from June to September, and a warm,

dry winter from October to February. The temperature usually stays between 15°C and 28°C, and it rarely goes below 53°F or above 110°F. The summers are very hot, and the monsoon brings a lot of moisture.

3.4 Safety Concerns in Bardoli

- Eve-teasing in crowded places
- Lack of surveillance systems
- Insufficient lighting in certain streets
- Limited women-focused policing

3.5 Existing Policing System

- Law enforcement managed by local police under Gujarat Police
- Limited presence of:
 - Women police personnel
 - Dedicated women police stations

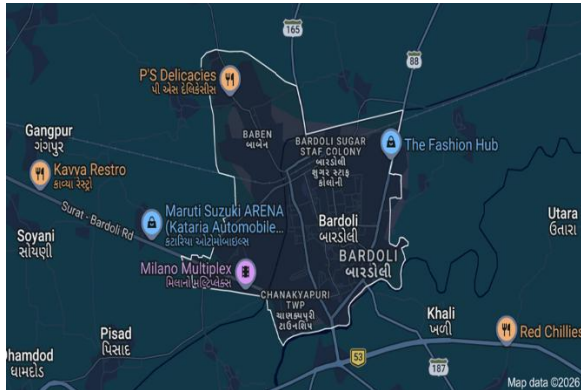


Figure 5: Bardoli Police Station

IV. EXISTING INFRASTRUCTURE

4.1 Current Police Station Scenario

Current Situation at the Police Station This cover both the town center and the rural and industrial outskirts of Bardoli.

Name of Police Station	Location / Area	Notes
Bardoli Police Station	Limda Chowk, Bardoli	Main police station serving Bardoli town; 24×7 law enforcement and public safety.
Bardoli Rural Police station	Ten Road, GIDC, Bardoli	Police station focused on rural & industrial areas around Bardoli; supports law and order in surrounding villages.





Figure 6: Ruler Police Station

4.2 Physical Infrastructure

The current building housing the police station is a standard government type of building, which in its current form was only meant for the most rudimentary aspects of policing.

➤ Building Structure

Ground floor administration building, Restrictions on the ability to expand, Conventional layout without consideration for planning constraints.

➤ Internal Layout

Reception / reporting desk., Duty officer room, Sample investigation rooms, Records storage area, Lock-up facility but the layout is not well zoned for privacy or specific services.

4.3 Functional Facilities

The police station provides essential services required for law enforcement: Registration of FIR, and Complaint Management, Searching and interrogating, Crime record keeping, Emergency response services, Police stations are the first contact point for the citizens with respect to their safety, reporting the crime and for settling any dispute.

4.4 Human Resources and Equipment

➤ Staff Strength

Police Inspector (PI)

Sub-Inspectors (PSI)

Officers and support staff

➤ Equipment:

The simplest communication systems, Police cars (jeeps, bikes), Require only limited digital infrastructure.

4.5 Existing Condition of Women Safety Infrastructure

Currently, the infrastructure is not specifically designed for women-centric policing:

- Women help desk has not been established (or women help desk with very limited facilities).
- Not enough private counselling rooms
- Lack of child- and victim-friendly spaces;
- There is no specified waiting area for women.
- This is potentially uncomfortable for women reporting sensitive complaints such as harassment or domestic violence.

4.6 Technology and Surveillance. The international dimension.

➤ Simple record keeping systems:

- Scope of the CCTV surveillance available
- Absence of detailed digital surveillance systems.

➤ Modern policing increasingly requires integration of:

- CCTV systems
- The systems of management of the cyber crimes
- GIS tracking

4.7 Parking and External Infrastructure

- Limited parking space for police vehicles
- Congestion due to central location
- No separate visitor parking area

