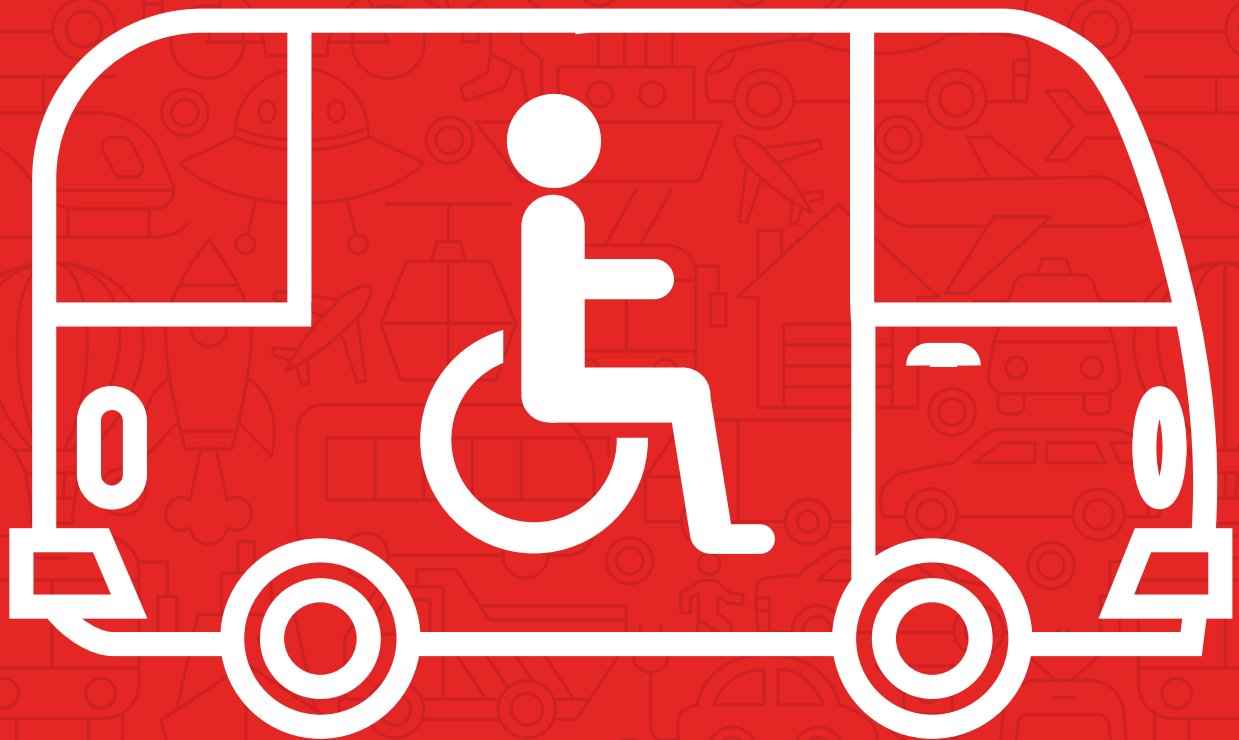


THE ACCESSIBILITY OF PUBLIC TRANSPORT SERVICE IN NAIROBI METROPOLITAN AREA





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PUBLIC TRANSPORT SERVICE
IN NAIROBI
METROPOLITAN AREA**

Photo 1: Photo Courtesy of Nairobi Business Monthly

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List of Abbreviations and Acronyms

BRT	Bus Rapid Transport
CRPD	Convention on the Rights of Persons with Disabilities
FGD	Focus Group Discussion
ISO	International Standards Organization
KEBS	Kenya Bureau of Standards
KENHA	Kenya National Highways Authority
KES	Kenya Shillings
KII	Key Informant Interview
KNBS	Kenya National Bureau of Statistics
MRT	Mass Rapid Transport
MTP II	Third Medium Term Plan (Vision 2030)
NaMATA	Nairobi Metropolitan Area Transport
NCPWD	National Council for Persons with Disabilities
NMS	Nairobi Metropolitan Service
PDU	Programme Delivery Unit
PSV	Public Service Vehicle
SACCO	Savings and Credit Cooperative Society
SDG	Sustainable Development Goals
WHO	World Health Organization

FOREWORD

Flone Initiative is a women-led organization working towards creating safe, sustainable and accessible public transportation spaces for women and vulnerable groups in Africa by influencing behavioural change, generating knowledge and movement-building. We envision a world where everyone can experience all freedoms of mobility.

Flone Initiative believes in implementing evidence-based programmes. Towards our new project on accessible transport, we acknowledge that old age and disability have some adverse features in common. Being part of either group suggests depleted capability, decreased social contribution, significant fragility, and heightened susceptibility to maltreatment by other people. Both age and disability are categories where discrimination is rife and where special protection is required. Many of the disabled will become aged, and many of the aged are disabled. Informed by this reality, Flone Initiative conducted this research to inform policy advocacy agenda for improved accessibility of public transport for the elderly and the people with disabilities.

We wish to thank the parties who have been involved in this study, including users of public transport with a disability, users who are elderly, the state agencies in transport, matatu owners, operators and staff and non-state actors. We hope that the findings and recommendations will contribute to solving the recurrent challenges of unreliable, ineffective and inaccessible public transport services for paratransit vehicles. Furthermore, we hope that partnership among the stakeholders will be strengthened to yield more results.

Special thanks to our partner, Friedrich-Ebert-Stiftung Kenya Office, who funded this study. We also express our gratitude to the technical research team led by Nathaniel Muthomi, supported by Collins Ombajo and Bernard Mwangi in the data collection process. Finally, we also acknowledge the staff of Flone Initiative who supported this process, including Lucy Kihonge, the Programme Officer and Robert Gatimu, the Finance Officer.

Naomi Mwaura
Executive Director



Executive Summary

People with disabilities are the world's largest minority accounting for 15% of the world population. They have lower education achievements, less economic participation, and higher poverty rates than people without disabilities (WHO, 2011). This can be partly attributed to existing barriers in accessing services such as transport as well as information. It is estimated that in the four counties within the Nairobi Metropolitan Area (Nairobi City, Machakos, Kiambu and Kajiado), persons with disabilities account for about 0.4% of the population. The majority of these people use public transport while seeking services from Nairobi City. This presents the need to plan for inclusive and accessible public transport services.

On this background, this study aims to identify technical, social and policy gaps and implementation challenges regarding inclusive mobility focusing on persons with disabilities and the elderly. The specific objectives were to (a) identify the current policies and programmes promoting accessibility in public transport; (b) identify the technical, social and policy gaps that hinder the implementation of policies and programmes promoting accessibility in public transport; (c) document the challenges faced by persons with disabilities and the elderly in accessing public transport; (d) provide recommendations to guide the improvement of accessibility of public transport; and (e) document best practices on accessible public transport can be replicated in other counties of Kenya. The study employed a mix of qualitative and quantitative methods to decipher the realities that persons with disabilities face while using public transport. The key respondents included people with different disabilities, government agencies, public service vehicle operators and non-state actors. The study was conducted during the months of August and September 2021.

Accessibility of public transport service remains a mirage to users with disabilities and the elderly since the policy, technical and social challenges are intertwined. Low implementation and monitoring of laws and policies that promote equality and accessibility make persons with disabilities continue being on the receiving end. With the low implementation of such laws and policies, the matatu operators remain indifferent. This points to an urgent need to involve the matatu owners, operators, and other stakeholders to achieve accessibility. The persons with disabilities make an effort to defend themselves, but the social environment is filled with the overwhelming stigma and condescending attitude from the matatu operators and the general public. Several recommendations are provided to the government, PSV owners and operators and the non-state actors. It is hoped that these recommendations will contribute to solving the recurrent challenges of unreliable, ineffective and inaccessible public transport services for paratransit vehicles. The recommendations are listed in the order of short term, medium-term and long term strategies for accessibility.

Recommendations to the Government Agencies

- a) Nairobi County Government (NCG): Enforce the Nairobi County Transport Act (2020) to ensure matatu owners and operators: (a) Provide designated seats for persons with disabilities; (b) adhere to the use of designated termini by matatu operators, and provision of designated seats to persons with mobility challenges; and (c) regulate music in PSVs
- b) Ministry of Transport: Operationalize and implement the DKS 372:2018, Draft Kenya Standard, Road Vehicles - Passenger vehicle Body Construction – Specification.
- c) Ministry of Transport: Review the road design manual of 1987 to incorporate accessibility aspects.
- d) Ministry of Transport: Fast-track the development and operationalization of the National Road Safety Action Plan as envisaged in the MTP III to address the safety of users, including the elderly and those with disabilities
- e) Ministry of Transport: Improve stakeholder engagement by building their internal capacity of engaging persons with disabilities in the planning, design, implementation and monitoring of transport service programmes. The public transport stakeholders should work closely with NCPWD, a state agency mandated to issue adjustment orders under sections 23 and 24 and implement the Persons with Disabilities Act of 2003.
- f) Increase the visibility of information provided to road users through signage in a variety of accessible formats.
- g) Ministry of Transport: Establish adequate infrastructure, amenities and facilities to accommodate the needs of persons with disabilities using the universal design model.
- h) NCG: Provide adequate spaces for picking and dropping passengers in town to avoid the cases of obstruction reported by the county askaris and the traffic officers.
- i) Ministry of Transport/NCC: Subsidize, standardize and regulate the fares charged by public service operators. This will avoid overburdening users who incur extra costs while travelling.
- j) Review the training curriculum in colleges and universities targeting students of road construction technology. The curriculum should incorporate a unit that sensitizes them on sensitivity and responsiveness to the needs of marginalized populations.
- k) Provide adequate financing for the implementation of the integrated mass rapid transit (MRT) project- Bus Rapid Transport (BRT). This will be an ideal means of transport for all and solves recurrent challenges faced by persons with disabilities and the elderly.

Recommendations to Matatu Owners and Operators

- a) Design capacity building programmes for matatu owners, operators and staff on disability etiquette, basic communication to different people with disabilities (skills such as sign language), and skills of handling persons with disabilities and their items such as wheelchairs.
- b) Develop robust reporting and complaints mechanisms where people can report cases of violence, maltreatment. Such cases should act on through laid down disciplinary protocol.
- c) Install accessibility communication features in the public service vehicles such as screen messaging, voice messaging and bell.
- d) Promote pro-disability human resource practices. Motivate the matatu staff by developing a program to award disability champions for promoting inclusion in the matatu sector.



Recommendations to Non-State Actors

- a) Partner with the matatu owners and operators to build their staff's capacity and develop complaints and response mechanisms.
- b) Educate the public on inclusive living to achieve an all-inclusive society where everyone is respected.
- c) Support in the development of inclusive messaging. For example, 'I am deaf, please flash, do not hoot.' This can address the safety of private vehicle drivers who are deaf.
- d) Promote self-advocacy of users with disabilities by empowering the users to speak up on matters affecting them while accessing public transport.
- e) Lobby for representation of persons with disabilities in the coordination groups such as in the Programme Delivery Unit (PDU).
- f) Form a stronger and inclusive coalition of non-state transport sector actors to increase their strength in advocacy on inclusive and accessible public transport. Such a structure will complement the government efforts and also seek accountability to the public on matters of public transport.

Introduction

1.1. Background

According to WHO (2011), people with disabilities are the world's largest minority accounting for 15% of the world population. They have lower education achievements, less economic participation, and higher poverty rates than people without disabilities. This can be partly attributed to existing barriers in accessing services such as transport as well as information. The World Report on Disability by WHO (2011) indicates that it is estimated that about one billion people have a form of disability globally. According to the 2019 census, in Kenya, 2.2% (0.9 million people) have some form of disability. Estimation by Development Initiatives based on Kenya

Household and Population Census conducted by KNBS in 2019, in the four counties in the Nairobi Metropolitan Region (Nairobi City, Machakos, Kiambu and Kajiado), persons with disabilities account for about 0.4% of the population. Out of this, persons with physical challenges represented the highest proportion, 0.7%, followed by those with visual impairments (0.65%). The majority of these people at one time seek services from Nairobi City and use public transport services. This presents a need to plan for accessible public transport services.

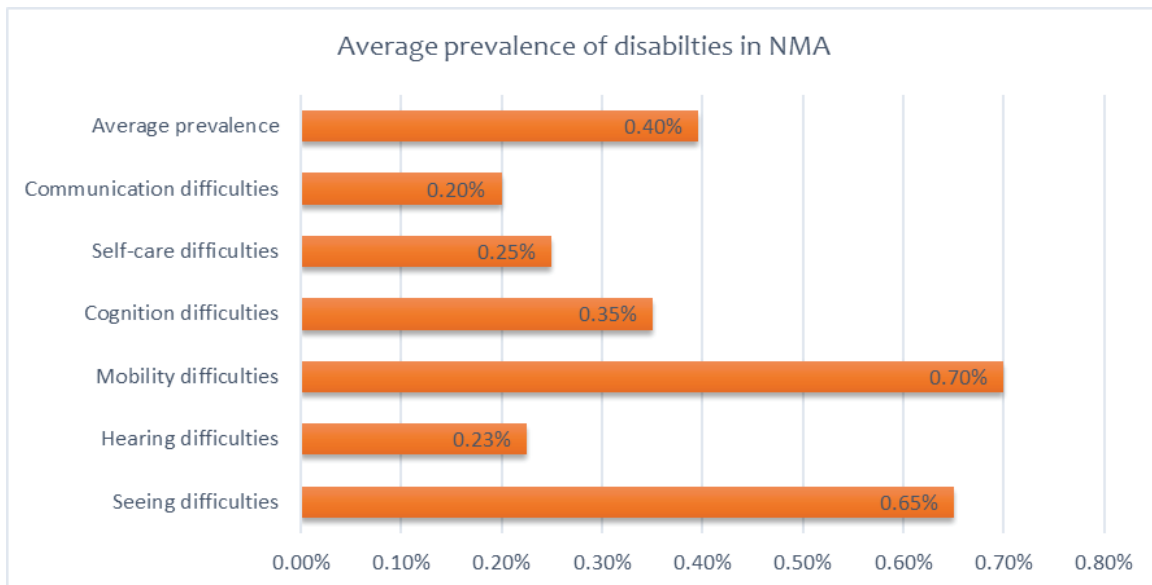



Figure 1: Average prevalence of disabilities in Nairobi Metropolitan Counties (Source Development Initiatives based on KNBS data)

The transport system in Kenya and specifically Nairobi is dominated by informal paratransit vehicles. The informal paratransit vehicles are commonly known as matatus, the 14-seater and low-capacity buses that ply within the Nairobi Metropolitan route. To meet the diverse transportation needs of the growing urban population, the Government of Kenya has attempted to expand the service by allowing private transport

1. https://www.who.int/disabilities/world_report/2011/report.pdf
2. <https://devinit.org/resources/status-disability-kenya-statistics-2019-census/>



providers to operate in the sector. Recent reforms in the matatu sector promote the introduction of higher capacity buses in city transport and plans are underway to introduce a Bus Rapid Transport system that will further improve the gains made so far. The legal notice 219 of 2013 by the Kenyan government also allowed for better regulation of the public transport sector and reduced rife criminal elements, especially on vulnerable populations like the old and persons with disabilities. However, it is unclear whether these efforts have improved the needs of senior citizens and persons with disabilities.

