JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



# Urban Mobility and the Supply of Public Transport in the Federal Capital Territory (FCT), Abuja

DOI: https://doi.org/10.5281/zenodo.15512652
Tolufashe Stephen Afolabi & Ojekunle Joel Ademola

*Nigerian Institute of Transport Technology (NITT), Zaria*

**Abstract**

*This study examines the relationship between urban mobility and the supply of public transport in Abuja, Nigeria's Federal Capital Territory (FCT). Using a mixed-methods approach that combines primary data from structured questionnaires with secondary data from existing literature and official records, the study evaluates the efficiency, adequacy, and regulatory framework of public transport services. Key findings reveal that Mini and Midi buses, largely operated by unregulated private individuals, dominate the transport system. Fares are inconsistent and often influenced by fuel prices. Residential and workplace areas are the primary traffic generators, yet the transport system is marked by long waiting times, extended travel durations, and increased walking distances, all indicators of inadequacy. The limited presence of government and organized private operators exacerbates inefficiencies and restricts access. To address these challenges, the study recommends the implementation of demand-responsive transit systems, improved traffic management, redesigned bus routes for equitable service coverage, and greater involvement of formal sector stakeholders in public transport provision.*

**Keywords:** Public Transport Supply, Urban Mobility, Federal Capital Territory (FCT), Transportation Infrastructure, Commuter Accessibility

## 1.0 Introduction

Urban mobility, particularly the supply of public transport, is a critical factor in shaping the livability and sustainability of urban areas. In the context of the Federal Capital Territory (FCT), Abuja, urban mobility is fundamental to ensuring that the population has equitable access to transportation services, which are essential for social, economic, and environmental development. The rapid urbanization of Abuja, which has experienced significant population growth over the past few decades, has placed considerable strain on the existing transportation infrastructure, highlighting the need for effective public transport solutions.

The Federal Capital Territory (FCT) was established in 1976, and since then, Abuja has grown into a major urban center with diverse needs in terms of transportation (Adebayo, 2020). As the city continues to expand, the demand for efficient, affordable, and gender-inclusive public transport systems becomes

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



increasingly urgent. Gender inclusivity in urban mobility is particularly relevant, as women, children, elderly persons, and persons with disabilities often face disproportionate barriers in accessing public transport (Oluwatayo, 2019). These barriers include safety concerns, long wait times, overcrowded buses, and insufficient service routes. Addressing these issues is essential for fostering an inclusive urban mobility system that supports the economic and social participation of all members of society.

Studies have shown that public transport in Abuja often falls short in meeting the needs of different demographic groups. For instance, many women in Abuja face specific challenges in accessing public transportation due to concerns about safety, harassment, and inadequate infrastructure (Akinluyi & Olayanju, 2021). Furthermore, the lack of well-planned and coordinated transport systems in the city has led to an over-reliance on informal transport options, such as okadas (motorcycle taxis) and keke napep (tricycles), which may not be well-regulated or safe (Adeyemo & Olofin, 2021). These informal options often exacerbate issues of safety, accessibility, and reliability, especially for women who are more vulnerable to risks.

In response to these challenges, it is crucial to examine the state of public transport provision in Abuja, with a focus on understanding the gaps and opportunities for improving accessibility and inclusivity. This study aims to analyze the urban mobility system in the FCT, with a specific emphasis on the gendered dynamics of public transport provision, to inform policy recommendations that will contribute to a more equitable and efficient transportation system for all.

Urban mobility is a key factor in shaping the economic, social, and cultural life of a city. The supply and quality of public transportation services in the Federal Capital Territory (FCT), Abuja, play a critical role in determining the accessibility and inclusiveness of mobility for all urban residents. However, issues such as limited public transport coverage, inadequate infrastructure, safety concerns, and gendered inequalities in access to transport services persist in Abuja (Ajibade & Olanrewaju, 2019). These challenges are further exacerbated by rapid urbanization, population growth, and increasing demand for transport services, leading to congestion and unequal mobility experiences for different segments of the population, particularly women, children, and persons with disabilities (Nwankwo, 2020).

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



Despite numerous policy initiatives and projects aimed at improving urban mobility and the supply of public transportation, gaps in the effectiveness of these initiatives remain. Studies have pointed to the insufficient integration of gender considerations in urban transport planning, resulting in the exclusion of women's specific mobility needs (Agwu & Emoh, 2021). Moreover, the lack of a comprehensive, well-funded public transport system in the FCT limits opportunities for equitable access to work, education, healthcare, and other essential services, disproportionately affecting vulnerable groups (Omotayo, 2020). Consequently, the central problem of this study is to explore how the supply of public transportation in Abuja affects urban mobility, with particular focus on identifying barriers faced by marginalized groups and proposing strategies to make the transportation system more inclusive and accessible to all.

