

Women and Transport in Indian Cities



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ITDP
Institute for Transportation
& Development Policy

SAFETIPIN 

Urban Workforce

Women's employment

- 865 million women – third billion globally (Strategy & PwC, 2012)
- 19 million left the labour force (2004-05 to 2011-12) (Andres, Dasgupta, Joseph, Abraham, & Correia, 2017)
- 15% female urban workforce participation

“The performance of urban transport services places different burdens on women and men, with the costs of poor public transport often being borne by women” (ADB 2013)

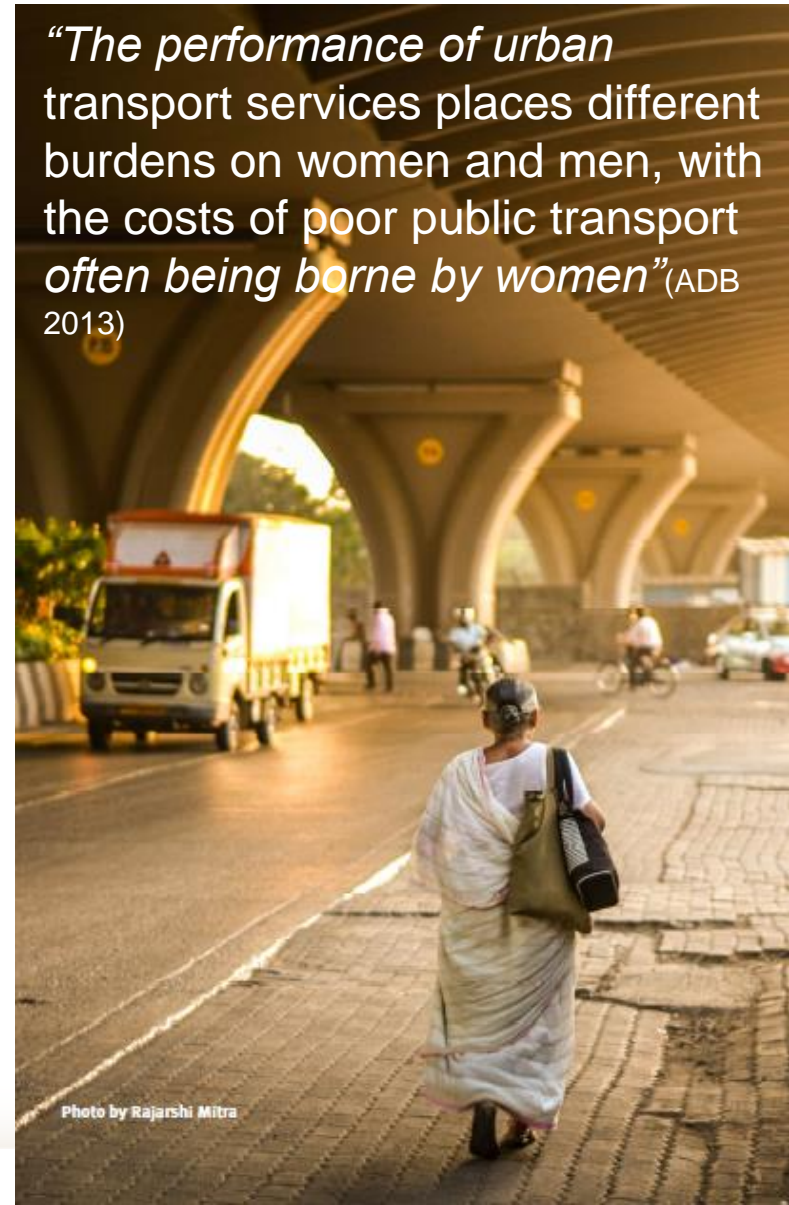
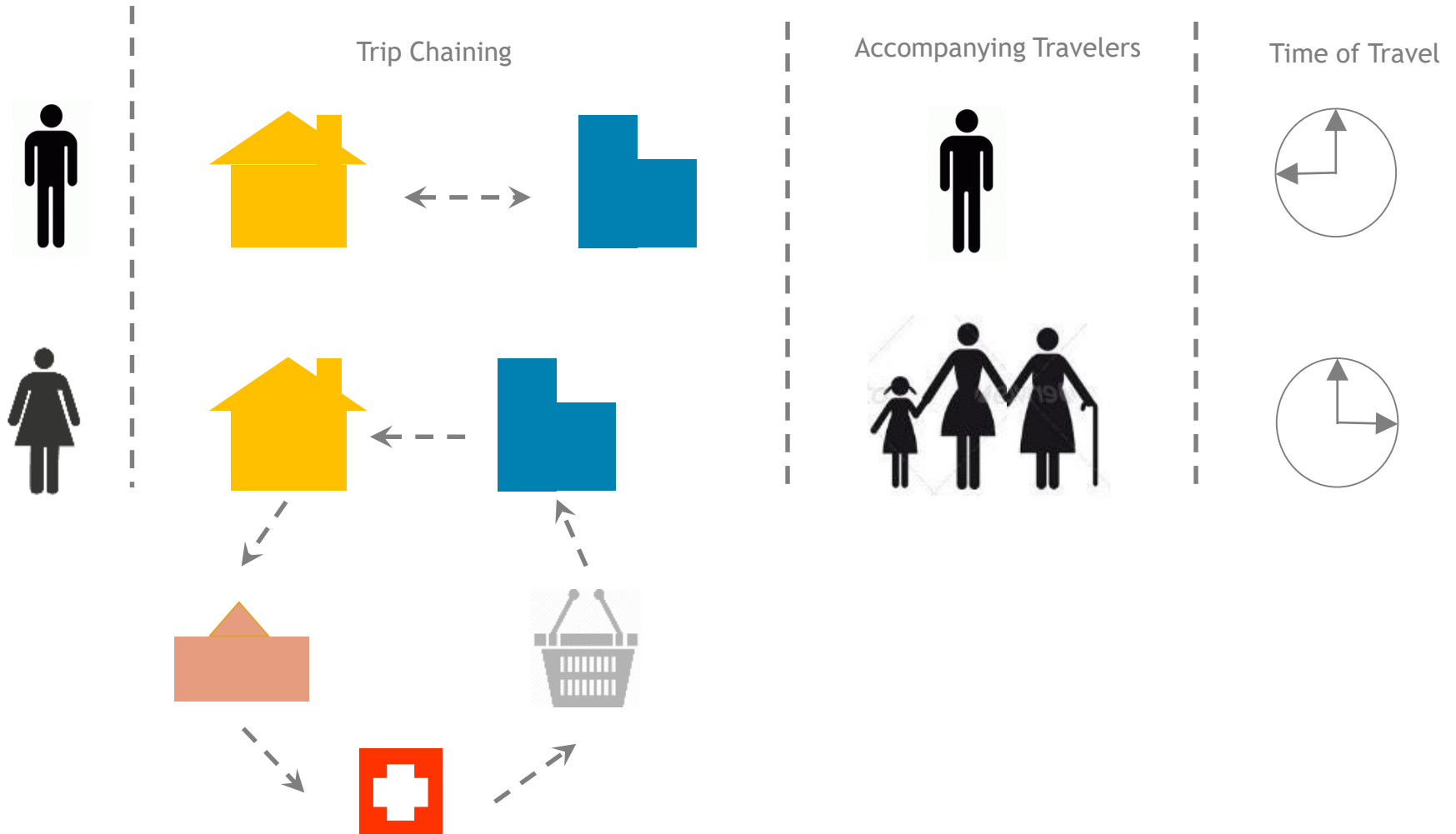


