Decoding women's transport experiences

A study of Nairobi, Lagos, and Gauteng

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WhereIsMyTransport is an industry-leading technology company and central source of mobility and location data for emerging markets. Our data assets help clients develop new business in high-growth markets, and our consumer products improve the public transport experience in places where people lack reliable information.

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1. Executive summary

It is a myth to think that transport is gender neutral. Women across the world regularly experience limitations to transport access and safety, so much so that it has been estimated to be "the greatest obstacle to women's participation in the labour market in developing countries, reducing their participation probability by 15.5 percentage points".[1] Despite women making up the majority of public transport users, "transport policies for most countries remain unrelentingly gender-blind".[2]

The challenges associated with implementing gender-sensitive and inclusive public transport agendas for cities across the world is not so much due to the lack of political willingness as it is due to the gender data gap. As noted by Caroline Criado-Perez in her book Invisible Women, "One of the most important things to say about the gender data gap is that it is not generally malicious, or even deliberate. Quite the opposite. It is simply the product of a way of thinking that has been around for millennia and is therefore a kind of not thinking."[3] In other words, frameworks to collect gender-sensitive data have not come into the mainstream, and this holds especially true for the transport sector in African cities.

Based on a review of existing studies and research projects on the topic of women and transport in African cities, it became clear that **there had been no**

systematic or comprehensive attempt to roll-out a gender-sensitive data collection exercise around women's experiences in the public transport sector. In assessing where this data gap was most acute, and where the uptake in the data collected could have the most impact, this study chose to focus on Gauteng, Lagos, and Nairobi.

This study therefore aims to instigate **one of Africa's first systematic gender-sensitive data collection efforts for Nairobi (Kenya), Lagos (Nigeria) and Gauteng (South Africa).** Over a five-month period, WhereIsMyTransport's research team worked in close collaboration with a network of local researchers in these three urban areas to host a number of research activities, from surveys, focus-group discussions, and ride-alongs to journey and empathy map workshops.

This study further aimed to **showcase novel ways of collecting gender-sensitive data, to inspire decision-makers and other practitioners to think differently about creating an evidence-base that can diagnose pain points and catalyse informed decision-making and action plans around women's experiences of public transport.** Planning transport systems that are truly inclusive of all cannot be done without considering gender-sensitive data.

To achieve the above-stated goals, our **methodology combined a mix of qualitative and quantitative methodologies**, complementing survey questionnaires with ride-alongs, journey mapping workshops, and women-only focus group discussions. This user-centric approach was instrumental in revealing the specifics of the lived experience and helped to surface the voice of women through stories told by research participants. In other words, these **qualitative methods added a level of depth and richness to the 'percentage findings' traditionally obtained through surveys**, while also providing more granular insights into the various decision-making stages of a woman's commuting journey. The study's duration, from planning, data collection, analysis to synthesis, spanned a period of four months. On average, around two to three weeks would be spent in each city to carry out field work (surveys and workshops). Some of the limitations and implications for future research identified during this project are summarised in the methodology section, and relate to increasing the sample size, avoiding online surveys, broadening the scope of participant types consulted, and allowing for more time to synthesise findings.

[1]Council for Decarbonising Transport in Asia, April 2022. "The Path to Zero: A Vision for Decarbonised Transport in Asia – Overcoming Blind Spots and Enabling Change".
[2]Karla Gonzalez Carvajal, Muneeza Mehmood Alam, World Bank Blog. 2018. "Transport is not gender-neutral".
[3] Caroline Criado-Perez, Invisible Women: Data Bias in a World Designed for Men, Abrams Press, 2019.

While the 'Findings' section summarises in detail the insights gathered from the surveys and other in-person research activities, a number of key trends were identified across the three cities:

• It is not sufficient to disaggregate data to produce impactful insights on the gendered experience of public transport. Women are not a single homogeneous group and their needs and pain points will differ greatly depending on their age, occupation, household structure, and income levels. Reasons for travelling daily or commuting lengths will for example vary by city or by occupational profile.

Top three activities for which women travel daily
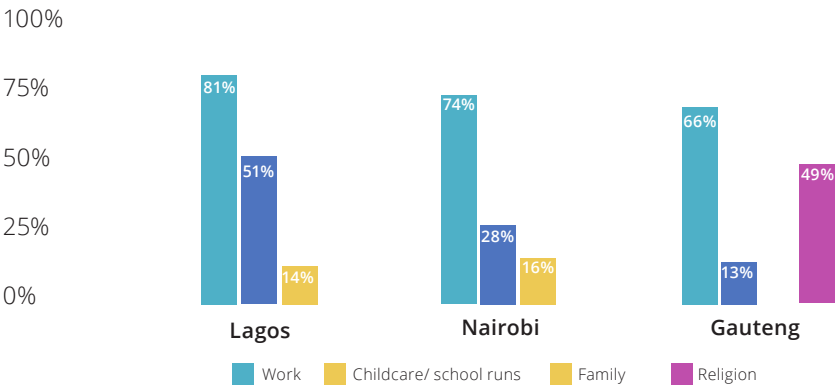
Note: includes only women survey respondents. Due to the small sample size, this graph does not claim to be representative of city-level trends.

How long is your longest regular commute from the moment you leave to the moment you arrive at your destination?
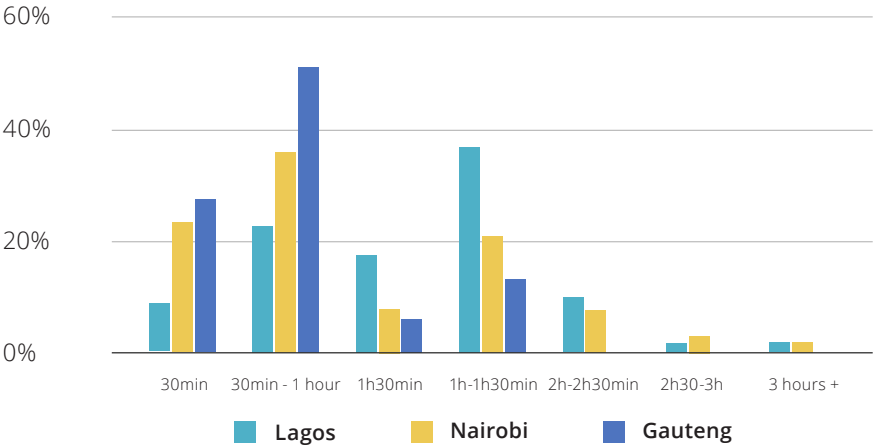
Note: includes only women survey respondents. Due to the small sample size, this graph does not claim to be representative of city-level trends.

• **For example, levels of income influence the type of modes a woman chooses to use to get to her destination.** Wealthier women (such as working professionals) will rely more heavily on ride-hailing services, as opposed to lower-income women (such as informal traders) being 'trapped' into using informal minibus transportation due to the prohibitive costs of alternative transportation modes (such as the train, bus or BRT).

• **Similarly, the role of age impacts the types of incidents experienced by women.** Younger women will be more vocal about the verbal sexual harassment they may have experienced, as opposed to older women who were less likely to express concerns around this. We argue that older women have perhaps developed coping mechanisms or have become used to such incidents and therefore feel less of a need to report such incidents.

• **The insights gathered around the type of incidents experienced by women varied depending on the research methodology used**—surveys were less conducive to women reporting the full extent of their experiences, as opposed to the focus-group discussions,

where women, in the presence of like-minded women, were encouraged to open up and relate to one another's stories. Greater insights around this challenging topic can be gained from conducting workshop-type activities and fostering discussions, as opposed to the tick-box answers gathered through survey forms.

• **Women from different profile groups exhibit different coping and posturing strategies to fend off uncomfortable, threatening or violent situations.** These range from wearing baggy clothing that cover the shape of a body and attract less attention, staying silent and making themselves discreet, checking the inside of a vehicle and scanning other passengers before boarding on a vehicle, to preparing the exact fare trip change in order to avoid confrontation or complications with the driver or tout.

• While safety was a prevalent concern for most women participants in this study, **worries around the affordability of public transport or around non-standardised/regulated fares sometimes took precedence.**

· **The relationship between drivers and women varies greatly depending on the woman spoken to and the type of mode used.** Formal modes[4] are not necessarily perceived as safer than informal modes, with women citing the examples of the BRT in Lagos and ride-hailing apps in Gauteng as potentially dangerous. Moreover, drivers may be perceived as threatening by some women, whereas in other instances, some women may trust a driver with their child's trip to school. There is a sliding scale of trust when it comes to drivers.

· **In each city, there was generally low satisfaction with public transport services and women were enthusiastic and vocal in suggesting possible solutions or areas of improvement for public transport.** There is room to build in greater participation from the end-users of public transport when designing more gender-sensitive and inclusive transport systems.

How satisfied are you by the public transport you use?
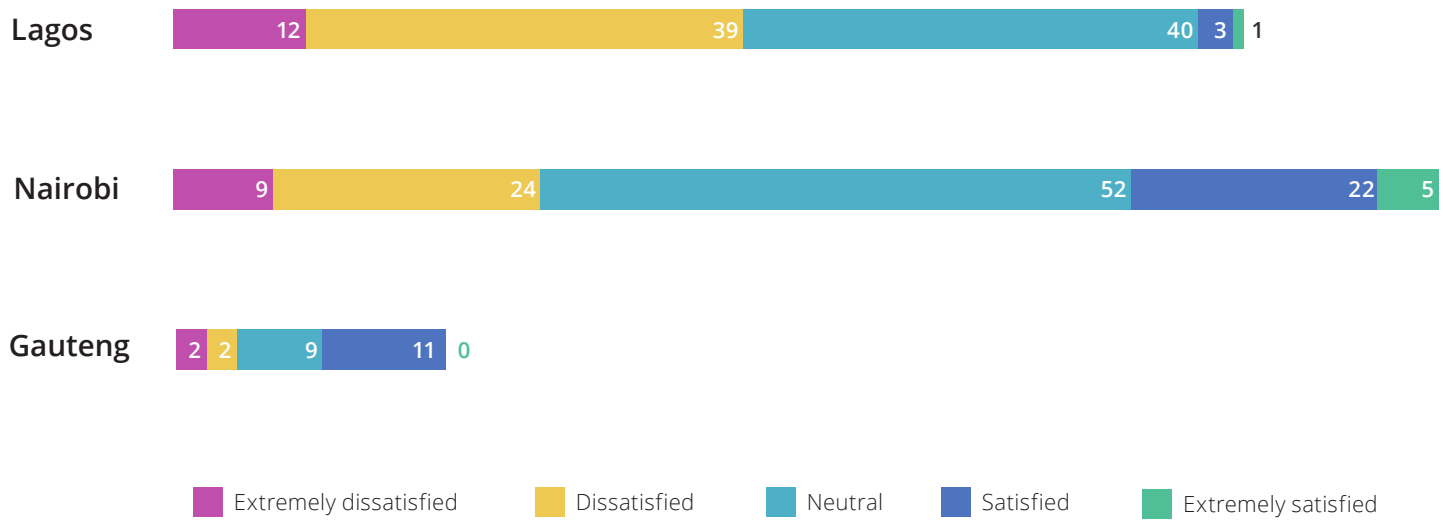
Lagos: 12, 39, 40, 3, 1

Nairobi: 9, 24, 52, 22, 5

Gauteng: 2, 2, 9, 11, 0

Legend: Extremely dissatisfied | Dissatisfied | Neutral | Satisfied | Extremely satisfied

Note: includes only women survey respondents. Due to the small sample size, this graph does not claim to be representative of city-level trends.

The 'Findings' section detailed below further breaks down the insights gathered at a city level.

[4] Formal modes are defined in this study as a transport mode that is regulated by an official transport authority or that are operated by an approved entity, as opposed to informal modes which are run by independent, and not necessarily regulated driver-operators.

2. Introduction
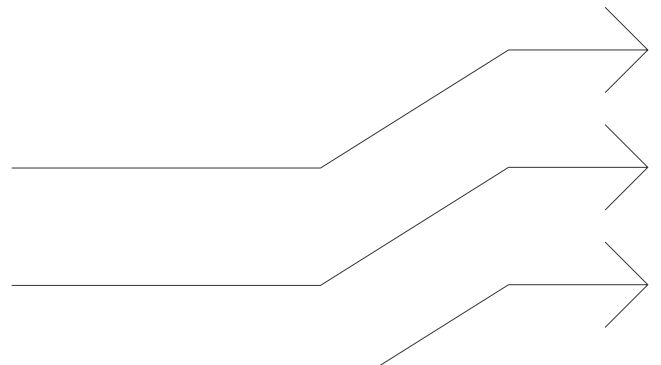
"Even where infrastructure is developed, its operation often does not address women's needs. Evidence shows that inadequate transport facilities, including its frequency, scope and safety, reduces women's labour market participation more than men's."

Sustainable Connectivity: Closing the gender gap in
infrastructure - OECD Environment Policy Paper No. 15, 2019

Most women experience safety and accessibility concerns over public transport. They make calculations daily on how best to reach their final destination: What will be the safest way to get to the bus stop? Will I be able to take my child with me? Can I walk home on my own when it is dark out? Will the driver of this vehicle assist me in case anything happens?

Despite the increasing numbers of women relying on public transport, and the general knowledge that transport is not gender neutral, many of these questions (and more) continue to go unresolved. Even when the answers exist, gender-specific needs are rarely integrated into the design, planning, and operation of existing systems.

This is largely due to the lack of readily available and openly accessible data on the issue. In emerging-market cities, where general mobility information is already hard to come by, obtaining gender-disaggregated data on public transport dynamics is even more of a challenge. This study, led by WhereIsMyTransport in partnership with the Transforming Urban Mobility Initiative (TUMI), is guided by three objectives.

First, to bridge this public transport gender data gap and provide novel insights on women's mobility experience across African cities. We see this research as an opportunity to create the first fully-fledged and holistic research programme on the topic, providing an African counterpart to the 2018 World Bank study on women's mobility in Latin America entitled Why Does She Move.[5] Moreover, user-centric, qualitative data is often lacking from traditional transport analysis and is something we believe can provide a more empathetic view of what it really means to use public transport in these cities. We hope that the findings of this study will mainstream and highlight a new type of evidence that can be used in decision-making and inclusive transport planning considerations.

Second, to develop a mixed-methods research methodology that showcases innovative ways of collecting gender-sensitive data. The literature review we conducted demonstrated that previous research studies in this field have tended to rely heavily on surveys as the main data collection methodology. Findings would often be presented as aggregated percentage figures and tend to encompass women under one blanket term. Instead, our study attempted to complement survey findings and bring in qualitative research methodologies including ride-alongs, journey mapping workshops, and women-only focus group discussions. This user-centric approach was instrumental in revealing the specifics of the lived experience and helped to bring out particular behavioural details that shape greater quantitative patterns

Third, we wanted to steer the conversation away from 'women' as one homogenous group and instead highlight how women's mobility needs and behaviours can differ significantly by age, occupation, and socio-economic level. Our research therefore took a comparative view of women commuters, and zoomed in at the level of different user-groups from students, working professionals, sex workers, stay-at-home mothers, to informal traders. Promoting inclusivity in transport systems starts with inclusive data collection that depicts behaviours, mobility needs, and capabilities on an individual level.

[5] Dominguez Gonzalez, Karla, Ana Luiza Machado, Bianca Bianchi Alves, Veronica Raffo, Sofia Guerrero, and Irene Portabales. 2020. Why does she move? A Study of Women's Mobility in Latin American Cities. Washington, DC: World Bank.

**The following questions guided the research
process and methodology development:**

Her	Her ecosystem	Her experience
Who is she? How does she travel	What are her daily needs related to mobility? Where does she travel to and for whom? (children, family and friends)	What is her experience across modes? What are her challenges and pain points? Does public transport bring her joy?

The study is structured in five sections in addition to this
introduction.

Section 2:
We summarise key findings from the literature review and
highlight caveats and best practices that informed our
research process.

Section 3:
We describe the methodology developed.

Section 4:
We present the findings at a city level along with a
comparative analysis.

Section 5:
We highlight some case studies and draw conclusions.

3. Literature review

The literature reviewed included a number of varied source formats (see Annex 1), including academic papers, toolkits, guidance, news articles, and research programmes on the topic of women and mobility, focusing on Africa and, in particular, on the three countries we aimed to begin our studies in: South Africa, Kenya, and Nigeria. The findings from this literature review were used to understand best practices, identify gaps and areas requiring further investigation, and guide the development of a sensitive and responsive approach for engaging with gender groups during the data collection process.

Snapshot findings from the literature review

• The Global South is heavily reliant on public transport systems because it is more affordable and often the only option—this is true of both men and women.

• In line with international trends, Kenyan women travel more often and further than men, most often for care-giving reasons.

• All three cities follow patterns found in other developing cities in that women regularly travel for "care" purposes. Particularly in Lagos, hyper-focused research has been conducted to understand pregnant women and students in travel, but no in-depth research has been carried out to compare women's experience of public transport across different work, occupational, and age groups.

• The majority of women commuters experience harassment at some point. This international trend is mirrored in existing African research with 87.5% of Nairobi commuters having witnessed harassment before and 88% of South African women reporting fear of harassment while travelling. One study showed 61% of female students in Lagos reporting "always" feeling unsafe using public transport.

• Harassment on public transport systems in the three cities we explored range from verbal to physical assault. This harassment requires women to develop strategies to navigate their circumstances, including group travel and "confidence posturing".[6]

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[6] According to this report, "confidence posturing" refers to a strategy of feigning confidence while waiting at a station. This adaption provides the woman herself, a greater sense of general safety.

Overview of literature on public transport in the Global South

Transport and gender issues are often interconnected, and the negative impacts of unsafe, inaccessible or unaffordable transport are more often felt by girls and women than by men. Violence and harassment is also cited as one of the challenges experienced by women and girls on public transport, as "crowded public transport systems can increase GBVH [gender-based violence and harassment] risks through factors such as close proximity between service users, transitory environments, and anonymity to commit acts of GBVH".[7]

In Africa, this pattern is especially prevalent. Research undertaken by the Flone Initiative in 2018 recorded that 88% of male and female commuters had witnessed gender-based harassment on public transport, and when, in 2021, the Kenya Generation Equality Youth Consortium explored the same topic the results remained unchanged. In South Africa, physical and verbal harassment against women on public transport has

been recorded regularly with about and again, 88% of women recorded fear of being sexually harassed while traveling. One woman commuter described the harassment as being so prevalent that "girls were raped, students robbed …it happened so regularly that we got used to it". In Lagos, research shows women feel far more unsafe than men while in transit. Overall, the literature highlighted how women feel particularly unsafe when walking to stations, waiting for transport, and commuting at night.

Affordability and reliance on public transport
The intersection between socioeconomic status and gender is clear, with most women in Nairobi citing "affordability" as their number one reason for choosing to use public transport, and matatus in particular. The Report on Mobility of Care Assessment of Nairobi's Public Minibus Transport Services found that these women are excluded from the use of a household's single vehicle when it

is available, despite making more trips in a day over longer distances than their male counterparts. Income can be a constraint on women's travel in other ways: in Lagos, a 2014 study suggested that the association between gender and income could be impacting women's lower use of the BRT system.

Gender sensitivity in data
Despite a number of recent reports in Nairobi pointing to the gender data gap, a city official concluded in a 2021 study: "How heavy are gender issues? (…) We know gender is an issue, we need to address it, but what are the specific needs women require in transport for us to be able to incorporate them in our policy? Bring it up and we shall consider it and discuss it, share with other women and subject it to public participation. Do research, bring issues to us to inform policy." Research in Lagos similarly cites the lack of commitment to—(and need for—) gender-sensitive approaches to transport planning and safety in Nigeria.

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[7] IFC, Addressing Gender-Based Violence and Harassment (GBVH) in the Public Transport Sector, Link
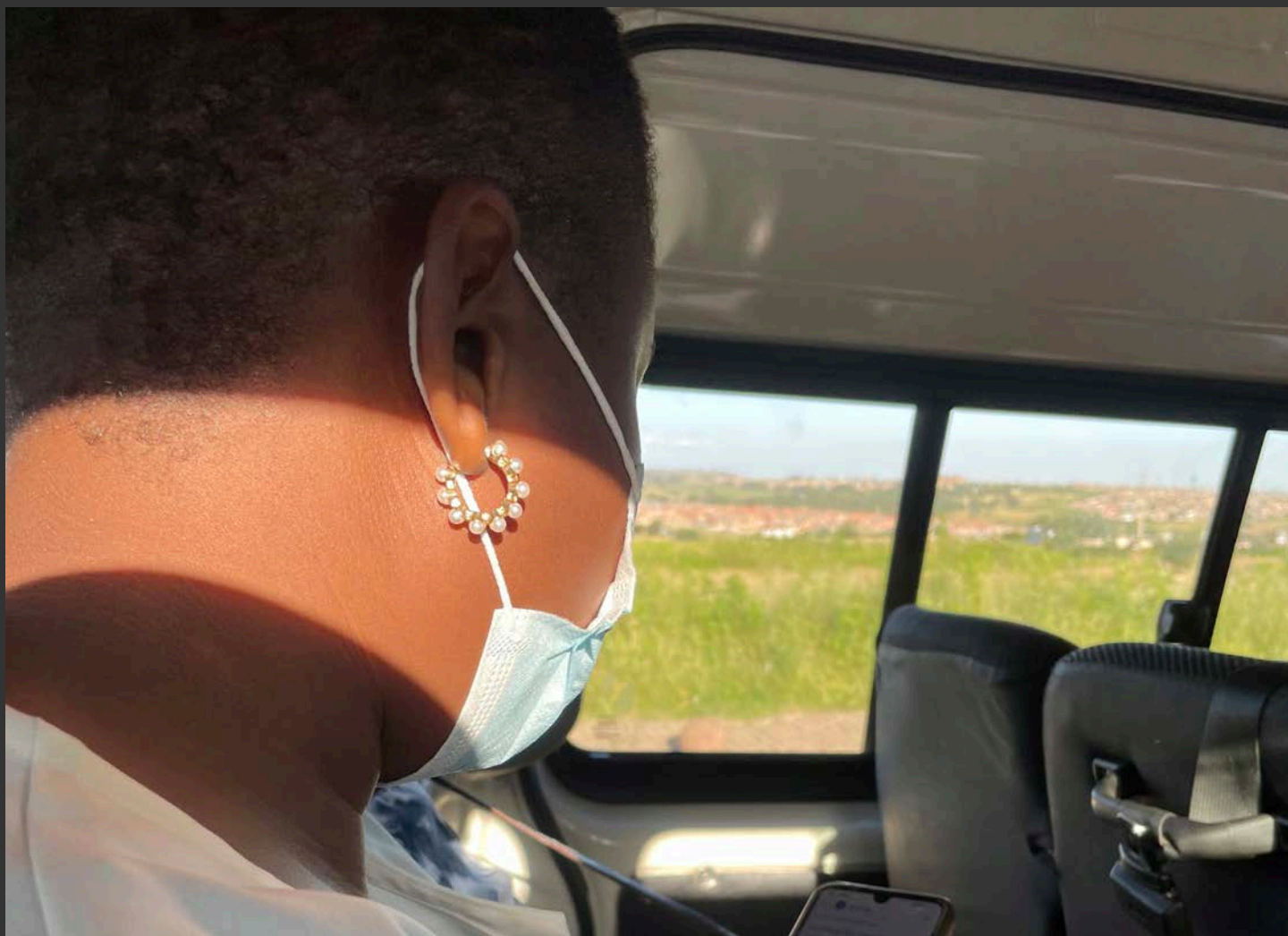
The unique woman commuter

A study conducted across South Africa found that, in line with international trends, women's transport movements often fall under the 'mobility of care' definition, meaning that their trips are motivated by "caring responsibilities: escorting others; shopping for daily living, with the exclusion of leisure shopping; household maintenance, organisation, and administrative errands, as different from personal walks for recreation; visits to take care of sick or older relatives, again as different from leisure visit".[8] A recent study demonstrated the particular impacts of Lagos's heavy traffic and poor road infrastructure on pregnant women trying to reach hospital, creating 'life or death' situations.

Survival strategies

Research has shown the widespread prevalence of 'survival strategies' to mitigate risk. A study showed that South African women often attempted to travel with someone else as a way to mitigate risk and weighed up safety and affordability when deciding on one mode of transport over another. Personal survival strategies of female students in Nairobi include "confidence posturing" in order to make themselves less attractive to assailants. In Lagos, female students described travelling during the daytime, only waiting for transport in well-lit places or with other people around, and dressing a particular way to try and guard against harassment. The safety of women and the experience of commuting on public transport are inseparable.