Old age and disability have some adverse features in common as being part of either group suggest depleted capability, decreased social contribution, significant fragility, and heightened susceptibility to maltreatment by other people. Both age and disability are categories where discrimination is rife and where special protection is required. Many of the disabled will become aged, and many of the aged are disabled. To ignore this intersectionality is to divert attention away from understanding and addressing the (similar) causes fuelling discrimination against both groups and diminishing accessibility for each.

Informed by this, Flone Initiative conducted research aimed to inform policy advocacy agenda for improved accessibility of public transport for the elderly and the people with disabilities.

1.2. Research Objectives

This qualitative and quantitative research was aimed to identify technical, social and policy gaps and implementation challenges with regards to inclusive mobility focusing on persons with disabilities and the elderly.

- 1) Identify the current policies and programmes promoting accessibility in public transport;
- 2) Identify the technical, social and policy gaps that hinder the implementation of policies and programmes promoting accessibility in public transport;
- 3) Document the challenges faced by persons with disabilities and the elderly in accessing public transport;
- 4) Provide recommendations to guide the improvement of accessibility of public transport;
- 5) Document best practices on accessible public transport can be replicated in other counties of Kenya.

Methodology

2.1. Model

The research will be designed using a model of public transport that responds to the framework described below. In addition, the framework borrows heavily from the Universal Design model that was designed to promote accessibility of public spaces and services by all, based on human rights principles. Victoria Transport Policy Institute (2021) defines accessibility as “people’s overall ability to reach desired services and activities (together called opportunities), and therefore the time and money that people and businesses must devote to transportation. Accessibility is the ultimate goal of most transportation planning.” The elements of accessibility include mobility, geographic proximity, transport system connectivity, affordability, convenience and social acceptability. Therefore, this research combined the three models to develop a schematic representation of the aspects evaluated during the study.

- a) Accessible. The degree to which the transit services achieve individual and community mobility goals. Provides information to the users
- b) Available. Effectiveness for users: service quality
- c) Affordable. The ability to meet the demand given existing resources.
- d) Accommodative. The degree to which the transport service meets the passenger needs. Enhanced mobility of seniors and individuals with disabilities
- e) Safe. Provide a Safe and Secure Environment
- f) Reliable. The degree to which the transport service meets the passenger needs

2.2. Scope

This research was limited to matatus (public transport vehicles including 14 seaters and buses).



Figure 2: Accessibility Research model

2.3. Design

The research utilized a qualitative and quantitative method of data collection and analysis. Qualitative data were collected from focus group discussions (FGD) and key informant interviews (KIIs). Quantitative data will be collected through a survey.

2.4. Sampling

The research participants targeted will be those from Nairobi City County. The main categories of respondents will be categorized as follows:

- a) KII for policymakers and policy implementors -government agencies in charge of transport- Nairobi City County Government, NMS, NaMATA.
- b) KII for transport stakeholders – officials of matatu owners, SACCOs, etc

- c) FGD and survey for users of public transport -passengers with disabilities from Nairobi

Due to its nature, the sampling was largely purposive. The policymakers and policy implementers were purposely sampled because of the offices they represent. For inclusion, the major categories of disabilities were targeted. People under these categories were targeted and mobilized through their representative DPOs or self-help groups. The major groups included the following:

- a) Those with mobility challenges
- b) Those with vision challenges (low vision and blind)

- c) Those with hearing impairment (hard of hearing and deaf)
- d) Those with intellectual and psychosocial challenges
- e) A group of elderly people

A total of 233 respondents participated in the study. From each category of focus group discussion, an average of ten participants were targeted to participate in the FGD. Thus, the survey targeted the participants of the FGD and additional users in the areas targeted. The participants in the survey were members of different support and self-help groups.

Group of respondents	Description	Targeted	Reached
KIIs (Policymakers and key stakeholders)	Government agencies in charge of transport (NMS, NaMATA)	2	2
	Officials of Matatu Owners Association	1	0
	Officials of public transport SACCOs (Lopha and Kenya Bus Service)	2	2
	Other stakeholders (NCPWD, Social Services)	2	2
FGD for stakeholders	Matatu staff (women in transport)	10	15
FGD (users of public transport)	Mobility challenges	10	13
	Visual impairment (low vision and blind)	10	10
	Hearing impairment (hard of hearing and deaf)	10	10
	Intellectual and psychosocial challenges	10	10
	Elderly people	10	10
Survey for users of public transport with disabilities.		100	159
Total		167	233

Table 1: Category of targeted and reached respondents

2.5. Inclusion criteria

- Users of public transport
- Living in Nairobi City County
- Aged over 18 years
- Have at least one type of disability (e.g., hearing impaired, visually impaired, physically challenged, intellectually challenged, autism etc.)
- Proxy respondents, for example, aides, caregivers of persons with severe disability

2.6. Inclusion Strategies

Several inclusion strategies were employed. Firstly, for the group of persons with hearing challenges, we used a sign language interpreter. Secondly, during the FGDs, we used accessible venues, most venues close to the participants. We also facilitated the aides who accompanied some of the participants. Finally, we used Computer-Aided Telephone Interviews (CATI) to ensure inclusive participation for those who could not physically reach.

Legal Instruments, Policies And Plans

3.1. Introduction

Several global and national legal instruments and policy frameworks provide for accessible transport. Therefore, the discussion may not be exhaustive but captures the main legal and policy provisions to provide a synopsis of the commitment by the Government of Kenya to provide sustainable and accessible public transport as a right to all its citizens.

3.2. Global Legal Instruments on Accessible Transport

Article 9 of the Convention on the Rights of Persons with Disabilities (CRPD) requires the State Parties to take appropriate measures to ensure that persons with disabilities access transportation equally with others. The scope of

transportation includes but is not limited to roads, transportation and other facilities. The CRPD requires State Parties to identify and eliminate obstacles and barriers to accessibility of buildings, roads, transportation and other indoor and outdoor facilities, including schools, housing, medical facilities and workplaces (article 9(1)(a)); and to information, communications and other services, including electronic services and emergency services (article 9 (1)(b)).

The State Parties is required to take the following measures related to transport:

- a) To develop, promulgate and monitor the implementation of minimum standards and guidelines for the accessibility of facilities and services open or provided to the public;
- b) To ensure those private entities that offer facilities and services which are open or provided to the public take into account all aspects of accessibility for persons with disabilities;
- c) To provide training for stakeholders on accessibility issues facing persons with disabilities;
- d) To provide in buildings and other facilities open to the public signage in Braille and in easy to read and understand forms;
- e) To provide forms of live assistance and intermediaries, including guides, readers and professional sign language interpreters, to facilitate accessibility to buildings and other facilities open to the public;
- f) To promote other appropriate forms of assistance and support to persons with disabilities to ensure their access to information.

The Committee on the Rights of Persons with Disabilities (2015), on its concluding observations on the initial report of Kenya, had two major concerns about accessibility by persons with disabilities. The Committee was concerned about:

- a) The barriers that prevent persons with disabilities from accessing public transportation in urban and rural areas and the lack of measures to enforce the guarantees concerning accessibility in all areas of life;
- b) The lack of measures to sanction non-compliance with existing accessibility standards.

Based on these observations and concerns, the Committee made two recommendations to Kenya:

- a) Finalize and adopt the draft consolidated national action plan on accessibility and disability rights for the implementation of the Persons with Disabilities Act No. 14 of 2003 and related provisions of the 2010 Constitution;
- b) Effectively implement the regulations of non-compliance as provided in the Persons with Disabilities Act and ensure adjustment orders are issued to non-compliant stakeholders.

The Sustainable Development Goals (SDGs, 2030) promotes the agenda of sustainable transport. It acknowledges that transport aids in overcoming the social exclusion of vulnerable groups and promotes the agenda of participation in planning for accessible transport. Accessible transport is directly addressed by SDG 9 and SDG 11.

SDG 9 calls countries to “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.” Target 9.1 calls for the development of quality, reliable, sustainable and resilient infrastructure that focuses on affordable and equitable access for all. SDG 11 is aimed to “Make cities and human settlements inclusive, safe, resilient and sustainable.” One of the indicators, 11.2 calls for

countries to “provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.” Further, target 11.3 requires countries to “enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.”

3.3. Domestic Legal and Policies on Accessible Transport

The Constitution of Kenya 2010 expressly and explicitly provides accommodation and non-discrimination in providing the rights to Kenyan citizens. One of the national values and principles of governance under article 10 is “human dignity, equity, social justice, inclusiveness, equality, human rights, non-discrimination and protection of the marginalized.” Chapter four, on the bill of rights, highlights the right to equality and freedom from discrimination. It requires the State not to discriminate anyone directly or indirectly on any ground, such as their age and disability. Further, Article 54 (1) (c) provides that a person with any disability is entitled to reasonable access to all places, public transport and information.

The Persons with Disabilities Act of 2003 recognizes that persons with disabilities are entitled to a barrier-free and disability-friendly environment to enable them access to buildings, roads and other social amenities, and assistive devices and other equipment to promote their mobility. Section 23 is particular on public service vehicles which requires an operator of a public service vehicle to adapt it to suit persons with disabilities in such manner as may be specified by the Council. Additionally, all operators of public service vehicles are expected to comply with the

3. <https://www.socialprotection.go.ke/wp-content/uploads/2020/04/Finalized-Disability-Mainstreaming-Strategy-November-2018-BOOKLET-3.pdf>

specification provided by the NCPWD. The Act empowers the NCPWD to offer adjustment orders to the owner of the premises or the provider of the services or amenities if the NCPWD considers that any premises, services, or amenities are inaccessible to persons with disabilities because of any structural, physical, administrative or other impediments to such access. The adjustment order may require the owner or provider concerned to undertake at his own expense the prescribed action to secure reasonable access by persons with disabilities to the services or amenities concerned while stipulating the period within which the action is to be taken.

The National Disability Mainstreaming Strategy (2018-2022) recognizes that inaccessible transport may significantly limit their participation in education, work or other spheres of life

It acknowledges that the public transport system remains largely inaccessible and insensitive to the needs of persons with disabilities. To address the challenge of inaccessibility, the Strategy proposes the following measures:

- a) Undertake sustained sensitization and awareness campaigns among public transport operators and stakeholders on the needs and challenges of persons with disabilities;
- b) Implement the national accessibility and usability standards with appropriate safety measures;
- c) Allocate appropriate and parking lots for Persons with disabilities in public and private car parks;
- d) Train persons with disabilities and their assistants on the use of mobility devices in relation to transport;
- e) Facilitate access by persons with disabilities to quality mobility aids, devices and assistive technologies at affordable costs.

One of the flagship programmes of Kenya's Vision 2030 under the Third Medium Term Plan (2018 – 2022) is the decongestion of cities and urban areas. The government plans to construct 40Km of non-motorized transport facilities. It will also involve the implementation of Mass Rapid Transit (MRT). This will entail construction of Bus Rapid Transit (BRT) infrastructure and facilities, development of Nairobi Commuter Master Plan, improvement of the Nairobi Railway, construction of Nairobi Viaduct, and development of integrated urban transport system and a loop line in Nairobi, which include development of Nairobi Metro Line 1. Other plans include developing a 50-year Transport Master Plan (TMP) as a vision for the long-term multimodal transportation system in the country and developing the National Road Safety Action Plan 2018-2022.

The Kenya Bureau of Standards (KEBS) in 2018 developed the DKS 372:2018, Draft Kenya Standard, Road Vehicles - Passenger vehicle Body Construction – Specification. The Standards defines a passenger with reduced mobility, a passenger with a special difficulty when using public transport, especially the elderly and a person with a disability. Further, the Standard provides for the accommodation of the needs of persons with disabilities and the elderly. Some of the provisions are highlighted.

- a) 5.8.2.6 All classes IVA, VA and VI vehicles shall be fitted with a suitable and safe ramp or a suitable alternative to allow for universal access/disembarking of passengers, including persons with disabilities and using wheelchairs. Such buses shall have docking space for wheelchairs with flip-down seats that can be used when there is no person with a disability in a wheelchair. Any entrance or exit intended to provide access for a wheelchair user shall have a clear unobstructed width of not less than 800mm.

- b) 5.10.5 The ideal passenger seat provides a firm sideward hold for the seated passenger and can flex in case of an impact forward to eat up the impact energy. At least two pairs of forward-facing seats nearest to the front passenger door shall be designated as priority seats for the elderly and passengers with a disability, and clearly marked with appropriate notice, incorporating a pictogram, to indicate their purpose. There shall be an extended space at knee level of at least 450 mm in front of these priority seats.

The National Building Code, 2020, developed under the National Construction Authority Act Of 2011 provides Part XX—special requirements for people living with disabilities. The provisions under this Code can inform the construction of public amenities to ensure they are accessible. For instance, section 370 (1) provides that “a building shall be designed in a manner that facilitates access to the building, and the use of its facilities, by a person living with a disability in accordance with KS ISO 21542:2011.” Kenya Bureau of Standards (KEBS) developed a KS ISO 21542:2011 Building construction - Accessibility and usability of the built environment. The ISO 21542:2011 specifies a range of requirements and recommendations for many of the construction elements in the built environment. These requirements are concerned with, among other things with constructional aspects of access to buildings, deals with aspects of accessibility and evacuation in the event of an emergency.

The Nairobi City County Transport Act (2020) guides general transport in the City. Section 25(1) requires that when terminals that are being designed to be part of the integrated public transport network. Section 27(1) requires a public transport vehicle to pick or drop at designated bus stops. Section 29 requires public service vehicle operators to develop a guide for fare

depending on their route, and display it publicly and protects the passengers from paying an extra fare. Section 31 (1) requires all PSV to have designated seats close to the alighting door reserved for passengers with a physical disability or special needs. Subsection 2 further guides the number of seats to be reserved as follows:

- PSVs with a capacity of not less than 17 passengers - one designated seat
- PSVs with a capacity of 18-35 passengers -two designated seats
- PSVs with a capacity of over 35 - three designated seats

Section 33(1) prohibits some activities in PSV such as offensive or excessively loud music, obscene or offensive language among others. section 37 protects the pedestrian lanes and roads for exclusive use by pedestrians.

