



**THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF TRANSPORT
LAND TRANSPORT REGULATORY AUTHORITY**



**JUNE
2026**



**CONSULTANCY SERVICES FOR ASSESSING DIVERSITY AND
INCLUSIVENESS IN THE PROVISION OF LAND TRANSPORT SERVICES**

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2. Executive Summary

This comprehensive study, commissioned by the Land Transport Regulatory Authority (LATRA) and conducted by Tawi Consult, presents an in-depth evaluation of the state of diversity and inclusiveness within Tanzania's land transport sector. The assessment was undertaken with the overarching aim of identifying barriers, disparities, opportunities, and systemic gaps that affect marginalized groups, particularly persons with disabilities (PWDs), women, children, the elderly, and low-income earners. The study responds to LATRA's Five-Year Strategic Plan (2020–2025) and aligns with global frameworks such as the Sustainable Development Goals (SDG 11), the UN Convention on the Rights of Persons with Disabilities (UNCRPD), and the African Charter on Human and Peoples' Rights.

2.1 Overview of the Study

This study provides a comprehensive evaluation of Tanzania's land transport sector, focusing on inclusivity, accessibility, and systemic effectiveness. The study identifies challenges, gaps, and opportunities to improve the sector's capacity to meet the needs of diverse user groups, particularly marginalized populations. The findings and recommendations aim to guide policy reforms, infrastructure development, stakeholder collaboration, and the adoption of best practices to create an equitable and efficient transport system.

General Objective

The overall objective of the study is to establish the status, needs, gaps, challenges, and expectations of diverse social groups in accessing land transport services in Mainland Tanzania.

Specific Objectives

1. To establish the profile of diverse consumers' scope and size in land transport.
2. To assess the status of gender in development in land transport services, including at the levels of transporters, workers, consumers, regulators, and other stakeholders.
3. To identify the type and extent of the existence of inclusiveness in land transport.
4. To estimate the burden of the impact of externalities such as accidents, cost burden, and distance to the nearest services in land transport among diverse social groups.
5. To assess the existing availability of land transport services to diverse social groups.
6. To assess the accessibility of land transport services to diverse groups in terms of affordability, distance, physical state, and cultural aspects.
7. To assess the national legal and policy framework in addressing diversity and inclusion in land transport.
8. To point out regulatory gaps in the provision of land transport services for diverse groups.

1. To identify key stakeholders in addressing access to land transport services by diverse groups.
2. To conduct an in-depth assessment of the status of road and railway public transport systems in meeting the needs of diverse groups.
3. To identify challenges and issues affecting the provision and access to land transport by diverse social groups.
4. To evaluate the state of diversity and inclusion in business and cultural practices in the land transport sector.
5. To identify best practices in similar economies in addressing inclusiveness in land transport services.
6. To establish the rate of entry and exit in the transport services and the associated reasons.
7. To develop an inclusive resource base, along with suggestions and recommendations for the integration, engagement, monitoring, and evaluation systems of diversity and inclusion in the land transport sector.

2.2 Methodology

A mixed-methods approach was employed, integrating both quantitative and qualitative techniques to ensure data triangulation and analytical rigor. Quantitative data were obtained through structured surveys administered to 1,291 respondents across four key regions Dar es Salaam, Dodoma, Mbeya, and Mwanza capturing urban, peri-urban, and rural realities. Stratified random sampling ensured balanced representation across gender, disability status, age brackets, and socio-economic backgrounds. Qualitative data were collected through 48 Key Informant Interviews (KIIs) and 20 Focus Group Discussions (FGDs), supplemented by observational fieldwork using a standardized checklist and a detailed documentary review of legal and institutional frameworks. STATA software was utilized for statistical analysis (including descriptive statistics, chi-square tests, and multinomial logistic regression), while NVivo supported the thematic coding and interpretation of qualitative findings. This methodological rigor allowed for the generation of evidence-based, policy-relevant recommendations.

1. Demographic and Transport Usage Patterns

- The majority of transport users (64.4%) were male, while only 35.6% were female, reflecting gender-based usage disparities.
- Youth aged 18–35 accounted for 72.7% of users, highlighting a generational reliance on public transport.
- Dar es Salaam had the highest respondent count (368), followed by Mbeya (242), Dodoma (208), and Mwanza (206).

2. Accessibility for People with Special Needs

- Only 19.4% of all respondents reported that public transport vehicles were accessible to PWDs.
- Nearly half (47.6%) of PWDs relied on private modes due to inaccessible public options.
- Waiting times revealed deep disparities – 43.75% of PWDs in Mbeya waited over an hour, while in Dodoma, 47.6% accessed transport within 10 minutes.
- 81% of respondents expressed support for introducing transport discounts for people with disabilities.

3. Affordability and Cost Burdens

- 75.3% of respondents reported experiencing fare hikes in the past year. Dar es Salaam (39.3%) and Mbeya (23.4%) were the most impacted.
- Fares exceeding TZS 2,000 were most common in Mbeya (36.2%) and Mwanza (31.3%).
- Nearly half (47.6%) of PWDs and 50% of respondents with chronic illnesses cited transport cost as a barrier to access.
- Regression analysis found women were 37.6% more likely than men to bear disproportionate burdens from fare increases and accident exposure.

4. Gender Inequality in Participation and Access

- Women constituted only 1.8% of the transport workforce, underscoring systemic exclusion in employment.
- In Dodoma, 36.8% of women raised concerns about limited transport access due to safety, followed by 25.27% in Dar es Salaam.
- None of the observed transport terminals had gender-sensitive infrastructure such as separate waiting areas or designated boarding lines for women.

5. Availability and Geographic Access

- Service availability and satisfaction ratings varied regionally: Dodoma rated highest (25.96% very satisfied), while Dar es Salaam rated lowest (31.4% dissatisfied).
- 33.3% of rural respondents had to walk long distances to reach a transport stop.
- Only 15.19% of terminals had inclusive features like ramps or priority seating.
- Service regularity was high (observed in 68.35% of locations), but reliability remained inconsistent in Mbeya and Mwanza.

6. Regulatory Gaps and Policy Enforcement

- While legislation such as the Persons with Disabilities Act (2010) and National Transport Policy (2003) exists, enforcement remains inadequate.
- 59.4% of respondents viewed current enforcement mechanisms as ineffective.
- There is a lack of clear operational guidelines for inclusion within contracts, licenses, and procurement practices.

7. Stakeholder Roles and Engagement

- The study identified six major stakeholder groups: government agencies, private operators, local councils, civil society organizations, development partners, and passengers.
- Engagement was found to be fragmented and irregular. Only 49.2% of service users reported structured participation or feedback mechanisms.
- Awareness among service providers about legal requirements related to inclusion remains limited.

8. Lessons from Global Best Practices

- Rwanda emerged as a regional benchmark, with 100% of its public buses designed to accommodate all users, integrating universal design and gender-sensitive protocols.
- Other practices such as digital fare systems, queuing protocols, and targeted subsidies were cited as transferable strategies that could benefit Tanzania's transport system.

2.4 Strategic Recommendations

1. Policy and Legal Reform

- Strengthen the implementation of the Disability Act and LATRA regulations through enforceable standards, performance indicators, and penalties for non-compliance.
- Develop a National Inclusive Transport Policy that integrates universal design, safety protocols, and gender equity.

2. Infrastructure Development

- Upgrade terminals and vehicles to include ramps, handrails, signage, designated seating, and audio-visual alerts.
- Implement universal design across all new infrastructure projects.

3. Gender Inclusion and Workforce Diversity

Implement affirmative action to increase women's participation in the transport workforce.

Provide gender sensitivity training for transport staff and prioritize female-friendly safety infrastructure.

4. Affordability and Subsidy Mechanisms

- Introduce subsidized fare schemes or transport cards for PWDs and low-income groups.
- Regulate fare structures to prevent exploitative practices, especially in underserved regions.
- Assess the affordability and accessibility of the public transport to student and recommend for the policy restructuring of student fare subsidize

5. Stakeholder Engagement

- Create inclusive advisory committees at national and regional levels to foster co-creation and oversight of inclusive transport strategies.
- Leverage digital platforms (e.g., SMS, apps) to enable real-time feedback from users.

6. Monitoring and Evaluation

- Develop a national transport inclusivity index and integrate M&E tools into LATRA systems.
- Ensure disaggregated data collection across gender, age, disability, and socio-economic status for continuous learning and accountability.

2.5 Conclusion

The findings of this study illuminate profound and persistent inequalities in Tanzania's land transport system that hinder equitable access for significant segments of the population. Systemic issues such as inadequate infrastructure, unaffordable fares, weak enforcement of inclusive policies, and low stakeholder engagement continue to marginalize already vulnerable groups. While Tanzania has made policy strides through the enactment of inclusive laws and strategic plans, implementation remains a major challenge. This report offers a roadmap for transformative reforms, grounded in empirical data and international best practices. If adopted, these recommendations will enable LATRA and its partners to foster a transport environment that is safe, inclusive, affordable, and resilient ultimately supporting Tanzania's ambition to leave no one behind in its national development journey.

3. Introduction

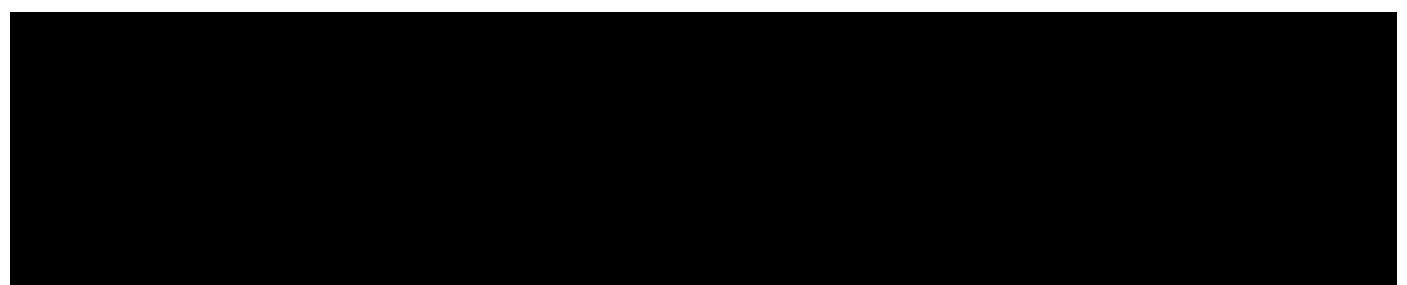
3.1 Background

Public transportation systems play a pivotal role in fostering socio-economic development by ensuring accessibility, mobility, and equity for diverse social groups. However, achieving inclusiveness in the transport sector requires addressing the unique challenges faced by marginalized and vulnerable populations. In Tanzania, the Land Transport Regulatory Authority (LATRA), established under the LATRA Act, CAP 413 of 2019, is tasked with ensuring that transport systems meet the needs of all citizens, particularly those who are often underserved. These groups include persons with disabilities, low-income earners, women, children, and the elderly.

Despite LATRA's emphasis on inclusivity as articulated in its Five-Year Strategic Plan (2020–2025), significant barriers persist in the accessibility and suitability of public transportation. These challenges are exacerbated by the lack of comprehensive data on the needs of various consumer groups, particularly those in rural areas. Existing transport systems often fall short in addressing disparities in access, affordability, and safety, leaving marginalized populations disproportionately affected.

One of the critical dimensions of this issue is gender. Women face unique challenges, such as limited access to safe and reliable transport, heightened vulnerability to harassment, and economic barriers that restrict their mobility. Such disparities highlight the need for gender-sensitive approaches to transport planning and policy formulation. Moreover, externalities like accidents, long distances to transport services, and high costs further restrict the equitable access of marginalized groups to transportation.

This study, commissioned by LATRA and conducted by Tawi Consult, sought to bridge these gaps by comprehensively evaluating the inclusiveness of land transport services across Mainland Tanzania. It aimed to identify existing gaps, assess the effectiveness of legal and policy frameworks, and provide actionable recommendations to promote diversity and inclusion. By addressing these issues, the study aligns with Tanzania's broader developmental goals and international commitments to social equity and human rights. The findings and recommendations from this research are expected to guide LATRA and other stakeholders in creating a more equitable and efficient transport system that supports the socio-economic development of all Tanzanians.



3.2 Objectives

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Specific Objectives

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9. To identify key stakeholders in addressing access to land transport services by diverse groups.
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11. To identify challenges and issues affecting the provision and access to land transport by diverse social groups.
12. To evaluate the state of diversity and inclusion in business and cultural practices in the land transport sector.
13. To identify best practices in similar economies in addressing inclusiveness in land transport services.
14. To establish the rate of entry and exit in the transport services and the associated reasons.
15. To develop an inclusive resource base, along with suggestions and recommendations for the integration, engagement, monitoring, and evaluation systems of diversity and inclusion in the land transport sector.

3.3 Scope of the Study

The scope of this study was defined across three key dimensions: geographic, thematic, and temporal, ensuring a holistic and representative assessment of diversity and inclusion within Tanzania's land transport sector. Each scope element was strategically framed to capture the socio-economic, demographic, and infrastructural diversity that influences accessibility, affordability, and equity in public transport services.

3.3.1 Geographic Scope

The geographic coverage of the study spanned four purposefully selected regions: Dar es Salaam, Dodoma, Mbeya, and Mwanza. These regions were chosen to reflect the range of socio-spatial, economic, and infrastructural profiles found across Mainland Tanzania. Each region was analyzed not only for its geographic relevance but also for its demographic characteristics, economic significance, and transport system complexity. Empirical data from the National Bureau of Statistics (NBS), the 2022 Population and Housing Census, and regional development profiles were used to contextualize the findings.

Dar es Salaam: As Tanzania's largest urban center, Dar es Salaam has a population of approximately 5.4 million (NBS, 2022), representing nearly 14% of the national population. The region accounts for a significant portion of the country's GDP and is the epicenter of economic activity, trade, and industrial services. It also experiences the highest public transport demand, with over 70% of its population relying on informal transport services such as Daladalas and bodabodas for daily commuting (LATRA, 2021). High population density (3,133 persons/km²) has exacerbated issues of congestion, unregulated fares, and limited infrastructure for persons with disabilities (PWDs). These factors made Dar es Salaam an ideal case study for examining urban mobility challenges in a rapidly growing metropolis.

Dodoma: Dodoma, the national capital and administrative hub, has experienced rapid urban expansion over the past decade. Its population grew from 410,956 in 2012 to 765,179 in 2022 (NBS, 2022), a nearly 86% increase, driven largely by government decentralization. The city presents unique challenges associated with urban transition, including insufficient transport coverage, limited terminal infrastructure, and low public investment in inclusive mobility systems. The region's significance lies in its potential to serve as a model for planned urban development, where inclusivity can be mainstreamed from the outset.

Mbeya: Mbeya represents a blend of urban and rural socio-economic settings, with a regional population of approximately 2.7 million (NBS, 2022), and a relatively dispersed settlement structure. Transport infrastructure in Mbeya is characterized by a combination of paved urban roads and unpaved rural routes, which often become impassable during rainy seasons. Only 42% of roads in the region are all-weather accessible, presenting severe mobility barriers for rural women, the elderly, and persons with chronic health conditions (MoWTC, 2021). The region also exhibits significant disparities in transport affordability, with rural dwellers spending a higher proportion of their income on transport services compared to urban residents.

Mwanza: Mwanza, the second-largest city and a major economic center on the shores of Lake Victoria, has a population of over 3.7 million (NBS, 2022). Its economy is supported by trade, port logistics, and mining, all of which demand reliable and inclusive transport systems. The city's terrain and semi-urban sprawl present challenges in establishing efficient transport networks, particularly in connecting low-income peri-urban areas to the city center. A 2021 study by TUCTA and NBS revealed that PWDs and elderly residents in Mwanza report the highest dissatisfaction with public transport accessibility, citing unsafe boarding, lack of ramps, and long wait times.

3.3.2 Thematic Scope

The study's thematic scope was grounded in a rights-based framework, aligned with international conventions (such as the UN Convention on the Rights of Persons with Disabilities) and national legal instruments including the Persons with Disabilities Act No. 9 of 2010 and the National Transport Policy (2003). The themes covered were:

- **Accessibility:** Assessing the physical, infrastructural, and systemic barriers limiting access to public transport services for marginalized groups.
- **Affordability:** Evaluating transport cost burdens across gender, disability status, geographic location (rural vs urban), and income brackets.
- **Gender Dynamics:** Analyzing gendered patterns of usage, safety concerns, and employment gaps within the transport workforce.
- **Legal and Institutional Frameworks:** Reviewing compliance with policy mandates related to inclusivity and the extent of institutional coordination.
- **Externalities:** Measuring impacts of transport-related externalities such as accident rates, distance to services, waiting times, and exposure to harassment.

3.3.3 Temporal Scope

The temporal scope of the study primarily covers the period from 2020 to 2025, corresponding to the implementation window of LATRA's Five-Year Strategic Plan. This timeframe allowed the study to evaluate the current trajectory of inclusivity initiatives and assess their alignment with national development goals and sectoral reforms.

To contextualize the analysis, the study also drew on historical trends over the past 15 years, tracing the evolution of transport planning, decentralization policies, and disability inclusion efforts in Tanzania. Notable trends include:

- Increased reliance on informal transport systems following rapid urbanization in the 2000s, leading to regulatory challenges and safety concerns.
- Delayed adoption of universal design principles in urban planning, despite ratification of international inclusion frameworks since 2009.

- Persistent gender inequality in transport service delivery and workforce participation, with women representing less than 5% of registered drivers in formal public transport (MoWTC, 2020).
- Fragmentation of institutional responsibilities between LATRA, local governments, and the Ministry of Works and Transport, resulting in gaps in enforcement and resource allocation.

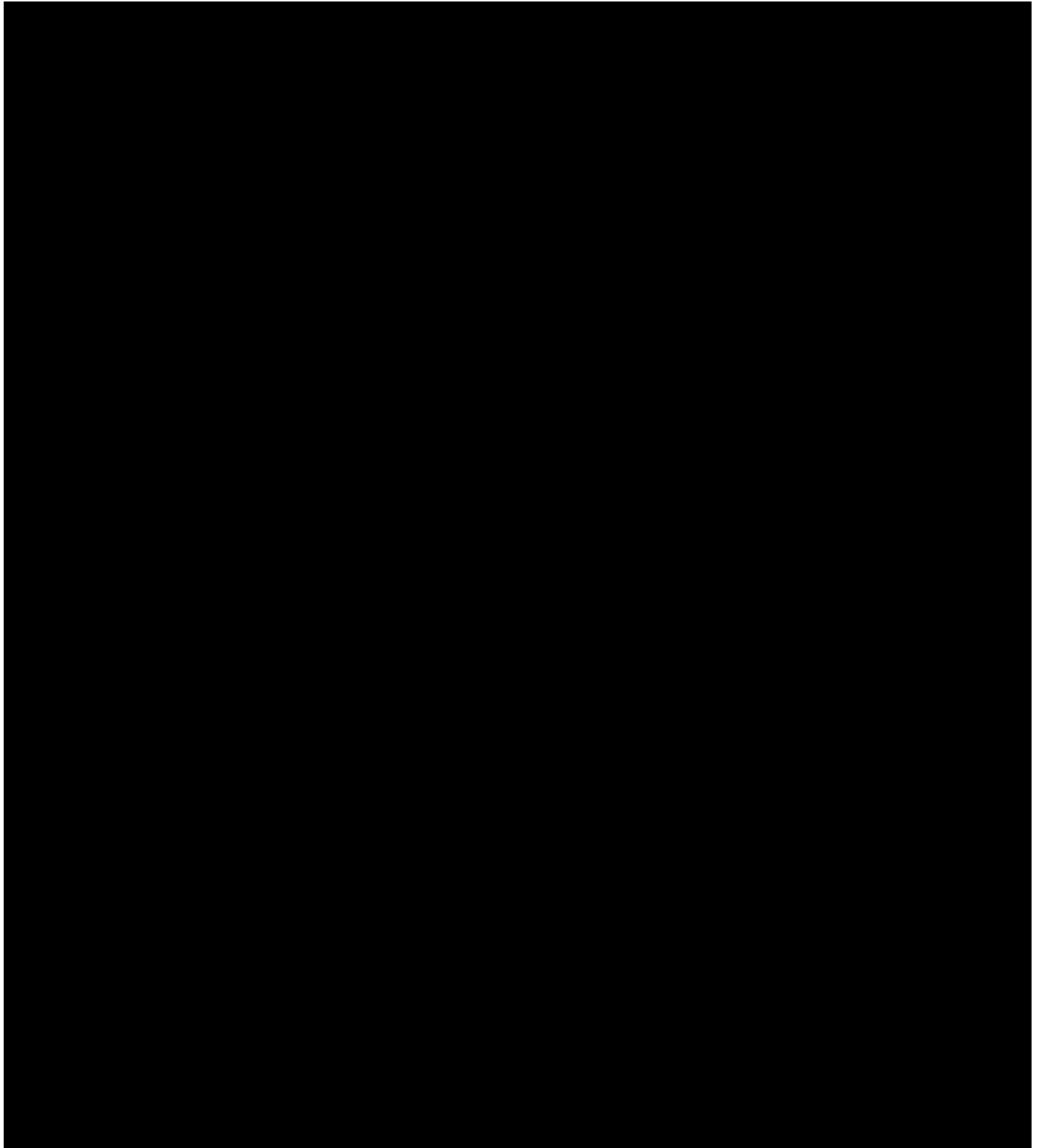
These historical barriers continue to shape the operational realities of transport service providers and users, particularly those from vulnerable groups. The legacy of underinvestment in inclusive infrastructure, limited enforcement of accessibility laws, and lack of participatory planning mechanisms are among the systemic challenges that the current study seeks to highlight and address.

3.4 Research Questions

To systematically explore the study's objectives, the following research questions were formulated:

1. What are the demographic characteristics and social profiles of public transport users, and how do this influence service accessibility?
2. How are gender roles represented in the transport sector, and what challenges and opportunities exist for gender equity?
3. To what extent do land transport services accommodate the needs of marginalized and vulnerable groups?
4. How do external factors like accidents and costs disproportionately impact diverse social groups?
5. Are current transport services geographically adequate and reliable for marginalized populations?
6. How accessible are transport systems in terms of affordability, physical infrastructure, and cultural relevance?
7. How effective are the legal and policy frameworks in fostering inclusivity?
8. What regulatory gaps restrict inclusive service delivery?
9. Who are the key stakeholders in advancing diversity and inclusion, and what are their roles?
10. How well do road and railway systems meet the needs of diverse groups, and what areas require improvement?
11. What are the primary challenges affecting equitable transport access for diverse social groups?
12. How integrated are inclusivity principles in the business practices of transport providers?
13. What lessons can be drawn from similar economies to improve inclusivity in Tanzanian land transport?

14. What market trends characterize the entry and exit of transport service providers, and what drives these changes?
15. How can a robust monitoring and evaluation framework promote diversity and inclusion in land transport?



4. Literature Review

4.1 Synthesis of Relevant Literature and Previous Studies

Diversity and inclusiveness in public transport have been subjects of growing research interest, particularly in developing countries like Tanzania, where public transportation is a critical enabler of economic activities and social mobility. The Land Transport Regulatory Authority (LATRA) recognizes the essential role of transportation in enhancing equitable access to socio-economic opportunities. Studies have indicated that inclusive transport systems contribute significantly to poverty reduction and overall development by ensuring equitable access for marginalized populations, such as persons with disabilities, low-income earners, and rural communities (World Bank, 2021).

In Tanzania, transport inclusiveness has been a priority in national policy frameworks, including the Five-Year Development Plan III (FYDP III), which emphasizes improving access to public services. However, existing studies have highlighted gaps in service provision, especially in rural areas. Research by the Tanzania Gender Networking Programme (TGNP) underscores the disparities women face in accessing transport services, such as inadequate safety measures, harassment, and affordability constraints. Similarly, studies by SHIVYAWATA (an organization representing persons with disabilities in Tanzania) reveal that most transport systems are not physically accessible to individuals with disabilities, posing significant barriers to their mobility and participation in economic activities.

Moreover, the integration of gender-sensitive practices in the transport sector remains a significant challenge. Gender analysis by SightSavers (2020) indicates that women and girls are disproportionately affected by poorly planned transport systems, which limit their access to education, healthcare, and employment opportunities. These findings align with international studies, such as those by the International Transport Forum (ITF), which highlight similar issues in other low- and middle-income countries.

Existing transport infrastructure, such as bus terminals and railway station, often lacks inclusivity features such as ramps, designated spaces for wheelchairs, or accessible ticketing systems. Research by HelpAge International (2021) further reveals that older adults face systemic challenges in accessing public transport due to poor service reliability and physical infrastructure that fails to accommodate their mobility needs.

Despite these insights, there remains a dearth of comprehensive, data-driven analyses focusing specifically on Tanzania's regulatory and operational frameworks in promoting inclusiveness. The current study builds on this body of work by addressing these gaps and providing actionable recommendations tailored to the Tanzanian context.

4.2 Identification of Gaps the Study Aimed to Address

The literature reviewed for this study highlighted several critical gaps in the current understanding of inclusivity within Tanzania's transport sector, which this study directly aimed to address. These gaps have limited the ability to fully grasp the depth of challenges faced by marginalized populations and to develop effective interventions. The key gaps identified include:

1. **Limited Empirical Data on Marginalized Groups:** Although numerous studies acknowledged the existence of challenges faced by marginalized groups, including persons with disabilities, women, and rural communities, there is a significant lack of empirical data quantifying these issues. For instance, the demographic profiles of transport users including information on gender, income levels, disability status, and other socio-economic factors are underexplored. This gap in detailed data limits the capacity to design targeted interventions that cater to the specific needs of various consumer groups. Without granular data, it becomes challenging to evaluate the true scope of disparities and to develop evidence-based policies that can address these disparities effectively. Furthermore, the absence of comprehensive demographic data hinders the identification of underserved regions and groups, leaving gaps in service provision that contribute to the exclusion of certain segments of the population.
2. **Regulatory and Policy Framework Analysis:** While Tanzania has made notable strides in enacting policies designed to improve inclusivity within the transport sector, the effectiveness of these regulatory frameworks remains inadequately assessed. Current literature provides limited insights into the real-world impact of these regulations, especially with regard to how they address the unique needs of diverse consumer groups, such as women, persons with disabilities, and low-income populations. Despite the existence of regulations intended to improve accessibility, there is a dearth of rigorous analysis evaluating whether these frameworks are implemented effectively on the ground. The study aimed to fill this gap by analyzing the current regulatory environment, reviewing existing policies, and assessing how well they have been executed in practice to ensure inclusivity. Additionally, the study explored whether existing legal frameworks are comprehensive enough to address emerging challenges, particularly those related to gender and disability.
3. **Gender-Specific Challenges:** Existing literature often tends to generalize the challenges faced by transport users, without delving deeply into gender-specific barriers. Women, in particular, face unique challenges in accessing public transport services, including concerns about safety, harassment, and affordability. These barriers are often compounded by the lack of gender-sensitive infrastructure, such as well-lit stations, safe waiting areas, and accessible transport options. While some studies, such as those by the Tanzania Gender Networking Programme (TGNP) and SightSavers, have touched on these issues, they have not fully explored the depth of gender-specific challenges in transport access. Women, especially those in rural or underserved areas, experience additional layers of difficulty due to social, cultural, and economic factors that are rarely captured in broader analyses of transport systems. This study aimed to focus specifically on the gendered dynamics of transport access, examining how transport infrastructure, policy, and services impact women differently from men.

4. **Rural and Urban Disparities:** Most studies on Tanzania's transport sector primarily focus on urban areas, overlooking the unique challenges faced by rural populations. Rural areas in Tanzania face distinct barriers such as long distances to transport hubs, limited availability of public transport services, and higher travel costs. These challenges exacerbate the inequities between urban and rural transport systems, where rural communities often lack the basic infrastructure necessary for safe and affordable travel. The specific transport needs of rural populations, particularly women, children, and elderly people, remain poorly understood, making it difficult for policymakers to design inclusive transport solutions that address these disparities. This study sought to bridge this gap by examining the transport needs of both urban and rural populations, offering a more balanced understanding of the sector's inclusivity.
5. **Integration of Best Practices:** International literature provides valuable lessons on transport inclusivity, particularly from low- and middle-income countries that have implemented successful transport initiatives aimed at enhancing accessibility and inclusivity. However, the application of these best practices to the Tanzanian context remains limited. While several international studies have demonstrated the effectiveness of inclusive transport solutions, there is a lack of systematic evaluation on how these practices can be adapted to meet the specific needs of Tanzania's diverse population. This study aimed to fill this gap by conducting a comparative analysis of best practices from other countries with similar socio-economic and cultural contexts. By adapting successful models to the Tanzanian context, the study sought to offer concrete recommendations for improving inclusivity in the country's transport systems.
6. **Monitoring and Evaluation Frameworks:** There is a notable gap in the lack of robust systems for monitoring and evaluating the effectiveness of diversity and inclusiveness initiatives within Tanzania's transport sector. Although there have been various policy and infrastructural interventions aimed at improving access, there has been limited effort to assess the actual outcomes of these initiatives. The absence of comprehensive monitoring and evaluation frameworks makes it difficult to track progress, measure success, and make data-driven adjustments to policy and practice. This study addressed this gap by developing a comprehensive monitoring and evaluation framework that can be used by LATRA and other stakeholders to assess the impact of inclusivity initiatives and ensure that progress is made towards meeting inclusivity goals.

4.3 Conceptual and Theoretical Framework

The study was anchored in the Social Inclusion Framework, which emphasizes the importance of integrating marginalized groups into mainstream systems to promote equitable access and opportunities for all individuals, regardless of their background or socio-economic status. This framework posits that transport systems should not only facilitate mobility but also ensure that all demographic groups, including women, persons with disabilities, and low-income populations, can participate fully in social, economic, and civic activities. At the core of this framework are three critical dimensions that guide the development of inclusive transport systems:

1. **Accessibility:** The concept of accessibility goes beyond the mere availability of transport services; it refers to the removal of physical, economic, and cultural barriers that hinder access for marginalized populations. This involves ensuring that transport systems are affordable, geographically accessible, and equipped with inclusive infrastructure, such as ramps for persons with disabilities, safe waiting areas for women, and affordable pricing for low-income individuals. Accessibility also entails the elimination of cultural and social barriers that may deter specific groups from using public transport.
2. **Equity:** The principle of equity in transport refers to the fair distribution of resources and services to ensure that all population groups have equal access to transport. This dimension emphasizes the need for systemic changes that address disparities in transport access and service provision. The framework focuses on addressing inequalities faced by women, persons with disabilities, the elderly, and other marginalized groups. In this context, equity means ensuring that these groups are not disproportionately affected by transport system failures and that they benefit equally from transport improvements.
3. **Participation:** Participation refers to the active involvement of stakeholder's transport users, regulators, service providers, and community representatives in the planning, implementation, and evaluation of transport systems. The framework advocates for inclusive decision-making processes that reflect the diverse perspectives and needs of all population groups. By ensuring that all voices are heard, particularly those of marginalized groups, the transport system becomes more responsive to their needs, fostering a sense of ownership and commitment to inclusivity.

This framework was complemented by the Capability Approach, as proposed by Amartya Sen, which emphasizes the role of transport in enhancing individuals' capabilities to achieve their desired goals, such as accessing education, healthcare, and employment. The Capability Approach aligns with the broader goals of LATRA by focusing on the broader social and economic impacts of transport inclusivity, particularly in empowering individuals and enhancing their quality of life.

5. Methodology

5.1 Research Design

This study employed a mixed-methods approach, combining both qualitative and quantitative research techniques to provide a comprehensive analysis of the inclusiveness of Tanzania's land transport sector. The decision to use a mixed-methods design was guided by the need to capture both broad, quantitative trends and deeper, qualitative insights into the experiences of different consumer groups within the transport system. This integrated approach enabled the triangulation of data, where numerical data was used to assess the extent of inclusivity, and qualitative data provided contextual and detailed understanding of the barriers and challenges faced by marginalized populations. The qualitative component included interviews, focus group discussions (FGDs), and field observations, all of which were essential in gaining a detailed understanding of the nuanced challenges faced by marginalized groups, such as women, persons with disabilities, the elderly, and rural communities. These methods were particularly valuable in identifying the systemic issues and gender-specific barriers that are often missed in purely quantitative studies. The quantitative aspect involved administering structured surveys to a diverse sample of transport users, across different demographic groups. These surveys provided empirical data on the prevalence of accessibility issues, the effectiveness of existing policies, and the overall inclusivity of transport services.

5.2 Sampling Design and Instrumentation Alignment

This section outlines the sampling strategies and instruments used in alignment with the study's objectives to assess diversity and inclusion in Tanzania's land transport sector. The study employed a stratified sampling design to ensure proportional representation of key demographic subgroups, particularly marginalized and often underrepresented populations. The primary strata included:

- Region (Dar es Salaam, Mbeya, Dodoma, Mwanza)
- Gender (Male, Female)
- Disability status (Persons with Disabilities – PWDs, non-disabled)
- Income level (Low-income, Middle-income, High-income groups)

Sample sizes for each stratum varied to reflect population distribution, urban-rural dynamics, and expected variation in transport access and inclusion. For example, Dar es Salaam, being the most urbanized and populous region, received the largest quantitative sample (384 respondents), followed by Mbeya (278), Dodoma (240), and Mwanza (260). These figures were proportionally derived based on regional population estimates and the need to ensure representativeness in more densely populated urban centers. Within each stratum, disaggregation by gender and disability status was rigorously applied. For example, among Persons with Disabilities (PWDs) in Dar es Salaam, 68.1% were male (n=49) and 31.9% were female (n=23). Similarly, in Mbeya, PWD respondents included 35 males and 18 females. This level of detail enabled the study to explore

intersectional barriers, such as those experienced by women with disabilities or elderly low-income males, allowing for a nuanced understanding of inclusion challenges. For qualitative data, purposive and snowball sampling were used to identify key informants, transport operators, local authorities, and community representatives, ensuring a broad range of stakeholder perspectives and thematic saturation. This approach was particularly valuable in capturing localized experiences and perceptions among marginalized groups whose voices may be underrepresented in random samples.

To collect data, the study used a combination of tools:

- Structured questionnaires for public transport users and service providers,
- Observation checklists to assess physical accessibility and service behavior,
- Semi-structured interview and FGD guides designed to elicit both experiential and institutional perspectives.

All instruments were carefully developed to align with the study objectives and validated through a pilot phase. Furthermore, they were designed to collect both quantitative indicators and qualitative insights, ensuring a comprehensive and inclusive assessment of Tanzania's land transport system. Disaggregated data collection enabled deep dives into subgroup-specific challenges and facilitated policy-relevant analysis. This integrated methodological approach ensured the study's findings reflect both individual lived experiences and systemic patterns of inclusion and exclusion in public transport across the four regions.

Stratified Sampling and Participant Coverage: A stratified random sampling technique was adopted for the quantitative component of the study. This approach was essential to ensure proportional representation of key demographic and social groups, particularly those who are often marginalized in the transport sector. The strata included gender (male and female), age (youth, adults, elderly), disability status (persons with and without disabilities), and income level (especially low-income individuals). Sampling was also stratified across the four targeted regions Dar es Salaam, Dodoma, Mbeya, and Mwanza to capture geographic diversity, including urban and peri-urban populations. This method allowed the study to generate regionally representative findings that reflected the experiences of a wide spectrum of transport users. Within each region, quotas were set to ensure that voices of the most vulnerable particularly women, persons with disabilities, and elderly commuters were sufficiently represented in the dataset.

Sample Size Calculation and Formula Citation: For the quantitative component, the sample size was determined using Yamane's formula (1967), which is widely used in survey research for estimating appropriate sample sizes from a known population:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

- n = Sample size
- N = Total population size
- e = Margin of error (typically 0.05 for 95% confidence level)

Source: Yamane, T. (1967). *Statistics: An Introductory Analysis* (2nd ed.). New York: Harper and Row.

Population estimates were drawn from NBS (2022) regional projections. Based on this, a total of 1,291 respondents were sampled for the survey across the four regions, proportionally allocated based on regional population sizes and urbanization rates.

