Gender Sensitive Mini-Bus Services & Transport Infrastructure for African Cities: A Practical Toolkit

Based on a Mobility of Care Study & Gender Equity Assessment of Nairobi’s Minibus Transport Network
Gender Sensitive Mini-Bus Services & Transport Infrastructure for African Cities: A Practical Toolkit
This Toolkit has been prepared by Kelvin Muriuki, Susan Goodwillie, Naomi Mwaura and Mary Mwangi of Flone Initiative.

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This Toolkit would not have been possible without the contribution of various public transport industry workers and consumers who provided the data used to inform our recommendations.
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Sustainable urbanization and attainment of the Sustainable Development Goals depends crucially upon the increased participation of women in economic and social activities. Nevertheless, several constraints combined, limit such participation. One such constraint is the challenge that women face when commuting in cities, whether to places of work, educational institutions, health care facilities or to places that provide opportunities for social interactions or recreation.

Research has shown that women have different travel patterns from men, due to their additional responsibilities of caring for children, the elderly and people with disabilities. Research also shows that women are often victims of sexual harassment in the streets or on public transport.

Based on practical examples, UN-Habitat and the Flone Initiative have worked together to develop this Toolkit that can guide public transport operators in improving their services for women. In Africa, public transport tends to be operated informally, with fleets comprised of smaller vehicles such as minivans. The recommendations in this Toolkit are also relevant for local and national government authorities making efforts to improve public transport for their citizens through improving the regulatory framework or introducing modern forms of public transport such as a Bus Rapid Transit system.

Users of the Toolkit will observe that the recommendations aim at improving public transport for women, and if adopted, will improve public transport for all including the elderly, people with disabilities and other vulnerable groups.

While it draws on examples from Nairobi, I believe that this Toolkit will contribute to improving public transport across cities in Africa. I hope that public transport operators, city managers and regulatory and road safety authorities will find the Toolkit on Gender Sensitive Mini Bus Services and Transport Infrastructure for African Cities useful.

Maimunah Mohd. Sharif
United Nations Under-Secretary-General and Executive Director, UN-Habitat
## Abbreviations

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<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>GEA</td>
<td>Gender Equity Assessment</td>
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<td>ILO</td>
<td>International Labor Organization</td>
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<td>ITDP</td>
<td>Institute for Transportation and Development Policy</td>
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<td>KBS</td>
<td>Kenya Bus Service</td>
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<td>Matatu</td>
<td>Minibuses, minivans, vans and buses used in road public transport</td>
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<td>NEMA</td>
<td>National Environment Management Authority</td>
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<td>PWD</td>
<td>People with Disabilities</td>
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<td>SACCO</td>
<td>Saving and Credit Co-Operative Societies</td>
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<td>UN</td>
<td>United Nations</td>
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<tr>
<td>VAWG</td>
<td>Violence against Women and Girls</td>
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Executive Summary

This Toolkit provides minibus transport organizations, policy makers and civil society actors with practical and concrete tools for creating safer public transport systems for African women and other vulnerable commuters. The tools and recommendations herein are derived from intensive case studies conducted with Nairobi-based transport workers and commuters.

The main recommendations for public minibus transport providers include:

01 Develop customer feedback tools that align with the organization’s customer service charter which provide commuters with clear reporting mechanisms.

02 Develop and implement policies of zero-tolerance to sexual harassment that address the concerns of both workers and commuters.

03 Make modifications to minibuses that support specific needs of commuters traveling with children, those carrying large packages and those living with both visible and invisible disabilities.

04 Adopt family-friendly organizational human resource policies such as maternity and paternity leave.

The Toolkit recommends ways for policy makers to develop gender sensitive legislation which create safer, more accessible public transportation systems for all. It also proposes how civil society can support these initiatives.

This is the first version of a Toolkit which will guide a multi-year project to be executed by Flone Initiative. The project supports transport organizations to adopt its recommendations. This Toolkit will be adapted and amended based on user feedback, impact and lessons learnt.
Introduction

The Gender Sensitive Mini-Bus Services and Transport Infrastructure for African Cities Toolkit provides minimum standard guidelines and practical tools for creating safer and more accessible public transportation systems for women in African cities. The Toolkit specifically provides vital information on improving existing management policies and practices.

Over the years, there have been rampant cases of violence against women and girls (VAWG) on public transport in Africa and other developing regions. On 17 November 2014, Kenya caught the world’s attention with the #MyDressMyChoice campaign in which thousands of people went to the streets to protest sexual violence against women in the public transport industry following a spate of stripping incidences which were filmed and posted online. This protest sparked off a movement to challenge gender norms and systems that allow this kind of violence and fundamentally limit women’s freedom of movement and access to public space.

How was this Toolkit developed?