3.4. BRT: Plans in place for promoting the accessibility of public transport

The Nairobi Metropolitan Area Transport Authority (NaMATA) was established via a Gazette Notice No. 1093, dated 17 February 2017. The Authority exists to oversee the establishment of an integrated, efficient, safe, reliable and sustainable transport system within the Nairobi Metropolitan Area. The Nairobi Metropolitan Area comprises Nairobi City, Kiambu, Kajiado, Machakos and Murang’a County. NaMATA has identified five corridors with high existing public transport ridership and the potential to benefit the greatest number of residents. These corridors have been earmarked to benefit from a mass rapid transit (MRT) project-Bus Rapid Transport (BRT). The BRT is expected to deliver fast, comfortable, and cost-effective urban mobility through the provision of segregated right-of-way infrastructure, rapid and frequent operations, and excellence in marketing and customer service. Among other advantages over rail-based MRT, it is expected that BRT will have

improved accessibility with safe and convenient access for all users. The plans in place will involve the construction of five lines, including:

1. Line 1-Athi River to Limuru (Ndovu - light blue)
2. Line 2- Rongai-Ruiru (Simba - yellow)
3. Line 3- Ngong-Road-Njiru/Tala (Chui- Red)

4. Line 4- Mama-Lucy-Kikuyu (Kifaru - dark blue)
5. Line 5- Ridgeways-Imara Daima (Nyati -green)

According to the BRT Framework , some of the key features of BRT that will lead to increased accessibility by all people, especially persons with disabilities and the elderly, include:

Accessibility Component	Description
Ramp(s)	<ul style="list-style-type: none"> • To be provided on one or both ends of the station to make the station accessible to all users. • Have a slope not exceeding 1:12, making it convenient for the disabled. • Have a railing on both sides and tactile paver blocks for people with visual impairments.
Bus-station interface	<ul style="list-style-type: none"> • Built to allow level boarding from station to bus and vice versa. • Level boarding means that the platform height is the same as the bus floor height, thereby eliminating any internal steps and making the system fully accessible to persons in wheelchairs, the elderly, persons with disabilities
Universal access	<ul style="list-style-type: none"> • BRT and complementary bus services will incorporate best practices regarding design for persons with disabilities and special needs. • The entire BRT corridor must be designed to provide seamless pedestrian connectivity without abrupt level differences or changes in clear width.
Stations	<ul style="list-style-type: none"> • Tactile guides, including directional indicators and warning strips at platform edges; • Accessible automatic barrier controls or manual gates operated by a station attendant; • Route signs and information in Braille; • Digital display systems with audio announcements; • Platforms should be sized to allow for the inclusion of waiting for wheelchair passengers close to other seating.
BRT vehicles	<ul style="list-style-type: none"> • The interior of BRT vehicles must also be designed so that all persons can use them • For BRT and feeder buses operating on service extensions beyond the dedicated BRT corridors, a lift must be provided on the left side of the bus to enable boarding from bus stops and from the ground level for seniors, wheelchair users, and other people with physical disabilities. • Stanchions, grab bars, and hand-holds must be provided in contrast colour for balance and support for passengers to hold during bumps or sudden stops that the vehicle may encounter. • Priority seating must be provided that is clearly identified as reserved for people with disabilities, seniors, mothers with small children, or pregnant women.

	<ul style="list-style-type: none"> • Approximately 800 mm x 1200 mm of space on BRT vehicles must be dedicated for persons using mobility devices. This area must be located adjacent to vehicle entry doors to facilitate access from BRT stations. • Stop request buttons must be installed at locations of priority seating and wheelchair positions. • Auditory announcements of stop names and key destinations ensure that people who are visually impaired are facilitated to reach their destinations
Access control	<ul style="list-style-type: none"> • Platforms should incorporate space for one wide gate suitable for wheelchairs and multiple regular gates
Passenger information.	<ul style="list-style-type: none"> • At stations and terminals: visual and audio announcements of when the next bus will arrive and the destination or route number of the bus. • On buses: real-time audio and visual announcements of the next stop and the route's final destination. • At stations and terminals: Network map, fare chart, directions, system map, station locations, and an area map with surrounding landmarks. • On buses: Line diagrams and network map. • Multi-lingual real-time and static information in Kiswahili and English is preferred to allow for easy comprehension by all users. • Non-motorized transport access. • For persons with visual impairments, tactile paving can be installed to indicate locations where vehicles and pedestrians interact • BRT network must be designed to provide seamless pedestrian connectivity, making it easy for passengers to reach BRT stations. BRT designs should promote safe, at-grade pedestrian access, employing universal design techniques that ensure accessibility for BRT passengers and other road users. • Continuous footpaths must be constructed along all streets. Intersections require pedestrian elements such as crosswalks, median refuge islands, and pedestrian signals. • Footpaths should be designed without abrupt level differences, especially at property entrances and intersections • For persons with visual impairments, tactile paving can be installed to indicate locations where vehicles and pedestrians interact.
Inter-modal integration	<ul style="list-style-type: none"> • Walking paths will be short and direct with a minimal level difference for transferring passengers. Direct cross-platform interchanges are preferred. • Adequate clear space for passenger movement will be provided to prevent bottlenecks. • Passenger areas will be protected from sun and rain. • Robust public information will be provided to enable users to navigate the areas.
Fare	<ul style="list-style-type: none"> • NaMATA will regulate the fares by engaging a bus operating company



	<ul style="list-style-type: none">• NaMATA will pay the mileage covered and not the number of passengers and the fare payment system will be integrated with the commuter rail• Tactile payment to help people who are blind• The fare will be cashless and integrated
Complaints Mechanism	<ul style="list-style-type: none">• Marshall to monitor the complaints and operation of BRT• Have a public address system to announce the stations• There will be an app that commuters will download that will have an inbuilt mechanism for complaints

Research Findings

The research findings represent qualitative and quantitative data that was collected from the study participants. In addition, the data was analyzed to represent opinions from different groups of users, particularly those with disabilities and the elderly.

4.1. Demographics

4.1.1. Respondents by Category

From figure 3, the majority (69%) of the respondents were users with disabilities. The rest (31%) were caregivers who responded on behalf of persons with disabilities such as children and those with severe disabilities or psychosocial and intellectual disabilities.

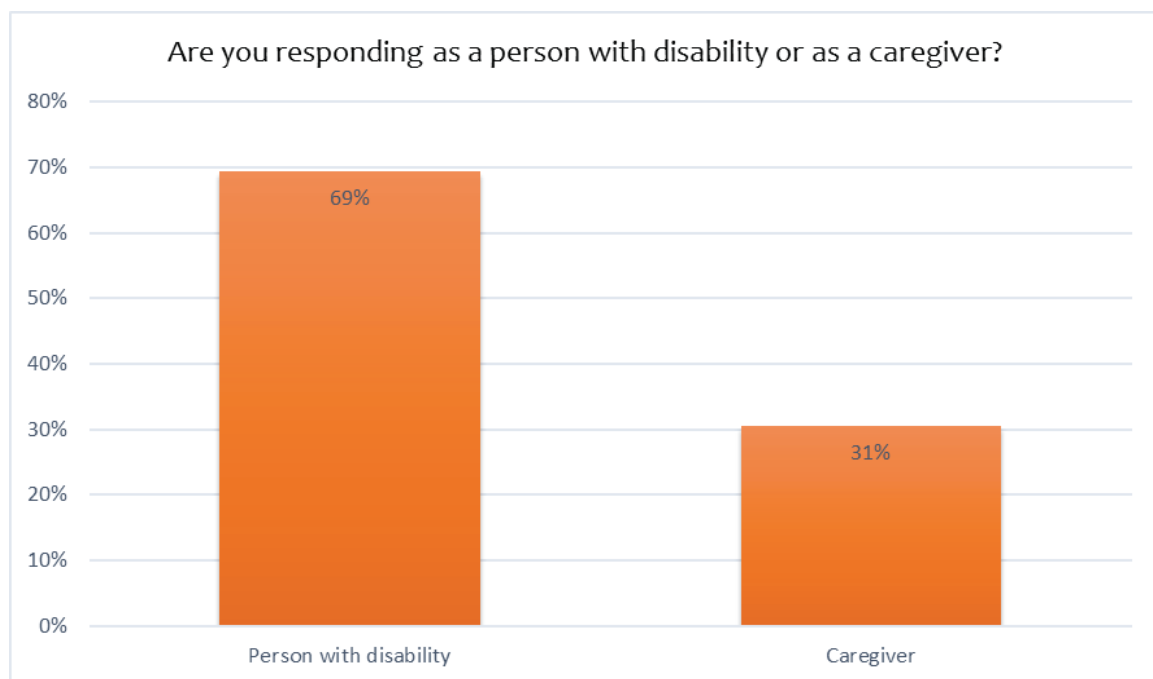


Figure 4: Respondents' category

4.1.2. Respondents by Age

From figure 4, most of the respondents (34%) were aged between 24-34 years, followed by those aged 35-44 years (28%), and those aged between 45-54 were 20%. Only a few (9%) aged above 55 years could fill in the online survey. This is partly because of the technical challenge of ownership and use of smartphones. However, their opinions were taken during the focus group discussion.

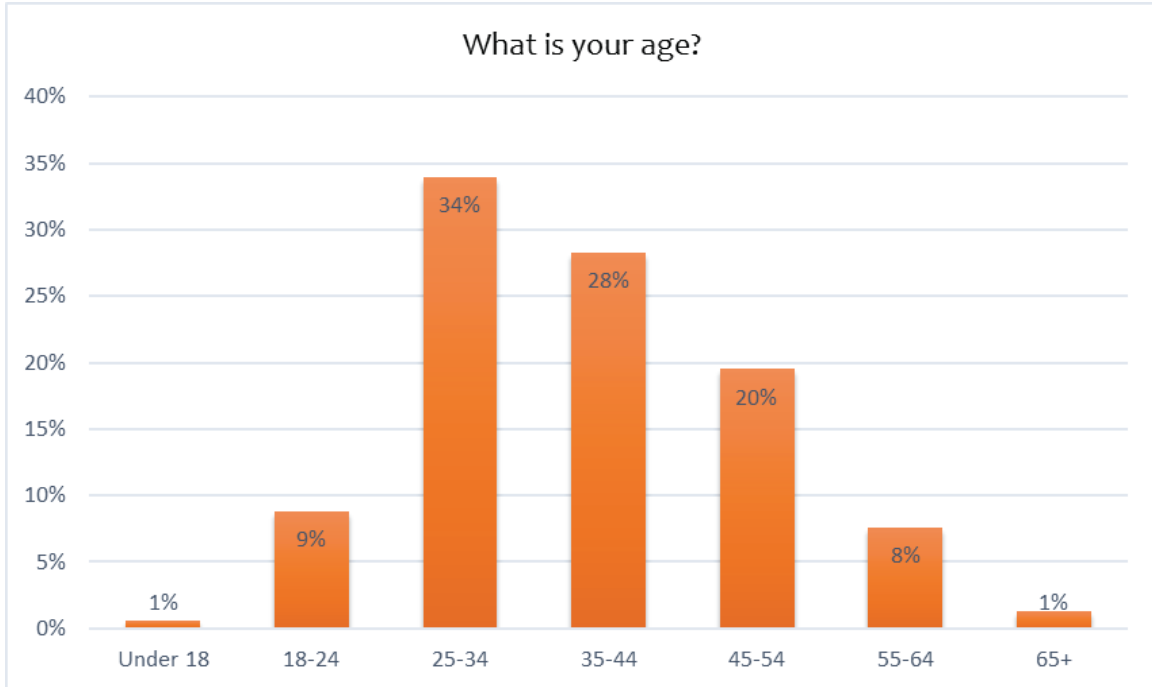


Figure 5: Respondents' age

4.1.3. Respondents by Gender

There was an equal number of survey respondents. Efforts were made to target both gender to ensure a balance of responses according to figure 5.

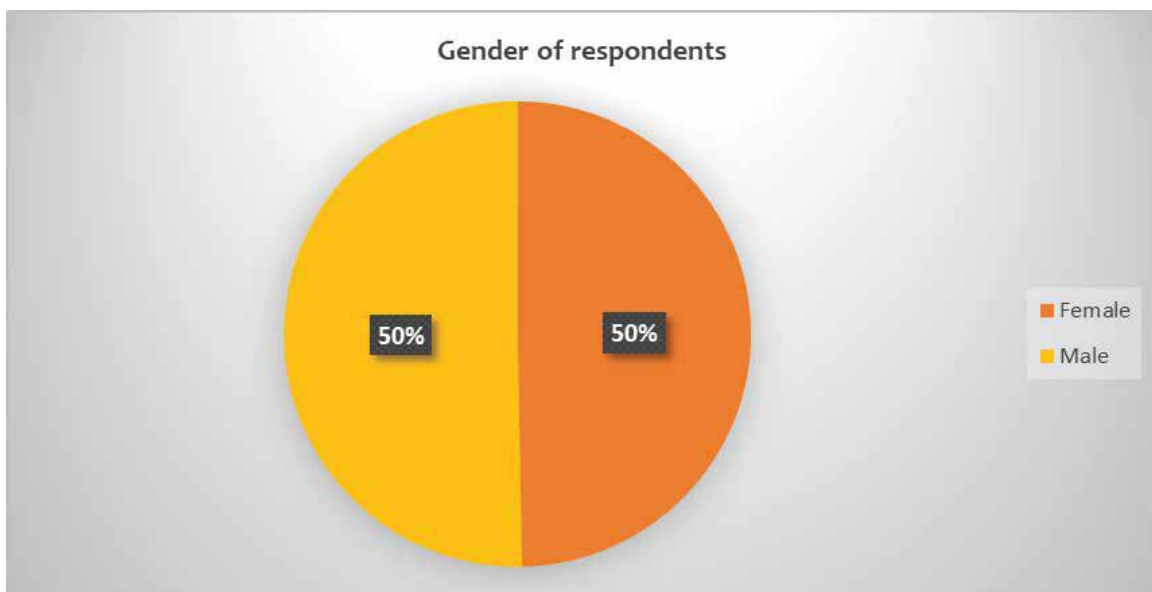


Figure 5: Respondents' age

4.1.4. Respondents by Source and Level of Income

According to figure 6, most of the respondents (27%) are in informal employment, followed by informal employment and running a business (22%). Those who had no source of income represented 18%, and 11% were students.

From figure 7, it can be deduced that almost half of the users (49%) earn less than KES. 50,000. Those with an income of less than KES. 15,000 were 31% and those with an income of 15,000-29,999 were 18%. Those earning between KES. 30,000-49,999 were 11% and those were earning between KES. 50,000-99,999 are 11% and only 3% were earning over KES. 100,000.

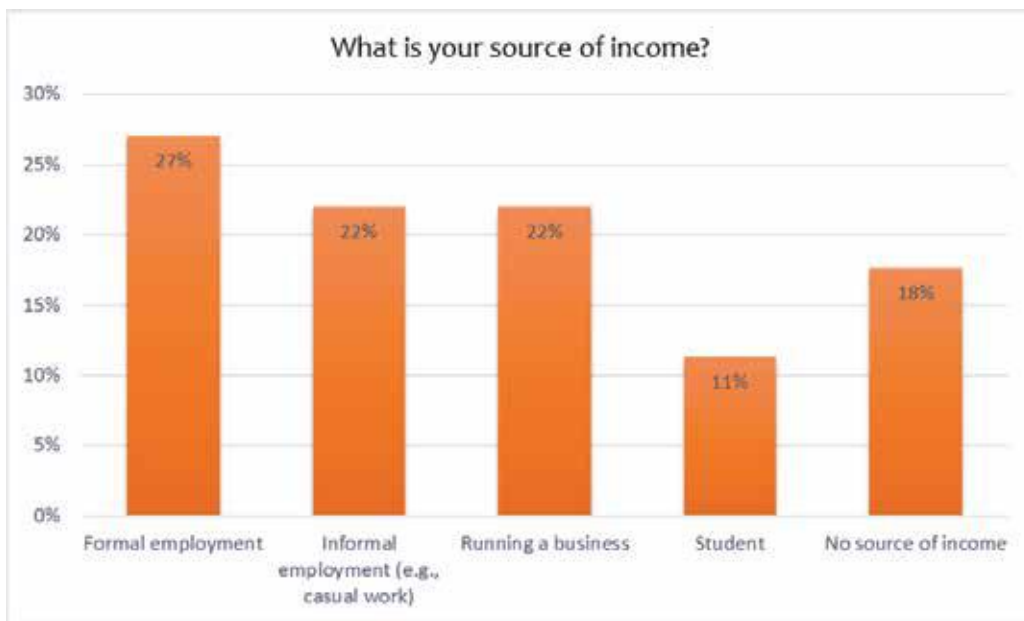


Figure 7: Respondents' source of income



Figure 8: Respondents' level of income

4.1.5. Respondents by Level of Education

According to figure 8, the majority of the respondents had completed college education (37%), while 28% had completed secondary education and 27% had completed university education.