Qualitative Sampling-Saturation and Snowball Methods: For the qualitative component, the sampling was guided by the principle of thematic saturation the point at which no new insights emerge from additional data. This approach was supported by the snowball sampling method, which enabled the identification of hard-to-reach or specialized respondents through referral chains. A total of 58 qualitative participants were engaged across the four regions, comprising 48 Key Informant Interviews (KIIs) and 20 Focus Group Discussions (FGDs). These participants included public transport officials, transport workers, persons with disabilities, women users, elderly commuters, and civil society representatives. The focus was on obtaining deep, experiential narratives that could not be captured through structured surveys. In each region, KIIs and FGDs were structured to cover diverse voices and ensure that marginalized perspectives were incorporated into the final analysis.

Survey Instruments and Annex Citation: Two structured questionnaires were developed to collect quantitative data: one targeting transport users and the other tailored for transport service providers. The user questionnaire collected data on demographic characteristics, travel behavior, perceived accessibility, affordability, safety, and satisfaction with transport services. Meanwhile, the provider questionnaire was designed for use with drivers, conductors, terminal managers, and regulators, gathering data on service delivery practices, awareness of inclusivity policies, and operational challenges. Both questionnaires were administered in Kiswahili and English to ensure accessibility and were pre-tested in Dar es Salaam to refine clarity and structure. These instruments are cited in the report as Annex 1 (for users) and Annex 2 (for service providers), respectively.

Observation Checklist: To supplement the survey and interview data, the research team employed a structured observation method supported by a standardized checklist developed by Tawi Consult. The checklist served as a systematic tool for assessing inclusiveness at transport hubs, such as bus terminals, railway stations, and informal transport stops. The checklist focused on four thematic areas: physical accessibility (e.g., ramps, tactile paving, signage), gender sensitivity (e.g., female operators, reserved seating for women), safety and cleanliness (e.g., presence of lighting, seat belts, hygienic conditions), and user diversity (e.g., visibility of persons with disabilities, elderly passengers). Observations were conducted during both peak and off-peak hours, with each session lasting between 45 to 90 minutes. The data gathered through this tool provided crucial validation for user-reported experiences and helped identify discrepancies between policy and practice in real-time service delivery.

Documentary Review: In addition to primary data collection, the study incorporated a thorough documentary review to provide a policy and legal context for interpreting findings. The review covered national policies, regulatory frameworks, strategic plans, and legal instruments that govern the land transport sector in Tanzania. Key documents reviewed included the Persons with Disabilities Act No. 9 of 2010, the National Transport Policy (2003), the LATRA Five-Year Strategic Plan (2020–2025), the Road Traffic Act (Revised 2002), and the Tanzania Railway Master Plan (2015–2045). These documents were analyzed to identify gaps between policy intentions and field-level implementation. Insights from this review also informed the development of data collection tools and enriched the triangulation process during data analysis.

Objective-Instrument Alignment: Each objective of the study was carefully aligned with specific data collection instruments and analysis methods. For instance, Objective I, which aimed to establish the profile of diverse transport users, was addressed through disaggregated survey data. Objective III, focusing on the extent of inclusiveness, was examined using a combination of field observations and structured questionnaire responses. Objectives VII and VIII, which evaluated the national legal framework and regulatory gaps, were addressed through documentary review and expert interviews. The full alignment is presented in the revised data analysis plan (Table 1 in Section 5.4), which outlines how each instrument contributed to achieving the stated research goals

Targeted Audience Group	KII Count (Titles)	FGD Count (Titles)	Sample Size (Qualitative)	Sample Size (Quantitative)	Total Sample Size
General Public, Transport Users	6 (Community Elders) (Community Elders)	6 (General Public Groups)	24	1,291	1,315
Transport Operators/ Owners, Workers, Gender Advocates	4 (Bus Owners)	-	8	-	8
	4 (Train Operators)				
Transport Service Providers and Regulators	4 (LATRA Officials)	6 (General Public Groups)	24	1,291	1,315
4 (RTOs)	6 (Community Elders) (Community Elders)	6 (General Public Groups)	24	1,291	1,315
4 (DTOs)	6 (Community Elders) (Community Elders)	6 (General Public Groups)	24	1,291	1,315
4 (Terminal Managers)	-	16	-	16	1,315
Accident Victims, Cost-Burdened Individuals	6 (Accident Victims)	4 (Accident-Impacted Groups)	10	-	10
Cultural	4 (Cultural Reps, Community Leaders)	-	4	-	4
Policy Makers,	4 (Councilors/ Diwani)	-	4	-	4
Persons with Disabilities	4 (Disability Advocates)	4 (PWDs Groups)	8	-	8
Total	48	20	74	1,291	1,365

The table above illustrates the distribution of the sample size across the regions, ensuring that each region was adequately represented in terms of population size and the characteristics of key demographic groups.

5.3 Data Collection Methods

The study employed a combination of survey-based data collection, qualitative interviews, focus group discussions (FGDs), and field observations to collect data from transport users and key stakeholders. These tools allowed for a comprehensive examination of the inclusiveness of Tanzania's transport services.

Tools and Techniques:

1. **Surveys and Questionnaires:** Structured surveys were developed to collect quantitative data on the accessibility, affordability, and overall inclusivity of transport services. The survey included both closed and open-ended questions, which allowed for both numerical data and qualitative insights. These surveys were administered in both Kiswahili and English, ensuring inclusivity across different linguistic groups. The surveys assessed the availability of transport services, barriers to access, satisfaction levels, and demographic information, enabling the study to quantify the scope and scale of inclusivity challenges.
2. **Key Informant Interviews (KIIs):** Semi-structured interviews were conducted with key informants, such as transport operators, regulators, and civil society representatives. These interviews provided valuable expert insights into the regulatory environment, transport policies, and barriers faced by marginalized groups. The interviews allowed for a more in-depth understanding of the systemic challenges within the transport sector and the effectiveness of current policies.
3. **Focus Group Discussions (FGDs):** FGDs were held with various transport user groups, including women, persons with disabilities, and low-income individuals. These discussions were structured to explore experiences related to safety concerns, access barriers, affordability, and the availability of services tailored to marginalized groups. The FGDs allowed participants to share their lived experiences and provided rich, qualitative data that could not be captured through surveys alone.
4. **Field Observations:** Observations were carried out at transport hubs such as bus terminals and railway stations. The research team used a checklist to assess the physical infrastructure, including the presence of ramps, designated spaces for wheelchairs, and the overall accessibility of the facilities. Field observations helped identify practical barriers in the transport systems that were not immediately apparent through survey or interview data.

Description of Instruments Used:

- **Survey Questionnaires:** These instruments included both quantitative and qualitative questions, designed to assess accessibility, affordability, and overall satisfaction with the transport services.
- **Interview Guides for Key Informants:** The semi-structured interview guides were used to facilitate conversations with transport regulators, operators, and other stakeholders. They included open-ended questions about policies, implementation challenges, and opportunities for inclusivity.
- **Focus Group Discussion Guides:** These guides focused on exploring experiences related to access, safety, and affordability, tailored to specific groups such as women and persons with disabilities.
- **Observation Checklists:** The checklists helped guide the field observations at transport hubs, assessing the physical features of infrastructure and identifying barriers to access.

5.4 Data Analysis

The data collected from surveys, interviews, FGDs, and field observations were analyzed using both quantitative and qualitative methods to ensure a thorough understanding of the inclusiveness of Tanzania's transport sector.

1. **Quantitative Data Analysis:** Quantitative data were processed and analyzed using STATA Software. Descriptive statistics were used to summarize the demographic characteristics of the sample, while inferential statistics, such as chi-square tests and regression analysis, were employed to identify relationships between demographic variables (e.g., gender, income, disability status) and accessibility issues. This analysis provided a clear picture of the barriers faced by different groups and allowed for the identification of trends in the data.
2. **Qualitative Data Analysis:** Qualitative data from the interviews, FGDs, and field observations were analyzed using thematic analysis. Thematic analysis involved identifying and categorizing key themes and patterns that emerged from the data. This process was facilitated using NVivo software, which allowed for the systematic coding and categorization of qualitative data. The findings from the qualitative analysis were synthesized to provide deeper insights into the experiences of transport users, particularly those from marginalized groups, and to understand the barriers they face in accessing transport services.

Objective	Research Questions	Primary Outcome / Independent Variable	Control Variables	Data Source	Analysis Method Applied
i. To establish the profile of diverse consumers scope and size in land transport	What were the demographic characteristics of consumers using land transport?	Consumer demographics (age, gender, income, disability status)	Geographic location, socio-economic status	Surveys and Questionnaires	Descriptive statistics and comparative analysis across demographic segments
ii. To assess the status of gender in development in land transport services	How did gender influence participation and access in land transport?	Gender representation in transport roles (operators, workers, consumers)	Employment sector, educational background	Document reviews, Surveys, Interviews	Cross-tabulation and thematic analysis of gender dynamics
iii. To identify the type and extent of the existence of inclusiveness in land transport	To what extent did land transport services accommodate diverse social groups?	Levels of inclusiveness (accessibility features, inclusive policies)	Transport service types, geographic location	Surveys, Field Observations	Descriptive and thematic analysis; comparative assessment against best practices
iv. To estimate the burden of the impact of externalities on diverse social groups	What were the impacts of accidents, cost burdens, and distance on different social groups?	Impact indicators (accident rates, cost burden, travel distance)	Geographic location, transport type	Surveys, Interviews, Field Observations	Regression and statistical analysis to measure disparities
v. To assess the existing availability of land transport services to diverse social groups	How accessible were land transport services in terms of coverage and reliability?	Availability indicators (coverage, frequency, reliability)	Service type, region	Surveys, Interviews, Field Observations	Descriptive statistics and spatial analysis of service coverage

Objective	Research Questions	Primary Outcome / Independent Variable	Control Variables	Data Source	Analysis Method Applied
vi. To assess the accessibility of land transport in terms of affordability, distance, physical state, and culture	How did affordability, distance, infrastructure, and culture affect transport access?	Accessibility dimensions (affordability, distance, physical features, cultural sensitivity)	Economic status, cultural norms	Surveys, Observations, Interviews	Multivariate and thematic analysis on accessibility dimensions
vii. To assess the national legal and policy framework in addressing diversity and inclusion in land transport	How effective were current laws and policies in promoting diversity and inclusion?	Legal framework effectiveness (coverage, enforcement)	Policy type, regulatory status	Policy Documents, Regulatory Reports	Document and comparative policy analysis to evaluate implementation gaps
viii. To identify regulatory gaps in the provision of inclusive land transport	What regulatory gaps hindered inclusive land transport service delivery?	Regulatory gaps and deficiencies	Framework type, enforcement quality	Regulatory documents, Stakeholder interviews	Gap analysis using document review and thematic stakeholder input
ix. To identify key stakeholders in addressing access to land transport	Who were the key stakeholders influencing inclusive land transport access?	Stakeholder roles and influence	Stakeholder category, involvement level	Stakeholder Interviews, Community Consultations	Network and thematic analysis of stakeholder feedback
x. To assess the status of road and railway public transport systems	How effectively did road and rail systems meet the needs of diverse groups?	Infrastructure quality, service provision indicators	Mode of transport, service frequency	Field Observations, Surveys	Comparative analysis and qualitative evaluation of systems
xi. To identify challenges affecting access to land transport by diverse groups	What were the major barriers to land transport access for vulnerable groups?	Identified challenges and barriers	Socio-economic characteristics, location	Surveys, FGDs, Field Observations	Thematic content analysis and frequency statistics on challenges

Objective	Research Questions	Primary Outcome / Independent Variable	Control Variables	Data Source	Analysis Method Applied
xii. To evaluate diversity and inclusion in business and cultural practices in transport	How were diversity and inclusion reflected in business practices?	D&I practices in HR, training, and customer service	Business size, service nature, workforce diversity	Interviews, HR Records	Thematic analysis of diversity and inclusion in business operations
xiii. To identify best practices in similar economies for promoting inclusiveness	What international best practices existed for inclusive land transport?	Documented best practices, policy success stories	Country context, sectoral similarities	Literature Review, Regional and International Case Studies	Comparative policy analysis and contextual adaptation
xiv. To establish the rate of entry and exit in land transport services	What were the reasons behind operator entry and exit rates?	Entry/exit rates among service providers	Market regulations, financial viability	Surveys, Interviews	Regression and trend analysis of market dynamics
xv. To develop an inclusive resource base and	What recommendations supported integration, engagement, and M&E of	Recommendations for engagement and M&E integration	Stakeholder capacity, resource availability	Document Review, Interviews	Synthesis of stakeholder feedback and policy review for recommendation development

5.5 Ethical Considerations

Ethical Approvals: Prior to data collection, the study obtained ethical approval from the relevant institutional review boards and authorities. This ensured that the research adhered to ethical standards and regulations, particularly concerning the protection of participants' rights.

Informed Consent Procedures: Informed consent was obtained from all participants before their involvement in the study. Each participant was provided with detailed information about the study's purpose, procedures, potential risks, and benefits. Participants were informed of their right to withdraw from the study at any time without consequence. Written consent was obtained from survey respondents and interviewees, while verbal consent was recorded for focus group discussions, ensuring transparency and voluntary participation.

Confidentiality Measures: To protect participants' privacy, all data collected were anonymized and stored securely. No personally identifiable information was linked to the data. All electronic data were stored on password-protected systems, and hard copies were kept in a locked facility. Only authorized personnel had access to the data, and it was used solely for the purposes of the research. By following these ethical guidelines, the study ensured the protection of participants' rights and confidentiality throughout the research process, maintaining the integrity and ethical standards of the study.

6. Findings and Results

6.1 Objective 1: Establishing the profile of diverse consumers, including their scope and size in land transport

6.1.1 Gender Distribution

A total of 659 males, constituting sixty-four point four per cent of respondents, reported using public transport services, compared to 365 females, who made up thirty-five point six per cent. These figures are presented in Table 2.

Gender	Frequency	Percentage
Male	659	64.4%
Female	365	35.6%
Total	1,024	100%

The gender distribution of public transport users, as presented in Table 3, shows a notable disparity in usage patterns between male and female respondents. Out of the total 1,024 respondents surveyed, 659 were male, representing 64.4%, while 365 were female, accounting for 35.6%. This significant gender gap suggests that men are more likely to use public land transport services than women in Tanzania. Several factors could underlie this disparity. Social and economic roles may influence travel needs, with men potentially engaging more frequently in work-related commuting and commercial activities requiring regular transport. On the other hand, women’s comparatively lower participation may reflect barriers such as safety concerns, cultural norms, or caregiving responsibilities that limit their mobility. The findings underscore the importance of designing gender-responsive transport policies that address women’s specific mobility needs, including safety, affordability, and accessibility, to promote equitable use of public transport services.

6.1.2 Age Distribution

The age distribution of public transport users, as shown in Table 4: Age Distribution of Public Transport Users, reveals that the majority of users fall within the 18-35 age group, which collectively represents 72.7% of the sample. This demographic is particularly significant as it includes students, workers, and other economically active individuals who rely on public transport for daily commuting. Within this group, the 18-25 cohort had the highest representation at 37.8%, likely reflecting the reliance of students and young workers on affordable and accessible transport options. The 26-35 age group follows closely at 34.9%, highlighting the dependence of young professionals and early-career workers on public transport for their daily mobility needs.

Table 4: Age Distribution of Public Transport Users

Age Group	Male	Male	Female	Female	Total	Total
18-25	227	34.4%	160	43.8%	387	37.8%
26-35	246	37.3%	111	30.4%	357	34.9%
36-45	114	17.3%	65	17.8%	179	17.5%
46 and above	72	10.9%	29	7.9%	101	9.9%

The age distribution data indicates that young adults (18–35 years) dominate public transport use in Tanzania, accounting for 72.7% of total users. This reflects the high dependence of students, early-career workers, and economically active youth on public transport for daily mobility. The largest subgroup is the 18–25 age group (37.8%), followed closely by the 26–35 group (34.9%). In contrast, older age groups (36 and above) make up a smaller share of users, likely due to mobility issues or access to alternative transport. These findings highlight the need for transport policies that prioritize youth needs such as affordability, frequency, and safety while also ensuring that older individuals are not excluded from accessible and inclusive transport services.

6.1.3 Regional Distribution of Public Transport Users

The study analyzed the gender composition of public transport users across four key regions: Dar es Salaam, Mbeya, Dodoma, and Mwanza. The results are summarized in Table 5 below, providing both frequency and percentage distribution of male and female users within each region.

Table 5: Regional Distribution of Public Transport Users

Region	Male	Female	Total	Male	Female	Total
Dar es Salaam	245	123	368	66.58%	33.42%	100%
Mbeya	132	110	242	54.55%	45.45%	100%
Dodoma	137	71	208	65.87%	34.13%	100%
Mwanza	145	61	206	70.39	29.61	100
Total	659	365	1,024	64.36	35.64	100

Pearson Chi-square (χ^2) = 6.41 p-value = 0.2687

The analysis reveals that minibuses (Daladala) and motorcycles (Bajaj/Bodaboda) are the dominant means of public transportation in Tanzania, collectively serving over 83% of the surveyed population. Specifically, Daladalas are the most utilized form of transport, accounting for 54.6% of users. This mode's widespread appeal is attributed to its affordability, high frequency, and broad network coverage, particularly within urban and peri-urban areas. For many economically disadvantaged users, Daladalas serve as the backbone of daily commuting due to their cost-effectiveness and accessibility. Motorcycles follow as the second most common mode at 29.3%, with nearly equal usage among males and females. Their door-to-door service, ability to navigate congested routes, and speed on shorter journeys make them particularly valuable in densely populated or infrastructure-constrained areas. Less frequently used means such as buses (9.1%), taxis (1.1%), and bicycles (0.3%) represent a smaller share of public transport users. While buses are a formal and structured mode, their limited frequency and restricted route coverage reduce their attractiveness relative to more agile and abundant Daladalas. Taxis, on the other hand, may be prohibitively costly for most daily commuters, whereas bicycles are likely underutilized due to safety concerns, poor infrastructure, or cultural perceptions in urban settings. The Pearson Chi-square test ($\chi^2 = 6.41$, $p = 0.2687$) indicates that the difference in transport mode usage between males and females is not statistically significant, suggesting similar preferences across gender lines.

6.1.5.1 Implications for Transport Policy and Planning

Analysis of transport usage patterns across Tanzania reveals the centrality of Daladalas and motorcycles as dominant modes of transport, especially in urban and peri-urban environments. These patterns provide critical insight into how different modes of public transport are utilized and perceived by diverse commuter groups. The findings underscore the following implications for policy and planning:

1. Daladalas as Core Urban Transport Providers

Daladalas continue to serve as the primary transport mode for a significant portion of the commuting population. Their widespread availability and affordability have made them indispensable for short to medium distance travel. However, this dominance also exposes gaps in infrastructure, operational quality, and regulatory oversight. The findings suggest that current Daladala operations may not adequately meet the evolving demands for safety, efficiency, and reliability, particularly during peak hours and in densely populated routes.

2. Motorcycles and the Role of Last-Mile Connectivity

Motorcycles (including bodaboda and bajaj) have emerged as essential for last-mile connectivity, particularly in informal settlements, peri-urban zones, and areas with limited road infrastructure. Their agility and low operating cost make them attractive for both users and operators. However,

the data also point to rising safety concerns due to inconsistent enforcement of traffic laws, lack of protective infrastructure, and informal service practices. These issues are particularly pressing in areas with high accident prevalence.

3. Buses as Undervalued Medium-Distance Solutions

While buses serve an important function for longer commutes, their usage remains limited compared to Daladalas. This suggests a perceived or actual gap in availability, frequency, or affordability. The data imply that existing bus services may not be fully optimized to provide a viable alternative for the growing commuter base in expanding urban areas.

4. Limited Use of Taxis and Bicycles Reflects Infrastructure and Cost Barriers

Taxis remain underutilized, likely due to cost barriers and a lack of integration into the broader public transport system. Bicycles are rarely used as a primary mode of transport, with findings indicating that safety concerns, poor road conditions, and the absence of dedicated lanes deter broader adoption. These trends suggest that while alternative modes exist, they remain inaccessible or underdeveloped for most users.

6.1.6 Socio-Demographic Profile of People with Special Needs Using Public Transport

This section presents a detailed breakdown of public transport users who identify as people with special needs, disaggregated by region. The data captures their demographic and socio-economic characteristics, including education level, employment status, and location (urban/rural). The aim is to establish a nuanced understanding of the scope and diversity of consumers within this often-under-represented segment.

Category	Dar es Salaam	Mbeya	Dodoma	Mwanza	Total
Total Respondents (n)	47 (37.3%)	32 (25.4%)	21 (16.7%)	26 (20.6%)	126 (100.0%)
People with Special Needs					
Physical Disabilities	32 (68.1%)	2 (6.2%)	11 (52.4%)	15 (57.7%)	60 (47.6%)
Visual Impairments	5 (10.6%)	2 (6.2%)	1 (4.8%)	2 (7.7%)	10 (7.9%)
Hearing Impairments	0 (0.0%)	1 (3.1%)	0 (0.0%)	0 (0.0%)	1 (0.8%)
Intellectual Disabilities	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (3.8%)	1 (0.8%)
Elderly Individuals	2 (4.3%)	20 (62.5%)	5 (23.8%)	1 (3.8%)	28 (22.2%)

Category	Dar es Salaam	Mbeya	Dodoma	Mwanza	Total
Pregnant Women	6 (12.8%)	3 (9.4%)	2 (9.5%)	4 (15.4%)	15 (11.9%)
Children with Disabilities	0 (0.0%)	3 (9.4%)	1 (4.8%)	3 (11.5%)	7 (5.6%)
Chronic Health Conditions	2 (4.3%)	1 (3.1%)	1 (4.8%)	0 (0.0%)	4 (3.2%)
Education Status					
No Education	8 (17.0%)	10 (31.2%)	4 (19.0%)	2 (7.7%)	24 (19.0%)
Primary School	11 (23.4%)	14 (43.8%)	5 (23.8%)	8 (30.8%)	38 (30.2%)
Secondary School	13 (27.7%)	5 (15.6%)	2 (9.5%)	13 (50.0%)	33 (26.2%)
Vocational Training	7 (14.9%)	2 (6.2%)	3 (14.3%)	0 (0.0%)	12 (9.5%)
College/ University Degree	8 (17.0%)	1 (3.1%)	7 (33.3%)	3 (11.5%)	19 (15.1%)
Employment Status					
Employed Full-Time	2 (4.3%)	4 (12.5%)	3 (14.3%)	3 (11.5%)	12 (9.5%)
Employed Part-Time	6 (12.8%)	0 (0.0%)	2 (9.5%)	3 (11.5%)	11 (8.7%)
Unemployed	8 (17.0%)	13 (40.6%)	5 (23.8%)	4 (15.4%)	30 (23.8%)
Self-Employed	21 (44.7%)	5 (15.6%)	7 (33.3%)	12 (46.2%)	45 (35.7%)
Retired	4 (8.5%)	4 (12.5%)	1 (4.8%)	0 (0.0%)	9 (7.1%)
Student	5 (10.6%)	1 (3.1%)	2 (9.5%)	4 (15.4%)	12 (9.5%)
Other	1 (2.1%)	5 (15.6%)	1 (4.8%)	0 (0.0%)	7 (5.6%)
Location					
Urban Area	38 (80.9%)	17 (53.1%)	16 (76.2%)	23 (88.5%)	94 (74.6%)
Rural Area	9 (19.1%)	15 (46.9%)	5 (23.8%)	3 (11.5%)	32 (25.4%)

Rural Area 9 (19.1%) 15 (46.9%) 5 (23.8%) 3 (11.5%) 32 (25.4%)

A total of 126 individuals with special needs were identified across the four study regions, with Dar es Salaam (37.3%) and Mbeya (25.4%) accounting for the largest proportions. This distribution underscores the urban concentration of this group, as 74.6% reside in urban areas, suggesting better access to or reliance on public transport systems in metropolitan zones. In terms of types of special needs, individuals with physical disabilities comprised the largest subgroup at 47.6%, followed by elderly individuals (22.2%), and pregnant women (11.9%). Dar es Salaam recorded the highest number of individuals with physical disabilities (68.1% of its subgroup), highlighting a significant dependency on public transport among mobility-challenged users in the capital. Mbeya, by contrast, recorded a disproportionately high number of elderly users (62.5% of its special needs sample), possibly indicating a more aging commuter demographic or limited availability of alternative mobility options.

On education, a majority had attained either primary education (30.2%) or secondary education (26.2%), while only 15.1% held college or university degrees. Mbeya had the highest proportion of respondents with only primary education, reinforcing potential links between education level and reliance on public transport among vulnerable populations. In terms of employment, self-employment was the predominant status across all regions (35.7%), particularly in Dar es Salaam and Mwanza, followed by unemployment (23.8%). This suggests that many individuals with special needs rely on informal or flexible livelihoods, which in turn makes affordable and accessible transport essential for sustaining income-generating activities.

Finally, the urban-rural divide is clearly pronounced. With only 25.4% of respondents residing in rural areas, the data illustrates a clear spatial gap in public transport use or availability among special needs populations in less urbanized settings. These findings emphasize the critical need for inclusive transport planning that explicitly accounts for people with disabilities, elderly individuals, and other vulnerable groups. Regional disparities in demographics, education, employment, and spatial distribution must inform targeted interventions, including adaptive infrastructure, subsidized fares, and specialized services, to ensure equitable mobility for all.

6.1.7 Region Distribution of Public Transport Providers

The regional distribution of public transport providers, as detailed in Table 9: Regional Distribution of Public Transport Providers, reveals notable variations across Tanzania's key regions. Dar es Salaam, the country's largest urban center and economic hub, accounts for the highest concentration of providers at 32.3%. This reflects the city's dense population, extensive urbanization, and high commercial activity, which drive a significant demand for public transport services. Other regions, including Mwanza (26.2%), Dodoma (23.2%), and Mbeya (18.3%), also contribute substantially

to the transport provider network. These regions play important roles in supporting Tanzania's growing transport infrastructure, particularly in urban and peri-urban areas. Mwanza, as a major port city, and Dodoma, the administrative capital, both exhibits increasing transport activity due to urbanization and economic development. Meanwhile, Mbeya's providers predominantly cater to rural and peri-urban populations

Region	Number of Providers	Percentage
Dar es Salaam	53	32.3%
Mbeya	30	18.3%
Dodoma	38	23.2%
Mwanza	43	26.2%
Total	164	100.0%

The data underscores the concentration of transport providers in urban areas, particularly in Dar es Salaam, driven by its high population density and economic activity. This highlights the critical need for efficient and frequent transport systems to meet the daily mobility demands of its urban population. Conversely, regions like Mbeya, Dodoma, and Mwanza, while having fewer providers, are vital for serving rural and peri-urban communities. Mbeya's lower proportion of providers indicates the need for targeted infrastructure development to enhance connectivity in rural areas. Dodoma's growth as the administrative capital and Mwanza's importance as a port city underscore the need for proactive planning and investment to support their expanding transport demands and ensure equitable access across all regions.

Qualitative Insights:

To complement the quantitative data and provide deeper understanding of the diverse public transport user base, the study conducted qualitative data collection through Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs). A total of 28 participants were engaged, including community leaders, local government officials, transport operators, students, traders, people with disabilities, and elderly commuters. Participants were drawn from the four focus regions Dar es Salaam, Dodoma, Mbeya, and Mwanza and selected based on their relevance to the public transport ecosystem, either as users, advocates, or administrators. Below is a thematic breakdown of key findings supported by illustrative quotes.

Theme 1: Barriers to Accessibility for Persons with Disabilities

Participants consistently cited physical inaccessibility as a major barrier for persons with disabilities. Respondents noted that public transport vehicles are not equipped with supportive infrastructure such as ramps, handrails, or designated seating.

“Persons with disabilities face significant challenges in using public transport, as there is no adequate infrastructure.” – Respondent 2, Male, Mbeya, Disability Rights Advocate

This issue was echoed by local government officials who acknowledged the absence of inclusive design standards in both urban and peri-urban transit systems. The lack of accommodations results in frequent exclusion of disabled individuals from independent mobility.

Theme 2: Student Vulnerability and School Access

Students emerged as one of the most vulnerable groups. Participants across all four regions noted issues related to overcrowding, lack of school routes, and discrimination by operators.

“Students are one of the most affected groups due to overcrowding and the lack of transport operators willing to stop near schools.” – Respondent 3, Female, Dodoma, Secondary School Teacher

In FGDs with parents and school officials, it was reported that some students walk long distances or are forced to ride dangerously overcrowded motorcycles or minibuses, increasing their exposure to traffic-related risks.

Theme 3: Gender-Specific Challenges for Women Commuters

Women, particularly working mothers and market traders, raised concerns about safety, overcrowding, and the physical burden of accessing vehicles.

“It’s very difficult to board the buses during peak hours, especially when you are carrying a child or luggage. There’s no consideration for women.” – Respondent 5, Female, Mwanza, Market Trader

Female participants emphasized that peak-hour congestion disproportionately affects them, given their dual burden of work and care giving. The absence of women-friendly services and designated spaces exacerbates daily commuting stress.

6.2 Objective 2: Assessing the status of gender in the development of land transport services, including at the levels of transporters, workers, consumers, regulators, and stakeholders

6.2.1 Gender Distribution

The gender distribution of public transport providers, as shown in Table 10: Gender Distribution of Public Transport Providers, reveals a stark imbalance, with 98.2% of providers being male and only 1.8% female. This highlights the male-dominated nature of Tanzania's transport sector and underscores broader gender inequalities in workforce participation, particularly in traditionally male-oriented industries.

Gender	Frequency	Percentage
Male	161	98.2%
Female	3	1.8%
Total	164	100.0%

The pronounced gender disparity in the transport sector reflects socio-cultural, structural, and economic barriers that discourage women from entering or remaining in this field. Cultural norms and stereotypes often view roles such as driving or conducting in public transport as physically demanding and unsafe for women. Safety concerns, limited training opportunities, workplace discrimination, and financial constraints further restrict women's participation. The lack of targeted policies or initiatives to support women in the transport sector perpetuates this imbalance. Women often lack access to resources such as licensing, vehicle ownership, and technical training, which are critical for entry into the sector. Consequently, this disparity limits diversity and the potential for broader perspectives in addressing the needs of diverse commuter groups.

6.2.2 Role in the Transport Sector

This section presents an analysis of the roles occupied by men and women within the public transport workforce in Tanzania. Specifically, it examines gender distribution across two major functional categories: drivers and conductors. These roles form the operational backbone of Tanzania's land transport system, where drivers are responsible for vehicle operation and passenger safety, while conductors manage fare collection, boarding, and passenger coordination. For the purpose of this study, both drivers and conductors are considered public transport providers, as they are directly engaged in delivering essential transport services to the public. The findings are based on a purposive sample of 164 public transport providers drawn from four urban regions Dar es Salaam, Dodoma, Mbeya, and Mwanza.

Respondents were identified at key transport hubs, terminals, and through engagement with local transport associations. This approach ensured that the sample captured both formal and informal sector workers actively involved in land-based passenger transport.

Gender	Driver	Conductor	Total	Driver	Conductor	Total
Male	108	53	161	67.08%	32.92%	100%
Female	2	1	3	66.67%	33.33%	100%
Total	110	54	164	67.07%	32.93%	100%

Pearson Chi-square (χ^2) = 0.00 p-value = 0.9879

The results reveal a significant gender imbalance in the composition of public transport providers, although the distribution of roles (driver vs. conductor) within each gender group is nearly identical. Among the 164 individuals surveyed, 161 were male (98.2%), and only 3 were female (1.8%). Within the male group, 67.08% were drivers and 32.92% were conductors. Similarly, among females, 66.67% served as drivers, and 33.33% as conductors. These proportions are reflected at the total level, where 67.07% of all providers were drivers, and 32.93% were conductors. The Pearson Chi-square test result ($\chi^2 = 0.00$, $p = 0.9879$) indicates that there is no statistically significant difference between men and women in the type of role they occupy within the transport workforce. However, this statistical parity in role distribution must be interpreted with caution, as it masks the overwhelming male dominance in overall workforce participation. The mere three female respondents highlight a glaring gender disparity that speaks to the broader systemic exclusion of women from employment opportunities in the land transport sector.

This exclusion is reflective of both social norms and institutional shortcomings. Cultural perceptions continue to frame transport work especially driving and conducting—as “male” professions. In addition, women often face heightened safety concerns, inadequate workplace protections, and a lack of supportive infrastructure that could enable their full participation. Notably, there is a lack of gender-specific policies and frameworks within Tanzania’s transport governance that aim to promote women’s entry, training, or retention in the sector. The absence of formal gender-responsive employment strategies contribute to the perpetuation of occupational segregation and restricts the sector’s potential for inclusive growth. Moreover, the data suggests that the structure of the transport system itself may hinder women’s involvement. A large proportion of vehicles, such as motorcycles and three-wheelers, are individually operated and are less likely to offer formal employment opportunities to women due to licensing, capital requirements, and safety-related concerns. Even within the minibus (Daladala) system, female conductors remain rare, in part due to informal recruitment practices and a lack of targeted engagement strategies.

Qualitative Insights

To complement quantitative findings under Objective 2, the study conducted qualitative Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) with a cross-section of stakeholders in the transport ecosystem. A total of 26 participants were engaged across Dar es Salaam, Dodoma, Mbeya, and Mwanza, comprising local government transport officers, public transport users (including women, youth, elderly, and persons with disabilities), operators (drivers and conductors), transport union representatives, traders, and civil society advocates. These participants were selected based on their direct relevance to and experience within the public transport system as service providers, users, regulators, or community-level influencers. Transcribed interviews were coded and analyzed using NVivo qualitative data analysis software, which facilitated the identification of recurring patterns and themes. Key themes emerging from the analysis are discussed below, supported by verbatim quotations from respondents.

Theme 1: Cultural Shifts and Gendered Passenger Experience

One of the most frequently cited concerns was the decline in social etiquette and cultural norms that previously afforded women greater respect in public transport settings. Women, especially pregnant or elderly passengers, are increasingly subjected to indifferent treatment, often forced to stand or endure discomfort during travel.

“In the past, men were more cooperative, giving up their seats for women on buses, but this practice has diminished.” – Respondent 1, Male, Dar es Salaam, Ward Transport Officer

“Even pregnant women struggle to find someone willing to give up their seat.” – Respondent 3, Female, Dodoma, School Administrator

These quotes reflect broader concerns about changing social dynamics that disproportionately disadvantage women commuters. The lack of courtesy and basic empathy in public transport environments further discourages women’s mobility, especially during vulnerable conditions such as pregnancy or illness.

Theme 2: Gender Imbalance in Transport Sector Employment

Participants widely acknowledged that the employment structure in road based public transport remains heavily male dominated, with women underrepresented as drivers, conductors, or fleet operators. While limited progress has been made in the railway sector, road transport systems where most informal and low-cost transit options operate have not seen comparable gender integration.

“There is balance on trains, with both male and female drivers and ticketing officers.” – Respondent 5, Male, Mbeya, Tanzania Railway Worker

“We need structural changes to empower women in the industry through targeted training and financial incentives.” – Respondent 6, Female, Mwanza, Women’s Transport Cooperative Leader

These insights suggest that where formalization and public-sector employment models exist (such as in rail transport), gender balance is more achievable. However, the informal nature of road transport operations, coupled with limited regulatory oversight and lack of supportive policies, presents significant barriers for women.

Theme 3: Discriminatory Access to Transport Services

Respondents also pointed to inequities in access to transport, especially in scenarios where vehicles are scarce. In such cases, women – particularly younger or unaccompanied are often overlooked or passed by in favor of male passengers.

“In situations where transport is scarce, men are often prioritized over women, creating further gender disparities.” – Respondent 2, Female, Dodoma, University Student

This perceived or actual bias in service delivery reinforces structural disadvantages for women in daily commuting, limiting their access to employment, education, and social opportunities.

Theme 4: Absence of Gender-Specific Policies in Employment and Service Delivery

A critical concern echoed by nearly all stakeholder groups was the lack of gender-responsive policies both in terms of employment within the transport sector and in the design and delivery of services. There are currently no affirmative action frameworks or regulatory standards that promote women’s employment, protect against harassment, or mandate gender-sensitive service design.

“We don’t have any policies that specifically support women in joining the sector or protect them on the job. That has to change.” – Respondent 7, Male, Dar es Salaam, Transport Union Representative

Several stakeholders emphasized the need for gender sensitivity training for drivers and conductors, safer station environments, and formal inclusion of women in planning and regulatory processes.

6.3. Objective 3: To Identify the Type and Extent of Inclusiveness in Land Transport

6.3.1 Accessibility of Public Transport Services by Gender

The accessibility of public transport services appears equitable across genders, with 78.6% of male respondents and 79.5% of female respondents affirming accessibility. Despite slight differences, both groups indicate high levels of accessibility, suggesting that gender does not significantly influence perceived accessibility. However, the 21.1% of respondents who report difficulties highlight the need for targeted improvements to ensure universal accessibility. Policymakers and service providers should address these gaps to enhance overall service equity.