**1.2 The Study Area**

The Federal Capital Territory (FCT) was created in 1976 as part of the Nigerian government's strategic decision to relocate the national capital from Lagos to a more central and accessible location. Within this designated territory, a site was selected for the construction of a new, purpose-built Federal Capital City (FCC), known today as Abuja. Spanning approximately 8,000 square kilometers, the FCT is comparable in size to several Nigerian states, including Rivers, Enugu, Ondo, and Osun, while being significantly larger than states such as Anambra, Ekiti, Lagos, Imo, Akwa Ibom, Ebonyi, and Abia (Aloba, 2000). Unlike Nigeria's federating states, the FCT was conceived and is administered as a unique administrative territory. To facilitate its planning, development, and governance, the Federal Capital Development Authority (FCDA) was established in 1976 as a federal agency. One of the main reasons for selecting this location was its geographical centrality, which enhances national accessibility and integration.

Geographically, the FCT is situated between latitudes 07°25'N and 09°20'N and longitudes 06°45'E and 07°39'E. Of its total land area, approximately 250 square kilometers have been designated for the development of the Federal Capital City. The FCT shares boundaries with Kaduna State to the north, Niger State to the west, Nasarawa State to the east and south, and Kogi State to the southwest. Its central position supports strong transportation connectivity via key highways, such as the Benin–Lokoja Road, Jos–Makurdi–Keffi Road, and Kaduna–Suleja

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/

Road. Additionally, the Nnamdi Azikiwe International Airport provides air connectivity to and from the region.

Initial population projections by Doxiades Associates (1983) estimated that the FCT had a population of 124,678 in 1977, increasing to approximately 132,816 by 1980, aligning with the onset of physical development activities. This translated to a population density of about 16 persons per square kilometer. By the 1991 national census, the population had grown to 378,671, reflecting a gradual demographic increase. The area's relatively low population density at the time was a significant factor in its selection as the new capital, especially when compared to more densely populated alternatives (Baba, 1990). The original inhabitants of the FCT comprised a mosaic of minority ethnic groups historically spread across regions that now form parts of Niger, Plateau, and Kwara States. While Table 1 (not included here) presents projected population targets for different phases of the FCC's development, Figure 1 illustrates the FCT's geographical location within the national context.

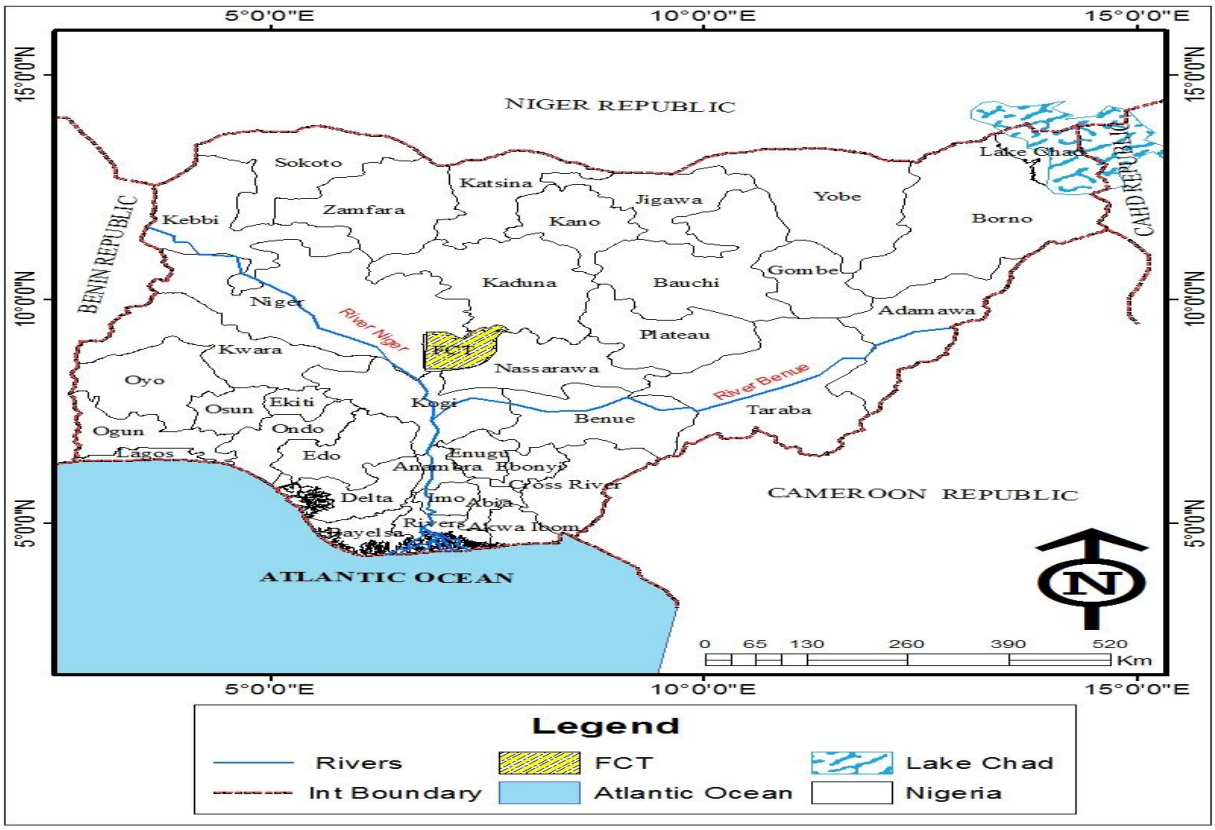



*Figure 1. Map of Nigeria Showing FCT.*
*Source: Modified from the Administrative Map of Nigeria, Using ArcGIS 10.3 Software.*