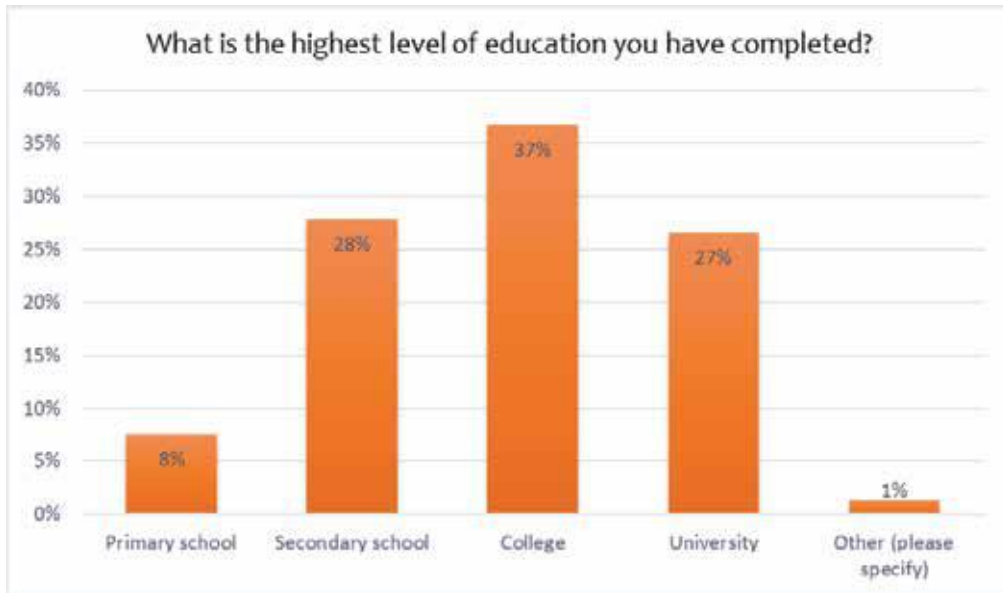


Figure 9: County of residence

4.1.6. Respondents by type of disability

According to figure 9, most of the respondents had a physical challenge (58%). However, the other respondents had an almost equal proportion of participation by category.

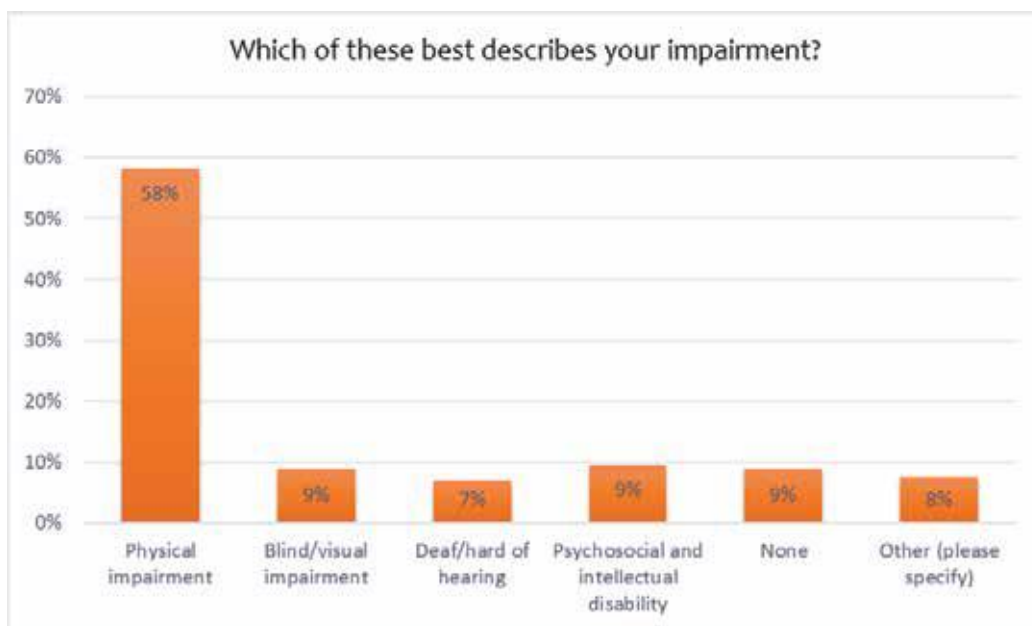


Figure 10: Respondents by type of disability

4.1.7. Respondents by County of Residence

According to figure 10, most of the respondents were from Nairobi City County (60%), followed by Kiambu County (24%), then Machakos (11%) and lastly, Kajiado County (5%). Thus, users from four counties were targeted because most use public service vehicles to access Nairobi City or other counties.

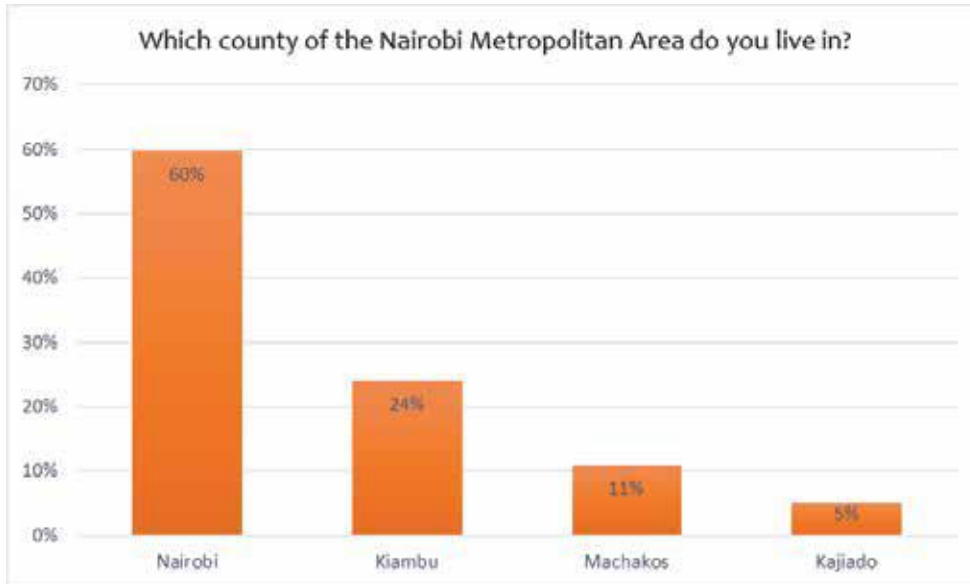


Figure 11: Respondents by County of Residence

4.2. Effectiveness and Reliability of Public Service Transport

Generally, matatus are the most preferred means of transport (77%) by most persons with disabilities, according to figure 11. However, despite being the preferred mode of transport, from figure 12, the majority (66%) felt that the matatus are ineffective and reliable.

Figure 13 presents the issues that users are concerned about when using matatus. Top in the list includes boarding (47%), reaching to the matatu (43%), cost of transport (43%), switching from one matatu to the other (40%), condition of sidewalks and alighting from a matatu (38%). Some of these challenges or concerns are discussed in the subsequent part of the report.

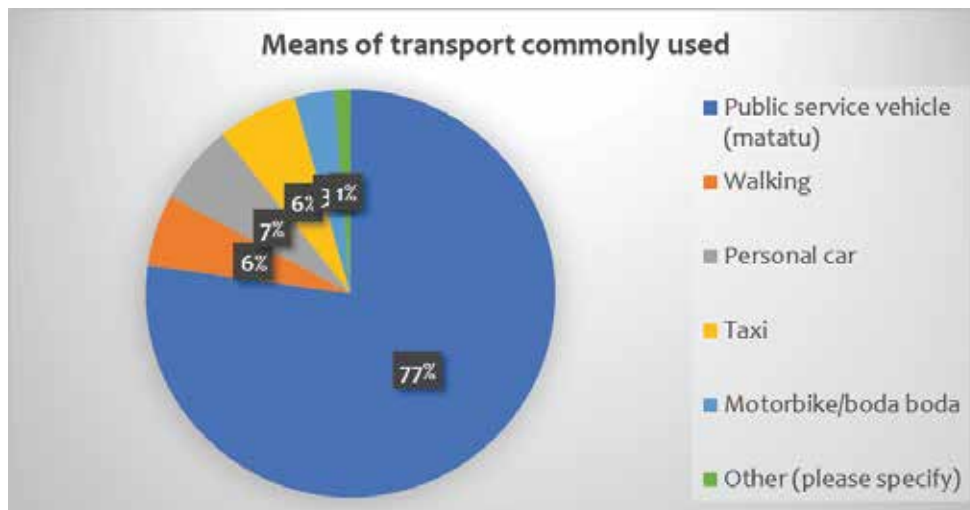


Figure 12: Means of transport commonly used

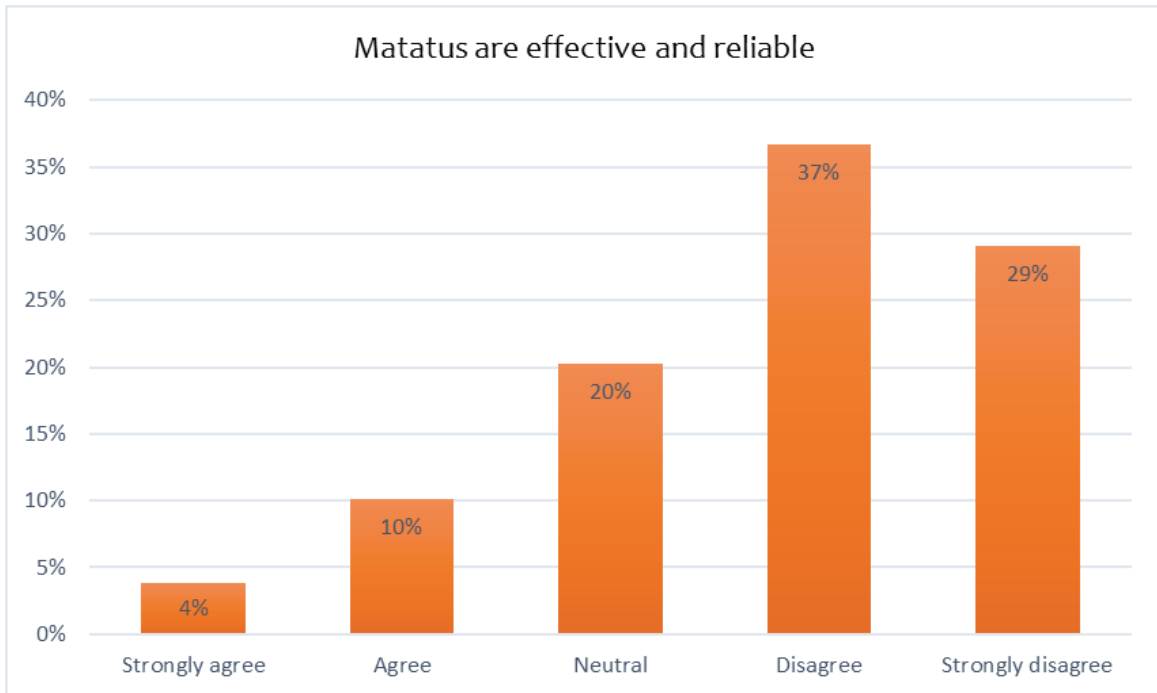


Figure 13: Effectiveness and reliability of matatus

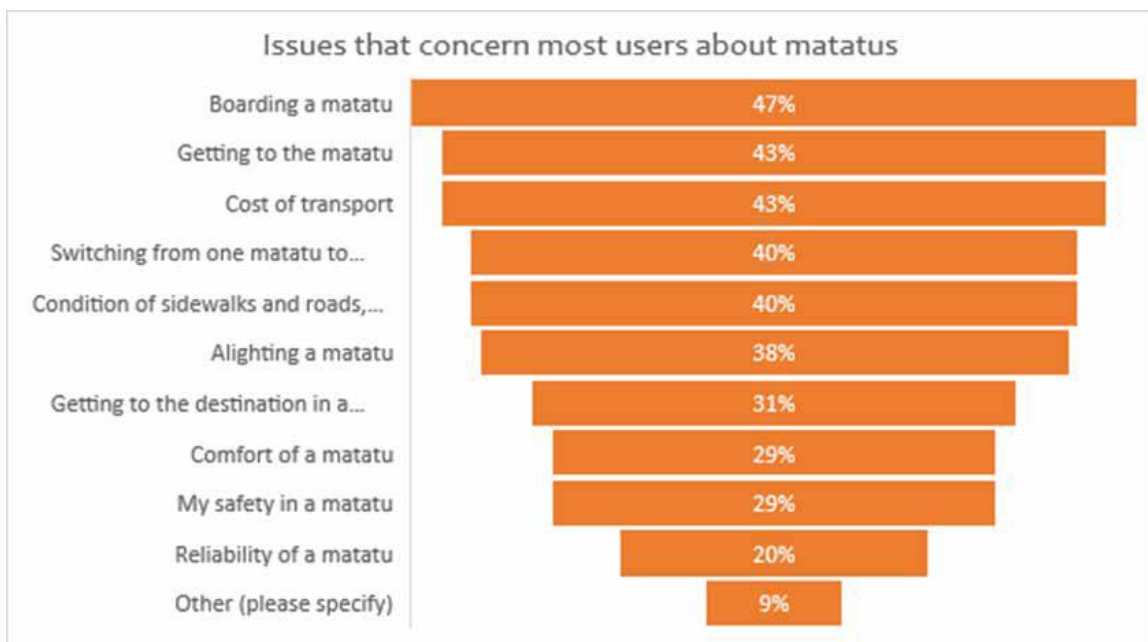


Figure 14: Top issues that concern most users about matatus

4.3. Challenges of Public Transport Services

Despite public transport services being preferred by users with disabilities, technical, policy, and social barriers exist, limiting their effectiveness. This section discusses these barriers from all perspectives while providing evidence from the stakeholders, including the government agencies, matatu owners, matatu operators and users. The users tell their experiences and provide a perspective of the complexities of categories and subcategories of their needs.

The major challenge that has hindered the implementation of an accessible transport system is mainly the lack of adequate financing. The government of Kenya has developed an elaborate plan of mass transit, as explained earlier. However, the implementation of such a plan is impeded by resources available that would provide all people with a comprehensive transport service that is accessible, reliable and affordable.