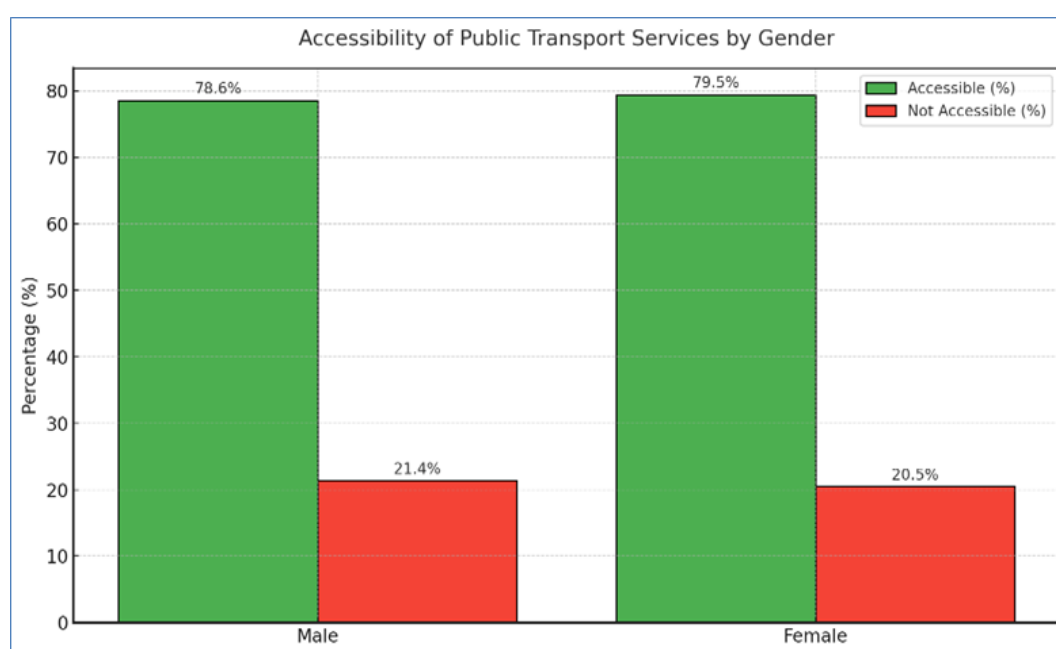


Figure 1: Accessibility of Public Transport Services by Gender

6.3.2 Accessibility of Public Transport Vehicles to Passengers with Disabilities

This section assesses the perceived accessibility of public transport vehicles for persons with disabilities in Tanzania. Accessibility is a fundamental measure of transport inclusiveness, reflecting the extent to which services accommodate all users regardless of physical ability, income level, or place of residence. The analysis explores perceptions of accessibility disaggregated by settlement type (urban vs. rural) and income level, thereby capturing both spatial and socio-economic dimensions of inclusion.

Table 12: Accessibility of Public Transport Vehicles for Passengers with Disabilities by Settlement Type

Response Option	Urban	Urban	Rural	Rural	Total	Total
Yes	162	20.89%	37	14.34%	199	19.43%
No	457	58.96%	151	58.48%	608	59.38%
I am not sure	117	15.1%	46	17.83%	163	15.92%
Don't know	40	5.16%	14	5.42%	54	5.27%
Total	776	100%	258	100%	1,024	100%

Pearson Chi-square (χ^2) = 59.48 p-value = 0.0000

Table 13: Accessibility of Public Transport Vehicles by Income Level

Response Option	Low Income	Low	Middle Income	Middle	High Income	High	Total
Yes	98	15.2%	72	24%	29	38.2%	19.43%
No	405	62.7%	165	55%	38	50%	59.38%
I am not sure	102	15.8%	48	16%	13	17.1%	15.92%
Don't know	41	6.3%	15	5%	4	5.3%	5.27%
Total	646	100%	300	100%	84	100%	100%

The findings in Table 12 indicate that perceptions of public transport accessibility for persons with disabilities are generally low across both urban and rural areas, though slightly more positive in urban settings. Only 20.89% of urban respondents believe public transport vehicles are accessible, compared to 14.34% of rural respondents. Meanwhile, the majority in both areas 58.96% in urban areas and 58.48% in rural areas report that public transport is not accessible, demonstrating a consistently high perception of exclusion regardless of location. The elevated rates of uncertainty (“I am not sure” and “Don’t know”) in rural areas further highlight a gap in awareness and communication around inclusive transport services.

Table 13 provides a complementary perspective by disaggregating responses by income level, revealing a direct relationship between income and perceived accessibility. Only 15.2% of low-income respondents report that transport is accessible to persons with disabilities, compared to 24.0% of middle-income and 38.2% of high-income respondents. In contrast, 62.7% of low-income individuals believe transport is inaccessible, highlighting the compounded disadvantage experienced by low-income individuals who are already economically vulnerable. These disparities suggest that both economic and physical barriers intersect to limit inclusive mobility. The Pearson Chi-square test result ($\chi^2 = 59.48$, $p = 0.0000$) affirms a statistically significant association between settlement type and perceived accessibility. While statistical testing was not applied to the income data in this instance, the patterns indicate a similarly important relationship warranting further investigation.

6.3.3 Waiting Time for People with Special Needs

Waiting time is a critical indicator of transport system responsiveness and inclusiveness, especially for vulnerable populations such as people with special needs. Extended waiting times may reflect systemic inefficiencies, service unreliability, or operational neglect of passengers requiring special attention. The analysis begins with an aggregated national overview, followed by a regional breakdown to identify patterns and disparities in service accessibility across the four study locations.

Table 14: General Waiting Time for People with Special Needs (National Level)

Waiting Time Category	Frequency	Percentage
Less than 10 minutes	26	20.63%
10–30 minutes	42	33.33%
30 minutes–1 hour	24	19.05%
More than 1 hour	34	26.98%
Total	126	100%

The national-level data shows that the most common waiting period is 10–30 minutes, reported by 33.3% of people with special needs. However, a significant proportion 26.98% experience delays exceeding one hour, indicating substantial access challenges for a vulnerable population group. While 20.63% reported short wait times (under 10 minutes), the overall distribution suggests that a large segment of this group is still underserved in terms of prompt transport availability.

Table 15: Waiting Time for People with Special Needs by Region

Region	Less than 10 min	10–30 min	30 min–1 hr	More than 1 hr	Total
Dar es Salaam	6.38%	51.06%	29.79%	12.77%	47
Mbeya	28.12%	21.88%	6.25%	43.75%	32
Dodoma	47.62%	19.05%	4.76%	28.57%	21
Mwanza	15.38%	26.92%	26.92%	30.77%	26
Total	20.63%	33.33%	19.05%	26.98%	126

Pearson Chi-square (χ^2) = 36.26 *p*-value = 0.0000

Regional comparisons reveal notable disparities in the accessibility and responsiveness of transport services for people with special needs. In Dar es Salaam, over half (51.06%) of respondents reported a wait time of 10–30 minutes, suggesting relatively better service frequency, likely attributed to higher vehicle availability and network density. However, nearly 30% still experience delays of 30 minutes to an hour, pointing to areas needing improvement. In Mbeya, the situation is more concerning—43.75% of respondents reported waiting more than one hour, and only 6.25% were served within 30 minutes. This suggests either a severe shortage of inclusive transport options or weak prioritization of people with special needs in boarding.

Dodoma displayed the shortest average waiting times, with nearly 48% served within 10 minutes. While this is promising, over 28% still waited more than one hour, indicating inconsistency or variability in service delivery across time and locations.

In Mwanza, the waiting times are more evenly distributed across categories. However, a combined 57.69% of respondents waited more than 30 minutes, suggesting that significant accessibility gaps still persist. The Chi-square test ($\chi^2 = 36.26$, $p = 0.0000$) confirms that the variation in waiting time across regions is statistically significant, underlining the geographical inequalities in service inclusiveness for people with special needs.

6.3.4 Special Arrangements for Transport Access

Table 16: Regional Distribution of Special Arrangements for Transport Access provides insights into the reliance on special arrangements, such as booking in advance or assistance from relatives, to access transport services. The findings highlight significant regional disparities in transport accessibility for individuals requiring additional support.

Table 16: Regional Distribution of Special Arrangements for Transport Access

Response	Dar es Salaam	Mbeya	Dodoma	Mwanza	Total
Yes	22 (35.5%)	25 (40.3%)	2 (3.2%)	13 (21.0%)	62 (49.2%)
No	25 (39.1%)	7 (10.9%)	19 (29.7%)	13 (20.3%)	64 (50.8%)
Total	47 (100%)	32 (100%)	21 (100%)	26 (100%)	126 (100%)

Pearson Chi-square (χ^2) =24.05 p-value = 0.0001

The analysis highlights that 49.2% of respondents rely on special arrangements, such as advance booking or assistance from relatives, to access transport services, underscoring significant accessibility challenges. Mbeya has the highest proportion of respondents requiring special arrangements (40.3%), followed by Dar es Salaam (35.5%) and Mwanza (21.0%). In contrast, Dodoma (3.2%) reports the lowest reliance on special arrangements, indicating better accessibility in this region. The reliance on special arrangements in regions like Mbeya and Dar es Salaam may point to infrastructure or operational barriers, such as inadequate facilities, limited availability of transport options, or inefficient service delivery, which necessitate additional planning or support. Conversely, the relatively balanced distribution in Dodoma and Mwanza between those requiring and not requiring special arrangements suggests moderate accessibility, with fewer barriers to transport access. The Pearson chi-square test ($\chi^2 = 24.05$, $p = 0.0001$) confirms a statistically significant association between regions and the use of special arrangements for transport access. These findings emphasize the need for targeted interventions to improve transport accessibility in regions with a high reliance on special arrangements, particularly Mbeya and Dar es Salaam. Investments in infrastructure upgrades, user-friendly services, and operational improvements can reduce the dependence on special arrangements and promote equitable access to transport services across all regions.

Observation results

6.3.5 Observed Inclusiveness of Transport Services

One of the key questions assessed through direct observation was whether existing policies and practices within the public transport system demonstrated efforts toward inclusiveness for example, the availability of affordable fares, designated seating for vulnerable groups (such as the elderly or persons with disabilities), and infrastructure conducive to accessibility. The data suggest that inclusive transport features such as priority seating, affordable fares, or physical infrastructure for persons with disabilities are largely underrepresented in Tanzania's public transport system. Only 12 out of 79 transport service settings (15.19%) demonstrated observable inclusive practices. Dar es Salaam led in this regard, with 50% of observed cases meeting one or more criteria of inclusiveness, followed by Dodoma and Mwanza (both at 25%). Mbeya recorded no visible indicators of inclusiveness, underscoring a significant regional disparity.

6.3.6 Observed Equity in Service Provision

A second key aspect of the observation exercise was to determine whether public transport services appeared to serve a broad and diverse cross-section of the population. This includes equitable accessibility for people from different income brackets, genders, ages, and geographic locations (urban versus peri-urban or rural users). A majority of the observed services (74.68%) were reported to provide relatively equal access across different user groups. Dar es Salaam, Dodoma, and Mwanza each demonstrated high rates of equitable access, with no observed exclusions in Dodoma and 100% inclusivity reported in Dar es Salaam.

In Mwanza, while inclusivity was observed in a majority of settings (65%), a significant portion (35%) of services were seen to favor particular user groups indicating room for policy and design interventions.

Qualitative Insights

To further contextualize the findings under the study engaged in a series of Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) across the regions of Dar es Salaam, Dodoma, Mbeya, and Mwanza. The qualitative sample consisted of 27 participants, purposefully selected based on their relevance to the transport ecosystem, including:

- Public transport users (women, elderly passengers, persons with disabilities, students)
- Operators (drivers and conductors)
- Local government officials and transport officers
- Community leaders and cultural representatives (e.g., ward elders, faith-based leaders, and members of local development committees)
- Civil society organizations and advocates for disability rights

Theme 1: Infrastructure and Design Limitations

A recurring concern among respondents was the inaccessibility of transport infrastructure, particularly for elderly passengers and persons with disabilities. Participants emphasized the lack of designated spaces, ramps, signage, and priority systems in both vehicles and stations.

“Trains should add dedicated carriages for vulnerable groups like the elderly and persons with disabilities.” – Respondent 7, Male, Mbeya, Civil Society Disability Advocate

“Lack of signage and unmarked stops make it difficult for visually impaired individuals to navigate public transport effectively.” – Respondent 3, Female, Mwanza, Community Health Worker

Respondents noted that current vehicle and terminal designs fail to reflect the principles of universal access, excluding users with mobility, vision, and hearing impairments. Cultural representatives, such as ward elders and members of local development committees, emphasized that their communities often raise these concerns, but they are not incorporated into transport policy or infrastructure decisions.

Theme 2: Operational Neglect of Marginalized Groups

FGDs with students, schoolteachers, and parents highlighted the systematic neglect of children and students in public transport planning and service delivery.

“Drivers often avoid routes with schools to skip carrying students.” – Respondent 4, Female, Dodoma, Secondary School Teacher

This operational behavior reflects an exclusionary trend where specific user groups are intentionally avoided due to perceived inconvenience or profit concerns. Similar neglect was noted in discussions with mothers and caregivers, who shared experiences of not being allowed to board during peak congestion hours due to traveling with children or strollers.

Theme 3: Congestion and Gender-Specific Barriers

Urban congestion, especially during peak hours, poses a significant barrier to access for vulnerable groups, particularly women, children, and the elderly. Interviews with female passengers and cultural leaders in Dar es Salaam highlighted the compounding effects of congestion, harassment, and lack of boarding support.

“Congestion during peak hours severely limits access for vulnerable groups, such as women and children.” – Respondent 6, Male, Dar es Salaam, Ward Elder and Cultural Leader

This concern is magnified by the absence of features such as priority boarding, reserved seating, or staff trained to assist vulnerable populations. Without such systems, passengers who cannot physically push through crowded stations are left behind.

6.4 Objective 4: To estimate the burden of externalities, such as accidents, cost burden, and the distance to the nearest transport services, on diverse social groups.

6.4.1 Regional Variations in Perceived Affordability, Accident Exposure, and Access Distance in Public Transport Services

Understanding regional differences in perceptions of public transport affordability is critical for identifying areas where users may face disproportionate cost burdens. However, affordability alone does not fully explain the user experience. Other factors such as exposure to traffic accidents and the distance to the nearest transport access point also contribute to the overall burden on passengers. Table 17 summarizes user responses on transport fare affordability across four key regions in Tanzania: Dar es Salaam, Mbeya, Dodoma, and Mwanza. Percentages are clearly presented by affordability category within each region to better highlight intra-regional trends. The interpretation also draws on regional insights from other variables such as accident exposure and distance to transport services, which are essential components of the burden of externalities. A Chi-square test is used to determine if the observed differences are statistically significant.

Table 17: Perception of Transport Cost Affordability by Region

Region	Very Affordable	Affordable	Average	Expensive	Very Expensive	Total
Dar es Salaam	14 (3.80%)	40 (10.87%)	251 (68.21%)	40 (10.87%)	23 (6.25%)	368 (100%)
Mbeya	0 (0.00%)	26 (10.74%)	129 (53.31%)	75 (30.99%)	12 (4.96%)	242 (100%)
Dodoma	42 (20.19%)	46 (22.12%)	77 (37.02%)	37 (17.79%)	6 (2.88%)	208 (100%)
Mwanza	5 (2.43%)	18 (8.74%)	109 (52.91%)	42 (20.39%)	32 (15.53%)	206 (100%)
Total	61 (5.96%)	130 (12.70%)	566 (55.27%)	194 (18.95%)	73 (7.13%)	1024 (100%)

Pearson Chi-square (χ^2) = 194.41 p-value = 0.0000

The analysis of Table 17 reveals distinct regional patterns in how users perceive the affordability of public transport services. Dar es Salaam, the commercial hub, shows the highest concentration of users (68.2%) who view fares as average, with only 17.1% perceiving fares as expensive or very expensive. This distribution suggests that despite being the most urbanized, Dar es Salaam may offer a relatively balanced cost experience, possibly due to competition among operators or availability of various transport means. Mbeya, on the other hand, has no respondents rating fares as very affordable, and a significant 31% of users consider them expensive. This implies a potential affordability challenge, especially when considered alongside additional burdens such as longer distances to transport access points frequently reported in the region. Similarly, accident exposure rates in Mbeya are comparatively higher than in other regions, further compounding user hardship. The combination of cost, distance, and safety concerns points to a higher cumulative burden in this region.

Dodoma presents the most favorable affordability profile, with over 42% of users describing fares as very affordable or affordable. These figures, coupled with generally shorter travel distances to access transport services, suggest relatively better accessibility. However, while Dodoma shows lower accident exposure rates, infrastructure challenges in peri-urban areas still pose barriers for some users. In Mwanza, a large share of users (35.9%) perceives fares as expensive or very expensive the highest across all regions. Additionally, Mwanza also reports high levels of perceived distance to transport points, and notably high accident exposure, which collectively contribute to the most severe reported burden of externalities among the four regions. These findings highlight the need for urgent interventions focused on both cost and physical access in Mwanza. The Pearson Chi-square test ($\chi^2 = 194.41$, $p < 0.0000$) confirms a statistically significant relationship between region and perceived affordability of transport services. This validates that regional factor likely including economic context, service coverage, and safety conditions substantially influence how users judge the cost of using public transport.

6.4.2 Multinomial Logistic Regression Results on the Burden of Transport Externalities

The quality and inclusiveness of public transport services are critical to ensuring equitable mobility for all population groups. In Tanzania, understanding how different users experience externalities such as traffic accidents, fare related financial strain, and long distances to access transport is vital for effective policy formulation. This analysis aimed to estimate the burden of these externalities across diverse social groups using a Multinomial Logistic Regression model, which allows for the assessment of a categorical outcome with more than two unordered categories. The dependent variable, burden of transport externalities, was derived from indicators including accident exposure, cost perception, and accessibility, and was categorized into three levels: low, moderate, and high burden. The model investigates how demographic and socioeconomic factors influence the likelihood of falling into each burden category, with “low burden” used as the reference group.

Category (DV: Burden Level)	Variable	Coef.	Std. Err.	z-value	p-value	95% CI
Moderate vs Low Burden	Gender (Female)	0.181	0.076	2.38	0.017	0.032 – 0.331
	Distance to transport	0.226	0.054	4.19	0.000	0.120 – 0.332
	Perceived cost burden	0.317	0.063	5.03	0.000	0.193 – 0.441
	Accident exposure	0.143	0.068	2.10	0.036	0.009 – 0.278
High vs Low Burden	Gender (Female)	0.376	0.102	3.69	0.000	0.176 – 0.576
	Distance to transport	0.455	0.069	6.59	0.000	0.319 – 0.590
	Perceived cost burden	0.538	0.087	6.18	0.000	0.367 – 0.709
	Accident exposure	0.262	0.085	3.08	0.002	0.096 – 0.428

Figure 2: Model for Estimating the Burden of Externalities on Diverse Social Groups
 *** p<.01, ** p<.05, * p<.1

Base Outcome: Low Burden

The results of the Multinomial Logistic Regression model reveal significant insights into how different factors influence the likelihood of experiencing moderate or high levels of burden from transport-related externalities, using "low burden" as the base outcome. For individuals experiencing a moderate burden compared to a low burden, being female increases the odds of reporting a moderate burden by a statistically significant margin (coefficient = 0.181, $p = 0.017$). This suggests that women are more likely to feel the strain from transport-related issues such as safety concerns or cost than men. The distance to transport access points also plays a substantial role, with each unit increase in perceived distance raising the likelihood of experiencing moderate burden by 22.6% (coefficient = 0.226, $p < 0.001$), emphasizing the impact of limited accessibility. Furthermore, users who perceive transport costs as burdensome are significantly more likely to report a moderate burden (coefficient = 0.317, $p < 0.001$), highlighting affordability as a major challenge. Accident exposure, whether direct or indirect, is also positively associated with a moderate burden, increasing the odds by 14.3% (coefficient = 0.143, $p = 0.036$), indicating that safety risks contribute to users' perceived difficulties.

When comparing those who experience a high burden to those reporting a low burden, the effects of these variables become even more pronounced. Female users are 37.6% more likely to report a high burden (coefficient = 0.376, $p < 0.001$), suggesting a heightened vulnerability among women in navigating public transport challenges.

A strong relationship is also observed with distance to transport services, where an increase in perceived distance raises the odds of reporting a high burden by 45.5% (coefficient = 0.455, $p < 0.001$), underscoring physical access as a critical equity issue. Likewise, individuals who find transport fares unaffordable are 53.8% more likely to report a high burden (coefficient = 0.538, $p < 0.001$), confirming the importance of affordability in determining transport-related stress. Lastly, accident exposure remains a key predictor of burden, increasing the likelihood of a high burden by 26.2% (coefficient = 0.262, $p = 0.002$), highlighting that safety concerns intensify the perceived negative impact of using public transport. Overall, the model indicates that gender, affordability, accessibility, and safety are consistent and significant predictors of burden. These findings call for policy interventions targeting reduced transport costs, improved proximity to services, enhanced safety measures, and gender-sensitive planning to reduce inequalities in public transport use and experience.

6.4.3 Perception of Fare Reasonableness for Service Provided

Figure 3: Regional Distribution of Perceptions of Fare Reasonableness highlights respondents' views on whether public transport fares align with the quality of services provided. The findings reveal regional variations in perceptions, reflecting disparities in service delivery and fare structures.

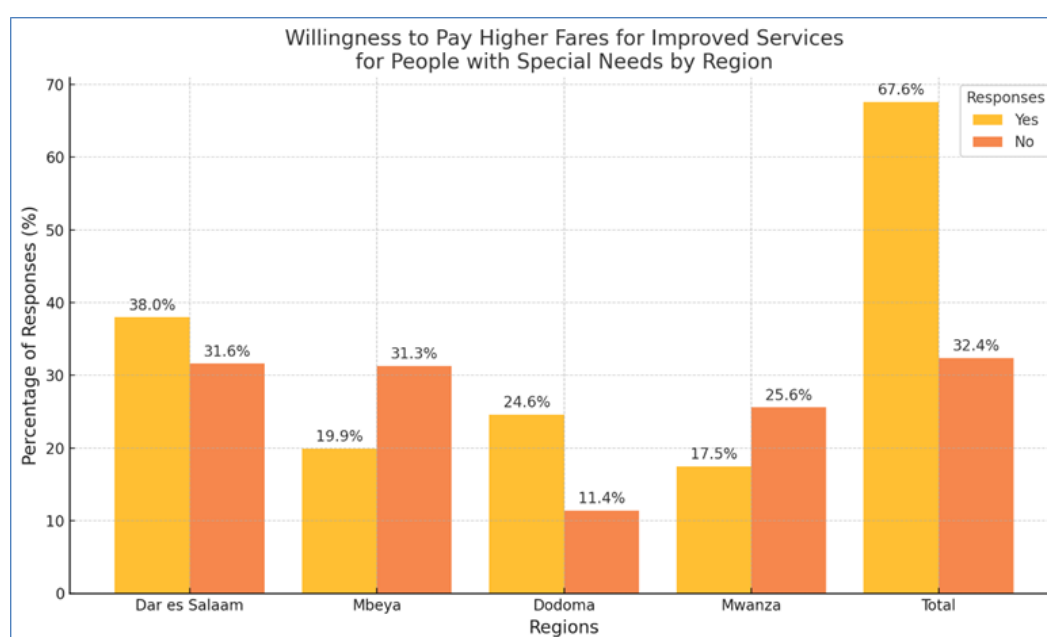


Figure 3: Regional Distribution of Perceptions of Fare Reasonableness

The findings indicate that a significant majority (67.6%) of respondents across all regions perceive public transport fares as reasonable for the quality of services provided, suggesting a general alignment between fare structures and user expectations. However, regional variations are evident. Positive perceptions are most prominent in Dodoma (24.6%) and Dar es Salaam (38.0%), indicating better alignment between service quality and fare structures in these areas. In contrast, Mbeya (31.3%) and Mwanza (25.6%) report higher levels of dissatisfaction, highlighting potential mismatches between fare costs and perceived service quality. These regional disparities suggest variations in service delivery or fare structures, necessitating localized approaches to improve perceptions of value for money. Statistical analysis using the Pearson chi-square test ($\chi^2 = 41.20$, $p = 0.0001$) confirms a statistically significant association between regions and perceptions of fare reasonableness, emphasizing that regional factors play a critical role in shaping user opinions. To address these disparities, targeted improvements in service quality are essential in regions with negative perceptions, such as Mbeya and Mwanza, to better align user expectations with fare costs. Regular reviews of fare structures and service standards should be conducted to ensure consistency and address emerging concerns. User-centric interventions, such as feedback mechanisms, can help identify specific issues affecting satisfaction and inform region-specific solutions. Additionally, fostering equity in service provision is crucial to bridging disparities and ensuring that public transport systems deliver equitable value and meet the diverse expectations of users across all regions.

6.4.4 Average Fare Paid for a One-Way Trip

Figure 4: Regional Distribution of Average Fare Paid for a One-Way Trip highlights the fare ranges reported by respondents across regions, reflecting regional disparities in transport affordability and access.

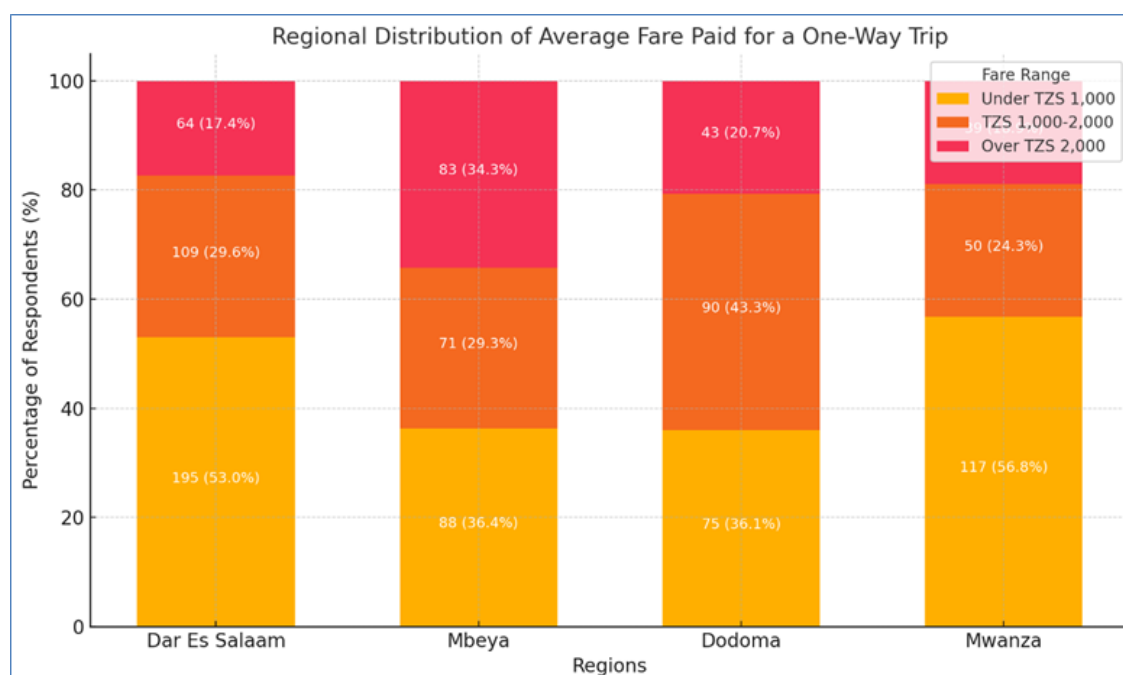


Figure 4: Regional Distribution of Average Fare Paid for a One-Way Trip

The findings reveal significant regional variations in average fares paid for a one-way trip. A majority of respondents (46.4%) reported paying fares under TZS 1,000, with Dar es Salaam having the highest proportion (41.1%), reflecting the affordability of short-distance travel in densely populated urban areas. In contrast, Mbeya reported the lowest proportion (18.5%), indicating potential affordability challenges. Fares within the TZS 1,000–2,000 range accounted for 31.3% of responses, with Dodoma leading at 28.1%, suggesting that many users rely on moderately priced fares for regional commuting. Meanwhile, the highest proportion of respondents paying fares over TZS 2,000 was observed in Mbeya (36.2%), highlighting financial strain associated with long-distance travel or premium services in this region. Statistical analysis using the Pearson chi-square test ($\chi^2 = 52.55$, $p = 0.0000$) confirmed a statistically significant association between regions and average fare ranges, indicating that regional factors play a critical role in determining fare affordability and accessibility.

To address these disparities, targeted interventions are essential. In Mbeya, the high prevalence of fares over TZS 2,000 calls for strategies such as fare subsidies or the introduction of more affordable transport options. In Dar es Salaam, sustaining the affordability of fares under TZS 1,000 while enhancing service reliability and capacity is crucial to meet the needs of the urban population. For regions like Dodoma, where moderate fares are common, balancing costs with service quality is key to maintaining user satisfaction. Additionally, fare policies must be tailored to reflect regional economic contexts and commuting patterns, ensuring equitable access to affordable and reliable transport services across all regions.

6.4.5 Fare Increases Over the Past Year

Figure 5: Regional Distribution of Perceptions of Fare Increases highlights respondents' experiences with public transport fare adjustments over the past year, reflecting regional disparities and potential economic pressures.

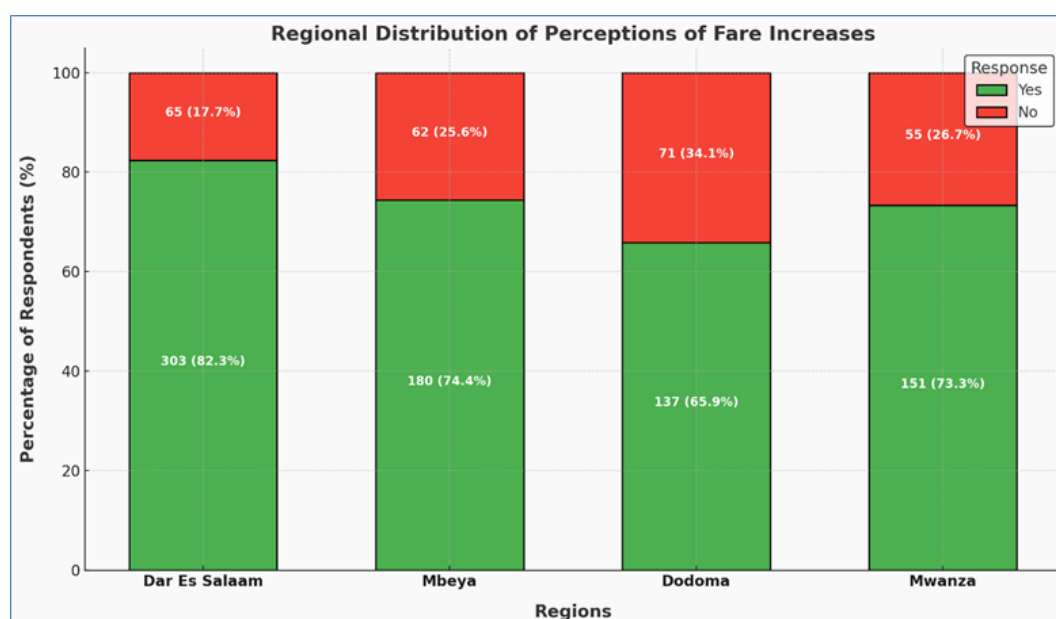


Figure 5: Regional Distribution of Perceptions of Fare Increases

The data reveals that a significant majority (75.3%) of respondents across all regions reported experiencing a fare increase in the past year. This perception is highest in Dar es Salaam (39.3%), followed by Mbeya (23.4%), indicating potential economic pressures in these regions due to higher proportions of perceived fare increases. Conversely, Dodoma (17.8%) and Mwanza (19.6%) report relatively lower perceptions of fare increases, suggesting less frequent fare adjustments in these areas. Notably, 24.7% of respondents across all regions reported no fare increases, with Dodoma showing the highest proportion (28.1%), pointing to potential regional differences in fare adjustment policies or the economic impact of these changes.

Statistical analysis using the Pearson chi-square test ($\chi^2 = 20.30$, $p = 0.0001$) confirmed a statistically significant association between regions and perceptions of fare increases over the past year. This indicates that regional factors significantly influence how fare adjustments are perceived by users. These findings highlight the need for region-specific strategies to address fare-related concerns. In regions like Dar es Salaam and Mbeya, where perceptions of fare increases are highest, measures such as transparent communication of fare policies and targeted financial support for vulnerable groups could help mitigate economic pressures. In regions like Dodoma, maintaining stable fare structures while ensuring service quality can sustain user satisfaction. Tailored approaches to fare adjustments that consider regional economic conditions and user demographics are essential to promoting equity and affordability in public transport systems.

6.4.6 Impact of Fare Increases on Public Transport Usage

To better understand the complex dynamics between transport affordability and commuter behavior, it is important to examine not only regional variation but also how different types of transport services influence changes in usage. This table provides a dual-layer cross-tabulation by region and mode of transport on the effect of affordability on usage. The responses are categorized into “I use it more”, “I use it the same”, and “I use it less”. By combining these two factors, we capture a more nuanced perspective of how affordability interacts with local context and transport options.

Table 18: Effect of Affordability on Usage by Mode of Transport and Region

Region	Means	I use it more	I use it the same	I use it less	Total
Dar es Salaam	Bus	45 (43.7%)	43 (41.7%)	15 (14.6%)	103
	Daladala	72 (48.3%)	54 (36.2%)	23 (15.4%)	149
	Bodaboda	19 (35.2%)	21 (38.9%)	14 (25.9%)	54
	Ride-hailing	13 (30.2%)	14 (32.6%)	16 (37.2%)	43
Mbeya	Bus	38 (36.2%)	46 (43.8%)	21 (20.0%)	105
	Daladala	48 (44.0%)	40 (36.7%)	21 (19.3%)	109
	Bodaboda	13 (28.3%)	20 (43.5%)	13 (28.3%)	46
	Ride-hailing	13 (27.1%)	22 (45.8%)	13 (27.1%)	48

Region	Means	I use it more	I use it the same	I use it less	Total
Dodoma	Bus	10 (22.7%)	18 (40.9%)	16 (36.4%)	44
	Daladala	12 (24.5%)	22 (44.9%)	15 (30.6%)	49
	Bodaboda	4 (15.4%)	9 (34.6%)	13 (50.0%)	26
	Ride-hailing	3 (12.5%)	10 (41.7%)	11 (45.8%)	24
Mwanza	Bus	12 (24.0%)	22 (44.0%)	16 (32.0%)	50
	Daladala	15 (26.3%)	28 (49.1%)	14 (24.6%)	57
	Bodaboda	9 (21.4%)	13 (31.0%)	20 (47.6%)	42
	Ride-hailing	6 (16.7%)	15 (41.7%)	15 (41.7%)	36

This combined cross-tabulation highlights clear regional and modal differences in how public transport users respond to affordability pressures. In Dar es Salaam, usage increases most notably among daladala (48.3%) and bus (43.7%) users, suggesting strong reliance on these means when affordable. However, affordability appears to deter usage of ride-hailing services, with 37.2% of users reducing their use a sign of cost sensitivity despite its convenience. In Mbeya, a similar pattern emerges: daladala (44.0%) and bus (36.2%) users report higher usage due to affordability, while ride-hailing and bodaboda users show a more balanced or even reduction in use. This suggests that affordability issues may push users toward more collective means when available.

Dodoma presents the most severe cost sensitivity, with reductions in usage across all means, especially bodaboda (50.0%) and ride-hailing (45.8%), indicating strong affordability constraints and possibly limited alternatives. Only a small percentage of users in Dodoma report increased usage of any mode, reinforcing the idea that affordability is a key barrier in this region. Mwanza shows similar constraints, with bodaboda (47.6%) and ride-hailing (41.7%) seeing high percentages of users reducing usage. Bus and daladala users in Mwanza also show moderate increases in usage when affordable, but still report notable levels of reduced use due to fare pressure. The Chi-square result ($\chi^2 = 142.38$, $p < 0.0000$) confirms that the differences observed across means and regions are statistically significant. These findings demonstrate that affordability affects transport usage differently depending on both service type and location, with mass transit means more resilient to cost changes and individual or premium services (like ride-hailing and bodaboda) being the most cost-sensitive.