This Toolkit is a synthesis of primary and secondary information from two case studies conducted in Nairobi, Kenya, and a literature review to identify best practices on gender and urban transport applied in cities around the world, with a focus on developing cities. Kenyan minibus services (locally referred to as *matatus*) are organized into informal saving and credit cooperatives societies or SACCOs. These public minibus transport services are the most common mode of transport for middle and low-income commuters, the majority of whom are women, and are notorious for harassment, reckless driving, and violence.

These case studies were conducted by Flone Initiative in collaboration with UN-Habitat and Prof. Inés Sánchez Madariaga, an expert in Gender and Urban Planning affiliated with the University of Madrid, and a member of the UN-Habitat Advisory Group on Gender Issues (AGGI). Information was gathered from both commuters and transport industry operators (drivers, conductors and managers) through the execution of a Mobility of Care Study and a Gender Equity Assessment with three selected public minibus transport service providers. The field studies were conducted in August - October 2018. Findings from both studies and corresponding best practices have informed the development of this Toolkit.
Who is this Toolkit for?

The *Gender Sensitive Mini-Bus Services and Transport Infrastructure for African Cities Toolkit* is mainly for managers of public transport service providers (buses and minibuses) but is also useful for city officials, civil society and other stakeholders in urban public transport. It is a practical guide to providing safe, inclusive, accessible and gender sensitive urban public transport.

Gender Equity Assessment (GEA)

Flone Initiative conducted interviews with female and male minibus operators (drivers, conductors and managers) in three select public minibus transport service organizations in Nairobi (referred to as SACCOs). The aim of the Gender Equity Assessment (GEA) was to understand women’s perspectives on their participation in employment and to evaluate how existing policies affect women with regard to employment, retention, promotion, safety and sexual harassment. Non-probabilistic (purposive) sampling was used, based on the socio-economic characteristics of the service providers, which maximally captured information variations from the target population. These characteristics include employment, safety and sexual harassment policies.

Mixed qualitative and quantitative data collection techniques were applied to capture the most comprehensive data. There are very few female workers in the selected SACCOs and so efforts were made to interview as many women working in the minibus industry in Nairobi as possible, regardless of the SACCO they work with. A total of 35 female drivers and conductors were interviewed. Men made up majority of drivers and conductors and 20 men were interviewed in each of the three selected SACCOs (this was the number at which responses maximized variations and would start repeating themselves). Three managers in each SACCO were also interviewed to get information on current organizational policies. A total of 104 questionnaires were distributed (35 for women, 60 for men and 9 for managers). The assessment revealed that only 6 per cent of sexual harassment cases are reported to law enforcement, while 32 per cent of victims interviewed remained silent.
The data was analyzed separately and then compared with data from Mobility of Care case study to develop insights for the Toolkit. For the full Gender Equity Assessment Report and Literature Review, visit [https://unhabitat.org/report-on-gender-equity-assessment-of-nairobi-public-minibus-transport-services/](https://unhabitat.org/report-on-gender-equity-assessment-of-nairobi-public-minibus-transport-services/).
Figure 1: Flone Initiative researcher in the field collecting data for the GEA

Figure 2: Small scale business women at Matatu stage in Nairobi © Monika Korczewski
Mobility of Care

The Mobility of Care case study was conducted to identify travel patterns and challenges faced by women using minibus public transport services provided by the three transport providers who participated in the GEA. Slovin’s formula was used to determine the number of people interviewed for each minibus service area (Slovin’s Formula, n.d.). Information triangulation was done to determine the percentage of commuters who represent women and men in a full minibus. This was informed by interviews with bus stop managers, queue observation, and a physical count of male and female commuters inside the minibus. Based on this, the number of women commuters was found to be around 60 per cent. Using a 95 per cent level of confidence and a confidence interval of 10 percent, 273 female and 200 male commuters were interviewed, making a total of 473 respondents. A mixed methodology approach (quantitative and qualitative) was applied with questionnaires as the tool of choice. The analysis of the mobility patterns of female and male users of the matatu system in Nairobi, shows significant differences in terms of care activities, access to private cars, number and purpose of trips and perceived safety for instance, a significant number of women (43%) does not travel after dark.

The data was analyzed separately then compared with data from the GEA to develop insights for the Toolkit. For the full Mobility of Care Report, visit https://unhabitat.org/report-on-mobility-of-care-assessment-of-nairobis-public-minibus-transport-services/.

<table>
<thead>
<tr>
<th>Do you travel or do tasks outside the house after dark?</th>
<th>Male</th>
<th>Female</th>
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<tr>
<td>Yes</td>
<td>98</td>
<td>75</td>
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<tr>
<td>No</td>
<td>203</td>
<td>202</td>
</tr>
<tr>
<td>Total</td>
<td>291</td>
<td>277</td>
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Guidance For Action
1. Customer Service Charter

Quality customer service ensures that customers feel safe, fairly treated and valued by the organization offering the service. A customer service charter is a framework outlining how businesses relate with customers in terms of the quality of service offered, mechanisms for handling customer grievances, and overall quality standards. It should be concise, easy to read, easily accessible, and prominently displayed.