In addition to lack of financing, there is weak coordination of transport initiatives. Initially, the government agencies in the transport industry were implementing independent plans and projects with little or no coordination with other agencies that sometimes led to duplication. This went on until a Programme Delivery Unit (PDU) was established. The PDU is a structure that brings all players such as KENHA, KURRA, KCAA, NMS, KRS, traffic commandant, NPS, Kenya Power, ICT, etc. However, despite the existence of PDU, there are still instances where inefficiency is witnessed. For example, in the testing of Green Park Station, some people with disabilities reported being aware of such an arrangement despite the provision of free transport. Others are concerned about the construction of the Nairobi Expressway, which has caused a lot of distraction and inconvenience among persons with disabilities.

“The testing of green park matatu terminus caused much chaos. No adequate communication was made to the would-be beneficiaries. One person with a physical challenge had to walk for one hour to town. The challenge is lack of proper planning for such policy.” (A non-state stakeholder in the public transport).

When the Green Park Station was being tested, the buses stopped at a very far place from the usual stage. So I had to walk all the way. It took me much time, especially with obstacles that are all over.” (A male user with low vision).

“Matatus stop anywhere, especially when there are road constructions. Soil is piled everywhere and therefore, and users cannot access such roads.” (A non-state stakeholder in the transport sector).

Additionally, there is a weak linkage between the practitioners and policymakers and low engagement of persons with disabilities. Only a few non-state actors are advocating for inclusive transport despite the overwhelming need. Additionally, persons with disabilities have not been engaged to the desirable level. This is partly because of the weak mainstreaming of disability by the government agencies in the transport industry. More often, persons with disabilities reported they lack information and opportunity to air their concerns about the transport services.

“Sometimes the government implements plans without involving or consulting the relevant stakeholders, and thus the plan ends up failing no matter good the intention was.” (A matatu operator).

Inaccessibility of the public service vehicles. Most of the paratransit vehicles used in the Nairobi Metropolitan Area are largely inaccessible. For example, from figure 14, the majority (77%) felt that matatus are not easy to board and alight. Additionally, in figure 15, most users (94%) felt that the available seats in the matatus are not adapted for persons with disabilities. Additionally, The matatus are inaccessible because they are profit-oriented and therefore, more capacity means more profits for the operators. Furthermore, the DKS 372 Standards on Passenger Vehicle Body Construction has not been operationalized. This would have dealt with the safety and comfort of vehicles during construction that would otherwise have reduced deaths and impairments caused by accidents. Most of the low-capacity matatus from the manufacturer are not modified.

“Public transport vehicles are not disability friendly, as the spacing of the seats inhibits a person with a disability from sitting comfortably.”

“It is not possible to accommodate passengers on wheelchairs on matatus as they require additional spaces which might prompt removal of some seats. This can be a loss to the business. It can only be possible if the government comes up with policy remedies for the foreseen losses.” (Matatu staff).

“There is a time I was waiting for a matatu to go to town from Langata to town to take my classes in town in the morning. Every time a matatu came, they stopped far from where I was in my wheelchair, and they said to me they had no space for my wheelchair and that I should avoid travelling during peak hours. So, I opted to be using taxis because I am confined to a wheelchair and always need a caregiver because of my spine injury. It is costly and difficult to use to my destination and back home daily. Also, matatu doors are small for wheelchairs.” (A male user with a spine injury).

“To tell the truth, the matatus are not accessible as they should be. Yes, we carry them but not in a manner that meets their needs. The seats available for persons with disabilities to sit on are the same seats used by persons without disabilities. A wheelchair user is forced to pay for an extra seat to keep the wheelchair, and maybe the person is not well off financially.” (Staff of Lopho SACCO).

“The public transport vehicles are not disability friendly, as the spacing of the seats inhibits a person with a disability to sit comfortably.” (a male user with physical challenge).

“No ramps when boarding most buses; they have a staircase.” (a female user with physical challenge).

“I stood on the bus stage for two hours because they were saying no place to put my child's wheelchair. ” (A female caregiver of a child with physical challenge).

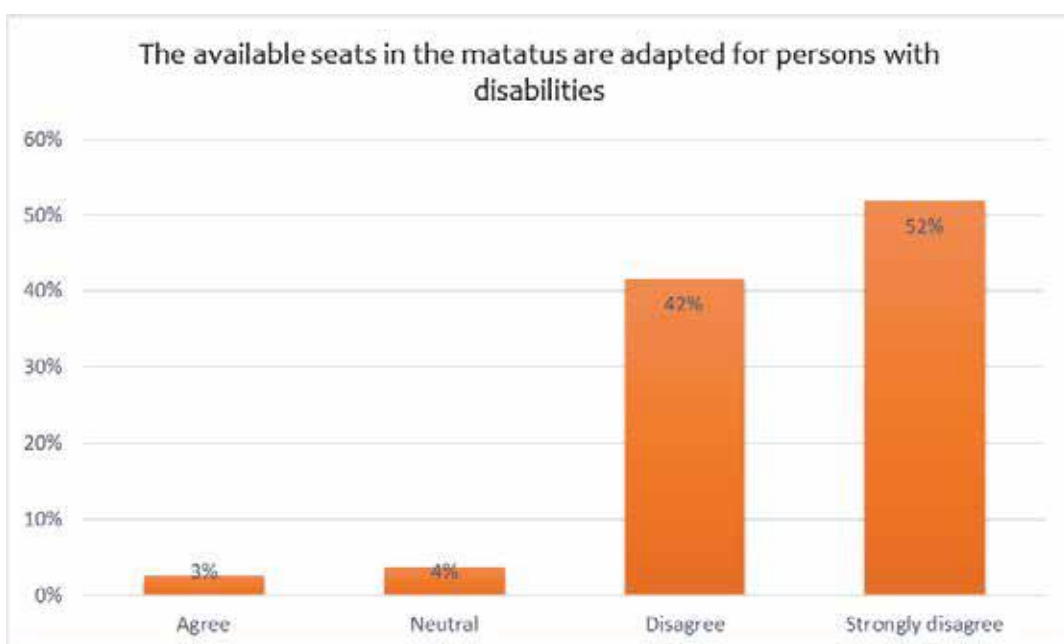


Figure 9: County of residence

Undignified handling, stigma from operators and passengers, condescending attitude, unresponsiveness, and use of unfriendly language. From figure 16, a significant number of users (52%) felt that matatu staff were not friendly and courteous, while 28% were not sure and 20% felt that they were friendly and courteous. Some reported a lack of skills and etiquette by matatu staff when handling the users and mishandling their wheelchairs, despite some doing it out of goodwill.

"When vehicles come, some staff lack handling skills and etiquette. Some do it out of goodwill and they can touch you inappropriately and in an undignified manner and may even harm you. What people should know is that a wheelchair is an extension of myself. So, when people touch it and handle it inappropriately, I feel defiled." (A user with physical challenge).

"We face harassment as conductors compete for you to board their matatu." (A male user who is blind).

"Autism comes paired with a sensory disability, and so the loud noise as soon as a matatu stop means that he gets overwhelmed even before the trip begins. So many times, matatus will just leave rather than switch off the music or videos." (A female caregiver of a child with autism).

"One time, I boarded a matatu to town, and the music was so loud which affects us, persons, with hearing impairment. When I tried to request it to be reduced due to communication barriers, the conductor assumed me." (A user with hearing challenge).

"My voice is low, so I cannot speak loudly and the matatus do not have a side bell which you can press on arriving at your destination and I cannot shout. Often I am dropped past my destination." (A female user with communication challenges).

"Sometimes they (conductors) steal from us by not giving back correct balance when we pay the bus fare. Some make embarrassing remarks like can't you see. They ignore the fact that you are visually impaired." (a male user with visual impairment).

"I am usually worried about being given less change, so I depend on sights guide." (A female user who is blind).

"(When I was left) I felt demoralized, humiliated and unworthy." (A female user who is blind).

"Some (matatu staff) assume that you are poor or do not have the cash to pay for services only because you have a disability." (A male user with visual impairment).

"Some matatu drivers and conductors assume that since you are visually impaired, you must also be deaf, so they make very demeaning comments about you as they try all means possible to avoid ferrying you in their vehicle." (An elderly male with visual impairment).

"Even when they purport to help you in a matatu, there is no dignity and respect." (Caregiver of a person with intellectual challenge).

"Sometimes when you board a matatu with your child with a disability, some passengers relocate as if they are running away from you." (Caregiver of a child with intellectual challenge).

"No person wanted to move to the back so I could access the nearest seat." (A female user with a physical challenge).

"In a matatu, there are seats that I cannot access. It was full and the only available seats were the ones I could not access. No passenger was willing to switch, so the matatu left." (A female user with a physical challenge).

"There is time my child vomited inside the vehicle, where both the driver and the conductor started making noise at me commanding that I must pay KES. 200 for cleaning the vehicle." (Caregiver of a child with an intellectual challenge).

"My child who is disabled has grown big and heavy to be carried especially when queuing at matatu terminals. We are left behind whenever everyone

scrambles for few spaces in a matatu. This happens all the time we are travelling with my child." (A female caregiver of a child with psychosocial and intellectual disability).

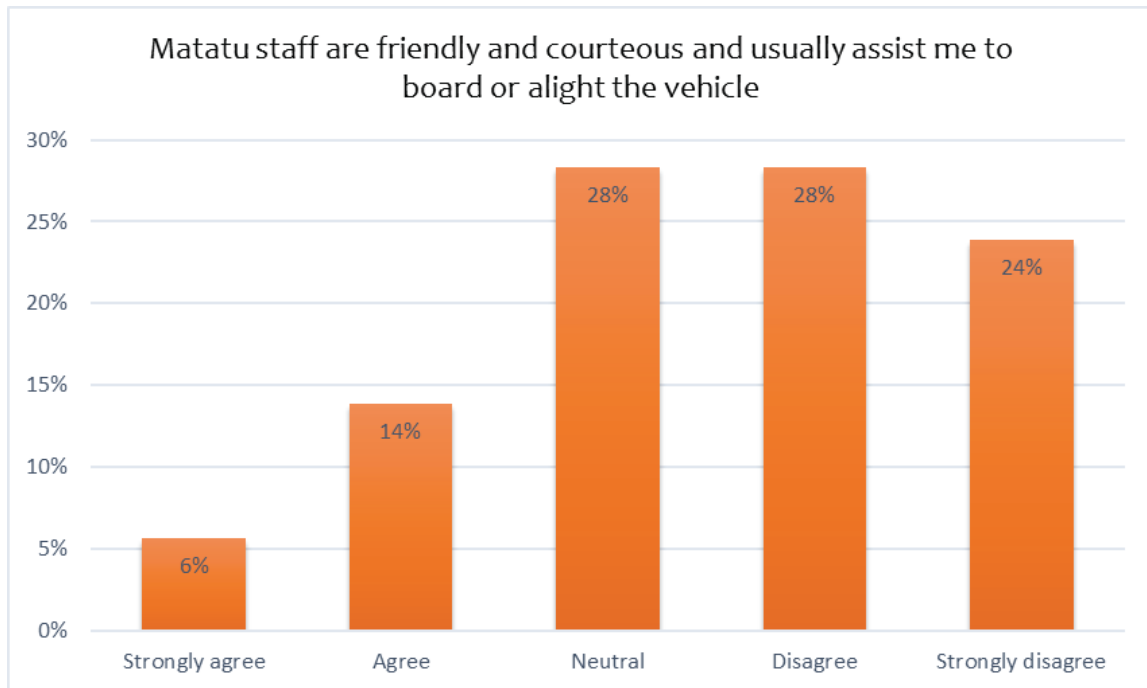


Figure 17: Friendliness of matatu staff

Discrimination of persons with disabilities while accessing the PSV. From figure 17, most users with disabilities (60%) reported being left by a matatu because of their disability. They are also left because some PSV staff perceive them as a burden. Other users with disabilities are known to take advantage of the matatus by feigning disability and others do not want to pay the fare. Despite the discrimination reported about many matatus, others such as Lopha SACCO, Super Metro, Forward and ROG have been praised for being accommodative and supportive to the elderly, expectant mothers, and persons with disabilities. For example, Forward SACCO does not charge the known users with disabilities.

According to figure 18, most of those who have been left at the bus station are persons with mobility challenges (64%), followed by those blind (10%), those with psychosocial and intellectual challenges (10%). Those who are not affected much are those who are deaf. Many users have

reported that they have suffered emotionally due to being discriminated against in the public transport service, to the extent of hating themselves and regretting their condition.

"I even shed tears because of it (when left by a matatu). I had my child on my back and it was even raining. So because of the rush, the driver and his conductor had no time for us. It was a very disturbing experience for my child and me. I have a severely disabled child who schools at Parklands Primary School in a special unit, and I take her daily on school days." (A female caregiver of a child with severe disability).

"My daughter was making much noise in the bus; the conductor had to alight us. " (A caregiver of a child with a psychosocial challenge).

"People who are stubborn are called 'swara' (gazelle) in our business language and we usually leave them wherever we spot them." (A female staff of transport SACCO).

"We left the evening class at 8.30 pm. A friend walked with me to the bus stage. He lived not very far from school. We found about 7 of my classmates still waiting for a bus. Soon the matatu came along and wanted ten or so passengers. My classmates gave me the way to get in first, but as soon as I moved the door, the bus pulled away and stopped in the middle of the road. I moved back as I let my classmates run after it to get in. I heard the conductor complain, "that one will derail us and we are competing with other matatus. We do not have time." So, I was left alone with my angel escort. (A female student with a physical challenge).

"I felt hurt and not accepted by the society because of my disability." (A female user with a physical challenge).

"The conductor told the driver to leave me for it will take time to board." (A male user with a physical challenge).

"Because these matatus are in a hurry during peak hours, they take it as if you are wasting their time." (A female user with visual challenge).

"There is a time I was left at the stage, where I stayed there for almost two hours before I could manage to get a vehicle to board, as other matatus were in a hurry and they could not wait for you to board slowly". (A female user with a physical challenge)

"We prioritize persons with disabilities and the elderly when boarding, especially during peak hours when every other commuter needs to queue as regulated by the SACCO. Therefore, the stage manager is directed to notice such a person at a distance, where he is supposed to give such a person boarding priority or board the next vehicle such that the person can select the best seat to occupy." (Staff of Lopho SACCO).