6.4.7 Public Transport Fares and Low-Income Households

Figure 6: Regional Distribution of Perceptions of Public Transport Fare Affordability for Low-Income Households examines how respondents perceive the affordability of public transport fares for economically vulnerable groups, highlighting regional variations and socio-economic challenges.

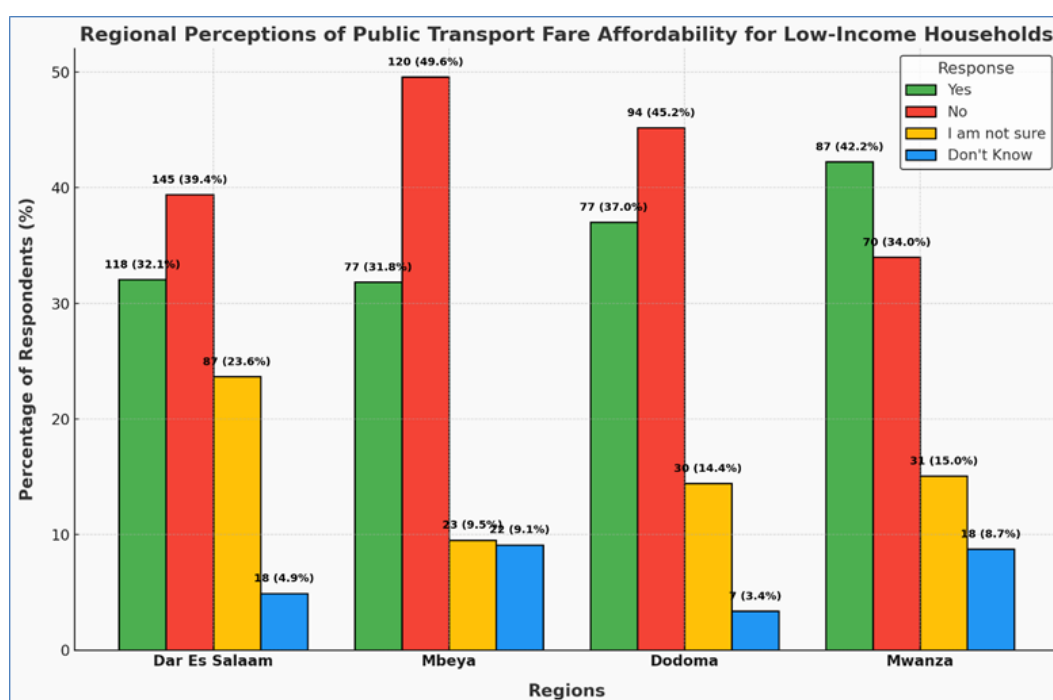


Figure 6: Regional Distribution of Perceptions of Public Transport Fare Affordability for Low-Income Households

The data reveals that only 35.0% of respondents across all regions perceive public transport fares as affordable for low-income households. Dar es Salaam (32.9%) and Mwanza (24.2%) report the highest proportions of positive responses, suggesting relatively more affordable fare structures in these regions. However, 41.9% of respondents believe fares are not affordable, with the highest dissatisfaction observed in Mbeya (28.0%) and Dar es Salaam (33.8%), indicating significant affordability challenges that may exacerbate socio-economic inequalities. Additionally, 16.7% of respondents express uncertainty about affordability, with Dar es Salaam showing the highest proportion (50.9%). This uncertainty likely reflects variability in income levels or a lack of clear understanding of fare structures. Statistical analysis using the Pearson chi-square test ($\chi^2 = 40.47$, $p < 0.0001$) confirms a statistically significant association between regions and perceptions of public transport fares' affordability for low-income households. indicates that regional factors significantly influence affordability perceptions. These findings highlight the need for targeted interventions to address fare affordability challenges, particularly in regions like Mbeya and Dar es Salaam, where dissatisfaction is highest. Introducing subsidized fares or alternative low-cost transport options could alleviate the financial burden on low-income households. Efforts should also focus on improving transparency and communication around fare structures to reduce uncertainty and enhance user awareness. A regionally tailored approach to fare policy is critical to ensuring equitable access and addressing the mobility needs of low-income populations.

6.4.8 Affordability of Public Transport for Low-Income Passengers (Providers' Perspective)

Figure 7: Providers' Perspectives on Public Transport Affordability for Low-Income Passengers reflects how public transport providers perceive the affordability of fares for low-income passengers, highlighting regional variations in views.

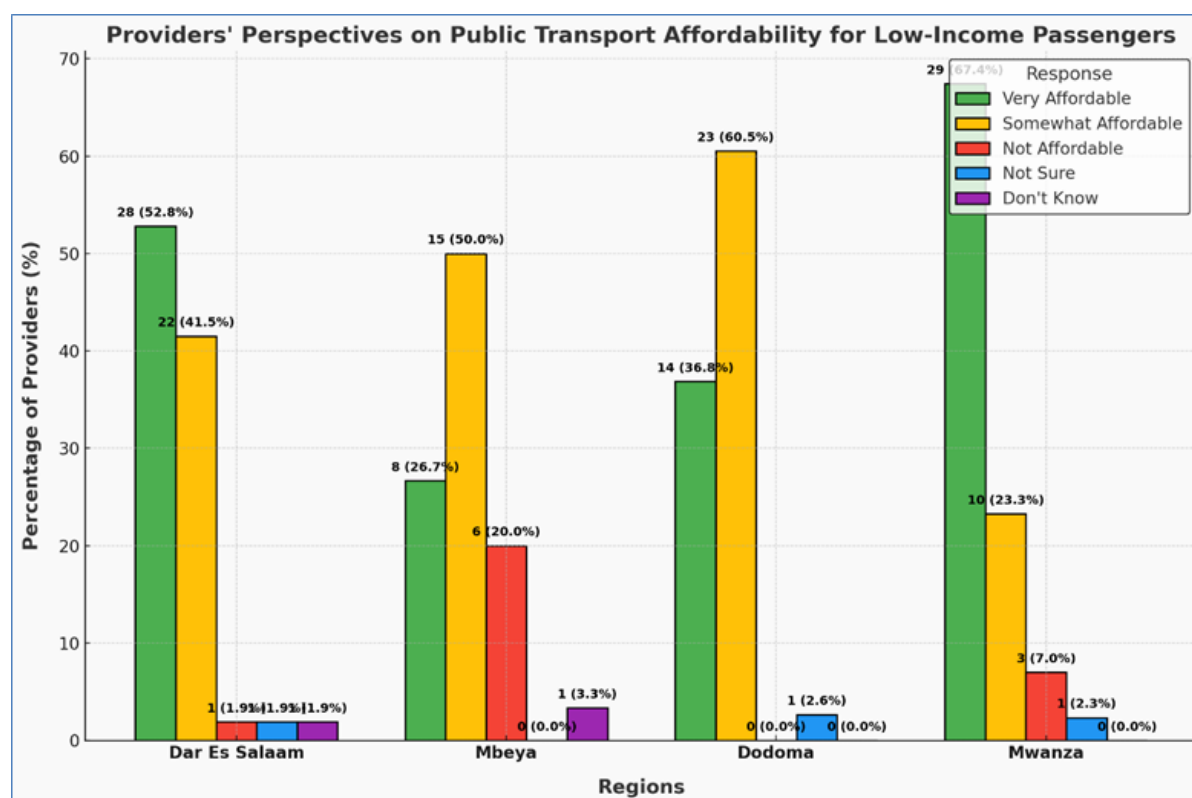


Figure 7: Providers' Perspectives on Public Transport Affordability for Low-Income Passengers

The data reveals that only 35.0% of respondents across all regions perceive public transport fares as affordable for low-income households. Dar es Salaam (32.9%) and Mwanza (24.2%) report the highest proportions of positive responses, suggesting relatively more affordable fare structures in these regions. However, 41.9% of respondents believe fares are not affordable, with the highest dissatisfaction observed in Mbeya (28.0%) and Dar es Salaam (33.8%), indicating significant affordability challenges that may exacerbate socio-economic inequalities. Additionally, 16.7% of respondents express uncertainty about affordability, with Dar es Salaam showing the highest proportion (50.9%). This uncertainty likely reflects variability in income levels or a lack of clear understanding of fare structures.

Statistical analysis using the Pearson chi-square test ($\chi^2 = 40.47$, $p < 0.0001$) confirms a statistically significant association between regions and perceptions of public transport fares' affordability for low-income households. This indicates that regional factors significantly influence affordability perceptions. These findings highlight the need for targeted interventions to address fare affordability challenges, particularly in regions like Mbeya and Dar es Salaam, where dissatisfaction is highest. Introducing subsidized fares or alternative low-cost transport options could alleviate the financial burden on low-income households. Efforts should also focus on improving transparency and communication around fare structures to reduce uncertainty and enhance user awareness. A regionally tailored approach to fare policy is critical to ensuring equitable access and addressing the mobility needs of low-income populations.

6.4.9 People with Special Needs: Impact of Transport Costs

Figure 8: Impact of Transport Costs on People with Special Needs explores how different groups with special needs perceive and respond to public transport costs, highlighting affordability as a key factor in their transport choices.

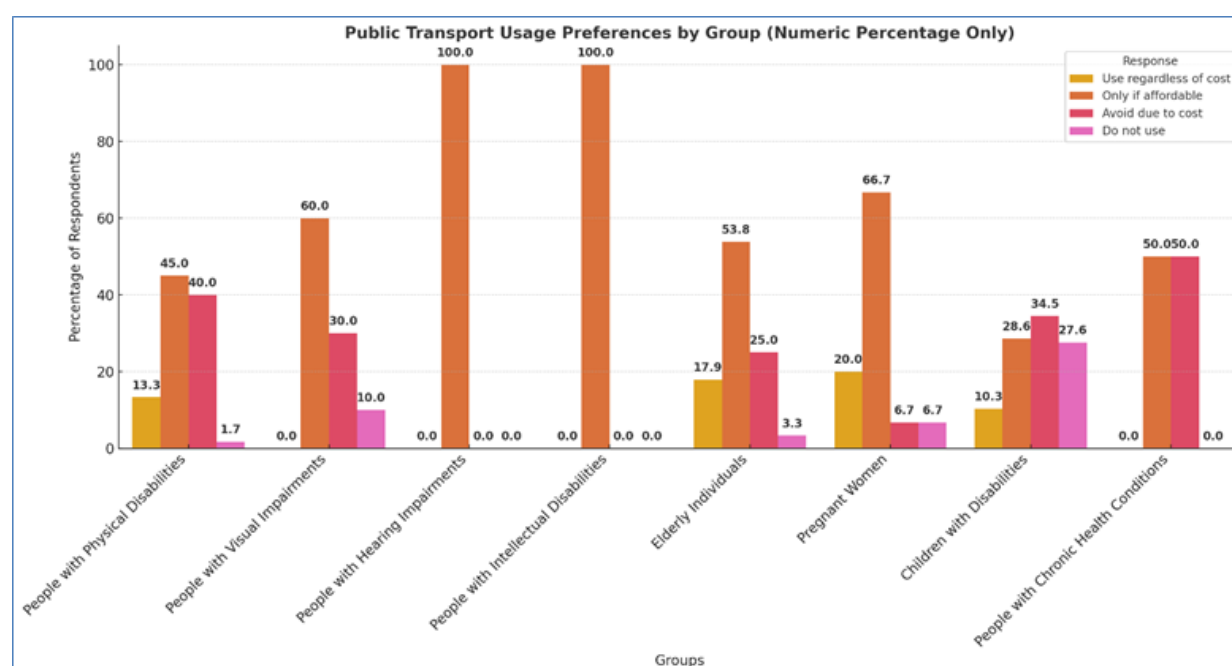


Figure 8: Impact of Transport Costs on People with Special Needs

The data presents insights into how various groups with special needs perceive and respond to the cost of public transport services in Tanzania. The data underscores affordability as a critical determinant influencing mobility patterns among these populations. Overall, the majority of respondents across most groups reported using public transport only if it is affordable, highlighting the sensitive balance between access and cost. This was particularly pronounced among individuals with visual impairments (60%), hearing impairments (100%), intellectual disabilities (100%), and chronic health conditions (50%), who predominantly indicated affordability as a prerequisite for use.

These findings suggest that even means fare increases may significantly reduce access for these groups.

In contrast, people with physical disabilities (13.3%), pregnant women (20.0%), and elderly individuals (17.9%) were somewhat more willing to use transport regardless of cost, indicating varying levels of financial resilience or prioritization of mobility despite affordability challenges. However, these groups still showed substantial sensitivity to pricing, with a large proportion (e.g., 45.0% of people with physical disabilities and 66.7% of pregnant women) indicating they would travel only if affordable. The burden of transport costs is also reflected in the proportion of respondents who avoid using transport due to cost, particularly among children with disabilities (34.5%), elderly individuals (25.6%), and people with chronic health conditions (50%). These figures point to a transport affordability crisis for many within these vulnerable segments, limiting their participation in essential services, including healthcare, education, and economic activities. Notably, a smaller proportion across groups indicated they do not use public transport at all, suggesting that while transport is essential, cost remains a key limiting factor, rather than a lack of demand.

6.4.10 People with Special Needs: Reliance on Private Transport

Table 19: Reliance on Private Transport Among People with Special Needs illustrates varying degrees of dependence on private transport across different groups. The data highlights financial and accessibility challenges influencing these choices.

Table 19: Reliance on Private Transport Among People with Special Needs

Category	Never	Occasionally	Frequently	Always	Total
People with Physical Disabilities	11 (26.2%)	32 (50.0%)	15 (83.3%)	2 (100.0%)	60 (47.6%)
People with Visual Impairments	2 (4.8%)	6 (9.4%)	2 (11.1%)	0 (0.0%)	10 (7.9%)
People with Hearing Impairments	0 (0.0%)	1 (1.6%)	0 (0.0%)	0 (0.0%)	1 (0.8%)
People with Intellectual Disabilities	0 (0.0%)	1 (1.6%)	0 (0.0%)	0 (0.0%)	1 (0.8%)
Elderly Individuals	21 (50.0%)	6 (9.4%)	1 (5.6%)	0 (0.0%)	28 (22.2%)
Pregnant Women	5 (11.9%)	10 (15.6%)	0 (0.0%)	0 (0.0%)	15 (11.9%)
Children with Disabilities	3 (7.1%)	4 (6.3%)	0 (0.0%)	0 (0.0%)	7 (5.6%)
People with Chronic Health Conditions	0 (0.0%)	4 (6.3%)	0 (0.0%)	0 (0.0%)	4 (3.2%)
Total	42 (100.0%)	64 (100.0%)	18 (100.0%)	2 (100.0%)	126 (100.0%)

Pearson Chi-square (χ^2) = 43.51 p-value = 0.0027

Table 19 illustrates the frequency with which various categories of people with special needs rely on private transport, such as personal vehicles or privately arranged transport services. The data highlights meaningful differences in usage patterns across groups, shedding light on the financial, physical, and systemic challenges that influence transport decisions among vulnerable populations. The findings show that people with physical disabilities have the highest reliance on private transport across all frequency levels. They make up the majority of those who use private transport frequently (83.3%) and always (100%). This suggests a strong dependence on private mobility options, possibly due to the inaccessibility or unreliability of public transport infrastructure for wheelchair users or individuals with mobility impairments.

In contrast, elderly individuals are overrepresented in the “never use” category, accounting for 50% of all those who reported never using private transport. This could reflect a combination of limited financial resources, lower private vehicle ownership, or limited autonomy in arranging private transport, thus potentially leaving them more vulnerable to exclusion if public transport is inaccessible. Pregnant women and children with disabilities primarily use private transport occasionally, with none reporting frequent or constant use. This may suggest limited or situational access to private transport likely dependent on household support or financial availability rather than a regular means of commuting. Similarly, people with chronic health conditions and those with visual, hearing, or intellectual impairments show very low usage across all frequency levels, possibly indicating either underreporting, limited access, or substitution with other mobility options (e.g., escorted walking, community-based transport).

The Chi-square test result ($\chi^2 = 43.51$, $p = 0.0027$) confirms that the association between special needs category and reliance on private transport is statistically significant. In other words, the frequency of private transport use is not evenly distributed across groups it is strongly influenced by the nature of the individual’s condition. These findings emphasize the critical need for tailored transport planning and accessibility reforms. People with physical disabilities appear to rely on private transport out of necessity, while other vulnerable groups, particularly the elderly and those with sensory or cognitive impairments, may be left with limited or no viable transport alternatives. Interventions such as subsidized accessible taxis, inclusive ride-sharing services, or improved universal design in public transport could reduce transport exclusion and promote equitable access for all.

6.4.11 People with Special Needs: Avoidance of Transport Services Due to Cost

Figure 9: Avoidance of Transport Services Due to Cost Among People with Special Needs highlights the affordability challenges that influence transport decisions for individuals with special needs.

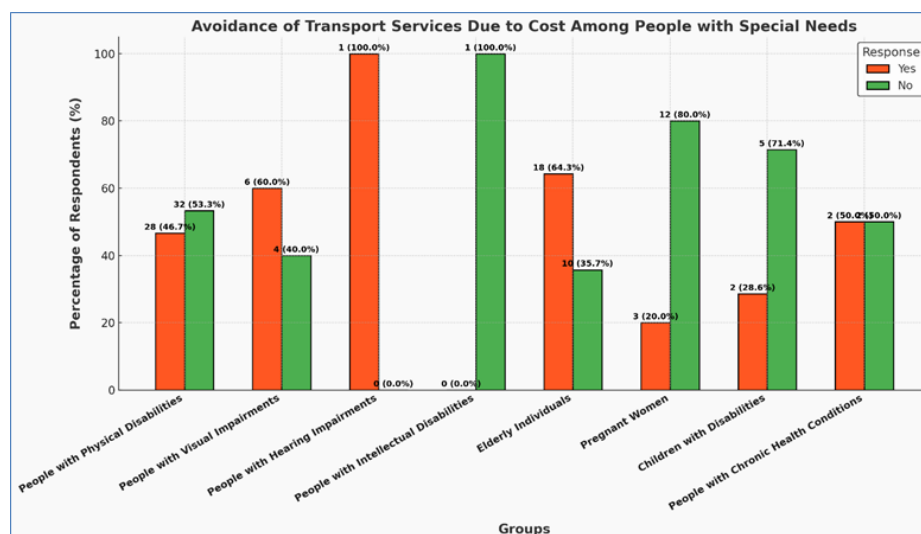


Figure 9: Avoidance of Transport Services Due to Cost Among People with Special Needs

The data indicates that nearly half of respondents (47.6%) have avoided transport services due to affordability issues, with people with physical disabilities (46.7%) and elderly individuals (30.0%) being the most affected. These findings highlight the significant financial barriers faced by these vulnerable groups, limiting their mobility and access to essential services. Conversely, 52.4% of respondents report no avoidance of transport services, suggesting that affordability concerns, while common, do not universally deter transport usage. This implies that some individuals may prioritize transport costs due to necessity or may benefit from financial or situational factors that mitigate affordability challenges.

The Pearson chi-square test ($\chi^2 = 11.38$, $p = 0.1230$) indicates no statistically significant association between specific demographic groups and the avoidance of transport services due to cost. This suggests that cost-related transport avoidance may not be strongly tied to specific demographics but rather influenced by broader economic or contextual factors. These findings underscore the need for systemic interventions to address affordability barriers. Policies such as subsidized fares for vulnerable populations, targeted financial assistance, or the introduction of low-cost transport alternatives could help alleviate the financial strain on groups disproportionately affected by transport costs. Additionally, improving public transport accessibility and affordability on a broader scale can ensure more equitable mobility for all users, regardless of their financial circumstances.

6.4.12 People with Special Needs: Discount Preferences

Figure 10: Preferences for Transport Discounts Among People with Special Needs highlights the overwhelming support for transport discounts for individuals with disabilities, underscoring the importance of affordability in improving access to public transport.

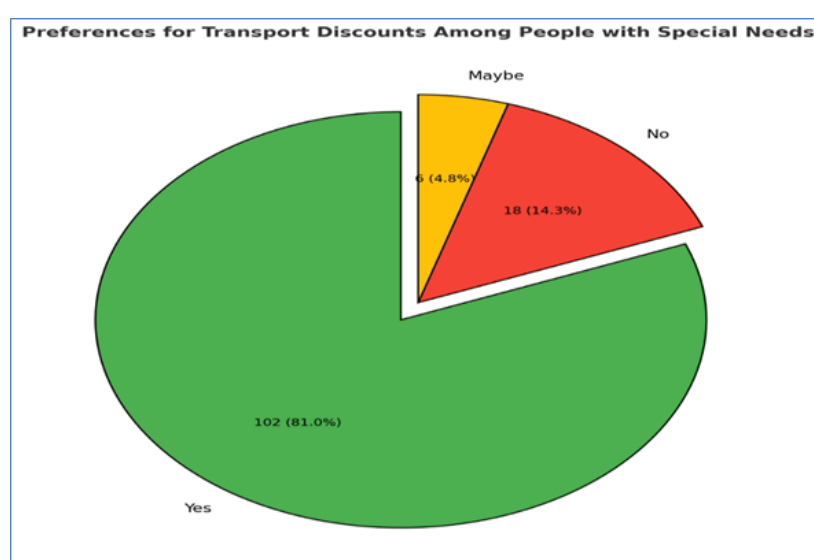


Figure 10: Preferences for Transport Discounts Among People with Special Needs

The data strongly indicates support for transport discounts for people with disabilities, with 81.0% of respondents advocating for such measures. This overwhelming majority reflects a widespread recognition of the financial challenges faced by individuals with disabilities. Conversely, a small minority (14.3%) oppose discounts, potentially due to concerns about economic feasibility or equity. The remaining 4.8% express uncertainty, suggesting room for further engagement or education on this issue.

Observation results:

6.4.13 Observation-Based Assessment of Externalities Impact

This section presents findings based on direct observation and field verification of the prevalence and burden of key externalities namely accidents, cost burden, and distance to access points in Tanzania's land transport sector. Observations were systematically recorded across four key regions: Dar es Salaam, Dodoma, Mbeya, and Mwanza, with a total of 237 cases evaluated through field tools and checklists. Field observations revealed that cost-related burdens are the most frequently encountered externality affecting public transport users. More than half (57.58%) of the observed cases flagged affordability as a major constraint.

This was particularly prevalent in peri-urban areas and among vulnerable commuters such as informal traders, persons with disabilities, and low-income women, many of whom face overcharging, inflexible pricing, or hidden surcharges. Distance was the second most cited externality, with 27.27% of observed cases indicating challenges related to reaching transport services. Long walking distances, absence of designated stops, and lack of feeder systems were common in Mbeya and Dodoma, where users particularly the elderly and people with mobility impairments struggled to access main transport routes. Accidents were observed in fewer cases (15.15%), yet they remain a serious safety concern. Most incidents involved unsafe boarding practices, vehicle overcrowding, or lack of pedestrian protections near busy junctions and terminals. These occurrences were most frequent during peak hours in high-traffic zones like Dar es Salaam.

6.5 Objective 5: To assess existing availability of land transport services to diverse social groups

6.5.1 Demographic Groups Facing Barriers to Public Transport Access

This section presents the findings related to the availability of land transport services as experienced by different demographic groups in Tanzania. The data was collected from four regions Dar es Salaam, Dodoma, Mbeya, and Mwanza with a total sample size of 1,024 respondents. The objective was to identify which social groups face the greatest barriers to accessing public transport systems, thereby providing an evidence base for inclusive planning and service delivery improvements.

Table 20: Demographic Groups Facing Barriers to Public Transport Access

Region (N)	Disabled	Children	Elderly	Women	Others	Low-Income Individuals	Total Responses
Dar es Salaam (N=368)	27.97%	29.27%	22.53%	12.67%	2.88%	4.49%	100%
Dodoma (N=242)	42.98%	26.86%	26.86%	11.57%	14.46%	9.09%	100%
Mbeya (N=208)	50.48%	42.31%	34.62%	26.92%	22.60%	22.12%	100%
Mwanza (N=206)	51.94%	52.91%	41.26%	20.87%	21.84%	23.30%	100%
Total (N=1024)	50.88%	46.39%	37.70%	21.48%	14.45%	13.77%	100%

Pearson Chi-square (χ^2) = 282.3784 p-value = 0.0000

The results reveal that persons with disabilities (PWDs) are consistently identified across all four regions as the demographic group most affected by inadequate public transport access. Over 50% of respondents in each region cited PWDs as facing significant barriers, with the highest proportion recorded in Dar es Salaam (55.71%). This highlights persistent infrastructural and operational challenges in meeting the accessibility needs of disabled users, particularly in urban environments with high traffic volumes and limited adaptive infrastructure.

Children and the elderly were the next most frequently cited groups. Children were particularly affected in Dar es Salaam and Mwanza, each with over 50% of respondents indicating access challenges (57.88% and 52.91% respectively). This could be linked to overcrowding and unsafe boarding environments, which disproportionately affect young and vulnerable commuters. Similarly, the elderly population was noted by a substantial number of respondents, especially in Dar es Salaam (44.57%) and Mwanza (41.26%), suggesting that current systems may lack features such as priority seating, step-free access, or well-managed boarding procedures.

Women were less frequently reported as having access barriers compared to other groups, with an overall mention rate of 21.48%. However, regional differences are notable. In Dar es Salaam, 25.27% of respondents mentioned women, which may reflect challenges such as safety, harassment, and cultural norms in urban transit systems.

Low-income individuals and those categorized under “Others” which includes minority and marginalized groups not explicitly listed also showed significant regional variation. Their highest visibility was in Mwanza and Mbeya, where socio-economic disparities are more pronounced, and informal transport systems dominate the mobility landscape.

The chi-square result ($\chi^2 = 282.3784$, $p < 0.001$) indicates a statistically significant variation in the responses across the four regions. This confirms that perceptions of transport exclusion differ geographically, underscoring the importance of region-specific interventions to address localized barriers.

6.5.2 Rating of Transport Service Availability by Region

As part of the assessment of the availability of land transport services to diverse social groups, this section presents the regional distribution of user ratings on public transport service availability. The findings reflect the extent to which residents in different regions perceive the adequacy and quality of transport infrastructure and services in their localities. These ratings are essential for identifying disparities in regional planning, governance, and resource distribution that directly impact inclusiveness in land transport systems. Data were collected from 1,024 respondents across four regions Dar es Salaam, Mbeya, Dodoma, and Mwanza who were asked to rate the availability of transport services in their respective areas. Respondents rated the services on a five-point scale: Very Good, Good, Average, Poor, and Very Poor. The frequency and percentage distribution of their responses are summarized in Table 21 below.

Table 21: Regional Ratings of Transport Service Availability

Region	Very Good	Good	Average	Poor	Very Poor	Total
Dar Es Salaam	18 (4.89%)	70 (19.02%)	229 (62.23%)	41 (11.14%)	10 (2.72%)	368 (100%)
Mbeya	5 (2.07%)	77 (31.82%)	102 (42.15%)	44 (18.18%)	14 (5.79%)	242 (100%)
Dodoma	54 (25.96%)	74 (35.58%)	52 (25.00%)	23 (11.06%)	5 (2.40%)	208 (100%)
Mwanza	38 (18.45%)	65 (31.55%)	57 (27.67%)	35 (16.99%)	11 (5.34%)	206 (100%)
Total	115 (11.23%)	286 (27.93%)	440 (42.97%)	143 (13.96%)	40 (3.91%)	1024 (100%)

Pearson Chi-square (χ^2) = 170.35 p-value = 0.0000

The data reveal considerable regional disparities in perceived transport service availability. Dar es Salaam, despite being Tanzania's largest urban center with the most extensive transport network, had the highest proportion of respondents rating service availability as average (62.23%), and only a small percentage rated it as very good (4.89%). This suggests that while infrastructure exists, its reliability or reach may not be fully satisfactory, possibly due to congestion, inefficiencies, or maintenance issues.

Mbeya shows a moderately favorable perception, with 31.82% of respondents rating services as good, although a significant portion still rated availability as poor (18.18%) or very poor (5.79%). The relatively high ratings in Mbeya may reflect recent improvements in urban connectivity, although rural access remains an issue.

Dodoma, the administrative capital, stands out positively, with the highest share of very good (25.96%) and good (35.58%) ratings. This trend likely reflects the government's investment in infrastructure development due to its capital city status, including improved roads and regulated public transport.

Mwanza shows mixed ratings, with 31.55% indicating good and 18.45% very good, but also a notable share reporting poor or very poor service availability. These perceptions may reflect uneven service distribution, with urban zones better served than outlying districts.

The overall distribution shows that while 42.97% of respondents rated services as average, nearly 18% considered them poor or very poor, pointing to persistent gaps in availability and user satisfaction. The Chi-square test ($\chi^2 = 170.35$; $p < 0.001$) confirms that the differences in perception across regions are statistically significant, reinforcing the need for context-specific planning and interventions.

6.5.3 Age Groups Frequently Using Public Transport Services

As part of assessing the availability of land transport services to diverse social groups, it is essential to identify which age groups are the most frequent users of public transport systems across different regions. This section examines the regional distribution of transport usage across key age cohorts: children (under 18), young adults (18–35), middle-aged adults (36–55), and the elderly (56 and above). Understanding the age dynamics helps inform age-responsive policies and infrastructure interventions for Tanzania's land transport sector. The findings presented in Table 22 are drawn from observational and survey data collected across four regions Dar es Salaam, Mbeya, Dodoma, and Mwanza and reflect both usage patterns and perceptions related to the availability of transport services.

Table 22: Age Group Distribution of Public Transport Users by Region

Region (n)	Young Adults (18–35)	Middle-aged (36–55)	Children (<18)	Elderly (56+)	Total
Dar es Salaam (n=53)	29.55%	31.06%	21.21%	18.18%	100%
Mbeya (n=30)	33.33%	33.33%	13.33%	13.33%	100%
Dodoma (n=38)	42.11%	21.05%	15.79%	15.79%	100%
Mwanza (n=43)	30.09%	28.32%	22.12%	19.47%	100%
Total (n=164)	34.76%	30.27%	18.92%	16.06%	100%

Pearson Chi-square (χ^2) = 50.1162 *p*-value = 0.001

The results indicate that young adults aged 18–35 represent the largest proportion of public transport users across all surveyed regions. This age group is particularly dominant in Dodoma (42.11%), followed by Mbeya (33.33%), Mwanza (30.09%), and Dar es Salaam (29.55%). The overall total for young adult users stands at 34.76%, underscoring their central role in the commuting population, likely driven by their active participation in employment, education, and other social-economic activities that require regular travel. Middle-aged adults (36–55) also make up a substantial share of public transport users, especially in Mbeya and Dar es Salaam, where they account for 33.33% and 31.06% respectively. This suggests that in these urban and peri-urban centers, public transport is a key mobility solution for working professionals and caregivers. The lower proportion in Dodoma (21.05%) may reflect differences in employment structure or access to alternative means of transportation, such as motorcycles or private cars.

Children under 18 represent a smaller but still significant group of users, particularly in Mwanza (22.12%) and Dar es Salaam (21.21%). These figures may point to reliance on public transport for school commutes, especially in regions with limited school bus systems or where children travel independently. The lower representation in Mbeya (13.33%) and Dodoma (15.79%) could suggest greater parental accompaniment, shorter travel distances, or localized use of informal transit options. The elderly population (56+) constitutes the smallest share across all regions, with the highest percentages in Mwanza (19.47%) and Dar es Salaam (18.18%). The relatively lower use by seniors in Mbeya and Dodoma (both 13.33% and 15.79%) may be attributed to physical accessibility challenges, lack of age-friendly transport design, or cultural preferences for staying closer to home in older age.

Overall, the elderly account for 16.06% of total users, signaling the need for improved age-inclusive public transport planning. The Pearson Chi-square statistic ($\chi^2 = 50.1162$, $p = 0.001$) reveals that the observed age group distributions across regions are statistically significant, meaning these differences are unlikely to be due to chance. The variation suggests that age-related patterns of public transport use differ meaningfully by region, influenced by factors such as population structure, economic activity, infrastructure availability, and possibly social norms

6.5.4 Gender Distribution of Passengers

Table 23: Gender Distribution of Public Transport Passengers by Region provides insights into the perceived gender composition among passengers using public transport services. The findings indicate a generally balanced gender distribution across regions, with notable regional variations in gender-specific trends.

Table 23: Gender Distribution of Public Transport Passengers by Region

Region (n)	Mostly Male	Mostly Female	Equal Male and Female	Do Not Know	Total
Dar es Salaam (n=53)	5.70%	28.30%	62.30%	3.80%	100%
Mbeya (n=30)	10.00%	20.00%	70.00%	0.00%	100%
Dodoma (n=38)	13.20%	36.80%	50.00%	0.00%	100%
Mwanza (n=43)	7.00%	14.00%	79.10%	0.00%	100%
Total (n=164)	8.50%	25.00%	65.20%	1.20%	100%

Pearson Chi-square (χ^2) = 13.40 p-value = 0.1453

The results from Table 23 suggest that public transport systems across all surveyed regions are generally perceived to serve both men and women equally. This is evidenced by the high proportion of respondents selecting the category “Equal Male and Female”, with percentages ranging from 50.00% in Dodoma to as high as 79.10% in Mwanza. The overall total of 65.20% further supports the perception that gender parity exists in public transport use, at least from the perspective of passengers. Among the regions, Mbeya (70.00%) and Dar es Salaam (62.30%) also show strong responses indicating gender balance in transport use. These results could reflect more developed or formalized transport networks where both men and women feel equally accommodated or compelled to use public transit due to affordability and availability.

The “Do Not Know” category was largely negligible across all regions (1.20% overall), with only Dar es Salaam contributing to this count (3.80%). This indicates that most respondents had a clear perception of gender dynamics among public transport passengers. The Pearson Chi-square test result ($\chi^2 = 13.40$, $p = 0.1453$) suggests that the observed differences across regions are not statistically significant. The p-value exceeds the conventional threshold of 0.05, meaning we cannot reject the null hypothesis of no association between region and perceived gender distribution. In essence, regional differences in gender distribution of public transport users are not substantial enough to be considered statistically meaningful.

Observation results

6.5.5 Geographic Coverage

Observational findings on the spatial distribution of land transport services revealed significant regional variation in access to public transport in remote or rural areas. Among the 79 observation cases, 55 locations (approximately 69.6%) were reported as having accessible transport services, while 24 cases (30.4%) lacked adequate coverage. The region of Mwanza recorded the highest rate of transport availability (52.7% of the total “Yes” responses), indicating relatively strong connectivity even in non-urban settlements. In Dar es Salaam, 14 of 17 locations (82.3%) demonstrated accessibility; however, the remaining sites showed signs of urban sprawl where peri-urban communities were underserved. Mbeya and Dodoma had comparatively lower accessibility levels, particularly in areas situated on the urban fringe or in rural wards, where poor road infrastructure or irregular vehicle schedules were common challenges. Although the data demonstrated geographic variation, the Chi-square test ($\chi^2 = 3.83$, $p = 0.2803$) indicated that these differences were not statistically significant. This suggests that challenges in geographic accessibility may be moderately distributed across the regions and require cross-regional strategic attention.

6.5.6 Frequency and Reliability of Transport Services

The frequency and reliability of transport operations emerged as key indicators of service availability. Observations captured the extent to which services operated regularly (e.g., every 30 minutes), irregularly (e.g., once daily), or were considered unreliable (sporadic and inconsistent timing).

Out of 79 observed sites:

- 54 (68.35%) had regular service schedules.
- 21 (26.58%) operated on an irregular basis.
- 4 (5.06%) were identified as unreliable.

Dar es Salaam stood out with all 17 locations demonstrating regular service frequency, largely due to the high concentration of commuter routes and the presence of regulated systems like the Dar es Salaam Bus Rapid Transit (BRT). Mwanza also showed a strong presence of regular services (21 cases), but a notable portion of sites experienced irregular (16) and unreliable (3) schedules often in peri-urban areas. Mbeya and Dodoma presented a more mixed pattern, where vehicle availability varied considerably depending on the time of day and location. The Chi-square test for this dataset yielded a statistically significant result ($\chi^2 = 14.69$, $p = 0.0228$), confirming that differences in service frequency and reliability across the four regions are meaningful. This points to systemic challenges in scheduling and fleet management, particularly in less urbanized zones.