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



## 2.0 Literature Review

### 2.1 Global Context of Public Transport Demand

Public transport demand has seen steady growth globally due to urbanization, environmental concerns, population growth, and a shift toward sustainable transportation. According to the International Association of Public Transport (UITP), global public transport ridership grew by 18% between 2000 and 2018, driven largely by rising urban populations and increased investment in mass transit systems (UITP, 2019). Public transport systems are especially critical in megacities where car ownership is not sustainable due to congestion and pollution (Pojani & Stead, 2015). However, public transport demand is not uniform. High-income countries experience stabilized or even declining ridership due to increased car ownership and flexible work arrangements, while low- and middle-income countries (LMICs) report rising demand but struggle with underdeveloped infrastructure (Cervero, 2013). The COVID-19 pandemic temporarily disrupted global demand, but trends suggest a rebound aligned with green recovery strategies and urban sustainability agendas (OECD, 2021).

#### *2.1.1 Public Transport Demand in Africa*

In Africa, public transport demand is primarily shaped by rapid urbanization, informal transit systems, and economic disparities. African cities are growing at an unprecedented rate, with urban populations expected to triple by 2050 (UN-Habitat, 2022). However, formal public transport systems are often inadequate, leading to high reliance on informal modes such as minibuses, shared taxis, and motorcycle taxis (Behrens, McCormick, & Mfinanga, 2016). The demand for affordable and accessible transport far exceeds supply. For instance, in cities like Nairobi and Lagos, public transport users often face long travel times, overcrowding, and safety concerns (Salon & Gulyani, 2019). Despite the strong latent demand, insufficient public investment, policy gaps, and weak regulatory frameworks hinder the development of efficient mass transit systems across the continent (Uteng & Lucas, 2018).

#### *2.1.2 Public Transport Demand in Nigeria*

Nigeria, Africa's most populous country, exhibits high public transport demand driven by urban expansion, limited private car ownership, and economic pressures. In cities like Lagos, Abuja, and Kano, over 70% of commuters rely on public transport daily (Aderamo, 2010). The

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



dominant modes include minibuses (danfo), tricycles (keke), and motorcycles (okada), which operate largely informally (Olawole & Aloba, 2014). Despite the high demand, Nigeria's public transport system suffers from inefficiency, poor integration, inadequate infrastructure, and regulatory inconsistencies. Urban transport planning rarely aligns with commuter needs, especially for low-income and vulnerable groups (Salau, 2020). Lagos State has made strides with the Bus Rapid Transit (BRT) system, yet its reach remains limited relative to demand (Mobereola, 2009). In Abuja, although formal bus services exist, the system remains fragmented and underutilized (Ipingbemi & Aiworo, 2012).

Public transport demand is expected to grow in tandem with Nigeria's urban population, projected to reach 400 million by 2050 (UN DESA, 2019). Addressing this demand requires robust investment in infrastructure, inclusive planning, and formalization of existing informal systems to improve service quality and coverage.

## 2.2 Global Overview of Public Transport Supply

Globally, the supply of public transport has evolved in response to urbanization, population growth, and environmental concerns. Public transport systems, including buses, subways, trams, and commuter trains, are crucial for sustainable urban mobility, reducing congestion and greenhouse gas emissions (World Bank, 2022). High-income countries have largely achieved a mature supply system with integrated, multimodal networks. For instance, cities like Tokyo, Paris, and London demonstrate advanced coordination between buses, subways, and cycling infrastructure, supported by digital ticketing and real-time information systems (UITP, 2021).

Despite such advances, global disparities persist. Low- and middle-income countries (LMICs) often face inadequate supply due to underinvestment, rapid urban expansion, and governance challenges. The United Nations (2019) notes that about one-third of the urban population in developing countries lacks access to reliable public transportation within walking distance.

### *2.2.1 Supply of Public Transport in Africa*

In Africa, the public transport supply is characterized by informality, inadequate regulation, and low capital investment. Minibus taxis and informal buses dominate the landscape, particularly in Sub-Saharan Africa, serving as the de facto public transport systems

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



in the absence of formal services (Behrens et al., 2016). While these informal services are flexible and affordable, they are often unsafe, environmentally inefficient, and poorly integrated into urban transport planning (Pirie, 2014).