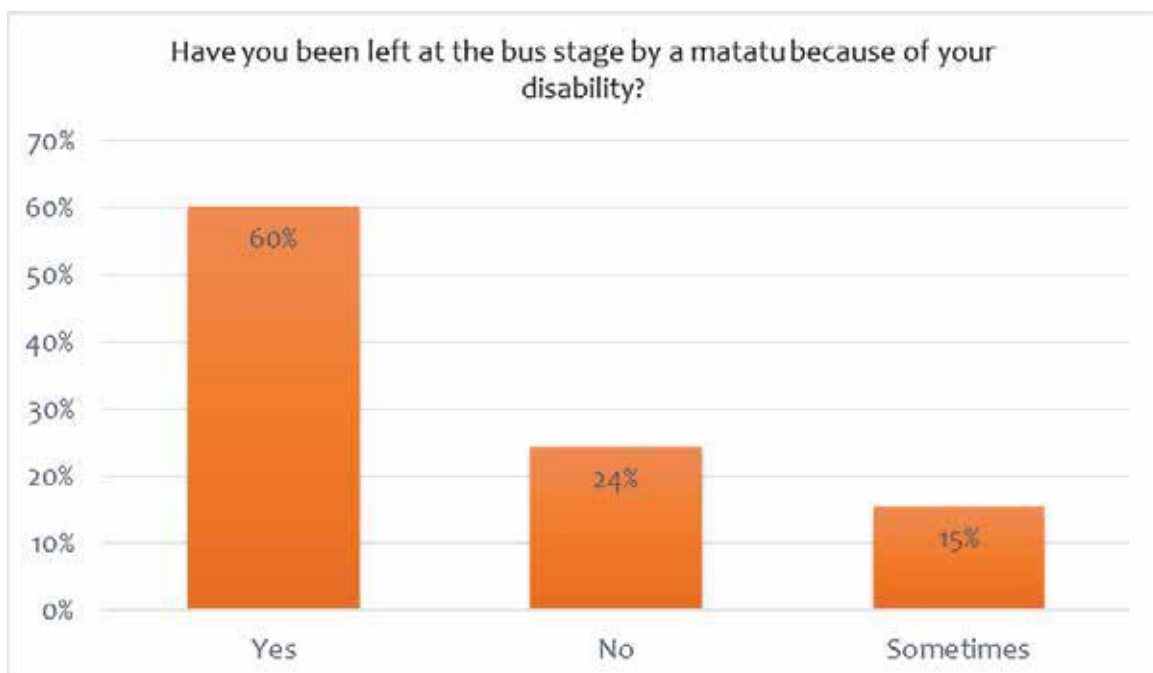


Figure 18: Those ever been left at the bus stage by a matatu because of your disability

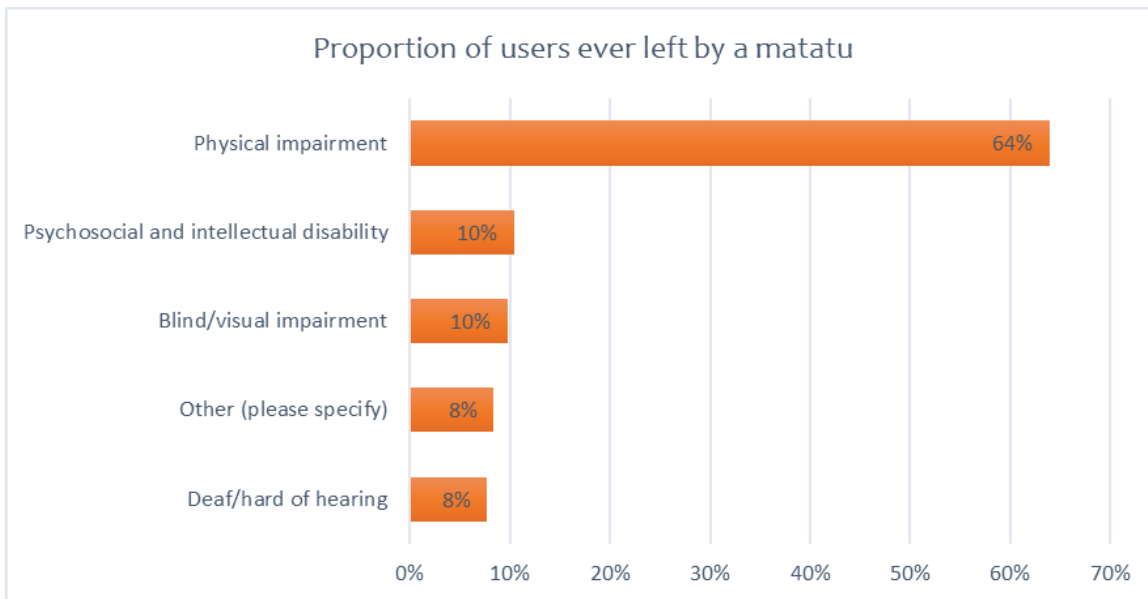


Figure 19: Proportion of users ever left by a matatu by category of their disability

High and unregulated fare. The fares are determined by the operators of the public service vehicles. However, considering that many persons with disabilities and the elderly have low income, it becomes difficult to afford the arbitrarily determined costs. As a result, most of the users (35%) use a fare of over KES. 200 per day while 30% use between KES. 150-200 (figure 19).

From figure 20, the users with physical challenges have the biggest burden of fare compared to other groups. For example, those spending over KES 200, 63% are those with physical challenges compared to those with visual challenges (14%) and those with psychosocial and intellectual challenges (12%). In addition, many are often forced to pay extra fees because of their disability, more particularly for wheelchair users. Most of the time, especially the wheelchair users, the blind and those with severe disabilities, require a caregiver to support them. This means an additional transport cost for the caregiver and their wheelchair, thus adding an economic burden.

“The matatu operators hike the fare depending on either the weather condition or time of the day.”

“Conductors and drivers lied to me to take me to a specific destination, but they dumped me on the way, a place I have never been before, and I spent the extra money to board another matatu while the previous matatu I had paid the extra money and even for my wheelchair too, like a distance of 100sh I paid 300sh.” (A male user with a physical challenge).

“The amount of fare depends with the time of the day, like during rush hour, or when schools are opening or closing, the fares are high and persons with disabilities or the elderly are affected. You can as well be left at the stage because they are in a hurry (to earn more).” (Elderly woman).

“It was at night after arriving from Kisumu when heading to college at Gigiri. They said they do not have a place to tie my wheelchair and that if I want to board their Matatu, I had to pay for double seats.” (A male user with a physical disability).

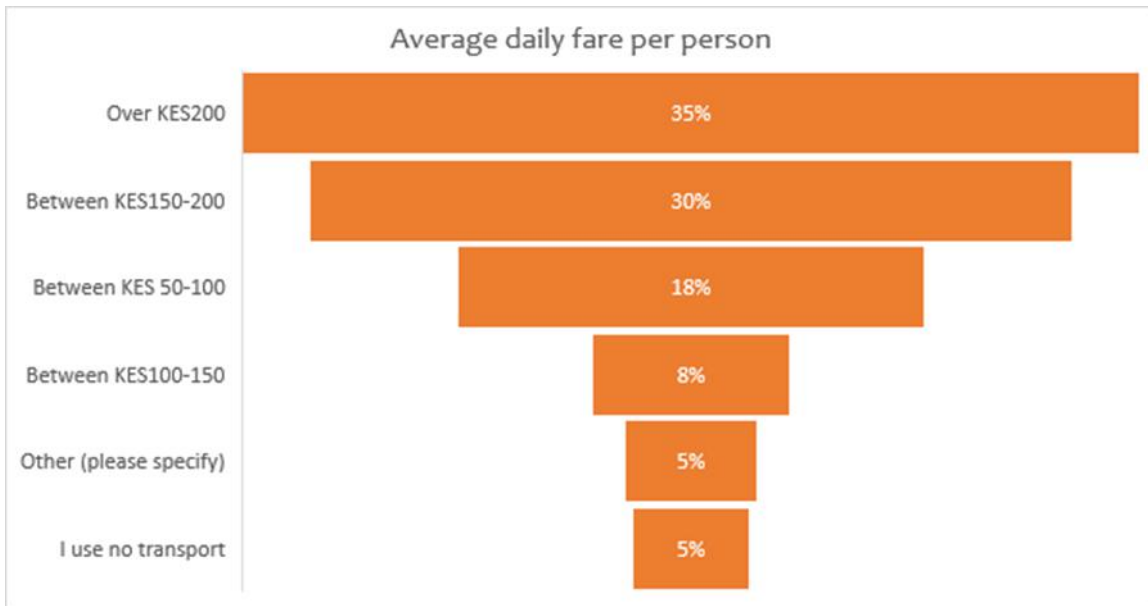


Figure 20: Average daily fare per person

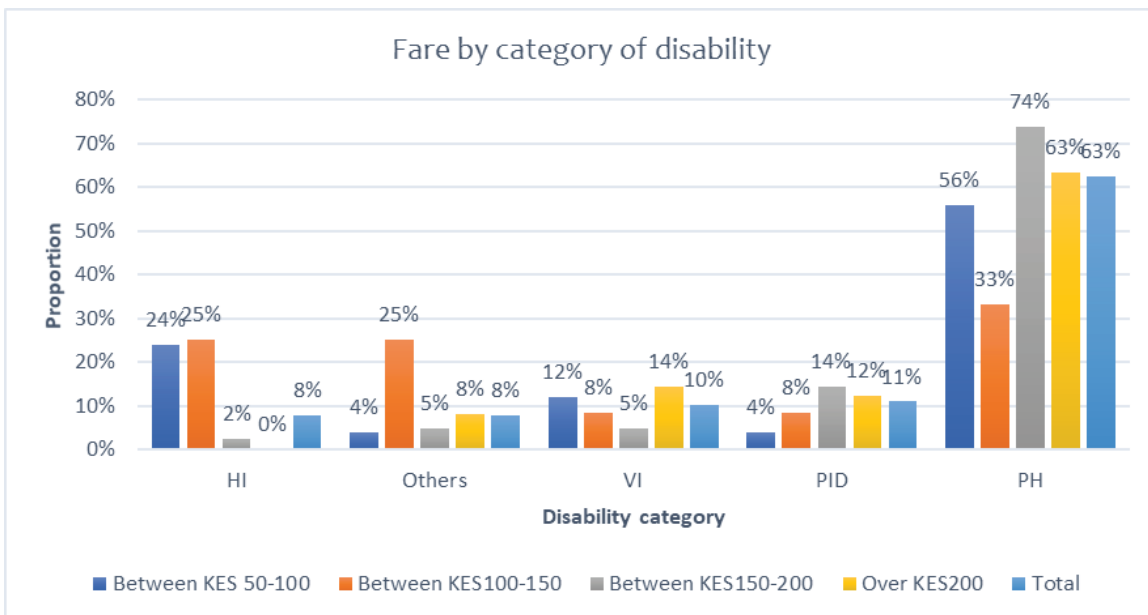



Figure 21: Fare used by category of disability

Poor accessibility of infrastructure and amenities. The current transport infrastructure is not friendly to non-motorized users, as observed by the respondents. In addition, many users are concerned with the lack of terminal linkages where they have to take much time, albeit with difficulties connecting one terminus to another.

From figure 21, most (81%) users felt that the bus stages are not accessible with accessibility infrastructure such as ramps.



According to figure 22, the majority (81%) felt that the bus termini have no adequate public amenities such as toilets, handwashing points and benches. In addition to being inadequate, 83% felt that those present are not adapted to fit their needs (figure 23).

Furthermore, most (74%) of the users reported that many walkways and pavements have barriers such as trees, car parking and others end abruptly and may have barriers making it difficult to access them (figure 24).

In some cases, when roads are being constructed, little consideration is made to ensure the accessibility of persons with disabilities. For example, at the National Council of Persons with Disabilities at ABC Place, where many persons with disabilities are working, they have challenges crossing from one side of the highway to the other. Currently, the expressway is being constructed, yet there is no seeming provision for accessible crossing.

“We work at the headquarter where mainstreaming starts (At NCPWD). We have seen people being transported by well-wishers who come for them from the office. We tried to follow up on a footbridge that would cross from the bus stage to the office. However, the issue was not addressed because we feel our seniors have private means and they do not care so much.” (A male with physical challenge).

“Surfaces are difficult to navigate. No pavements, pathways in most places and some get to an abrupt end. Others have manholes that are not covered and it becomes challenging for blind users.” (A stakeholder in the transport sector).

“The main stages do not have those accessible toilets or ramps, even a shade along the roads. The available toilets are not disability friendly.” (A male caregiver of a person with intellectual challenge).

“The toilets in the bus station are not accessible, dirty. For example, people who are blind need to touch toilets, yet they are very dirty.” (A stakeholder in the transport sector).

transport sector). “I live at Kwa Rueben informal settlement. Matatus do not get to my preferred destination. I get a challenge navigating in town connecting to another matatu located far from where I alight. I have to board two vehicles to reach his place of work and sometimes forced to use a boda-boda.” (A male with a physical challenge).

“Nowhere to sit while waiting for the next matatu. Standing is very challenging.”

(A female caregiver of a child with physical challenge).