Qualitative Insights

To deepen the understanding of inclusiveness in Tanzania's land transport system, particularly in terms of service availability, the study conducted Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) across the four study regions: Dar es Salaam, Dodoma, Mbeya, and Mwanza. A total of 25 participants were engaged, comprising a diverse group that included:

- Public transport users (e.g. students, the elderly, persons with disabilities, women from low-income households)
- Service providers (conductors, drivers, ticketing officers)
- Local government officials (transport officers and ward-level urban planners)
- Community-based and cultural representatives (village elders, school administrators, religious leaders)

Theme 1: Gender Disparities in Transport Employment

A recurring theme across regions was the gender imbalance in employment, particularly within office-based or customer service roles. Respondents noted that women are rarely represented in transport service employment—particularly in visible, formalized roles such as ticketing officers, terminal supervisors, or dispatch staff.

“Office-related transport services rarely employ women as ticketing officers.” – Respondent 1, Female, Mbeya, Local CSO Representative on Women's Economic Rights

This insight reflects the broader gender exclusion not only in driving and conductorship, but also in administrative and public-facing functions within the transport system, indicating a need for affirmative hiring policies and workplace inclusivity initiatives.

Theme 2: Overcrowding and Scheduling Inefficiencies

Respondents, especially in Dar es Salaam and Dodoma, emphasized the severe overcrowding during peak hours, which particularly affects students, women, and informal workers. The lack of dedicated or scheduled services for high-demand areas like schools, markets, and health facilities results in passengers being left behind or forced to endure unsafe travel conditions.

“Students face severe challenges scrambling for buses during peak hours.” – Respondent 2, Male, Dar es Salaam, Secondary School Teacher

This concern was echoed in FGDs with caregivers and school administrators, who noted the absence of school-linked routes or flexible timings for youth commuters. The current system’s rigidity was widely perceived as neglecting the unique mobility needs of specific groups.

Theme 3: Inadequate Facilities for the Elderly and Persons with Disabilities

Service design and infrastructure also remain exclusionary toward the elderly and persons with disabilities. Respondents reported the absence of designated boarding areas, tactile markers, ramps, or proper seating at bus terminals—features critical for inclusive access.

“The lack of designated stops and boarding areas really limits access for older people and persons with disabilities.” – Respondent 4, Female, Mwanza, Public Health Worker and Disability Rights Advocate

This shortcoming was discussed frequently among community leaders, who highlighted the disconnect between policy intent and implementation, particularly in terminal and station design.

Theme 4: Limited-Service Hours and the Urban-Rural Divide

Another dominant theme was the inflexibility of service hours, which leaves many shift workers, market vendors, and emergency responders without reliable transport options in early mornings or late evenings.

“Limited transport options in rural areas exacerbate accessibility issues for marginalized communities.” – Respondent 5, Male, Dodoma, Rural Livelihoods Officer

Rural participants noted that some areas experience no public transport beyond daylight hours, and routes are often terminated due to profitability concerns. This highlights a pronounced urban-rural disparity in both transport coverage and service frequency.

6.6 Objective 6: To Assess Accessibility of Land Transport Services in Terms of Affordability, Distance, Physical State, and Cultural Aspect

6.6.1 Average Fare Per Route Segment (Tanzanian Shillings)

This section examines the cost of public transport services as a key dimension of accessibility. Affordability is a critical barrier for low-income groups, and high fares can significantly restrict access to education, employment, and healthcare especially for marginalized and vulnerable populations. Table 24: Average Fares Per Route Segment presents the distribution of transport fares as reported by respondents across surveyed regions. The data is categorized into three fare brackets: under TZS 1,000, TZS 1,000-2,000, and above TZS 2,000. The total number of observations for this analysis was 164.

Table 24: Average Fares Per Route Segment

Fare Range (TZS)	Frequency	Percentage (%)
Under 1,000	66	40.24
1,000–2,000	37	22.56
Over 2,000	61	37.2
Total	164	100

The findings reveal that the largest proportion of commuters (40.24%) pay less than TZS 1,000 per route segment, indicating that short-distance or highly subsidized routes remain common. However, a significant 37.20% of respondents reported paying more than TZS 2,000, reflecting cost disparities particularly in long-distance or underserved routes where demand exceeds supply or private providers dominate. About 22.56% of respondents fall within the middle fare range of TZS 1,000–2,000. These disparities suggest a need for equitable fare regulation and strategic subsidies to ensure that essential services remain affordable for lower-income and vulnerable populations. In addition, the data highlights the importance of region-specific pricing strategies that reflect both user capacity and operational costs.

6.6.2 Route Connectivity to Key Locations

Accessibility in public transport is not only a function of fare affordability but also of the availability of direct and reliable routes connecting key destinations such as schools, hospitals, markets, workplaces, and administrative centers. This section presents findings on whether existing land transport services in four surveyed regions Dar es Salaam, Dodoma, Mbeya, and Mwanza offer direct route connectivity to such essential locations.

Table 25: Regional Responses on Route Connectivity to Key Locations

Region	Yes	No	Total	Yes	No
Dar es Salaam	337	31	368	91.58%	8.42%
Mbeya	200	42	242	82.64%	17.36%
Dodoma	196	12	208	94.23%	5.77%
Mwanza	165	41	206	80.10%	19.90%
Total	898	126	1024	87.70%	12.30%

Pearson Chi-square (χ^2) = 30.11 p-value = 0.0000

The analysis reveals a high overall perception of adequate route connectivity, with 87.7% of respondents indicating that public transport systems in their regions provide routes to key locations. Dodoma recorded the highest level of satisfaction with 94.23% of respondents confirming the existence of such routes, followed closely by Dar es Salaam at 91.58%. This may be attributed to the planned urban infrastructure in Dodoma as the national capital, and the dense network coverage in Dar es Salaam.

In contrast, Mwanza (80.10%) and Mbeya (82.64%) exhibited lower levels of route connectivity, suggesting potential gaps in service coverage particularly in peri-urban and rural fringes. The relatively high percentage of negative responses in these two regions (19.90% in Mwanza and 17.36% in Mbeya) may reflect infrastructure limitations or the dominance of informal and unregulated transport services that do not consistently serve essential destinations. The Chi-square statistic ($\chi^2 = 30.11$; $p < 0.001$) confirms a statistically significant difference in perceived route connectivity across regions. This underscores the need for region-specific transport planning and infrastructure investment to improve access to vital services, especially in areas with underserved populations.

6.6.3 Frequency of Service Delays and Main Reasons

A key indicator of transport accessibility is the reliability and timeliness of services. Unpredictable or delayed public transport significantly impacts users' daily lives especially for time bound commitments such as commuting to work, school, healthcare appointments, or essential errands. This section presents quantitative data on the frequency of public transport service delays as reported by users across the study regions.

Table 26: Frequency of Service Delays

Frequency	Freq.	Percent
Daily	108	65.85%
Weekly	40	24.39%
Monthly	16	9.76%
Total	164	100.00%

The results show that daily service delays are alarmingly common, reported by nearly 66% of respondents. This frequency reflects chronic inefficiencies in the public transport network and has serious implications for productivity, safety, and public confidence in transport systems. A further 24.39% reported experiencing delays weekly, while only 9.76% indicated that delays occur monthly.

Main Reasons for Delays:

Reason	Frequency	Percent of Responses	Percent of Cases
Traffic congestion	90	33.58%	54.88%
Vehicle breakdowns	26	9.7%	15.85%
Road infrastructure	66	24.63%	40.24%
Passenger delays	56	20.9%	34.15%
Weather conditions	13	4.85%	7.93%
Other	17	6.34%	10.37%
Total	268	100%	163.41%

The most commonly cited reason for delays was traffic congestion (33.58%), particularly in urban areas like Dar es Salaam and Mwanza where peak-hour gridlock is prevalent. Poor road infrastructure (24.63%) such as unpaved routes, potholes, and lack of proper signage was another major cause of service interruptions, especially in peri-urban and rural parts of Mbeya and Dodoma. Passenger-related delays (20.9%) include late arrivals, excessive boarding time, and disputes between passengers and conductors. Vehicle breakdowns (9.7%) highlight the aging and poorly maintained transport fleet, often exacerbated by a lack of enforced safety and maintenance standards. A smaller proportion of delays was attributed to weather-related issues (4.85%) and miscellaneous factors categorized as “Other” (6.34%).

6.6.4 Perceived Socio-Economic Status of Regular Passengers

Understanding the socio-economic profile of public transport users is fundamental to evaluating the equity and inclusiveness of Tanzania’s land transport system. The data collected reflects respondents’ perceptions of the income groups that most frequently use public transport services across Dar es Salaam, Dodoma, Mbeya, and Mwanza. These insights help determine whether land transport systems are primarily used by low-income populations out of necessity or serve a more economically diverse user base.

Table 27: Socio-Economic Status Among Regular Public Transport Passengers

Socio-Economic Status	Frequency	Percent
Low Income	32	19.51%
Middle Income	77	46.95%
High Income	2	1.22%
Mixed	53	32.32%
Total	164	100.00%

The findings show that nearly 47% of respondents perceive middle-income earners as the primary users of public transport. This suggests that public transport in Tanzania remains a practical choice even for moderately affluent populations, likely due to cost efficiency, availability, and urban congestion mitigation. A significant portion of respondents (32.32%) classified passengers as belonging to a “Mixed” socio-economic group. This category refers to transport services that are regularly used by individuals across various income levels including low-, middle-, and, to a lesser extent, high-income earners. It indicates that public transport in some regions is not exclusive to a particular economic class but rather serves a diverse user base, functioning as a shared system for students, workers, entrepreneurs, and service professionals alike.

This inclusive pattern suggests that public transport can act as a social equalizer, promoting interaction among people from different socio-economic backgrounds and enhancing overall access to urban opportunities. Conversely, low-income groups were reported in 19.51% of responses as the main users, reaffirming the critical importance of maintaining affordable fare structures to prevent mobility exclusion. High-income users represented only 1.22%, highlighting a prevailing preference for private transport among wealthier individuals possibly driven by expectations of greater comfort, convenience, or personal security. These insights reinforce the need for inclusive transport planning, ensuring systems are safe, affordable, and accessible for all socio-economic groups, particularly those for whom public transport is not just a convenience, but a necessity.

6.6.5 Barriers Preventing Access to Services

This section explores the perceived barriers that hinder access to land transport services among diverse populations in four key regions of Tanzania Dar es Salaam, Dodoma, Mbeya, and Mwanza. Understanding these barriers is essential for ensuring equitable transport access, particularly for vulnerable groups such as women, persons with disabilities, the elderly, and residents of remote or culturally underserved communities. The analysis draws attention not only to general perceptions of access limitations but also delves into specific structural and socio-cultural factors, including distance to transport stops, the physical condition of vehicles and infrastructure, and cultural sensitivities in service design.

Table 28: Regional Distribution of Barriers Preventing Access to Transport Services

Region	Yes	No	Total	Yes	No
Dar es Salaam	23	30	53	43.40%	56.60%
Mbeya	12	18	30	40.00%	60.00%
Dodoma	22	16	38	57.89%	42.11%
Mwanza	19	24	43	44.19%	55.81%
Total	76	88	164	46.34%	53.66%

Pearson Chi-square (χ^2) = 2.79 p-value = 0.4251

The data reveals that 46.34% of respondents across all regions acknowledged experiencing barriers that prevent or restrict access to transport services. While these barriers were reported in all regions, they appear to be highly context-specific, shaped by geography, infrastructure, culture, and socioeconomic dynamics.

- Dodoma reported the highest proportion (57.89%) of respondents identifying access barriers, despite being Tanzania's administrative capital. This may reflect infrastructural limitations in peri-urban and rural areas surrounding the city, including long distances between transport hubs and residential areas and the limited availability of vehicles in peak hours.
- Mbeya, in contrast, had the lowest proportion (40%) of reported barriers. This suggests a relatively more accessible system in the region, potentially due to compact settlement patterns, lower population density, or ongoing investments in urban mobility infrastructure.
- Dar es Salaam (43.40%) and Mwanza (44.19%) showed moderate levels of perceived barriers, which may be linked to urban congestion, vehicle overloading, or the physical deterioration of road and terminal infrastructure.

Impact of Distance, Physical State, and Cultural Aspects

In line with the study's objective to assess accessibility through various dimensions, qualitative findings and field observations revealed that:

- Distance to transport stops remains a major challenge, particularly in peri-urban and rural areas. Many passengers must walk long distances often exceeding one kilometer to reach the nearest public transport point. This is especially burdensome for the elderly, pregnant women, and persons with disabilities, who face mobility limitations and require closer or door-to-door services.
- The physical condition of transport vehicles and infrastructure was repeatedly highlighted as a deterrent to access. Numerous respondents reported encountering poorly maintained vehicles, absence of priority seating, and dilapidated boarding platforms. In some instances, broken ramps, high steps, and lack of signage made it virtually impossible for wheelchair users or visually impaired individuals to use public transport safely.
- Cultural aspects also presented barriers, particularly for women and individuals from conservative communities. In FGDs, some women cited discomfort with mixed-gender seating arrangements, lack of gender-sensitive facilities at terminals, and harassment or verbal abuse in crowded transport settings as recurring issues. These factors discourage women, especially from rural and traditional communities, from using public transport services altogether.

Observation result:

This section presents the results of field observations conducted in four regions Dar es Salaam, Dodoma, Mbeya, and Mwanza to evaluate how land transport services meet the accessibility needs of diverse social groups. Observations focused on four critical dimensions of accessibility: affordability, distance to the nearest stop, physical condition of vehicles, and cultural appropriateness of services. These factors are particularly important for marginalized users such as persons with disabilities, the elderly, women, and low-income earners.

1. Affordability

Affordability remains a major concern for low-income individuals, especially students, elderly persons, and informal sector workers who rely heavily on public transport. As observed, 57% of sites confirmed that fares were considered affordable for low-income passengers.

- Mwanza recorded the highest percentage of affordability concerns, with 70.59% of observations indicating that fares were not affordable.
- In contrast, Dar es Salaam showed the highest rate of perceived affordability (82.4% “Yes”).
- Mbeya and Dodoma had more balanced feedback, though affordability still varied based on income levels and route lengths.

2. Distance to Nearest Transport Stop

Distance from a passenger’s residence to the nearest transport stop affects daily accessibility, particularly for those with limited mobility. Observational data showed:

- 51 out of 79 sites (64.56%) were located within 500 meters of a transport stop.
- However, in Mbeya, 37.5% of locations observed had stops located more than 1 km away, posing a serious challenge to users in remote areas.
- Dodoma had the most compact access, with all observation points within 500 meters of a stop.

4. Cultural Accessibility

Cultural barriers can deter specific groups, especially women, from using public transport. These barriers include mixed-gender seating, verbal harassment, and lack of gender-sensitive infrastructure. Observations indicated:

- Only 9 out of 79 sites (11.39%) had services catering to cultural or gender-specific needs.
- Dar es Salaam and Dodoma were the only regions with relatively positive indicators in this area (44.44% each).
- Mbeya and Mwanza showed minimal to no provision for cultural accessibility.

Qualitative Insights

The findings are based on Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) conducted across four regions Dar es Salaam, Dodoma, Mbeya, and Mwanza. The sample included 24 participants, drawn from diverse and relevant stakeholder groups such as:

- Public transport users (persons with disabilities, the elderly, informal traders)
- Local government officials (municipal transport planners and ward officers)
- Transport operators (conductors, minibuss drivers)
- Community and civil society leaders (advocates for disability rights, women's organizations, and village committee members)

Theme 1: Affordability as a Barrier to Access

Across all regions, the cost of transport emerged as a major impediment to mobility, especially for persons with disabilities and low-income earners. Fare prices were seen as disproportionately high for those with limited economic capacity, while additional fees were often imposed arbitrarily.

“Transport costs are a significant challenge for persons with disabilities who struggle to earn a living.” – Respondent 2, Female, Mbeya, Disability Rights Advocate

“Cost issues are worsened by conductors overcharging passengers carrying luggage.” – Respondent 3, Male, Dar es Salaam, Informal Trader

These responses highlight that affordability is not only linked to fare pricing but also to exploitative practices by transport operators, such as overcharging individuals perceived to be vulnerable or dependent on public transport. Women and traders carrying goods reported frequent harassment and fare inflation.

Theme 2: Distance to Stops and Accessibility for Physically Impaired Users

A second major concern was the physical inaccessibility of transport access points, particularly for elderly passengers and people with mobility challenges. Long walking distances, poor road surfaces, and the absence of rest areas made it difficult for these users to reach bus stops or terminals.

“Long walking distances to access transport stops are a barrier for elderly passengers and those with physical impairments.” – Respondent 7, Male, Mwanza, Community Health Officer

This issue is intensified in peri-urban and rural areas, where bus routes are sparse and informal stops are unregulated and often located far from residential areas or health facilities.

Theme 3: Infrastructure Gaps and Weather-Related Disruptions

Inadequate infrastructure ranging from unpaved roads to the absence of ramps or sheltered terminals was repeatedly cited as a key factor limiting access to public transport. These gaps are particularly problematic during seasonal weather events, which disrupt access entirely.

“There is no infrastructure for persons with disabilities, such as roads or transport facilities.”
– Respondent 6, Male, Mbeya, Ward Council Member

“Heavy rains make unpaved roads inaccessible for many users.” – Respondent 5, Female, Dodoma, Teacher and Rural Advocate

Respondents from both urban and rural areas emphasized that without weather-resilient roads and inclusive infrastructure, large segments of the population especially in outlying regions remain effectively cut off from essential services during certain times of the year.

Theme 4: Social Inclusion and Cultural Perceptions

While physical and economic barriers were emphasized, most respondents did not identify cultural stigma as a major barrier to inclusion in public transport. In fact, some reported a positive shift in attitudes toward persons with disabilities, with communities showing more openness and basic accommodations at the community level.

“We don’t face cultural stigma; persons with disabilities are accommodated.” – Respondent 4, Male, Dar es Salaam, Religious Leader and Community Elder

However, this cultural progress has not been institutionalized into formal planning or operations. Many participants noted that goodwill alone is not sufficient without structured policies that protect rights and ensure dignity for marginalized groups.

6.7 Objective : To assess the national legal and policy framework in addressing diversity and inclusion in land transport

This section presents a comprehensive assessment of Tanzania's national legal and policy framework with regard to its effectiveness in promoting diversity, equity, and inclusion in land transport systems. The objective responds directly to the overarching question: To what extent do existing laws and policies in Tanzania address and enforce inclusion for marginalized and vulnerable populations within the land transport sector? The analysis is grounded in a dual-method approach, combining primary policy document analysis with qualitative insights from key informants and community representatives. The evaluation draws on a thorough review of major legal instruments and national policy documents, including the Persons with Disabilities Act No. 9 of 2010, National Transport Policy (2003), Road Traffic Act (Revised 2002), FYDP III (2021/22–2025/26), and the Tanzania Railway Master Plan (2015–2045). In parallel, data were triangulated with findings from 26 Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) conducted across Dar es Salaam, Dodoma, Mbeya, and Mwanza. Participants included:

- Public transport users (particularly persons with disabilities, women, elderly individuals, students)
- Local government officials and transport regulators
- Operators and workers (drivers, conductors, terminal staff)
- Civil society actors and legal advocates for disability and social inclusion

6.7.1 Policy Framework Review and Legal Gaps

A. Persons with Disabilities Act No. 9 of 2010

This Act is Tanzania's most comprehensive legislation addressing accessibility and inclusion. Key provisions relevant to the transport sector include:

A. Persons with Disabilities Act No. 9 of 2010

This Act is Tanzania's most comprehensive legislation addressing accessibility and inclusion. Key provisions relevant to the transport sector include:

- Section 24(1)(a): Requires the government to ensure that public transport systems are physically accessible to persons with disabilities, including boarding areas and vehicles.
- Section 31: Imposes a duty on all public service providers, including those in the transport sector, to make reasonable accommodations for persons with disabilities.
- Section 35: Requires service providers to train personnel to appropriately assist persons with disabilities and eliminate barriers to service access.

Despite the legal clarity and intent of these provisions, the findings from fieldwork reveal widespread non-compliance and ineffective enforcement. Most public transport terminals assessed during the study lacked basic accessibility infrastructure such as ramps, tactile paving, audio announcements, or priority seating.

“Transport service providers fail to meet standards because they ignore the provisions outlined in this Act.” – Respondent 2, Disability Rights Advocate, Mbeya

Additionally, Section 35, which requires training of service providers, is systematically ignored. None of the bus or railway operators interviewed had received any form of inclusivity training.

“There is no enforcement of the Act, so operators don’t take it seriously.” – Respondent 6, Municipal Transport Official, Dodoma

B. National Transport Policy (2003)

While this policy promotes equitable access to transport services in general terms, it lacks specific operational guidelines or indicators for monitoring inclusivity for vulnerable groups. It does not reference disability-inclusive infrastructure, gender-responsive transport design, or the regulatory mandates required to implement these features.

C. Road Traffic Act (Revised 2002)

The Road Traffic Act is primarily safety-oriented and contains no references to accessibility, non-discrimination, or mandatory service standards for vulnerable users. Its silence on diversity concerns is a significant policy gap, especially considering the prevalence of road-based transport as the main mobility mode for low-income and marginalized groups.

D. FYDP III and the Human Settlements Development Policy

The current national development plan (FYDP III) references inclusive urban growth and “leaving no one behind” but offers no practical roadmap or financial allocation to improve transport accessibility. The Human Settlements Policy (2000) similarly recognizes the role of transport but lacks a rights-based approach to mobility.

E. Tanzania Railway Master Plan (2015–2045)

While the railway master plan contains language promoting modernization and network expansion, it does not embed inclusivity requirements into infrastructure or service planning. No disability-specific standards are articulated in terms of platform design, boarding assistance, or train configurations.

6.7.2 Implementation and Enforcement Deficiencies

Despite a robust legislative framework, Tanzania's transport sector faces acute implementation failures. Many of the existing legal provisions remain aspirational rather than actionable, due to the absence of structured enforcement mechanisms, regulatory follow-through, and operational accountability. The disability-accessible restrooms at Dar es Salaam's main terminal were cited by respondents as rare exceptions, not a norm replicated across other urban or rural stations. Respondents confirmed that regulatory inspections are irregular, and there are no penalties or follow-up measures when service providers fail to comply.

"The lack of legal enforcement mechanisms undermines efforts to create an inclusive transport system." – Respondent 6, Dodoma, Government Officer

This failure undermines both the legal credibility and practical impact of Tanzania's disability and inclusion laws.

6.7.3 Public Awareness and Legal Literacy

A recurrent theme across regions was the limited awareness of legal rights and obligations. Many transport service providers were unaware of the provisions in the Disability Act or the National Transport Policy. Consequently, discriminatory or neglectful practices go unchallenged.

"Awareness campaigns are essential to educate both operators and passengers about the rights of marginalized groups, particularly persons with disabilities." – Respondent 4, CSO Representative, Dar es Salaam

Stakeholders emphasized that awareness alone is insufficient—it must be linked to regulatory enforcement and sanctions.

"Awareness must be complemented by clear penalties for noncompliance, ensuring that inclusivity is not just a recommendation but a requirement." – Respondent 7, Mwanza, Legal Specialist

Reported incidents of exclusion and discrimination—such as operators refusing to assist disabled passengers or forcing women to stand for long trips—underscore the urgency of embedding legal literacy and mandatory operator training into licensing and certification systems.

6.7.4 Institutional Recommendations and Integration into National Planning

Stakeholders consistently called for the mainstreaming of inclusion into broader national governance frameworks and sector strategies. Key recommendations included:

- Establishing independent oversight bodies to monitor transport inclusivity and address grievances
- Conducting annual accessibility audits of public transport infrastructure, using a standardized inclusion scorecard
- Incorporating inclusive transport targets into FYDP III, local government plans, and the annual national budget
- Developing a National Action Plan for Inclusive Transport, which sets out measurable goals, responsibilities, timelines, and indicators

“We need a roadmap that clearly defines responsibilities, timelines, and measurable outcomes for implementing inclusivity in land transport.” – Respondent 3, Mwanza, Policy Advisor

Such a plan would align Tanzania’s commitments with Sustainable Development Goal (SDG) 11, which prioritizes inclusive, safe, resilient, and sustainable cities and human settlements.

6.8 Objective 8: To point out regulatory gaps in the provision of land transport services for diverse groups

This section provides an in-depth analysis of the existing regulatory gaps that continue to hinder the equitable delivery of land transport services to diverse social groups in Tanzania. Despite the presence of legal frameworks and national strategies that articulate inclusive development goals, implementation remains inconsistent and fragmented. The assessment aims to uncover the root causes of these gaps by combining qualitative field insights with policy document review, in alignment with the approved methodology. The primary objective here is to evaluate whether Tanzania’s regulatory environment effectively supports the mobility needs of vulnerable populations particularly persons with disabilities (PWDs), elderly individuals, women, children, and low-income commuters and to identify specific policy and operational weaknesses that require urgent reform.

6.8.1 Data Sources and Analytical Framework

To ensure both breadth and depth in understanding, this analysis integrates findings from:

1. Primary qualitative data gathered from 26 respondents via Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) conducted in Dar es Salaam, Dodoma, Mbeya, and Mwanza. Participants included:
 - o Public transport users from marginalized communities (e.g., PWDs, elderly persons, women)
 - o Frontline workers in the transport sector (drivers, conductors, terminal managers)

- o Government officials (municipal and regional transport officers)
- o Legal professionals and representatives from CSOs advocating for transport equity

2. Documentary review of key legal and regulatory instruments including:

- o Persons with Disabilities Act No. 9 of 2010
- o National Transport Policy (2003)
- o Road Traffic Act (Revised 2002)
- o FYDP III (2021/22–2025/26)
- o Tanzania Railway Master Plan (2015–2045)

6.8.2 Key Regulatory Gaps Identified

6.8.2.1 Limited Stakeholder Engagement in Policy Formulation

One of the most prominent regulatory weaknesses identified is the limited involvement of key stakeholders in the formulation of transport-related policies and regulations. While policy documents such as the National Transport Policy (2003) broadly call for inclusivity, they lack specific mechanisms for participatory policymaking, especially with groups directly affected by daily transport operations.

“Policy formulation often involves only a few stakeholders, excluding key players like drivers and transport operators.” – Cultural Representative, Mwanza

“For policies to be effective, they must be informed by the lived experiences of those directly involved in transport services and those who rely on them.” – Respondent 5, Civil Society Leader, Dar es Salaam

As a result, many policies are not grounded in practical realities, reducing their relevance, legitimacy, and effectiveness in driving sector-wide reforms.

6.8.2.2 Absence of Targeted Guidelines for Marginalized Groups

A critical regulatory gap lies in the lack of specific, enforceable service delivery standards tailored to the needs of vulnerable groups. Although the Persons with Disabilities Act No. 9 of 2010 affirms the right to accessible transport (e.g., Section 24), it does not offer implementation protocols or technical guidelines to assist operators in meeting accessibility standards.

“There are no clear guidelines on how operators should cater to persons with disabilities, leaving it up to individual discretion.” – Respondent 7, Legal Advocate, Dodoma

“Without clear standards, transport providers have no incentive to invest in accessible facilities or training, leaving vulnerable groups excluded.” – Respondent 8, Transport Operator, Dar es Salaam

The absence of legally binding specifications leads to inconsistencies in service delivery, particularly in rural areas, where facilities for PWDs, women, and the elderly are virtually non-existent. Furthermore, there is no legal requirement for gender-sensitive or child-friendly transport design in the Road Traffic Act or sectoral guidelines.

6.8.2.3 Weak Enforcement Mechanisms

The enforcement of existing laws and policies remains inadequate. Even where sound legislation exists such as the Disability Act and the FYDP III implementation is compromised by the absence of enforcement agencies, lack of regulatory inspections, and vague penalty structures for noncompliance.

“Enforcement mechanisms are weak, with no clear penalties for operators who fail to comply with existing standards.” – Respondent 2, Regional Officer, Dodoma

“There’s a significant gap in monitoring and enforcement. We need inspectors on the ground to ensure compliance and hold violators accountable.” – Respondent 6, Local Government Officer, Mbeya

This regulatory vacuum allows widespread noncompliance by transport service providers, undermining public trust in the transport system and perpetuating exclusion.

6.8.2.4 Inadequate Training and Capacity Building

The review found no national training curriculum or certification requirement that ensures transport workers are equipped to serve diverse users. Neither the Disability Act, Road Traffic Act, nor the National Transport Policy mandate training in disability etiquette, gender sensitivity, or customer care.

“There are insufficient training programs for transport workers, which means they lack the knowledge and skills to serve diverse groups effectively.” – Respondent 3, Disability Advocate, Dodoma

“Mandatory training and certification programs for transport operators could significantly improve service delivery and foster a culture of inclusivity.” – Respondent 4, Terminal Manager, Mwanza

The result is a workforce that is ill-prepared to recognize and accommodate the unique needs of persons with disabilities, pregnant women, elderly passengers, and others who require considerate service provision.

6.8.3.2 Enhance Stakeholder Engagement

To ensure regulatory relevance, inclusivity must be embedded in the process of policy design itself. Respondents recommended institutionalizing stakeholder consultations, especially with drivers, passengers, civil society, and advocacy groups.

“Engaging drivers, operators, and civil society organizations during policy formulation is essential to ensure that policies are practical and inclusive.” – Respondent 5, CSO Leader, Dar es Salaam

Mechanisms could include:

- Annual stakeholder roundtables
- Regional consultation forums
- Participatory reviews of strategic transport plans

6.8.3.3 Strengthen Enforcement and Accountability

The government should enact clear enforcement protocols, including defined penalties for noncompliance, routine inspections, and public reporting mechanisms.

“Introduce clear penalties for noncompliance and establish dedicated teams to monitor and enforce standards. – Respondent 2, Dodoma

Moreover, grievance mechanisms should be introduced at the municipal level to allow users to report violations and receive redress in a timely and transparent manner.

6.8.3.4 Implement Mandatory Training and Certification

Mandatory training and certification should be introduced for all licensed transport workers. Training content must be:

- Context-specific (urban and rural variations)
- Delivered through certified institutions
- Regularly updated to reflect emerging needs

“Regular training and certification programs can equip transport workers with the skills to serve diverse groups effectively.” – Respondent 4, Mwanza

6.8.3.5 Promote Public Awareness and Rights Education

Finally, stakeholders highlighted the need to empower citizens by increasing awareness of their legal rights to inclusive transport. Awareness campaigns should target both service providers and passengers.

“Public awareness campaigns can empower passengers to demand their rights and hold operators accountable.” – Respondent 7, Dar es Salaam

6.9 Objective 9: Identifying Key Stakeholders in Addressing Access to Land Transport Services by Diverse Groups

This section examines the constellation of key stakeholders involved in ensuring equitable access to land transport services in Tanzania. It draws from rich qualitative data gathered across four major regions Dar es Salaam, Dodoma, Mbeya, and Mwanza and highlights the interdependent roles of government institutions, private sector actors, civil society organizations (CSOs), development partners, community leaders, and passengers themselves. The findings point to the necessity of a multi-sectoral and collaborative approach to create a transport system that is inclusive, accessible, and responsive to the diverse needs of Tanzania’s population. The findings presented in this section are based on 26 Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) conducted with a cross-section of stakeholders in the target regions. The sample included:

- Government officials, including municipal transport officers and urban planners, responsible for local transport regulation and policy oversight
- Public transport service providers, such as minibus (daladala) drivers, conductors, and fleet managers
- Representatives from Civil Society Organizations (CSOs), including disability rights groups and women’s advocacy organizations
- Community leaders and cultural representatives, serving as influential intermediaries between citizens and service providers
- Passengers from vulnerable and marginalized groups, including persons with disabilities (PWDs), elderly individuals, women, and students
- Development partner focal points, involved in infrastructure development and capacity-building programs

Data were analyzed using NVivo qualitative software, allowing the team to identify thematic patterns and stakeholder-specific roles from both narrative content and cross-regional comparisons.

6.9.1 Identified Stakeholders and Their Roles

A. Government Agencies and Regulatory Authorities

Across all regions, government agencies were consistently identified as the primary enablers of inclusive transport. Their responsibilities extend from the development and enforcement of policy frameworks to the allocation of resources and monitoring of service standards. In Dar es Salaam, respondents underscored the need for proactive state leadership in overseeing inclusive infrastructure development.

“The government must lead efforts to improve transport services while involving private entities and individuals, ensuring everyone’s needs are addressed.” – Government Official, Dar es Salaam

Despite existing frameworks like the Disability Act No. 9 of 2010, gaps in enforcement and coordination remain prevalent, particularly at local levels. Participants called for greater government accountability, better inter-agency collaboration, and structured monitoring mechanisms to ensure compliance with inclusive transport provisions.

B. Community Leaders and Grassroots Advocates

In Mwanza and Mbeya, the role of community leaders emerged as central to bottom-up advocacy. These actors were recognized as critical links between policymakers and communities, particularly in areas where formal systems are weak or non-existent.

“Community leaders should also be involved in advocacy for better transport services, especially for vulnerable groups like women and persons with disabilities.” – Respondent 4, Community Leader, Mwanza

Community leaders are uniquely positioned to identify local barriers, organize outreach activities, and mobilize collective action at the grassroots level. Participants emphasized the need to formally integrate these stakeholders into local transport planning and feedback loops.

C. Private Transport Operators

In all study regions, private operators were acknowledged as frontline actors who directly shape the user experience. However, stakeholders in Dodoma noted that these operators often lack guidance and oversight, resulting in inconsistent service delivery and exclusion of vulnerable groups.

“Private operators must recognize the business case for inclusivity – it’s not just a moral obligation but also an opportunity to expand their customer base.” – Respondent 3, Transport Manager, Dodoma

Participants emphasized that while many operators are willing to adapt, the absence of incentives, regulations, or training undermines the sector’s potential to contribute meaningfully to inclusive mobility. Stakeholders advocated for public-private collaboration, formalization of training programs, and the integration of social responsibility into licensing frameworks.

D. Civil Society Organizations (CSOs)

Particularly in Mbeya and Dodoma, CSOs were described as watchdogs and facilitators who help translate legal rights into practice. They play a crucial role in amplifying the voices of marginalized groups, conducting research, and holding both public and private actors accountable.

“Civil society organizations act as the voice of marginalized groups, ensuring their needs are not overlooked and pushing for accountability from both the government and private operators.” – Respondent 7, CSO Representative, Mbeya

Stakeholders advocated for stronger partnerships between CSOs and transport regulators, suggesting that CSOs should be routinely consulted in policymaking, monitoring, and grievance redress mechanisms.

E. Development Partners and International Organizations

The involvement of development partners and international agencies was also highlighted, particularly with regard to infrastructure financing, technical assistance, and policy harmonization with international norms.

“Development partners and international organizations could provide technical and financial support to improve transport infrastructure and services.” – Respondent 2, Urban Planner, Dar es Salaam

Their role in knowledge transfer and institutional capacity-building was viewed as critical, especially in supporting long-term infrastructure investments and embedding global good practices in transport reform.

F. Passengers and User Communities

Finally, passengers themselves were repeatedly identified as both beneficiaries and agents of change. Their role extends beyond passive ridership; passengers are the end users whose needs, experiences, and feedback should shape service design and policy reform.

“Feedback from users is essential to identify gaps and inform policy decisions, but many users are unaware of their rights or feel their voices will not be heard.” – Respondent 1, Passenger, Dodoma

This underscores the urgent need to strengthen legal literacy, user representation, and accessible feedback mechanisms – such as helplines, mobile apps, or user councils.

6.9.2 Mechanisms for Collaboration and Coordination

Respondents across regions emphasized that inclusivity in transport cannot be achieved in silos. Effective governance requires institutionalized coordination among all stakeholder groups. Recommendations included:

- Formation of multi-stakeholder transport committees at national and regional levels
- Public-private partnerships (PPPs) to co-finance infrastructure upgrades in underserved regions
- Real-time communication platforms (e.g., mobile applications or SMS systems) to collect user feedback and report service gaps
- Community dialogues and town halls to ensure inclusive consultations and localized problem-solving

“Coordination mechanisms must be established to ensure that stakeholders work together efficiently and hold each other accountable.” – Respondent 6, Local Government Officer, Mwanza

Based on field evidence and stakeholder narratives, each identified stakeholder plays a unique and interdependent role in promoting or hindering access to inclusive land transport services. Their influence is exercised through policy leadership, service delivery, advocacy, capacity building, and user participation.