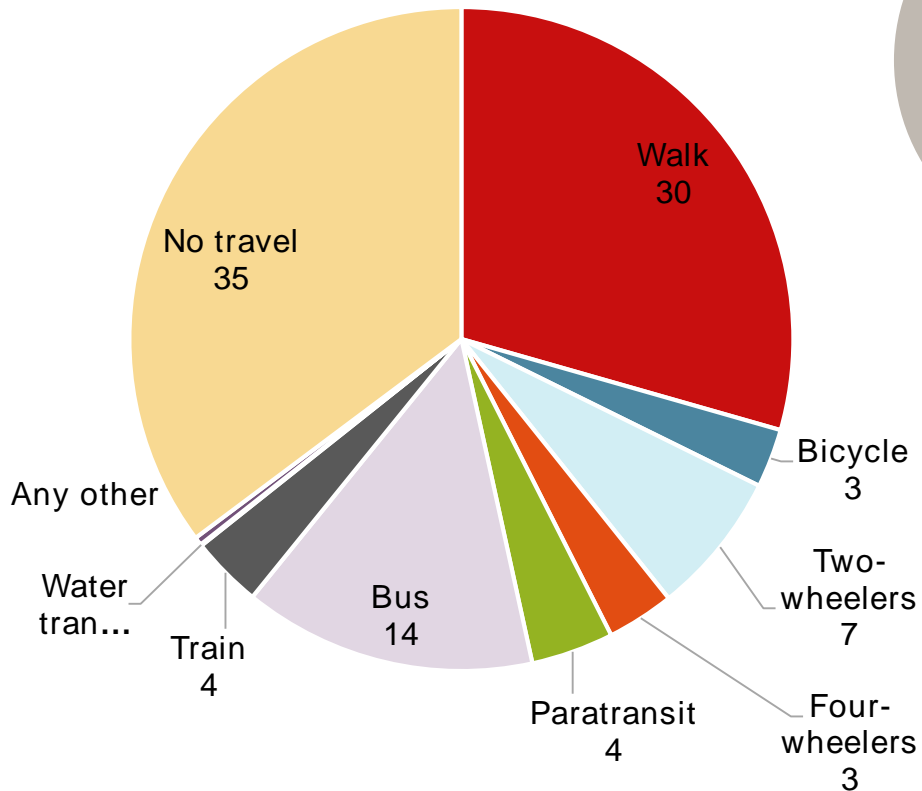
Photo by Rajarshi Mitra

Gendered Travel

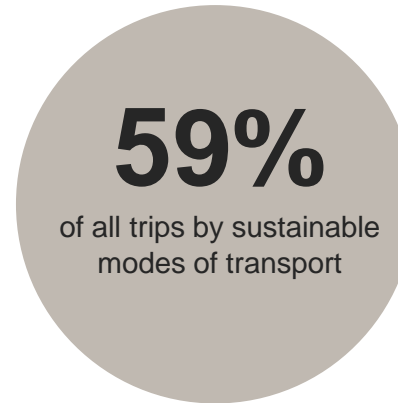


Gendered Travel

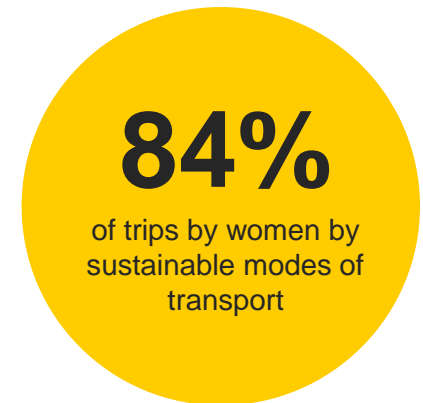
Mode share amongst women



Men



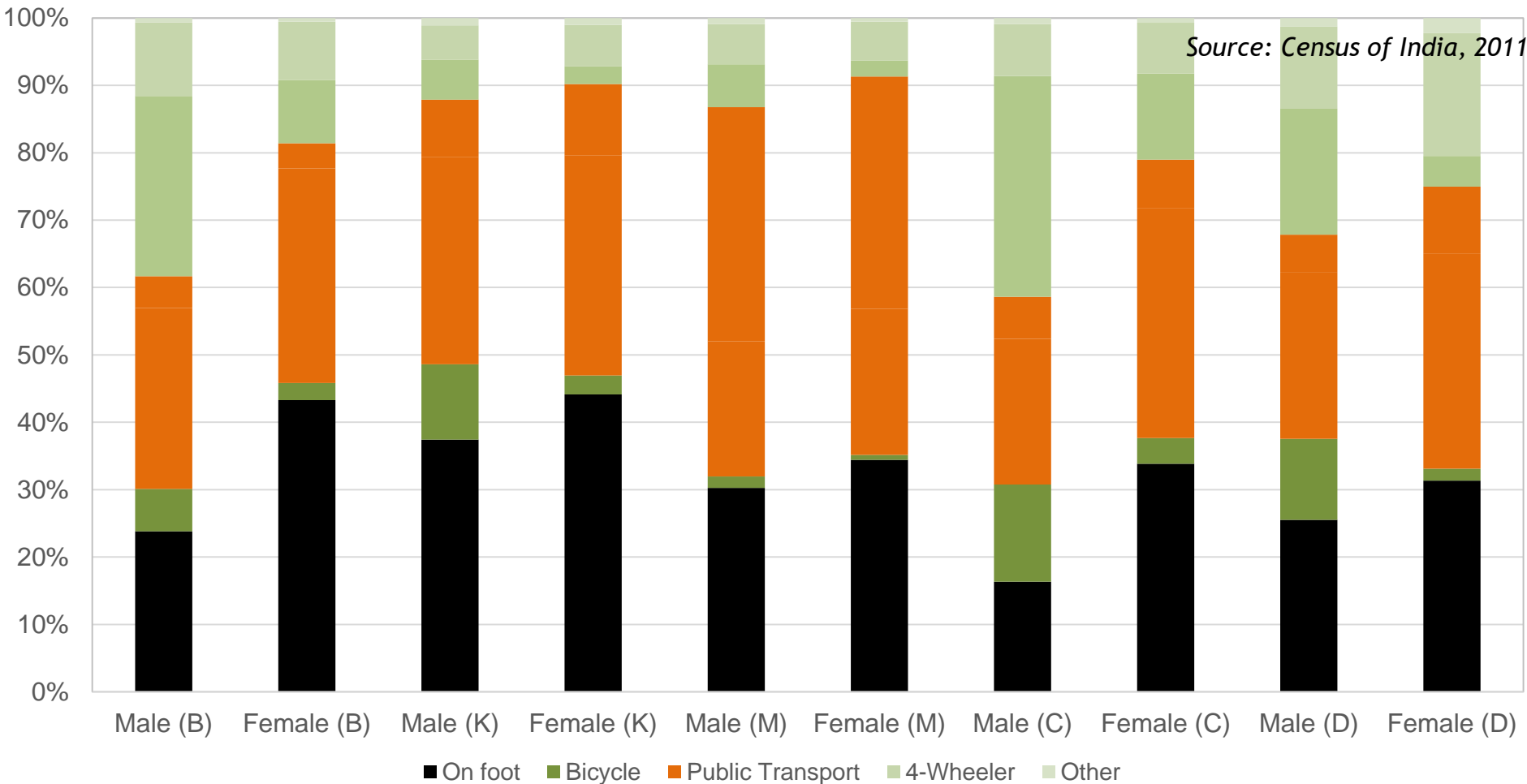
Women



Gendered Travel

Mode of Transport

Source: Census of India, 2011

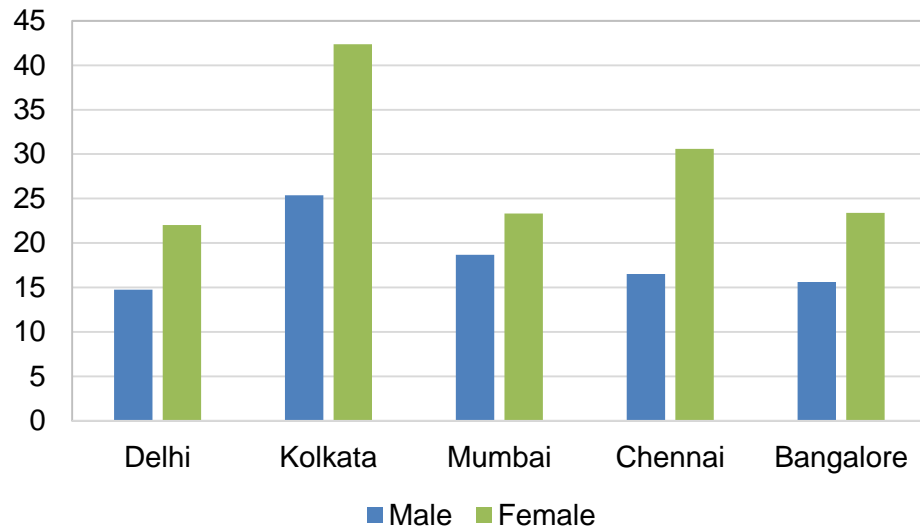


B-Bengaluru K-Kolkata M-Mumbai C- Chennai D-Delhi

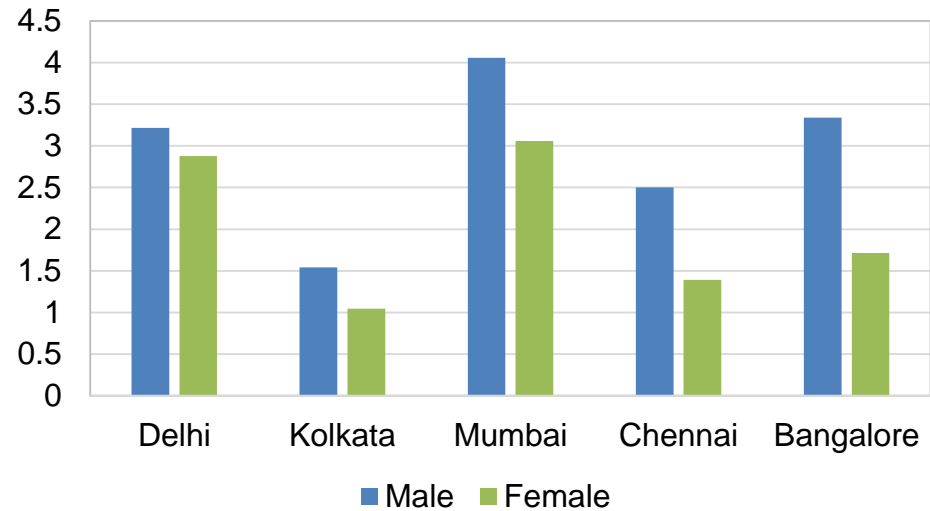
Gendered Travel

Shelter-transport-livelihoods link

Persons Working From Place of Residence

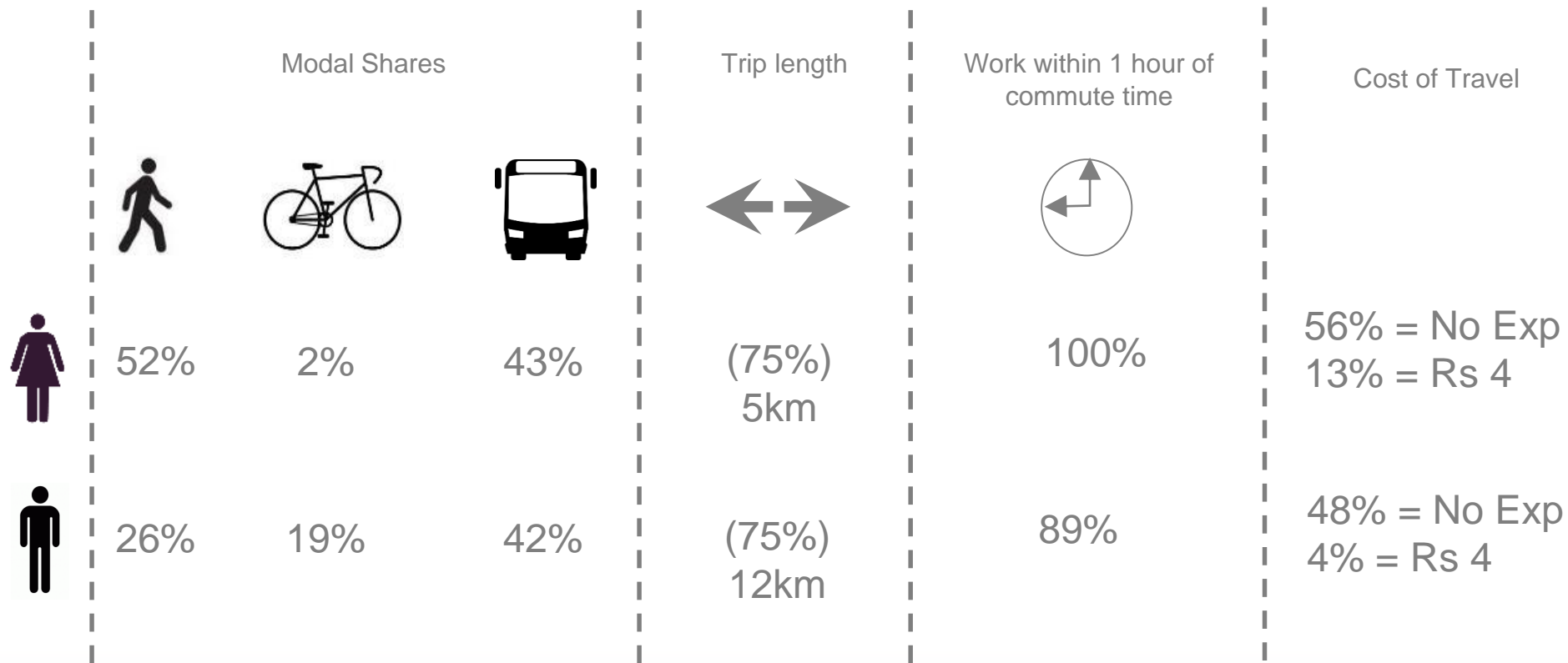


Travel Distance By Gender



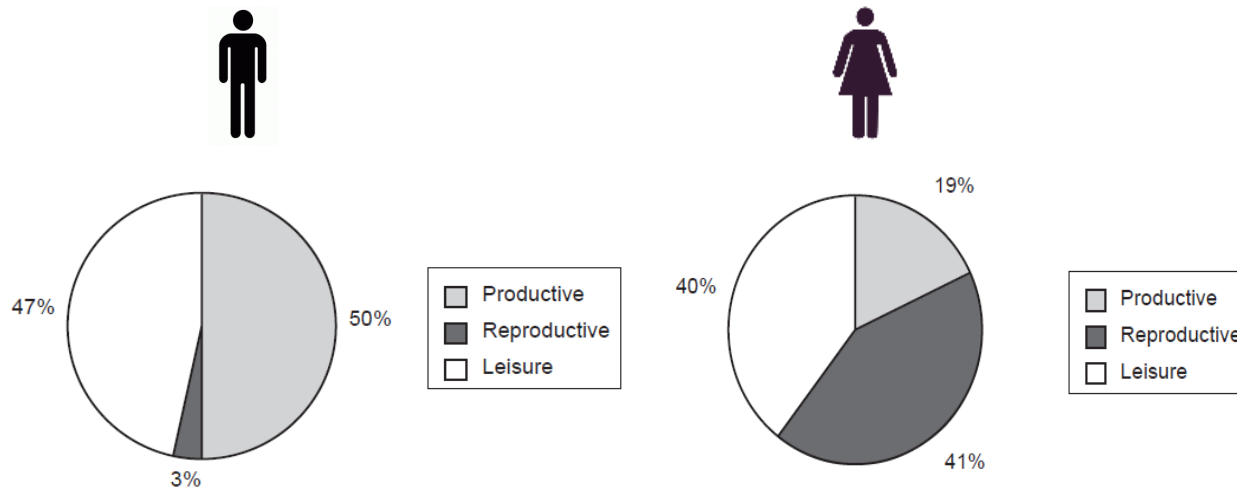
Gendered Travel

Sanjay Camp, Delhi



Gendered Travel

Mobility of Care (and leisure)



Source: Anand and Tiwari, 2005

“A careful appraising and labeling of care-related travel would provide a much clearer and more precise understanding of the gender differences in transport”