There have been efforts to reform the sector, such as the introduction of Bus Rapid Transit (BRT) systems in cities like Johannesburg, Lagos, and Dar es Salaam. However, the scale of these systems remains limited compared to population needs. Infrastructure deficits, weak institutions, and funding gaps continue to constrain the expansion and reliability of supply across African cities (Lucas et al., 2019).

### *2.2.2 Supply of Public Transport in Nigeria*

In Nigeria, the public transport supply reflects broader challenges seen across Africa but is further complicated by rapid urbanization, poor planning, and fragmented governance. The country relies heavily on informal modes—such as minibuses (danfos), tricycles (keke), and motorcycle taxis (okadas) to fill gaps in formal transit provision (Aderamo & Magaji, 2010). Formal bus systems exist in cities like Lagos and Abuja but are insufficient in capacity and coverage. Lagos has made notable progress with the Lagos Bus Rapid Transit (BRT) system, launched in 2008, which marked Nigeria's first attempt at structured mass transit (Mobereola, 2009). While the BRT serves over 200,000 passengers daily, its reach is still limited compared to demand (Olawole & Aloba, 2014). Other Nigerian cities, including Abuja, struggle with inconsistent investment, limited infrastructure, and coordination issues among transport agencies (Akinyemi & Ogunsanya, 2015).

Overall, public transport supply in Nigeria is constrained by inadequate infrastructure, insufficient investment, and poor integration among modes. Expanding formal, safe, and inclusive public transport remains a critical priority to enhance mobility, reduce urban inequality, and promote sustainable development.

## 3.0 Methods of the Study

A wide range of data concerning various aspects of public transportation supply and usage in the Federal Capital Territory (FCT), Abuja, was collected. These included information on commuters' trip origins and destinations, transit times, waiting times, bus patronage levels, types and ownership of buses in operation, service quality perceptions, and issues surrounding government regulation. Data

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



sources comprised institutional records from the Directorate of Road Traffic Services (DRTS), the Federal Capital Territory Administration (FCTA), the FCT Transport Secretariat (all located in Mabushi), as well as field data from commuters, drivers, operators, and managers within both public and private transport systems. Observational fieldwork was also undertaken to complement institutional and respondent data.

Primary data collection was conducted through the administration of structured questionnaires. The questionnaire was divided into two sections: the first targeted commuters, and the second was directed at operators. A total of 800 questionnaires were administered, with 400 distributed to commuters and 400 to transport operators. Additionally, 100 questionnaires each were administered along the three principal transportation corridors connecting the city to major satellite towns: Abuja–Kubwa, Abuja–Nyanya, and Abuja–Gwagwalada. The selection of these corridors was informed by preliminary observational surveys that identified them as the major arteries linking the satellite towns to the city center.

A reconnaissance survey revealed an average hourly bus traffic of approximately 300 buses on each artery. For sampling purposes, 50% of this figure (i.e., 100 buses) was adopted as the survey benchmark per corridor. Questionnaire administration followed a schedule of 30 questionnaires per day across the five working days (Monday to Friday), ensuring adequate coverage of the weekday commuting patterns. Morning and evening rush hours were targeted, with administration taking place between 7:00–10:00 a.m. and 4:00–6:00 p.m., respectively. This scheduling was based on observational evidence indicating that these periods represent the peak of commuter movement to and from work. To capture both inbound and outbound flows, 10 questionnaires were administered to commuters arriving in the city in the morning, and another 10 to those returning to the satellite towns in the evening. The data collection phase spanned one week, from Monday, January 13 to Sunday, January 19, 2025.

Commuters were classified into two main categories: inter-city commuters (those traveling between the city center and the satellite towns) and intra-city commuters (those residing and working within the municipal area). The primary focus of the study was on inter-city commuters—those traveling from surrounding towns into the Abuja municipality. The sampled population included individual transport operators, corporate operators, and

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



transport cooperatives. Within this population, special attention was given to identifying the types and numbers of buses in use. Due to the lack of a comprehensive sampling frame for public transport operators, purposive identification using the researcher's field knowledge was employed. A stratified sampling technique was used for selecting operators. Public transport buses were first categorized into mini-buses**,** midi-buses, and maxi-buses**,** after which a simple random sampling method was applied within each category to select participants. For commuters, a simple random sampling approach was employed, where all passengers encountered during the survey periods had equal chances of selection.

To complement questionnaire data and address potential information gaps, oral interviews were conducted with officials from the FCT transport agencies, as well as with transport operators and commuters. Responses were recorded immediately to preserve data integrity. Data analysis combined both descriptive and graphical statistical techniques**.** Frequencies and percentages were used to summarize the data, while bar charts, pie charts, and line graphs were employed to provide visual interpretations and enhance understanding of the patterns and trends observed.