Our research revealed that while some public transport service providers have customer service charters, commuters are not always aware of their existence. Some service providers have posted their customer service charters online (such as that by the Kenya Bus Service (KBS, 2016)). Displaying customer service charters prominently on buses and other locations is a constant reminder for both customers and operators of the level of service organizations are expected to provide.

Recommendations

- All service providers in the transport industry should develop customer service charters specifically addressing the needs of women, children, persons living with disabilities and other vulnerable road users. The charters should provide clear guidelines for channeling customer complaints, and for the service providers to respond to the complaints. For a sample Customer Service Charter Template, see Appendix A.

- Display the Customer Service Charter inside vehicles and at bus stages.

- Orientation for new staff should include mandatory review of the Customer Service Charter which should be incorporated into annual staff refresher courses.

- Public transport service providers must ensure that drivers, conductors and stage attendants undertake customer service refresher courses at
least twice a year. The courses should impart crucial skills such as how to assist women, children and people living with disabilities properly, how to de-escalate hostile situations, and how to respond to sexual harassment.¹

2. Customer Feedback

Good customer feedback is essential to sustain safety and deliver quality service. However, most public transport companies do not actively seek to collect and incorporate such feedback.

Our research found that 76 per cent of female operators (drivers and conductors) have either experienced or witnessed sexual harassment and that 25 per cent of those cases go unreported because victims and witnesses feel that perpetrators will not be held accountable. The research also found that commuters feel that drivers and conductors are often the major perpetrators of sexual harassment. Women therefore look for alternative means of transport such as private cars or taxis, while others choose not to use a particular service provider or even opt not to travel at all. Most managers in the transport industry are unaware of this as they do not have customer feedback mechanisms to capture the information.

Managers will get valuable information on reliability, operational speed, trip cost perspective, sexual harassment prevalence, and staff performance from customer feedback. This information is vital for planning and decision making.

Recommendations

¹ For Customer Service Training in Kenya, contact Flone Initiative at: info@floneinitiative.org. Certificates of Completion will be made available to operators who have received the training. These can be displayed to passengers on minibuses.
• Public minibus service providers need to decide on a reliable feedback system that works for them and clearly communicate that system to their customers. Among the customer feedback tools available are surveys, e-customer forms, in-person interviews, social media, physical comment boxes, hotlines, and websites. Because some minibus users may not have access to digital tools, the use of SMS-based surveys, hotline numbers and/or physical comment boxes is recommended. The key is having reliable systems to review and respond to feedback, regardless of how it is collected.

• In the case of SMS-based customer feedback tools and hotline numbers, the license plate number of each minibus should be indicated inside the vehicle or next to the hotline number so that commuters are able to specify which vehicle they are in when reporting an incident. It is imperative that staff receives proper training on the feedback system and how feedback will be incorporated into the organization’s policies, no matter what customer feedback tool the organization chooses.

• Public minibus service organizations employ stage attendants at major
Figure 4: Stage Attendants should be trained to both receive customer feedback and respond to sexual harassment reports, as well as provide important route information.

3. Standardized Sexual Harassment Policy

The Gender Equity Assessment revealed a lack of sexual harassment policies in public transport organizations. Managers said specific sexual harassment policies are unnecessary because such cases are treated like any other grievance and reported to police. However, interviews with commuters and workers exposed extreme prevalence of sexual harassment, significantly affecting women. Over half of commuters reported experiencing sexual harassment in public transport bus terminals. They should be trained to solicit, receive, and respond to complaints of sexual harassment by commuters or transport staff. The stage attendants personnel are strategically placed to handle feedback, expedite response time for more serious grievances including harassment cases, and provide in-person service and accountability for quality assurance.
spaces, while 76 per cent of women interviewed had witnessed sexual harassment while working in the public transport industry. The Gender Equity Assessment also showed the reluctance of survivors to report these incidences due to lack of clear reporting mechanisms and the belief that perpetrators will not be held accountable. These findings reveal a disturbing gender gap between how men and women experience public transportation. Sexual harassment can have a harmful cumulative effect on those who experience or bear witness to it, serving to reinforce and normalize negative gender stereotypes.

Transport organizations must therefore approach sexual harassment as a pervasive issue. They must state unequivocally that they stand against harassment in all its forms and develop clear, actionable and reliable systems to address harassment when it is reported.

**Recommendations**

- Using stickers and signage inside vehicles, clearly indicate that sexual harassment of any kind is unacceptable and that all reports of harassment will be investigated and action taken immediately against those found guilty. The signs should say explicitly that mode of dress is never an invitation or excuse for harassment.