Source: Madariaga, 2013

Gendered Travel

Forced Mobility: When functions that are taken for granted in some places are absent in others

Forced Immobility: Constrained or unpermitted travel; latent demand for journeys not made

“Good girls from respectable families do not step out in the night”

Gendered Travel

Sexual Harassment



Source: Jagori, Akshara, Sakhi and others

Women in the transport sector

Employment



Transport Sector

6.85 % | 19 %

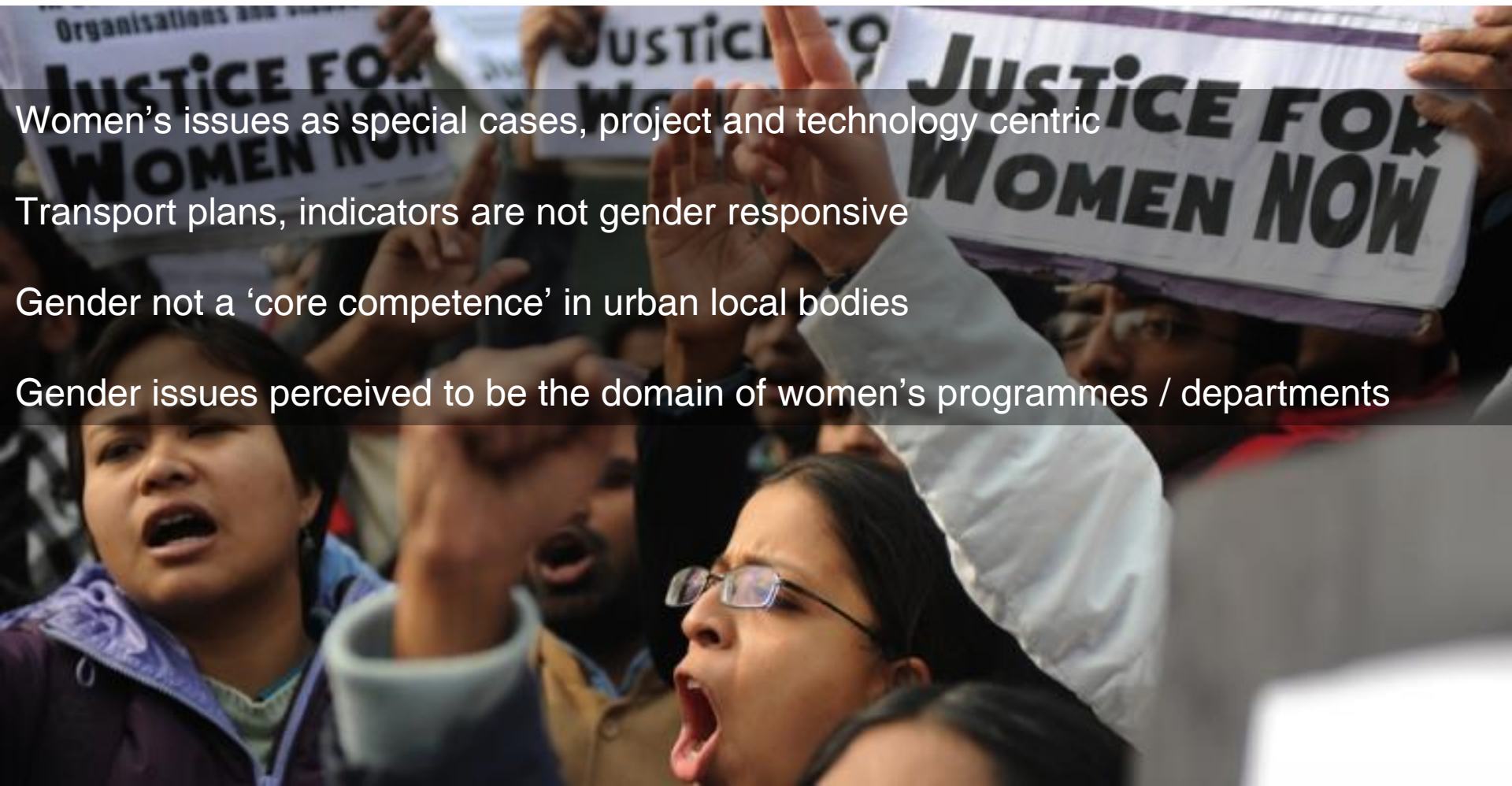


“No place for women”

(Turnbull, Lear, & Thomas, 2009)

Source: ILO

Policy Responses



- Women's issues as special cases, project and technology centric
- Transport plans, indicators are not gender responsive
- Gender not a 'core competence' in urban local bodies
- Gender issues perceived to be the domain of women's programmes / departments