## 4.0 Results and Discussion

### *Bus Types, Ownerships, and Operational Characteristics*

As shown in Table 1, three classes of bus ownership were revealed from the result of the survey, they are Individual, cooperative and corporate registered company.

**Table 1. Vehicle Ownership Type**

| Ownership Type | Respondents | Percentage |
|---|---|---|
| Individual | 307 | 76.7 |
| Cooperative | 31 | 7.8 |
| Corporate | 62 | 15.5 |
| **Total** | **400** | **100** |

***Source: Field Work, (2025).***

Table 1 show that public transport in the Federal Capital Territory (FCT) is dominated by individual vehicle ownership**,** accounting for 76.7% of respondents. This indicates a largely informal and fragmented sector, posing challenges for regulation and service improvement. Cooperative ownership represents only 7.8%**,** suggesting limited organizational collaboration among operators. Corporate ownership makes up 15.5%**,** reflecting a modest but more structured segment likely to support better service quality and regulatory compliance. Overall, the data underline the need for policies that promote cooperative growth and corporate investment to improve public transport efficiency and governance in Abuja.

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



The average number of vehicles (fleet size) owned by the operator was investigated and the result is shown in Table 2 below

**Table 2. Number of Buses Owned**

| Number Owned | Respondents | Percentage |
|---|---|---|
| 1 – 2 | 305 | 76.2 |
| 3 – 4 | 63 | 15.8 |
| 5 – 6 | 27 | 6.8 |
| 7 Above | 5 | 1.2 |
| **Total** | **400** | **100** |

*Source: Field Work (2025).*

Table 2 shows that the majority of public transport operators in the Federal Capital Territory (FCT), Abuja, own small fleets, with 76.2% of respondents operating 1–2 buses**.** This reflects a predominantly informal, micro-scale ownership pattern consistent with individual operation trends observed in Table 1. Only 15.8% own 3–4 buses, and fewer still**,** 6.8% and 1.2% own 5–6 buses and 7 or more, respectively. This pattern suggests limited capacity for large-scale, efficient service provision. The findings underscore the need for policies that promote fleet consolidation, access to financing, and support for cooperative or corporate growth to modernize and professionalize public transport operations in Abuja. The location of the public transport operator in the territory was investigated as shown in Table 3.

**Table 3. Location of Vehicle Owner**

| Location of Vehicle Owner | Respondents | Percentage |
|---|---|---|
| Within the FCT | 237 | 59.2 |
| Niger State | 61 | 15.3 |
| Nasarawa State | 52 | 13 |
| Other Parts of Nigeria | 50 | 12.5 |
| **Total** | **400** | **100** |

***Source: Field Work (2025).***

Table 3 shows that the majority of public transport vehicle owners in the Federal Capital Territory (FCT), Abuja, 59.2%, reside within the FCT, indicating strong local engagement in the city's transport operations. However, a significant number of owners are based outside the FCT, with 15.3% from Niger State**,** 13% from Nasarawa State, and 12.5% from other parts of Nigeria. This reflects Abuja's role as a regional transport hub attracting both nearby and national operators. While external ownership broadens investment, it may pose challenges for effective regulation and oversight, highlighting the need for stronger intergovernmental collaboration to ensure consistent service standards across jurisdictional boundaries. The ages of public transport vehicles under the different operators were investigated and the result is presented in Table 4 below:

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



**Table 4. Vehicle Age**

| Vehicle Age in Years | Respondents | Percentage |
|---|---|---|
| 1 Day – 1 Year | 41 | 10.3 |
| 1 – 2 Years | 73 | 18.2 |
| 3 – 4 Years | 117 | 29.3 |
| Above 5 Years | 169 | 42.2 |
| **Total** | **400** | **100** |

*Source: Field Work (2025).*

Table 4 highlights that the majority of public transport vehicles in the FCT, Abuja, are relatively old, with 42.2% aged above 5 years and 29.3% between 3–4 years**.** Only 10.3% are less than one year old**,** indicating minimal recent investment in new vehicles. This aging fleet raises concerns about reliability, safety, and environmental impact. The data underscore the need for fleet renewal policies**,** credit access, and incentives for newer vehicles, especially given the dominance of small-scale and informal operators with limited financial capacity.

**Table 5: Licenses Required and Possessed**

| Licenses Required and Possessed | Respondents | Percentage |
|---|---|---|
| Vehicle Registration | 150 | 37.5 |
| Insurance | 60 | 15 |
| Colour | 58 | 14.5 |
| Hackney Permit | 47 | 11.8 |
| Road Worthiness | 45 | 11.2 |
| Route Permit | 40 | 10 |
| **Total** | **400** | **100** |

*Source: Field Work (2025).*

Table 5 illustrates the extent of compliance with key regulatory licensing among public transport operators in, the Federal Capital Territory (FCT), Abuja, based on a 2025 field survey. The data show that Vehicle Registration is the most commonly held license, possessed by 37.5% of respondents. Other critical licenses, such as Insurance (15%), Colour, Code (14.5%), Hackney Permit (11.8%), Road Worthiness (11.2%), and Route Permit (10%), are held by significantly fewer operators. This low level of compliance suggests widespread informality and weak enforcement in the sector. Many operators may be avoiding regulatory processes due to costs, bureaucracy, or lack of awareness. The limited possession of safety-related licenses raises concerns about operational risks, passenger protection, and service quality. The findings highlight an urgent need for improved enforcement, education on regulatory requirements, and supportive mechanisms, such as incentives or streamlined licensing procedures, to enhance compliance and promote safer, more reliable public transport in Abuja.