- Develop a written policy of zero-tolerance to sexual harassment with clear guidelines for both commuters and workers on reporting incidences of sexual harassment. It should spell out clearly the referral hierarchy of responsibility for intervention at different stages of all sexual harassment incidences reported by commuters. Decision makers may refer to a useful and comprehensive Sexual Harassment Policy drafted by the International Labour Organisation for guidance (ILO, 2013). Additionally, Flone Initiative is committed to assisting transportation organizations develop sexual harassment policies, protocols and training material that best work for them.

- Ensure that the sexual harassment policy is reviewed and signed during orientation of any new employee.

- Organize mandatory bi-annual sexual harassment training to sensitize staff on current sexual harassment policies and procedures as well as sexual harassment issues and their implications in the workplace.²

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² Flone Initiative has conducted trainings on gender sensitization and prevention of sexual harassment for minibus organizations around Eastern Africa and are available to assist in the development of training materials and training facilitation. For more information, contact Flone Initiative at: info@floneinitiative.org.
CASE STUDY 1

*Ella se mueve segura / She moves safely*, a study by FIA Foundation (2017) was conducted on women’s personal security and public transport in three Latin American cities, Quito in Ecuador, Buenos Aires in Argentina, and Santiago in Chile. They found that in all three cities, women face many types of harassment daily while using public transport. The study found that women would avoid using public transport or adjust the time of the day they travel on public transport. In extreme cases, the emotional distress caused by harassment or violence caused women to restrict their travel to destinations closer to their premises, or even avoid the travel all together.

4. Minibus Modifications

Our research revealed that commuters felt certain environmental characteristics such as dark isolated places and overcrowded vehicles, contribute to the perceived lack of safety in minibuses and bus stages. There are several practical adjustments that can be made to minibuses and minibus stages to address these issues.

It is important to note that in Kenya, each minibus (or *matatu*) is privately owned, even within the same SACCO. Each minibus owner is responsible for “building” their own vehicle. Depending on SACCO rules, owners can make adjustments to internal lighting, cameras, exterior painting and graffiti, seating arrangement, internal signage, etc. All SACCOs are urged to require vehicle owners to adhere to the following requirements.

A. Lighting

Commuters reported associating dark areas with sexual harassment, theft and other safety concerns. Lighting and time of day influenced women’s decisions on when to travel and whether to travel accompanied or alone. Certain design measures have a positive effect in reducing this fear including:

- Internal lighting for vehicles which should be left on every evening, all through the ride, as opposed to only during fare collection.
- Bus stages should be well lit at all times. While this may or may not be under the control of transport companies, they can partner with corporations and government entities to install better lighting in certain areas of the city.
Adopt-a-Light was founded by Nairobi County Women’s Representative, Esther Passaris in 2002 with the objective of lighting Nairobi’s streets and slums by redirecting advertising revenues into community development projects. Adopt-a-Light installs and maintains street lighting in exchange for advertising spaces on street-lighting infrastructure. A Steadman Group report which assessed the impacts of the project found that lighting increased perceptions of safety at night, allowing people to conduct business and travel even after the sun went down (The Steadman Group, 2006).

B. Stop Announcements

Women like to be able to scan their surroundings through bus windows prior to alighting to determine whether it is the right stop and whether the environment is hospitable enough for them to alight. Stop announcements help women commuters, hearing and visually impaired commuters, and commuters who may be unfamiliar with a route. Recommendations to ensure that commuters feel comfortable enough to alight include:

- **Announcements at every stop**, as well as the upcoming stop. Where appropriate organizations could also incorporate automated bus stop announcement systems.

- **Acceptable music systems**. Loud music hinders efficient communication between commuters and the conductor or driver, especially when women need to raise an alarm of harassment or request a drop off.

- **Fully transparent** windows to allow women to scan their surroundings.

C. Minibus Infrastructure Considerations

Due to their design, minibuses pose accessibility challenges to many commuters. Sliding doors, low ceilings, crammed seating arrangements, and high boarding platforms create obstacles for commuters boarding and alighting from the vehicles. The following infrastructure considerations can help ameliorate these challenges:

- Make all minibuses wheelchair accessible (based on UN-Habitat’s Access and Mobility: The implications of Universal Access on Groups in Vulnerable Situations in Nairobi project) by installing a ramp in the back of the minibus and making the back row of seats foldable (See Case Study 3).
• By making back seats foldable, the minibus can create luggage space for market women with large parcels of wares. Minibuses should prioritize this space for commuters living with disabilities, but should it not be in use by persons with disabilities, it should be made available for luggage or large parcels.

CASE STUDY 3

In 2018, UN-Habitat, in partnership with the National Gender and Equality Commission (NGEC) and the Institute of Transportation and Development Policy (ITDP), initiated a project in Kenya called Access and Mobility: The implications of Universal Access on Groups in Vulnerable Situations in Nairobi. As a part of this project, they have designed and built a matatu that is wheelchair accessible by building a ramp in the back of the vehicle as well as outfitting the minivan with foldable seats. This arrangement allows the matatu to accommodate a wheelchair user, while also being able to return the seats to their original position when the space is not needed for a person living with a disability. (UN Habitat Worldwide, 2018)
D. Other Recommended Safety Infrastructure

- The installation of CCTV cameras inside minibuses provides surveillance and creates a sense of safety. These cameras can not only record evidence of a crime, but also make possible a more rapid response where a crime is in progress. Some minibuses already have functional CCTVs installed inside the passenger cabin of the vehicle and a monitor for the driver. This arrangement provides for clear communication between the driver and conductor, maintains accountability, and allows the crew to act quickly in case of an emergency.