Policy Recommendations



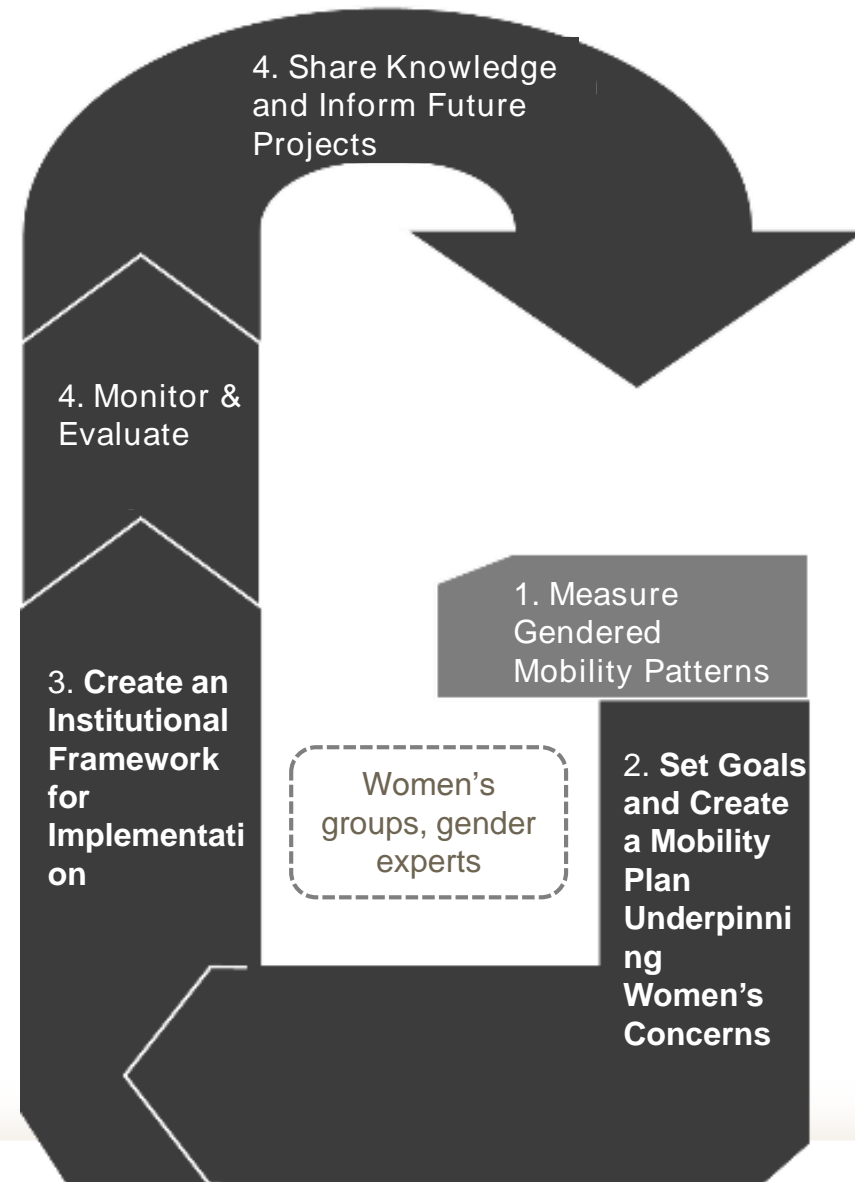
Recommendation 1-4

Prepare and Implement Gendered Mobility Plans

Source: Adapted from ICRW

Table 1: Outcome indicators for comprehensive mobility plans

Indicator	Measure	Recommended Benchmarks
1 People near transport (PNT), disaggregated by gender	Percentage of women and girls living within 500m walking distance of public transport in the city and metropolitan region, with a frequency of at least 6 schedules per hour	At least 80 percent of women and girls
2 Mode shares, disaggregated by gender	Percentage of walking, cycling, public transport (buses and metro-rail separately), intermediate public transport, motorized two-wheeler and four wheeler trips by women and girls	At least 80 per cent of all trips are by public and non-motorized transport At least 40 percent of all public and non-motorized transport trips are by women and girls
3 Median non-motorized trip time, disaggregated by gender	Women and girls' median walking and cycling trip time	Women and girls' walking trips are less than 15 minutes Women and girls' cycling trips are less than 25 minutes
4 Median motorized trip distances, disaggregated by gender	Women and girls' median motorized trip distances	Stabilized at 2017 levels or lesser
5 Cost on transport per month	Monthly household expenditure on transport	Not more than 10 per cent for low-income households
6 State and city transport allocations and expenditures on transport	State and city transport budget that benefits women and girls	Specific allocations and expenditures in the state and city transport budget for women's safety in urban transport
7 Improved air quality	Reduction in air pollutants (to achieve CPCB ambient air quality norms) due to women and girls' use of sustainable transport	City achieves or exceeds air quality standards set by the CPCB. 50 percent of the reduction in air pollutants from transport because of women and girls' use of sustainable modes of transport