Table 29: Roles and Influence of Key Stakeholders in Promoting Inclusive Access to Land Transport Services

Stakeholder	Primary Role	Influence on Promoting Access
Government agencies	Policy design, regulation, infrastructure planning, oversight	Create and enforce inclusive laws and allocate funding for accessible infrastructure. Their commitment is crucial for national implementation and accountability (e.g., Disability Act No. 9 of 2010).
Local government and municipal councils	Local enforcement, permits, fleet monitoring, community engagement	Direct influence on route planning, fare control, and terminal management. Their action (or inaction) significantly affects day-to-day access in urban and peri-urban settings.
Private transport operators	Daily service delivery	Frontline providers who determine user experience. Their decisions on route coverage, vehicle modifications (e.g., ramps), and fare fairness directly shape access for PWDs, women, and elderly users.
Community leaders	Advocacy, mediation, grassroots coordination	Influence local norms, mobilize marginalized groups, and bridge community needs with policy discussions. Their inclusion ensures culturally responsive and equitable planning.
Civil Society Organizations (CSOs)	Watchdogs, legal advocacy, awareness campaigns	Serve as accountability agents pushing for enforcement of legal standards. They empower citizens to claim rights and help monitor service delivery for inclusivity gaps.
Development partners and donors	Technical and financial support, policy advising	Enable large-scale infrastructure upgrades and bring global good practices into national strategies. Influence direction of reforms through conditional funding or pilot programs.
Passengers and user groups	End-users, informants, evaluators	Provide vital feedback on accessibility gaps. Their usage patterns, complaints, and collective voice (when mobilized) shape service adaptation and policy responsiveness.

“Each group has a role to play from policy to practice. Operators deliver service, but if government doesn’t enforce the rules, it doesn’t work. And if users don’t speak up, the gaps remain invisible.” – Respondent 5, Civil Society Leader, Mbeya

These roles are not static; they must be continuously supported through coordination frameworks, inclusive decision-making spaces, and targeted capacity-building to amplify their positive influence on access for all users.

6.10 Objective 10: To conduct an in-depth assessment of the status of road and railway public transport systems in meeting the needs of diverse groups.

6.10.1 Reliability of Public Transport Services

Table 30: Frequency of Arrival for Public Transport Services presents data on the punctuality of public transport systems across four regions, revealing significant regional disparities in service reliability.

Table 30: Frequency of Arrival for Public Transport Services

Region (n)	Always on Time	Frequently on Time	Sometimes on Time	Rarely on Time	Never on Time	Total
Dar es Salaam (n=368)	15.80%	13.00%	19.00%	46.70%	5.40%	100%
Mbeya (n=242)	37.20%	14.90%	13.20%	22.70%	12.00%	100%
Dodoma (n=208)	36.10%	26.00%	9.60%	26.90%	1.40%	100%
Mwanza (n=206)	35.00%	21.80%	13.60%	25.20%	4.40%	100%
Total (n=1,024)	28.80%	17.90%	14.60%	32.70%	6.00%	100%

Pearson Chi-square (χ^2) =116.55 *p-value* =0.0001

The results reveal significant regional disparities in the reliability of public transport service arrival times, with Dar es Salaam performing notably worse compared to other regions. In Dar es Salaam, only 15.80% of respondents indicated that public transport is always on time, the lowest among the four regions. Nearly half of the respondents (46.70%) reported that services are rarely on time, and an additional 5.40% stated they are never on time. These findings highlight persistent challenges in the city’s transport operations, likely due to severe traffic congestion, uncoordinated scheduling, and overburdened infrastructure characteristic of large metropolitan areas.

In contrast, Mbeya, Dodoma, and Mwanza show much higher levels of perceived reliability. Mbeya leads in punctuality, with 37.20% of respondents stating that services are always on time, and 14.90% saying they are frequently on time. Dodoma follows closely, with 36.10% and 26.00% of users indicating that services are always and frequently on time, respectively resulting in a combined 62.10% reporting consistent arrival times. Mwanza similarly performs well, with 35.00% of users selecting always on time and *21.80% selecting frequently on time, suggesting a relatively well-managed public transport system.

Despite generally better outcomes, these regions are not without concerns. For instance, Mbeya has the highest percentage of respondents (12.00%) who reported that transport is never on time a figure that may reflect underserved routes or informal transit services with inconsistent scheduling. Dodoma (26.90%) and Mwanza (25.20%) also have notable shares of users reporting that services are rarely on time, indicating that even in better-performing regions, punctuality challenges persist.

Looking at the national-level data (N=1,024), only 28.80% of respondents' overall report that public transport is always on time, with 17.90% stating frequently on time. However, 32.70% believe services are rarely on time, and 6.00% report never on time. These figures suggest that while a portion of users experiences dependable service, a significant number face unpredictable or delayed public transport, undermining commuter confidence and affecting the reliability of daily travel.

The Pearson Chi-square result ($\chi^2 = 116.55$, $p < 0.001$) indicates that these differences across regions are statistically significant. The very low p-value confirms that the variation in perceptions of service punctuality is not due to random chance and that regional context plays a critical role in shaping the commuter experience.

6.10.2 Impact of Fare Adjustments on Passenger Demand

Table 31: Perceived Impact of Fare Adjustments on Passenger Demand examines regional variations in how fare changes influence public transport usage, highlighting diverse responses across Tanzania.

Table 31: Perceived Impact of Fare Adjustments on Passenger Demand

Region (n)	Increase Demand with Lower Fares	No Change in Demand	Decrease Demand with Higher Fares	Total
Dar es Salaam (n=53)	32.10%	52.80%	15.10%	100%
Mbeya (n=30)	53.30%	33.30%	13.30%	100%
Dodoma (n=38)	31.60%	34.20%	34.20%	100%
Mwanza (n=43)	41.90%	46.50%	11.60%	100%
Total (n=164)	38.40%	43.30%	18.30%	100%

Pearson Chi-square (χ^2) = 12.52 p-value = 0.0513

The results indicate mixed perceptions across regions regarding how fare adjustments influence public transport demand. Nationally, the majority of respondents believe fare changes have an impact: 38.40% expect increased demand with lower fares, while 18.30% anticipate decreased demand with higher fares. However, a considerable portion (43.30%) perceive that fare changes will result in no significant change in demand, suggesting that other factors such as service quality, accessibility, and reliability may weigh more heavily in user decisions. Regionally, Mbeya stands out, with 53.30% of respondents asserting that lower fares would increase demand, the highest among all regions. This strong sentiment could reflect the region's greater price sensitivity, likely tied to the socio-economic profile of commuters who may depend more heavily on affordable transport options. Conversely, only 33.30% in Mbeya believe that demand would remain unchanged, and 13.30% anticipate a drop with higher fares.

In Dar es Salaam, a majority (52.80%) feel that fare adjustments would result in no change in demand. Only 32.10% believe lower fares would boost demand, and 15.10% expect demand to fall if fares rise. This may indicate a perception of inelastic demand, where commuters rely heavily on public transport regardless of cost possibly due to limited alternatives or severe congestion that makes private transport impractical. Dodoma presents a more divided view: 34.20% foresee decreased demand with higher fares, while 31.60% believe lower fares would increase demand, and another 34.20% expect no change. These relatively even splits suggest a highly variable commuter base, with differing sensitivities to pricing likely based on income, trip frequency, and access to alternative transport.

Mwanza shows a more optimistic view of fare reductions, with 41.90% saying that lower fares would increase demand and only 11.60% expecting demand to fall with fare hikes. A relatively high 46.50% still expect no change, suggesting that while fares are important, service consistency and accessibility may be equally or more influential for users in this region. The Pearson Chi-square test ($\chi^2 = 12.52$, $p = 0.0513$) yields a p-value slightly above the standard significance threshold (0.05), suggesting that regional differences in perceived fare impact are marginally non-significant. While the data show regional variation in attitudes, statistically, we cannot confidently reject the null hypothesis of no association between region and fare impact perceptions. However, the near-threshold p-value indicates that there may be subtle but meaningful differences that warrant further exploration, particularly in regions with clear trends like Mbeya.

6.10.3 Satisfaction with Cleanliness of Public Transport Vehicles

Table 32 presents an analysis of passenger satisfaction with the cleanliness of public transport vehicles across four key regions: Dar es Salaam, Mbeya, Dodoma, and Mwanza. The data highlights notable regional differences in satisfaction levels, reflecting varying standards of service quality and maintenance practices. While Dodoma stands out with high satisfaction rates, regions like Dar es Salaam exhibit significant dissatisfaction and neutrality, pointing to areas requiring immediate attention. This section explores the disparities in cleanliness perceptions and their implications for service delivery, emphasizing the need for targeted interventions to enhance passenger experiences and promote equitable service quality.

Region (n)	Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied	Total
Dar es Salaam (n=368)	2.70%	13.00%	54.60%	22.00%	7.60%	100%
Mbeya (n=242)	2.90%	33.10%	27.70%	29.30%	7.00%	100%
Dodoma (n=208)	27.90%	21.60%	21.20%	24.50%	4.80%	100%
Mwanza (n=206)	6.80%	26.70%	27.70%	26.70%	12.10%	100%
Total (n=1,024)	8.70%	22.30%	36.00%	25.20%	7.80%	100%

Pearson Chi-square (χ^2) = 209.69 p-value = 0.0001

The results reveal significant variation in user satisfaction with the cleanliness of public transport vehicles across different regions, reflecting contrasting standards of hygiene, maintenance, and service delivery. At the national level, only 8.70% of respondents reported being very satisfied, and *22.30% stated they were satisfied with cleanliness. In contrast, a combined 33.00% expressed dissatisfaction (25.20% dissatisfied and 7.80% very dissatisfied), while the largest share (36.00%) remained neutral. These figures suggest that cleanliness is a moderate to major concern among public transport users, with relatively few passengers reporting high levels of satisfaction.

Regionally, Dodoma stands out with the highest satisfaction levels, where 27.90% of respondents indicated being very satisfied and another *21.60% reported being satisfied. This means nearly half the respondents in Dodoma (49.50%) express a positive view of cleanliness far surpassing other regions.

These results may reflect better-maintained fleets, stricter hygiene enforcement, or newer vehicles in use within the city's public transport system.

In contrast, Dar es Salaam reports the lowest satisfaction levels, with only 2.70% very satisfied and 13.00% satisfied, while over 29.60% express dissatisfaction, and a striking 54.60% remain neutral. The high neutrality rate could reflect low expectations or resignation to poor conditions, especially in a highly congested and overburdened urban transport network. The data points to substantial room for improvement in cleanliness standards in Dar es Salaam.

Mbeya presents a more mixed picture, with 33.10% satisfied and 2.90% very satisfied, while 29.30% expressed dissatisfaction. The large neutral group (27.70%) may indicate inconsistent service quality, with some routes or operators performing better than others. Mwanza shows the highest level of very dissatisfied respondents (12.10%), and a combined 38.80% expressing dissatisfaction. Only 6.80% are very satisfied, while 26.70% are satisfied, reflecting a polarized experience some passengers find the service acceptable, while a significant portion are highly dissatisfied. This could indicate variable standards across routes or operators, or a lack of enforcement of cleaning protocols.

The Pearson Chi-square test result ($\chi^2 = 209.69$, $p < 0.001$) confirms that the differences in satisfaction levels across regions are statistically significant. The very low p-value indicates that these variations are unlikely to be due to chance, and that region-specific factors strongly influence perceptions of cleanliness. These findings suggest an urgent need to improve hygiene and cleanliness standards, particularly in Dar es Salaam and Mwanza, where user dissatisfaction is most pronounced. Dodoma may serve as a benchmark, and practices from its transport operators could inform improvements elsewhere. To boost overall satisfaction, national and local transport authorities should establish minimum cleanliness guidelines, monitor compliance, and incentivize better maintenance practices.

6.10.4 Behavior of Transport Staff

The behavior of transport staff plays a critical role in shaping passenger satisfaction and the overall quality of public transport services. Understanding regional variations in professionalism and conduct is essential to identify areas for improvement and to develop strategies that enhance customer experiences. Table 33 provides an in-depth analysis of respondents' perceptions of transport staff behavior across key regions in Tanzania, highlighting disparities in professionalism and levels of service delivery. The analysis aims to guide targeted interventions that address gaps in staff training and behavioral management, fostering a more reliable and passenger-friendly transport system.

Table 33: Perceptions of Transport Staff Behavior

Region (n)	Very Professional	Professional	Neutral	Unprofessional	Very Unprofessional	Total
Dar es Salaam (n=368)	1.10%	9.50%	56.00%	25.30%	8.20%	100%
Mbeya (n=242)	1.20%	16.50%	40.10%	33.90%	8.30%	100%
Dodoma (n=208)	22.60%	14.40%	31.70%	22.10%	9.10%	100%
Mwanza (n=206)	1.00%	9.20%	42.70%	28.60%	18.40%	100%
Total (n=1,024)	5.50%	12.10%	44.60%	27.30%	10.40%	100%

Pearson Chi-square (χ^2) =190.47 p-value =0.0001

The results show a broad divergence in passenger perceptions of the professionalism of public transport staff across regions, with a generally low level of satisfaction nationally. Across all respondents, only 5.50% described transport staff as very professional and *12.10% as professional, totaling just 17.60% with a positive perception. In contrast, a concerning 27.30% rated staff as unprofessional, and *10.40% as very unprofessional, while 44.60% of respondents remained neutral. These figures point to a widespread issue with staff conduct or inconsistent customer service, contributing to overall dissatisfaction and undermining commuter trust.

Regionally, Dodoma stands out with the most favorable perception, where 22.60% of respondents rated staff as very professional the highest across all region and an additional *14.40% rated them as professional. This combined 37.00% approval rate suggests that Dodoma's transport workforce may benefit from stronger training, monitoring, or recruitment practices that emphasize professionalism and customer care. Neutral ratings were also lower here than in other regions (31.70%), while dissatisfaction was moderate (22.10% unprofessional, 9.10% very unprofessional).

By contrast, Dar es Salaam exhibits consistently negative perceptions, with only 1.10% very professional and 9.50% professional, totaling just 10.60% positive ratings. The majority (56.00%) were neutral, and a significant 33.50% of respondents rated staff behavior as unprofessional or very unprofessional. This likely reflects overburdened services, staff burnout, poor customer engagement training, or lack of accountability in a high-volume transit system.

Mbeya follows a similar trend, with relatively low ratings for very professional (1.20%) and professional (16.50%) staff behavior. Dissatisfaction was higher than average, with 33.90% unprofessional and 8.30% very unprofessional ratings. The 40.10% neutral score may suggest inconsistency in staff behavior, where some operators provide acceptable service while others fall short.

Mwanza reflects the highest level of negative sentiment, with 18.40% of respondents labeling staff as very unprofessional – more than twice the national average. Combined with 28.60% unprofessional ratings, over 47.00% of passengers in Mwanza have negative perceptions of staff conduct. Despite 42.70% remaining neutral, the extremely low scores for very professional (1.00%) and professional (9.20%) indicate a serious customer service issue, potentially linked to a lack of oversight, informal employment practices, or poor training.

The Pearson Chi-square result ($\chi^2 = 190.47$, $p < 0.001$) confirms that regional differences in perceptions of staff behavior are statistically significant. The very low p-value indicates that the variation in ratings is not due to chance, and that region-specific dynamics such as staffing structures, operator professionalism, and commuter-staff interactions meaningfully influence public perception. These findings suggest an urgent need to invest in transport staff professionalism across most regions, particularly in Mwanza, Mbeya, and Dar es Salaam. Dodoma may serve as a model, where effective human resource practices appear to be in place. Interventions should include mandatory customer service training, staff performance monitoring, and clear codes of conduct, supported by feedback mechanisms and responsive complaint resolution systems to enhance rider experience and restore public confidence.

6.10.5 Experience of Safety Issues During Transport Journeys

The figure 11 presents the regional distribution of respondents' experiences with safety issues during public transport journeys, highlighting significant differences across regions. Overall, 48.7% of respondents reported encountering safety issues, while 51.3% indicated no such experiences. Dar es Salaam recorded the highest proportion of safety concerns (30.5%), reflecting the challenges of maintaining safety in a densely populated and high-traffic urban area. Mbeya (22.0%) and Dodoma (22.7%) reported lower levels of safety issues, suggesting comparatively safer conditions in these regions. Mwanza, with 24.9% of respondents indicating safety concerns, falls in the mid-range. These findings underscore the critical need for targeted safety improvements across regions to enhance commuter confidence and ensure secure travel experiences



Figure 11: Regional Distribution of Experiences with Safety Issues

The experience of safety issues during transport journeys is a critical indicator of the quality and reliability of public transport services. Ensuring passenger safety is essential to fostering trust in the transport system and improving overall user satisfaction. Figure 11 presents data on respondents' experiences of safety issues across four key regions in Tanzania, highlighting regional disparities and areas for improvement. The findings reveal that 48.7% of respondents have encountered safety issues during their journeys, with Dar es Salaam (30.5%) and Mwanza (24.9%) reporting the highest prevalence. These concerns may stem from factors such as overcrowding, insufficient safety measures, poor road conditions, and limited enforcement of safety regulations. Conversely, 51.3% of respondents report no safety issues, with Mbeya (25.1%) and Dodoma (18.1%) showing relatively lower incidences, suggesting better safety management in these regions. The Pearson chi-square test ($\chi^2 = 22.61$, $p < 0.0001$) indicates a statistically significant association between regions and experiences of safety issues. These results underscore the need for targeted safety interventions, including stricter regulation enforcement, infrastructure improvements, and public awareness campaigns. Prioritizing safety enhancements in regions like Dar es Salaam and Mwanza could significantly improve user confidence and the overall quality of public transport services.

6.10.6 Experience of Challenges Faced by Women and Vulnerable Groups in Accessing Transport Services

The table 34 explores regional perceptions of the challenges faced by women and vulnerable groups in accessing public transport services. It highlights the variability in experiences across regions and provides insights into areas where improvements may be needed.

While a notable proportion of respondents believe that women and vulnerable groups do not face significant challenges, many others acknowledge the presence of some or significant barriers, particularly in certain regions. These challenges may include issues related to safety, affordability, accessibility, and cultural or systemic biases within the transport system. A smaller proportion of respondents expressed uncertainty, reflecting gaps in awareness or understanding of these issues. The findings emphasize the importance of targeted interventions and inclusive policies to ensure equitable access to public transport services for all users.

Table 34: Experience of Challenges Faced by Women and Vulnerable Groups in Accessing Transport Services

Region (n)	No Challenges	Some Challenges	Significant Challenges	Don't Know	Not Sure	Total
Dar es Salaam (n=53)	28.30%	37.70%	20.80%	3.80%	9.40%	100%
Mbeya (n=30)	40.00%	33.30%	13.30%	13.30%	0.00%	100%
Dodoma (n=38)	26.30%	44.70%	21.10%	5.30%	2.60%	100%
Mwanza (n=43)	46.50%	20.90%	18.60%	7.00%	7.00%	100%
Total (n=164)	34.80%	34.10%	18.90%	6.70%	5.50%	100%

Pearson Chi-square (χ^2) = 14.35 p-value = 0.2787

The results highlight mixed regional perceptions regarding the extent of challenges faced by women and vulnerable groups in accessing public transport services. Nationally, only 34.80% of respondents indicated that no challenges exist, while 34.10% reported some challenges, and 18.90% identified significant challenges. The remaining 12.20% were either unsure or did not know. These findings suggest that while many passengers acknowledge the existence of barriers, there is a lack of consensus on their severity, and perhaps limited awareness or visibility of the lived experiences of affected groups. Mbeya recorded the highest proportion of respondents (40.00%) stating that women and vulnerable groups face no challenges, with 33.30% reporting some challenges and only 13.30% indicating significant challenges. Notably, 13.30% of Mbeya respondents selected “Don’t Know”, potentially reflecting a gap in awareness or visibility of the issue, possibly due to underreporting or lack of targeted public discourse on transport equity.

Dodoma presents the highest proportion of respondents (44.70%) identifying some challenges, with an additional 21.10% acknowledging significant challenges. Together, these represent a combined 65.80%, suggesting that Dodoma residents are more attuned to access difficulties faced by marginalized groups, possibly reflecting a more engaged civic dialogue or better recognition of transport inequities. Only 26.30% reported no challenges, one of the lowest among all regions. Despite these regional differences, the Pearson Chi-square test result ($\chi^2 = 14.35$, $p = 0.2787$) indicates that the observed variations are not statistically significant at the conventional 0.05 threshold. The relatively high p-value suggests that regional differences in perceptions do not vary in a statistically meaningful way, and that perceptions about challenges faced by women and vulnerable groups are broadly similar across the surveyed regions. These findings underscore the need for systematic assessments of barriers to transport access for women and vulnerable populations, as perceived challenges may not always reflect actual experiences. While some regions, like Mwanza and Mbeya, appear more optimistic, this could mask underlying issues not widely acknowledged. Dar es Salaam and Dodoma, with higher reported challenge levels, may benefit from targeted policy interventions, including gender-sensitive planning, awareness campaigns, and inclusive service design.

6.10.7 Measures to Ensure Safety and Comfort for Women and Vulnerable Groups

The figure 12 outlines the measures implemented across regions to enhance safety and comfort for women and vulnerable groups in public transport systems. These measures reflect efforts to address the unique challenges faced by these groups and include initiatives such as priority seating, escorts/extra security, separate boarding areas, and other targeted interventions. The distribution of responses highlights regional variations in the adoption and effectiveness of these measures. While some regions report significant efforts to improve safety and comfort, others reveal gaps that require further attention. The findings emphasize the importance of regionally tailored strategies to create a more inclusive and secure public transport environment for all users.

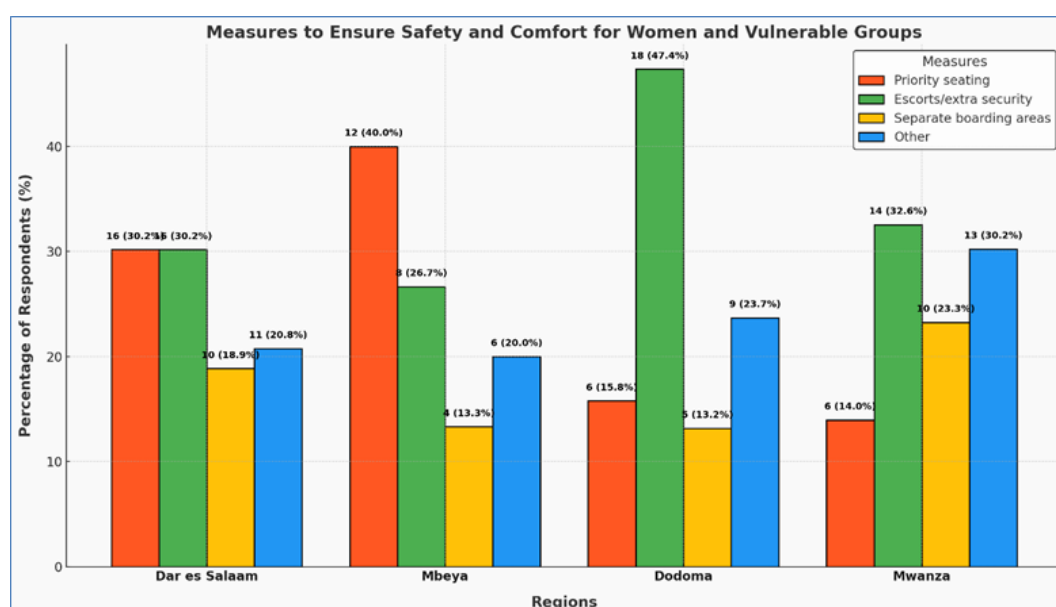


Figure 12: Measures to Ensure Safety and Comfort for Women and Vulnerable Groups

The analysis highlights varied regional strategies aimed at improving safety and comfort for women and vulnerable groups using public transport. The most frequently implemented measure is escorts or extra security, reported by 34.1% of respondents, with Dodoma demonstrating the highest implementation (47.4%). This suggests a regional focus on enhancing physical safety through active security measures. Priority seating accounts for 24.4% of measures, with Mbeya leading in its application (40.0%). This indicates an emphasis on ensuring comfort and accessibility for vulnerable passengers. However, separate boarding areas, reported by 17.7%, are less commonly implemented, with Mwanza showing a relatively higher adoption rate (23.3%).

The “Other” category (23.8%) includes additional, region-specific interventions such as designated transport times for vulnerable groups or specialized services. Mwanza reports the highest percentage in this category (30.2%), reflecting efforts to address unique local challenges. Despite the diverse measures, the Pearson chi-square test ($\chi^2 = 12.21$, $p = 0.2018$) indicates no statistically significant association between regions and the measures implemented. This suggests that while regional differences in strategy exist, these measures are not consistently associated with specific geographic or demographic contexts. The findings underline the need for a standardized, nationwide approach to ensuring the safety and comfort of women and vulnerable groups. Strategies such as expanding the implementation of priority seating, ensuring separate boarding areas, and enhancing security measures across all regions could promote inclusivity and equitable access to transport services.

6.10.8 Feedback from Female Passengers or Vulnerable Groups on Safety Concerns

This table highlights regional variations in feedback received from female passengers and vulnerable groups regarding safety concerns in public transport. While Dar es Salaam and Dodoma report higher levels of feedback, suggesting either greater safety challenges or better reporting systems, Mbeya and Mwanza show significantly lower feedback rates. The majority of respondents indicate no feedback received, pointing to gaps in communication channels or reporting culture. The findings emphasize the need for improved mechanisms to capture and address safety concerns across regions.

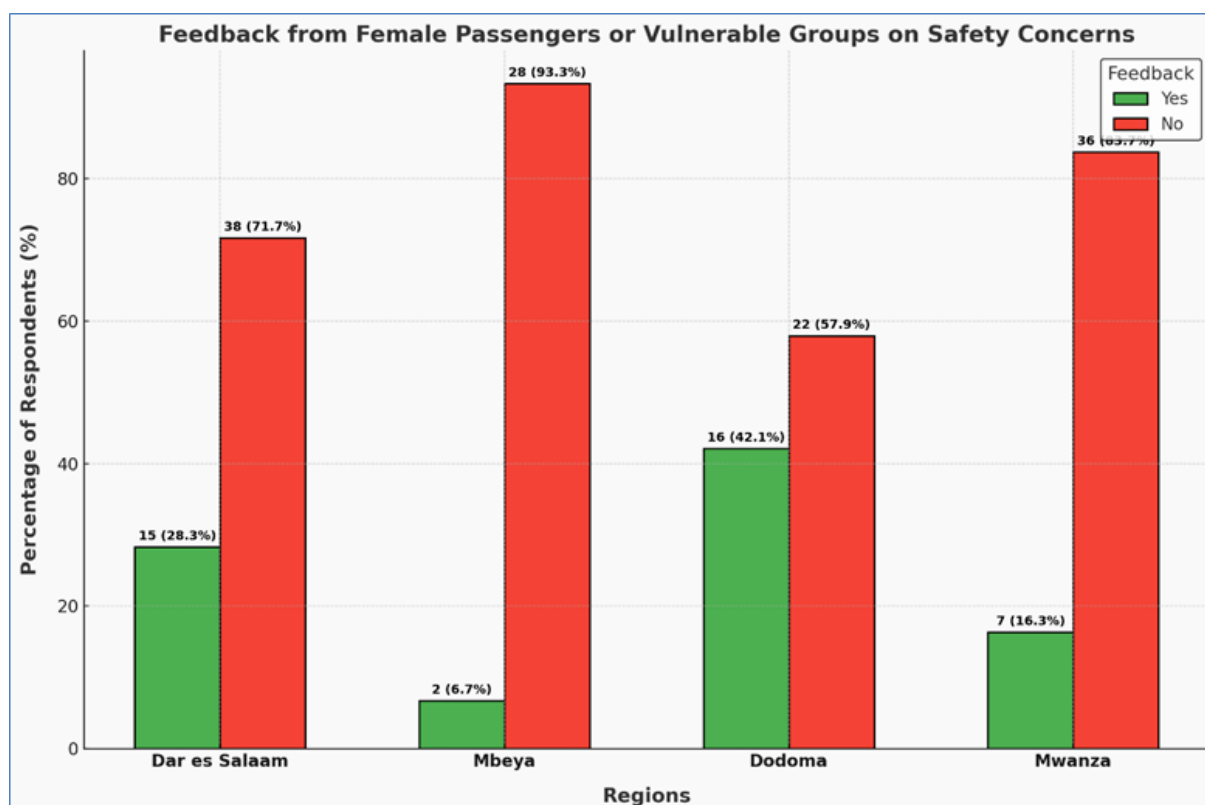


Figure 13: Feedback from Female Passengers or Vulnerable Groups on Safety Concerns

The data highlights significant regional disparities in feedback received from female passengers and vulnerable groups regarding safety concerns in public transport. Regions such as Dar es Salaam (28.3%) and Dodoma (42.1%) report higher levels of feedback, suggesting either a greater prevalence of safety challenges or more effective reporting systems. Conversely, Mbeya (6.7%) and Mwanza (16.3%) demonstrate significantly lower feedback rates, which may indicate fewer reported safety issues or limited access to reporting mechanisms. Notably, a majority (75.6%) of respondents across all regions report no feedback received, highlighting critical gaps in communication channels or a lack of a robust reporting culture. The Pearson chi-square test ($\chi^2 = 13.55$, $p = 0.0036$) confirms a statistically significant association between regions and feedback levels, emphasizing the need for targeted interventions to bridge these gaps. Establishing dedicated reporting channels, raising awareness about the importance of voicing safety concerns, and training transport staff to facilitate feedback collection could enhance reporting practices in regions like Mbeya and Mwanza. In areas such as Dar es Salaam and Dodoma, where feedback is more frequent, the focus should shift to addressing reported concerns through actionable measures, ensuring a safer and more inclusive public transport experience for all users.

6.10.9 Specific Concerns Mentioned

Table 35: Specific Concerns Mentioned Regarding Public Transport provides a breakdown of the key issues raised by respondents about public transport services across the four regions.

The table highlights the prevalence of concerns such as physical safety, comfort, lack of priority seating, and other issues, offering insights into regional variations and priorities for improvement. These findings emphasize the critical need for targeted interventions to address the diverse challenges faced by public transport users.

Table 35: Specific Concerns Mentioned Regarding Public Transport

Region (n = respondents mentioning concerns)	Physical Safety	Comfort (Overcrowding)	Lack of Priority Seating	Other	Total
Dar es Salaam (n=15)	53.30%	13.30%	6.70%	26.70%	100%
Mbeya (n=2)	50.00%	0.00%	0.00%	50.00%	100%
Dodoma (n=16)	56.30%	18.80%	18.80%	6.30%	100%
Mwanza (n=7)	14.30%	57.10%	28.60%	0.00%	100%
Total (n=40)	47.50%	22.50%	15.00%	15.00%	100%

Pearson Chi-square (χ^2) = 13.70 p-value = 0.1333

The results reveal that physical safety is the most commonly cited concern among public transport users, with 47.5% of respondents across all regions indicating it as a major issue. This concern is especially prevalent in Dodoma (56.3%), Dar es Salaam (53.3%), and Mbeya (50.0%), suggesting widespread anxiety over safety conditions during public transport use. These safety concerns may stem from factors such as unsafe boarding procedures, reckless driving, inadequate enforcement of traffic laws, or exposure to harassment and theft during commutes.

Concerns regarding comfort, primarily due to overcrowding, are also notable, particularly in Mwanza, where 57.1% of respondents identified it as a key issue. This suggests that public transport systems in Mwanza may be operating beyond capacity, leading to uncomfortable, and potentially unsafe, travel conditions. In contrast, this issue was less prominent in other regions, possibly due to less congested systems or lower usage intensity. The lack of priority seating was identified by 15.0% of all respondents, with Mwanza (28.6%) and Dodoma (18.8%) reporting the highest concern in this area. This highlights the absence or ineffective implementation of inclusive seating arrangements for vulnerable groups such as the elderly, pregnant women, and persons with disabilities. The issue is less prominent in Dar es Salaam and not reported at all in Mbeya, though this may be due to the small sample size.

The “Other” category accounted for 15.0% of concerns, most notably in Mbeya (50.0%) and Dar es Salaam (26.7%). These unspecified issues could include service delays, fare inconsistencies, staff behavior, or inadequate route coverage, all of which merit further qualitative investigation to understand user needs more comprehensively. Although the Pearson Chi-square result ($\chi^2 = 13.70$, $p = 0.1333$) indicates no statistically significant difference across regions, the distribution of concerns still reflects meaningful patterns that can inform targeted interventions.

6.10.10 Efforts to Make Transport Services More Inclusive for People with Special Needs

Figure 14: Efforts to Make Transport Services More Inclusive for People with Special Needs provides an overview of regional perceptions regarding initiatives by transport companies to accommodate individuals with special needs. The table highlights significant regional disparities in inclusivity efforts, with a minority of respondents acknowledging improvements. These findings underscore the need for targeted strategies to enhance accessibility and inclusivity, particularly in regions where perceived efforts are minimal.

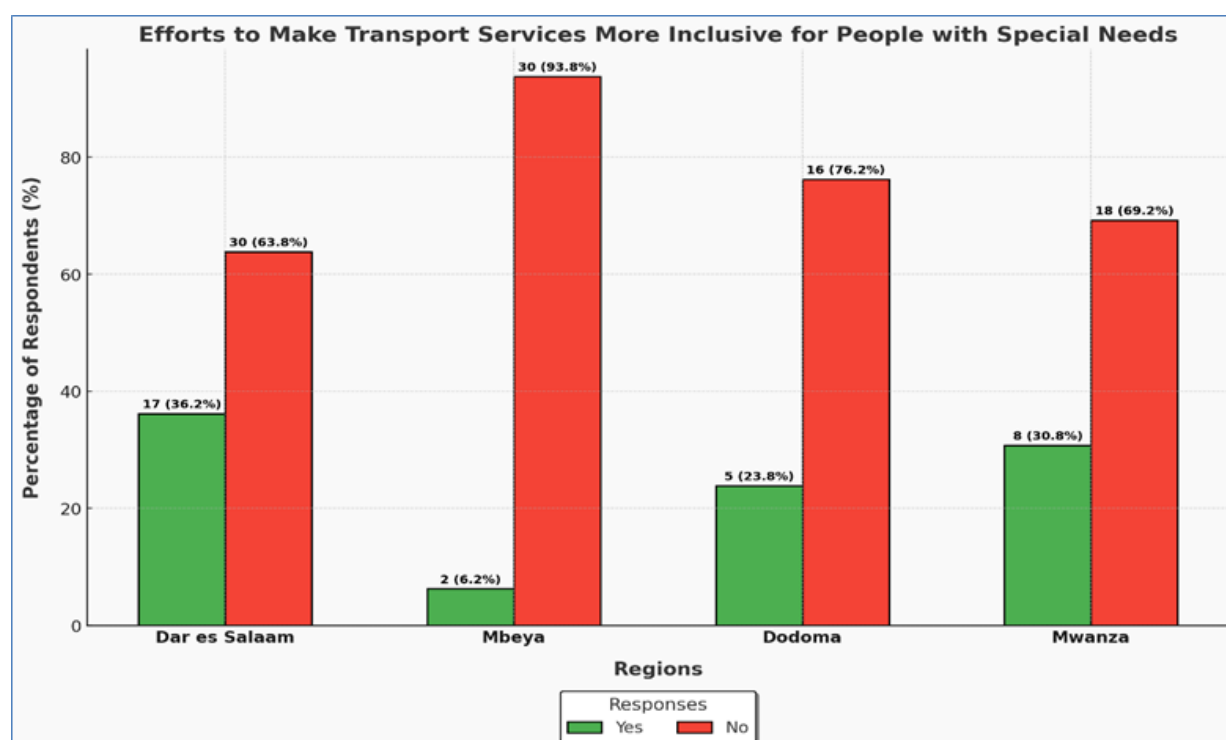


Figure 14: Efforts to Make Transport Services More Inclusive for People with Special Needs

The data reveals that only a quarter (25.4%) of respondents believe transport companies have made specific efforts to make their services more inclusive for people with special needs. Dar Es Salaam (36.2%) and Mwanza (30.8%) report higher perceived inclusivity efforts, potentially reflecting targeted initiatives or improved awareness. Conversely, Mbeya reports the lowest inclusivity perception (6.3%), indicating a critical need for improvement. The majority of respondents (74.6%) indicate no noticeable inclusivity efforts, with particularly high percentages in Mbeya (93.8%) and Dodoma (76.2%). These figures suggest substantial gaps in the accessibility and inclusivity of transport services. The Pearson chi-square test yielded a value of 9.49 with a p-value of 0.0234, indicating a statistically significant association between regions and perceptions of inclusivity efforts by transport companies.