	Nairobi	Lagos	Gauteng
Overview	While Nairobi is the city with the most available data on the topic, a 2021 report citing a transport policymaker from Nairobi stated that there is still a lack of gender-disaggregated data.	Although some resources exist, many were not focused on women specifically, or spoke about Nigeria in a larger context.	Gauteng was the city with the least amount of targeted data and research on the topic of women and transport. When it did exist, it was mainly quantitative in nature and not focused on different socio-economic profiles.
Number of reports, papers, studies reviewed	10	9	4
Authors / beneficiaries of the research	University-based work and corporate sponsorship including: World Bank Transportation Research Board Safetipin UN Habitat Bill and Melinda Gates Foundation Stockholm Environment Institute Special interest groups including: Flone Initiative International Youth Alliance for Family Planning Youth in Action Organisation Of African Youth Kenya	University-based work in both Nigeria and abroad (London School of Economics), as well as corporate sponsorship work for the Volvo Research and Educational Foundations. Special interest groups: International Forum on Urban Poverty ActionAid International	University-based work and corporate sponsorship work for the Volvo Research and Educational Foundations. Special interest groups including: Sonke Gender Justice Amplify Change
Time of publication: how fresh is the research?	Mobility, Poverty, and Gender: Travel 'Choices' of Slum Residents in Nairobi, Kenya - **2010** Time of publication: how fresh is the research? Mobility, Poverty, and Gender: Travel 'Choices' of Slum Residents in Nairobi, Kenya - **2010** Gender Relations in Public Transport in Africa: A case Study of Nairobi Kenya - **2014** Nairobi Safety Analysis Report by Safetipin - **2016** (4,956 data points collected)	Towards Gender Sensitive Urban Transport Planning and Operations in Metropolitan Lagos, Nigeria - **2001** Regional Assessment of Public Transport Operations in Nigerian Cities: The Case of Lagos Island - **2012** (640 participants) Quality of Service and Crime Incidents in Public Transport: A Case Study of Lagos Metropolis - **2012** (1600 participants) Gender and safety in public transportation : an explorative study in Lagos Metropolis, Nigeria - **2012** (110 participants)	Public transport and the safety of women in South Africa: Lessons learnt from around the world - **2017** Perceptions of Gender, Mobility, and Personal Safety: South Africa Moving Forward - **2019** (±35 participants in focus groups) User Diversity and Mobility Practices in Sub-Saharan African Cities: Understanding the Needs of Vulnerable Populations - **2020** Women and Girls' Experiences of Gender-Based Violence on Public Transport in Gauteng & the Western Cape Province - **2020** (+1000 survey respondents, ±40 focus group participants)

	Nairobi	Lagos	Gauteng
Time of publication: how fresh is the research?	Factors influencing gender violence against women in public transport sector in Kenya: the case of Nairobi County public transport system - **2017** (±215 participants) Violence against Women and Girls in Public Road Transport and Connected Spaces in Nairobi County, Kenya - **2018** (±85 participants) Commuting in Urban Kenya: Unpacking Travel Demand in Large and Small Kenyan Cities - **2019** (14,580 participants) The Report on Mobility of Care Assessment of Nairobi's Public Minibus Transport Services - **2019** (+470 participants) Examining Perceptions of Public Transport Safety for Young Women in Nairobi, Kenya - **2021** Sexual Harassment in Kenya Public Tansport a Rapid Assement Report - 2021 (+500 participants) Mainstreaming gender in urban public transport: Lessons from Nairobi, Kampala and Dar es Salaam by Stockholm Environment Institute **2021** **2021** (+500 participants) Mainstreaming gender in urban public transport: Lessons from Nairobi, Kampala and Dar es Salaam by Stockholm Environment Institute **2021**	Access to Intra-Urban Public Transport across Varied SocioEconomic Groups : A Case of Lagos Bus Rapid Transit (BRT) - **2014** (360 participants) Freedom to Move: Women's experience of urban public transport in Bangladesh, Brazil and Nigeria, and how lost tax revenues can pay to improve it - **2016** "In cities, it's not far, but it takes long": comparing estimated and replicated travel times to reach life-saving obstetric care in Lagos, Nigeria - **2020** (732 participants) An analysis of transit safety amongst college students in Lagos, Nigeria in Crime and Fear in Public Places: Towards Safe, Inclusive and Sustainable Cities - **2020** (270 participants) User Diversity and Mobility Practices in Sub-Saharan African Cities: Understanding the Needs of Vulnerable Populations - **2020**	Perceptions of Gender, Mobility, and Personal Safety: South Africa Moving Forward - **2019** (±35 participants in focus groups) User Diversity and Mobility Practices in Sub-Saharan African Cities: Understanding the Needs of Vulnerable Populations - **2020** Women and Girls' Experiences of Gender-Based Violence on Public Transport in Gauteng & the Western Cape Province - **2020** (+1000 survey respondents, ±40 focus group participants)

	Nairobi	Lagos	Gauteng
Type of research: quantitative or qualitative? Surveys / methods used? Any innovative research process we can learn from/build on?	Mixed methodology **Quantitative** - Surveys - Geolocation tracking **Qualitative** - Surveys - Literature reviews - Focus groups	Mixed methodology **Quantitative** - Surveys - Geocoding and modelling of transit times **Qualitative** - Surveys - Literature reviews - Informal interviews - Field observation and photography	Mixed methodology **Quantitative** - Surveys - Census reviews **Qualitative** - Focus groups - Literature reviews
Type of gender data collected: who were the target research participants? (specific women groups e.g. professionals, mothers, sex workers, etc.)	- Women working in public transport - Women commuters of specific modes - Students of specific universities	- Female students - Pregnant women making trips to hospital - Women commuters in general	- Women from specific neighbourhoods - Women with disabilities - Women commuters in general
Limitations of the research / gaps to fill	**Participant limitations** Most participants contacted about GBV or discrimination have focused on the use of matatu. Few papers have looked at other forms of PT. **Methodology limitations** Surveys have been the most used methodology in Nairobi. The use of workshops, ride-a-longs, and other qualitative methodologies could add more detail to the established quantitative findings.	**Participant limitations** Two of the major studies focused on particular demographic groups (students and pregnant women respectively) so are limited in representing women more broadly. **Methodology limitations** Surveys have been the most used methodology in Lagos. However, there is a lack of quantitatively rigorous surveys with large sample sizes representative of the population, making it hard to make generalisable claims about women's experience. For example the percentage of women who have experienced sexual harassment on public transport. The use of workshops, ride-a-longs, and other qualitative methodologies would add depth and richness to the field.	**Participant limitations** Other than 1 report, qualitative data was limited to a small group so the baseline is difficult to fully establish. This group was also representative of a shared neighbourhood and economic position. **Methodology limitations** Other than 1 report, they relied heavily on existing quantitative data (census/outdated data), the opportunity to uncover original and specific quantitative data

	Nairobi	Lagos	Gauteng
	Research gaps There have been no comparative findings that look at women in different social or economic profiles.	**Research gaps** There is very little rigorous and recent research on women's experience around public transport in Lagos in general, even though it is evident that challenges abound. In particular, the themes of mode choice, women's travel patterns, challenges beyond safety, and social attitudes around gender and transport warrant further research. There are no comparative findings that look at women in different social or economic profiles.	**Research gaps** There have been no comparative findings that look at women in different social or economic profiles. There has also not been a great deal of original data collection around motivations and choice making when it comes to women and travel.

Implications for methodology

Throughout the cited research, and throughout this review, "women in Africa" have most often been explained as an all-encompassing group. In the case of the literature focussed on Lagos, women are often not considered independently from their male counterparts when collecting data. Their challenges and mobility patterns have been stated in blanket terms, and individual nuances are more often than not left out. We have noted a gap to undertake a comparative look at women commuters who occupy different social and economic positions in their societies. In other words, studies have not investigated in-depth how different user groups experience public transport. In addition, the 2021 study entitled Mainstreaming gender in urban public transport concludes: *"comparisons across cities (...) particularly in the global South, are necessary to reveal spatial equity dimensions of transport sector and gender issues."*

Moreover, this literature demonstrates a heavy reliance on surveys as the main method for collecting data.

The methodology developed therefore attempts to distinguish itself from previous efforts in three main ways:

• complementing a survey-only approach with more user-centric and qualitative research methodologies, such as women-only workshops, focus-group discussions and ride-alongs;

• focusing on extracting deeper insights on motivations and decision-making for women in public transport at an individual level, across different socio-economic groups;

• bringing out findings that can be compared across different cities

• surfacing the voice of women through stories told by research participants

4. Methodology

- Protection of research participants

- Timeline and Workplan

- Sampling of research participants

- Mixed-method research methodology

- Limitations, best practices and implications for future research
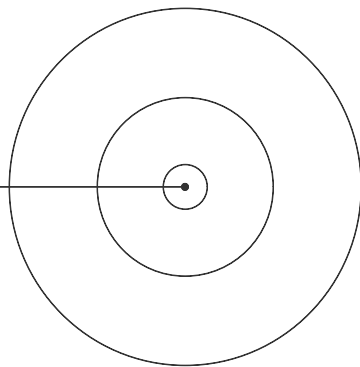
From Nairobi, Lagos to Gauteng, we undertook a large-scale data collection project targeting 400 participants over the course of a five-month period from January to May 2022.

The data collection process included a variety of methodologies to ensure that we were listening in as many forms as possible, from online and in-person surveys, focus-group discussions, ride-alongs to journey mapping workshops.

Designed for on-the-ground research, local researchers played a critical role in ensuring that the methodology:

• was sensitive to local specificities and cultural norms,

• was conducted in local languages to ease communications and create spaces of trust,

It was decided, in collaboration with the local teams in each city, that an all-women team was best for the sensitivity of the discussion around gender-based violence and harassment. Only in Lagos did the local research team suggest that having a male researcher on the team would not pose a challenge to openly interviewing research participants.

Protection of research participants

The protection of research participants' privacy was always front of mind when developing the research methodology for this project. Survey questionnaires were anonymised. In other words, they were developed so that no personal information could be identified: first and last names were not collected, and survey respondents were asked to read a consent form, containing details on how their data would be protected, before agreeing to take part in the survey. Consent forms were translated in the local language to ensure that participants fully understood the goal and context of the research. If agreement was granted, the consent form would be signed and a copy of this was saved in a password-protected folder, to which only the Project Lead had access to. In a similar way, none of the data collected during the workshops or ride-alongs contained personal identifiable information (PII), and no PII was published as part of the work results of this project. Photos taken were always obtained with the consent of participants, and ensured that they did not capture any recognisable facial features.

Holding conversations around the experience of women in any setting can lead to sensitive conversations around violence and harassment. Creating a space where women feel heard, respected and safe is critical when conducting a research project of this nature. When choosing the local researchers we would work with, a key requirement was that they have experience in working with women research participants and that they demonstrated the behavioural skills of empathy and active listening. Some of the topics discussed in workshops were difficult to unpack, and the line between research and reliving a traumatic experience through story-telling is thin. As part of the training for these workshops, local researchers were therefore reminded to be mindful of this and to not push participants to recount stories that made them uncomfortable.

Timeline and Workplan

The study's duration, from planning, data collection, analysis to synthesis, spanned a
period of four months. On average, around two to three weeks would be spent in each
city to carry out field work (surveys, workshops).

City	Timelines
Nairobi	Jan 17th - 21st: hiring and onboarding of local team Jan 24th - 29th: participant recruitment Jan 31st - Feb 4th: ride-alongs Feb 7th - 12th: workshops + in-field surveys
Gauteng	Feb 7th - 12th: hiring and onboarding of local team Feb 8th - 18th: participant recruitment Feb 21st - 25th: ride-alongs Feb 28th - March 4th: workshops March 7th - 11th: in-field surveys
Lagos	March 14th - April 1st: hiring and onboarding of local team April 4th - 8th: ride-alongs April 11th -14th & April 19th - 20th:: workshops and in-field surveys

Online surveys ran online for an average period of five weeks, alongside the planning
and in-field phases in each city.

To summarise, the overall work plan in each city followed the
steps as laid out below:

1 — **Desktop research, interviews with locals**
Refining and localising the research methodology for each
city, in partnership with local researchers

2 — **Field activities preparation**
Finding a space for the research lab
Training of local researchers on research methodology

3 — **Online survey roll-out**
Through social media channels: Flone initiative,
WhereIsMyTransport, TUMI, Twitter key accounts (e.g. journalists,
transport advocates) and whatsapp groups

4 — **Ride-longs and home visits**
To gain a deeper understanding of the experience and challenges
by user group user group and by vehicle

5 — **Research lab**
Seven workshops (10 participants each): journey mapping,
empathy mapping, commuting pain points and solution ideation
focus groups

6 — **Infield surveys**
Random sampling

7 — **Synthesis of findings**
Documentation, consolidation, hypothesis validation

Given the legalities of the cities, we were unable to conduct the
online surveys using competitions. This led to lower numbers
from the online survey participants. To solve for this, we decided
to run the surveys for as long as possible in each city.

Sampling of research participants

The study's duration, from planning, data collection, analysis to synthesis, spanned a period of five months. On average, around two weeks would be spent in each city to carry out field work (surveys, workshops).

In each city, where possible, our aim was to involve research participants from the following groups in order to collect information on the diverse experience of women across the board:

- Students: attending tertiary education

- Working professionals, including working mothers

- Stay-at-home mothers

- Women working in public transport

- Informal traders, street vendors, or domestic workers

- Sex workers

- Expert working in public transport

See Annex 4 for full detail of the number and type of participants involved in each city, per activity.

Mixed-method research methodology

Our aim with this study is to showcase innovative ways of collecting gender-sensitive data. The literature review we conducted demonstrated that previous research studies in this field have tended to rely heavily on surveys as the main data collection methodology. Findings would often be presented as aggregated percentage figures and tend to encompass women under one blanket term. Instead, our study attempted to complement survey findings and bring in qualitative research methodologies including ride-alongs, journey mapping workshops, and women-only focus group discussions to flesh out how the patterns and pain points of the woman commuter vary greatly depending on

their profile as a student, a mother, a working professional, an informal trader, or a sex worker. This user-centric approach was instrumental in revealing the specifics of the lived experience and helped to bring out particular behavioural details that shape greater quantitative patterns.

All throughout the research activities, our aim was to uncover deeper insights on the motivations and decision-making of women using public transport, and for different profiles of women. Through this user-centric approach, we sharpen the focus on not just what happens inside public transport modes, but also on the wider experiences of women's journeys, from the first to the last mile.
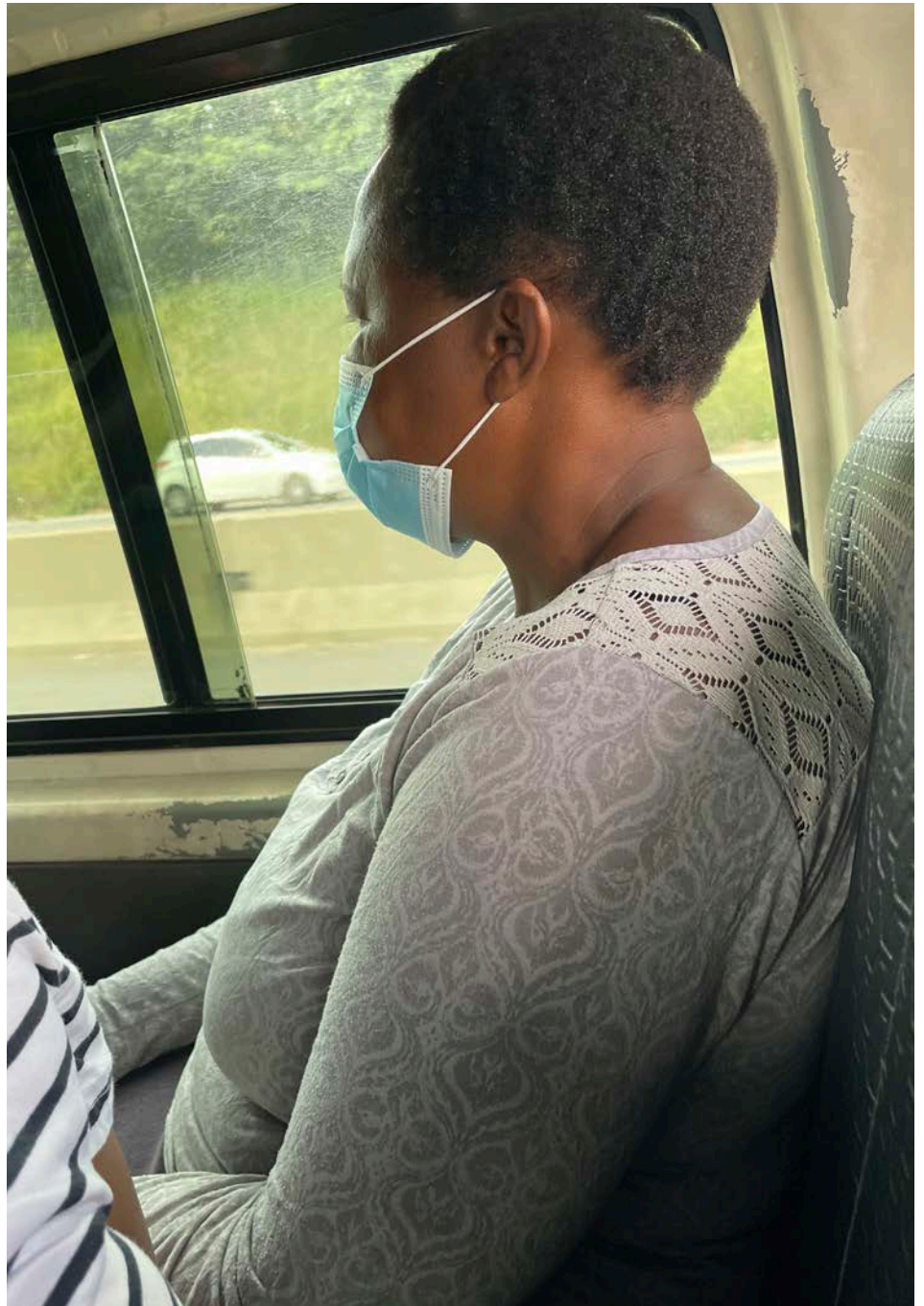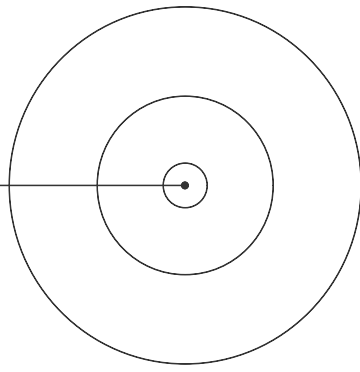
Ride-alongs and home visits

Home visits and ride-alongs are two independent research activities that we conduct in a sequential way, whereby we meet a research participant at their chosen start point; at home, at work, at a client, or at school. We then observe and interview the participant getting ready for their journey and then follow the participant on their daily commute, from the first to last mile.

The objective of these activities is to gain a deeper understanding of the participant's experience: what they observe, what they wear, what they listen to, their body language, whom they interact with and how.
The participant is followed by two researcher: one who interviews them, the other who collates the responses and observations into a grid
(see Annex 2).

Once the research activity has ended, the local researchers regroup to retranscribe and synthesise their notes into an excel spreadsheet, as shown in the example below:

Synthesis
spreadsheet example

Participants	Travel itinerary — What does she use PT for? (in general & access to human rights)	Body — Why does she walk the route she does? Does she change her clothes? Does she change her posture (smaller / bigger)?	Public transport — Why does she choose the vehicles she does?	Payment — Options and Concerns? Use of Mpesa?	Safety — Is she safe on the walk?	Phone — Does she use her phone?
Student	Access to work	However, other factors she considers include the condition of the road because of her health. she tries to avoid roads in poor conditions, e.g. dusty roads	How busy the road is in terms of traffic is a also a determinant fro her. when thhere is traffic congestion, she often uses okada (motorbike) to beat the traffic.	Uses the Cowry card payment syste	Within the school campus also, the situat	As a matter of principles, not so important ur urgent cllas and messages are deffered to later time
	Access to social infrastructure generally	She rarely changes her clothes. she does only when she has special occassions	Functionality - she uses the available vehicle that can yield the resul she wants. gets her to the place she wants at a good time			She often listens to music on her phone while on a trip but makes sure it is not loud enough to distract her from being conscious of her environment
	She uses PT virtually everytime and to everywhere since she does not have a car of her own yet	She does change position when she's not convenient of comfortable. she just readjust herself to get more comfortable	She also considers cost. when the prefered isn't affordable, then she makes do with the affordable.	Uses the Cowry card payment system for BRT	However, whenever she is outside these	
			Safety is also an important consideration for her. genereally, she uses all the different modes of PT, e.g. okada (motorbike), danfo (the yello buses), molu (the old, outdated school buses, almost extinct existing only along that route in Lagos), BRT and Uber			
Professional working woman	To get around to her different destinations. mainly office, home and church. she also use PT to shop and visit with friends who actually live close to her.	She does because the route is shorter and mostly free of traffic congestion in the morning.	Because she feels safe in it. it is comfortable and convenient for her.	For informal PT modes, she pays cash	She feels safe walkin since the ride starts right in front of her house.	Yes, mostly to listen to music or sermons
		No, she doesn't change her clothes.	Taking her regular cab/ taxi gives her a sense of security and saves her the stress of having to always give direction thus avoid wasting time.	For ordered rides (taxi/ cab) it is a bit more flexible - she can pay cash or do transfer but she prefers to pay cash to avoid connection or USSD issues that could result in delay.		
	Uber	She is more relaxed in her regular cab/ taxi and doesn't need to be changing her posture but she does change her posture in danfos (yellow buses)				

Journey and empathy mapping workshops/focus group discussions

During the week of the research lab, participants will be divided into two groups. One group will focus on building a journey map and the other an empathy map. The maps will be based on a persona that they create founded in and echoing their lived experience.

In each city, one week is set aside to conduct workshop activities and focus group discussions. These activities are organised in a space that is situated near an accessible transport hub, to allow participants to easily come together.

Each workshop usually spans an hour to hour and a half, and are organised either in the late morning or in the early afternoon to minimise safety concerns of travelling to and from the workshops at early or late hours of the day. In each city, six different workshops were hosted, each organised solely with participants from the same user group, to enable more focused discussions and to clearly identify common trends among them. Each user group, totalling between 8 and 15 participants, is taken through a journey map workshop and an empathy

workshop. Participants are given the option of choosing their group by moving either to the empathy or journey map workshop. This helps to put the participants at ease and further helps the researchers engage with a smaller group, to ensure all voices are heard and accounted for.

Workshop attendance

	Gauteng	Lagos	Nairobi
Students	6	9	10
Working professional	10	11	10
Stay-at-home mums	10	13	10
Informal trader	14	15	10
Informal trader	11	11	8
Expert	10	8	14
Totals	**61**	**67**	**62**

Consent forms

Prior to the workshops starting, women are asked to sign a consent form which then leads to the group discussion. This helps to manage participant arrivals while 'warming up' participants and guiding them to an understanding of what is expected of them during the expectations of the workshop.

Kick-off
As a kick-off activity, participants are prompted to answer the question; "Everything was fine until...?" on post-it notes. Using the notes, the women are then asked to share what they have written down. It allows for the discussion to start in a personable way, while helping women feel connected to one another through the shared experiences they begin to tell.
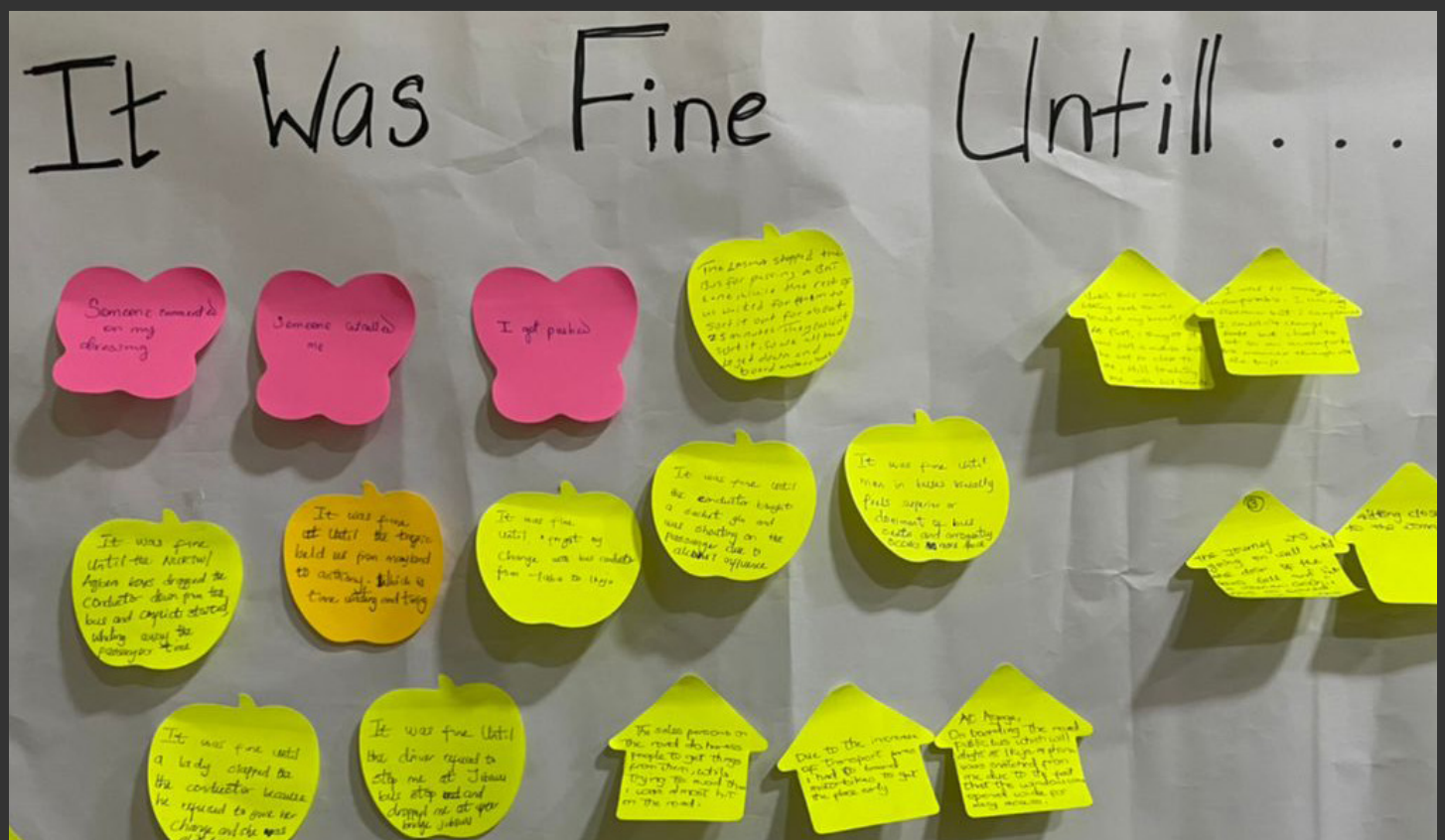
Journey Map

A journey map is mapped from the participant's perspective of a particular service or experience. The participants will explain what happens at each stage of the journey that they have decided upon. They will add touchpoints, obstacles, and feelings to the journey map to give a rich detailed description of their lived experience.
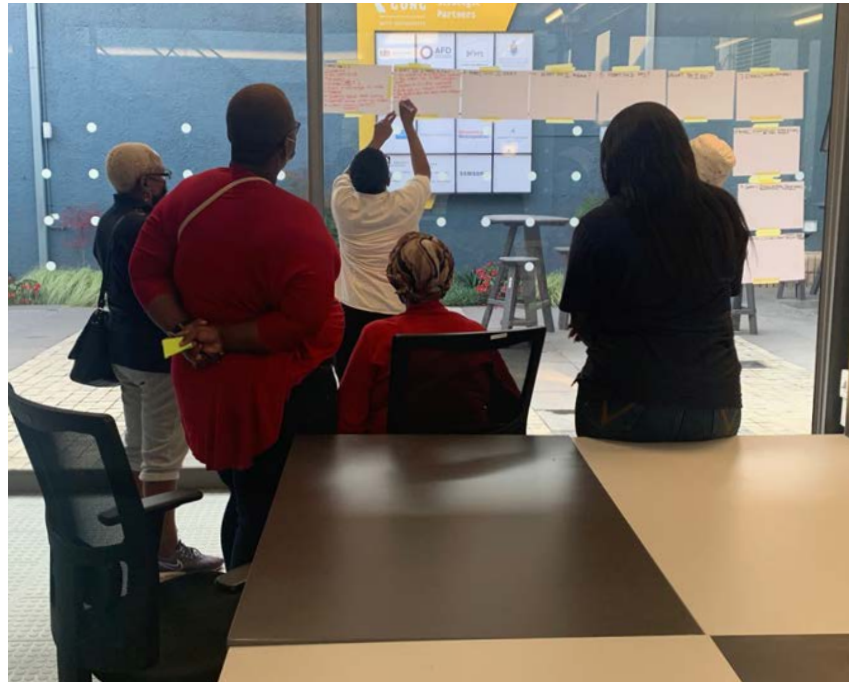
Empathy Map

Creating a persona that echoes the participants lives and experience, the participants are then asked to describe the following as their persona goes through her chosen journey:

• What does she see?
• What does she do and say?
• What does she hear?
• What does she think and feel?
• What are the pains and gains?