Mode Specific Recommendations

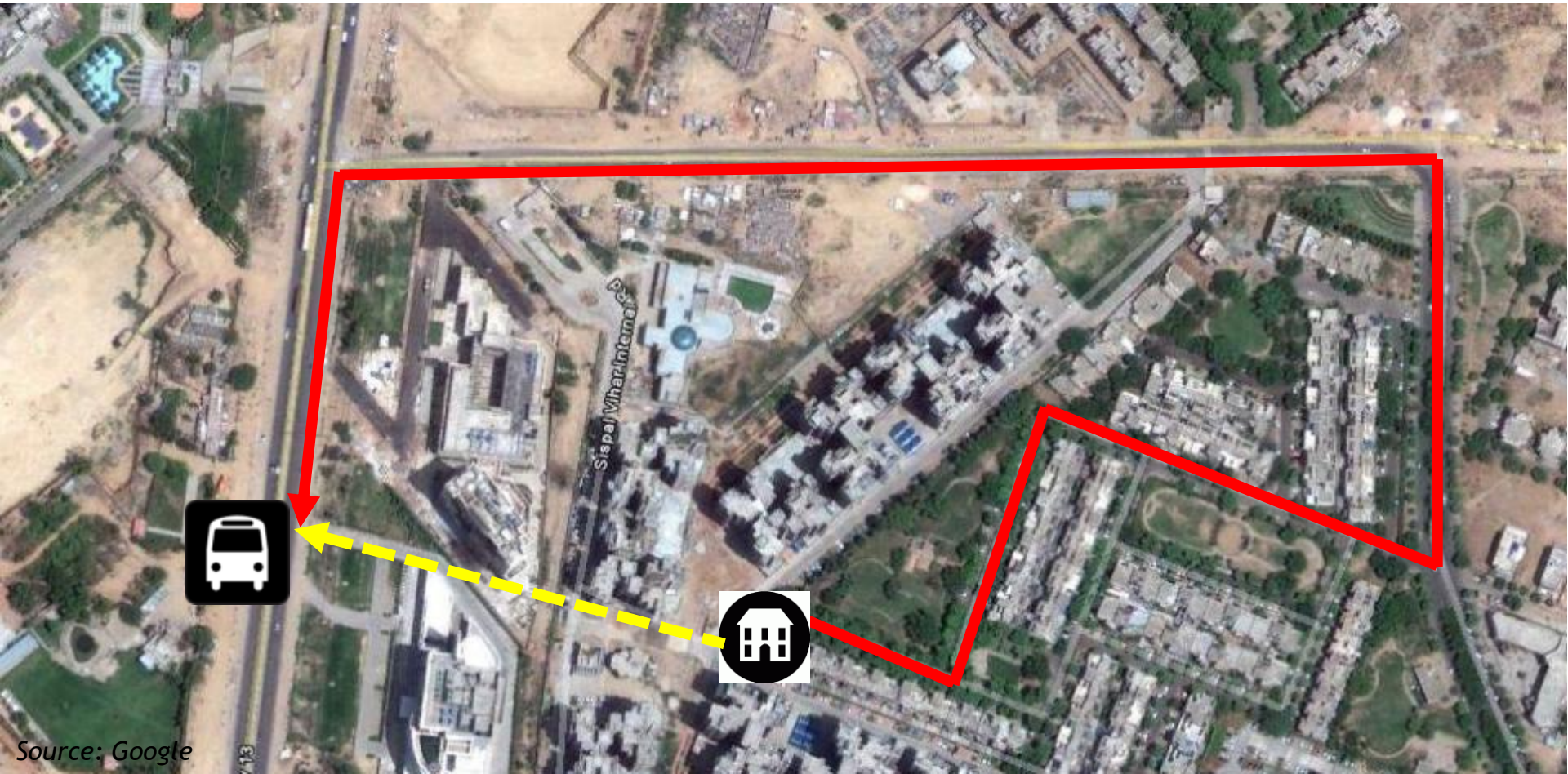




Walking

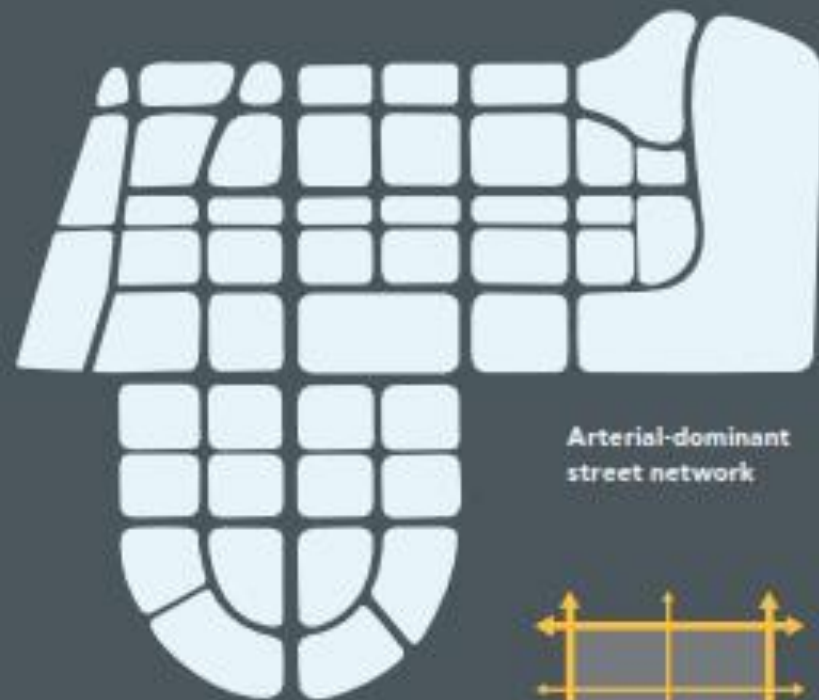
Recommendation 5

Create Safe and Comfortable Walking Environments for Women and Girls

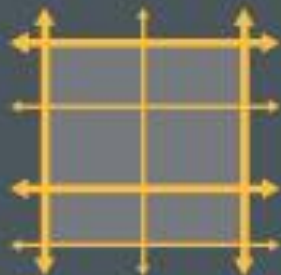


Recommendation 5

Create Safe and Comfortable Walking Environments for Women and Girls



Arterial-dominant street network



Network of arterials and superblocks



Preferred street network



Network of varying street widths and block sizes

Recommendation 5

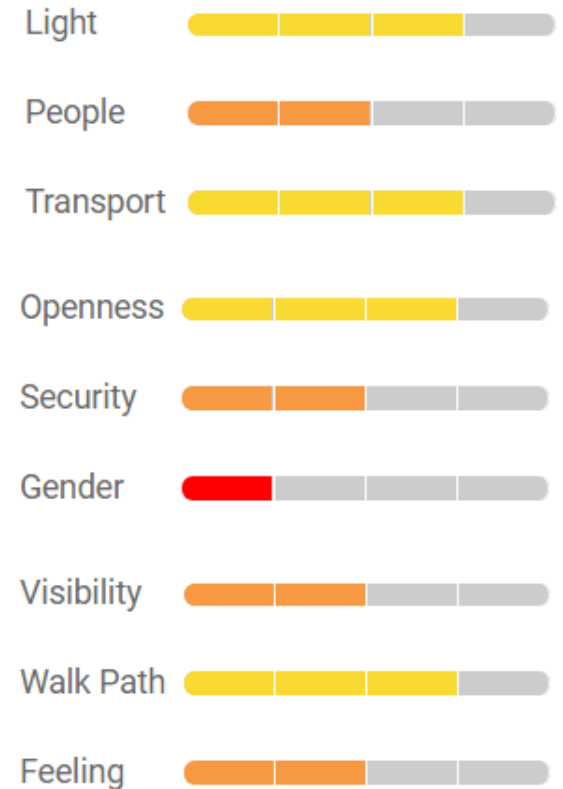
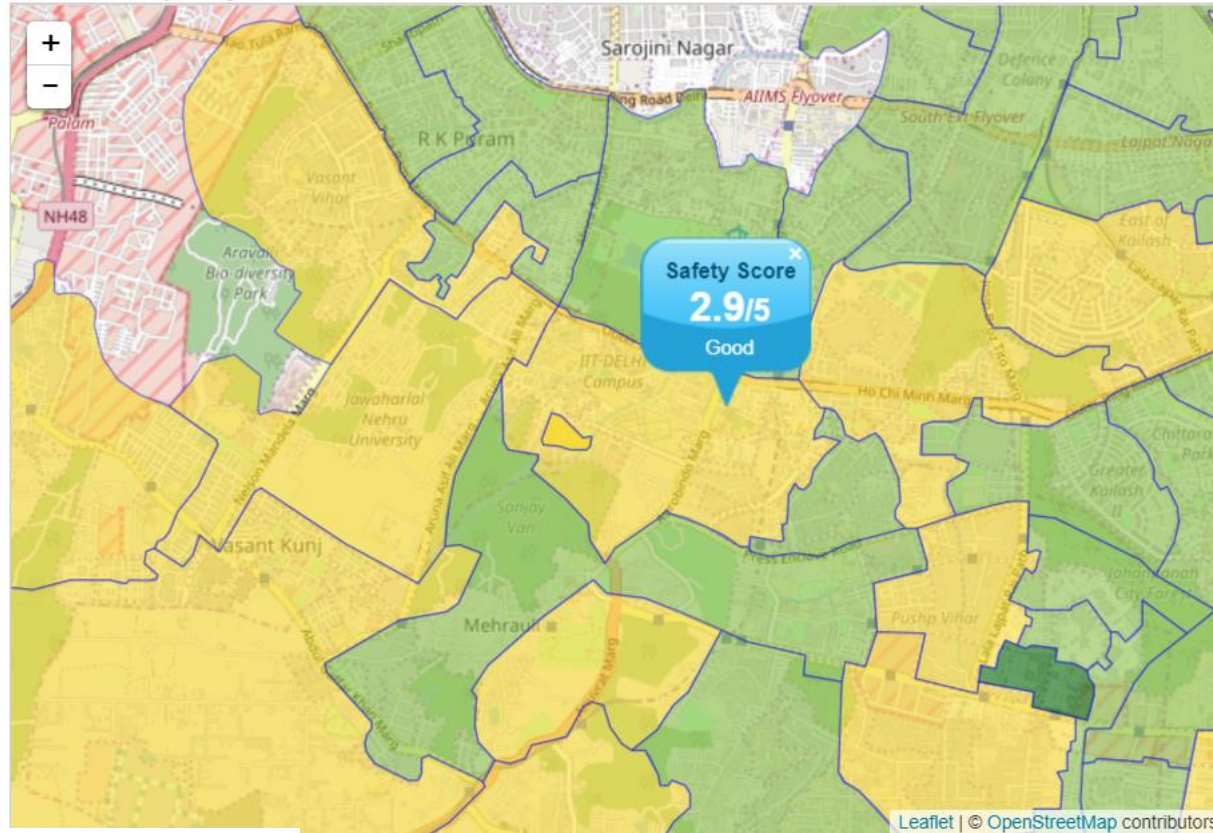
Create Safe and Comfortable Walking Environments for Women and Girls

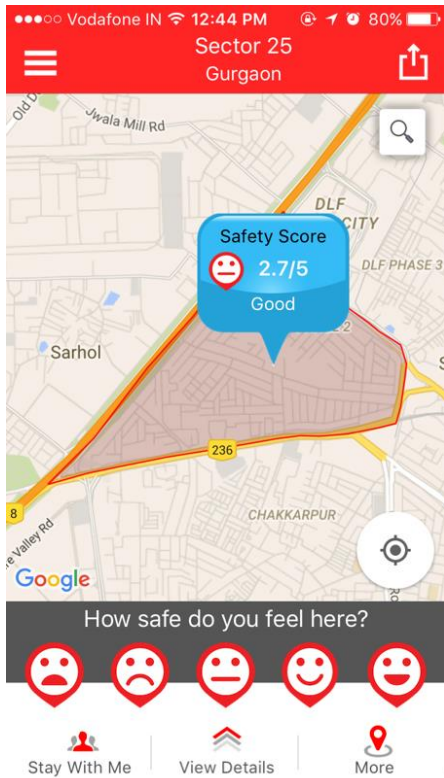


Recommendation 5

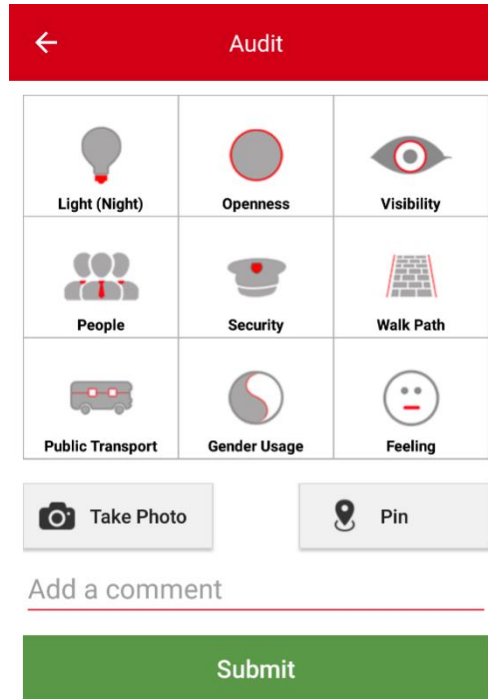
Create Safe and Comfortable Walking Environments for Women and Girls