- Some public transport systems now employ alarms or panic buttons which can be used in the event of an emergency on-board vehicles or at transport hubs.

CASE STUDY 4

In Quito, Equador, the Bájale al Acoso (Down with Harassment) campaign has been implemented to provide an innovative reporting outlet to commuters on public buses. The SMS-based platform allows people to make reports in real-time if they experience or witness harassment. The SMS is received by the EPMTPQ (Quito’s Transport Authority) control center, who immediately call the person reporting to learn more about the situation. Simultaneously, the driver is notified of the incident of harassment and an alarm sounds in the bus unit, alerting all passengers that they should be especially vigilant. In addition, the police or security personnel of the EPMTPQ are made available to intercept the victim and/or aggressor at the next bus station. (FIA Foundation, 2017)

E. Achieving Environmental Sustainability

According to UN Environment, pollution was responsible for more than 9 million premature deaths and 16 per cent of all deaths worldwide in 2015 (Landrigan & Fuller, 2017). The study also found that the effect of pollution on the health and well-being of nations has huge economic impact. Greenhouse gas emissions from transport are growing faster than in any other sector, with the global car fleet projected to triple by 2050. Given that women travel more than men and have more complex travel patterns, they are primarily affected by this challenge.
Recommendations

• **Prioritize vehicle maintenance.** The National Environment Management Authority (NEMA) requires all public service vehicles to undergo annual emissions tests to ensure that they comply with national emissions standards as stipulated in the Environmental Management And Co-Ordination (Air Quality) Regulations, 2014 (NEMA, 2014). Such tests can be done at accredited emission testing centers. NEMA also gives guidelines on acceptable emission control technologies, as detailed in Appendix B (NEMA, 2014).

If a vehicle is emitting visible pollutants (smoke), it needs to be serviced! Better vehicle maintenance will help minibuses remain operational and will provide a healthier environment for everyone.

• **Adopt clean energy motor vehicles.** Clean energy vehicles are those that are powered by alternative fuels and technology such as hybrid electric vehicles, plug-in hybrid electric vehicles, battery electric vehicles, compressed air vehicles, neat ethanol vehicles, flexible-fuel vehicles, natural gas vehicles among others.

5. Route Information

Information about service provider names, route maps, time schedules and fare information is important when planning travel. Women have more complex travel patterns than men and value route information to aid their travel planning. Our study found that a key consideration by women when they plan travel is reliability. Being at the wrong place at the wrong time, especially at night, makes women more vulnerable to harassment and violence.

**Recommendations**

Ensure that posters are placed inside vehicles with information such as names of major stages along the route, fare information for different destinations, and any time-specific fare changes (peak and off-peak fare differentials).
• **Clearly legible signage** should be placed at minibus stages with the same information as above. Currently, SACCOs often have signs outside the vehicles indicating general fares and major stages, but this can be greatly improved on by including the name of the SACCO, a map of all of the stages along the route and peak/off-peak fares.

**Figure 6:** This fare chart includes the names of stages as well as peak and off-peak fares. Similar fare charts should include visual maps of stages and be posted in ALL minibuses.

**Figure 7:** While some minibuses have signs on top of the vehicle to indicate destination and price, they often do not include the name of the SACCO, peak and off-peak fare differentials or all stops along the route. Signage outside of vehicles can be greatly improved to assist commuters plan their travel.
CASE STUDY 5

Digital Matatu is a mobile application developed by Kenyan and American universities in collaboration with the Nairobi technology sector. The application seeks to address the lack of route information in the matatu industry and contains information about the routes used by Nairobi matatus. The Digital Matatu project has been incorporated into Google Maps. It’s worth mentioning that the digital matatu project is being used by the government in planning. (digitalmatatus.com)

6. Hire and Retain More Women Workers

100 per cent of transport managers interviewed for the GEA stated that women make good drivers although the number of women employed in public transport at all levels remains extremely low. Our research highlighted several challenges which deter women from entering and building careers in the transport sector. These include:

- Sexual harassment and coercion (sexual favors in exchange for work opportunities)
- Public stigmatization and discrimination by family and friends
- Lack of job security
- Lack of gender specific labor provisions (maternity leave, sanitary facilities, etc.)