Summary workshops: extracting patterns

Once the workshops have ended, the researchers retranscribe post-it notes and other written materials into digital form. They then come together to compare notes and summarise the key take-aways in a moderated discussion by someone who was not present in the workshops, to prompt for clarifications. These key take-aways are then used to form the basis of the 'infinity mapping' exercise.

This is a process whereby the workshop highlights are organised on a virtual board, and grouped by common themes (represented by different colours). Some examples of themes from these workshops included: sexual harassment, driver incompetence, challenges with other passengers, vehicle infrastructure, and overcrowding.

Virtual whiteboard pattern grouping exercise
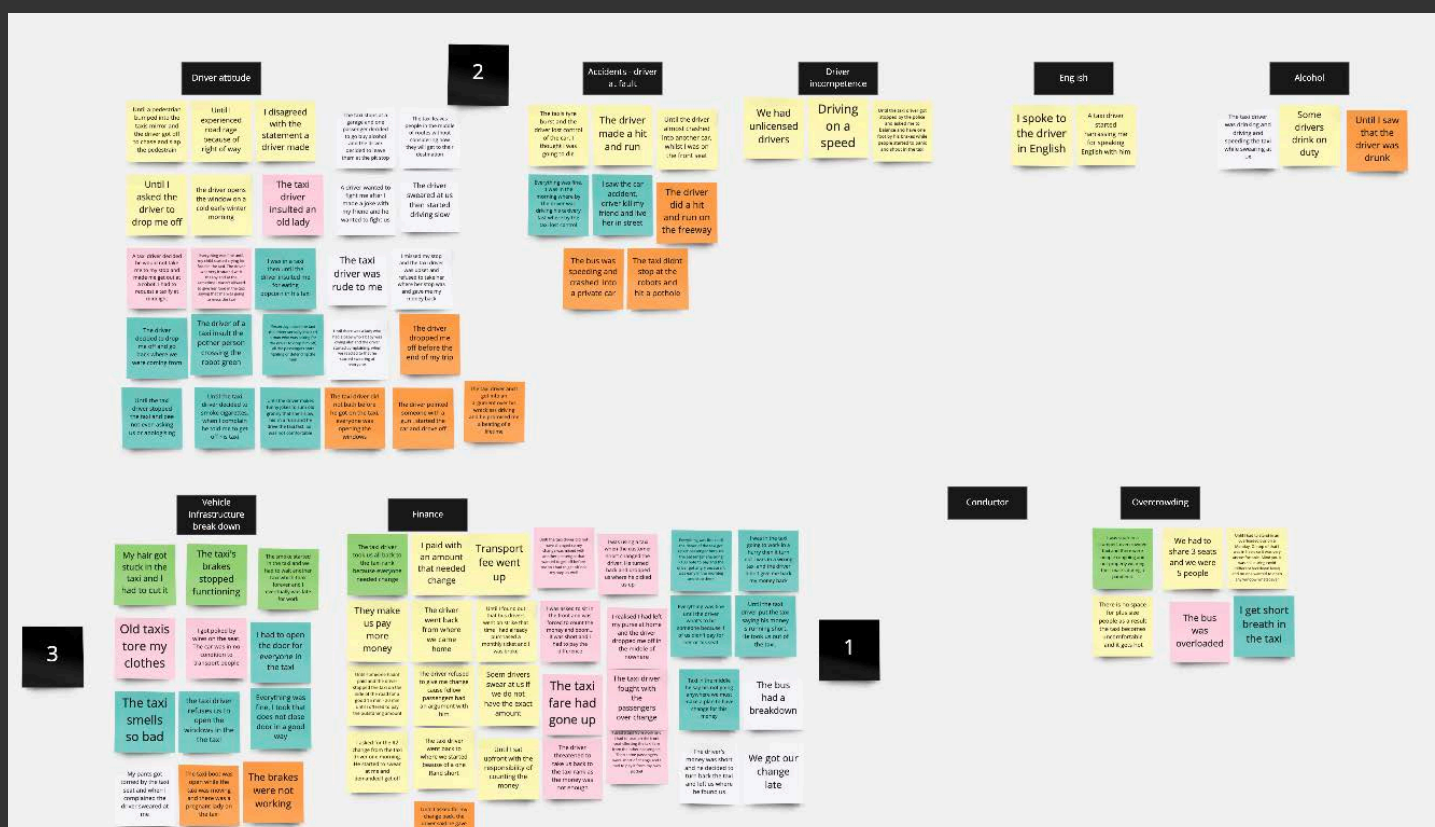
In-field and online surveys

In total, 235 surveys were conducted across the three cities, with 155 in Nairobi, 100 in Lagos, and 80 in Gauteng. On average, it took around 15 minutes to fill out the entire survey.

To complement the findings from the qualitative research activities described above, we further conducted surveys, both online and in-field, aiming for a total of 100 survey respondents per city. The survey was formulated to bring qualitative data to the rich quantitative data gathered from ride-alongs, home visits and workshops. It was divided into the following 8 sections, and the full questionnaire can be found in Annex 2:

• Section 01: Gender, age, and physical limitations

• Section 02: Work and income

• Section 03: Household

• Section 04: Travelling on public transport

• Section 05: Experiences related to travelling on public transport

• Section 06: Costs of daily commute and budget

• Section 07: Pain Points related to travelling on public transport

• Section 8: Phone usage and gathering of information about public transport

It was advised to translate the survey into Swahili and English for further reach in Nairobi, but researchers in Gauteng and Lagos did not believe that this was necessary in either city.

To reach as wide a participant pool as possible, we identified a number of online channels through which the surveys could be shared. We targeted transport advocacy and academic research groups' Twitter pages, we advertised it on social media (Facebook and Instagram), and partnered with local research groups (such as Flone Initiative) to share the survey via newsletters. One particularly effective way of sharing the survey is to also target journalists, who may be interested in relaying it through their social media profiles.
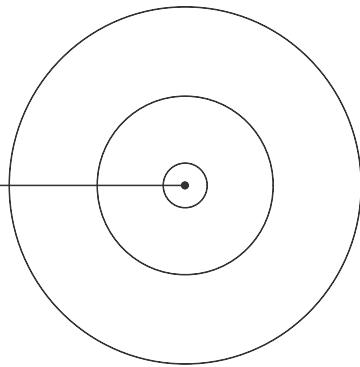
Survey analysis

The survey analysis was conducted with local researchers from each of the markets to ensure that local nuance and cultural understanding was maintained. The analysis process was conducted in Excel and was split into two stages:; general statistical trends and cross-question patterns.

Stage 1

The raw data from each city was analysed to look for high level trends in each space. Close-ended questions (those questions in the survey that had fixed options to select as answers) were used to develop quantitative evidence that could corroborate or challenge hypotheses and trends emerging from workshops and focus-group discussions. The survey also contained open-ended questions (those questions where a participant had space for free writing) which required a different analysis approach. Local researchers employed a process of coding, where they identified similar answers and developed a short list of codes to demonstrate the recurring themes. This was useful for comparing findings from qualitative research activities, provided a deeper sense of the experience, and ensured we did not miss out by limiting our participants.

Stage 2

We then went through a process of cross-analysing questions to identify patterns and ascertain if the experience has been different for women in different profiles. For example, we explored the relationship between how different age groups described their budgeting for public transport, or looking at the effect of employment status on the choice of modal use.

In order to know which patterns to explore, we used hypotheses that come out of the workshops as well as considering variables that indicated particular socioeconomic profiles (earnings, age, employment status).

Once this work of analysing and identifying key statistical trends was complete, we created a centralised place where each city could be compared to their counterpart. This allowed us to see where trends were specific to women across the African continent, and where they differed on a city level.

Limitations, best practices and implications for future research

Surveys

We summarise below some of the limitations we identified during the survey analysis stage:

1.

The sample sizes used as part of this study are smaller than best practice might suggest, and therefore the insights derived from the analysis of the survey responses are not significant enough to be used as a definitive conclusion on the state of affairs for women and transport but rather point towards trends in the space. Having said that, the intent of this study was to bring to the fore new qualitative methods for collecting gender-sensitive data, and to shine a light on the voices of women more than on percentage figures. Survey insights were still useful in corroborating, contrasting, and validating some of the themes and trends that we heard from women during workshops and ride-alongs. Going forward, our suggestions would be to conduct surveys on a larger sample size where income and age representation is taken into account to ensure a fair spread between the profiles of different women.

2.

Simple random sampling was applied for sourcing survey respondents. This was in part due to some of the surveys being conducted online, which meant that respondents could not be controlled for. Moreover, it was beyond the scope of this study, and would have required significant additional resources, to target respondents in a stratified or systematic way. In addition to simple random sampling, the in-field survey participants were selected based on availability and willingness to take part. Going forward, our suggestion would be to use multi-stratified sampling to ensure that the respondents being targeted represent the gender and age groups in the correct proportions, and to avoid the risk of bias in selecting participants through convenience sampling. We further recommend that surveyors be sent out with an instruction sheet detailing the categories and profiles of participants they should be targeting.

3.

The gender sampling for these cities differed. In Lagos for example, we opted to only interview women whereas in Nairobi and Gauteng, we aimed to have a more equal split between men and women. The approach used in Nairobi did not enable us to produce comparative findings between men and women that were significant enough to justify replicating this approach in Lagos. Considering that we were already limited by a small sample size, we opted to only interview women in Lagos in order to produce more representative findings. Going forward, our suggestion is to continue to focus on women only as the objective of this work was to highlight women-specific findings, and not to compare men and women. Focusing on women only also allows for more stratification between women profiles as mentioned in an earlier recommendation.

4.

Initially, the objective was to carry out half the surveys online and the other half in-field. The first barrier we encountered with this approach was the low number of responses received from the online surveys. We recommend focusing on in-person surveys as the digital forms are also likely to exclude those profiles that represent lower-earning or older profiles as they may lack access to the internet as well as digital literacy. Moreover the type of responses were more complete when in-person, and less risk of respondents misinterpreting the question.

5.

Moreover the type of responses were more complete when in-person, and less risk of respondents misinterpreting the answer and giving an answer that was not helpful. As indicated in the findings section below, we hypothesise that women do not share and unpack the full details of the challenges they experience in a survey form, as they would in a workshop space.

To summarise, going forward, we recommend conducting surveys on a larger sample size, avoiding online surveys and targeting women only. As demonstrated by the EMPOWER consortium, which is a Transport Research Programme funded by UK Aid Direct, the sensitive nature of the topic of sexual harassment requires careful consideration around the phrasing of survey questions.[9] It is therefore also recommended that survey questionnaires are tested and piloted before being rolled out on a larger scale. It would also be interesting to conduct workshops with the same participants who would have taken part in the survey exercise, in order to further unpack some of their answers and assess if survey questionnaires could act as a mental prompt or conversation catalyst for the workshops.

[9] World Bank, Integrating Gender Considerations Into Public Transport Policies and Operations, p. 31 (Link)

Ride-alongs

Having two researchers on the home visits and ride-alongs ensured that one researcher could focus on asking questions and gathering information, while the other took notes and photographs of the experience. There was a safety aspect to this as no researcher is alone in the field and travelling by herself to meet participants. This also meant that they could compare notes and check their biases. The challenge with this became apparent when trying to stay with a fast-paced participant as she navigated the city streets of Nairobi. Our researchers lost her in the crowd and caught up to her at the next stop.

We tested voice recordings on the ride-along, to produce a new type of data point (soundbites). Unfortunately, the sound quality was too poor due to the surrounding noise of the transport ecosystem. That being said, with the right equipment, high-quality voice recordings could be collected, but there would be a risk that this draws attention to the researchers and participants, and increases the risk of theft.

Exhaustion after a ride along is expected and as such, we planned for a documentation period in between each ride-along. In particularly dangerous areas, we ensured that we were available to researchers on WhatsApp. Although all the researchers stated that they would prefer to not have a car trail them, this might be a good idea if more dangerous cities or areas are researched in future.

Ensuring and confirming the availability of participants required more work with some profiles, and less with others. As an example, it was a challenge for us to connect with sex workers in all of the cities. In one city, one of the researchers was asked by a participant to meet in an area that felt unsafe, and when the participant did not arrive, we advised her to immediately leave.

Workshops

The greatest importance during a workshop is to create a safe space where women feel confident to open up and share common pain points/experiences. To achieve this the correct choice of researchers is central, for the ride-alongs, workshops, and surveys. Any hint of judgement or closing down of a conversation will stop participants sharing.

All of the workshops were held before sundown in all of the cities to ensure that participants could return home safely. We raise this here to ensure that participants' need for safety is central to any of the activities conducted.

On arrival, women were given a consent form to fill in. In Lagos, a group of participants were concerned by the consent form. The researchers dealt with this by asking the participants to complete the workshop with full payment and if they still were not happy to sign the consent form, we would delete all data. It could have meant that we would

have to schedule another workshop, but the participants, through participation, understood what we were asking and we were able to build trust with them. They signed the consent forms. Ensuring that participants feel complete control over their own data is vital to building trust.

Given the emotional labour of listening to women's challenges and sufferings for two weeks, it is important to consider building in longer time in the workshop synthesis sessions with the researchers, to ensure that they are also given the space to process and let go of the work they have been focused on.

Participants

Investigating one woman commuter type

Our aim with this study was to move the conversation away from women as a homogenous group, and instead zoom in on the variance in commuting patterns and pain points between different women commuter profiles. Given the limited time that we had with participants, either through one-on-one ride-alongs or during the dedicated workshops, we were limited to creating a view of each role that was quite generalistic. While forming this foundation was the first step of this research, this meant that we were not able to investigate how a woman can fulfil several roles at the same time, acting as a stay-at-home mother during the day and as a student in the evenings. We hope that future studies will build on these learnings and recommend that each role is investigated in more depth, as entire research projects could be dedicated to understanding just one profile, such as the student commuter, the stay-at-home mother, or an elderly woman.

Investigating travel with children

Travelling with children came up in most of, if not all of our engagements (outside of the students). This was not a focus of our research, but it was an aspect of travel that women raised most often. Given the impact on behaviours when travelling with children and the concerns around children travelling alone, this would help us understand a challenge that women echoed throughout this study. Related to this, the mobility of care was a recurrent topic in the findings. Caregiving has a notable impact on how women travel, often acting as a burden in the decision-making process of travelling, and this topic for African cities should be further investigated.

Investigating the racialised politics of travel

During the research, we followed Twitter and Instagram accounts that speak about women and race dynamics in Africa. One such account (No White Saviors) published an image related to being "yellow-boned" (a term used to indicate a light-skinned person of mixed ethnicity, including black) and the privileges it might afford a person when travelling.

Our research did not investigate the racial dynamics that are at play in public transport, but this could be an area that warrants future research.

5. Gauteng findings
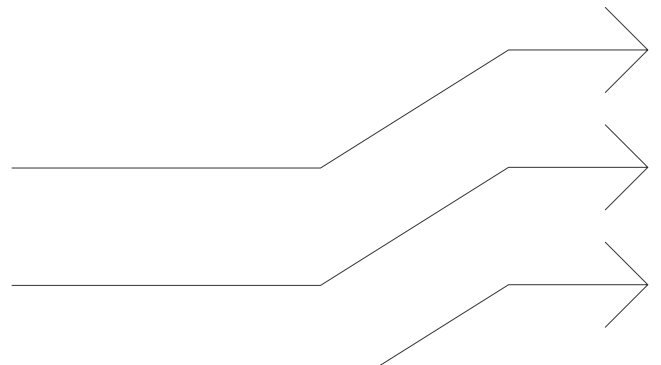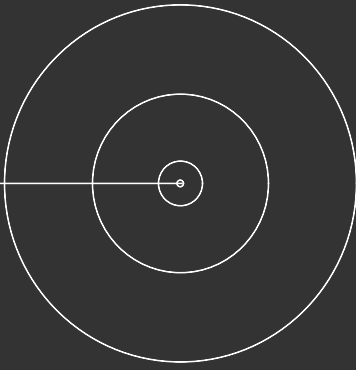
Model use and trip patterns

Minibus taxis and their drivers

The workshop participants from this study described an overreliance on the main public transport mode in their city, minibus taxis, which offer them improved levels of convenience when accessing economic opportunities. However, insecurities around safety cloud their experience and make it one that is largely unenjoyable. Minibus taxis are also not necessarily perceived as being more affordable than other modes—people reliant on them can be described as captive users, due to lack of cheaper alternatives. In fact, minibus taxis were repeatedly described as "too expensive" in workshops. Having said that, minibus taxis are still the more affordable mode in comparison to other modes like buses and trains.

We saw minibus taxis as the central talking point from which women describe their daily commuting experiences. This was mirrored in the modal usage patterns apparent in the survey data with 87% of women stating that minibus taxis were one of their regular modes of transport. The second highest was buses with only 49% of women citing it as a regular mode.

Women we spoke to are trapped in the dichotomy of having minibus taxis as their primary choice in transport mode, while maintaining that they wish it wasn't. When we looked at the survey data we saw that 55% women reported feeling "neutral" with regards to their satisfaction towards public transport as a whole. When we dove into the "why", one of the most cited reasons, at 41%, was related to the dissatisfaction of the type of service they used. As minibus taxis are the most used mode of transport by a significant margin, we took this to be indicative of what we heard in the workshops: minibus taxis are chosen because they are often the only option but they are also the reason for general unhappiness around using public transport.

Minibus taxis became an interesting theme for this research that had initially wanted to look comparatively at how women from different profiles experience public transport differently. Minibus taxis almost acted like an equaliser: they were the most used mode of transport, regardless of profile, and as a result the frustrations related to them were similar for each group. When it comes to minibus taxis, two dangers are ever present; the actual vehicle and the driver. Minibus taxis are described as not roadworthy and often unclean, and the majority of women in this study referenced regularly seeing accidents and injured commuters involving minibus taxis on their daily travels, "I also see accidents, people are injured."

At the helm of these unroadworthy minibus taxis is another threat to the women we spoke to in each profile, their drivers. Drivers are described most often as reckless, rude, aggressive, or violent. "Today I saw the taxi driver busy drinking beer when I was already in the taxi." Their speeding is often the cause of accidents, and their general disrespect for their passengers causes a great deal of frustration in women, "taxi drivers are bullies". When asked about potential solutions for frustrations around public transport, 29% of all participants reported that action against drivers—whether it be through policy or improvements in the behaviour and driving—would be a useful way forward.

Budget and affordability considerations
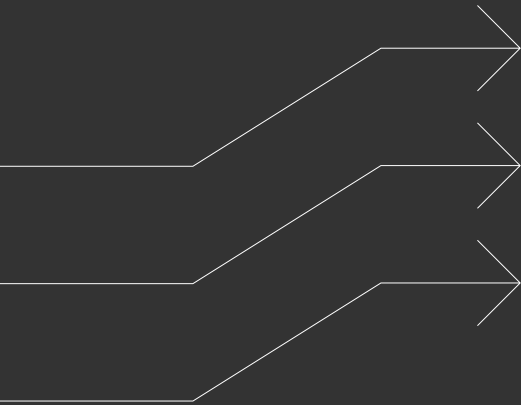
Money opens up options

No matter the profile of the women in the study, all of them reported minibus taxis as their primary mode of transportation—as mentioned earlier, the use of minibus taxis on a regular basis sits at 87% of women surveyed. This extreme reliance on one form of transport comes down to accessibility. When discussing minibus taxis in the workshops, women described that they were often the only option available as bus routes don't reach their homes.

However, when speaking to women of the working professional profile, who have slightly more financial freedom, we saw the introduction of more modes. On-demand vehicles[10] (particularly Uber and Bolt), and more expensive forms of formal transport (like the Gautrain) were referenced as options for women with higher earnings. Budget is still a major consideration, but we see time, safety, and comfort as being equally important in the decision-making process. With this said, the factor of accessibility is still apparent when it comes to on-demand vehicles. It was mentioned by higher-earning participants of workshops that on-demand vehicles are harder to come by in their peripheral or semi-urban neighbourhoods, so even if the preference and financial means are there, it is not always possible to rely on e-hailing.

On the more profitable corridors where demand for minibus taxis is high, competition between operators can lead to violence (including gun violence), compounding the challenge of accessibility and safety around public transport. One survey respondent related how she was once threatened at gunpoint by a driver of a minibus taxi, when she was trying to get into an Uber in Bosman (Pretoria central).

There was also discussion around how the cost of minibus taxis increases but women who do not earn formal salaries don't see this increase reflected in their income. As a result, the percentage of their monthly spending spent on public transportation becomes disproportionately inflated, with workshop respondents stating that "I am thinking about my transport budget, the minibus taxi prices always increase but the pay is never enough." Informal traders in particular have a problem with this because when they have inventory to sell with them, their ticket fare is often subjectively decided upon by the driver and there is little the trader can do. This point was emphasised again in the survey in relation to the reason for dissatisfaction with public transport, where 41% of women stated that they were unhappy with public transport because of the high cost related to their salary, "the daily cost of living is not balanced with my income."

[10] On-demand vehicles are defined in this report as distinct from route-based vehicles, which follow a fixed or semi-fixed path, and which have fixed origin and destination points. On-demand vehicles are synonymous with e-hailing taxi services like Uber or Bolt.
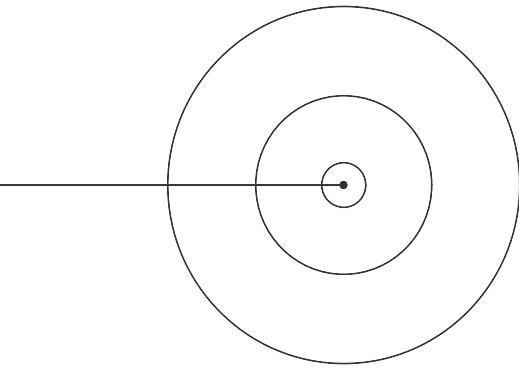
Desire for personal vehicles

A theme apparent in higher-earning profiles (working professionals and students), was the aspiration to own their own car, with one woman saying: "I see beautiful women who drive their own cars". When broached, the idea of owning their own cars was not simply down to a mark of status—it was seen as a solution to minimise the time spent walking to, and on, public transport, and the number of transfers needed to reach their final destination.

Nevertheless, of the survey respondents interviewed, 25% of women indicated being satisfied or extremely satisfied with public transport, as opposed to 21% of women being either dissatisfied or extremely dissatisfied with public transport. Public transport is therefore not necessarily always perceived as negative. As one woman survey respondent described it "I get to meet new characters every day. (…) passengers are always energetic and ready for anything." When asked what makes public transport fun, 58%

of women survey respondents cited the social aspect of meeting new people, listening to others' stories, and hearing jokes and music. We will see this idea of a social community come up again in a later section titled "ubuntu".

Personal vehicles were seen as one option to limit time spent on and around public transport, but other desires were cited, including being able to work from home or having a taxi that would pick them up from their doorstep, with one woman stating: "it is my dream to work from home." These aspirations are pinned on the dream of having more control over their movements, and limiting their exposure to risk. These aspirations of having more control were most apparent in the working professional group, while lower-earning profiles like informal traders simply noted that they wish the actual taxi would be safer.

Experience on public transport

Taxis and taxi drivers

The frustrations brought on by drivers affects the experience of public transport for all the women we spoke to, regardless of their profile. Some of the ways drivers affect that experience include:

• The driver's willingness to speed, "taxi drivers speed a lot putting lives in danger." A peculiar relationship exists between the fear of speeding, and the fact that it is the factor that allows them to arrive at their final destination on time. There is a tradeoff that happens for these women when they make the decision to get into a taxi; the fear of being late and risking financial loss supersedes the recklessness of the driver. Interestingly, it was working professional women who raised speeding and reckless driving the most of any group. This could be related to them having more buffer time should they need it than lower-earning groups.

• The use of vulgar language and shouting, "the language used by some taxi drivers is awful and they shout a lot". Women feel disrespected but helpless to stand up for themselves because they need to arrive at their destination safely. Although all women felt frustrated by what they considered to be bad attitudes from drivers, informal traders described being the victim of the driver's comments more often than the other groups.

• Financial frustration. Drivers and their conductors are particular about how they are paid, preferring smaller denominations to larger bills. Women need to ensure they have exact amounts or small notes to get their change back and avoid conflict with the driver, "the taxi driver wants to beat up the passenger for the change."

Local researchers in Gauteng explained this relationship with drivers as a behavioural pattern embedded within the phenomena of patriarchy. Drivers represent the patriarch in their vehicles, and all passengers are considered "beneath them". Unfortunately for women passengers, they sit particularly low down on the hierarchy, "I wish all drivers would be taught how to address people, especially women". Drivers are able to dictate what happens inside the vehicle, including stopping women from feeding their children or ordering people to sit in particular seats.

"When you speak, drivers do not listen."

Unfortunately, there is a sense of helplessness attached to the relationship with a driver. The risk of speaking up comes with physical threat and aggression, and police cannot be relied on: "I wish traffic cops always did

their jobs and avoided taking bribes from drivers who are driving taxis that are not road worthy".