Address: Malviya Nagar, Delhi, New Delhi

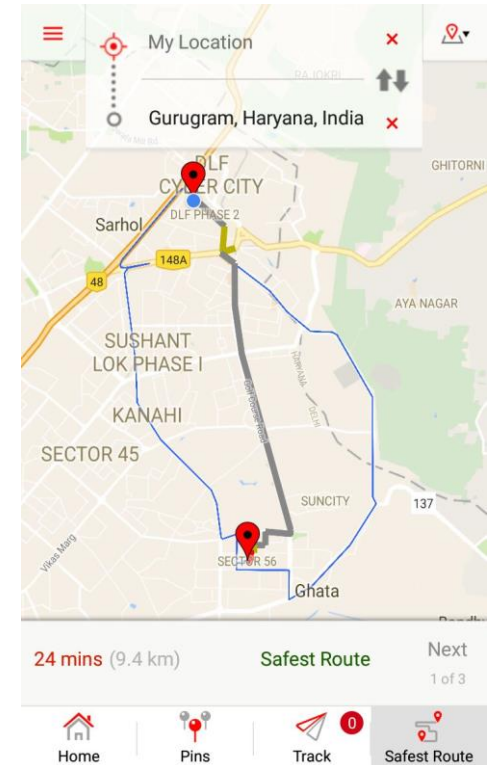




- Safety Score
- Stay With Me



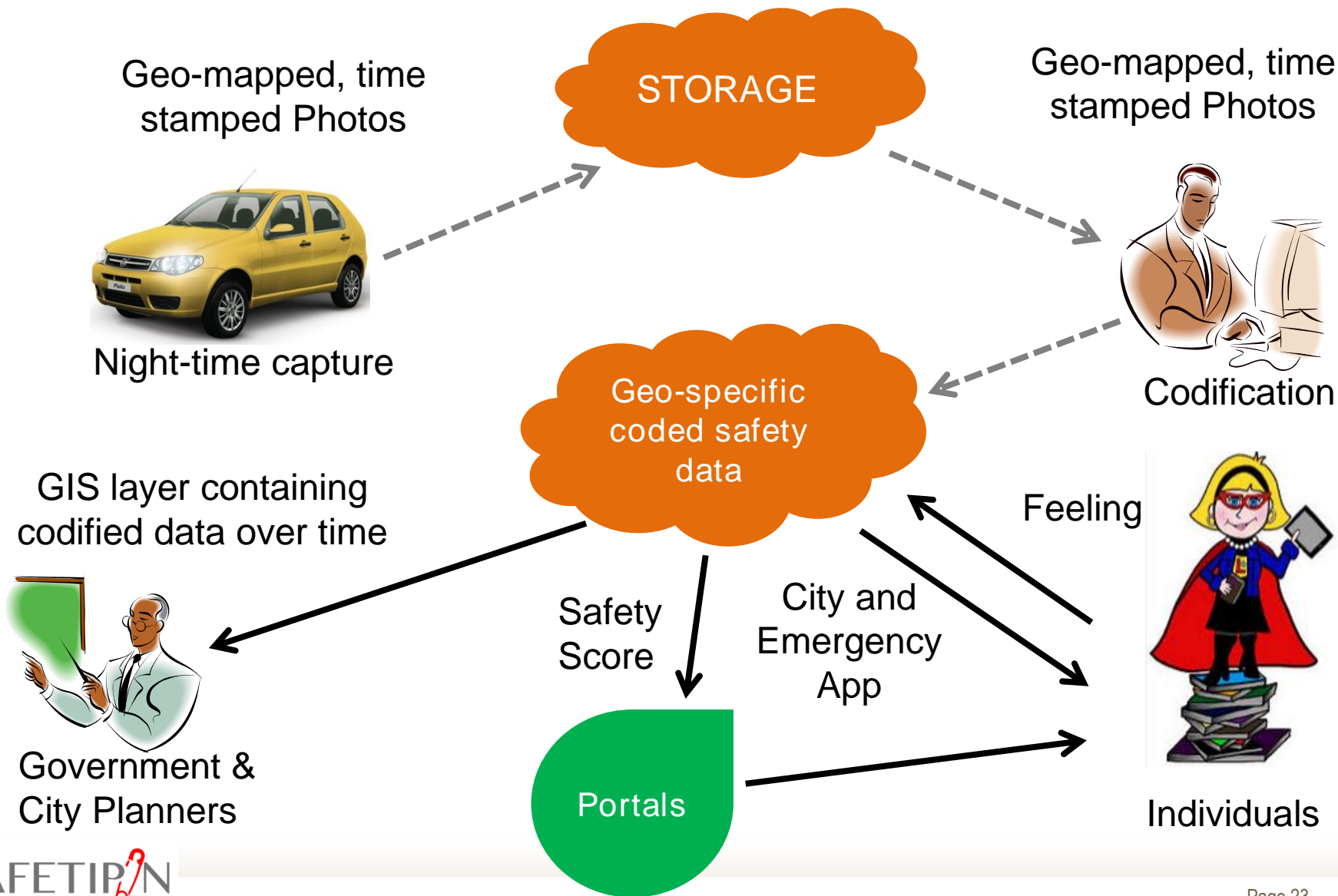
- Safety Audit
- Notifications

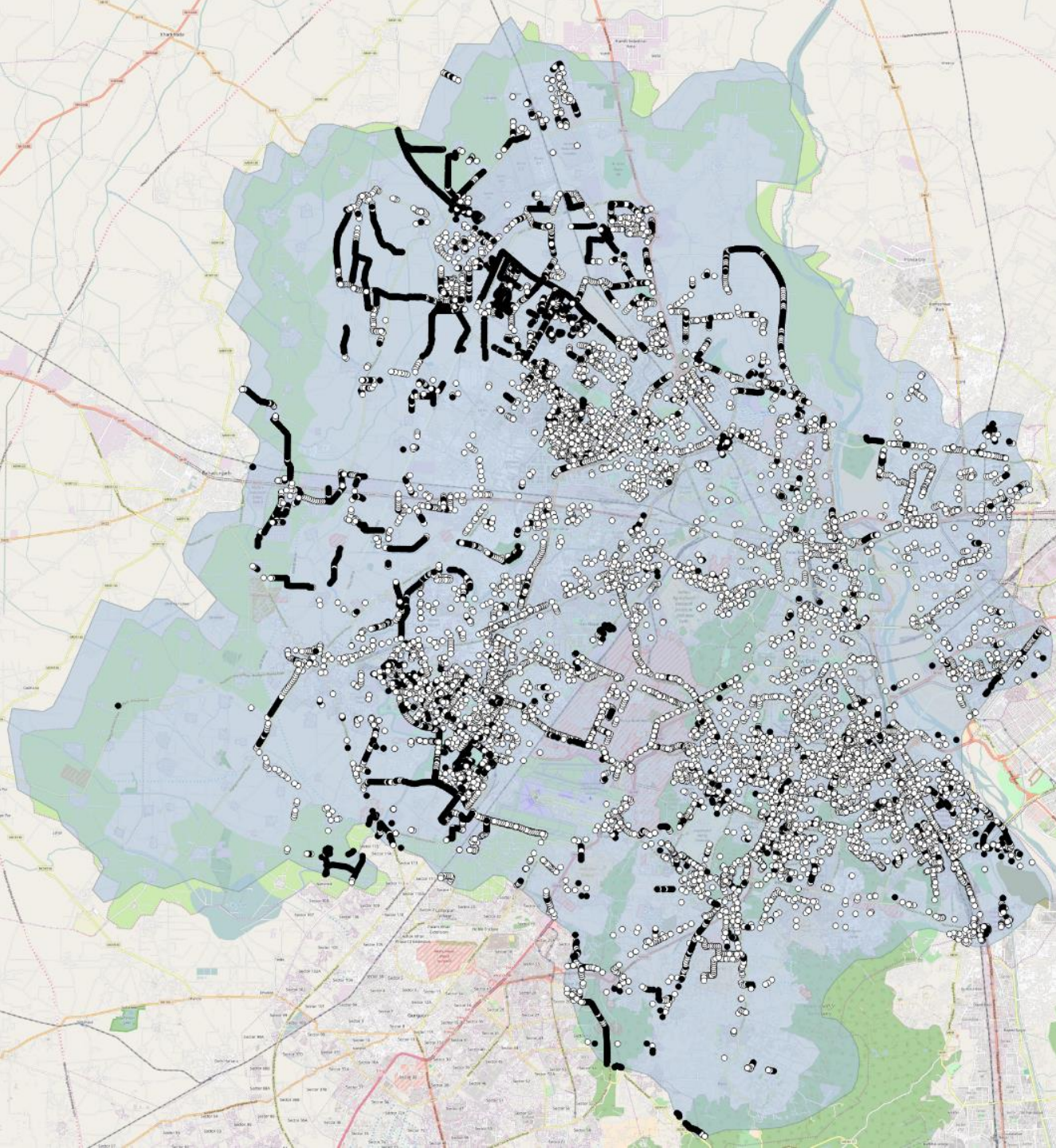


- Safest Route
- Pick a Pic!



Phone with Safetipin Nite app attached to moving vehicles for capturing pictures. Pictures are taken every 50 metres and uploaded to their system. These pictures are then assessed according to the safety audit parameters.





51,494 Audit Pins

5,429 User Audits

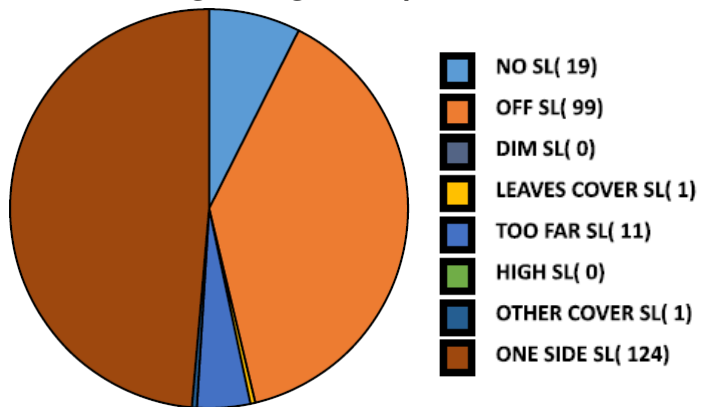


4,846 kms or road covered by safety audits done through My Safetipin and Safetipin Nite

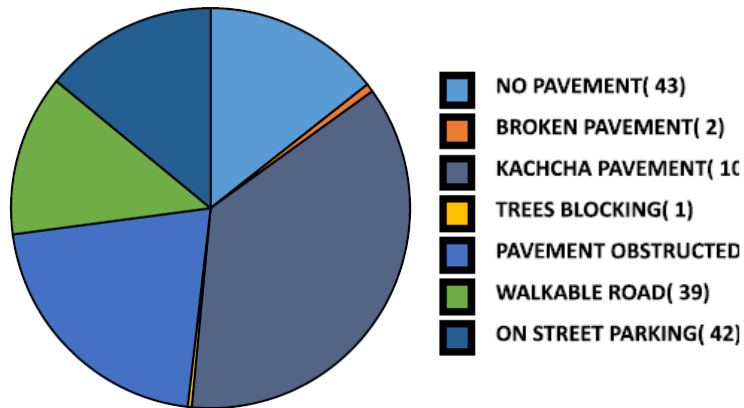
Minister of Public Works Department will work on fixing 7823 dark spots identified. They have fixed lighting along 45 stretches and work is ongoing on 92 more stretches

Eastleigh, Nairobi

Street lighting sub-parameters



Walkpath sub-parameters



- Ensure all streetlights are operational.
- Install streetlights where they do not exist.
- Construct proper pavements where it doesn't exist.