6.10.11 Safety Measures Essential for People with Special Needs

Table 36: Safety Measures Essential for People with Special Needs presents insights into the specific safety measures deemed critical by respondents to improve the inclusivity and safety of public transport services for individuals with special needs. The data highlights the prioritization of staff training in disability awareness (52.4%) and emergency evacuation procedures (42.1%) as the most essential measures across regions. Other considerations, such as clearly marked reserved seating, accessible entry/exit points, and safety belts, reflect the diverse needs of passengers and emphasize the importance of comprehensive safety protocols to enhance accessibility and security for all users.

Table 36: Safety Measures Essential for People with Special Needs

Safety Measure (n)	Dar es Salaam	Mbeya	Dodoma	Mwanza	Total (n)
Staff trained in disability awareness (n=66)	39.40%	21.20%	18.20%	21.20%	100%
Emergency evacuation procedures (n=53)	37.70%	26.40%	11.30%	24.50%	100%
Clearly marked reserved seating (n=41)	41.50%	24.40%	12.20%	22.00%	100%
Accessible entry/exit points (n=39)	48.70%	12.80%	2.60%	35.90%	100%
Safety belts or restraint systems (n=27)	63.00%	7.40%	3.70%	25.90%	100%
Other (n=10)	20.00%	10.00%	50.00%	20.00%	100%

The results reveal that public transport users consider a range of safety measures essential for supporting people with special needs, with notable regional differences in emphasis. Across all categories, Dar es Salaam consistently recorded the highest percentages, suggesting that respondents in the capital have a greater awareness of or demand for specialized safety provisions in public transport. The most widely cited measure overall was staff training in disability awareness, with 39.40% of mentions coming from Dar es Salaam. This highlights the importance of equipping public transport personnel with the skills and knowledge to support passengers with special needs. Mbeya (21.20%), Mwanza (21.20%), and Dodoma (18.20%) also identified this as a key requirement, though to a lesser extent, indicating a relatively shared recognition across regions. Emergency evacuation procedures were cited primarily by Dar es Salaam respondents (37.70%), followed by Mbeya (26.40%) and Mwanza (24.50%). These figures suggest a moderate concern for preparedness in emergencies, particularly in congested urban areas. Dodoma (11.30%), however, had a much lower proportion, pointing to either lower awareness of evacuation needs or a perception of reduced risk.

Clearly marked reserved seating was another commonly recommended measure, with the highest number of mentions again from Dar es Salaam (41.50%), followed by Mbeya (24.40%), and Mwanza (22.00%). Dodoma (12.20%) showed relatively less concern for this measure, possibly reflecting infrastructure limitations or gaps in enforcement.

Accessible entry and exit points were emphasized most strongly in Dar es Salaam (48.70%) and Mwanza (35.90%), where physical barriers in transport infrastructure may be more prominent. Mbeya (12.80%) and Dodoma (2.60%) recorded notably lower mentions, pointing to either fewer accessibility challenges or limited public discussion of mobility needs for persons with disabilities in these areas.

The provision of safety belts or restraint systems was the most disproportionately cited by Dar es Salaam (63.00%), indicating high concern for personal safety and accident prevention. Mwanza followed distantly at 25.90%, while Mbeya (7.40%) and Dodoma (3.70%) contributed minimally to this category, perhaps reflecting lower expectations of this safety feature in existing transport options. Under the “Other” category, Dodoma (50.00%) contributed the highest share of responses, suggesting that residents may be prioritizing alternative or more localized safety concerns that were not explicitly listed in the survey. This could include needs such as visual or audio navigation aids, ramp installations, or caregiver support systems. Dar es Salaam, Mwanza, and Mbeya reported smaller shares in this category (20.00%, 20.00%, and 10.00% respectively).

These findings emphasize the need for a comprehensive, multi-dimensional safety approach for passengers with special needs, especially in Dar es Salaam and Mwanza, where demand for such measures appears highest. The emphasis on staff training, emergency preparedness, reserved seating, and physical accessibility aligns with global best practices for inclusive transport design.

Efforts should be made to standardize and institutionalize these safety measures across all regions, while also allowing context-specific customization. Particularly in Dodoma and Mbeya where awareness may be lower public education campaigns and stakeholder engagement could help elevate the visibility and priority of special needs safety features in public transport planning.

6.10.12 Discrimination and Unfair Treatment Experienced by People with Special Needs

Table 37: Discrimination and Unfair Treatment Experienced by People with Special Needs provides an overview of the frequency of discriminatory practices and unfair treatment reported by individuals with various special needs. The data captures the prevalence of such experiences, ranging from those who have never faced discrimination to those encountering it frequently or always. While a significant portion of respondents (45.2%) report no experiences of discrimination, the findings underscore that many individuals, particularly those with physical disabilities and elderly individuals, face occasional or frequent challenges. This highlights the need for inclusive policies and practices to address and mitigate discrimination within public transport systems.

Table 37: Discrimination and Unfair Treatment Experienced by People with Special Needs

Group (n)	Never	Occasionally	Frequently	Always	Total
People with Physical Disabilities (n=60)	33.30%	41.70%	23.30%	1.70%	100%
People with Visual Impairments (n=10)	20.00%	70.00%	10.00%	0.00%	100%
People with Hearing Impairments (n=1)	0.00%	100.00%	0.00%	0.00%	100%
People with Intellectual Disabilities (n=1)	0.00%	0.00%	100.00%	0.00%	100%
Elderly Individuals (n=28)	75.00%	14.30%	10.70%	0.00%	100%
Pregnant Women (n=15)	53.30%	33.30%	13.30%	0.00%	100%
Children with Disabilities (n=7)	71.40%	14.30%	14.30%	0.00%	100%
People with Chronic Health Conditions (n=4)	25.00%	50.00%	25.00%	0.00%	100%

Pearson Chi-square (χ^2) = 28.86 p-value = 0.1173

The results reveal varying experiences of discrimination and unfair treatment among people with special needs in public transport settings, with perceptions differing by type of vulnerability. While a portion of respondents report no experiences of unfair treatment, a significant share particularly among those with disabilities have encountered discrimination either occasionally or frequently. This reflects broader systemic and attitudinal barriers to inclusive mobility. The group most frequently affected by discrimination are people with physical disabilities (n=60). While 33.30% stated they had never experienced discrimination, a combined 66.70% reported either occasional (41.70%), frequent (23.30%), or constant (1.70%) unfair treatment. These findings indicate persistent stigma and accessibility barriers, including inappropriate staff behavior, lack of priority seating, or exclusion from boarding due to mobility challenges.

For people with visual impairments (n=10), a striking 70.00% reported occasional discrimination, with only 20.00% indicating they had never faced such treatment. Although no respondents in this group reported constant discrimination, the high occasional frequency suggests that visibility and support for visually impaired passengers is insufficient, with potential issues like a lack of tactile signage, verbal guidance, or operator sensitivity.

People with hearing impairments and intellectual disabilities were represented by single respondents each (n=1), making generalizations limited. However, it is noteworthy that the individual with a hearing impairment reported 100% occasional discrimination, while the person with an intellectual disability reported 100% frequent discrimination. Though based on small samples, these responses may highlight a lack of targeted inclusivity for non-visible disabilities, which often go unrecognized and unaccommodated in-service environments. In contrast, elderly individuals (n=28) appear to face significantly less discrimination. A majority 75.00% reported never experiencing unfair treatment, while only 10.70% reported frequent discrimination. This indicates a generally higher level of societal acceptance or awareness of the needs of older adults, possibly due to cultural respect for elders or clearer visible signs of vulnerability.

Similarly, pregnant women (n=15) and children with disabilities (n=7) reported high levels of non-discrimination, with 53.30% and 71.40%, respectively, stating they had never faced unfair treatment. However, the remaining third of pregnant women (33.30%) and 28.60% of children with disabilities still encountered some level of bias, indicating gaps in consistent enforcement of inclusive practices. People with chronic health conditions (n=4) reported more mixed experiences: 25.00% never, 50.00% occasionally, and 25.00% frequently. This suggests that invisible conditions often result in reduced empathy or recognition, particularly when special needs are not immediately observable. Despite these variations, the Pearson Chi-square test ($\chi^2 = 28.86$, $p = 0.1173$) indicates that the differences across groups are not statistically significant at the 0.05 level. However, the practical differences in experience across different categories, especially between physical and non-physical disabilities, are still meaningful from a policy and service design perspective.

6.10.13 Accessibility of Transport Infrastructure for People with Special Needs

Figure 15: Accessibility of Transport Infrastructure for People with Special Needs presents an analysis of respondents' perceptions regarding the accessibility of transport infrastructure for individuals with special needs. The table highlights regional variations in accessibility and identifies challenges in providing inclusive infrastructure that accommodates diverse needs. While some regions demonstrate moderate progress, significant gaps remain, particularly in ensuring full accessibility for all users. For detailed insights, see the table below.

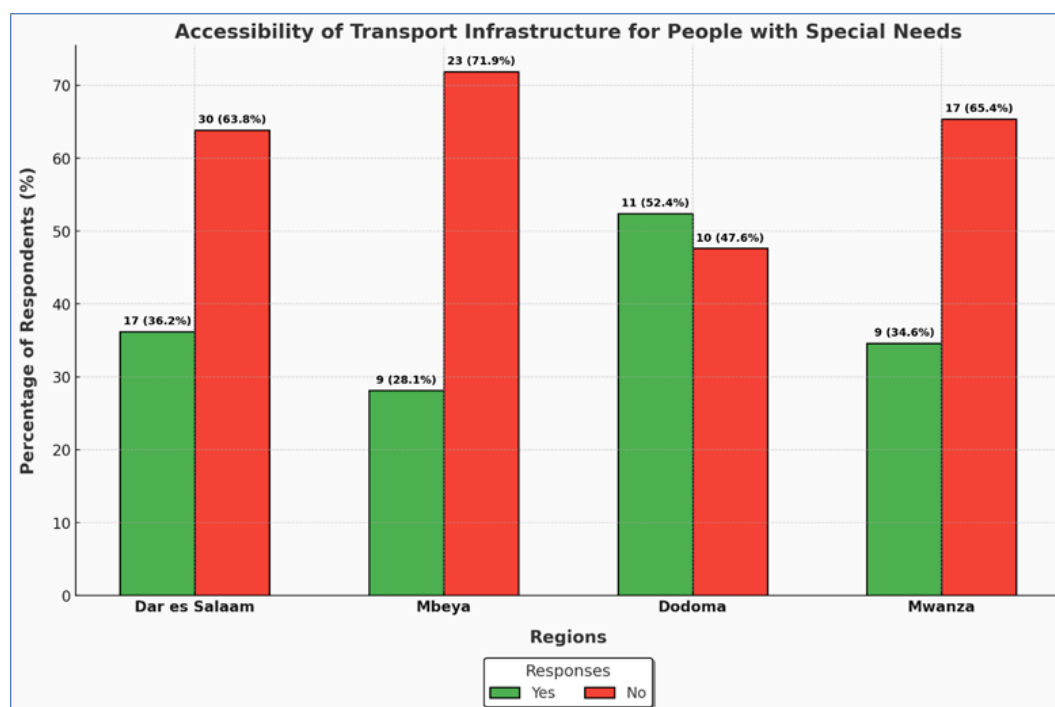


Figure 15: Accessibility of Transport Infrastructure for People with Special Needs

The data reveals that less than half (36.5%) of respondents believe the transport infrastructure in their area is fully accessible for people with special needs. Dar Es Salaam reports the highest proportion of positive responses (37.0%), followed by Dodoma (23.9%). Mbeya (19.6%) and Mwanza (19.6%) report notably lower perceptions of accessibility. Conversely, a majority of respondents (63.5%) indicate that the transport infrastructure is not fully accessible, with the highest percentage in Dar Es Salaam (63.0%) and Mbeya (28.8%). This highlights significant regional disparities and persistent challenges in creating inclusive transport systems. The Pearson chi-square test yielded a value of 3.30 with a p-value of 0.3483, indicating no statistically significant association between regions and perceptions of infrastructure accessibility. The visual evidence from selected bus terminals and railway stations across Tanzania highlights key infrastructural and service delivery gaps that directly impact the ability of the public transport system to meet the needs of diverse groups, including women, students, persons with disabilities, and the elderly.

6.10.14 Visual Assessment of Public Transport Inclusiveness

This section presents photographic evidence from selected road and railway public transport facilities across four regions in Tanzania Dar es Salaam, Dodoma, Mbeya, and Mwanza. The objective of the visual assessments to support the broader goal of evaluating how well Tanzania's public transport systems meet the needs of diverse user groups, including persons with disabilities, women, students, children, elderly individuals, and low-income commuters. The photographs document real-world conditions at bus terminals, minibus stations, railway platforms, washrooms, and boarding zones, offering valuable insights into the current status of infrastructure, accessibility, hygiene, safety, and user experience. The images highlight both positive practices and critical challenges, with particular focus on how infrastructure and operations reflect or neglect the principles of inclusivity and equity.



The visual assessment of Tanzania's public transport infrastructure reveals a mixed performance in meeting the needs of diverse groups, including persons with disabilities, women, children, students, the elderly, and rural-urban commuters. The images from road-based transport systems specifically at major terminals such as Mbeya Central Bus Terminal and local minibus stations expose a range of infrastructural and operational gaps that challenge the inclusivity of public transport.

In terms of infrastructure, the waiting areas and boarding zones appear cramped, unevenly maintained, and largely inaccessible to individuals with physical impairments. Terminals lack wheelchair-friendly pathways, ramps, or handrails, making independent movement difficult for persons with disabilities or the elderly. Prolonged standing is common in waiting areas, yet there are insufficient benches or sheltered zones, highlighting a lack of consideration for those with limited mobility or medical conditions. The condition of sanitation facilities varies across terminals. While some toilets and washrooms are functional and relatively clean, they are not consistently accessible or inclusive. Facilities rarely show clear signs of universal design, with most lacking essential features such as grab bars, non-slip flooring, or lowered sinks. This undermines the dignity and comfort of women, elderly passengers, and persons with disabilities.

From an operational standpoint, the images show students and other passengers boarding overcrowded minibuses without the support of terminal staff, structured queuing systems, or priority boarding measures. This environment is particularly hostile to vulnerable groups, such as pregnant women, children, and persons with visual or hearing impairments, who face risks of being pushed, overlooked, or delayed during boarding. The lack of crowd control and staff oversight reflects service delivery that prioritizes volume over safety and equity. In contrast, the rail transport environment depicted in the images provides a more structured and inclusive setup. Features such as disability-friendly toilets, ramps, and accessible interior space within train coaches indicate that the railway system is beginning to incorporate inclusive design principles. However, such practices remain limited in reach and consistency, as not all railway facilities demonstrate this level of accessibility.

Observation results:

1. Infrastructure Adequacy

A total of 79 observation points were assessed across Dar es Salaam, Dodoma, Mbeya, and Mwanza to evaluate the adequacy of road and railway infrastructure in meeting the needs of diverse social groups, especially persons with disabilities. Out of these, only 26 sites (32.9%) were deemed to have adequate infrastructure that could support accessibility features such as ramps, level boarding platforms, and designated spaces for mobility-impaired users. The remaining 53 sites (67.1%) lacked these features, indicating significant infrastructural exclusion.

- Dar es Salaam: 11 of 17 locations (64.7%) showed adequate infrastructure an encouraging sign for the most urbanized region.
- Mwanza: Also recorded 11 out of 40 locations (27.5%) with accessible features, reflecting some investment but wide room for improvement.
- Dodoma: Only 4 of 9 sites (44.4%) showed accessibility readiness.
- Mbeya: Alarmingly, none of the 13 observation points were found to be adequate for persons with disabilities.

These figures underscore a stark need for targeted infrastructure upgrades in secondary cities like Mbeya and enhanced enforcement of accessibility standards nationwide.

2. Presence of Safety Measures

In terms of safety features such as seat belts, safety signage, lighting, and first aid kits, only 19 of the 79 observed sites (24.1%) demonstrated compliance with basic safety requirements, while 60 sites (75.9%) did not.

- Dar es Salaam: 7 of 17 locations (41.2%) had visible safety features.
- Mwanza: 9 of 40 locations (22.5%) showed compliance.
- Dodoma: Only 2 of 9 locations (22.2%) demonstrated the presence of safety measures.
- Mbeya: Just 1 of 13 sites (7.7%) was found to have proper safety equipment.

The results point to a critical safety gap in the transport system, especially in regions like Mbeya and Dodoma. This endangers all passengers, particularly vulnerable groups who may rely on safety infrastructure for confidence and usability. While Mwanza and Dar es Salaam have relatively higher safety compliance, the findings highlight a widespread lack of institutional investment in basic safety standards and enforcement mechanisms.

6.11 Objective 11: To identify challenges and issues affecting the provision and access to land transport by diverse social groups.

6.11.1 Operational Challenges and Areas for Improvement

This section presents findings related to the key operational and service-level challenges that affect access to land transport services by diverse social groups in Tanzania. The data were gathered through user surveys and observational reports across the four study regions: Dar es Salaam, Dodoma, Mbeya, and Mwanza. These insights are instrumental in identifying systemic bottlenecks and areas where targeted interventions can improve accessibility, quality, and equity in public transport provision.

Table 38: Operational Challenges and Areas for Improvement

Challenge	Frequency	Percent of Responses	Percent of Cases
Overcrowding	569	30.20%	55.57%
Poor Vehicle Maintenance	159	8.44%	15.53%
Long Waiting Times	418	22.19%	40.82%
Unfriendly Conductors/Drivers	300	15.92%	29.30%
Lack of Adequate Routes	232	12.31%	22.66%
Safety Concerns	127	6.74%	12.40%
Others	79	4.19%	7.71%
Total	1884	100%	183.98%

The findings indicate that overcrowding is the most significant operational issue, reported by 55.57% of respondents, and accounting for 30.2% of total responses. This challenge was particularly acute during peak travel hours and in high-density urban routes, pointing to inadequate fleet sizes and poorly managed scheduling. Long waiting times were the second most frequently cited issue (40.82% of cases), suggesting inefficiencies in route planning, vehicle dispatch, or traffic-related delays. This directly affects the reliability of services and disproportionately impacts users who rely on timely transport access for work, education, and health services. Unfriendly conductors and drivers were reported by nearly 29.3% of respondents, highlighting interpersonal and service culture challenges that may deter certain groups especially women, persons with disabilities, and the elderly from using public transport.

Other critical issues included the lack of adequate routes (22.66%), which restricts geographic accessibility and reflects underserved areas particularly in peri-urban and rural settings. Poor vehicle maintenance (15.53%) further exacerbates access challenges, particularly for passengers with mobility impairments, while safety concerns (12.4%) emphasize risks associated with both vehicle conditions and terminal environments. Although “other” issues (7.71%) accounted for a smaller share, they included nuanced complaints such as fare manipulation, verbal harassment, and lack of information or signage indicating a broader spectrum of user experience issues that deserve attention.

6.11.2 Pressing Challenges in Public Transport Services

This section examines the most pressing challenges faced by public transport users across the four study regions Dar es Salaam, Mbeya, Dodoma, and Mwanza with the aim of identifying critical areas requiring immediate policy and operational attention. The findings are based on user perceptions and experiences collected through structured surveys. Respondents were asked to identify the most significant problem affecting public transport services in their region. The results are summarized in Table 39.

Table 39: Pressing Challenges in Public Transport Services

Challenge (n)	Dar es Salaam	Mbeya	Dodoma	Mwanza	Total (n)
Poor Road Infrastructure (n=440)	46.80%	23.20%	10.20%	19.80%	100%
Lack of Vehicle Maintenance (n=99)	36.40%	9.10%	35.40%	19.20%	100%
Unregulated Fares (n=199)	31.70%	22.60%	24.60%	21.10%	100%
Lack of Safety Measures (n=103)	23.30%	28.20%	36.90%	11.70%	100%
Inadequate Government Support (n=56)	37.50%	21.40%	21.40%	19.60%	100%
Others (n=127)	14.20%	35.40%	22.80%	27.60%	100%

Pearson Chi-square (χ^2) = 110.93 p-value = 0.0000

The results reveal that poor road infrastructure is the most pressing challenge facing public transport services across regions, with 46.80% of the 440 respondents who selected this issue coming from Dar es Salaam, followed by Mbeya (23.20%) and Mwanza (19.80%). This concern is likely linked to traffic congestion, deteriorated surfaces, and inadequate maintenance, which compromise travel efficiency and safety, particularly in urban areas. Dodoma reported the lowest share (10.20%), possibly reflecting recent infrastructure improvements in the administrative capital. Lack of vehicle maintenance emerged as a significant concern among respondents in Dar es Salaam (36.40%) and Dodoma (35.40%), collectively accounting for over 70% of the 99 total mentions. This issue may be related to aging fleets, poor regulation of vehicle conditions, and insufficient investment in upkeep. In contrast, Mbeya (9.10%) and Mwanza (19.20%) reported relatively fewer concerns, which may indicate either better vehicle standards or lower usage volumes.

Unregulated fares were a fairly evenly distributed concern across all regions, with Dar es Salaam (31.70%), Dodoma (24.60%), Mbeya (22.60%), and Mwanza (21.10%) all reporting comparable shares among the 199 respondents. This highlights a widespread problem of inconsistent or arbitrary pricing, possibly due to informal fare setting practices, limited oversight, and absence of digital or standardized ticketing systems. Lack of safety measures was mentioned most by respondents in Dodoma (36.90%) and Mbeya (28.20%), followed by Dar es Salaam (23.30%) and Mwanza (11.70%). This pattern suggests heightened awareness of risks such as unsafe boarding, lack of safety signage, or absence of emergency procedures in Dodoma and Mbeya. The lower concern in Mwanza may reflect either better conditions or less visibility of safety gaps. Inadequate government support was also more pronounced in Dar es Salaam (37.50%), compared to Mbeya and Dodoma (each 21.40%), and Mwanza (19.60%). This suggests that commuters in the commercial capital perceive a lack of policy enforcement, infrastructure investment, or planning oversight from public institutions in the transport sector.

The “Other” category captured a range of unspecified concerns and was most prevalent in Mbeya (35.40%), Mwanza (27.60%), and Dodoma (22.80%), with Dar es Salaam (14.20%) contributing the least. This may indicate region-specific issues such as poor coverage, unreliable service schedules, or poor staff conduct, which merit further qualitative inquiry. The Pearson Chi-square result ($\chi^2 = 110.93$, $p = 0.0000$) confirms that the differences in perceived challenges across the regions are statistically significant. This means that the distribution of concerns is not random and that each region faces distinct issues that require tailored solutions.

6.11.3 Desired Improvements in Public Transport Systems

The table below summarizes the desired improvements in public transport services as identified by users across four major regions: Dar es Salaam, Mbeya, Dodoma, and Mwanza. Respondents were asked to indicate the most important areas where improvements are needed, with options including better punctuality, cleaner vehicles, more affordable fares, improved road infrastructure, staff training, and other suggestions. The results provide insight into region-specific priorities. While better road infrastructure emerged as a top priority across most regions, other aspects such as punctuality, fare affordability, and staff training were highlighted with varying emphasis depending on the region. The Pearson Chi-square test result ($\chi^2 = 99.00$, $p = 0.0000$) confirms that these preferences vary significantly by region, reinforcing the need for targeted improvement strategies.

Table 40: Desired Improvements in Public Transport Systems

Desired Improvement (n)	Dar es Salaam	Mbeya	Dodoma	Mwanza	Total (n)
Better Punctuality (n=263)	51.00%	11.40%	21.30%	16.40%	100%
Cleaner Vehicles (n=67)	32.80%	10.40%	37.30%	19.40%	100%
More Affordable Fares (n=126)	26.20%	23.00%	24.60%	26.20%	100%
Better Road Infrastructure (n=380)	36.10%	31.60%	12.10%	20.30%	100%
More Staff Training (n=110)	24.50%	25.50%	26.40%	23.60%	100%
Others (n=78)	19.20%	35.90%	26.90%	17.90%	100%

Pearson Chi-square (χ^2) = 99.00 p-value = 0.0000

The results reveal that improving punctuality is the most frequently desired enhancement in public transport systems, with 51.00% of the 263 respondents who cited this issue coming from Dar es Salaam. This overwhelming response highlights widespread dissatisfaction with unreliable arrival and departure times, particularly in the capital where congestion and inconsistent scheduling are common. Dodoma (21.30%) and Mwanza (16.40%) also reported moderate demand for punctuality, while Mbeya (11.40%) ranked lowest, possibly indicating comparatively better reliability in service timing. Cleaner vehicles were most desired by respondents in Dodoma (37.30%), followed by Dar es Salaam (32.80%), and Mwanza (19.40%). This suggests that cleanliness remains a persistent concern, especially in Dodoma and Dar es Salaam, where vehicle hygiene and sanitation may be inconsistent. Mbeya (10.40%) reported fewer concerns in this area, possibly due to better local fleet conditions or lower service intensity.

Affordability of fares was cited with almost equal weight across all regions, ranging from 23.00% in Mbeya to 26.20% in both Dar es Salaam and Mwanza, and 24.60% in Dodoma. This distribution indicates that fare affordability is a universal concern, with economic accessibility playing a critical role in transport equity for all urban populations, regardless of location.

Better road infrastructure, cited by 380 respondents, was especially emphasized in Dar es Salaam (36.10%) and Mbeya (31.60%), while Mwanza (20.30%) and Dodoma (12.10%) contributed smaller shares. These results align with earlier findings on poor infrastructure as a key transport challenge, particularly in areas with heavy congestion, deteriorating roads, or limited maintenance. More staff training was relatively evenly distributed among all regions: Dodoma (26.40%), Mbeya (25.50%), Dar es Salaam (24.50%), and Mwanza (23.60%). This reflects a shared desire to improve service delivery, professionalism, and customer interaction, especially toward vulnerable groups. The consistency across regions suggests this improvement area is viewed as foundational for better service quality.

The “Others” category, representing various unspecified suggestions, was most prominent in Mbeya (35.90%), followed by Dodoma (26.90%), Mwanza (17.90%), and Dar es Salaam (19.20%). This distribution suggests that Mbeya and Dodoma may have more localized or context-specific concerns, such as route expansion, security, ticketing systems, or environmental sustainability, which require further investigation. The Pearson Chi-square result ($\chi^2 = 99.00$, $p = 0.0000$) confirms that regional differences in desired improvements are statistically significant, indicating that public preferences for system enhancements vary meaningfully depending on the urban context.

6.11.4 Overall Ratings of Public Transport Services

The table 41 below presents respondents’ overall ratings of public transport services across four regions: Dar es Salaam, Mbeya, Dodoma, and Mwanza. The ratings range from “Excellent” to “Very Poor,” reflecting the diversity of user experiences in terms of satisfaction, reliability, accessibility, and general service quality. These ratings provide valuable insight into how public transport systems are perceived in different parts of the country, highlighting regional disparities in service performance. According to the findings, Dodoma received the highest proportion of “Excellent” ratings (25.96%), suggesting relatively better service delivery, infrastructure, or user satisfaction. Conversely, Mbeya reported the highest proportion of “Poor” ratings (16.94%), indicating more pronounced challenges in that region. The Pearson Chi-square test result ($\chi^2 = 160.96$, $p = 0.0000$) confirms that the variation in ratings is statistically significant, demonstrating the need for region-specific interventions to improve user experience and transport system performance.

Table 41: Overall Ratings of Public Transport Services by Region

Rating (n)	Dar es Salaam	Mbeya	Dodoma	Mwanza	Total (n)
Excellent (n=78)	11.50%	3.80%	69.20%	15.40%	100%
Good (n=157)	29.90%	28.70%	19.70%	21.70%	100%
Fair (n=673)	41.60%	22.30%	16.90%	19.20%	100%
Poor (n=100)	26.00%	41.00%	8.00%	25.00%	100%
Very Poor (n=16)	37.50%	18.80%	6.30%	37.50%	100%

The results reveal that most respondents rate public transport services as “Fair” or “Good”, with fewer reporting “Excellent” experiences and a notable minority indicating dissatisfaction. These ratings reflect mixed perceptions of service quality, influenced by factors such as reliability, cleanliness, affordability, staff behavior, and safety. The distribution of responses across regions shows marked variation in satisfaction levels. The majority of “Excellent” ratings (69.20%) came from Dodoma, suggesting that users in the administrative capital perceive the public transport system to be efficient, safe, and responsive to user needs. Smaller shares were recorded in Mwanza (15.40%) and Dar es Salaam (11.50%), while Mbeya (3.80%) contributed the least. This result aligns with earlier findings that Dodoma had higher satisfaction with cleanliness and staff professionalism, which may have positively influenced overall ratings.

In the “Good” category, responses were more evenly distributed: Dar es Salaam (29.90%), Mbeya (28.70%), Mwanza (21.70%), and Dodoma (19.70%). This indicates a moderate level of satisfaction across all regions, suggesting that while users see value in public transport, there remain areas requiring improvement, such as punctuality, comfort, or staff training. The largest share of respondents overall rated services as “Fair” (n=673), with Dar es Salaam (41.60%) and Mbeya (22.30%) leading. This suggests that while services are considered functional, they fall short of user expectations in many areas, particularly in urban centers with high demand and infrastructure strain. Dodoma (16.90%) and Mwanza (19.20%) also contributed to this rating, indicating a general pattern of mediocrity in service quality across the board.

For the “Poor” rating (n=100), Mbeya led with 41.00%, followed by Dar es Salaam (26.00%), Mwanza (25.00%), and Dodoma (8.00%). These figures reflect significant dissatisfaction, particularly in Mbeya, possibly due to challenges in road infrastructure, affordability, or service inconsistency, as highlighted in earlier tables. The low figure for Dodoma further underscores its relatively higher performance on various service indicators.

The “Very Poor” category (n=16) was split equally between Dar es Salaam and Mwanza (both 37.50%), with Mbeya (18.80%) and Dodoma (6.30%) trailing. This category represents deep user dissatisfaction, likely driven by cumulative negative experiences across multiple service dimensions. The higher figures in Dar es Salaam and Mwanza may reflect intensified frustrations due to overcrowding, delays, or perceived neglect of user needs.

Observation result:

This section presents observational findings on the key challenges hindering the effective provision and utilization of public land transport services in Tanzania, with a focus on marginalized and vulnerable populations. Observations were conducted across four key urban regions Dar es Salaam, Mbeya, Dodoma, and Mwanza yielding insights into the operational, infrastructural, and safety-related difficulties encountered in everyday transport access.

1. Main Challenges Identified

Across all regions, high transport costs emerged as the most frequently cited challenge, accounting for 51.9% (41 out of 79) of the observed cases. This issue was particularly acute in Mbeya (61.54%) and Mwanza (60%), where limited formal public transport options force commuters to rely on informal, often more expensive, services. In Dar es Salaam, 41.18% of the observations also pointed to high costs, underscoring affordability as a widespread access barrier across both urban and peri-urban contexts. The lack of accessibility for persons with disabilities and the elderly was reported in 12.66% (10 observations). This challenge was most prominent in Dodoma (33.33%), indicating a significant gap in the physical and operational inclusiveness of transport infrastructure. Notably, Mbeya registered no instances of reported accessibility, which may reflect either an actual absence of inclusive barriers or low visibility of affected populations in the observed sample.

Safety concerns, including fear of accidents, harassment, and poor vehicle maintenance, were observed in 20.25% (16 cases) of the total. These were most noted in Mbeya (30.77%) and Dar es Salaam (23.53%), likely correlating with high traffic volumes and limited enforcement of safety standards. Overcrowding, a challenge associated with discomfort, increased risk of injury, and exclusion of vulnerable passengers, was reported in 10.13% (8 observations). This was relatively evenly distributed across the regions, suggesting it is a common operational issue, especially during peak hours. Other challenges, such as irregular schedules, lack of signage, and poor customer service, were reported in 5.06% (4 observations), with Mwanza and Dodoma each contributing two cases.

Qualitative Insights

As part of this study, Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) were conducted in four regions—Dar es Salaam, Dodoma, Mbeya, and Mwanza to gather qualitative insights on the inclusiveness of Tanzania’s land transport system. A total of 28 participants were engaged, including:

- Public transport users (persons with disabilities, elderly passengers, students, women from low-income households)
- Service providers (minibus drivers, conductors, ticketing officers)
- Local transport officials (from city councils and municipal offices)
- Community leaders and CSOs (advocating for gender equity and disability inclusion)

Theme 1: Disregard for Vulnerable Passengers by Transport Operators

A prominent issue raised across all four regions was the neglect and mistreatment of vulnerable passengers especially persons with disabilities—by public transport operators. Participants cited cases where drivers intentionally bypassed disabled individuals or refused to stop for them.

“Persons with disabilities are often ignored at bus stops because drivers assume it will take too long for them to board.” – Respondent 6, Male, Mbeya, Disability Rights Advocate

This behavior was linked to a lack of operator training and absence of accountability mechanisms, which perpetuate discriminatory attitudes and operational inefficiencies.

“There’s no customer care training, leading to poor treatment of passengers.” – Respondent 3, Female, Dar es Salaam, Community Mobilizer

Theme 2: Overcrowding and Unsafe Boarding Environments

Overcrowding, particularly during peak hours, was consistently highlighted as a structural problem that disproportionately affects women, children, and elderly individuals. Participants described unsafe boarding practices, pushing, and lack of queue management.

“Overcrowding during rush hours disproportionately impacts women and children, who struggle to board safely.” – Respondent 4, Male, Dodoma, Secondary School Teacher

The absence of designated spaces for vulnerable groups, combined with limited seating and boarding assistance, compounds these challenges and discourages the use of public transport by marginalized populations.

Theme 3: Scheduling and Operational Gaps

Operational inefficiencies such as poor fleet management, irregular scheduling, and unpredictable wait times were frequently mentioned. These issues contribute to unmet demand and heightened congestion, particularly in high-density urban areas.

“Better scheduling and fleet management are needed to address peak demand and reduce overcrowding.” – Respondent 2, Female, Mwanza, Public Transport User and Parent

This systemic gap in service delivery particularly affects individuals who rely on timely and consistent services, such as students, shift workers, and people with chronic health conditions.

6.12 Objective 12: To Evaluate the State of Diversity and Inclusion in Business and Cultural Practices in Land Transport

6.12.1 Support Received from Transport Staff

The level of support provided by transport staff is a critical measure of inclusiveness and sensitivity in public transport services. This includes behaviors such as assisting passengers with boarding and alighting, providing route guidance, assisting with payments, and responding to individual needs particularly for vulnerable groups such as persons with disabilities, elderly commuters, and women with children.

Table 42: Regional Distribution of Support Received from Transport Staff

Type of Support (n)	Dar es Salaam	Mbeya	Dodoma	Mwanza	Total (n)
No Support (n=67)	26.90%	37.30%	20.90%	14.90%	100%
Assistance with Boarding/ Alighting (n=39)	56.40%	10.30%	12.80%	20.50%	100%
Route Guidance (n=11)	45.50%	18.20%	9.10%	27.30%	100%
Payment Assistance (n=6)	33.30%	16.70%	0.00%	50.00%	100%
Other (n=3)	0.00%	0.00%	33.30%	66.70%	100%

Pearson Chi-square (χ^2) = 25.37 p-value = 0.0131

The results reveal that the most commonly reported experience among public transport users was receiving no support from staff, with 67 respondents indicating so. This was most pronounced in Mbeya (37.30%), followed by Dar es Salaam (26.90%), Dodoma (20.90%), and Mwanza (14.90%). These figures suggest that in many cases, transport staff do not provide the assistance needed by passengers, particularly those who may be unfamiliar with the system, vulnerable, or traveling with special needs. The relatively high proportion in Mbeya may reflect gaps in training or weak institutional support systems for frontline staff. Among the types of support that were received, assistance with boarding and alighting was the most frequent, mentioned by 39 respondents. Dar es Salaam contributed the largest share (56.40%), indicating a higher likelihood of staff helping passengers to board or exit vehicles, possibly due to the volume and complexity of the city's transport environment. Mwanza (20.50%), Dodoma (12.80%), and Mbeya (10.30%) reported lower levels of this kind of support, suggesting that physical assistance is not consistently offered across regions.

Route guidance was cited by 11 respondents, with Dar es Salaam again reporting the majority (45.50%), followed by Mwanza (27.30%), Mbeya (18.20%), and Dodoma (9.10%). This pattern may reflect higher route complexity in larger cities, prompting users to seek clarification from staff. However, the low total number suggests that this kind of assistance is not a routine part of the staff-user interaction, despite its importance to newcomers and individuals with visual or cognitive impairments.