During the workshops, drivers were cited as a pain point in the transport ecosystem by every profile of woman. However, when we look at the survey data around who perpetrates violence, crime or harassment other passengers are the most cited group. 47% of women reported that it was other passengers who had committed some act of harassment or crime against them, while only 24% of women said it was drivers.

Ubuntu

Another theme prevalent in Gauteng was one of community, or "ubuntu" as it is commonly referred to in South Africa. There is a trend of caregiving extending beyond the home with these women, as we see them openly discuss their sympathy for others using the informal public transport system or describe how they create support for fellow passengers. This section will explore the deep sense of ubuntu.

When women were asked to describe their overall commuting experience, the presence of people is prevalent. No matter their profile or movement patterns, all women in Gauteng describe how they interact with the people around them, whether that's through conversation, help or greeting: "when I leave home I greet my neighbours and when I'm inside the minibus taxi I say hello to people and I have general conversations." As mentioned earlier, this sense of community and socialising is something that brings some joy to the use of public transport, with 58% of women survey respondents explaining that the fun in public transport came from the social aspect of meeting new people, listening to others' stories, and hearing jokes and music.

This deep sense of ubuntu is seen in the way women describe their care and concern for their fellow, particularly vulnerable, passengers. Women raised a few times how children deserve more respect and care, and how they might even help a mother with a small child in the minibus taxi, "I interrupt their conversation and I tell him to talk to the child nicely." This sense of being a caregiver or custodian for children is something that stays with them throughout the day. The majority of women in the workshops talked about how their own children were on their mind when not with them, and that it was their duty to ensure the children were prepared and transported to school. In the Gauteng study, very few women mentioned a male co-parent and seemed to shoulder the responsibility alone.

The community also manifests itself as a strategy for dealing with particular issues. For example, a number of women we spoke to highlighted the existence of "community patrollers"—a group of residents who keep their spaces safe by monitoring activity in the neighbourhood. Women also discussed providing support and advice to each other in the minibus taxis as they travel, "I hear a woman discussing an abusive husband and I feel sorry for her so I give her advice on what to do."
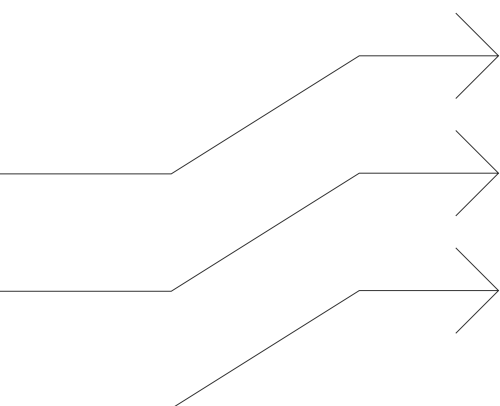
Violence and harassment

The threat of muggings

When the women in Gauteng were asked to discuss their thoughts around crime, mugging was top of mind for every profile. The only profile of woman that had another form of violence top of mind were the students who feared sexual harassment as much as theft. Muggings occur both on the way to their vehicle, as well as inside the vehicle itself: "my individual anxieties about taking a taxi is the possibility of getting mugged again inside the taxi." 55% of women in the survey explained that incidents of harassment took place at a transport station, while 45% reported having experienced an incident in a bus, train or taxi. Women describe themselves as remaining on higher alert until they reach their vehicle, and employ strategies like hiding precious items in their bras or walking in the middle of the street to avoid being attacked from a bush. It is

not uncommon for women to witness other attacks—"sometimes I hear people screaming for help"—but some do not intervene for fear of retaliation. This was seen in the survey data with the most common response to crime being "I looked away / I did nothing" at 38% of women. Interestingly, the likelihood of doing nothing as a strategy increased among younger women with 69% of 18-24 year olds citing this response.

Informal traders in particular highlighted the fear of having their goods stolen. This is because their livelihood is directly linked to their ability to sell items, and because they are physically overburdened, they become easy targets for thieves.

In the past year, have you experienced any of the following while using or waiting for public transport?

Legend: 18-24, 25-34, 35-44, 45-59

- People pushing each other while getting on or off public transport or while on public transport: 4, 10, 2, 1
- Theft of your personal belongings without you knowing: 3, 6, 3, 2
- A person touching someone without that person knowing on public transport: 2, 4, 2, 0
- Theft such as mugging: 2, 3, 3, 2
- Verbal sexual harassment including catcalling: 3, 2
- Inappropriate or uncomfortable stares: 8, 8, 3, 1
- Being hit: 1, 2, 1, 1
- None of the above: 2, 11, 4, 3
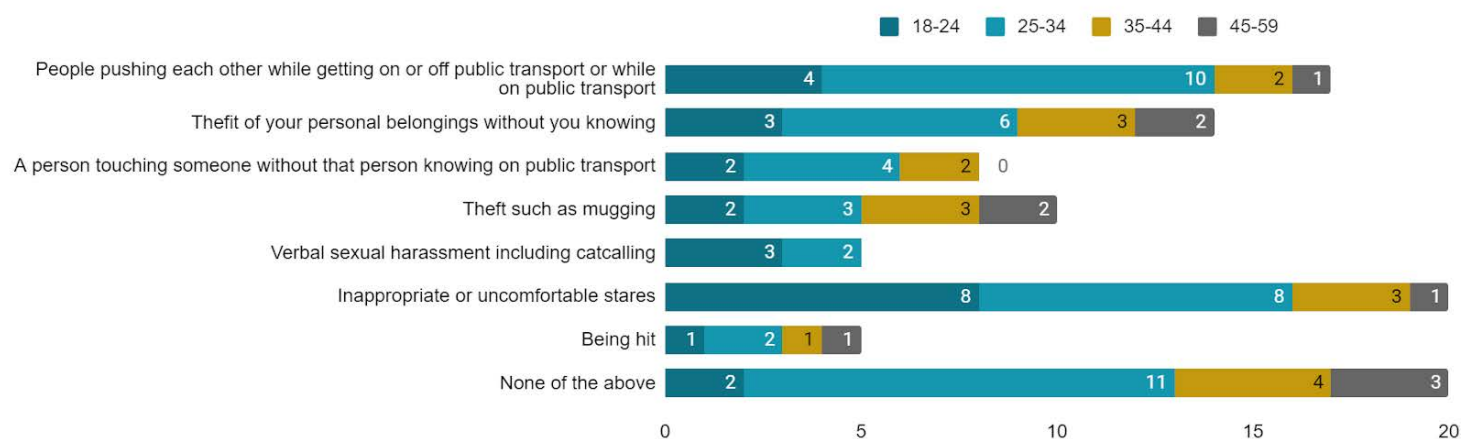
Note: includes only women survey respondents. Due to the small sample size, this graph does not claim to be representative of city-level trends.
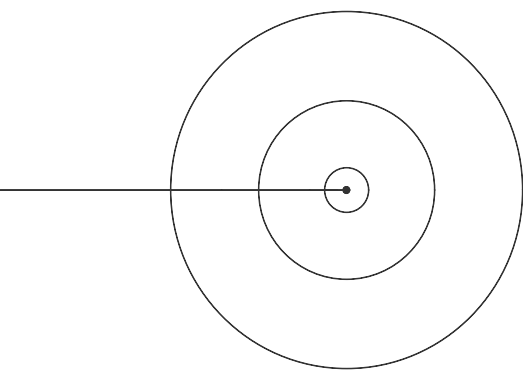
Sexual harassment and age

For the older profiles of women we spoke to during the workshops, sexual harassment and aggression was not as prevalent a concern as it was for women in the student profile. Younger women, particularly in the student profiles during the workshops, describe instances of verbal sexual assault by other commuters, as well as by the minibus taxi drivers themselves: "It dawned on me that the driver would know my address and pursue me more aggressively." We see this reflected in the survey data for certain sexually motivated forms of harassment. 57% of women in the youngest age group (18-24 years) reported being stared at inappropriately, while this number decreased to 32% in the next age group (25-34 years).

Again, when we look at explicitly verbal sexual harassment (like catcalling), 21% of the youngest age group (18-24 years) reported having experienced, when compared to only 8% in the next age group up (25-35 years).

Sexual harassment seemed to not only be limited to catcalling and touching, but expanded to derogatory comments around weight and appearance. Women with larger bodies experienced being humiliated by drivers in particular: "drivers tell me how being fat is taking others' space." It is not something they feel empowered to do anything about and perpetuates the sense of being bullied on a daily basis.

Pain points
touch points

Gauteng

🚶 Walking to and from public transport

🚕 During the journey

Persona	Muggings	Crowds	Costs	Sexual harassment	Aggressive drivers	Speeding	Other passengers	Police
Working professional	●	●	○	●	●	●	●	●
Student	●	○	●	●	○	○	○	●
Stay at home Mum	●	●	●	○	●	○	●	○
Informal trader	●	●	●	○	●	●	○	●
Expert	○	●	●	○	●	●	○	○

Problem description

Muggings: Muggings were considered the type of crime most feared by all women we spoke to. It is common place to have personal belongings stolen both on the way to your hub, and while on the vehicle itself.

Crowds: The overreliance of people using taxis means that there are often long queues, pushing and overcrowding. This can cause delays in their travels, as well as general discomfort.

Costs: There is often conflict between drivers and passengers when it comes to paying and receiving change. Passengers are expected to provide small enough denominations, and often miss out on change (something they cannot afford in their already vulnerable financial situations).

Sexual harassment: Women experience sexual harrassment from both drivers and other passengers. This fluctuates between being verbally assaulted, and being aggressively persued.

Aggressive drivers: Drivers are considered aggressive and disrespectful to all passengers, and women in particular. They are often referred to as "bullies" who use vulgar language.
Passengers are often at the mercy of drivers who can drop them off at an alternative stop, forcing them to have to reroute or walk longer distances.

Speeding: Speeding becomes a double-edged sword. It's one of the biggest fears as drivers of taxis are reckless. On the other hand, in an unreliable public transport ecosystem, it helps to ensure passengers get to work on time.

Other passengers: Women experience a lot of frustration for the people who share their space. Beyond being pushed to make space or alight, younger women in particular are disrespected.

Police: There is often conflict between drivers and passengers when it comes to paying and receiving change. Passengers are expected to provide small enough denominations, and often miss out on change (something they cannot afford in their already vulnerable financial situations).

Strategies employed

Muggings:
- Women described traveling with others for company, and as a way to not be a vulnerable target.
- They also described hiding particular valuables in their underwear.
- When walking to their station, they avoid smaller streets if alone and walk in the middle of the street to not be ambushed from the side.

Crowds:
- When taxis are unavailable they might defer to other transport modes like buses but then expect a longer journey with more walking.

Costs:
- Passengers described ensuring they had smaller denominations of notes or coins, or the exact amount.
- Passengers sometimes split the change between themselves.
- Women described sometimes asking the driver for their change but if the driver gets aggressive they accept the loss.

Sexual harassment:
- Women as part of the ridealongs were noted to move quickly during more dangerous areas or to slouch / hunch their bodies.

Aggressive drivers:
- Some more confident passengers may defend other passenger's who are being bullied.
- Women we spoke to often make it clear to the driver where they need to travel to when alighting

Speeding:
- Passengers do sometimes ask drivers to slow down.
- Some women mentioned that they often notice passengers praying for their safety on the taxi.

Other passengers:
- Accept the treatment to avoid conflict.

Police:
- Passengers described ensuring they had smaller denominations of notes or coins, or the exact amount.
- Passengers sometimes split the change between themselves.
- Women described sometimes asking the driver for their change but if the driver gets aggressive they accept the loss.

Student - Gauteng

Driver or taxi
Speeding becomes a double-edged sword, it's one of the biggest fears as drivers of taxis are reckless and passengers have to ask them to slow down. On the other hand, in an unreliable public transport ecosystem, it helps to ensure passengers get to work on time.

Woman passenger
Women experience sexual harassment from both drivers and other passengers. This fluctuates between being verbally assaulted, and being aggressively pursued.

Driver or stop
Passengers are often at the mercy of drivers who can drop them off at an alternative stop, forcing them to have to reroute or walk longer distances.

Informal trader (40 years+) - Gauteng

Driver
Drivers are considered aggressive and disrespectful to all passengers, and women in particular. They are often referred to as "bullies" who use vulgar language.

Any passenger or driver
There is often conflict between drivers and passengers when it comes to paying and receiving change. Passengers are expected to provide small enough denominations, and can sometimes miss out on change (something they cannot afford in their already vulnerable financial situations).

Woman passenger
Muggings were considered the type of crime most feared by all women we spoke to. It is common place to have personal belongings stolen both on the way to your hub, and while on the vehicle itself.

Student - Gauteng

What are her key goals and needs as she travels?	What does she struggle with most when she travels?	What modes of transport does she use predominantly?
1. Get to university safely.	Taxis are often the only options so even if I'm unhappy with it, I have to use it. I sometimes opt for Uber but they are scarce.	Minibus taxi
2. Get home in time to help and care for my family.	Safety is always top of mind, whether I am walking to the taxi or on board, I have to be vigilant.	Uber

Journey map

	Setting off Planning, walking, choosing	At the hub or station Alighting	On board Experience while traveling	Arriving Getting to the final destination	It would be better if...
Thinking What is she thinking about as she travels?	- I have a lot to do at university today, I need to make sure I get there on time. - I'm still not going to choose/try take any short cuts, at least my normal route is quite safe.	- I really hope there aren't too many people and I can get a comfy seat. - I will avoid that taxi because the driver is catcalling me and it's uncomfortable.	- Finally, I am settled and can focus on my work and catch up with some friends. - I feel so busy all the time, at least I have a moment now.	Luckily, my campus is a major stop for taxis so I don't need to walk far or feel unsafe.	There were more regulations of drivers and taxis to avoid reckless situations.
Doing What does she do? What information does she look for? What is her context?	- I have a rote of caregiver in my house so I do house chores like feeding the water before I can leave. I won't have time to do it before dark when university is finished. - I gather my things and say goodbye to my grandmother who I live with.	- I check the taxi inside and get in to settle down. - Now I can settle in and take out my phone.	- My mind is consumed with my school and home responsibilities so I often think about what needs to get done. - I will chat with friends on WhatsApp. - I check on my university emails to make sure I haven't missed anything.	I gather my stuff and jump out, finding myself right outside the campus where I feel comfortable.	Drivers treated me with respect, and weren't derogatory when they spoke to me.
Feeling What is she feeling?	🙂😟	🙂		🙂	I could walk without fear. I have so much to do in a day and limited daylight.
Needs and Pains What does she want to achieve or avoid?	- Taxis are my only option to get from home to university, I wish I had access to more modes. - I can't take out my phone while I walk because I could get mugged, I can't get lost.	- If there are too many people in the taxi I will be overcrowded and uncomfortable, but if there are too few people on it I get scared. - The drivers often speak loudly to us from both a sexual harassment perspective, and a respect one.	- Some taxis are not roadworthy but luckily this one is and I can relax a bit more. - I saw some taxi drivers trying to score high school girls and it makes me uncomfortable, they're so young.	Sometimes the drivers don't give me my change back but I'm too scared to fight with them about it so I lose out.	
Strategies What does she do to avoid the pains?	- I only use routes I know to ensure safety. - I walk on streets that are busy with other people so I doesn't make myself a target. - I travel with others sometimes so I am not alone.	I try not to draw attention to myself and ignore advances from men.	I will wait to be safe and settled before I can take my phone out.	I let my grandmother and friends know I have made it safely to campus.	
Tools What does she use?	Other people for protection.	I can now take my phone out for entertainment.	Phone and email.	WhatsApp groups.	

Transport expert (bus driver) - Gauteng

	What does she struggle with most when she travels?	What modes of transport does she use predominantly?
What are her key goals and needs as she travels?	Even though I work on buses, I have to use taxis to get to the bus depot because there are no immediate public transport options accessible close to my home.	Taxi
1. I have to balance being a single mother with long working days as a bus driver.		
2. I consider myself a custodian of my passengers.	I am responsible for people's time and safety. I know what it's like when something goes wrong with public transport and how that affects your whole day.	Bus

	Setting off — Planning, walking, choosing	At the hub or station — Alighting	On board — Experience while traveling	Arriving — Getting to the final destination	It would be better if...
Thinking — What is she thinking about as she travels?	I need to hurry to get my child ready, run the bus service from 6am when morning rush hour begins. I feel like I haven't spent enough time with my daughter; maybe I can make it home for dinner with her tonight.	I wonder what kind of passengers I will have today, I meet such interesting people. I hope my baby is ok with the child minder. I don't like being away from her for so long. I am really proud of my bus, it is always clean. I will make sure it's in good condition before my first passenger's arrive.	I need to focus on the drive so I can get these people to work on time and safely. I feel so lucky to have a job, it's hard these days to find work. These taxis on the road are so dangerous.	Time for me get back on the taxis, this day was exhausting. I am going to have a bath as soon as I get home. It's dark already, I hope my baby is still awake and I can spend some time with her.	My bus was in better condition and I didn't have to worry about any issues.
Doing — What does she do? What information does she look for? What is her context?	I wake up at 4am to get my child ready so I can go to work on time. I put on my uniform and prepare to leave.	I take a taxi to get to the bus depot. I start by doing an inspection of the bus. I need to make sure everything is in order.	I remain vigilant as I drive my routes. I have a schedule I need to try to stick to. I greet my passengers as they alight.	I am rushing home after my shift ends. I need to transfer and the trip home is longer than normal with the traffic.	COVID protocol was followed by all passengers.
Feeling — What is she feeling?	😠	😐	🙂	🙂	Taxis didn't drive recklessly on the roads.
Needs and Pains — What does she want to achieve or avoid?	In order to make the morning commute, I have very little time for my own life.	Sometimes the bus itself has technical issues, which adds a layer of stress to my day. I get anxious that I won't be able to help my passengers get to work. I work long hours and miss my child.	Sometimes my passengers are pick-pocketed by other passengers and the situation can cause me a great deal of stress. Sometimes I get scared of the taxi drivers who drive recklessly and don't like buses. My passengers don't always follow COVID regulations and quite a few won't wear masks.	The number of transfers and travel distance mean that I am away from home for even longer than I just my working hours. I am surrounded by strangers all day and lots of them don't care about getting sick, what if I get COVID?	I could spend more time with my baby.
Strategies — What does she do to avoid the pains?	I get up as early as possible to be able to help my daughter and spend some time with her.	By leaving early, I leave enough time to deal with issues that might pop up before the commute starts.	I do my best to focus on the positive. I think my situation could be worse and I do like my job.	I wear a mask and encourage fellow passengers to do the same.	
Tools — What does she use?	I will be away from the house for a really long time so I make sure I have a bag full of stuff: wipes, makeup, snacks and water.	I make use of child minding services to make sure my baby is safe and cared for while I work.	My bus is my main focus while I am on a shift, I don't make use of anything else because I know my routes.	My mask.	

6. Lagos findings

Modal use and trip patterns

Children and public transport

While 90% of women reported travelling alone, another 14% said they also usually travel with their children on public transport. The link between public transport and children's schooling came up frequently during the workshops. One major concern is the long waiting times for school buses or the lack of public transport options that results in children not attending school. Having safe transport options to send their children to school is also a barrier. One mother explained that she has spent time building a close relationship with a keke driver to ensure that her child will be safe getting to school with this specific driver. Trust with the driver can play an important role in deciding on a transport option for your child. Similarly, motorbikes were seen as an unsafe mode to send children to school on: "women would not put their kids in front of a bike man because of the fear of the rider mishandling their kids and sexual harassment, especially since the child is sitting in front of him, there is room for that and we would rather avoid that".

Bringing children on board can also be challenging for two reasons. Firstly, a mother will be unable to breastfeed her child on public transport because they worry that "people will watch or tell them to cover up if they pop their boob out". Secondly, bringing a child with them will result in a fare increase: as "you have to buy tickets for self, children and goods". Anything that takes up extra space is paid for.

Care-giving

Related to the topic of children is the question of care-giving and its place in trip-chaining. Compared to the working professionals that attended the workshop—who tend to live closer to work, have a shorter commute, can afford to hire a nanny and ride-hail stay-at-home mothers rely heavily on public transport to travel to and from home, bringing lunch to their husband, going out for shopping, and coming back home to care for their children. This contrasts with the profile of informal traders or street food vendors in the workshops who tended to be more independent, focused on their selling activities, and nonchalant about men and marriage. Interestingly, one stay-at-home mum also shared that while her husband owned a car, and while she had a higher number of transport trips in a day, she would still move around mainly by public transport.

Survey findings further indicated that over half of the women respondents (51%) travelled daily for school runs and child-care related activities. Of the seven reasons women respondents were presented with on the survey—work, childcare and school runs, groceries, family, healthcare, religious activities, entertainment—childcare and school runs came up as the second most cited reason for travelling daily, after work.

Ride-hailing versus public transport: experiencing comfort before safety

While 75% of female respondents indicated that they relied on danfos as one of their main regular modes of public transport, 39% also said that ride-hailing apps (such as Bolt or Uber) constituted their main mode of transportation.

Working professionals in particular indicated during focus-group discussions that e-hailing was the preferred mode for getting around when they are in a rush, when they want to work or take meetings remotely while commuting, or when they want a more relaxing experience (with air-conditioning). Owning a car to reduce the stress of public transport was also an aspiration voiced by the majority of working professionals during the focus-group discussions, as opposed to danfos, which was seen as the fall-back or last-resort option for one of the working professionals.

If comfort and efficiency emerged as the main motivating factors for using e-hailing to get around, taxis and ride-hailing apps were not necessarily synonymous with more safety than on public transport. One working professional woman described that she would sit up front with the taxi driver when travelling after dark to ensure that he was taking the correct directions. Doing a "quick scan through the back of the car" to ensure they are safe is also a common procedure: "Recently, there was news flying around that drivers would remove the door handle in the car so passengers can't get out easily. So women would check that as well." They also would avoid private cars that are sometimes run as public transport because there have been many incidents of robbery in those vehicles." Moreover, the recent murder of a young woman on Lagos's BRT and the unverified account of

ride-hailing app drivers has prompted fears that even the transport modes traditionally considered as the safer options are becoming dangerous. Some students in the workshop explained they were now more cautious about using the BRT due to this incident.

When thinking about safety considerations for women on public transport, it is therefore important to question which transport modes these pertain to as the experience differs significantly across them. Interestingly, the survey results indicated that on the street, or walking to a public transport stop, were the two instances were an incident was most likely to happen to them (74%), contrasting with the 59% who indicated that it could also take place on public transport, in a BRT, ferry, or danfo.
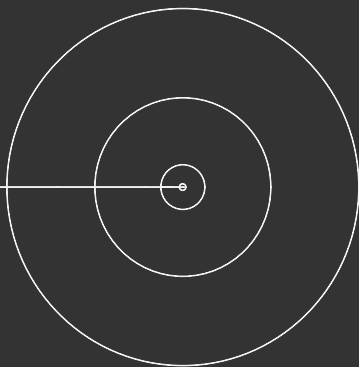
Experience on public transport

The general sentiment with public transport in Lagos is one of dissatisfaction. Of all the women interviewed in the survey, 52% indicated being dissatisfied or extremely dissatisfied with public transport, while only 3% expressed satisfaction. The main reason given for being dissatisfied was the high cost of public transport (78%), followed closely by nearby public transport options not existing (51%).

This was corroborated by the discussions during workshops, where tiredness time and again came up as the main theme for women of all ages. This fatigue was summarised as being caused by the stress of travel (traffic congestion, heat, waiting for a vehicle to be fully loaded with passengers before departing), the stress of a dangerous situation arising (being on constant alert, anticipating escape strategies), and the stress of caregiving (thinking of their children and other family time-consuming tasks).

When asked "what makes public transport fun", gistin (chatting to socialise) was cited by 23% of women as one source of enjoyment. However, 16% of women respondents also simply responded that "public transport is not fun".

Violence and harassment

Reactions to violence and harassment: from indifference, discomfort to feeling unsafe

When asked 'what could be done to improve your public transport experience?', "cost reductions" came up as the most frequently cited answer (34%), followed by "improved infrastructure (better roads, better vehicles)" (30%) and "more safety" (29"%).

These survey answers contrasted with the prevailing sentiment in the workshops, where the question of safety was more prevalent than the question of costs. We hypothesise that women-only workshops or focus-group discussions play an important role in creating a safe and trustworthy environment where participants feel more comfortable and open to share their true sentiments and stories of public transport violence/harassment, in a way that survey questionnaires

may not. When collecting gender-sensitive data, surveys may not always be the most effective method for building an evidence base that is reflective of the ground truth. For example, as one of the local researchers noted, considering how frequent catcalling is in the streets of Lagos, it was surprising to read in the survey responses that only 22% of verbal sexual harassment was reported by the women respondents. One hypothesis for this low figure could be that women have adopted coping mechanisms where being catcalled is such a common occurrence that it is not seen as necessary to report it. In fact, out of the 91 women who had witnessed or experienced an incident on public transport, only 10% went on to express a complaint to the driver and only 1 woman went to the police.

Authority bodies like the NURTW (National Union of Road Transport Workers) are "seen as menace" and the police are seen "as not doing anything about it", which may also explain why reporting is not more common.

Additionally, it was interesting to note during the various workshop sessions that different types of women adopted different attitudes towards the concept of safety. For example, it was less of a concern for working professionals who could avoid unsafe situations by switching to private cars/ride-hailing and for one informal trader who was more preoccupied with meeting their sales targets of the day.