The International Labor Organization (ILO) Career Cycle Approach is a useful guide to increasing women’s participation in the transport sector (ILO, 2013). This chart focuses on working conditions and the human resources policies of transport service providers designed to mainstream gender. It describes opportunities for success and advancement, while also recognizing the barriers faced by women in education, training, and the level of social support available to those who work in the transport sector.
Figure 8: Women’s Career Cycle in the Transport Sector (ILO, 2013)

**Recommendations**

- Highlight women-friendly policies such as maternity leave and professional development training in advertisements for transport jobs to attract women candidates. Because of gender stereotypes associated with public transport, transport jobs are unlikely to appeal to young school girls as a potential career choice.

- Employ hiring practices such as affirmative action and gender quotas. Gender quotas require a certain number or percentage of employees to be female. According to Stary (2012), most gender quotas in corporate settings around the world strive for 40 per cent female representation on boards and in the workforce.
• Introduce career and personal development programs which evaluate employee needs and goals and reward good performance with scholarships to driving schools, opportunities for training in auto repair, or other skills development courses. Such a commitment to support women’s growth would attract more women to join the industry at every level.

• Develop maternity and paternity leave policies with provisions for workers to re-enter the workforce without having to reapply (as is currently the practice).

**CASE STUDY 6**

*Anbessa City Bus Service Enterprise* in Addis Ababa, Ethiopia has prioritized hiring women drivers. To retain this new workforce, the company has instituted a maternity leave policy that allows female workers to continue driving until they are five months pregnant. After five months, they are assigned light office work. Once the woman has given birth, she is welcomed back to work with a flexible schedule for six months, which allows her to spend time with her new child.

• According to the Gender Equity Assessment, 94 per cent of surveyed women working in Nairobi’s minibus industry said that they do not have formal contracts with the employing SACC O. It is recommended that all employees sign employment contracts stipulating terms of employment, rate of remuneration and criteria for dismissal.

• To provide gender-specific perspectives on the physical and environmental factors that enhance women’s security and ease of travel, women must be involved in developing infrastructure projects and vehicle design.
Recommendations
Recommendations for Policy Makers

The public minibus industry in Kenya is currently organized in numerous SACCOs with each SACCO made up of individual private minibus owners. The recommendations made above provide these transport organizations with tools and proposals to make them more accommodating to women workers and commuters. These recommendations can be adopted or adapted depending by organizations at their discretion, and based on their values.

Policy makers and the institutions tasked with keeping roads and public spaces safe have the power to regulate the public minibus industry. The recommendations above should be used by policy makers to establish a set of minimum standards for developing policies and regulations for the minibus industry. Such regulations may include, but are not limited to the following:

- Establish a uniform sexual harassment policy for all SACCOs to enable commuters understand and trust the reporting systems, and coordinate law enforcement to respond adequately to harassment cases.

- Require all minibuses to incorporate features that accommodate all road users. Legislation should require all public service vehicles to meet minimum infrastructure standards including foldable back seats, a ramp, and internal lighting. Incentives should be provided for vehicles which meet the stipulated specifications as the necessary modifications would require additional investments by vehicle owners. Ensure that SACCOs adopt and adhere to family-friendly human resource policies such as provision for maternity and paternity leave.

Policy makers wishing to develop such legislation must dedicate adequate time and resources to disseminating the new regulations and to sensitizing and training minibus managers and operators.
Civil society organizations advocate for important social change, influence policy makers and hold them accountable for enacting legislation which protect society’s most vulnerable groups. Several civil society groups are working towards a safer public transportation system for Nairobi and these recommendations will hopefully assist them in their work.

Recommendations

• Adopt a multi-pronged collaborative approach embracing all stakeholders in the transport services sector including drivers, conductors, stage attendants, union representatives, and commuters. Transport provider staff and management, governments, city planners and concerned citizens should also be included. All interventions should be initiated by those directly impacted by the issues including people from diverse ages, abilities and cultural, religious, and tribal backgrounds.

• Lobby government officials to develop and implement policies, projects and interventions that create safer public spaces, and to mainstream gender into government projects.

• Develop applications and other user-friendly surveillance systems that allow passengers to communicate with authorities directly. While some surveillance systems have been installed by transport management, our research found that they are often malfunctioned. Civil society should feel empowered to record and report incidences of harassment or of poor service delivery.