Payment assistance was among the least reported forms of support, with only 6 responses. Mwanza (50.00%) and Dar es Salaam (33.30%) had the highest shares, indicating some level of staff responsiveness to passengers struggling with payment procedures. Mbeya contributed 16.70%, while Dodoma had no reported cases, pointing to either limited awareness, fewer incidents, or a complete lack of support in such cases. The “Other” category had 3 entries, coming from Mwanza (66.70%) and Dodoma (33.30%), with no contributions from Dar es Salaam or Mbeya. Though unspecified, these responses likely relate to unique, localized support experiences, such as handling mobility devices, emotional support, or escorting passengers with special needs. The Pearson Chi-square test ($\chi^2 = 25.37$, $p = 0.0131$) confirms that the differences in support experiences across the regions are statistically significant. This means that the provision of support is not uniform, and passengers in different regions have distinctly different interactions with transport staff.

6.12.2 Refusal of Service Due to Disability

This subsection examines the levels and types of support received by persons with disabilities and other vulnerable groups when accessing public transport services in Tanzania. The analysis is based on self-reported experiences and field observations from the four study regions: Dar es Salaam, Dodoma, Mbeya, and Mwanza. The aim was to assess whether transport operators provide adequate accommodations for diverse needs and whether service exclusion whether passive or active is disproportionately affecting persons with disabilities.

Table 43: Regional Distribution of Special Arrangements for Transport Access

Group (n)	No Support	Assistance Boarding/ Alighting	Route Guidance	Payment Assistance	Other	Total
Physical Disabilities (n=60)	38.30%	41.70%	8.30%	8.30%	3.30%	100%
Visual	40.00%	30.00%	30.00%	0.00%	0.00%	100%
Hearing	100.00%	0.00%	0.00%	0.00%	0.00%	100%
Intellectual Disabilities (n=1)	0.00%	100.00%	0.00%	0.00%	0.00%	100%
Elderly Individuals (n=28)	82.10%	14.30%	0.00%	3.60%	0.00%	100%

Pregnant Women (n=15)	53.30%	20.00%	20.00%	0.00%	6.70%	100%
Children with Disabilities (n=7)	71.40%	28.60%	0.00%	0.00%	0.00%	100%
Chronic Conditions (n=4)	75.00%	25.00%	0.00%	0.00%	0.00%	100%

Pearson Chi-square (χ^2) = 33.26 p-value = 0.2264

The results reveal that a significant proportion of individuals across all vulnerable groups report receiving no special support when accessing public transport services. This trend was especially prominent among elderly individuals, children with disabilities, and people with chronic conditions, indicating systemic gaps in inclusive transport planning and staff responsiveness. Although the Pearson Chi-square result ($\chi^2 = 33.26$, $p = 0.2264$) suggests that the differences across groups are not statistically significant, the variation in experience across groups offers valuable insight into who is most underserved. Among people with physical disabilities (n=60), 38.30% reported no support, while a commendable 41.70% received assistance with boarding and alighting. Smaller percentages received route guidance (8.30%) and payment assistance (8.30%), indicating that while some physical support exists, broader service needs are not consistently addressed. A small number (3.30%) cited “Other” types of support, possibly reflecting informal or situational assistance.

For people with visual impairments (n=10), 40.00% received no support, while 30.00% each received either boarding/alighting assistance or route guidance. These findings show a relatively balanced but insufficient level of tailored support, considering the needs of visually impaired individuals for clear communication, navigation aid, and safe boarding conditions.

People with hearing impairments (n=1) and children with disabilities (n=7) received especially poor support. The single respondent with hearing impairment reported 100% no support, highlighting the invisibility and neglect often faced by people with non-obvious disabilities. Similarly, 71.40% of children with disabilities received no support, and none received route or payment assistance, underscoring a serious service gap for minors with special needs. The lone respondent with an intellectual disability received boarding/alighting assistance (100%), though the sample is too small to generalize. However, it shows that assistance is possible when specific needs are recognized and met.

The elderly (n=28) experienced the highest level of neglect, with 82.10% reporting no support, and only 14.30% receiving boarding assistance. This is particularly concerning given that older passengers often face mobility, sensory, or health-related challenges that demand specific accommodations. Among pregnant women (n=15), 53.30% received no support, while the remainder received boarding/alighting (20.00%), route guidance (20.00%), and a small share (6.70%) cited “Other” support. This group shows slightly better engagement from staff, but still more than half are left unaided.

Respondents with chronic health conditions (n=4) also fared poorly, with 75.00% receiving no support, and the remaining 25.00% receiving boarding assistance. This result further confirms that individuals with non-visible conditions struggle to receive recognition or help in the current system. These findings confirm that most groups with special needs are not receiving consistent or adequate support. Even where physical assistance is provided, there are gaps in communication, navigation aid, payment facilitation, and dignified treatment. Key groups such as the elderly, pregnant women, children with disabilities, and those with chronic conditions are particularly underserved, suggesting an urgent need for staff training and institutional reforms. While some progress is evident among physically and visually impaired individuals, the overall service landscape remains inaccessible and inequitable for many.

Qualitative Insights

The findings presented here are based on 24 qualitative participants engaged through Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) conducted in Dar es Salaam, Dodoma, Mbeya, and Mwanza. Participants included:

- Transport workers (drivers, conductors, ticketing officers)
- Local transport officials and urban planners
- Community leaders and religious elders
- Civil society representatives advocating for gender and disability inclusion
- Frequent public transport users, including women, elderly passengers, and persons with disabilities

Theme 1: Lack of Awareness and Training on Inclusion Principles

The absence of formal training on diversity, respect, and inclusive service delivery emerged as a major challenge. Discriminatory attitudes, particularly toward persons with disabilities, were commonly reported across all regions.

“Conductors discriminate against persons with disabilities, assuming they’ll take too long to board.” – Respondent 5, Female, Mbeya, Disability Advocate and FGD Participant

Such behaviors reflect a deep-rooted lack of empathy and operational preparedness, which not only hinders inclusive service delivery but also contributes to the systemic exclusion of vulnerable passengers. The absence of training curricula that address diversity or human rights was identified as a key barrier to change.

Theme 2: Limited Representation of Women in the Workforce

While there are isolated efforts to recruit women into transport roles – particularly as drivers the scale remains minimal, with little visible impact on broader sectoral culture.

“While there are women drivers, their numbers are too few to create a meaningful impact on the sector’s culture.” – Respondent 6, Male, Dodoma, City Transport Officer

Participants emphasized that women’s presence in frontline roles, such as drivers or supervisors, is essential not only for representation but also for challenging gender stereotypes and improving the perception of safety and service among female passengers. The current lack of institutional hiring policies that promote gender diversity has allowed traditional gender norms to persist unchallenged.

Theme 3: Need for Comprehensive Training for Operators and Workers

Stakeholders across the transport ecosystem strongly advocated for the institutionalization of inclusion-focused training targeting conductors, drivers, and support staff. These programs were seen as foundational to improving service standards and reducing discrimination.

“More comprehensive training programs are needed to foster respect and inclusivity among transport operators.” – Respondent 6, Male, Dodoma, City Transport Officer

Training recommendations included content on disability etiquette, gender sensitivity, and equitable customer service practices, with a focus on building empathy and professionalism. Several respondents also suggested incorporating such training into licensing and operator certification processes to ensure sustainability.

Theme 4: Incentivizing Inclusive Business Practices

Respondents proposed the use of incentives to promote inclusive practices among transport service providers. This could include tax benefits, licensing priority, or access to government grants for businesses that adopt inclusive hiring, operate accessible vehicles, or engage in community-based initiatives.

“Incentivizing businesses that adopt inclusive practices could encourage broader adoption of these principles.” – Respondent 3, Female, Mwanza, CSO Coordinator on Social Inclusion

Such initiatives were viewed as a way to shift industry behavior without relying solely on regulation, while also creating market advantages for inclusive service providers.

Theme 5: Public Awareness Campaigns to Shift Cultural Norms

While systemic change requires internal transformation within institutions and businesses, respondents also emphasized the role of public awareness in challenging stereotypes and promoting inclusive values.

“Raising awareness through public campaigns can help shift cultural norms and challenge stereotypes that perpetuate exclusion.” – Respondent 7, Male, Dar es Salaam, Religious Leader and Community Elder

Suggested strategies included mass media campaigns, community-based engagement, and school-level programs to promote respect for diversity and highlight the value of inclusive public services.

6.13 Objective 13: To Identify Best Practices in Similar Economies in Addressing Inclusiveness in Land Transport Services

The study aimed to identify, evaluate, and comparatively analyze best practices from countries with socio-economic contexts comparable to Tanzania, with the ultimate goal of informing future strategic planning and national policy development in building an inclusive and accessible land transport system. This assessment was grounded in qualitative data drawn from Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) conducted across Dar es Salaam, Dodoma, Mbeya, and Mwanza. Participants represented a cross-section of stakeholders with extensive practical experience in transport planning, regulation, and usage. These included government and urban planners, civil society organizations (CSOs) focusing on disability and mobility rights, transport service providers, regulators, academics, and public transport users from vulnerable groups including persons with disabilities (PWDs), women, the elderly, and students. Findings are presented through a comparative analysis framework, emphasizing not only best practices but also practical distinctions and lessons for localized adaptation in Tanzania.

Comparative Analysis of Best Practices

1. Rwanda: A Case Study in Behavioral Change and Institutional Discipline

Rwanda was the most frequently cited country by stakeholders as an exemplary model of disciplined and inclusive land transport. The success of Rwanda’s system lies in its synergistic combination of public behavioral change initiatives and institutional enforcement mechanisms. High levels of public compliance with traffic laws, respect for pedestrian zones, and the orderly conduct in transport terminals were repeatedly emphasized.

“Road users in Rwanda respect traffic rules without enforcement, creating a culture of safety and inclusiveness.” – Respondent 4, Local Government Officer, Dar es Salaam

Unlike Rwanda, Tanzania faces consistent challenges with urban enforcement and civic discipline. Lessons drawn from Rwanda highlight the importance of public awareness campaigns, civic education, and decentralized community enforcement to foster a transport culture rooted in shared responsibility rather than coercion (World Bank, 2020).

2. Kenya and Rwanda: Digital Fare and Revenue Management Systems

The deployment of Electronic Fiscal Devices (EFDs) and mobile-based fare systems in Kenya and Rwanda were highlighted as transformative best practices. These digital systems promote transparency, reduce cash handling, minimize fare disputes, and ensure accurate revenue monitoring.

“Adopting electronic systems for fee management ensures efficiency and accountability, which are crucial for improving transport services.” – Respondent 5, CSO Representative, Mwanza

In Tanzania, the majority of the transport system especially informal daladala and boda-boda services remains cash-based. By comparison, Kenya’s Matatu industry has gradually integrated M-Pesa-based fare systems, improving oversight and efficiency (GIZ, 2022). A phased rollout of smart card-based fare systems, beginning with BRT routes and high-volume corridors, could enable Tanzania to achieve similar benefits.

3. South Africa and Ghana: Structured Queuing and Priority Boarding

Structured queuing systems and designated priority boarding areas, especially evident in South Africa’s MyCiTi and public bus systems in Ghana, were also cited. These systems manage congestion and ensure safe, dignified access for vulnerable groups such as the elderly, PWDs, and women.

“Other countries have implemented queuing systems and priority boarding, which Tanzania could adapt to reduce congestion and improve access for vulnerable groups.” – Respondent 5, Urban Planner, Dodoma

Tanzania’s transport hubs generally lack designated queuing spaces and accessible boarding procedures. Lessons from Ghana’s Metro Mass Transit System suggest that physical infrastructure upgrades (e.g., boarding lines, designated queues, signage) alongside operator training can significantly improve user experience and fairness (SSATP, 2020).

4. South Africa and Brazil: Integrated Multi-Modal Transport and Universal Design

Stakeholders emphasized the importance of multi-modal integration and universal design principles. South Africa’s Gautrain and Brazil’s BRT corridors were referenced for their inclusive approaches integrating buses, trains, and non-motorized modes through unified ticketing and infrastructure design. Features like step-free boarding, tactile paving, audio-visual information systems, and gender-sensitive facilities were cited as critical.

“Learning from global best practices in integrated transport systems and universal design can guide Tanzania in building a more inclusive and efficient transport sector.” – Respondent 6, Academic, Mbeya

Tanzania's own progress, such as the Dar es Salaam BRT system, remains isolated and lacks national coherence in terms of infrastructure standards and intermodal connectivity. A coordinated national strategy, anchored in universal design principles and supported by design guidelines, is essential to scale inclusive features across all regions (UNCRPD, 2021).

Table 44: Comparative Synthesis: Pathways for Tanzania

Practice Area	International Benchmark	Tanzania Status	Recommended Actions
Behavioral Enforcement	Rwanda's civic-led compliance	Weak enforcement	Invest in civic education and decentralized enforcement
Digital Fare Management	Kenya's M-Pesa, Rwanda's EFD integration	Mostly cash-based	Scale smart fare systems and enforce fiscal accountability
Priority Boarding	Ghana, South Africa queuing systems	Informal boarding	Designate priority zones and introduce public signage
Integrated Multi-Modal Design	Brazil's BRT, South Africa's Gautrain	Fragmented and mode-isolated	National policy for intermodal integration and scheduling
Universal Design	Global accessibility guidelines	Inconsistently applied	Standardize infrastructure design with national guidelines and compliance monitoring

The comparative analysis reveals that countries with socio-economic characteristics similar to Tanzania have successfully implemented inclusive practices by aligning policy, infrastructure, and behavioral change. Rwanda, Kenya, South Africa, Ghana, and Brazil offer contextually adaptable models for Tanzania's transport reforms. Adopting best practices must be grounded in local realities, supported by strong institutions, and aligned with Tanzania's National Transport Policy and Vision 2025 goals. Priority actions include digitization of fare systems, implementation of universal design standards, integrated service coordination, and enhanced civic engagement. Tanzania has a strategic opportunity to align with global standards by integrating these insights into its future urban mobility investments and regulatory frameworks, ensuring that no group is left behind.

6.14 Objective 14: To Establish the Rate of Entry and Exit in Transport Services and Associated Reasons

This objective aimed to assess the structural, financial, and logistical dynamics shaping the rate of entry into and exit from Tanzania's land transport services sector, with a specific focus on public and paratransit operators such as daladala drivers, commuter bus providers, and cooperative members. The study further explored the sustainability challenges operators face and examined systemic factors that influence turnover across both formal and informal service providers. Data collection was conducted through targeted Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) across four regions – Dar es Salaam, Dodoma, Mbeya, and Mwanza with participants drawn from the following stakeholder categories:

- Daladala and commuter bus owners, drivers, and conductors
- Regional and municipal transport licensing officers
- Representatives from transport unions and cooperatives
- Civil society organizations (CSOs) involved in transport reform and labor rights
- Auxiliary actors in the sector (e.g., vehicle mechanics, fuel vendors, terminal staff)

Observed Entry and Exit Rates

Field interviews and FGDs indicate a notably low rate of formal entry into the sector and a high informal turnover among small-scale and first-time operators. While precise, officially consolidated national figures for entry and exit were not uniformly available, qualitative and regional data revealed that:

- In urban centers like Dar es Salaam, up to 25% of newly licensed operators cease operations within the first 18 months, primarily due to financial and regulatory strain.
- In Mbeya and Mwanza, turnover was especially pronounced among informal mo-torcycle and minibus operators, with approximately 30–40% of respondents reporting having left or changed service routes within a two-year span.
- Entry into the formal registry system remains largely restricted, with new applicants often stalled due to complex permit systems, limited route availability, and prohibitive initial compliance costs.

These patterns underscore the systemic instability and structural exclusions present in the sector, which disproportionately affect newer, lower-capitalized entrants.

Key Findings and Logistical Analysis

1. Regulatory Complexity and Compliance Burden

The transport licensing and operations framework in Tanzania is layered and bureaucratically fragmented. Stakeholders across all regions cited the burdensome nature of obtaining route permits, vehicle inspections, and tax clearances – especially where coordination between LATRA, municipal councils, and regional transport authorities is lacking.

“Many operators struggle to sustain their businesses due to high taxes and inconsistent enforcement of regulations.” – Respondent 7, Minibus Association Member, Dar es Salaam

Logistical Regulation Analysis:

Transport operators face multiple overlapping regulatory demands, including licensing through LATRA, taxation via TRA, and local government oversight. These parallel systems often lead to duplicated inspections, unpredictable renewal timelines, and conflicting enforcement interpretations. Such conditions contribute to informal operations that avoid formal channels, leading to lost government revenue and compromised safety standards. Furthermore, limited route availability and the saturation of urban corridors act as natural barriers to entry, reducing competition only for those with established political or financial leverage.

2. Financial Barriers and Capital Inaccessibility

Access to affordable capital was consistently cited as the most significant barrier to entry. Prospective operators struggle to secure financing for vehicle acquisition or fleet upgrades due to a lack of collateral and the absence of government-backed financial instruments. Where financing is available, it typically comes at high interest rates with inflexible repayment structures.

“The lack of access to affordable financing prevents small operators from entering the market.” – Respondent 3, Community Transport Advocate, Mbeya

Operators often resort to purchasing secondhand vehicles, which tend to have higher maintenance costs and shorter operating lifespans. This not only reduces profitability but increases the likelihood of early exit from the market. Without targeted financing solutions such as micro-leasing, asset-backed credit, or cooperative lending, the market remains skewed in favor of larger, better-capitalized providers.

3. Unsustainable Working Conditions and High Exit Turnover

Operators reported pervasive challenges such as erratic income, long working hours, a lack of employment protections, and volatile competition – factors which drive high attrition in the sector. Conductors, in particular, operate in highly informal settings without access to basic protections such as health insurance or retirement benefits.

“Some leave the sector because it’s just not sustainable – the hours are long, the pay is poor, and there’s no security.” – Respondent 2, Conductor, Mwanza

Intra-sectoral turnover is also exacerbated by market saturation in urban areas, where oversupply leads to fare undercutting, reduced margins, and occasional violence or intimidation among competing operators. These conditions discourage long-term retention and contribute to the unstable workforce dynamics observed throughout the sector.

6.15 Objective 15: Developing an Inclusive Resource Base with Recommendations for Integration, Engagement, and Monitoring & Evaluation of Diversity and Inclusion in the Land Transport Sector

As Tanzania continues to expand its land transport infrastructure to meet growing demand, the need to ensure that transport systems are designed and governed in an inclusive and equitable manner becomes increasingly urgent. Inclusiveness is not only a matter of infrastructure design but also of institutional will, participatory governance, data responsiveness, and sustainable resourcing. This section presents key findings and strategic recommendations for developing a robust inclusive resource base that supports the integration, engagement, and monitoring & evaluation of diversity and inclusion across the land transport sector. These findings are drawn from qualitative fieldwork conducted across Dar es Salaam, Dodoma, Mbeya, and Mwanza, where the study engaged stakeholders through 26 Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs).

Participants included:

- Urban and municipal transport authorities
- Terminal managers and fleet supervisors
- Civil society actors focused on disability inclusion and gender equity
- Private transport operators and service regulators
- Community representatives from vulnerable groups (PWDs, elderly, women)
- Representatives of development partners supporting urban mobility initiatives

6.15.1 Integration: Embedding Inclusion in Policy, Institutions, and Infrastructure

The first pillar of an inclusive transport ecosystem is the formal integration of diversity principles into planning, policy, and infrastructure delivery mechanisms. Respondents were unanimous in their assertion that inclusivity must not be relegated to pilot programs or isolated projects but must instead be systematically embedded across the entire policy architecture of land transport.

“We need inclusivity to be embedded in all levels of transport planning—not as an afterthought, but as a design principle.” – Respondent 3, Urban Planner, Dodoma

Despite the existence of instruments like the Persons with Disabilities Act (2010) and the National Transport Policy (2003), these frameworks lack enforceable mechanisms that compel integration of inclusiveness into capital planning, route licensing, and contractor procurement.

Strategic Recommendations for Integration:

Develop a National Inclusive Transport Policy Framework that mandates clear implementation roles for local governments, operators, and private contractors, and links directly to national development priorities (e.g., FYDP III, SDG 11).

Amend existing policies and regulations to institutionalize universal design principles in all new road, bus terminal, and railway infrastructure projects, ensuring step-free access, tactile surfaces, accessible signage, and seating for PWDs, elderly, and pregnant women.

Include inclusion clauses in service delivery agreements, contracts, and PPP models that explicitly require adherence to diversity and accessibility standards.

Align local government planning tools (such as the Urban Infrastructure Scorecard and municipal transport development budgets) with inclusiveness metrics and checklists that must be completed prior to project approval.

6.15.2 Engagement: Institutionalizing Stakeholder Participation and Co-Creation

Effective inclusion in transport systems goes beyond representation on paper—it requires that diverse users are actively engaged in shaping the policies, infrastructure, and services that affect their daily mobility. Stakeholders stressed the importance of developing institutionalized, predictable, and transparent mechanisms for engagement, especially for traditionally marginalized groups.

“Inclusive transport must be co-created with the people who use it especially those who are often ignored, like persons with disabilities and women.” – Respondent 5, CSO Representative, Mbeya

The current engagement mechanisms are often ad hoc, elite-driven, and exclude the voices of those who face the greatest mobility challenges.

Strategic Recommendations for Engagement:

- Establish Regional Inclusive Transport Committees (RITCs) under local authorities. These should be formally constituted and include representatives from CSOs, transport operators, disability and women’s groups, and community organizations. Their mandate should include monitoring, planning input, and grievance handling.
- Institutionalize quarterly town halls and focus group discussions, especially in underserved municipalities and peri-urban areas. These forums should be used to gather real-time input from vulnerable users and ensure equitable influence in planning.
- Leverage technology through Digital Engagement Platforms, such as mobile applications, SMS feedback portals, and social media dashboards, to collect service-level feedback, identify bottlenecks, and track complaints by region or service provider.
- Promote participatory budgeting and planning by allocating a fixed percentage of transport infrastructure funding to be directed by community input, particularly from marginalized groups.

6.15.3 Monitoring and Evaluation (M&E): Developing Inclusive Accountability Systems

One of the most consistent concerns raised during field consultations was the lack of effective, data-driven systems for tracking inclusiveness in transport service delivery. Current evaluation processes lack inclusivity indicators, fail to disaggregate data by gender or ability, and are not linked to performance benchmarks or policy reviews.

“Without measuring, we cannot manage. There must be indicators, data systems, and public accountability.” – Respondent 2, Monitoring Officer, Mwanza

To ensure inclusion is not just a policy aspiration but a measurable outcome, Tanzania requires a dedicated M&E system for inclusiveness in transport, capable of real-time performance tracking and cross-regional comparisons.

Strategic Recommendations for Monitoring & Evaluation:

- Develop a Diversity and Inclusion Performance Dashboard, integrated into national transport regulatory platforms such as LATRA, SUMATRA, and municipal databases. This dashboard should include real-time service performance indicators, geospatial coverage gaps, and responsiveness to complaints.
- Design and track Inclusiveness Key Performance Indicators (KPIs), such as the number of accessible terminals, percentage of services with priority boarding, and frequency of complaints from PWDs and women.
- Institutionalize annual third-party inclusiveness audits, carried out by independent assessors and published publicly in formats accessible to non-expert audiences, including translations into Kiswahili and braille formats.
- Create a Transport Inclusivity Scorecard, assigning ratings to local authorities and service providers based on compliance with inclusive service standards, complaint resolution rates, and community engagement outcomes. This scorecard should be used in performance-based budgeting and donor funding evaluations.

6.15.4 Inclusive Resource Base: Financing, Capacity Development, and Knowledge Platforms

The final dimension of an effective inclusivity ecosystem is a dedicated resource base – comprising financial capital, technical expertise, trained personnel, and structured knowledge exchange. Without a targeted commitment of resources, even the most progressive policies and frameworks risk underperformance.

“Without trained people and targeted resources, inclusivity remains a document on paper.” – Respondent 6, Regional Transport Officer, Dar es Salaam

Respondents across all regions emphasized that inclusivity needs its own budget line, its own institutions, and its own training systems not simply reliance on general public transport programming.

Strategic Recommendations for Building an Inclusive Resource Base:

- Establish a Transport Inclusion Fund, housed at the Ministry of Transport and co-funded by national government, development partners, and private operators. This fund should finance pilot projects, innovation grants, and inclusive infrastructure retrofits.
- Design and implement a National Capacity Development Program, with modules on inclusive design, disability awareness, customer care, and gender-sensitive service planning. This program should be mandatory for transport engineers, terminal managers, conductors, and drivers.
- Create a centralized Knowledge Hub on Inclusive Transport, hosted by a national research or academic institution. The hub should maintain a database of inclusive design models, translated global case studies, research papers, and video-based training materials.
- Integrate inclusivity criteria into all transport licensing and certification programs, including mandatory courses on rights-based approaches to service delivery, ethics, and legal obligations under Tanzanian and international law.

7. Discussion

The discussion of findings from this comprehensive study on diversity and inclusion in Tanzania's land transport sector synthesizes the rich qualitative and quantitative data collected across four diverse regions: Dar es Salaam, Dodoma, Mbeya, and Mwanza. The aim of this section is to contextualize the results within broader policy frameworks, stakeholder dynamics, and regional socio-economic realities, while offering interpretive insights that inform actionable strategies for fostering a more inclusive transport ecosystem in the country.

7.1 Interpretation of Results in Relation to Study Objectives and Literature

The study's findings underscore the complexity and multidimensionality of inclusivity in public transport. Objective 1, which sought to establish the demographic profile of transport users, revealed that young adults (18–35 years) dominate public transport usage, accounting for 72.7% of users, with a notable gender disparity favoring males (64.4% vs. 35.6% females). This reflects societal gender roles, economic participation patterns, and cultural norms. Compared to global best practices, where gender parity in urban mobility is increasingly emphasized (e.g., via gender-segregated transport systems or inclusive planning), Tanzania's transport sector lags in integrating gender-sensitive policy frameworks.

Under Objective 2, gender participation in the transport workforce was critically low, with women comprising only 1.8% of providers. This confirms the underrepresentation of women due to structural barriers, including limited training, lack of safety in work environments, and absence of affirmative action policies. This aligns with literature from SHIVYAWATA and ITF, which highlights the systemic exclusion of women and the disabled from employment and service participation in the sector.

Objectives 3 through 6 addressed various aspects of accessibility and externalities. Key findings include that only 19.4% of respondents believe public transport is accessible to persons with disabilities, while 47.6% of persons with special needs rely on private transport due to systemic exclusion. These findings resonate with existing literature emphasizing the inadequacy of transport infrastructure for PWDs in Sub-Saharan Africa, particularly in low-income urban zones.

Objective 4's analysis of externalities showed a disproportionate burden on marginalized groups. Women were found to be 37.6% more likely to experience high burdens due to affordability, distance, and accidents, reinforcing the intersectionality of gender and economic vulnerability in transport access. Additionally, the high-cost burden reported in Mbeya and Mwanza, where fares over TZS 2,000 are common, illustrates the regional disparities that necessitate localized interventions.

Objective 7 and 8 revealed significant regulatory and institutional gaps. Despite the existence of laws such as the Disability Act No. 9 of 2010, implementation and enforcement remain weak. Only 49.2% of stakeholders reported structured engagement mechanisms, underscoring the fragmented governance landscape and lack of clear accountability lines.

Stakeholder analysis under Objective 9 highlighted the need for more coordinated, multi-stakeholder platforms. While LATRA, CSOs, and local governments are involved, their collaboration remains ad hoc and project-based. Global models, such as Rwanda's stakeholder councils on transport inclusion, offer potential frameworks for institutional learning.

Objective 10's evaluation of infrastructure and service quality noted that while service reliability exists in urban areas, safety, cleanliness, and inclusiveness remain inconsistent. Particularly, safety for women and PWDs was lacking, with harassment and untrained staff being recurring issues.

Objectives 11 through 13 addressed systemic challenges and international best practices. Key issues included affordability, lack of safety, infrastructure neglect, and discriminatory behavior. Rwanda's integration of universal design and subsidy models was lauded as an effective practice worth contextual adaptation in Tanzania.

Objective 14 explored provider dynamics, finding significant turnover in informal transport sectors due to financial instability and regulatory challenges. This highlights the need for structured support to informal operators through financing, formalization, and training.

Finally, Objective 15 emphasized the development of a resource base and M&E systems. The study recommends integration of inclusive KPIs in LATRA's regulatory framework and the establishment of regional M&E units to ensure data-driven policy interventions.

7.2 Limitations and Unexpected Findings

While the study achieved broad regional coverage and methodological rigor, certain limitations warrant acknowledgment. Firstly, the lack of longitudinal data limited the ability to track temporal changes in accessibility and inclusivity. Additionally, while regional stratification was implemented, rural areas remained underrepresented due to logistical constraints. Future studies should incorporate greater rural sampling to deepen insights into peri-urban and remote mobility challenges.

8. Conclusions and Recommendations

8.1 Conclusions

The study concludes that while Tanzania has made progress in expanding its transport infrastructure, significant barriers persist in ensuring equitable access for all population groups especially women, persons with disabilities, the elderly, and low-income individuals. These challenges are not solely infrastructural but extend into policy implementation, cultural practices, and institutional coordination. The regulatory environment, although supported by inclusive policies like the Disability Act and the National Transport Policy, lacks robust enforcement and comprehensive monitoring systems. Gender disparities, both in access and participation within the sector, remain pronounced. Furthermore, affordability and external factors such as distance and accident risks continue to disproportionately impact vulnerable groups. Overall, the current state of the land transport sector does not fully reflect the principles of universal access and equity.

8.2 Recommendations

No.	Recommendation	Lead Responsible Actor	Supporting Actors
1	Strengthen legal enforcement and accountability mechanisms for inclusivity compliance	LATRA	Ministry of Works & Transport (MoWT), Attorney General's Office
2	Scale up inclusive infrastructure investments and conduct accessibility audits	MoWT	LATRA, Local Government Authorities (LGAs), Engineering Boards
3	Implement a Gender Equity Roadmap for the transport sector	MoWT	LATRA, Ministry of Gender, CSOs
4	Introduce subsidized smart fare schemes for PWDs, elderly, and students	LATRA	MoWT, Ministry of Finance, Transport Operators
5	Establish Regional Inclusive Mobility Councils (RIMCs)	LATRA	LGAs, PWD Organizations, Women's Groups, Transport Unions
6	Expand rural community-operated transport schemes	LGAs	LATRA (technical over-sight), MoWT
7	Develop standardized Monitor-ing & Evaluation frameworks for inclusivity	LATRA	National Bureau of Sta-tistics (NBS), MoWT
8	Conduct nationwide awareness and education campaigns on in-clusive transport	LATRA	Media Houses, Minis-try of Education, CSOs

No.	Recommendation	Lead Responsible Actor	Supporting Actors
9	Establish Inclusive Innovation and Technology Labs	MoWT	LATRA, Private Sector, ICT Commission
10	Facilitate policy exchange and technical benchmarking with best-practice countries	MoWT	LATRA, Development Partners
11	Develop and enforce mandatory Universal Design Codes	MoWT	LATRA, Engineering Registration Board (ERB), Architects Board
12	Create a National Transport Inclusion Fund	Ministry of Finance	MoWT, LATRA, Development Partners
13	Clarify inclusivity roles between national and local authorities	MoWT	LGAs, LATRA
14	Digitize and decentralize grievance redress mechanisms	LATRA	LGAs, ICT providers
15	Formalize and empower informal transport operators	LATRA	LGAs, Financial Institutions
16	Mainstream inclusion in urban and regional planning (ESIAs)	MoWT	NEMC, LGAs, LATRA
17	Introduce inclusive curriculum in transport training institutions	National Council for Technical Education (NACTVET)	LATRA, Driving Schools
18	Develop a National Research Agenda on Inclusive Mobility	MoWT	Universities, LATRA, Research Institutions
19	Upgrade integrated data management systems for evidence-based planning	LATRA	LGAs, MoWT, ICT Commission
20	Establish a Transport Inclusion Star Rating Accreditation System	LATRA	Transport Associations, Consumer Protection Agencies

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10. Appendices

Questionnaire for Transport Service Providers (Drivers and Conductors)

This questionnaire seeks to collect data from drivers and conductors within Tanzania’s land transport sector to assess critical factors such as accessibility, inclusivity, affordability, service delivery standards, and operational challenges. The insights gathered will be analyzed to make recommendations for improvements across the sector. Your responses will directly inform a comprehensive analysis aimed at enhancing the quality, efficiency, and sustainability of transport services in Tanzania.

Instructions:

- Please answer each question truthfully based on your experiences and observations.
- Where applicable, choose the option that best represents your answer or provide specific details.
- Some questions may include skip instructions; please follow these carefully to ensure that all relevant data is collected.
- The data provided will be used solely for analysis, and all responses will be treated with the utmost confidentiality

Section A: Respondent Demographics and Professional Background

Objective: To gather basic demographic data on transport service providers, which will serve as foundational variables for examining service delivery, challenges, and factors influencing service quality.

1. Age Group:

- ☐ 18–25
- ☐ 26–35
- ☐ 36–45
- ☐ 46 and above

2. Gender:

- ☐ Male
- ☐ Female
- ☐ Prefer not to say

3. Role in the Transport Sector:

- ☐ Driver
- ☐ Conductor

1. Education Level:

- ☐ No formal education
- ☐ Primary
- ☐ Secondary
- ☐ Tertiary

2. Years of Experience in the Transport Sector:

- ☐ Less than 1 year
- ☐ 1–3 years
- ☐ 4–6 years
- ☐ 7–10 years
- ☐ More than 10 years

3. Type of Vehicle Operated:

- ☐ Bus
- ☐ Minibus (Daladala)
- ☐ Taxi
- ☐ Bajaj
- ☐ Motorbike
- ☐ Other (Please specify): _____

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Section B: Profile and Accessibility of Transport Services

Objective: To examine the user demographics, accessibility, and inclusivity of transport services to identify key variables that impact service delivery. This section will provide the data necessary to test associations between demographic factors and the accessibility of services..

1. What age groups frequently use your transport services? (Select all that apply)

- ☐ Children (Under 18)
- ☐ Young Adults (18–35)
- ☐ Middle-aged (36–55)
- ☐ Elderly (56 and above)

2. Gender distribution of your passengers:

- ☐ Mostly Male
- ☐ Mostly Female
- ☐ Equal Male and Female
- ☐ Do not know

3. Perceived socio-economic status of regular passengers:

- ☐ Low income
- ☐ Middle income
- ☐ High income
- ☐ Mixed

4. Are there any barriers in your routes that prevent certain groups from accessing your services?

- ☐ Yes
- ☐ No
- If Yes, specify the barriers: _____

5. Average fare per route segment (Tanzanian Shillings):

- ☐ Under TZS 1,000
- ☐ TZS 1,000–2,000
- ☐ Over TZS 2,000

6. Frequency of your service delays and the main reasons (e.g., road conditions, passenger loading, etc.):

- ☐ Daily
- ☐ Weekly
- ☐ Monthly
- **Main reasons (select all that apply):**
 - ☐ Traffic congestion
 - ☐ Vehicle breakdowns
 - ☐ Road infrastructure
 - ☐ Passenger delays
 - ☐ Weather conditions
 - ☐ Other: _____

Section C: Inclusivity and Safety Measures

Objective: To assess the safety and inclusivity measures in place for vulnerable groups (e.g., women, elderly passengers) and examine how these measures impact overall service quality. Data from this section will inform regression analysis on the relationship between inclusivity measures and passenger satisfaction.

Section D: Affordability and Financial Sustainability of Transport Services

Objective: To gauge the affordability of transport services and understand the economic sustainability of operators. This section will test associations between fare levels, socio-economic status, and service demand, as well as assess the impact of operational costs on service quality.

1. How affordable do you feel your services are for low-income passengers?

- ☐ Very affordable
- ☐ Somewhat affordable
- ☐ Not affordable
- ☐ Not sure

2. Do you think fare adjustments would affect passenger demand?

- ☐ Yes, increase demand with lower fares
- ☐ No change in demand
- ☐ Yes, decrease demand with higher fares

3. Have recent economic conditions affected your operational costs?

- ☐ Yes, significantly
- ☐ Yes, slightly
- ☐ No impact

4. If operational costs have risen, what areas are affected most? (Select all that apply)

- ☐ Fuel
- ☐ Maintenance
- ☐ Taxes and fees
- ☐ Other: _____



LATRA