In the past year, have you experienced any of the following while using or waiting for public transport?
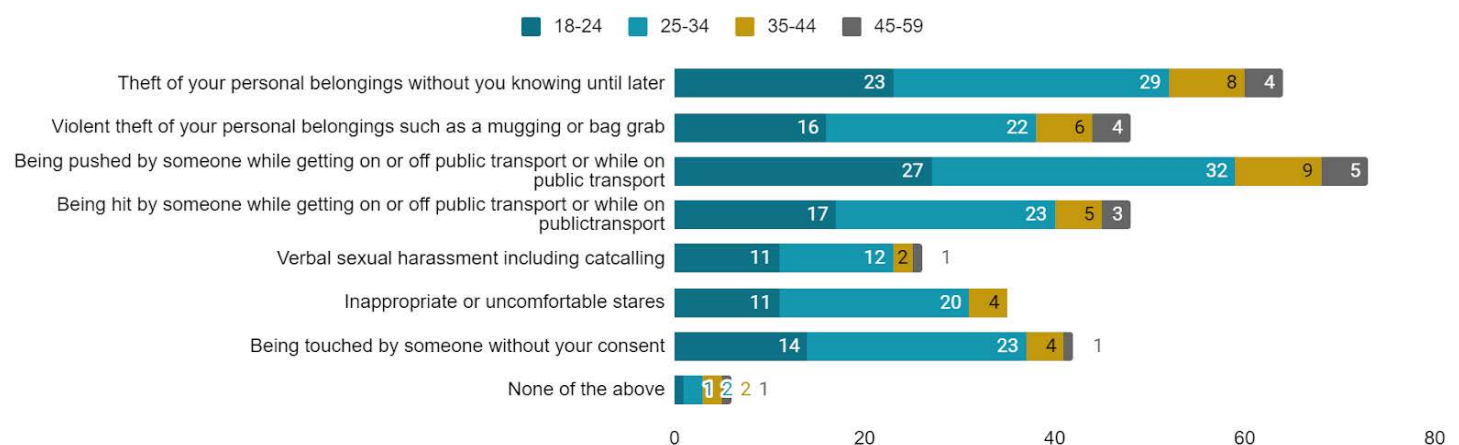
Note: includes only women survey respondents. Due to the small sample size, this graph does not claim to be representative of city-level trends.

Young women

On the other hand, for young women, safety is more of a concern and public transport can be a particularly difficult experience. During the focus-group discussions, students mentioned that they don't feel respected, and that "because they are younger and maybe smaller, bus drivers speak to them rudely and give them bad seats where they are squashed". Moreover, students expressed concerns with verbal sexual harassment, and catcalling especially. This stood out in contrast to older women, who were less vocal about having experienced verbal or physical harassment. In fact, survey findings showed that women aged 18-34 represented 85% of women having experienced verbal sexual harassment like catcalling, as opposed to 15% for women aged 35-59.

Young women will also hesitate about taking their phone out, for fear of mugging or theft. Drivers were also cited as a source of worry, with anecdotes being shared on drivers getting into fights with passengers or being under the influence of alcohol while driving.

Coping strategies and suggested solutions

Profile is not a determinant of how a woman will react and we saw different women across the spectrum employ different strategies to fend off potential threats or to deal with violent situations. We heard during the workshops:

- From one informal trader, when she was being followed and at risk of pickpocketing, she turned to the man following her and said "would you steal from your mother?".

- Another informal trader related a time when a man grabbed her shirt and tried to strangle her: she did not speak back but instead let other passengers speak up on her behalf.

- One transport ticketer woman explained that she avoids wearing her uniform because she is nervous that it will draw attention to the fact that she is carrying money, and fears that she will get harassed or robbed. She chooses to wear casual clothes instead to and from work.

- Several women of different ages and occupation groups shared that they always look inside the vehicle before getting on to ascertain that it is not just men in the vehicle, or that the vehicle is not empty.

When asked what solutions they would like to see implemented, more regulations was a recurring answer among women of all ages and backgrounds. Specifically, they voiced a need for stronger policies to regulate drivers and touts, and better regulation of fares and schedules.

Pain points touch points

Lagos

Personas (rows):
- Working professional
- Student
- Stay at home Mum
- Informal trader
- Expert

🚶 Walking to and from public transport

	Drop off away from usual place	Safety	Strategies to keep safe	School children do not have access to buses	Information	Theft
Problem description	When there is traffic, the buses often drop off the passengers before they get to their bus stop, whenever this happens it always causes an additional inconveniences and stress especially when she's with load or luggage.	She uses a cross bag and always carries it in front of her.		Meeting point on Lagos island and children hang out there and do not go to school because they are waiting for buses' school buses are needed	Information on bus visually and sound to announce bus stops. Regulated bus times so that they can plan their day better.	A woman shared that when she felt someone was following her and going to pickpocket her, she turned to him and said "would you steal from your mother?"
Strategies employed		She is composed and confident. Hangs her back on her shoulder but keep it close to her side. She feels very safe within her neighbourhood at anytime of the day. Yes, she does use her phone for calls and messaging freely within her neighbourhood. However, when she's outside she's more careful and refrains from using her phone.	Know the community and surrounding, where to go and not to go, who to interact with. For some, the ability to live in an estate is cited as a way to stay safe.			

🚉 During the journey

	Payment	Choosing a driver	Alighting safely
Problem description	Ensuring that they get their change back.	She is not comfortable on okada because the riders are often reckless. So she feels safer and more secure in keke.	To ensure she isn't injured when alighting
Strategies employed	She often keeps the correct fare for every trip to avoid or eliminate the risk/ possibility of having to forget to collect her change.	If she must use the bike, she makes sure to assess the rider very well.	Before boarding or getting off the vehicle, she allows it to stop properly.

Student - Lagos

Reckless driving
She is not comfortable on okada because the riders are often reckless. She feels safer and more secure in a keke.

If she must use the bike, she makes sure to assess the rider very well.

Safety assessment of the bus, driver and other passengers
Before boarding, she quickly scans the bus to be sure it is safe and secure. She does a quick assessment of the driver and his conductor (bus assistant) to have an idea of the kind of person they are. She also tries to assess the other passengers. She checks the seat to be sure they are safe.

Lack of information on bus timing and routes
Information on bus visually and sound to announce bus stops Regulated bus times so that they can plan their day better.

Road infrastructure
Some participants try to avoid certain routes because of their health and so try to avoid roads in poor conditions, such as dusty roads.

Stay at home mum - Lagos

Alighting before the designated spot
When there is traffic, the buses often drop off the passengers before they get to their bus-stop, whenever this happens it always causes additional inconveniences and stress, especially when she's carrying heavy loads or luggage.
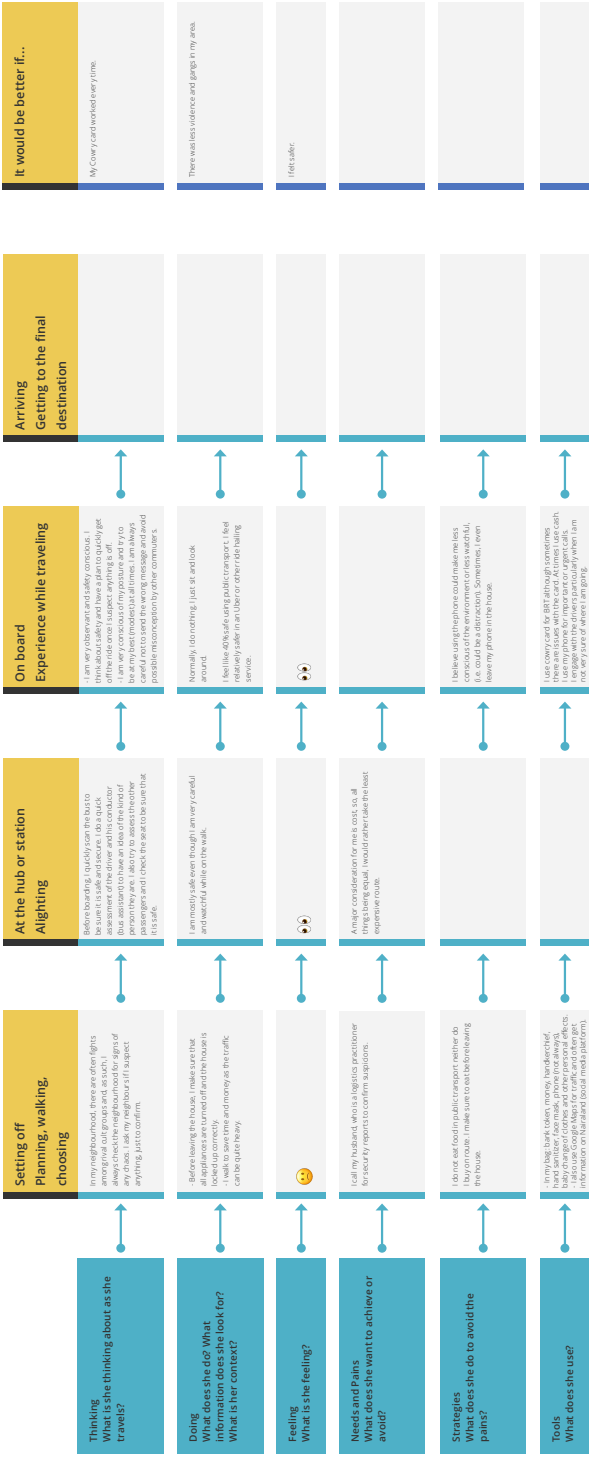
General safety
Knowing ones area was listed as a way to stay safe, as is knowing the 'boys' in the area.

Safety while walking
Know the community and surrounding, where to go and not to go, who to interact with.

Safety and phone usage
She does use her phone for calls and messaging freely within her neighbourhood. However, when she's outside she's more careful and refrains from using her phone.

Informal trader - Lagos

	What are her key goals and needs as she travels?	What does she struggle with most when she travels?	What modes of transport does she use predominantly?
	I go to other markets depending on what I want to buy. I go to the market weekly. For example, every Monday, I go as far as Badagry from Ikeja to buy my wares.	When there is traffic, the buses often drop off the passengers before they get to their bus-stop. Whenever this happens, it always causes an additional inconveniences and stress, carrying a load or luggage.	Danfos. Only use ride hailing to get to church or when she is overloaded. Ferry on a Monday to go to Badagry.
	2. Get home in time to help and care for my family.	I use a cross-bag and always carry it in front of me.	Keke

Journey map

	Setting off — Planning, walking, choosing	At the hub or station — Alighting	On board — Experience while traveling	Arriving — Getting to the final destination	It would be better if...
Thinking — What is she thinking about as she travels?	In my neighbourhood, there are often fights among rival cult groups and as such, I always check the neighbourhood for signs of any chaos. I ask my neighbours if I suspect anything, just to confirm.	I do not engage with people in public transport. I strictly mind my own business but I am not unapproachable.	When going to work in the morning, I think about the tasks ahead of me for the day, but when returning in the evening, I think about getting vehicles on time.	I hope that the driver will stop at the designated stop.	There was information on bus visually and sound to announce bus stops. Regulated bus times so that I can plan my day better.
Doing — What does she do? What information does she look for? What is her context?	- Before leaving the house, I make sure that all appliances are turned off and the house is locked up correctly. - I walk to save time and money as the traffic can be quite heavy.	- I buy when I see what I like. - I only buy fruit, not food or snacks. - I buy things I need on route (e.g. foods, drinks, or even soap, if it is Friday for weekend laundry).	I like to sit at the window side.	Before boarding or getting off the vehicle, I make sure it has stopped properly.	*NURTW (National union of road transport workers) They are a lot of a menace, but they should not be banned. They need jobs, they need to be regulated.*
Feeling — What is she feeling?	I feel safe walking.	I feel safe. I have a strong belief I am safe even though I am aware and conscious of the security issues in the city.	I do not like to be touched so I adjust my position often to avoid it.		Bathrooms at stop would be a great help.
Needs and Pains — What does she want to achieve or avoid?	I prepare for everyday: the night before, i.e. I take our everything I need so that I am ready. All I do in the morning is dress, pick up my bag and leave for work. Moreover, all my children are grown ups so I leave the house in their care.	Bathrooms.	I don't always feel comfortable in the buses. There are a lot of inconveniences but I make do.		Drivers stopped at designated places so that I can safely alight and not walk further than I have to with my goods.
Strategies — What does she do to avoid the pains?	When I go to the markets, I dress smart in casual trousers with tops (ready to face the hustle and bustle of the market. Generally, I wear anything modest and comfortable for me.		While traveling, I look around, I do not use my phone for entertainment purposes.	I do not really check. I just goes out since it is a normal route and routine for me and it is something I have to do regardless.	
Tools — What does she use?	No, I don't. This is because it is only one single route from home to work and back, and I love to travel this route regardless what might be happening on the route.		I do not update others with my trips, but my family is always aware of my whereabouts and I stay within my daily routine, i.e. from home to work and back.		

Stay at home mum - Lagos

What does she struggle with most when she travels?

What modes of transport does she use predominantly?

What are her key goals and needs as she travels?

1. Traveling to markets for the goods I need for myself and my family. The cheaper markets are further away.

2. School runs.

3. Family visits.

4. Church.

I wear smart, comfortable, casual outfits like jean trousers, leggings, etc., when I am going to the market in public transport. However, I avoid wearing flowing or too loose clothings or skirts that could obstruct my movements.

BRT

2. Get home in time to help and care for my family.

Safety is always top of mind, whether I am walking to the taxi or on board, I have to be vigilant.

Uber

|	Setting off — Planning, walking, choosing	At the hub or station — Alighting	On board — Experience while traveling	Arriving — Getting to the final destination	It would be better if...
Thinking — What is she thinking about as she travels?	In my neighbourhood, there are often fights amongst rival cult groups and, as such, I always check the neighbourhood for signs of any chaos. I ask my neighbour's if I suspect anything, just to confirm.	Before boarding, I quickly scan the bus to be sure it is safe and secure. I do a quick assessment of the driver and his conductor (bus assistant) to have an idea of the kind of person they are. I also try to assess the other passengers and I check the seat to be sure that it is safe.	- I am very observant and safety conscious. I think about safety and have a plan to quickly get off the ride once I suspect anything is off. - I am very conscious of my posture and I try to be at my best (modest) at all times. I am always careful not to send the wrong message and avoid possible misconception by other commuters.		My Cowry card worked every time.
Doing — What does she do? What information does she look for? What is her context?	- Before leaving the house, I make sure that all appliances are turned off and the house is locked up correctly. - I walk to save time and money as the traffic can be quite heavy.	I am mostly safe even though I am very careful and watchful while on the walk.	Normally, I do nothing, I just sit and look around.		There was less violence and gangs in my area.
Feeling — What is the feeling?	🙂	😐	😟		I felt safer.
Needs and Pains — What does she want to achieve or avoid?	I call my husband, who is a logistics practitioner for security reports to confirm suspicions.	A major consideration for me is cost, so, all things being equal, I would rather take the least expensive route.	I feel like 40% safe using public transport. I feel relatively safer in an Uber or other ride hailing service.		
Strategies — What does she do to avoid the pains?	I do not eat food in public transport neither do I buy on route. I make sure to eat before leaving the house.		I believe using the phone could make me less conscious of the environment or less watchful, (i.e. could be a distraction). Sometimes, I even leave my phone in the house.		
Tools — What does she use?	In my bag: bank token, money, handkerchief, hand sanitizer, face mask, phone (not always), badly charged clothes, and other personal effects. I also use Google Maps for traffic and often get information on Nairaland (social media platform).		I use cowry card for BRT although sometimes there are issues with the card. At times I use cash. I use my phone for important or urgent calls. I engage with the drivers particularly when I am not very sure of where I am going.		

7. Nairobi findings

Model use and trip patterns

Decision making

When researching, we hypothesise that there are five factors that are balanced as passengers make choices about which mode to take: cost, time, safety, comfort, and access. In Nairobi, the relationship between comfort and time came up as a frequent topic of discussion for the workshop participants across different user groups. For the higher-income groups such as the student, working professional, and stay-at-home mum, comfort during travel is of higher importance than time, whereas for women in the lower-income groups the feeling of being time poor meant leaving earlier and sleeping on public transport.

One of the most important factors for mothers taking part in the workshops when deciding on which mode of transport to use, was whether it was fit for their child. This includes criteria such as vehicle safety, and getting home as quickly as possible when a child is tired.
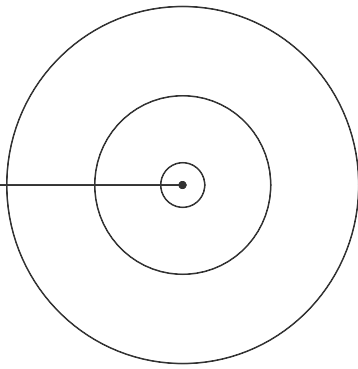
Children and public transport

In Nairobi, as in other cities, women tend to travel with others in mind. For most women, their thoughts will go first to their children, but they are also thinking of extended family, classmates, coworkers, and customers. Participants often exhibited anxiety when it comes to how their travel decisions might impact others, for example by causing delays to their caregiving or breadwinning activities.

In regards to children, working professional women, on a lower-income level, mentioned they would be willing to spend slightly more on a newer, more efficient matatus, to avoid waiting in the designated area of the older matatus and to therefore save on time. Ubers would also sometimes be used when their child is ill, overly tired in the evening, or to go to church on Sundays. They will also accept being less comfortable to ensure that the children are less impacted by negative aspects of travel, especially if the child is tired, unsafe, or if they might have to travel late.

Budget and affordability considerations

Several women participants mentioned being yelled at by touts or drivers when wanting to pay with M-pesa, an electronic method of payment used across Kenya, but also a commonly rejected method by matatu drivers.[11] Cash is in fact often preferred by matatu drivers for the following reasons:

• Cash allows drivers and touts to short change the matatu owners, and increase their revenue for the day. This is not possible with M-Pesa as the payment is linked to the owner's phone, and payment history can then be tracked by the matatu owner.

• Drivers and touts rely on cash to pay fees (bribes) to police and city officials, to be able to continue operating without issues.

Therefore, most passengers will ensure that they leave the house with the exact amount that is required to pay a trip fare, as one professional woman interviewed during the workshop explained.

In some instances, however, M-Pesa and other digital payment methods are perceived by women as a way to avoid confrontation with drivers around fare disputes and to avoid unsafe situations.

Experience on public transport

Working professionals interviewed during the workshops explained that they can afford the higher costs to ensure that they are more comfortable. They also cited the social stigma that comes with riding matatus that blare music or are older vehicles. Lower-income earning participants (informal traders and students) prioritise the

faster vehicles run by the drivers who know the city well, whereas higher-income earning participants spoke about the importance of comfort. One hypothesis brought forward to explain this is that lower-income groups must leave their homes much earlier in the morning to commute longer distances to their workplaces, and leave much later in the evening to benefit from the lower, off-peak fares. In other words, being time-poor or money-rich is an important variable in the transport mode decision-making process of different income groups. Informal traders also explained that the markets they work at tend to be served by cheaper, but old and run-down, matatus (broken seats, unclean, windows not closing, noisy…), which are therefore preferred to the newer, more expensive matatus (that may also not exist on these routes).

[11] Kimani, Michael, How Nairobi's Matatus Defied the Will of Kenya's Cashless Policy Makers, Link
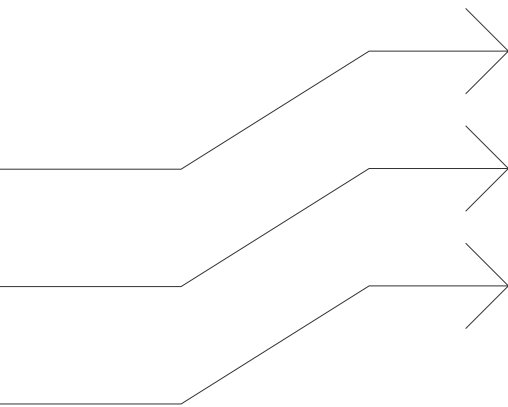
Touts

Touts assist the driver with loading and unloading passengers, collecting fares, and managing the passenger and drivers needs and requests. Participants characterised touts as rude and aggressive, however, they are also the first person a woman would ask for assistance if she felt in danger on a matatu.

Participants felt that the female touts were more aggressive than male, however, female drivers and touts speak about how cruel and unkind female passengers are.

Surveys indicate that 6% of respondents felt that having more courteous touts would bring an improvement to the public transport experience. However, creating better transport infrastructure was cited as more important, with 28% of respondents wishing for wider roads, less traffic, CCTV cameras inside matatus, and more accessible bus stops.

Tout as a job

We focused one of our workshops on the experience of women who work in transport, and most of the participants were touts who spoke openly of the challenges they face. The women in the workshops explained that it was more frequent for a woman to start a job in the transport sector as a tout rather than as a driver, and that it was difficult to progress from the former to the latter for the following reasons:

· A female tout cannot stay with a male driver for more than three months as he will begin asking for sexual favours in exchange for retaining the female tout's position on the vehicle.

· Male touts are given driving lessons and the opportunity to progress whereas female touts are not and do not have access to drivers who might help them progress.

· If a better position does become available, nepotism was cited as the reason that female touts will not progress, despite having years of experience and expertise.

Female touts stated that they have to be aggressive when working as backing down would impact their reputation.

Violence and harassment

When discussing concerns about safety, workshop participants more often raised the threat of theft over sexual harassment and violence. This contrasted with women's survey responses on the question around incidents experienced on public transport, where the most frequently cited incidents were "Being pushed by someone while getting on or off public transport or while on public transport" (73%) or "Inappropriate or uncomfortable stares" (63%).
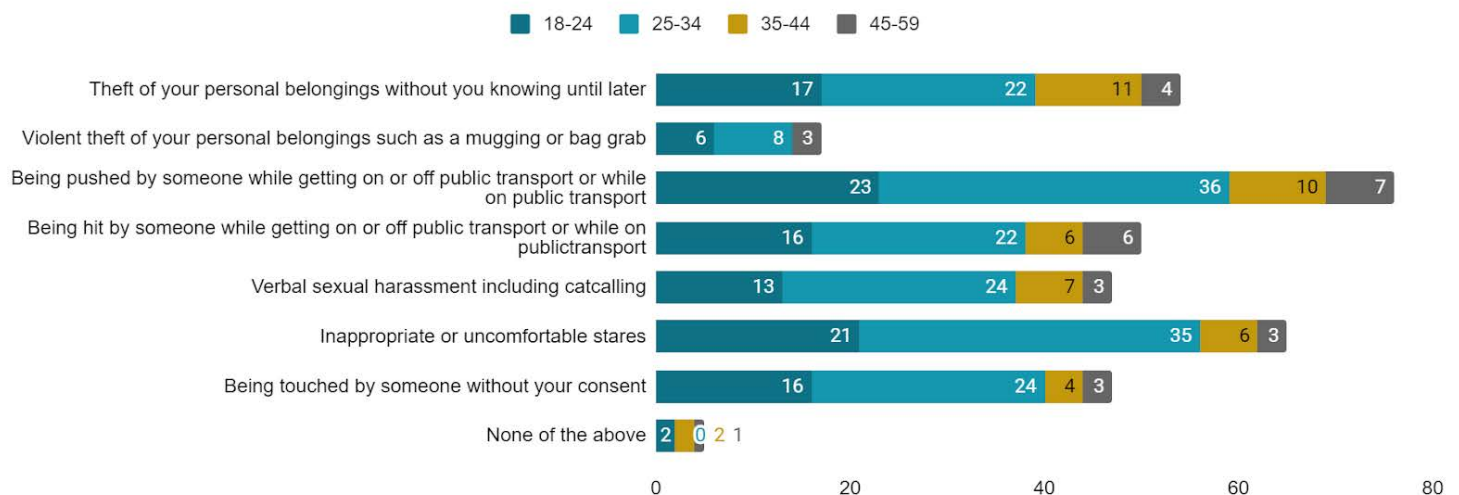
Although women spoke of feeling safe, concerns and fears of sexual harassment and violence were raised, with some women sharing stories about the strategies they use to keep themselves and their possessions safe. One woman gave the example of wearing a large jacket (even on hot summer days) to move around the city "unseen" and draw less attention to her body. Other women mentioned they would walk quickly through the city and perceived dangerous areas.

Younger women spoke about incidents of sexual harassment more often than older women, whereas the likelihood of theft seemed more prevalent for older women, and this was also reflected in the survey data with 14% of women aged 18-34 having experienced unconsensual physical touching on public transport, as opposed to 9% and 10% respectively for the 35-44 and 45-59 year old groups. When younger women spoke about sexual harassment, they cited their bodies as the reason: smaller bodies are seen as unable to fight back, curvaceous bodies as drawing unwanted attention.
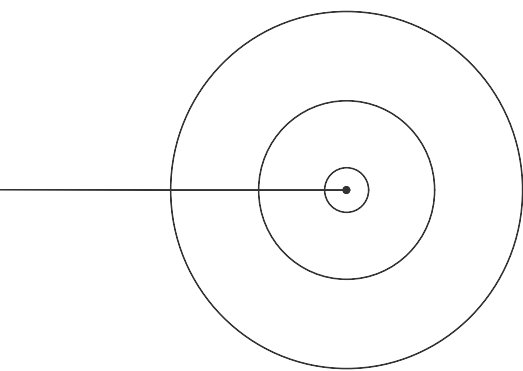
In the past year, have you experienced any of the following while using or waiting for public transport?