• Develop a reward system that recognizes transport providers who have implemented the proposed recommendations and those who have collaborated in initiatives geared towards making public transport safer for women. The public can also act as a watchdog over policy makers and SACCOs to ensure effective implementation of their respective mandates and roles as outlined in this Toolkit.
• Launch initiatives to encourage active bystanders. Bystander actions can range from calling, text messaging, or otherwise alerting authorities; physically stepping in to help the victim; trying to communicate with the offender and/or recording the incident on a mobile device for evidence. Training on the safest and most effective ways to intervene in such situations can be provided through *de-escalation and violence-interruption workshops.*
1. Increased Security:
   • The presence of police or formal security has been found to provide a sense of safety and act as a deterrent to harassment and criminal behavior in public spaces. A national study in the United States done in 1997 found that uniformed police patrols were the main strategy deployed by transit agencies to regulate crime and assault in public transportation spaces (Needle & Cobb, 1997). This law enforcement presence was found to reduce women’s fear in public places.
   • Closed Circuit Television (CCTV) surveillance of public service vehicles and at transport stops and stations is being used to deter crime, collect evidence and provide a sense of safety to commuters. It is commonly believed that installing CCTV equipment on public transport vehicles reduces crime as people are less likely to offend when they know they are being observed (Yavuz & Welch, 2010). CCTV has thus become one of the most widely used crime prevention strategies in public transport (Yavuz & Welch, 2010). In the United Kingdom ‘CCTV is the most heavily funded crime prevention method outside of the Criminal Justice System’ (Welsh & Farrdington, 2003). CCTV is currently being deployed by some public minibus service organizations in Kenya.

2. Use of Technology:
   • **Ushahidi** - Used in Kenya and other African countries, Ushahidi was developed in 2008 to map post-election violence. Ushahidi is a Swahili word which translates to “testimony”. The app encourages survivors of violence to report their stories. Building upon Ushahidi, Flone Initiative’s Report it Stop it crowdmapping platform maps out harassment and violence incidences in public transport and connected spaces (http://floneinitiative.org/ushahidi/)
   • **Circle of 6** - This app allows users to reach out to six people they trust to alert them as to their location and interrupt unwanted attention or harassment (circleof6app.com)
Practical Toolkit

• **The Blank Noise Project** - This volunteer-led collective was established in 2003 in India to address street harassment. The collective conducted an online blog in 2006 which asked people to share their experiences of street sexual harassment, including on public transport. Hundreds of bloggers took part, leading to a mass online catharsis (blanknoise.org).

• **Safetipin** is a mobile application originally developed in Delhi which uses crowdsourcing to map public spaces and create safety audits. It has been used in India, Colombia, Philippines, Indonesia, Kenya and Papua New Guinea. SafetiPin has been working with governments, NGOs, city planners, international agencies and corporations to provide safety data for change (safetipin.com).

• **HarassMap** is a volunteer-based initiative in Cairo, Egypt, that crowdsources information on offenses that take place in public places, including on and around transport. The data is then displayed on a searchable map that, in turn, identifies hot spots where police protection might be stepped up (harassmap.org).

3. **Women Working in Transport:**

• Transport in Ghana has been male dominated, but women are now venturing into this industry led by Esenam Nyador, popularly known as *Miss Taxi*. Esenam became one of the first female taxi drivers in Ghana five years ago and has been inspiring and training other women to follow in her footsteps (Benke, 2016).

• Flone Initiative in Kenya is working to recruit, retain and promote more women in the public transportation sector by providing capacity building workshops and influencing systemic change on multiple stakeholder levels (floneinitiative.org).

• **SafeMotos Institute** in Rwanda is training women to become motorcycle taxi drivers. The mobile application – SafeMotos - operates like Uber but connects commuters with motorcycles taxis, which are a preferred mode of travel in Rwanda. The application allows women to indicate if they would prefer a female driver, and ensures that there are enough women riders on the road to accommodate those requests (institute.safemotos.com)
4. Physical Infrastructure:

- In Quito, Bus Rapid Transit stations have been redesigned and solid barriers (from ground level to +/- 1.20m) have been replaced by transparent material. This is to allow women to scan their drop off points.

- *Emergency panic buttons* for drivers in case of harassment or endangerment of both commuters and operators especially women and children.

- *Intelligent street lighting* in Europe among other places in the world. The lights are fitted with cameras and panic buttons which people can press if they feel exposed to danger. A live video is sent to nearby police station and stored in a cloud account. Police can therefore either send a quick response unit or use the video for tracking down the culprits and as evidence in their prosecution.
Conclusion
According to Quartz Africa, approximately 70 per cent of Nairobi’s 4.4 million commuters use matatus to travel into Nairobi daily (Masinde, 2016). Our studies show that the majority of these commuters are women, and that over half of women who use matatus - commuters and workers - either experience or witness sexual harassment every single day. Without clear channels for reporting harassment cases, and little faith that anything can be done to stop them, the incidences persist and deeply impact women’s wellbeing. Africa is the fastest urbanizing continent (UNDESA, 2015) and the number of female heads of households is also growing (Meeham, 2004). Women have no choice but to continue utilizing public transportation to reach the services they need, commute to their jobs, and access training programs that allow them to provide for their families. Clearly, there is an urgent need to make public transportation safer and more accessible to women.

The public minibus transport service providers of Kenya - the matatu industry - provide an affordable transportation option to many people who would otherwise remain immobile. The matatu industry has developed its own unique culture and employs hundreds of thousands of people. This Toolkit seeks to maintain what works well about this industry, while providing practical tools and support to make it more accessible and safer for women.