**Table 6: Cost of Licenses**

| Licenses | Average Cost in ₦ |
|---|---|
| Vehicle Registration (Commercial) | 38,500 |
| Insurance 3rd Party | 20,000 |
| Colour Permit | 20,000 |
| Hackney Permit | 4,475 |
| Road Worthiness Certificate | 8,000 |
| Route Permit | 3,000 |
| **Total** | **₦93, 975** |

*Source: Field Work (2025).*

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



Table 6 presents the average costs for the regulatory licenses required to operate commercial vehicles in the Federal Capital Territory (FCT), Abuja: Vehicle Registration (Commercial): ₦38,500, which covers registration, number plates, and administrative fees, making it the most expensive due to its comprehensive nature. Insurance (3rd Party): ₦20,000 is a legal requirement that ensures compensation for third-party damages in case of an accident, safeguarding both the operator and others on the road. Colour Permit: ₦20,000 that ensures vehicles meet local appearance standards and are easily identifiable for safety and regulatory purposes. Hackney Permit: ₦4,475, which is required for vehicles on specific routes, such as taxis and buses, to help manage urban mobility and reduce congestion. Road Worthiness Certificate: ₦8,000 that verifies that a vehicle is safe and meets environmental standards for road use. Route Permit: ₦3,000 allows vehicles to operate on designated routes, ensuring regulatory compliance in public transport. The total cost for all six licenses is ₦93,975. This substantial expense could deter compliance, especially for small-scale operators, contributing to the use of informal or unregistered vehicles.

**Table 7: Methods of Acquiring Buses**

| Methods | Respondents | Percentage |
|---|---|---|
| Outright Purchase | 203 | 50.7 |
| Loan from the Bank | 35 | 8.7 |
| Hire Purchase | 77 | 19.3 |
| Leased from Companies | 33 | 8.3 |
| Leased from FUMTC | 28 | 7 |
| Others | 24 | 6 |
| **Total** | **400** | **100** |

*Source: Field Work (2025).*

Table 7 presents the distribution of methods used by respondents to acquire buses in the Federal Capital Territory (FCT), Abuja, reflecting different financial strategies. The most common method is outright purchase, chosen by 50.7% of respondents (203 out of 400), indicating a preference for long-term ownership. Hire purchase follows at 19.3% (77 out of 400), offering an instalment-based alternative for those without upfront capital but seeking eventual ownership. Bank loans are used by 8.7% (35 out of 400), suggesting limited access to traditional financing due to factors like high interest rates. Leasing from private companies is selected by 8.3% (33 out of 400), providing flexibility and avoiding the financial burden of ownership. A smaller portion, 7% (28 out of 400), lease buses from the Federal Capital Territory Urban Mass Transit Company (FUMTC), benefiting from government-supported programs. Lastly, 6% (24 out of 400) use informal or alternative methods, such as partnerships or community-based financing.

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



**Table 8: Methods for Receiving Bus Revenue**

| Methods | Respondents | Percentage |
|---|---|---|
| By Evening Deliveries | 298 | 74.5 |
| By Morning Deposits | 59 | 14.7 |
| Other (Weekly, etc., Agreement) | 43 | 10.8 |
| **Total** | **400** | **100** |

*Source: Field Work (2025).*

Table 8 reveals that the majority of respondents (74.5%) remit bus revenue through evening deliveries, indicating a preference for daily accountability and financial transparency. Morning deposits, used by 14.7%, suggest alternative routines possibly influenced by operational or safety concerns. A smaller group (10.8%) follows flexible or weekly remittance agreements, often found in informal settings. Overall, over 89% of respondents adopt daily remittance practices, highlighting the importance of liquidity and control in bus operations. These patterns have policy implications for improving transparency, financial inclusion, and revenue monitoring in the urban transport sector.