Legend: 18-24 | 25-34 | 35-44 | 45-59

Category	18-24	25-34	35-44	45-59
Theft of your personal belongings without you knowing until later	17	22	11	4
Violent theft of your personal belongings such as a mugging or bag grab	6	8		3
Being pushed by someone while getting on or off public transport or while on public transport	23	36	10	7
Being hit by someone while getting on or off public transport or while on public transport	16	22	6	6
Verbal sexual harassment including catcalling	13	24	7	3
Inappropriate or uncomfortable stares	21	35	6	3
Being touched by someone without your consent	16	24	4	3
None of the above	2	0	2	1

Note: includes only women survey respondents. Due to the small sample size, this graph does not claim to be representative of city-level trends.
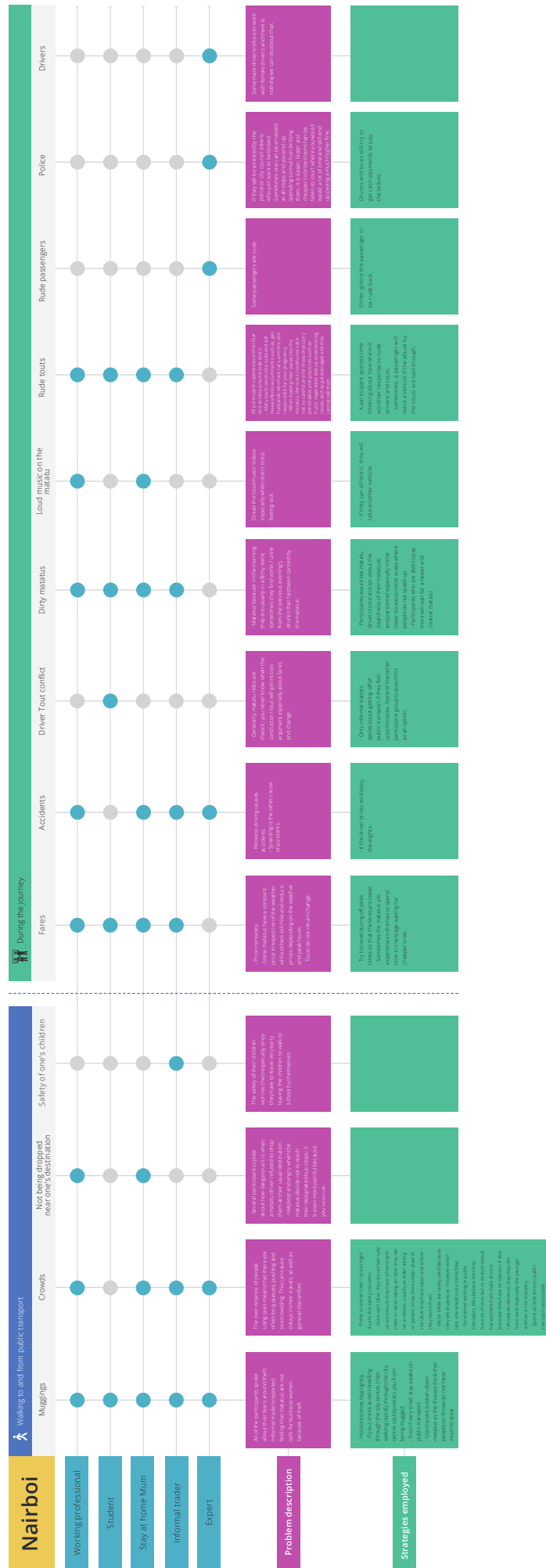
In comparison to other cities, participants explained that they would travel alone to ensure that they can move faster through the city. In the surveys, this preventive and risk-aversive behaviour came through in the answers from the question around how women react to an incident they may have experienced: "I looked away" was the most common answer given by respondents (63%), followed by "I walked faster" (47%). Anecdotally, during one of the ride-alongs conducted in Nairobi for this study, one of the researchers struggled to keep up with the participant they were interviewing and eventually lost sight of her, as the participant power-walked to catch her matatu.

Safety strategies / The threat of mugging

Participants raised several strategies for ensuring one's safety. Strategies such as holding the bag as well as wearing it across your body to ensure that if the bag is not cut and snatched, you can hopefully hold onto it. Another is to rely on touts by choosing vehicles managed by older touts who it seems are less tolerant of bad behaviour or by sitting next to a tout for protection as "no one will attack you there". There is a trust scale that most participants adhere to: the most trustworthy are the police stationed at the stops, second on the list are the touts on buses and the touts on matatus as the least trustworthy.

Pain points
touch points

Nairboi

Working professional
Student
Stay at home Mum
Informal trader
Expert

Problem description

Strategies employed

Walking to and from public transport

Muggings | Crowds | Not being dropped near one's destination | Safety of one's children

During the journey

Fares | Accidents | Driver Tout conflict | Dirty matatus | Loud music on the matatu | Rude touts | Rude passengers | Police | Drivers

Stay at home mum -Nairobi

Fare increases
Fares are not fixed and will increase during peak hours. If the weather is bad, like when there is flooding or when it gets too hot to walk, it means that access to opportunities or to care responsibilities (hospital visits) becomes unaffordable.

Woman passenger
Women consistently speak of theft and mugging. They adjust their behaviour in the hopes that it will deter would be thieves such as holding onto personal belongings tightly, taking old matatus which they hope thieves do not frequent and walking as fast as possible through the city.

Driver / stop
Drivers can refuse to drop passengers at their stop forcing them to walk or take private taxis.

Informal trader (25-40 years old) - Nairobi

Driver vs touts
Drivers and touts have argued over fares and this usually creates a frightening atmosphere for the passengers.

Matatus
There are several concerns related to the vehicles.
- Older matatus are not safe and road worthy
- Some matatus are dirty, especially early in the morning. There are reports of the smell of vomit and urine in matatus.
- Loud music is often played in matatus

Touts
Touts are seen as rude and helpful. They withhold change and insult passengers. On the other hand, female touts report being treated badly by passengers and having to be sharp and unfriendly to protect themselves.

Working professional - Nairobi

What are her key goals and needs as she travels?	What does she struggle with most when she travels?	What modes of transport does she use predominantly?
1. Get to work on time.	Discomfort of old or dirty vehicles.	Matatu
2. Physical and mental health preservation.	Rude drivers and touts.	Train (because it does not experience traffic and it's cheaper). Swvl (offers door to door services, it is classy, keeps on time, plays soft music, is cheaper, reliable, and can be booked at your convenience). Uber/ Bolt (for privacy, uses only when financially liquid). Motorbike (it is convenient and fast). Hire a friend's car (for convenience especially when travelling).

Journey map

	Setting off — Planning, walking, choosing	At the hub or station — Alighting	On board — Experience while traveling	Arriving — Getting to the final destination	It would be better if...
Thinking — What is she thinking about as she travels?	It's important to get to work on time.	- I wonder if everything will run smoothly today, last time there was an accident. - I wish the drivers took M-pesa. - I think I should save up to buy my own car.	- Those cars are beautiful, I would love one. - I really need to finish that report today for my boss. - I could change to a bus and get closer to the office but these matatus are just much more frequent.	- The driver dropped me off too far away because he felt like it - now I have to walk further. - Those matatus were uncomfortable and loud. - Next time I will take a Bolt.	Regulated matatu conditions.
Doing — What does she do? What information does she look for? What is her context?	- I leave at about 7am. - I wear my office clothes. - I collect change for the drivers.	- I get a matatu right outside my house, didn't have to walk much. - I prepare my change exactly so I don't have to argue with the driver. - I'm not too scared and I travel alone.	- I change matatus to avoid too much traffic. - I listen to podcasts and catch up on social media. - I work on my report, which is why I like the matatus with free wifi.	I walk to my office, I am on time but not as early as I wanted to be.	Regulation of drivers.
Feeling — What is she feeling?	😊	😊	😐😐	😊	I had my own car.
Needs and Pains — What does she want to achieve or avoid?	I want to get to work on time without being too uncomfortable.	- I want to have a journey without any surprises. - There are drunk men on the street who are shouting and being general nuisances.	- This matatu is playing loud music - it's too early in the morning. - This matatu is dirty and cramped, we're still in a pandemic! - The drivers are rude, I feel sorry for the passengers they shout at.	Drivers will stop at random places if they have a change of plans.	I could use M-pesa instead of cash.
Strategies — What does she do to avoid the pains?	I stop at the shop for change.	I prepare my change exactly so I don't have to argue with the driver.	- I sit next to the tout or in the middle so if something happens I will have witnesses. - I avoid the window seat so no one steals passing by.	I'll check for promotions on Bolt or Bolt so hopefully I get a smoother ride next time.	COVID protocol was followed.
Tools — What does she use?	- Bag with perfume, toiletries, headphones, power bank and make-up. - Google Maps to check route and traffic. - I listen to the radio to get updates.	Exact change.	Phone.		

Sex worker - Nairobi

What are her key goals and needs as she travels?	1. Mostly going back and forth to work calls. 2. Get to my daughter on time (I do have a friend to share pick up with).
What does she struggle with most when she travels?	At night, my concern is theft. The safety of my children when I travel. Discomfort of old or dirty vehicles.
What modes of transport does she use predominantly?	Matatus (if I have money, I will try get a newer matatu but most often travels on older Matatus). Boda boda, but only if my daughter and I are tired at the end of the day.

	Setting off Planning, walking, choosing	At the hub or station Alighting	On board Experience while traveling	Arriving Getting to the final destination	It would be better if...
Thinking What is she thinking about as she travels?	It is after work and I am going to pick my daughter from kindergarten and then head home. I have to finish work by 2:00 PM to be able to get to my daughter's school at 3:00PM for the pick-up.	I prefer to walk to the main road to pick the matatus from there because there are many matatus plying that road so one does not spend time waiting for them.	- Usually about my children and my wellbeing. - I usually chew mira so to avoid lengthy thoughts about life. - I feel a bit conscious and judged however, as a mother, I have to provide for my children.	My mood is relaxed as I walk.	After 10:00 PM, I do not feel safe walking the distance to my house.
Doing What does she do? What information does she look for? What is her context?	I prefer to pick a matatu from the designated stop near the bus station because they fill up fast and, when leaving town, they use a route that doesn't enter the CBD traffic, where they would be held up. These matatus are however old and therefore cheaper.	They are always fill up fast so one does not have to wait for long.	- I choose the two seater arrangement over sitting on the side that has only one seat. I avoid the three seat one because, if all the three people sitting on that seat are big/plump, it is quite uncomfortable. - Although I am usually tired and might doze, it is not safe as someone can easily steal from me, maybe open my purse and take away my phone or my money.	The public transport stops a distance away from my child's school and that is why it is my chosen public transport.	When going out with both my children, I prefer using Uber. Since such outings are not frequent, I do not mind the cost as Uber is more comfortable and safer especially for my younger child.
Feeling What is she feeling?	😐	😐	😠😕😣	😊	
Needs and Pains What does she want to achieve or avoid?	On days when I have money, I would prefer using the newer matatus because it just feels nicer to be in a new and comfortable matatu. It will not be a workout in terms of seats tearing or even falling off.	I avoid carrying money in my purse and even on M-Pesa. I have a line that I leave in the house so when I have quite a lot of money on the line I carry, I transfer it to that one and delete the message so if I meet any thieves they can't find proof that I have money. There are instances when people have been forced to send all the money on their M-Pesa plus take the mobile loans (Fuliza, Mshwari, KCB-M-Pesa).	During the day, I usually feel safe, but on days when I have to leave town at night (i.e. Friday and Saturday) is when I feel a bit unsafe because thieves could be in the same matatu.		
Strategies What does she do to avoid the pains?	I do not check anywhere for traffic.		I sit quietly on my own.		
Tools What does she use?	- I carry my work wear in a bag. - A makeup bag, change of clothes, a toothbrush because sometimes I chew mira and would need to brush my teeth to freshen up.	Mpesa on an old phone. I delete M-Pesa messages so that, if taken, thieves cannot see the last transaction. I send all my money to the phone at home.	When I don't have enough cash and hard to pay for my transport, I pay both cash and M-Pesa for my fare.		

Cross-city comparative finding

	Nairobi	Lagos	Gauteng
Attitude to drivers and other authority figures in the transport sector	Compared to Lagos and Gauteng, drivers seem to represent a form of safety for women. Touts are also seen as potential protectors, but less so than drivers, with only 3% of responses to the question of "what could be done to improve the experience of public transport" referring to drivers. On the trust scale, workshop participants felt that matatu touts are least trustworthy and police officers stationed at the stops are most trustworthy.	The general stereotype made of danfo drivers in Lagos by the workshop and survey participants is that they are known to drink and drive, and seen as dangerous. NURTW representatives are seen as a "menace". 4% of women cited better driver regulation as an area needing improvement.	Drivers are cited as one of the biggest frustrations of public transport, across all groups of women. When asked what could be done to improve the experience of public transport, improving driver social behaviour was the most cited answer (21%).
Satisfaction/ dissatisfaction with public transport	29% of women survey respondents indicated being dissatisfied or extremely dissatisfied with public transport in Nairobi. When asked "what makes public transport fun?", 8% of female respondents answered "nothing/it is not fun". The most frequently given answer by women to this question was "socialising and entertainment" (31%), followed by "affordability" (24%).	In Lagos, dissatisfaction with public transport among women survey respondents was much higher than in Nairobi or Gauteng. In total, 52% of them indicated being dissatisfied or extremely dissatisfied with public transport. When asked "what makes public transport fun?", 34% of female respondents answered "nothing/it is not fun". On the other hand, socialising (or "gisting": chatting to other people) was the most frequently given answer to this question of "what makes public transport fun" (22%).	21% of women survey respondents indicated being dissatisfied or extremely dissatisfied with public transport in Gauteng. When asked "what makes public transport fun?", 27% of female respondents answered "nothing/it is not fun". On the other hand, socialising and entertainment (meeting new people, listening to music, hearing jokes) was cited by women as the main contributing factor to making public transport fun (58%).
What should change?	In order of importance, when women were asked what they would like to see improved on public transport, better infrastructure was cited as the most needed change (23%) and an additional 15% of respondents cited affordable transport fares as an area needing improvement	In order of importance, when women were asked what they would like to see improved on public transport, 33% suggested improving overall transport infrastructure (better roads, street lighting and traffic light systems) and 24% of them cited the need for more fare regulation and reduction of trip fares.	In order of importance, when women were asked what they would like to see improved on public transport, they stated improving overall service and reliability on the network (37%), improving driver's behaviours (21%) and better regulation of transport fares (16%).

Cross-city comparative finding

	Nairobi	Lagos	Gauteng
Incidents experienced on public transport	Like in Lagos, "being pushed by someone while getting on or off public transport or while on public transport" was the most commonly experienced indecent by women of all age groups, except for the 35-44 year old group for which this was the second most common occurrence, after"theft of personal belongings". There is also a mirroring of the trend that younger women (18-34) are more likely to be victims of "Being touched by someone without their consent" or "Inappropriate or uncomfortable stares" than older women.	Across all age groups, the incident women are most likely to experience is "being pushed by someone while getting on or off public transport or while on public transport". The second most cited incident across all age groups was "Theft of your personal belongings without you knowing until later". Only 22% of women indicated being a victim of verbal sexual harassment. These survey findings contrasted with the stories of workshop participants, where the topic of catcalling and other forms of verbal sexual harassment came up more frequently than that of theft or pushing, and which was described as a very frequent occurrence in the daily life of Lagos, especially for younger women (the students).	For the older profiles of women we spoke to during the workshops, sexual harassment and aggression was not as prevalent a concern as it was for women in the student profile. Younger women, particularly in the student profiles during the workshops, describe instances of verbal sexual assault by other commuters, as well as by the minibus taxi drivers themselves:, "It dawned on me that the driver would know my address and pursue me more aggressively." We see this reflected in the survey data for certain sexually motivated forms of harassment. 57% of women in the youngest age group (18-24 years) reported being stared at inappropriately, while this number decreased to 32% in the next age group (25-34 years). Again, when we look at explicitly verbal sexual harassment (like catcalling), 21% of the youngest age group (18-24 years) reported having experienced, when compared to only 8% in the next age group up (25-35 years).

Decision-making matrix of different profiles interviewed

The blue dots summarise which factors the different types of women prioritise in their decision-making process around public transport.

Gauteng

Profile	Cost (The pricing and affordability of the mode of transport.)	Time (The speed and reliability of the mode of transport.)	Safety (The perceived safety of the mode of transport in terms of crime and infrastructural safety.)	Comfort (Variables such as space, hygiene and road-worthiness of the mode of transport.)	Access (The availability and positioning of the mode of transport in relation to their daily commute.)
Working professional	○	●	○	●	○
Student	○	○	●	○	●
Stay at home Mum	○	○	●	●	○
Informal trader	●	○	○	○	●
Sex worker	○	●	○	○	●

Lagos

Profile	Cost (The pricing and affordability of the mode of transport.)	Time (The speed and reliability of the mode of transport.)	Safety (The perceived safety of the mode of transport in terms of crime and infrastructural safety.)	Comfort (Variables such as space, hygiene and road-worthiness of the mode of transport.)	Access (The availability and positioning of the mode of transport in relation to their daily commute.)
Working professional	○	●	○	●	○
Student	○	○	●	○	●
Stay at home Mum	○	○	●	○	○
Informal trader	●	○	●	●	●
Sex worker	○	●	●	○	●

Nairobi

Profile	Cost (The pricing and affordability of the mode of transport.)	Time (The speed and reliability of the mode of transport.)	Safety (The perceived safety of the mode of transport in terms of crime and infrastructural safety.)	Comfort (Variables such as space, hygiene and road-worthiness of the mode of transport.)	Access (The availability and positioning of the mode of transport in relation to their daily commute.)
Working professional	○	●	○	●	○
Student	○	○	●	●	●
Stay at home Mum	○	●	●	○	○
Informal trader	●	○	●	●	●
Sex worker	○	●	●	○	●

8. Conclusion

Outlook

Gender-sensitive data, and of qualitative nature is key to deeply understanding how women experience public transport and the challenges they face in moving around. Transport plays a crucial role in everyday life, as an enabler of economic development and better quality of life, and a gender data gap in the transport sector can have repercussions on how women's mobility needs are understood and accounted for.

If transport systems are to truly become gender-sensitive and designed in an inclusive way, we will need to set ambitious goals to collect more comprehensive data on the experience of women in public transport. This is not to say that there is no positive momentum in how transport systems are planned to better account for the needs of women, but calls for change and recommendations need to be grounded in stronger foundations of gender-sensitive data.

Going forward, this study therefore recommends the following:

• **Reproducing this study in the same three cities:**
  · The research methodology applied in this study had limitations (see Section 4) and therefore implications on the representativeness and accuracy of the data collected. Future efforts should focus on addressing these limitations and incorporating the learnings identified, and specifically in replicating this study with a much larger participant sample size, to obtain high-quality data.
  · The data collected is only as valuable as it is useful to the decision-makers, policy-makers, civil society groups and other public stakeholders who can incorporate it into the solutions and action plans they are already designing or planning. Future gender-sensitive data collection efforts should be designed and implemented in partnership with city governments, in order to avoid having datasets that are unused by the cities they are meant to benefit, and in order to leverage synergies with other ongoing initiatives by the city. Engagement with public and private stakeholders is key.

• **Replicating and scaling gender-sensitive data collection efforts to other African cities:** by building a growing regional database on the topic of women and transport, advocates, policy-makers, and other critical stakeholders working in this sector will be empowered with a new type of evidence to draw attention to the scale of the challenge and influence the course of action. Observers of the initiative will also be inclined or inspired to do what has already been done and shown as possible.

• **Developing a systemic framework to initiate these data collection efforts every five years**, to ensure that data stays fresh, relevant, and up-to-date, and to be able to track progress on some of the issues previously identified.

• **Diagnosing specific research areas that may need to be further investigated** in each city. For example, the trust relationship between women commuters and drivers or other figures of authority in the transport sector was a recurring theme across the three cities. It would be interesting to dig into the dynamics of these relationships in more detail. Another example would be on the solutions women suggested implementing to improve the public transport experience, such as their recommendations to increase the regulation around drivers' behaviours. These research areas could be further workshopped to take them from ideation to concrete solutioning stage.

From an urban or transport planning perspective, the kind of data collected for this study should be a prerequisite for any Sustainable Urban Mobility Plan or National Urban Mobility Plan. As mentioned in a report by the Mobilise Your City Initiative, "quantitative statistics might not be sufficient" and "qualitative data" must be included. [12] All in all, any attempt to improve transport systems for women from an architectural, engineering, design, or policy perspective must start with the right evidence, and therefore with comprehensive and accurate gender-sensitive data.

[12] Mobility for All? Integrating gender perspectives into SUMP and NUMP, April 27th 2022, p. 31. Link
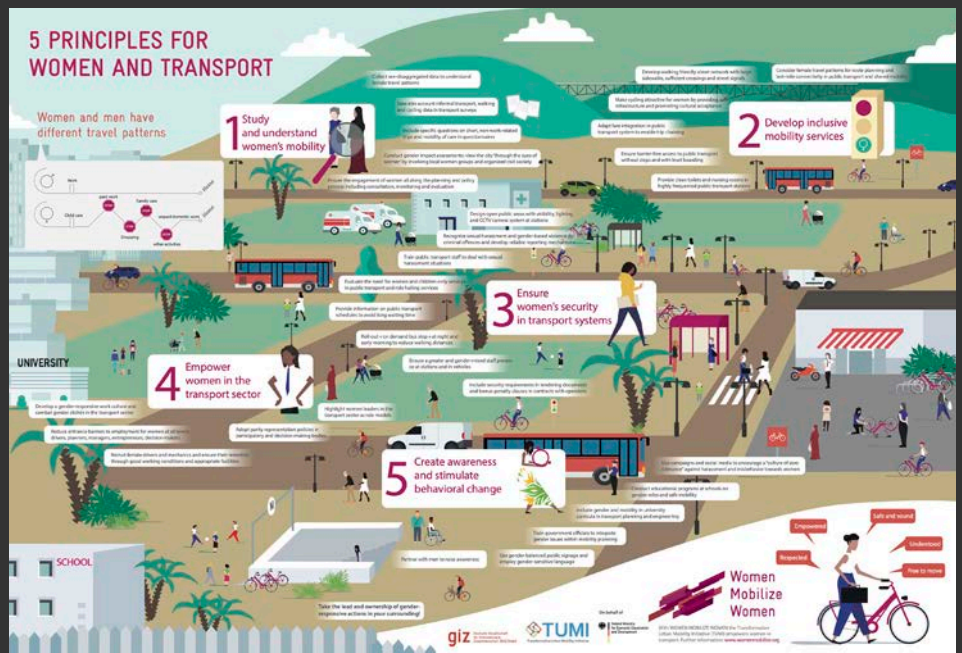
Five Principles for Women and Transport

In May 2022, TUMI released the "Five Principles for Women and Transport" poster, which summarises some key recommendations to follow to make women feel empowered, understood, respected, and free to move in transport systems.

TUMI's Five Principles for Women and Transport

1. Study and understand women's mobility
· Collect sex-disaggregated data
· Take into account informal transport, walking and cycling data
· Ensure the engagement of women all along the planning and policy process

2. Develop inclusive mobility services
· Consider female travel patterns for route planning and last-mile connectivity
· Adapt fare integration in public transport system to enable trip chaining

3. Ensure women's security in transport systems
· Provide information on public transport schedules to avoid long waiting times
· Evaluate the need for women and children-only services in public transport and ride-hailing services

· Ensure greater and gender-mixed staff presence at stations and in vehicles

4. Empower women in the transport sector
· Highlight women leaders in the transport sector
· Develop gender-respective work culture
· Recruit female drivers and mechanics

5. Create awareness and stimulate behavioural change

Our aim with this study was to demonstrate how to implement some of these recommendations in practice, highlighting a unique approach to qualitative data collection and detailing a step-by-step methodology to inspire future similar initiatives. There are many ways gender-sensitive data can be analysed, interpreted and used to inform policy development or transport plans. However, the findings that can emerge from such a study are just as important as the process of collecting and tracking this kind of data, to inspire other actors to create similar evidence-bases.

Case studies

Below, we share some important case studies that illustrate alternative and innovative approaches to collect gender-sensitive data in the transport sector. From crowd-sourcing apps, interactive map platforms, video stories, the following use cases exemplify one type of gender-sensitive data—geospatial data—that can be collected to complement the qualitative data collected in this study.

"Report It Stop It" app

Flone Initiative, in 2021, released the first Kenyan-built and Kenyan-used mobile app for survivors and witnesses of gender-based violence in and around public transport. The app, called "Report It! Stop It!" or RISI, allows users to share their experience and can set the location of it to a pin on a map or a matatu route. Details can be provided on the type of incident experienced, to whom it happened, a voice message and photos. The crowd-sourced data aims to close the gender data gap around public transport and raise awareness with public policymakers and other society partners.

Digital storytelling

Digital storytelling can be another effective way of collecting gender-sensitive data in the transport sector, while at the same time giving a voice to women. For example, the Stockholm Environment Institute at the University of York used a video format, as part of

a wider research project on 'Inclusive Climate Resilient Transport Planning in Africa', to show and tell the story of a young girl's commute to school in Zambia

Safetpin.

Safetipin is a "social organisation working with a wide range of urban stakeholders including governments to make public spaces safer and more inclusive for women." They collect data using three mobile phone applications, and present the data collected to relevant stakeholders with recommendations.

- My Safetipin: this app enables users to compute a safety score for a location and communicates through notifications when a user is in an unsafe place.

- Safetipin Site: this app enables the collection of additional information related to accessibility of bus stops, functionality of public toilets, last mile connectivity from metro stations and so on.

-Safetipin Nite: is an app that can be used while driving and to collect data during both day and night. Mounted on the windshield of a car, the app takes photographs at predefined distances of the road surroundings. Once uploaded on the servers, machine learning is used to extract information on safety parameters identified in the photos.
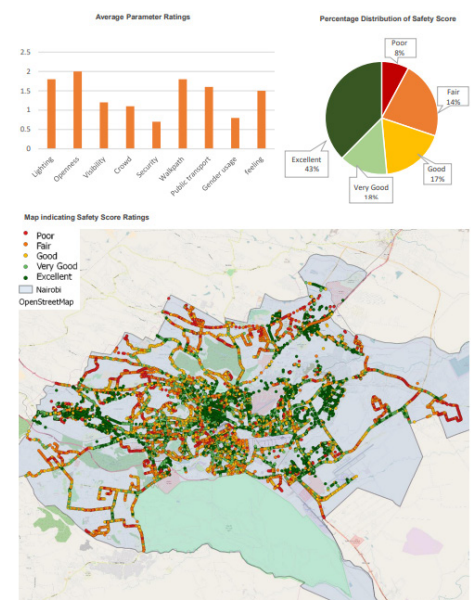
HarassMap
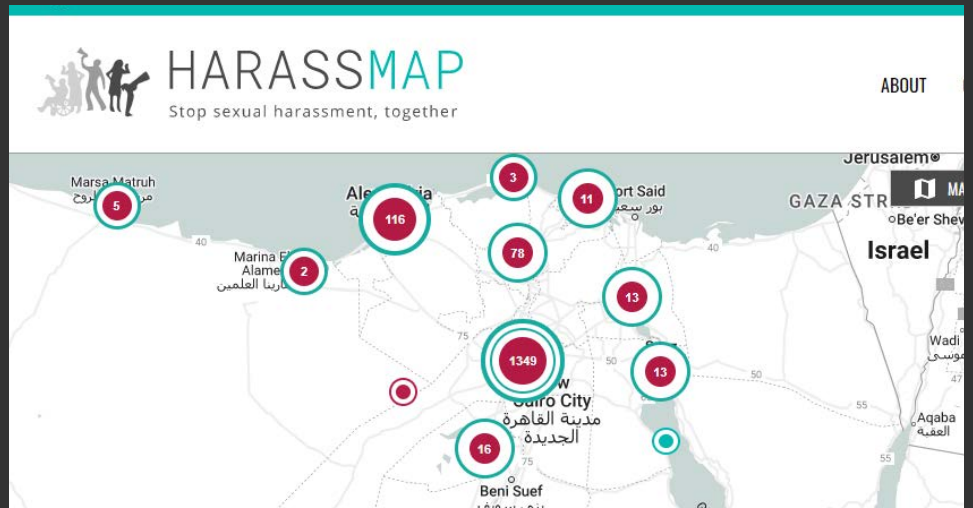
HarassMap is an award-winning, volunteer-based initiative founded in Egypt in late 2010, with the mission to build a future in which neighborhoods, schools, universities, cafes, restaurants, shops, and workplaces across Egypt become safe spaces that never tolerate sexual harassment and always help people when they are harassed. It does so by delivering training with employees of transit agencies on the protocols and systems for managing complaints of sexual harassment and violence against women. More importantly, it provides a landing page for women to report sexual harassment while specifying the location of the incident, in order to map out the distribution and scale of these events.