4.8 Jurisdiction and coverage

- Bardoli town area
- Surrounding village and semi-urban refions

4.9 Respons time Analysis

Area Type	Exiting Time
City	5-10min
Peripheral	10-20min

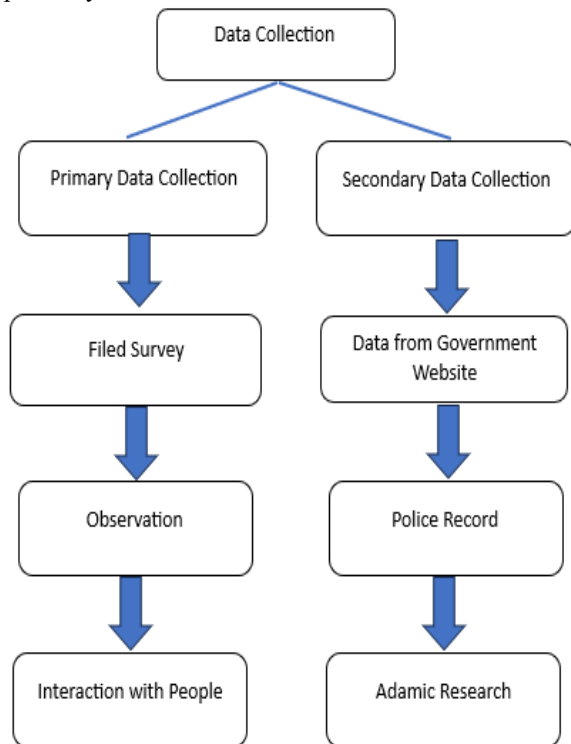
4.10 Key Issues Identified

- Poorly designed space

- Absence of 'women friendly' infrastructure
- Inadequate functional segmentation
- Few technological integrations
- Lack of privacy in the handling of complaints
- Parking and circulation.

V. DATA COLLECTION & ANALYSIS

The following chapter discusses the methodology that was employed to obtain the information required and the analysis that was performed on this information to identify various problems associated with women's security in Bardoli. Primary as well as secondary data were employed to establish various concerns, the distribution of insecurities, and deficiencies within the police system.



5.1 Primary Data Collection:

For this study primary data collection is most significant, as it is reliable, credible and localized information on women 's safety in Bardoli, was collected first hand from the women directly by field survey, individual interviews, direct observations and interaction with stake holders in the field. A structured field survey was used for collecting quantitative data on perception of safety; duration of everyday travel and travel time, time-based vulnerability; frequency of

visit; availability of police and vehicles etc. The survey was carried out in residences, places of market, and transport stations and educational institutions collecting data from women belonging to different socio-economic strata including housewives, working women and students. The study also relied greatly on the method of direct observation i.e. the areas under study were observed repeatedly at different times of the day to see what the conditions actually were like in terms of street-lights, presence of CCTVs, visitors, crowd, safety etc.

5.2 Secondary Data Collection:

In addition to the primary data, secondary data was collected in the form of case studies of successful projects such as Pink Police Stations and other women safety projects in various cities to understand their effectiveness, practicality and the extent for which they could be applied in the city of Bardoli. Further, academic research papers, journals, earlier research studies, from university were studied so as to provide a theoretical applicability of the research. The secondary data added value to the research and strengthened the primary data.

There are also as mentioned above, possible flaws of secondary data, such as lack of up-to-date information, geographic specific information, and even contradictions between sources, but overall, it is a valuable contribution alongside primary data, to a balanced and evidence-based investigation.





5.3Data Collection:

The following present the details analysis of survey data collect form Bardoli Nagarpalika.

The size of the area is about 444.22 square kilometre.

➤ Population:

Table1.Bardoli Population

Area	Population Census1991	Population Census2011
Bardoli City	38,377	60,821
Bardoli Taluka	1,96,156	2,24,164

➤ Sex Ratio:

Table 2. Sex Ratio

Gender	Bardoli City	Bardoli Taluka
Male	31,034	113,967
Female	29,787	110,197

5.4Data Analysis:

The data were analysed statistically and graphically.

1. Safety Perception Analysis

- Between 60 to 70 percent of women do not feel secure at night. Unsafe areas are streets that have no lighting on it and congested areas.

2. Travel Pattern Analysis

- Majority depend on: Public transportation Walking
- Increased vulnerability during: Bus stop waiting times Last-mile connectivity