Cycling



Recommendation 6

Increase Women's Cycling Shares

Urban Design

Behavioural Measures

Cycling Economy



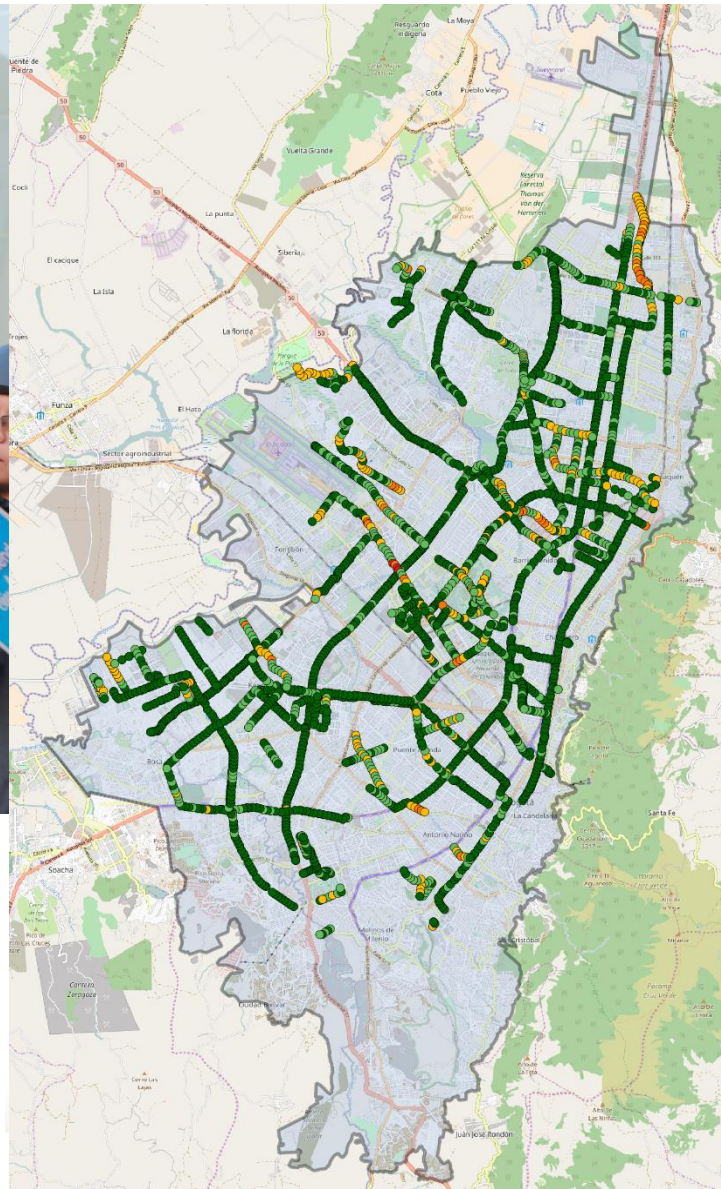
**Shaded, well lit and
continuous cycle track**

Buffer zone

Concrete 2m wide cycle track

Delhi





Data used to determine where to put lights, CCTV cameras, bike stands to encourage women and girls to bike

Santiago, Chile

Case: Santiago, Chile

In a survey conducted by the Ministry of Transport and Telecommunications in Santiago, it was observed that women constituted 10 per cent of cyclists in Santiago. A cycling master plan was created and the number of cycle tracks quadrupled from 2007-12. The cycling mode shares increased from 3 per cent in 2006 to 6 percent a decade later.

However, since women did not know how to ride or were afraid to use bicycles in the city, a local women's group, Macleta (Women on Bikes), initiated classes to encourage women to learn to ride bicycles. They had a 'Learn to pedal' course, which was for beginners, while 'Get off the sidewalk' was for women who knew how to ride a bicycle, but were too frightened to use it around the city. Women and girls now constitute 30 per cent of all cyclists in the city.

In addition, around 30,000-40,000 people are seen cycling across the streets of Santiago every Sunday as part of the CiclRecreoVia initiative where 40 kilometres of the city's roads are closed to vehicular traffic and made available for walking, running, cycling and other social activities (Cycling in Santiago 2014).



Figure 5: Women cyclists in Santiago increased from 10% to 30% of total cyclists in a decade

ECOBICI Mexico City

Case: ECOBICI - Bike Share System, Mexico City

ECOBICI, Mexico city's public bicycle sharing system, is the largest one in Latin America. According to the Ministry of Environment, Department of Cycling Culture and Infrastructure, ECOBICI's management authority, women were only 20 per cent of its users in 2010 (when the program was initiated), which increased to 40 per cent by 2017. Moreover, the number of women users in ECOBICI is three times higher than the number of women cyclists in the city.

ECOBICI's features - more than 450 stations located at a distance of around 300m in Mexico City's central business district with a high level of public activity and connectivity to other modes of transport such as the Metrobus (bus rapid transit system) and the subway, low cost and accessibility to the payment system - make it a safe, flexible and convenient mode for short trips. (Ministry of Environment n.d.)



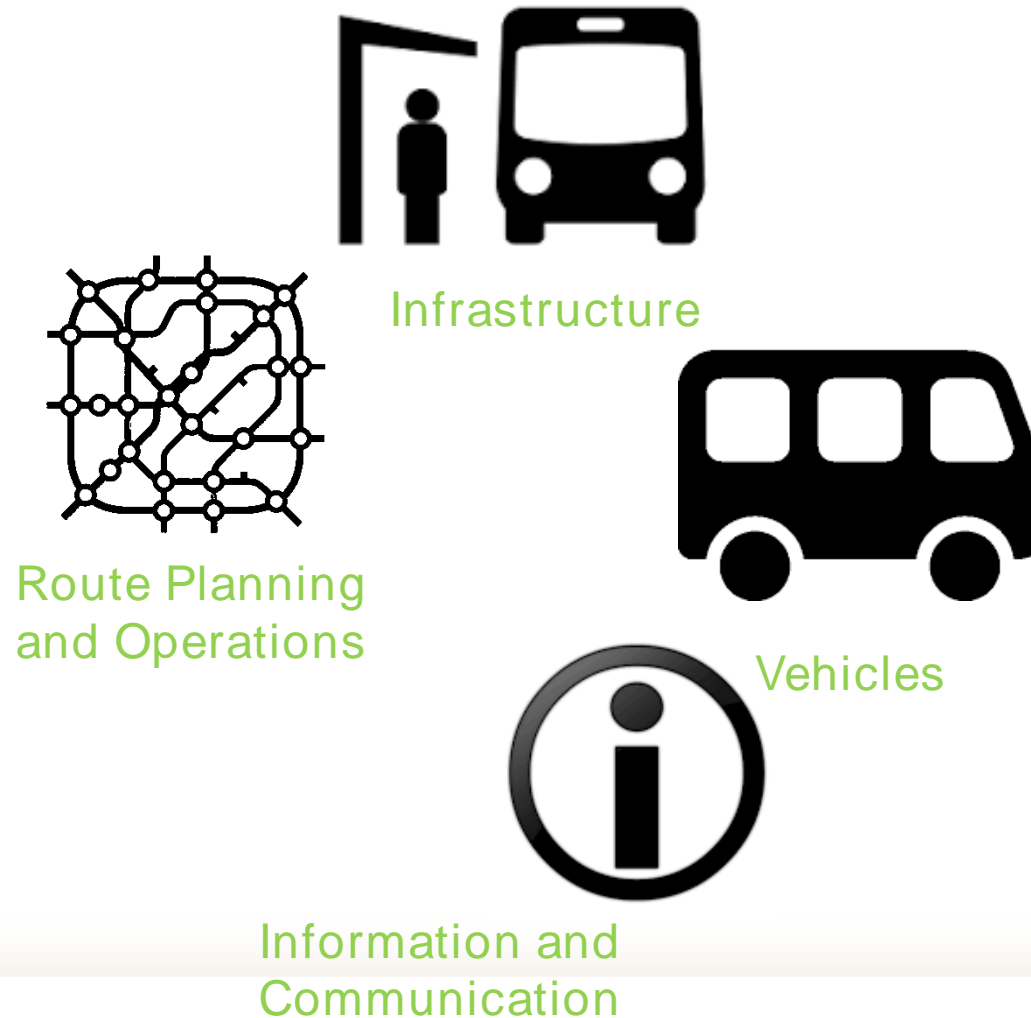
Figure 6: ECOBICI's women cyclists increased from 20% to 40% of total users over 2010 to 2017

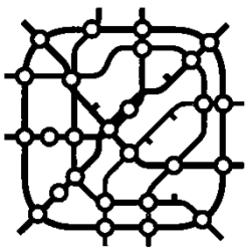
Public Transport & IPT



Recommendation 7

Increase Women's Safety and Use of Public Transport





Route Planning and Services

Operations: Reserved Seats

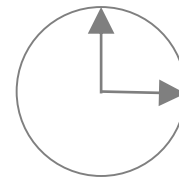
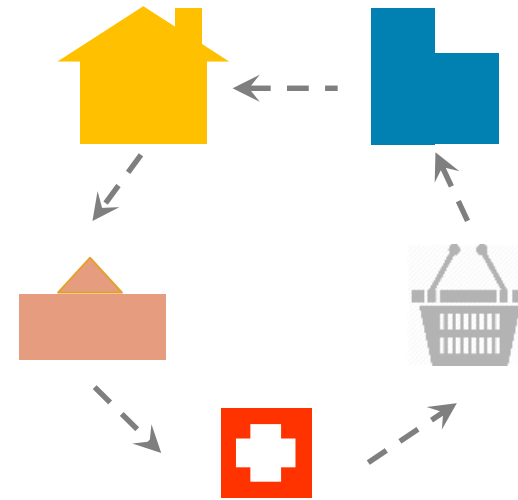
Women-only Doors,

Hail / Request a Stop

Frequent services (peak and off-peak hours)