**Table 9: Determinants of Bus Fare Setting**

| How Determined | Respondents | Percentage |
|---|---|---|
| Bus Operators | 147 | 36.8 |
| Government | 29 | 7.2 |
| Transport Union | 116 | 29 |
| Others (Fuel, Roads etc.) | 108 | 27 |
| **Total** | **400** | **100** |

*Source: Field Work, (2025).*

Table 9 reveals that bus fare determination is largely driven by informal actors and operational factors, with minimal government involvement. The majority of respondents (36.8%) indicated that bus operators set fares independently, while 29% pointed to transport unions as key decision-makers, reflecting their organizational influence in stabilizing fares. Additionally, 27% cited external factors such as fuel costs and road conditions, highlighting the sector's sensitivity to economic and infrastructural changes. Only 7.2% identified the government as a fare regulator, signaling weak formal oversight. Overall, the findings suggest a decentralized and reactive fare-setting system, underscoring the need for stronger government regulation to promote transparency, affordability, and equity in public transport.

**Table 10: Determinants of Route Selection in Bus Operations**

| How it Came About | Respondents | Percentage |
|---|---|---|
| Personal Choice | 44 | 11 |
| Transport Choice | 292 | 73 |
| Government Rule | 64 | 16 |
| **Total** | **400** | **100** |

***Source: Field Work, (2025)***

Table 10 shows that decisions on bus routes are largely controlled by transport unions, as reported by 73% of respondents. This highlights the unions' dominant role in organizing route allocations and

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



maintaining operational order among drivers. In contrast, 16% indicated that government rules influence route choices, reflecting limited formal regulatory control. Only 11% cited personal choice, suggesting that individual autonomy is constrained by institutional structures. Overall, route determination is shaped more by union authority than by government or individual decision-making, underscoring the need for collaborative governance involving unions, public agencies, and stakeholders to ensure equitable and efficient route distribution in urban transport planning.

**Table 11: Bus Operating Hours**

| Operating | Respondents | Percentage |
|---|---|---|
| 1 – 6 Hours | 114 | 28.5 |
| 7 – 12 Hours | 237 | 59.2 |
| 13 – 18 Hours | 49 | 12.3 |
| 19 – 24 Hours | 0 | 0 |
| **Total** | **400** | **100** |

*Source: Field Work, (2025).*

Table 11 reveals that bus operations in the study area are primarily concentrated within a 7–12 hour daily range**,** as reported by 59.2% of respondents. This indicates a moderate service level aligned with daily peak travel periods. About 28.5% operate only 1–6 hours, suggesting part-time activity or operational limitations, while 12.3% run for 13–18 hours, reflecting high-intensity service, possibly under economic pressure. No respondents reported round-the-clock (19–24 hours) operations, highlighting the absence of late-night transport services. These findings point to the need for extended service hours**,** infrastructure support**,** and balanced labour conditions to enhance transport efficiency and inclusivity.

**Table 12: Duration at Bus Stops Across Major Urban Corridors**

| Duration in Minutes | Suleja/Kubwa Axis | | Gwagwalada Axis | | Nyanya/Karu Axis | | Total |
|---|---|---|---|---|---|---|---|
| | Response | % | Response | % | Response | % | |
| | | | | | | | |
| 1 – 10 | 2 | 2 | 0 | 0 | 1 | 1 | 1 |
| 11 – 20 | 7 | 7 | 2 | 2 | 9 | 9 | 6 |
| 21 – 30 | 15 | 15 | 8 | 8 | 13 | 13 | 12 |
| 31 – 40 | 39 | 39 | 41 | 41 | 40 | 40 | 40 |
| 41 – 50 | 21 | 21 | 14 | 14 | 16 | 16 | 17 |
| 51 – 60 | 13 | 13 | 19 | 19 | 11 | 11 | 14.3 |
| 61 Above | 3 | 3 | 16 | 16 | 10 | 10 | 9.7 |
| **Total** | **100** | **100** | **100** | **100** | **100** | **100** | **100** |

*Source: Field Work, (2025).*

An analysis of Table 12 reveals significant delays experienced by commuters at bus stops across Abuja's Suleja/Kubwa, Gwagwalada, and Nyanya/Karu corridors. The data indicate that long wait times are widespread, with 40%

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



of respondents reporting delays of 31–40 minutes, and nearly 24% waiting over 50 minutes. Moderate delays of 21–50 minutes are also common, reinforcing the perception of systemic inefficiencies in transit operations. Conversely, short wait times (under 20 minutes) are rare, affecting only 7% of commuters, highlighting poor service frequency. Corridor-specific insights show that Gwagwalada has the highest proportion of commuters (16%) waiting over an hour, while Suleja/Kubwa experiences a notable delay peak in the 41–50 minute bracket (21%). Nyanya/Karu performs slightly better but still reflects persistent issues. The findings underscore critical infrastructure and service gaps, including low fleet density and weak scheduling. Extended wait times raise safety concerns, particularly for women and vulnerable groups, and emphasize the need for gender-sensitive planning. Recommended policy interventions include the implementation of real-time tracking, increased bus frequencies, dedicated lanes, and safety audits at bus stops. Overall, the data highlight urgent needs for comprehensive urban transport reforms to enhance reliability, equity, and efficiency in Abuja's mobility system.