The Toolkit is a living document. Flone Initiative is committed to working with transport managers to develop appropriate and effective solutions and provide training based on these recommendations. Together, we can create safer public spaces and greater freedom of movement for everyone!
References


Organization Name & Logo

(Organization letterhead and office address should be included if available)

Organizational Vision, Mission and Core Values
Describe organizational vision, mission and core values if available.

Our Services
This section should list the services provided by your company. For example: We provide safe transport along the following routes XXX, serving the following stops XXX.

Our Standards & Commitments
Sample language: We aim to provide lawful, safe and accessible transportation to all. We shall strive to meet the specific needs of pregnant women, parents traveling with small children, people with disabilities and elderly persons, and our staffs have been specially trained to assist these people in vulnerable situations. Additionally, our customers can expect all of XXX staff to demonstrate the following values and actions:

   a) Dropping and picking passengers at designated points
   b) Vehicles will wait until passengers are seated before moving
   c) Crew will use courteous language while addressing customers
   d) Money will be reimbursed when a trip is not completed
   e) Clear communication of changes in service including:
       • cancellation of a trip
       • changes in fare charges
       • changes in plying route
       • unavoidable delays
f) All route stops will be audibly announced

g) Vehicles and staff will uphold a high standard of cleanliness

h) Functional seat belts will be provided

i) Crew will assist passengers with on-boarding and off-loading luggage

j) Crew will provide reserved seating for pregnant women and mothers with children

**Sexual Harassment Policy**

Sexual harassment of any kind is unacceptable and all reports will be investigated. Note that mode of dress is never an excuse or invitation for unwanted sexual behavior.

**To Provide Feedback or Make a Complaint**

This section should indicate:

- Customer Service Feedback Tool
- Sexual Harassment Reporting Mechanism
- Important points of contact
- What can customers expect in terms of response from the organization
Appendix B: Acceptable Mobile Emission Control Technologies

MOBILE SOURCES (NEMA, 2014)

The aim of these guidelines is without sacrificing performance, improve engine performance through understanding pollutant formation mechanism, ensure precise control of engine parameters, such as air/fuel ratio, spark timing, airflow, optimize on exhaust gas treatment.

List of mobile emission control technologies.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Control measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOX Exhaust</td>
<td>Exhaust Gas Recirculation (EGR) Valves</td>
</tr>
<tr>
<td>HC, CO Exhaust</td>
<td>Three Way Catalyst (TWC), 2 nd Air Pumps</td>
</tr>
<tr>
<td>Evaporative Emissions</td>
<td>Canisters</td>
</tr>
<tr>
<td>Crankcase e/m s</td>
<td>Positive Crankcase Valve PCV valves</td>
</tr>
<tr>
<td>On Board Display (Obd-2)</td>
<td>Precise a/f control</td>
</tr>
<tr>
<td></td>
<td>Dual Oxygen Sensors</td>
</tr>
<tr>
<td></td>
<td>Individual cylinder a/f control</td>
</tr>
<tr>
<td></td>
<td>Adaptive fuel control</td>
</tr>
<tr>
<td></td>
<td>Electronic throttle control</td>
</tr>
<tr>
<td></td>
<td>Improved induction</td>
</tr>
<tr>
<td></td>
<td>Heat optimized exhaust system</td>
</tr>
<tr>
<td></td>
<td>Leak-free exhaust system</td>
</tr>
<tr>
<td>Particulate matter</td>
<td>Diesel Oxidation Catalyst (DOC)</td>
</tr>
<tr>
<td></td>
<td>Diesel Particulate filter (DPF)</td>
</tr>
<tr>
<td></td>
<td>Flow Through Filter (FTF)</td>
</tr>
<tr>
<td></td>
<td>Retrofit, Repower, or Replace</td>
</tr>
</tbody>
</table>

And any other technology that may be approved by the Authority from time to time.
List of evaporative emission control technologies

<table>
<thead>
<tr>
<th>#</th>
<th>Cause</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Diffusion</td>
<td>Precise purge control and optimization of canister structure</td>
</tr>
<tr>
<td>2</td>
<td>Leakage</td>
<td>Modification of designs for locking Parts and fuel filler cap</td>
</tr>
<tr>
<td>3</td>
<td>Permeation</td>
<td>Material changes for hoses in fuel line</td>
</tr>
<tr>
<td>4</td>
<td>Evaporation while fueling</td>
<td>Improve sealing by putting elastic cap around the nozzle of fueling gun</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Create negative pressure while fueling by using the venturi effect</td>
</tr>
<tr>
<td>5</td>
<td>Fuel Temperature</td>
<td>Reduce the fuel amount returning to fuel tank</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Limit the fuel tank temperature</td>
</tr>
</tbody>
</table>
Gender Sensitive Mini-Bus Services & Transport Infrastructure for African Cities: A Practical Toolkit

Based on a Mobility of Care Study & Gender Equity Assessment of Nairobi's Minibus Transport Network