Affordability

Fare integration





Infrastructure



Access to and from
the Public
Transport Stop



Waiting at the
bus shelter,
interchange,
terminal



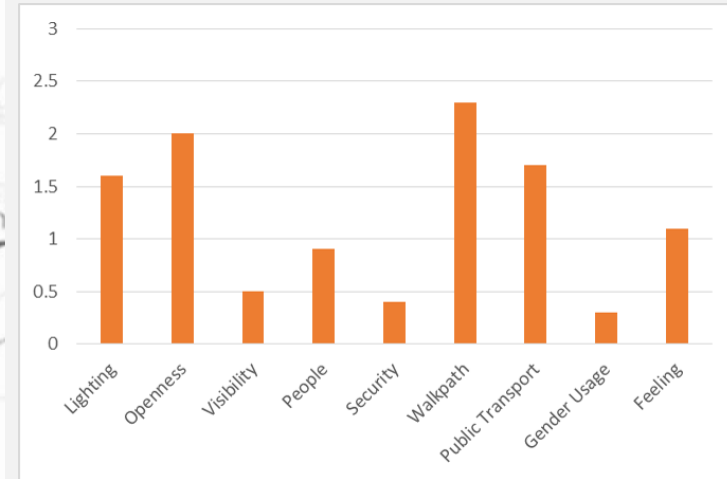
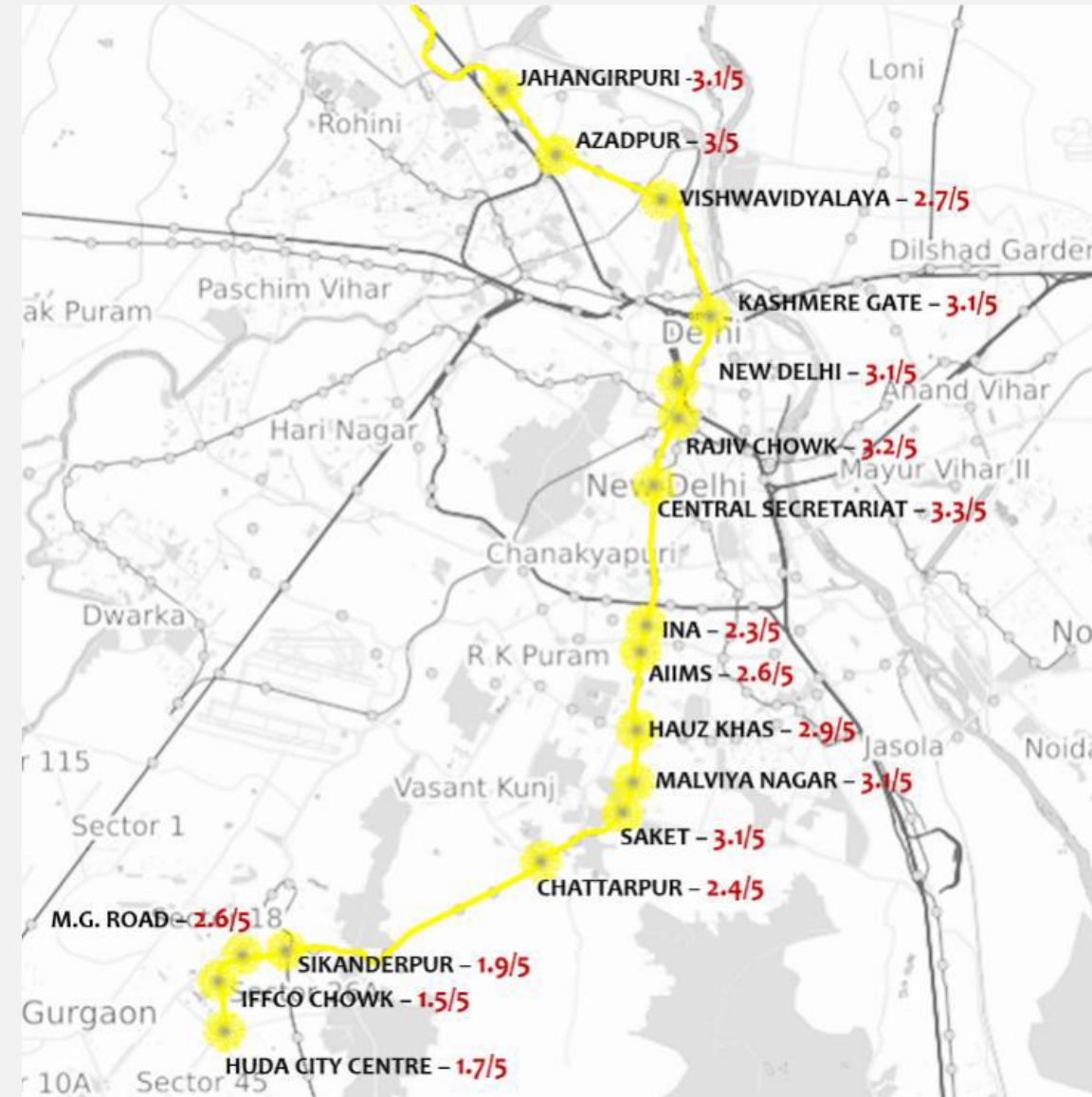
Boarding and
alighting the
vehicle



Experience in
the vehicle



Infrastructure





Infrastructure

Well-lit bus shelters with emergency numbers, level boarding and alighting, real time information, maps, route numbers with origins and destinations





Vehicles

Low floor buses, women-only doors, gangways, lower height of the supports, GPS devices

Emergency numbers

Real-time information: visual and audio; route maps





Information and Communication

- Reporting of Sexual Harassment
- Communication Campaigns

**SNEAKING
A PICTURE.**

IT'S NEVER OKAY AT
THE POOL.
IT'S NEVER OKAY ON ETS.

FOR IMMEDIATE HELP, PRESS A **PASSENGER ALARM**
OR CALL **TRANSIT WATCH 780.442.4900**

ETS HAS **ZERO TOLERANCE** FOR **SEXUAL HARASSMENT.**
Learn more: takeETS.com/SafeRide

ETS EDMONTON POLICE SERVICE TRANSIT WATCH

Edmonton Transit System

GROPING.

IT'S A CRIME.

FOR IMMEDIATE HELP, CALL **9-1-1**
OR PRESS A **PASSENGER ALARM.**

ETS HAS **ZERO TOLERANCE** FOR **SEXUAL ASSAULT.**
Learn more: takeETS.com/SafeRide

ETS EDMONTON POLICE SERVICE TRANSIT WATCH

Edmonton Transit System

LEERING.

IT'S NEVER OKAY AT WORK.
IT'S NEVER OKAY ON ETS.

FOR IMMEDIATE HELP, PRESS A **PASSENGER ALARM**
OR CALL **TRANSIT WATCH 780.442.4900**

ETS HAS **ZERO TOLERANCE** FOR **SEXUAL HARASSMENT.**
Learn more: takeETS.com/SafeRide

ETS EDMONTON POLICE SERVICE TRANSIT WATCH

Edmonton Transit System

"HEY SEXY."

IT'S NEVER OKAY AT
THE MALL.
IT'S NEVER OKAY ON ETS.

FOR IMMEDIATE HELP, PRESS A **PASSENGER ALARM**
OR CALL **TRANSIT WATCH 780.442.4900**

ETS HAS **ZERO TOLERANCE** FOR **SEXUAL HARASSMENT.**
Learn more: takeETS.com/SafeRide

ETS EDMONTON POLICE SERVICE TRANSIT WATCH

Edmonton Transit System



Information and Communication

- Gender inclusive signage
- Real time and static information



Source: Vienna Sees Differently
<http://www.mrctv.org/>

Recommendation 8

Engender Public Transport Authorities

Create a Gender Advisory Committee (GAC):

- Gender equality a core duty
- Review all public transport plans
- Capacity building program
- Define protocols to prevent and address sexual harassment in public transport
- Enable recruitment, retaining and promotion of women at all levels
- Facilitate gender sensitization trainings

Recommendation 8

Engender Public Transport Authorities



Gender Audits:
Organization's Goals,
Policies and Programmes

Employment:
Recruitment, Retention,
Equal Pay, Workplace
Culture, Flexibility



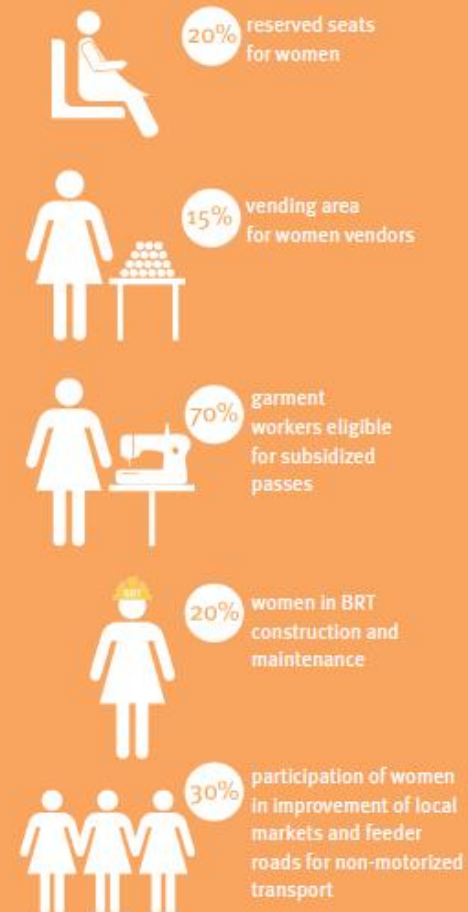
Standard operating procedures, gender sensitization

Capacity Building

Dhaka

Case: Greater Dhaka Sustainable Urban Transport Project in Bangladesh

This project aims to improve the public transport system of Dhaka North City Corporation and Gazipur City Corporation. The gender analysis resulted in a project design that addresses women's limited access to safe and reliable transport by supporting a bus rapid transport (BRT) line in an area where a large proportion of passengers will be female garment sector workers commuting from their homes to the factory. A gender action plan has been prepared, which includes the following features:



Recommendation 9

Make Intermediate Public Transport Safer for Women and Girls

Source: Malcolm Payne



Recognize IPT as a mode of transport

Verification, gender sensitization of drivers and conductors

Sheltered, safe, well lit waiting areas

Conclusions

Institutional co-ordination

Gender Experts

Gender Action Committee

Integrated land-use, spatial planning and transport: housing and employment and amenities

WOMEN AND TRANSPORT IN INDIAN CITIES