Free to be
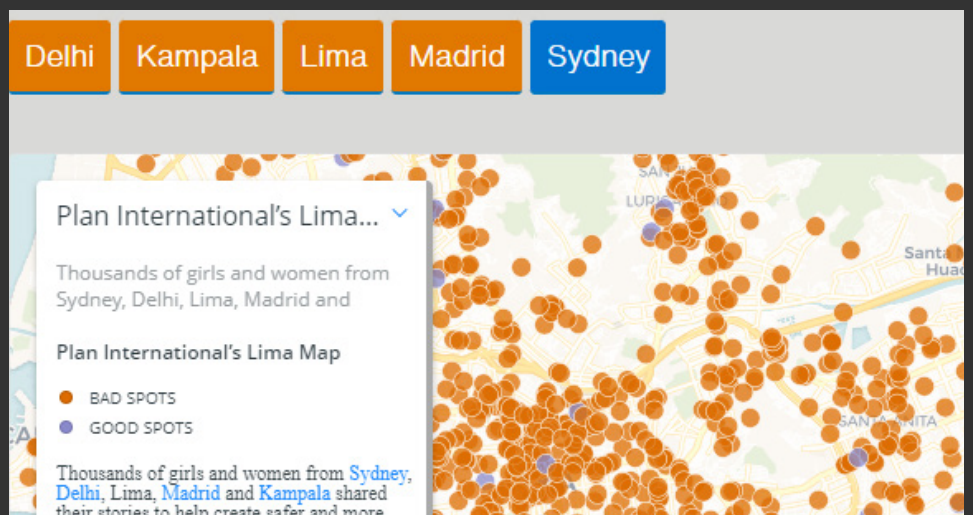
Free to Be is a crowd-mapping tool that was developed by Plan International "in collaboration with CrowdSpot, Monash Univeristy's XYX Lab and crucially, young women."

The data was crowd-sourced across Sydney, Madrid, Lima, Kampala and Delhi, and used to feed into an interactive map platform, identifying the public spaces that make women feel uneasy and scared, or happy and safe. It was recognised for giving women a platform to express their struggles and geographically highlight spaces where change needs to occur.

Annex 1 - Literature review sources

Lagos

Regional Assessment of Public Transport Operations in Nigerian Cities: The Case of Lagos Island (2012)
- Improvement recommendations for policymakers
- Not women specific
- Looks at overall commuter satisfaction and pain points
- Only mentions women as being less likely to use PT as not predominantly heads of households

Access to Intra-Urban Public Transport across Varied SocioEconomic Groups: A Case of Lagos Bus Rapid Transit (BRT) (2014)
- Looking at the relationship between socioeconomic groups and access to BRT
- Not women specific
- Made use of surveys to collect data (360 participants)
- Discusses how lower socioeconomic groups have access to less reliable transport
- Makes reference to women having access to less reliable transport due to lower economic statuses

Quality of Service and Crime Incidents in Public Transport: A Case Study of Lagos Metropolis (2012)
- Looks at the link between crime and PT
- Not women specific
- Surveys as the methodology (1600 participants)
- Came to the conclusion that socioeconomic status and gender affect your vulnerability to crime
- Women are the worst affected because they are perceived as weaker

Towards Gender Sensitive Urban Transport Planning and Operations in Metropolitan Lagos, Nigeria (2001)
- Focuses on women being left out of policy and therefore out of PT altogether
- Lack of regulation means women suffer more in terms of crime
- In terms of methodology - I think that was just a lit review itself
- Very subjective report
- Created for THE 4TH IFUP CONGRESS MARRECH, MOROCCO

"In cities, it's not far, but it takes long": comparing estimated and replicated travel times to reach life-saving obstetric care in Lagos, Nigeria (2020)
- Focused specifically on pregnant women
- Looks at how the lack of accurate real-time data and traffic congestion affects access to health
- Used patient files, journey planner apps and simulated ridealongs to arrive at their results

Gender and safety in public transportation : an explorative study in Lagos Metropolis, Nigeria (2012)
- MSc thesis rather than peer-reviewed publication: original data comprised of questionnaires, field observations and informal interviews
- Focus on safety
- Women expressed many more safety concerns compared to men - this affected women's willingness to travel and their livelihoods
- Incidents most commonly occur while waiting for transport - inadequate design & management of stops/ transport hubs pinpointed as a particular challenge
- Social attitudes and power: perpetrators of crime perceived women as the weaker sex

Freedom to Move Women's experience of urban public transport in Bangladesh, Brazil and Nigeria, and how lost tax revenues can pay to improve it (ActionAid, 2016)

-Focused on Abuja rather than Lagos
- Lack of designated waiting areas and shelter spaces, and overcrowding on public transport, was seen to have a particular effect on women's safety.
- Report recommended an additional 600 buses to be added to the network to mitigate overcrowding.

Quality of Service and Crime Incidents in Public Transport: A Case Study of Lagos Metropolis (2012)
- Looks at the link between crime and PT
- Not women specific
- Surveys as the methodology (1600 participants)
- Came to the conclusion that socioeconomic status and gender affect your vulnerability to crime
- Women are the worst affected because they are perceived as weaker

An analysis of transit safety amongst college students in Lagos, Nigeria in Crime and Fear in Public Places: Towards Safe, Inclusive and Sustainable Cities (2020)
- Focused on safety (with strong gender analysis)
- Women declared themselves to feel far more unsafe than men while in transit
- Especially pinpointed: bus/ keke nanep/ motorcycle stops; at night; walking to station
- Risk/fear of sexual harassment very significant reason why women participants don't use PT to commute to campus.
- Cautionary measures: only travel during daylight; avoid particular stops; travel with someone else; dress in a certain way

User Diversity and Mobility Practices in Sub-Saharan African Cities: Understanding the Needs of Vulnerable Populations (2020)
- As with Gauteng - helpful lit review of some Lagos PT themes, not women-specific

Nairobi

Sexual harassment in Kenya publlic transport: a rapid assessment report (2021)
- GBV (88% of commuters)
- Focus groups and interviews
- Types of violence

Examining Perceptions of Public Transport Safety for Young Women in Nairobi, Kenya (2021)
- Survey
- University students
- Coping strategies
- Comparison to men

Mainstreaming gender in urban public transport: Lessons from Nairobi, Kampala and Dar es Salaam by Stockholm Environment Institute (2021)
- Gender mainstreaming
- Comparative study
- Gender inclusivity in transport planning and policy-making

Commuting in Urban Kenya: Unpacking Travel Demand in Large and Small Kenyan Cities (2019)
- Choice of transport
- Split of daily movements
- 89% use matau

Report on mobility of care assessment of Nairobi's public minibus transport services (2019)

- Specific framework - Mobility of Care
- Qualitative survey to understand how people (women) who care for dependents travel in the face of challenges
- Focus on matatu (why women choose it)
- Understanding men and women - surveys with open-ended questions

Violence against Women and Girls in Public Road Transport and Connected Spaces in Nairobi County, Kenya (2018)

- GBV (88% of commuters have witnessed GBV on PT)
- Men and women, operators, commuters
- Qualitative survey

Factors influencing gender violence against women in public transport sector in Kenya: the case of Nairobi County public transport system (2017)

- City-wide safety
- PT seen as one aspect
- Audit from phone to identify safe and unsafe zones in the city

Nairobi Safety Analysis Report by Safetipin (2016)

- GBV
- Officials, commuters and operators interviewed
- Qualitative

Gender Relations in Public Transport in Africa: A case Study of Nairobi Kenya (2014)

- Women working in transport
- Survey
- Does look at the existing gender issues in PT but to understand how they might affect entrepreneurial endeavours

Mobility, Poverty, and Gender: Travel 'Choices' of Slum Residents in Nairobi, Kenya (2010)

- Affordance (choose to walk)
- Disproportionate effect on women
- Survey

Gauteng

User Diversity and Mobility Practices in Sub-Saharan African Cities: Understanding the Needs of Vulnerable Populations (2020)

- All SSA
- Access to PT
- Vulnerable populations (gender, age, sexuality, disabilities)
- All transport modes (not just PT) - big focus on non-motorized mobility
- Primary and secondary cities only

Women and Girls' Experiences of Gender-Based Violence on Public Transport in Gauteng & the Western Cape Province (2020)

- Large survey and focus groups (new quant and qual data)
- Looking at GBV in major provinces on all PT modes
- 88% of women fear PT for harassment
- Well presented report

Perceptions of Gender, Mobility, and Personal Safety: South Africa Moving Forward (2019)
- Care trips / mobility patterns
- Decision-making factors
- Harassment

Public transport and the safety of women in South Africa: Lessons learnt from around the world (2017)
- South Africa and global trends
- GBV and safety perceptions
- Infrastructure + development
- Reasons for PT use ("caring work")
- Economic effects (consequences)
- Global solutions

Dar es Salaam

Mainstreaming gender in urban public transport: Lessons from Nairobi, Kampala and Dar es Salaam by Stockholm Environment Institute (2021)
- Gender mainstreaming
- Comparative study
- Gender inclusivity in transport planning and policy-making

Public Transport as a Common Good. Problems for children and women in Dar-es-Salaam (2006)
- Role of women and children in grassroots transport planning
- Dala dala reliability
- Focus on six neighbourhoods of Dar Es Salaam.

Transportation conditions and access to services in a context of urban sprawl and deregulation. The case of Dar es Salaam (2003)
- Access to PT
- Vulnerable populations (not only women)

Global

Sexual harassment in public transport in Bogotá

Social norms as a barrier to women's employment in developing countries

Bias against research on gender bias

Affordability of Public Transport in Developing Countries

Invisible Women: Exposing Data Bias in a World Designed for Men by Caroline Criado Perez

Why Does She Move? : A Study of Women's Mobility in Latin American Cities

Annex 2 - Ride-along grid questionnaire

1. **Home visits and Ride Alongs: Setting off from Point A**

🚌 Travel itinerary Where is she going today? Why?	🧍 Body What does she wear? Does she change as she travels?
👭 Travel companions Is she joined by someone? At the start or during?	👜 Bag What does she carry in her bag? {ask to get a photo of the contents} Food: Does she carry her food? Or buy on route?
🕐 Before she leaves What are the last activities before she leaves home?	📱 Tools Do they check anywhere or anything to know what might be happening on route? Radio, WhatsApp, TV etc

2. Home visits and Ride Alongs: To public transport: The First Mile Experience

🚌 Travel itinerary What does she use PT for? (in general & access to human rights)	🧍 Body Why does she walk the route she does? Does she change her clothes? Does she change her posture (smaller / bigger)?
🚌 Public transport Why does she choose the vehicles she does?	💰 Payment Options and Concerns? Use of Mpesa?
🔴 Safety Is she safe on the walk?	📱 Phone Does she use her phone?

2. Home visits and Ride Alongs: On public transport
(please full in for each public transport that she takes eg mutatu, dala, bus, etc)

🚌 Travel How does she engage with others? Who does she speak to?	🧍 Body How does she choose where to sit? How does she behave? (onboarding, being on PT and alighting) Does she change her posture (smaller / bigger)?
📱 Entertainment? What does she do while travelling? Does she use her phone?	🧠 Thinking What does she think about or plan for?
🔴 Safety Does she feel safe?	🧡 Feeling How does she feel?

2.   Home visits and Ride Alongs: To her destination: Last mile experience

🚌 Travel Where does the PT stop and how does that impact her?	🧍 Body How does she behave? How does she carry her bag? How far does she have to walk? What is the experience like?
💰 Payment Did she get her change?	📱 Phone Does she tell anyone where she is?
🔴 Safety How safe is the walk?	🛍️ Shop Does she buy anything on her route?

Annex 3 - Survey questionnaire

Example of survey questionnaire used in Lagos.

WhereIsMyTransport is interested in understanding your experience of travelling in <city name> and wants to hear from you about the advantages and challenges of moving around Nairobi.

WhereIsMyTransport ina nia ya kuelewa uzoefu wako wa kusafiri katika Nairobi na inataka kusikia kutoka kwako kuhusu manufaa na changamoto za kuzunguka Nairobi.

This survey will help us understand the challenges that you experience on your daily commute. An open source report will be published from this data.

The survey has 8 sections and takes 30-35 minutes to complete.

Utafiti una sehemu 8 na huchukua dakika 30-35 kukamilika.

This survey is anonymous. If you choose to participate, do not write your name on the questionnaire. No one will know whether you participated in this study. Responses will be anonymised and your answers will be kept confidential, following privacy agreement terms and conditions. You can read more about these here: https://drive.google.com/file/d/10ifpk2xQsCAnVYyLWBP_zRwCkUk8qWjk/view

Utafiti huu haujajulikana. Ukichagua kushiriki, usiandike jina lako kwenye dodoso. Hakuna mtu atakayejua kama ulishiriki katika utafiti huu. Majibu hayatajulikana na majibu yako yatatunzwa kwa siri, kwa kufuata sheria na masharti ya makubaliano ya faragha. Unaweza kusoma zaidi kuhusu hizi hapa: https://drive.google.com/file/d/10ifpk2xQsCAnVYyLWBP_zRwCkUk8qWjk/view

01. We'd like to find out a bit more about you! Tungependa kujua zaidi kukuhusu wewe!

This section has 6 questions and will take approximately 3 minutes.
Sehemu hii ina maswali 6 na itachukua takriban dakika 3.

1.   What is your gender? (Jinsia yako ni gani?)
a.   Female (Mwanamke)
a.   Male (Mwanaume)
b.   Rather not say (Ningechagua kutosema)
c.   Other (Jinsia nyingineyo)

2.   How old are you? Una umri gani?*
a.   Under 18 / Chini ya18
b.   18-24
c.   25-34
d.   35-44
e.   45-59
f.   60-74
g.   Above 75 / Zaidi ya 75

3.   Do you experience any physical limitations or disabilities that impair your ability to travel? For example, wheelchair access, sight or hearing limitations. Je, unakumbana na mapungufu yoyote ya kimwili au ulemavu unaoathiri uwezo wako wa kusafiri? Kwa mfano, ufikiaji wa viti vya magurudumu, mapungufu ya kuona au kusikia.
a.   Yes / Ndiyo
b.   No / Hapana
c.   Not sure / Sina uhakika

4.   [conditional on question 3 answer being yes] If yes, please share which challenges you experience. [sharti kwenye swali la 3 jibu kuwa ndiyo] Kama ndiyo, tafadhali shiriki changamoto unazopitia.

[FREE TEXT]

5.   Which area / neighborhood do you live in in Nairobi? Je, unaishi katika eneo/ mtaa gani katika Nairobi?

a.   Kasarani
b.   Westlands
c.   Dagoretti
d.   Embakasi
e.   Mathare
f.   Kibra
g.   Makadara
h.   Langáta

[FREE TEXT] /[WEKA MAANDISHI]

02: Now we'd like to hear about your work! Sasa tungependa kusikia kuhusu kazi yako!

This section has 5 questions and some are optional. It will take approximately 2 minutes.

Sehemu hii ina maswali 5 na baadhi ni ya hiari. Itachukua takriban dakika 2.

1.   What is your current work situation? / Hali yako ya kazi ikoje kwa sasa?*

a.   Full time employment / Ajira ya muda wote
b.   Employed for wages / Kuajiriwa kwa ujira
c.   Self-employed / Kujiajiri
d.   Out of work and looking for work / Kutoka kazini na kutafuta kazi
e.   Out of work but not currently looking for work / Nje ya kazi lakini si sasa kutafuta kazi
f.   A homemaker / Mtu wa nyumbani
g.   A student / Mwanafunzi
h.   Military / Kijeshi
i.   Retired / Mstaafu
j.   Unable to work / Siwezi kufanya kazi
k.   Other / Nyingine

2.   What is your occupation? (what industry do you work in?) Kazi yako ni nini? (unafanya kazi katika tasnia gani?

a.   Business, consultancy, finance, law or management / Biashara, ushauri, fedha, sheria au usimamizi
b.   Business support (HR, sales, accounting, Marketing, advertising or PR) /Usaidizi wa biashara (rasilimali watu, mauzo, uhasibu, Masoko, utangazaji au mahusiano ya umma)
c.   Construction, mining, property / Ujenzi, madini, mali
d.   Charity and voluntary work / Upendo na kazi ya kujitolea
e.   Creative and digital arts or design or media or marketing / Sanaa za ubunifu na dijitali au muundo au media au masoko
f.   Education / Elimu
g.   Energy and utilities / Nishati na huduma
h.   Engineering or manufacturing / Uhandisi au utengenezaji
i.   Environment or agriculture / Mazingira au kilimo
j.   Government, public services or administration / Serikali, huduma za umma au utawala
k.   Healthcare, social care, science or pharmaceuticals / Huduma ya afya, huduma za kijamii, sayansi au dawa

l.   Hospitality (events)/ Sekta ya ukarimu (matukio)

m.   Computing or IT / Kompyuta au teknolojia ya habari

n.   Leisure, sport or tourism /Burudani, michezo au utalii

o.   Retail, restaurants, food services /Uuzaji wa rejareja, mikahawa, huduma za chakula

p.   Telecommunications, broadcasting /Mawasiliano ya simu, utangazaji

q.   Transport or logistics / Usafiri au vifaa

r.   Student/ Mwanafunzi

s.   Unemployed/Wasio na kazi

3.   What is your total household income bracket on a monthly basis? Je, jumla ya mabano ya mapato ya kaya yako ni yapi kila mwezi?

a.   Below KES13,000 / Chini ya KES13,000
b.   KES13,000 - KES20,000
c.   KES21,000 - KES30,000
d.   KES31,000 - KES40,000
e.   KES41,000 - KES50,000
f.   KES51,000 - KES60,000
g.   KES61,000 - KES70,000
h.   Above KES70,000 / Zaidi ya KES70,000

4.   Are you financially dependent on anyone else's salary to afford daily travel? / Je, unategemea kifedha mshahara wa mtu mwingine yeyote ili kumudu usafiri wa kila siku?

a.   Yes / Ndiyo
b.   No / Hapana
c.   Sometimes / Wakati mwingine

5.   Who would this be? / Mtu huyu angekuwa nani?

a.   Parent? / Mzazi
b.   Partner or Spouse / Mpenzi au Mchumba
c.   Other family member (aunt, uncle, cousin, sibling)
d.   Transport fare / Nauli ya usafiri
e.   Other/ Nyingine

03. We would love to know more about your household. /Tungependa kujua zaidi kuhusu kaya yako.

This section has 6 questions and will take approximately 3 minutes./ Sehemu hii ina maswali 6 na itachukua takriban dakika

1.   Are you: / Je, wewe ni:

a.   Single / Sijaolewa
b.   Married/ Nimeolewa
c.   Divorced / Tumeachana
d.   Separated /Nimetengwa
e.   Remarried/ Nimeolewa tena
f.   Other / Nyingineyo

2.   Are you the head of your household? / Je, wewe ni mkuu wa kaya yako?

a.   Yes / Ndiyo
b.   No / Hapana
c.   Not sure / Sina uhakika

3.   If no, who is the head of the household? / Kama hapana, mkuu wa kaya ni nani?

a.   Father / baba
b.   Mother / mama
c.   Grandfather / babu
d.   Grandmother / bibi
e.   Partner or Spouse / Mke/mpenzi
f.   Sibling / Ndugu
g.   Relative such as an Aunt or Uncle / Jamaa kama vile Shangazi au Mjomba
h.   Other guardian / Mlezi mwengine

4.   How much studying have you completed? / Je, umemaliza masomo kiasi gani?

a.   No education / Sina elimu rasmi
b.   Primary education / Elimu ya msingi
c.   Part of secondary or high school education / Sehemu ya elimu ya sekondari au sekondari
d.   All of secondary or high school education / Elimu yote ya sekondari au sekondari
e.   Diploma education / Elimu ya Diploma
f.   Degree/Bachelors education / Elimu ya Shahada/Shahada
g.   Postgraduate education /Elimu ya Uzamili

5.   How many people live in your household at this particular moment?/ Ni watu wangapi wanaoishi katika kaya yako kwa wakati huu maalum?

            [FREE TEXT] / [WEKA MAANDISHI]

6.   Who lives with you? You can choose as many as you'd like. / Nani anaishi nawe? Huenda ukachagua jibu zaidi ya moja ukipenda.

a.   Father / Baba
b.   Mother / Mama
c.   Grandmother / Bibi
d.   Grandfather / Babu
e.   Spouse/partner /Mke/mpenzi
f.   My children under 3 / Watoto wangu chini ya miaka 3
g.   My children 3-12 / Watoto wangu 3-12
h.   My children 12-17 / Watoto wangu 12-18
i.   My children (18 and over) /Watoto wangu (18 na zaidi)
j.   Children under 3 / Watoto chini ya miaka 3
k.   Children 3-12 / Watoto 3-12
l.   Children 12-18 / Watoto 12-18
m.   Children (18 and over) / Watoto (18 na zaidi)
n.   Sibling (under 18) / Ndugu (chini ya miaka 18)
o.   Sibling (18 and over)/ Ndugu (18 na zaidi)
p.   Aunt/ Shangazi
q.   Uncle / Mjomba
r.   Cousin / Binamu
s.   Other/ Nyingine

04. Well done! You're halfway there! We'd like to find out how you travel on public transport. / Umefanya vizuri! Uko katikati! Tungependa kujua jinsi unavyosafiri kwa usafiri wa umma.

This section has 14 questions and will take approximately 8 minutes. / Sehemu hii ina maswali 14 na itachukua takriban dakika 8.

1.   Where do you travel to using public transport? You can choose as many as you'd like. / Unasafiri kwenda wapi kwa kutumia usafiri wa umma? Unaweza kuchagua nyingi upendavyo.*

a.   Work / Kazini
b.   Friends / Kuona marafiki
c.   Family / Kuona familia
d.   Home / Nyumbani
e.   Religious travel / Safari za kidini
f.   Entertainment (movies, bars, restaurants) / Burudani (sinema, baa, mikahawa)
g.   Grocery shopping / Ununuzi wa mboga
h.   Retail shopping / Ununuzi wa rejareja

2.   Please select all the areas you regularly travel to? You may select as many as you like / Tafadhali chagua maeneo yote unayosafiri mara kwa mara? Unaweza kuchagua nyingi upendavyo

a.   Kasarani
b.   Westlands
c.   Dagoretti
d.   Embakasi
e.   Mathare
f.   Kibra
g.   Makadara
h.   Langáta
i.   Kamukunji
j.   Starehe

3.   Approximately how often do you use public transport?*/ Unatumia usafiri wa umma mara ngapi?*

a.   Daily / Kila siku
b.   At least 2-3 times a week / Angalau mara 2-3 kwa wiki
c.   At least once a week / Angalau mara moja kwa wiki
d.   Once every 2 weeks / Mara moja kila baada ya wiki 2
e.   At least once a month / Angalau mara moja kwa mwezi
f.   Less than once a month / Chini ya mara moja kwa mwezi
g.   For special events or occasions / Kwa matukio maalum au matukio
h.   Never / Kamwe

4.   Approximately how often do you travel for {matrix question}: /Takriban, ni mara ngapi unasafiri kwa {matrix question}:

1. Travelling to and from work / Kusafiri kwenda na kurudi kazini

2. Traveling for children such as school runs / Kusafiri kwa watoto kama vile kukimbia shule

3. Travelling for groceries / Kusafiri kwa ajili ya mboga

4. Travelling to visit family / Kusafiri kutembelea familia

5. Travelling for your healthcare /Kusafiri kwa ajili ya huduma yako ya afya

6. Travelling for other's healthcare / Kusafiri kwa ajili ya afya ya wengine

7. Travelling for religious reasons such as attending Church or Mosque / Kusafiri kwa sababu za kidini kama vile kuhudhuria Kanisani au Msikitini

8. Travelling for entertainment / Kusafiri kwa burudani

a.   Daily / Kila siku

b.   At least 2-3 times a week / Angalau mara 2-3 kwa wiki

c.   At least once a week / Angalau mara moja kwa wiki

d.   Once every 2 weeks / Mara moja kila baada ya wiki 2

e.   At least once a month / Angalau mara moja kwa mwezi

f.   Less than once a month / Chini ya kila mwezi

g.   Never / Kamwe

h.   Other / Nyingine

5.   When do you use public transportation? You may select more than one answer. / Unatumia usafiri wa umma wakati gani? Unaweza kuchagua jibu zaidi ya moja.

a.   Morning peak hours / Saa za kilele za asubuhi
b.   Evening peak hours / Saa za kilele cha jioni
c.   Night hours / Saa za usiku
d.   Throughout the day / Siku nzima
e.   I don't use public transport

6.   How many trips do you usually take on a day when you do travel? E.g. two = home to work and work to home. / Je, huwa unasafiri mara ngapi kwa siku unaposafiri? K.m. mbili = nyumbani kufanya kazi na kufanya kazi nyumbani.

a.   Two / Mbili
b.   Three / Tatu
c.   Four / Nne
d.   Five / Tano
e.   More than five / Zaidi ya tano
f.   I don't use public transport

7.   How long is your longest regular commute from the moment you leave to your destination? For example 65 minutes total = 40 minutes in the bus + 20 minutes bodaboda + 5 minutes walk. / Safari yako ndefu ya kawaida ni ya muda gani kutoka unapoondoka kuelekea unakoenda (Mf. jumla ya dakika 65 = dakika 40 kwenye basi + dakika 20 bodaboda + dakika 5 kwa kutembea)?

a.   30 minutes / Dakika 30
b.   30 minutes to an hour / Dakika 30 hadi saa moja
c.   An hour to an hour and 30 minutes / Saa moja hadi saa na dakika 30
d.   An hour and 30 minutes to two hours / Saa moja na dakika 30 hadi saa mbili
e.   Two hours to two and a half hours / Saa mbili hadi saa mbili na nusu
f.   Two and a half hours to three hours / Saa mbili na nusu hadi saa tat
g.   More than three hours / Zaidi ya masaa matatu
h.   I don't use public transport

8.   On your daily commute, how much time do you spend walking? For example, 20 minutes = home to bus stop, bus stop to offices. / Katika safari yako ya kila siku, unatumia muda gani kwa kutembea (k.m. dakika 20 = nyumbani hadi kituo cha basi, kituo cha mabasi hadi ofisini)?

a.   10 minutes / Dakika 10
b.   10 to 15 minutes / Dakika 10 hadi 15
c.   15 to 30 minutes / Dakika 15 hadi 30
d.   30 to 45 minutes / Dakika 30 hadi 45
e.   45 to 60 minutes / Dakika 45 hadi 60
f.   Over an hour / Zaidi ya saa moja

9.   Which of the following public transport modes do you use on a regular basis? / Je, unatumia usafiri gani kati ya zifuatazo mara kwa mara?

a.   Buses / Mabasi
b.   Matatu
c.   Matatu minibus /Basi dogo la Matatu
d.   Regular cabs / Cabs za kawaida
e.   Ride on demand e.g. Uber or Bolt / Endeshwa unapohitaji kwa mfano Uber au Bolt
f.   Ride on demand e.g. Swvl / Endeshwa unapohitaji kwa mfano Swvl
g.   I don't use public transport

10.   How satisfied are you with public transportation services? / Je, umeridhishwa kwa kiasi gani na huduma za usafiri wa umma?

a.   Extremely satisfied/ Kuridhika sana
b.   Satisfied/Kuridhika
c.   Neutral / Kuegemea upande wowote
d.   Dissatisfied/ Kutoridhika
e.   Extremely disatisfied/ Kutoridhika sana
f.   I don't use public transport

11.   Have you ever turned down work because of travel challenges or travel times? / Je, umewahi kukataa kazi kwa sababu ya changamoto za usafiri au nyakati za usafiri?

a.   Yes / Ndiyo
b.   No / Hapana
c.   Not sure / Sina uhakika

12.   If you are dissatisfied, why? (you may select more than one answer) / Ikiwa haujaridhika, kwa nini? (unaweza kuchagua jibu zaidi ya moja)

a.   Lack of nearby public transport / Ukosefu wa usafiri wa umma ulio karibu
b.   Having to use more than one or two public transport options to get to work/ Kulazimika kutumia zaidi ya chaguo moja au mbili za usafiri wa umma kufika kazini
c.   The type of service and routes used / Aina ya huduma na njia zinazotumika
d.   High public transport costs when compared to the salary /Gharama kubwa za usafiri wa umma ikilinganishwa na mshahara
e.   Not wanting to use public transport everyday / Kutotaka kutumia usafiri wa umma kila siku
f.   Family doesn't want me to use public transport / Familia haitaki nitumie usafiri wa umma
g.   My society does not accept using public transport / Jamii yangu haikubali kutumia usafiri wa umma
h.   Other / Nyingine

13.   What could be done to improve your public transport experience? /Je, nini kifanyike ili kuboresha uzoefu wako wa usafiri wa umma?