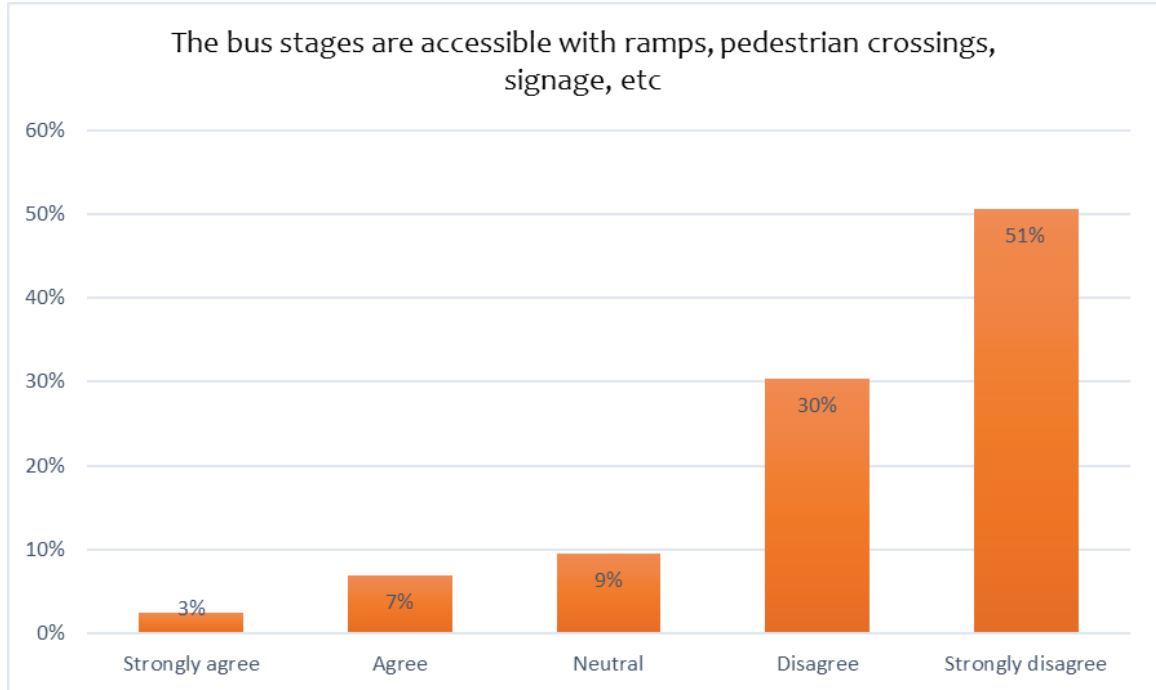


Figure 22: Accessibility of matatu stations

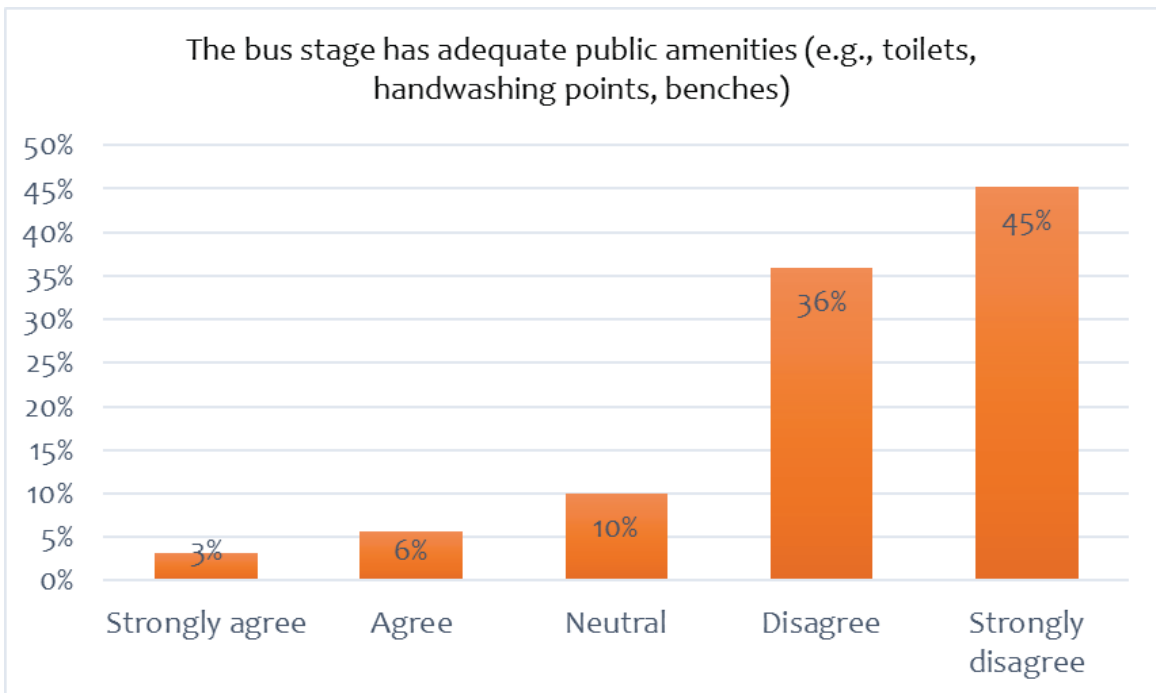


Figure 23: Adequacy of public amenities at bus termini

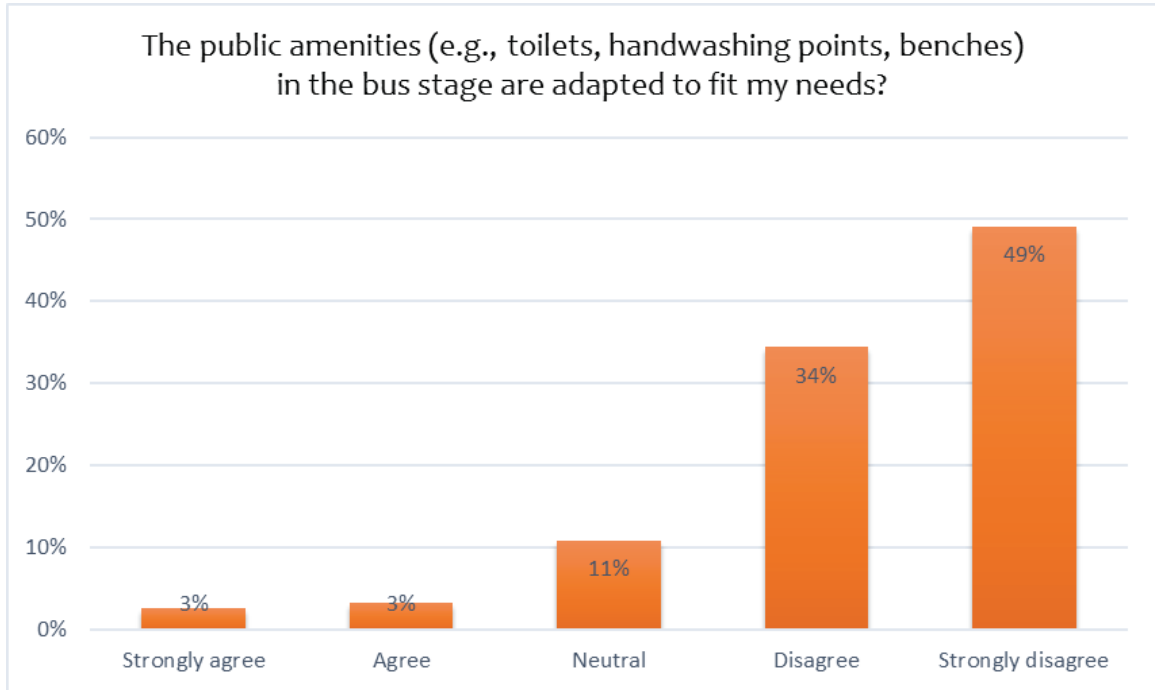


Figure 24: Adaptation of public amenities at the bus termini

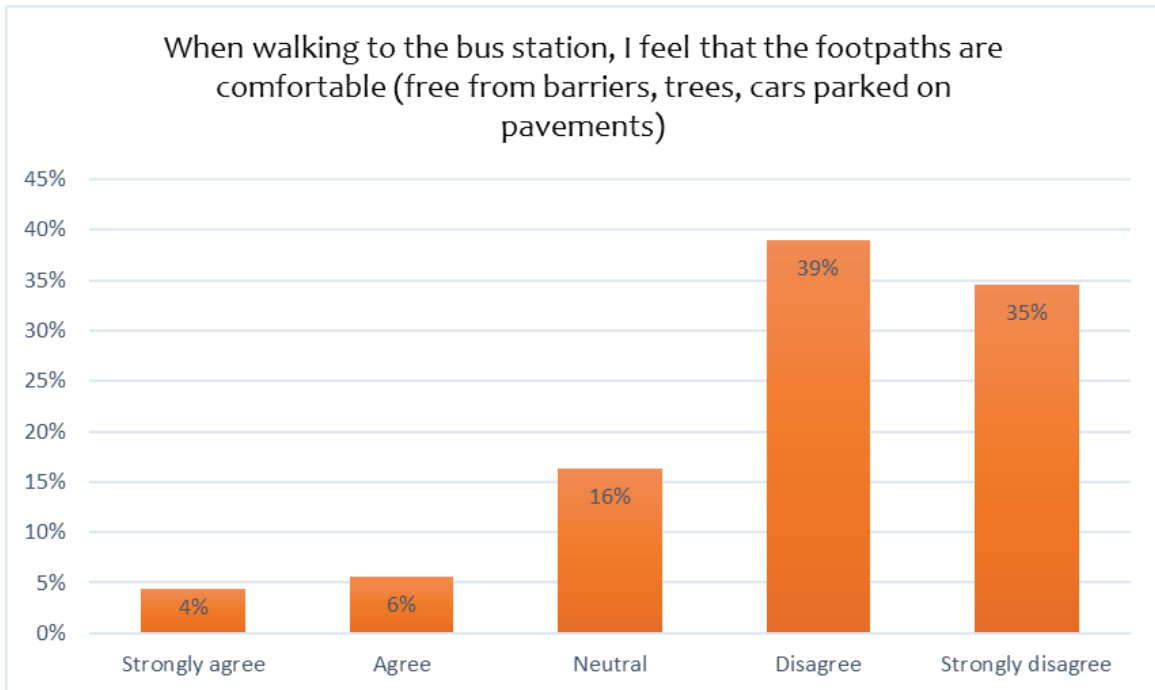


Figure 25: Comfort of walkways and pavements

Ineffective reporting mechanisms in public transport. Many people with disabilities and the elderly reported cases of non-action or follow-up upon reporting indiscipline by PSV staff. Many do not even report since they feel that there may be no action by the SACCOs. Even when reporting channels are provided, it becomes difficult for PSV staff to communicate with passengers with disabilities. Furthermore, those with visual challenges may not even access such information. Despite, these some SACCOs have efficient reporting and follow-up mechanisms in place, though they largely remain inaccessible to all people.

“One lady said that it is very hard to report because such incidences happen so quickly and the vehicle is in a hurry such that even taking the vehicle registration is very hard, despite knowing the process of reporting.” (A female user with a physical disability).

“The problem with reporting is that you report to the management, which happens to be the vehicle owners. Thus, your complaints are not resolved conclusively.” (A caregiver of a person with intellectual challenge).

“Sometimes you have to deal with the challenge or the harassment on the spot because following up with the SACCO can be difficult. (A female user with visual impairment).

“We as Lopha we have a system of receiving and solving complaints which are recorded in a book where it does not take more than 24 hours before the issues are acted upon, also we have put route managers contact inside our vehicle and at the stage, to use to report anything may it good or wrong. In every like half a kilometre we have stationed a staff, such that when an onboard passenger reports a complaint, calls are made to those route marshals to stop the vehicle in the next stage and get to record and confirm the raised complaints then report the matter to the office. We have regulation whereby the culprit is either suspended or fined depending on the case, but more

importantly, the accused is requested to apologize to the customer and the customer has to report to the office that they have accepted the apology. Our customers are very satisfied and happy about the way Lopha Sacco handles reported complaints and they acknowledge that the customers are their employer and they need to be respected.” (Manager, Lopha SACCO).

Lack of adherence to designated terminus by PSV operators. Many users report issues of concern with how matatus drop them off arbitrarily to the point of risking their lives and may lead to incurring an additional cost of transport from the unintended drop-off point to their destination.

“Sometimes you are dropped in a different stage from your preferred destination. Again, when these matatus drop passengers in a hurry which might risk your health.” (A male with physical challenge).

“When you are dropped in a different stage, you are forced to spend additional cost by boarding either another matatu or a boda-boda.” (A female with physical challenge).

“My experience happened in a matatu stage. I fell while alighting, and when the bystanders asked the conductor why they made me fall. The conductor replied that he was not the one who had caused her disability. I got bruised and was very angered and demoralized to the point of wondering why I am disabled.” (A lady with a physical challenge).

Inaccessible information and communication barriers. The users reported that most of the information provided for transport is not accessible at all. In addition, it becomes difficult for them to communicate with the matatu operators since some of them have no skill in, for example, sign language. Many, especially those with visual impairments, especially those with no guides, reported being dropped off past their destination because they could not see the terminus information. From figure 25, about half of the users (47%) reported that they could not locate the different matatu routes because such

information is not accessible. A majority (57%) felt they could not see the road signage and terminus (figure 26).

“There is a lack of information that is clear to anyone. The names written on the bus stations are not in accessible formats and have no signs. Communication becomes worse for people with disabilities that are not visible. Such people lack expression, and it becomes difficult to speak out their needs.” (A non-state stakeholder in the transport sector).

“The public transport is not good. It is inaccessible to me because I cannot communicate with the conductor.” (A user who is deaf).

“Sometimes matatus hoot, yet as a person with hearing impairment, I cannot hear.” (A male user who is deaf).

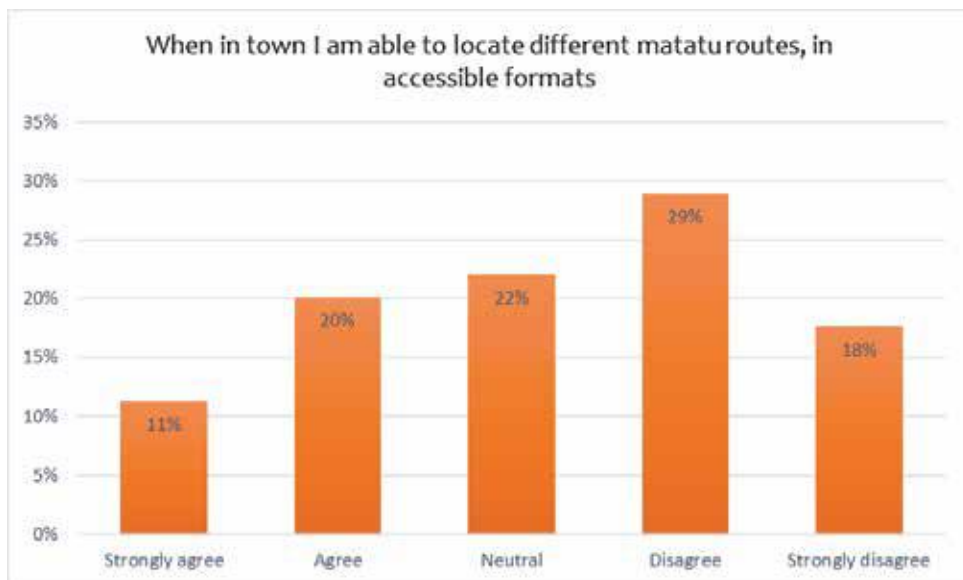


Figure 26: Availability of accessible information on routes and termini

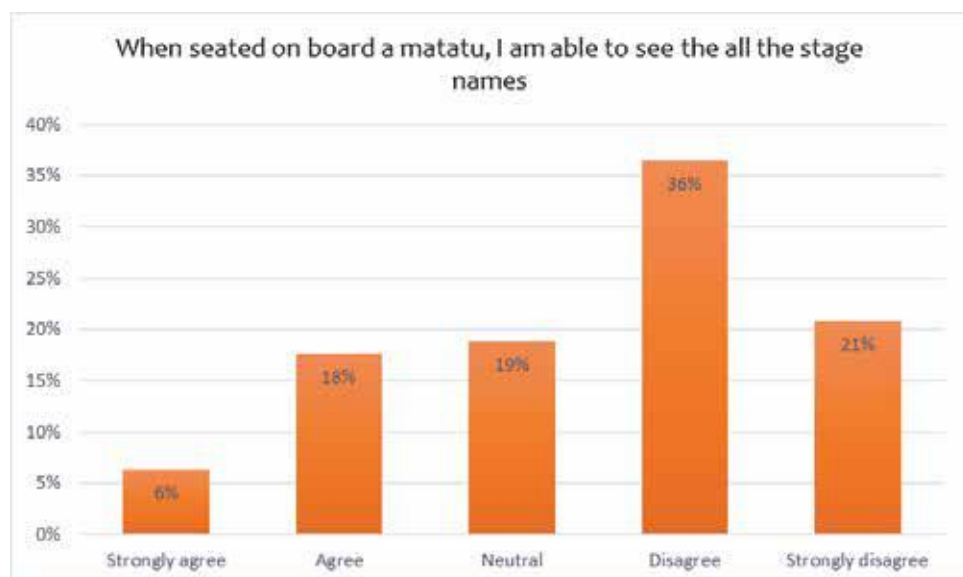


Figure 27: Legibility of all the stage names

Low safety from vehicular traffic. The majority (70%), according to figure 27, felt that they are not usually safe from vehicular traffic.

"The vehicle door knocked me after alighting and the vehicle was speeding off in a hurry." (A female user with physical challenge).