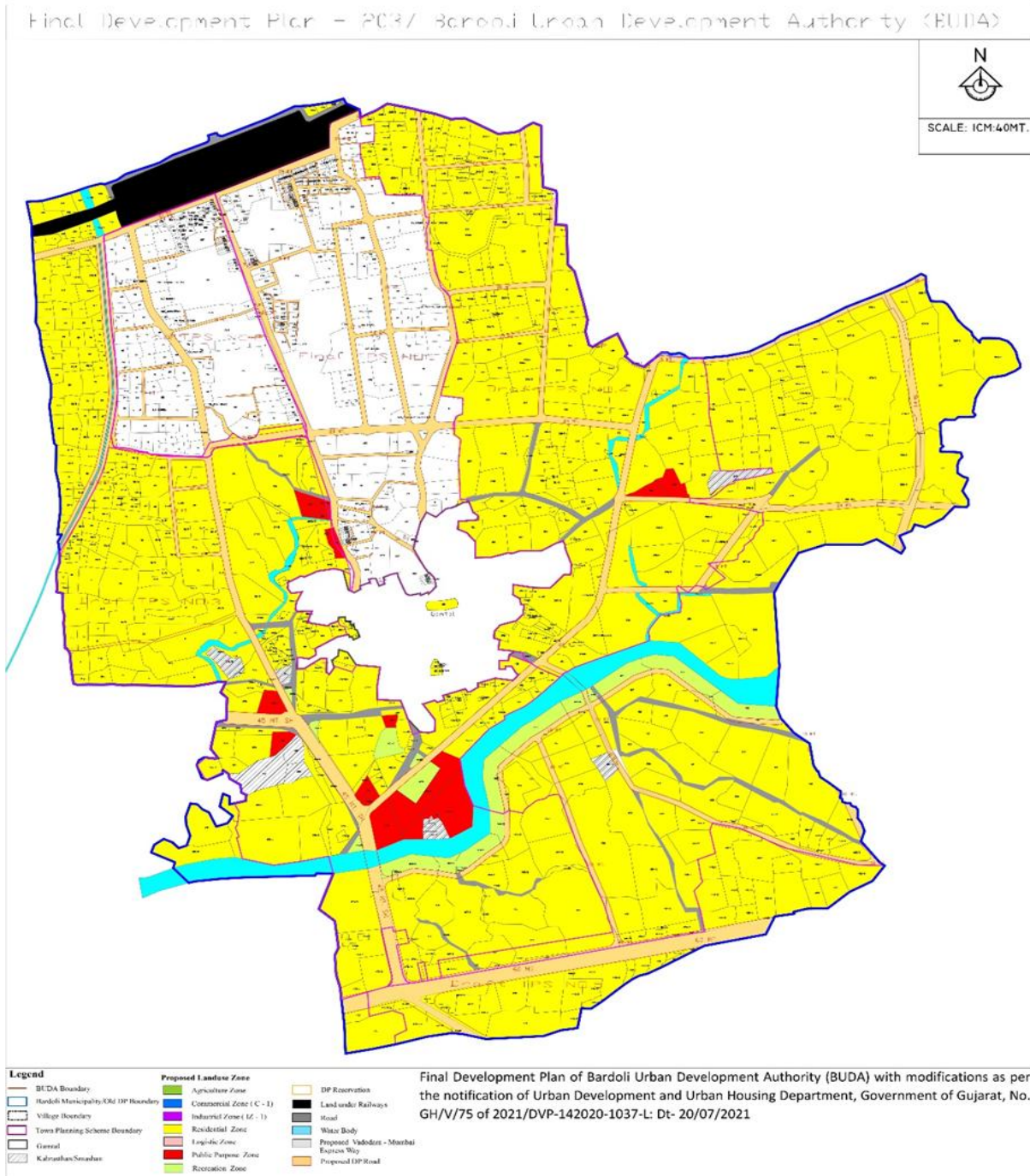
3. Police Accessibility & Response:

- Limited awareness of helplines
- Lack of a timely response in some regions
- The need for gender sensitive police

4. Observation:

- Distance to nearest Police station
- Condition of street lights
- CCTV cameras
- emergency response
- Police Patrolling





VI. PLANNING PROPOSAL.

6.1. Introduction:

The women residing in cities like Bardoli are very much worried about safety. As the population increases, the cities start expanding and land use grows patterns keep on changing, new safety issues crop up.

The objective of this proposal is to create a women-oriented Pink Police Station using urban planning techniques that help make women feel safe, confident and accessible.

Solution: combines (urban and regional, spatial, land use or city) planning, (new) buildings/infrastructure

and (government/budget/financial/tax or investment) policy support for our city safety.

6.2. Aim:

- To make Bardoli safer for women by planning and building a Pink Police Station that follows the principles of safe cities and good city design.

6.3. Objectives:

- To set up a Pink Police Station in a good spot that is easy to get to
- To include safe city planning ideas in the design of cities
- To make systems for surveillance, lighting, and moving around better
- To build infrastructure that takes gender into account
- To make people more aware and involved in their communities

6.4 Functional Zoning of Pink Police Station:

A. Public Zone

- Reception and help desk
- Waiting area (women-friendly)
- Desk for registering complaints, grievances, etc.

B. Semi-Private Zone

- Counselling sessions [blank] rooms.
- Interview rooms
- Area of legal aid

C. Private Zone

- to study rooms.
- Staff offices
- Record rooms.