[FREE TEXT]/ [WEKA MAANDISHI]

14.   What makes public transport fun? / Ni nini hufanya ufurahie usafiri wa umma?

[FREE TEXT]/ [WEKA MAANDISHI]

05. You are doing well! We'd like to understand what your travel experience is like. Unaendelea vizuri! Tungependa kuelewa jinsi hali yako ya usafiri ilivyo.

 This section has 4 questions and will take approximately 2 minutes.

Unaendelea vizuri! Tungependa kuelewa jinsi hali yako ya usafiri ilivyo

1.   Who do you usually travel with on public transport? You can select multiple answers. / Ni nani huwa unasafiri naye kwa usafiri wa umma (unaweza kuchagua majibu mengi)?
a.   Alone / Peke yangu
b.   Your children / Watoto wangu
c.   A male family member / Mwanafamilia wa kiume
d.   A female family member / Mwanafamilia wa kike
e.   A friend or colleague / Rafiki au mfanyakazi mwenzangu
f.   Other/ Nyingine
g.   I don't use public transport

2.   If relevant, please explain the reason for commuting with other people? / Ikiwa inafaa, tafadhali eleza sababu ya kusafiri na watu wengine?

[FREE TEXT]/ [WEEKA MAANDISHI]

3.   Does your household own a car? / Je, kaya yako inamiliki gari?
a.   Yes / Ndiyo
b.   No / Hapana

4.   If yes, how often do you use the car? / Ikiwa ndio, unatumia gari mara ngapi?
a.   Daily / Kila siku
b.   At least 2-3 times a week / Angalau mara 2-3 kwa wiki
c.   At least once a week / Angalau mara moja kwa wiki
d.   Once very 2 weeks / Mara moja kila baada ya wiki 2
e.   At least once a month / Angalau mara moja kwa mwezi
f.   A few times a year / Mara chache kwa mwaka
g.   On weekends / Siku za wikendi
h.   Never / Kamwe

06. We're curious to understand how you financially plan for your travels. / Sehemu hii ina maswali 4 na itachukua takriban dakika 3.

This section has 4 questions and will take approximately 3 minutes. / Sehemu hii ina maswali 4 na itachukua takriban dakika 3

1.   How much does your average daily commute cost? / Je, wastani wa safari yako ya kila siku unagharimu kiasi gani?

a.   KES100 - KES200
b.   KES201 - KES300
c.   KES301 - KES400
d.   KES401 - KES500
e.   Above KES 500 / Zaidi ya KES500

2.   Do you budget for public transport costs?* / Je, unabajeti kwa gharama za usafiri wa umma?*

a.   Yes / Ndiyo
b.   No / Hapana

3.   If yes how do you budget? / Kama ndiyo, unapangaje bajeti?

a.   Per trip / Kwa safari
b.   Per day / Kwa siku
c.   Per week / Kwa wiki
d.   Per month / Kwa mwezi

4.   Can you describe the process of how you budget for public transport? / Je, unaweza kuelezea mchakato wa jinsi unavyopanga bajeti ya usafiri wa umma?

[FREE TEXT]/ [WEKA MAANDISHI]

07. Almost done! We would like to understand the personal experience of travelling on public transport in your city.

Karibu kumaliza! Tungependa kuelewa uzoefu wa kibinafsi wa kusafiri kwa usafiri wa umma katika jiji lako.

This section has 8 questions and will take approximately 6 minutes. None of what you say will be shared and your answers will be confidential and your email will be separated from the answers on this survey./ Sehemu hii ina maswali 8 na itachukua takriban dakika 6. Hakuna chochote unachosema kitakachoshirikiwa na majibu yako yatakuwa siri na barua pepe yako itatenganishwa na majibu kwenye utafiti huu

1.   Have you witnessed any of the following situation while using or waiting for public transport? You can select as many as you have seen occur. / Je, umeshuhudia hali yoyote kati ya zifuatazo? Unaweza kuchagua nyingi kama umeona zikitokea.

a.   A verbal altercation on public transport / Ugomvi wa maneno kwenye usafiri wa umma
b.   Pickpocketing of personal belongings eg wallet, phone or bag / Unyang'anyi wa vitu vya kibinafsi mfano pochi, simu au begi
c.   Theft such as mugging / Wizi kama vile wizi
d.   People pushing each other while getting on or off public transport or while on public transport / Watu wanasukumana wanapopanda au kushuka kwenye usafiri wa umma au wakiwa kwenye usafiri wa umma
e.   A violent altercation between people getting on or off public transport or while on public transport / Mapigano makali kati ya watu wanaopanda au kutoka kwenye usafiri wa umma au wakiwa kwenye usafiri wa umma
f.   A person touching someone without that person knowing on public transport / Mtu kumshika mtu bila mtu huyo kujua kwenye usafiri wa umma
g.   Verbal sexual harassment including catcalling / Unyanyasaji wa kijinsia wa maneno ikiwa ni pamoja na kukamata
h.   Inappropriate or uncomfortable stares / Mtazamo usiofaa au usiofaa
i.   A person physically sexually harassing a woman on public transport / Mtu anayemnyanyasa kimwili mwanamke kwenye usafiri wa umma
j.   A person physically sexually harassing a man on public transport / Mtu anayemnyanyasa kimwili mwanamume kwenye usafiri wa umma
k.   None of the above / Hakuna kati ya haya
2.   In the past year, have you experienced any of the following while using or waiting for public transport? You can select several. / Unaweza kuchagua mifano kadhaa hapa chini. Katika mwaka uliopita, umepitia mojawapo ya yafuatayo? Unaweza kuchagua kadhaa.

a.   Someone yelling at you on public transport/ Mtu anayekufokea kwenye usafiri wa umma
b.   Theft of your personal belongings without you knowing until later /Wizi wa vitu vyako vya kibinafsi bila wewe kujua hadi baadaye
c.   Violent theft of your personal belongings such as a mugging or bag grab / Wizi mkali wa vitu vyako vya kibinafsi kama vile wizi au kunyakua begi
d.   Being pushed by someone while getting on or off public transport or while on public transport / Kusukumwa na mtu unapopanda au kushuka kwenye usafiri wa umma au ukiwa kwenye usafiri wa umma
e.   Being hit by someone while getting on or off public transport or while on public transport / Kugongwa na mtu unapopanda au kushuka kwenye usafiri wa umma au ukiwa kwenye usafiri wa umma
f.   Verbal sexual harassment including catcalling / Unyanyasaji wa kijinsia wa maneno ikiwa ni pamoja na kukamata
g.   Inappropriate or uncomfortable stares / Mtazamo usiofaa au usio na wasiwasi
h.   Being touched by someone without your consent/ Kuguswa na mtu bila ridhaa yako
i.   None of the above/ hakuna kati ya haya

3.   If you answered yes to any of the above has happened, where did this happen? You may select more than one answer. / Ikiwa umejibu ndiyo kwa lolote kati ya hayo hapo juu limetokea, hii ilitokea wapi? Unaweza kuchagua jibu zaidi ya moja.

a.   On the street, walking to your public transport / Barabarani, ukitembea kwa usafiri wako wa umma
b.   At the station / Kwenye kitu

c.   At a stop / Katika kusimama

d.   On the street or on a sidewalk while waiting for public transport / Barabarani au kando ya barabara wakati wa kusubiri usafiri wa umma

e.   In an on-demand vehicle / Katika gari linalohitajika

f.   In a bus, train or minibus

g.   Other / Nyingine

4.   When did this happen? You may select more than one answer. / Hii ilitokea lini? (unaweza kuchagua jibu zaidi ya moja)

a.   Morning peak hours / Masaa ya kilele cha asubuhi

b.   Evening peak hours / Saa za kilele cha jioni

c.   At night / Usiku All the time / Wakati wote

d.   Other / Nyingine

5.   If you have personally experienced any of the above, how did you react? You may select more than one answer. / IIkiwa umejionea lolote kati ya hayo hapo juu, ulitendaje? Unaweza kuchagua jibu zaidi ya moja.

a.   I walked faster / Nilitembea kwa kasi

b.   I yelled for assistance or help / Nilipiga kelele kwa usaidizi au usaidizi

c.   I confronted the person / Nilimkabili mtu huyo

d.   I submitted a complaint to the police / Niliwasilisha malalamiko kwa polisi

e.   I submitted a complaint to the driver or the company / Niliwasilisha malalamiko kwa dereva au kampuni

f.   I chose a special seat / Nilichagua kiti maalum

g.   I looked away / Nilitazama pembeni I did not do anything / Sikufanya chochote

h.   Not applicable, I have not personally experienced any of these situations / Haifai, mimi binafsi sijapitia hali zozote kati ya hizi

6.   If you have personally experienced any of the above, who is most often the perpetrator? You may select more than one answer. /Ikiwa wewe binafsi umepitia mojawapo ya hayo hapo juu, ni nani mara nyingi mhusika? Unaweza kuchagua jibu zaidi ya moja.

a.   Other passengers / Abiria wengine

b.   Driver or other public transport workers / Dereva au wafanyakazi wengine wa usafiri wa umma

c.   Passerby / Mpita njia

d.   Not applicable, I have not personally experienced any of these situations / Haifai, mimi binafsi sijapitia hali zozote kati ya hizi

7.   Are there any strategies that you use to keep safe or improve your travel? Please list as many as you can E.g travel with friends / Je, kuna mikakati yoyote unayotumia kuweka usalama au kuboresha safari yako? Tafadhali orodhesha vingi uwezavyo K.m. safiri na marafiki

8.   You can choose several of the statements below. In the past year, have you done any of the following things while using or waiting for public transport? You can select several. / Unaweza kuchagua kauli kadhaa zilizo hapa chini. Katika mwaka uliopita, umefanya lolote kati ya mambo yafuatayo (unaweza kuchagua kadhaa):

a.   Yelled at someone on public transport / Alimpigia kelele mtu kwenye usafiri wa umma

b.   Stolen or taken someone's personal property without them knowing / Kuibiwa au kuchukuliwa mali ya mtu binafsi bila yeye kujua

c.   Stolen or taken someone's personal property, violently by mugging or grabbing their belongings / Kuibiwa au kuchukuliwa mali ya kibinafsi ya mtu, kwa jeuri kwa kuiba au kunyakua mali zao

d.   Pushed someone while getting on or off public transport or while on public transport / Alisukuma mtu wakati akipanda au kutoka kwa usafiri wa umma au akiwa kwenye usafiri wa umma

e.   Hit someone while getting on or off public transport or while on public transport / Piga mtu unapopanda au kutoka kwa usafiri wa umma au ukiwa kwenye usafiri wa umma

f.   Catcalled someone / Akamwita mtu
g.   Stared at someone in inappropriate way or in a way that made them uncomfortable (intentionally or unintentionally) / Kumtazama mtu kwa njia isiyofaa au kwa njia iliyomfanya akose raha (kwa kukusudia au bila kukusudia)
h.   Touched another woman without them knowing it was you / Akamgusa mwanamke mwingine bila wao kujua ni wewe
i.   Touched another man without them knowing it was you / Akamgusa mwanaume mwingine bila wao kujua ni wewe
j.   Touched another woman without their permission (intentionally or unintentionally) / Alimgusa mwanamke mwingine bila idhini yao (kwa kukusudia au bila kukusudia)
k.   Touched another man without their permission (intentionally or unintentionally) / Alimgusa mwanamume mwingine bila idhini yao (kwa makusudi au bila kukusudia)
l.   None of the above / Hakuna kati ya zilizo hapo juu

08. This is the last section! We'd love to find out what apps you use to know what is happening on public transport. / Hii ni sehemu ya mwisho! Tungependa kujua ni programu zipi unazotumia kujua kinachoendelea kwenye usafiri wa umma.

This section has 8 questions and will take approximately 5 minutes. / Sehemu hii ina maswali 8 na itachukua takriban dakika 5.

1.   Do you use your phone while travelling? / Je, unatumia simu yako unaposafiri?

a.   Yes / Ndiyo
b.   No / Hapana
c.   Sometimes / Wakati mwingine

2.   If you do use your phone, what do you use your phone for? / Ikiwa ndiyo na wakati mwingine, unatumia simu yako kufanya nini?

a.   Chatting with friends and family / Kuzungumza na marafiki na familia
b.   Travel information / Taarifa za usafiri
c.   Games / Michezo
d.   Social media / Mitandao ya kijamii
e.   News / Habari
f.   Listening to music or podcasts / Kusikiliza muziki au podikasti
g.   Video/ Video
h.   Education / Elimu

3.   Have you used an app to help you navigate around [city name]?* / Je, umetumia programu kukusaidia kuzunguka [jina la jiji]?*

a.   Yes / Ndiyo
b.   No / Hapana
c.   Not sure / Sina uhakika

4.   What apps have you used? / Je, umetumia programu gani?

a.   Google Maps / Ramani za Google
b.   Here
c.   Waze
d.   Other / Nyingine

5.   What have you used the above apps for? You can choose as many options as you'd like. / Je, umetumia programu zilizo hapo juu kwa ajili ya nini? Unaweza kuchagua chaguo nyingi kama ungependa.

a.   To find a new route to a place you always go to / Kupata njia mpya ya kwenda mahali unapoenda kila mara
b.   To find a route to a new place / Kupata njia ya kwenda mahali papya
c.   To find out about disruptions on public transport / Kujua kuhusu usumbufu kwenye usafiri wa umma
d.   To view maps of public transport systems or networks / Kutazama ramani za mifumo au mitandao ya usafiri wa umma

e.   To view a map of your city / Kutazama ramani ya jiji lako

f.   To view information about time or cost of a route / Kuangalia taarifa kuhusu muda au gharama ya njia

g.   I was just curious to try it and didn't use it for anything specific / Nilikuwa na hamu ya kujaribu na sikuitumia kwa kitu chochote maalum

h.   Other / Nyingine

6.   Would you rely on the chosen app for that information again? / Je, unaweza kutegemea programu uliyochagua kwa maelezo hayo tena?

a.   Yes / Ndiyo

b.   No / Hapana

c.   It depends / Inategemea

7.   Do you use any of the following channels to find out information about traffic or your journey before you start traveling? You can choose as many as you'd like. / Je, unatumia chaneli yoyote kati ya zifuatazo ili kujua habari kuhusu trafiki au safari yako kabla ya kuanza kusafiri? Unaweza kuchagua nyingi kama ungependa.

a.   Radio programmes / Vipindi vya redio

b.   Television programmes / Vipindi vya televisheni

c.   Newspaper / Gazeti

d.   Word of mouth (for example friends, family and neighbours) / Maneno ya kinywa (kwa mfano, marafiki, familia na majirani)

e.   Twitter

f.   WhatsApp

g.   Facebook

h.   Google

i.   Waze

j.   I don't look for this kind of information before I start traveling / Sitafuti aina hii ya habari kabla sijaanza kusafiri

k.   Other/Nyingine

8.   Do you want to tell us more about that? / Je, ungependa kutuambia zaidi kuhusu hilo?

[FREE TEXT] / [WEEKA MAANDISHI]

End of survey / Mwisho wa utafiti

Thank you for taking the time to fill out this survey! The team at WhereIsMyTransport really appreciates you!

Do you have any other thoughts to share on public transport? If so, we would love to stay in touch with you! If you are interested in sharing more about your experience of travelling around your city, please leave us your contact details and a member of our Research Team will reach out to you.

Phone number or email address: _____

Asante kwa kuchukua muda kujaza utafiti huu! Timu iliyoko WhereIsMyTransport inakuthamini sana!

Je, una mawazo mengine yoyote ya kushiriki kwenye usafiri wa umma? Ikiwa ndivyo, tungependa kuwasiliana nawe! Ikiwa ungependa kushiriki zaidi kuhusu uzoefu wako wa kusafiri kuzunguka jiji lako, tafadhali tuachie maelezo yako ya mawasiliano na mshiriki wa Timu yetu ya Utafiti atakufikia.

Nambari ya simu au barua pepe: _____ *Example of survey questionnaire used in Lagos.*

Annex 4 - Research participant details

	Nairobi	Lagos	Gauteng
Ride-alongs	1 x working professional woman 1 x student 1 x informal trader 1 x informal trader 1 x stay at home mum 1 x sex worker 6 in total		
Workshops	62	67	61
Surveys	155	100	80

Survey demographics:

Below is a summary of the gender those surveyed in each city.

Gender	Nairobi	Gauteng	Lagos	Total
Female	72.3%	66.3%	99%	78.8%
Male	27.7%	32.5%	0%	20.5%
Prefer not to say	0%	1.3%	1%	0.6%

Below is a summary of the ages of those surveyed in each city.

Age group	Nairobi	Gauteng	Lagos	Total
Under 18	0%	0%	1%	0.3%
18-24	30.3%	21.3%	34%	29.2%

25-34	46.5%	52.5%	40%	45.9%
35-44	16.8%	18.8%	18%	17.6%
45-59	6.5%	6.3%	7%	6.5%
60-74	0%	1.3%	0%	0.3%

Below is a summary of the monthly income of those surveyed in each city. The salary bracket indicates the position of that income range where A is the highest, and G is the lowest.

Nairobi - Monthly income		
Salary bracket	**Salary**	**Percentage makeup**
G	Below KES13,000	14%
F	KES13,000 - KES20,000	27%
E	KES21,000 - KES30,000	15%
D	KES31,000 - KES40,000	9%
C	KES41,000 - KES50,000	5%
B	KES51,000 - KES60,000	8%
A	KES61,000 - KES70,000	4%
A+	Above KES70,000	18%

Gauteng - Monthly income		
Salary bracket	**Salary**	**Percentage makeup**
G	Below R1,500	2.6%
F	R1,500 - R7,000	37.2%
E	R7,000 - R16, 000	33.3%
D	R16,000 - R33,000	20.5%

C	R33,000 - R57,000	1.3%
B	R57,000 - R123,000	2.6%
A	R123,000 - R196,000	2.6%

Lagos - Monthly income		
Salary bracket	**Salary**	**Percentage makeup**
G	Below N25,000	21.5%
F	N25,000 - N92,500	43%
E	N92,500 - N133,300	17.2%
D	N133,300 - N267,000	6.5%
C	N267,000 - N500,000	7.5%
B	N750,000 - N1,000,000	2.2%
A	Above N1,000,000	2.2%

In order to compare across cities, the below table provides the percentage breakdown per market per representative salary bracket name.

Salary bracket	Nairobi	Gauteng	Lagos	Total
G	13.6%	2.6%	21.5%	13.2%
F	27.2%	37.2%	43%	34.2%
E	15%	33.3%	17.2%	20.1%
D	8.8%	20.5%	6.5%	11%
C	4.8%	1.3%	7.5%	4.7%
B	8.2%	2.6%	2.2%	5%
A	4.1%	2.6%	2.2%	3.1%
A+	18.4%	0%	0%	8.4%

Below is a split of those participants who indicated some financial dependency on another person. It also indicates who the person is who provides them with financial support.

Are you dependent on someone else?	Nairobi	Gauteng	Lagos	Total
Yes	68%	27.5%	25.3%	24.2%
No	26.5%	53.8%	68.7%	64.7%
Sometimes	5.4%	18.8%	6.1%	11%
Who?				
Parent(s)	46%	42.1%	67.6%	50.7%
Spouse / partner(s)	39.7%	36.8%	16.5%	32.6%
Other family member(s)	9.5%	18.4%	5.4%	10.8%
Student funding or bursary	0%	7.9%		2%
Transport fare	3.2%			1.4%

Below is a summary of the level of education the participants have.

Level of education	Nairobi	Gauteng	Lagos	Total
No formal education	NA/0%	2.5%	1%	0.9%
All of primary education	8.4%	NA/0%	2%	4.5%
Part of	2.6%	22.8%	8.1%	9%

secondary or high school education				
All of secondary or high school education	22.1%	44.3%	12.1%	24.3%
Diploma education	18.2%	8.9%	24.2%	17.7%
Degree/Bachelors education	40.3%	12.7%	42.4%	34.3%
Postgraduate education	8.4%	8.9%	10.1%	9%

Annex 4 - Research participant details

	Nairobi	**Lagos**	**Gauteng**
Ride-alongs	1 x working professional woman 1 x student 1 x informal trader 1 x informal trader 1 x stay at home mum 1 x sex worker 6 in total		
Workshops	62	67	61
Surveys	155	100	80

Survey demographics:

Below is a summary of the gender those surveyed in each city.

Gender	Nairobi	Gauteng	Lagos	Total
Female	72.3%	66.3%	99%	78.8%
Male	27.7%	32.5%	0%	20.5%
Prefer not to say	0%	1.3%	1%	0.6%

Below is a summary of the ages of those surveyed in each city.

Age group	Nairobi	Gauteng	Lagos	Total
Under 18	0%	0%	1%	0.3%
18-24	30.3%	21.3%	34%	29.2%
25-34	46.5%	52.5%	40%	45.9%
35-44	16.8%	18.8%	18%	17.6%
45-59	6.5%	6.3%	7%	6.5%
60-74	0%	1.3%	0%	0.3%

Below is a summary of the monthly income of those surveyed in each city. The salary bracket indicates the position of that income range where A is the highest, and G is the lowest.

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A+	Above KES70,000	18%

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Salary bracket	Salary	Percentage makeup
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F	R1,500 - R7,000	37.2%
E	R7,000 - R16, 000	33.3%
D	R16,000 - R33,000	20.5%
C	R33,000 - R57,000	1.3%
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Salary bracket	Salary	Percentage makeup
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C	4.8%	1.3%	7.5%	4.7%
B	8.2%	2.6%	2.2%	5%
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Transport fare	3.2%			1.4%

Below is a summary of the level of education the participants have.

Level of education	Nairobi	Gauteng	Lagos	Total
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All of primary education	8.4%	NA/0%	2%	4.5%
Part of secondary or high school education	2.6%	22.8%	8.1%	9%
All of secondary or high school education	22.1%	44.3%	12.1%	24.3%
Diploma education	18.2%	8.9%	24.2%	17.7%
Degree/Bachelors education	40.3%	12.7%	42.4%	34.3%
Postgraduate education	8.4%	8.9%	10.1%	9%

Annex 5 - City glossary

Gauteng

Gautrain   a type of formal public transport. It is an express commuter train that connects some major areas of Johannesburg and Pretoria.

Stokvel   a savings or investment group where members contribute an agreed amount on a regular basis. They then receive a lump sum payment on an arranged date.

Taxi   a type of informal public transport. It is a minibus van that transports a number of passengers at once. It should not be mistaken with a taxi cab that is hailed and used privately.

Ubuntu   a widely-accepted, followed and understood South African philosophy based on a shared sense of humanity, and working together as a community. It is often represented by using the phrase, I am because you are.

WITS   the University of Witwatersrand, a university in Johannesburg.

Lagos

Danfo   one of the more prevalent modes of transport in Lagos. A privately-owned minibus or van hired to carry 16-18 passengers.

Keke   a popular mode of transport in Lagos, that can be described as a yellow three-wheeler.

NURTW   National Union of Road Transport Workers.

Nairobi

Tout   synonymous with conductor. Matatu drivers are generally referred to as touts.

Keke   a mobile money transfer service widely used in Kenya and other African countries, for payments and micro-financing services.