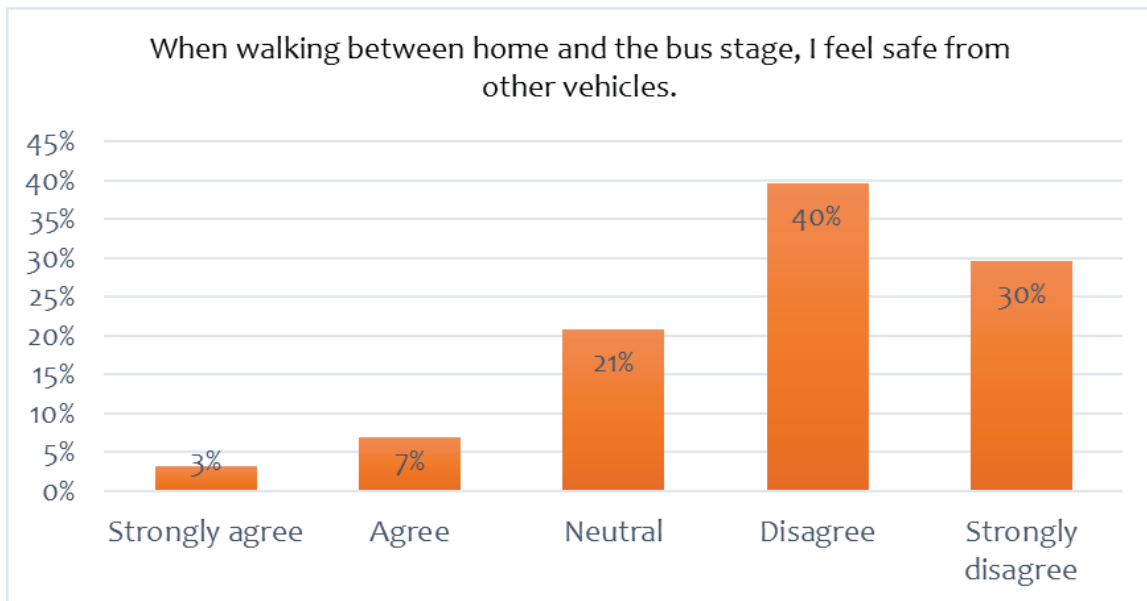


Figure 28: Safety of persons with disabilities from vehicular traffic

Insecurity in matatus. Many reported cases of having experienced insecurity in matatus, especially theft of their items. For example, many reported having lost their phones in matatus because they are easy targets. Some cases of sexual violence have been reported to happen in matatus, though no person with a disability reported being a victim of the same.

Additionally, there are no plans for evacuating persons with disabilities in emergency cases while on-board matatus or in the termini. This becomes challenging because they may not access the information immediately since the media used are not accessible.

"I was using my phone to search for direction and it was snatched while onboard a matatu." (A user who is blind).

"Due to my low vision, I use my phone very close to the face. One time, my phone was snatched from the window." (A male user with albinism-low vision).

"There are cases of violence in public transport. When PWD are faced with violence they are not able to run for themselves." (A stakeholder in the transport sector).

Health effects resulting from overcrowding and loud music in matatus.

"When the vehicle is overcrowded, our child normally convulses due to overcrowding inside the matatu." (A caregiver of a child with a psychosocial challenge).

"Some conditions such as epilepsy and fibromyalgia are triggered by loud music and lighting in matatus." (A non-state stakeholder in the transport sector).

Conclusions And Recommendations

The major challenge that has hindered the implementation of an accessible transport system is mainly the lack of adequate financing. The government of Kenya has developed an elaborate

5.1. Conclusions

Accessibility of public transport service remains a mirage to users with disabilities and the elderly since the policy, technical and social challenges are intertwined. Low implementation and monitoring of laws and policies that promote equality and accessibility make persons with disabilities continue being on the receiving end. With the low implementation of such laws and policies, the matatu operators remain indifferent. This points to an urgent need to involve the matatu owners, operators, and other stakeholders to achieve accessibility. The persons with disabilities make an effort to defend themselves, but the environment is live with the overwhelming stigma and condescending attitude from the matatu operators and the general public.

Several recommendations are provided to the government, PSV owners and operators and the non-state actors. It is hoped that these recommendations will contribute to solving the recurrent challenges of unreliable, ineffective and inaccessible public transport services for paratransit vehicles. A general recommendation is that different research can be conducted to ascertain the accessibility of taxis. Another dimension of this research could be how inaccessibility affects female users with disabilities.

5.2. Recommendations to the Government Agencies

- l) NCC: Enforce the Nairobi County Transport Act (2020) to ensure matatu owners and operators:
 - Provide designated seats for persons with disabilities;
 - adhere to the use of designated termini by matatu operators, and provision of designated seats to persons with mobility challenges; and
 - regulate music in PSVs
- m) Ministry of Transport: Operationalize and implement the DKS 372:2018, Draft Kenya Standard, Road Vehicles - Passenger vehicle Body Construction – Specification. The implementation of this Standard will lead to the realization of accessibility and safety on newly built public service vehicles adapted to fit the needs of persons with disabilities and the elderly. This can be coupled with policy initiatives that promote the local assembly of vehicles tailored to the local needs.
- n) Ministry of Transport: Review the road design manual of 1987 to incorporate accessibility aspects. The review should incorporate the realities informed by challenges faced by persons with disabilities and the emerging practices on accessibility or roads while promoting liveable cities.
- o) Ministry of Transport: Fast-track the development and operationalization of the National Road Safety Action Plan as envisaged in the MTP III. This will address the safety of users, including the elderly and those with disabilities and safety provisions for non-motorized users.

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- p) Ministry of Transport: Improve stakeholder engagement. Only a limited number of stakeholders with disabilities are engaged in the policymaking for transport services. The government transport stakeholders need to build their internal capacity of engaging persons with disabilities in the planning, design, implementation and monitoring of transport service programmes.

The public transport stakeholders should work closely with NCPWD, a state agency mandated to issue adjustment orders under sections 23 and 24 and implement the Persons with Disabilities Act of 2003. The government should promote more and better public participation of persons with disabilities and the elderly through improving communication, venues, platforms and medium of engagement during the public participation forums. For instance, communication can be done through the organizations of persons with disabilities and alternative and accessible means of communication are used. The coordination structures such as Programme Delivery Unit (PDU) should have a constitutional representation of persons with disabilities.

- q) Increase the visibility of information provided to road users through signage in a variety of accessible formats.
- r) Ministry of Transport: Establish adequate infrastructure, amenities and facilities to accommodate the needs of persons with disabilities using the universal design model. Those that require priority are termini shades, toilets, walkways, pavements, among others. In addition, such facilities should have ramps, guard rails and adequate lighting, etc.

- s) NCC: Provide adequate spaces for picking and dropping passengers in town to avoid the cases of obstruction reported by the county askaris and the traffic officers. The current spaces are not enough and the available ones are irregularly allocated to SACCOs. This makes it hard for other matatu operators to onboard or alight persons with disabilities since the available spaces are squeezed.

- t) Ministry of Transport/NCC: Subsidize, standardize and regulate the fares charged by public service operators. This will avoid overburdening users who incur extra costs while travelling. For example, those using wheelchairs and an aide should be charged reasonable costs. The government can provide a cushion by paying the operators such additional costs through social protection programmes. Additionally, the government can provide tax incentives to the operators who are accommodative of persons with disabilities.

- u) Review the training curriculum in colleges and universities targeting students of road construction technology. The curriculum should incorporate a unit that sensitizes them on sensitivity and responsiveness to the needs of marginalized populations.
- v) Provide adequate financing for the implementation of the integrated mass rapid transit (MRT) project- Bus Rapid Transport (BRT). There is a need for the government to allocate adequate funds to fast-track the implementation of the BRT. This will be an ideal means of transport for all and solves recurrent challenges faced by persons with disabilities and the elderly. This can be done by exploring the PPP financing options in the provision of some services.



5.3. Recommendations to Matatu Owners and Operators

- e) Design capacity building programmes for matatu owners, operators and staff on disability etiquette, basic communication to different people with disabilities (skills such as sign language), and skills of handling persons with disabilities and their items such as wheelchairs.
- f) Develop robust reporting and complaints mechanisms where people can report cases of violence, maltreatment. Such cases should act on through laid down disciplinary protocol. The victims of maltreatment should get feedback on the actions taken. The users need to be provided with information that they can use if they wish to report or compliment the staff.
- g) Install accessibility communication features in the public service vehicles such as screen messaging, voice messaging and bell.
- h) Promote pro-disability human resource practices. Motivate the matatu staff by developing a program to award disability champions for promoting inclusion in the matatu sector. Employ sign language interpreters and marshals to support persons with disabilities in accessibility to vehicles. Promote inclusive employment of persons with disabilities as staff and operators to promote inclusion and sensitivity to the needs of persons with disabilities. Additionally, assure staff of job security by employing them on contracts.

5.4. Recommendations to Non-State Actors

- g) Partner with the matatu owners and operators to build their staff's capacity and develop complaints and response mechanisms.
- h) Educate the public on inclusive living to achieve an all-inclusive society where everyone is respected.
- i) Support in the development of inclusive messaging. For example, 'I am deaf, please flash, do not hoot.' This can address the safety of private vehicle drivers who are deaf.
- j) Promote self-advocacy of users with disabilities. Empower the users to speak up on matters affecting them while accessing public transport. This will ignite the interest of persons with disabilities to participate in public participation and planning forums to air out their concerns and proposals for inclusive transportation.
- k) Lobby for representation of persons with disabilities in the coordination groups such as in the Programme Delivery Unit (PDU).
- l) Form a stronger and inclusive coalition of non-state transport sector actors to increase their strength in advocacy on inclusive and accessible public transport. Such a structure will complement the government efforts and also seek accountability to the public on matters of public transport.

5.5. Best practices on Accessible Public Transport

Table 3: Best practices on Accessible Public Transport

Element of accessibility	Key practices
<p>Vehicle construction</p>	<ul style="list-style-type: none"> • Low floor, usually with a kneeling device and a ramp • PSV and stations should provide priority seating for people with disabilities that should be clearly marked and close to the driver. Folding supports and seats can be provided to help save space. • Platform level boarding: The gap between the bus floor and the platform edge should not be larger than 10 centimetres, or else it becomes a hindrance to people on wheelchairs, e.g., walking sticks, wheelchairs and crutches get stuck in the gap. • Low-level buses should have the kneeler feature that decreases the bus suspension by roughly 10cm allowing platform boarding • There should be charging stations for people on electric wheelchairs. This enables them to plan their trips without the fear of wheelchair batteries running flat. A “charging point” sticker should be displayed in stations. • A wheelchair space, clearly marked as such, with a flat surface without obstacles and with minimum dimensions of 1 300 mm x 750 mm as well as space to manoeuvre. • It is safer for the wheelchair passenger to sit with their back to the direction of travel;
<p>Road and pedestrian environment</p>	<ul style="list-style-type: none"> • The underlying purpose of pavement is to provide safe, easy access for everyone walking or using a wheelchair. • A minimum obstacle-free footway at least 1 500 mm wide - preferably 2 000 mm. • Widths should be greater at bus stops (minimum 3 000 mm) and in front of shops (3 500 mm or more). • If possible, gradients should be not more than 5% (1 in 20) to cater for self-propelled wheelchairs: this should be used as a design limit in new development. • Where gradients are unavoidably steeper than this, level areas (preferably 1 500 – 1 800 mm long) should be incorporated at intervals of 10 m. • Surfaces should be non-slip, well maintained and any joints between paving slabs should be closed and flush to avoid catching the small wheels of a wheelchair. • Nothing should overhang the footway (signs, tree branches, etc.) to a height of less than 2 100 mm (preferably 2 500 mm)

Element of accessibility	Key practices
	<ul style="list-style-type: none"> • Seating should be provided at regular intervals of around 100 m. • Footpaths should be designed without abrupt level differences,
Pedestrianised areas	<ul style="list-style-type: none"> • Areas, particularly in town centres, that are traffic-free for some or all of the time can provide a pleasant and safe environment for all pedestrians, but they can also contain hazards. • The gradients, where unavoidable changes in level, ramps should be provided as well as steps. Two levels (or more) shopping precincts must have lift access to all floors. • Like footways, the walking surface should be non-slip and well-lit; good maintenance is also essential. • There is very likely to be some encroachment onto the pedestrian areas of shop displays and goods as well as street furniture should be carefully controlled; otherwise, it can be dangerous for visually impaired people. • The aim should always be to maintain all the principal directions of movement as “pedestrian clearways”. • For large open pedestrian areas, provide tactile guidance surfaces and appropriate warning for any flights of steps for blind and partially sighted people to navigate
Shelters and waiting seats	<ul style="list-style-type: none"> • Shelters to keep the worst of the weather off waiting passengers should be designed so that people inside them can see the approaching vehicle • Seating should be located so that people don’t have to walk more than about 50 to 60 m without the opportunity to sit down and rest for a moment. • Both visual and audible information should be relayed to all waiting rooms.
Toilets	<ul style="list-style-type: none"> • Designed to accommodate people in wheelchairs. • A wide, easily opened door (minimum clear width of 925 mm) that swings in both directions. • Sufficient space for a wheelchair user to manoeuvre inside the cubicle. • Space around the lavatory to enable the wheelchair user to transfer from front or side from wheelchair to lavatory. • Hand-washing and drying facilities within reach from the lavatory. • Sufficient space for a helper to assist in the transfer.

Element of accessibility	Key practices
Termini	<ul style="list-style-type: none"> • Guiding blocks for people with vision impairments should be put at exit and entrance to and from bus stations and at boarding areas, especially in areas with abruptly changing levels or ramp • The guiding blocks should be in contrasting colours and textures as compared to the rest of the surroundings.
Ticketing	<ul style="list-style-type: none"> • An accessible ticket vending machine should not be more than 1200 mm high. Station attendants should be at hand to address the challenges that blind and deaf commuters might have with purchasing tickets
Communication	<ul style="list-style-type: none"> • Audible announcements (of next step, terminus, etc.) and at bus stops of service number/destination of the next bus • Visual display “bus stopping” and name of next stop. • Bell pushes within reach of a seated passenger (1 200- 1 400 mm above the floor). • Timetables and brochures should be printed in a clear type face for the benefit of everyone but should also be produced in large print, minimum 14pt, preferably 19pt • To assist people with intellectual disabilities, timetables should make use of symbols and illustrations.

Annexes

6.1. Work Plan

Stages	Key activities	Weeks/dates				
		W1	W2	W3	W4	W5
Inception/planning	Contracting process	16 - 17/08				
	Development of an inception report and tools	16 - 17/08				
	Receive inputs on the inception report/tools from Flone Initiative	20 - 19/08				
	Training research assistants		23-21/08			
Data collection	Mobilisation of respondents		24-24/08			
	Collect data from the sampled respondents		25/08-10/09			
Report writing	Data analysis and drafting of report			10-18/09		
	Validation workshop -Nairobi County Government Disability Mainstreaming working group					29/09
	Review of the report to incorporate stakeholders' inputs and submit the final report					05/10



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