D. Support Facilities

- Public washrooms (women's; separate)
- Child care room
- Parking space
- Security & surveillance room

6.5 Site Selection Criteria:

- Closer to exiting police station infrastructure for coordinating
- Good road connectivity
- Availability of public transport

- CCTV coverage at all entry/exit points
- Emerge Vehicles assess

6.6 Infrastructure & Facilities

➤ Infrastructure Physical:

Well-lit building, Signage & wayfinding, Boundary wall.

➤ Infrastructure Technological:

CCTV surveillance system, Helpline emergency system, GPS-enabled police patrol vehicles, Complaints digital portal.

➤ Facilities Supporting:

Women Help Desk, Psychotherapy counselling services, Legal advice.

6.8 Integration within the Urban Planning System:

- Pink Police Station must be linked to the urban planning system in Bardoli.
- Integrated with TP schemes (Town Planning Scheme roads)
- Integrated with main transport networks
- Situated in densely populated neighbourhoods
- Coordination with: Municipality bodies, Health care agencies, non-government organizations.

6.9 Expected Outcomes:

- Enhanced safety and security of women.
- Reduced response time to complaints
- More crimes recorded
- Increased confidence in the police system
- Safer urban environment

VII. WAYS TO MAKE THINGS SAFER

To ensure improvement in women's safety in the town, physical planning, technological support, strengthening the institutions and participation of community have to work together. In Bardoli, safety depends on designing public spaces that are active and high usage; visible and open to users, at all times. The implementation of measuring, such as lighting the streets, plazas, streets and transit stops all day/toll heighten the impression of security. Continuous, unimpeded pedestrian movement could be facilitated by means of designing unobstructed walkways that wouldn't hamper movement. The promoting mixed

use of land where institutional, commercial and residential activities check one another, for ensuring the active use of the spaces at all time.

Similarly, technology-based solutions can further enhance safety systems by providing more monitoring and fast response. The use of CCTV cameras in prominent and overcrowded places such as road intersections, market places, bus stops and near educational institutes will help monitor and take quickly aggressive action. Emergency call boxes and mobile based safety apps will also be of direct help when women are under attack. Pink Police Station as suggested should be wire up with these technologies with a central control room so as to enable effective surveillance and fast response. GPS enabled patrolling cars and efficiently integrated communication network also will help speed up the response time.

Institutional aspects seem to be equally important in the long-run perspective. While more women police officers can make a Pink Police Station more inviting and welcoming, regular patrolling can continue to make women feel more secure and confident, especially in vulnerable, and poorly visible areas. Awareness programs, self defense techniques workshops for women, safety campaigns to minimize the risks involved, audience with police, knowledge about rights and laws can make women independent and make police action effective. This should be forged by working with local NGOs, schools, community groups and institutions.

Other physical measures of urban design including proper signage, open frontages, open sightseeing, cleaning up of abandoned and poorly managed lands make an area safer. Proper provision of light, seating arrangements and visibility in bus stops and stations makes them comfortable as well as safe. Effective and prompt redressal system against any grievance, strict regulations and periodic monitoring and safety checks help sustain citizen 's faith in the system.

VIII. BENEFITS FOR SOCIETY AND THE ECONOMY.

➤ Benefits for Society

- Women are safer Women feel safer in public when they know there is a police station just for them.

➤ More Crime Reporting

- A lot of women don't want to report crimes because they are scared or feel pressure from others. A police station that is friendly to women makes them more likely to come forward.

➤ More freedom and confidence

- Women can travel, work, and do social things more freely when safety gets better.

➤ Less violence against women

- Strict action and programs that raise awareness can help lower crimes like abuse, harassment, and domestic violence.

➤ More trust in the community

- People trust the police system, which helps keep the peace and order.

➤ Benefits to the economy

- More women working in the workforce
- Women are more likely to get jobs when they feel safe, which helps the local economy.

➤ More business in the area

- Shops, markets, and small businesses grow when they have safe places to do business. This is especially true for women.

➤ Boost for Urban Development

- Safer places are more appealing to investors, which helps Bardoli grow as a whole.

➤ Less money lost because of crime

- Fewer crimes mean fewer medical, legal, and social costs, which saves money for both people and the government.

IX. CONCLUSION

- The research revealed the deficiencies of the existing safety infrastructure and community spaces of Bardoli.
- The Pink Police Station proposed for us is a special, friendly, accessible and women friendly police system.
- It combines factors of urban design such as lighting, risk perception, connectivity.

- Community involvement and awareness are important for sustainable impact.
- In conclusion, the proposals will bring about a safer and more supportive area.

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