**Table 13: Trekking Time to the Nearest Bus Stops from Home and Office**

| Trekking Time | Kubwa-Abuja Axis | | G/lada Axis | | Nyanya Axis | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Response | % | Response | % | Response | % | Response | % |
| 0 – 5 | 9 | 9 | 4 | 4 | 5 | 5 | 18 | 6 |
| 6 – 10 | 13 | 13 | 11 | 11 | 8 | 8 | 32 | 10.6 |
| 11 – 15 | 24 | 24 | 12 | 12 | 18 | 18 | 54 | 18 |
| 16 – 20 | 35 | 35 | 39 | 39 | 36 | 36 | 110 | 36.6 |
| 21 – 25 | 4 | 4 | 21 | 21 | 19 | 19 | 34 | 11.3 |
| 26 – 30 | 5 | 5 | 3 | 3 | 9 | 9 | 17 | 5.6 |
| 31 Above | 8 | 8 | 10 | 10 | 5 | 5 | 23 | 7.6 |
| **Total** | **100** | **100** | **100** | **100** | **100** | **100** | **100** | **100** |

**Source: Field Work, (2025).**

Table 13 highlights critical insights into the walking time commuters spend to access bus stops across three major transport corridors in Abuja: Kubwa-Abuja, Gwagwalada, and Nyanya. The findings reveal limited immediate access to transit services, with only 6% of all respondents located within a 5-minute walk. Most commuters (54.6%) reported moderate walking distances of 11–20 minutes, while a concerning 24.5% trek for more than 20 minutes, underscoring systemic accessibility challenges. The Nyanya axis emerges as the most underserved, with just 4% of commuters enjoying close proximity and 34% walking over

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



20 minutes. In contrast, Kubwa-Abuja and Gwagwalada show better, yet uneven, access with higher shares of short-distance trekkers but still significant long-walk proportions. These patterns suggest poor integration between transport infrastructure and urban land use, particularly affecting vulnerable populations. The data underscores the urgent need for transit-oriented development (TOD) strategies, inclusive transport planning responsive to gender and disability needs, and last-mile solutions such as feeder buses, walkable infrastructure, and non-motorized transport options. With less than 17% of respondents within a 10-minute walk to a bus stop, the current public transport layout in Abuja lacks spatial equity. Corridor-specific interventions, especially in Nyanya, are crucial to ensure accessible, inclusive, and sustainable urban mobility.

**Table 14: Nearness of Work Place & Residence to Road**

| Distance in Meters | Kubwa- Abuja | | G/lada-Abuja | | Nyanya-Abuja | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Response | % | Response | % | Response | % | Response | % |
| 0-100 | 16 | 16 | 8 | 8 | 11 | 11 | 43 | 14.3 |
| 101-300 | 21 | 21 | 16 | 16 | 19 | 19 | 56 | 18.6 |
| 301-400 | 39 | 39 | 24 | 24 | 37 | 37 | 100 | 33.3 |
| 401-500 | 15 | 15 | 34 | 34 | 21 | 21 | 70 | 23.3 |
| Above 501 | 9 | 6 | 18 | 18 | 12 | 12 | 31 | 10.3 |
| **Total** | **100** | **100** | **100** | **100** | **100** | **100** | **300** | **100** |

*Source: Field Work, (2025).*

Table 14 provides data on the distance between commuters' residences and workplaces to the nearest main roads across three major transport corridors in Abuja—Kubwa-Abuja, Gwagwalada-Abuja (G/lada-Abuja), and Nyanya-Abuja. The distances are grouped into five categories: 0–100 meters, 101–300 meters, 301–400 meters, 401–500 meters, and above 501 meters. Only 14.3% of respondents live or work within 100 meters of a main road, with Kubwa-Abuja having the highest percentage (16%) and Nyanya-Abuja the lowest (8%). This indicates that most commuters face some distance between their homes/workplaces and main roads. The 301–400 meter range is the most common, with 33.3% of respondents falling into this category. Notably, Kubwa-Abuja (39%) and Nyanya-Abuja (37%) have higher proportions in this group, suggesting moderate access to major roads. 10.3% of respondents live or work more than 500 meters from a main road. This is especially prevalent in

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



Nyanya-Abuja (12%) and Gwagwalada-Abuja (18%), indicating significant last-mile connectivity challenges. Kubwa-Abuja has relatively better access with 37% of respondents within 300 meters but still a 9% share over 500 meters. Gwagwalada-Abuja shows moderate proximity with 18% beyond 500 meters. Nyanya-Abuja is the most disadvantaged, with 24% within 300 meters and 12% beyond 500 meters. Overall, more than 43% of respondents live or work over 300 meters from a main road, with 10% over 500 meters. These findings underscore the need for better urban connectivity and spatial equity to improve public transport access across Abuja.

**Table 15: NUTL buses (Green buses)**

| S/N | Attributes | Information |
|---|---|---|
| 1 | Fleet of Buses | 205 |
| 2 | Size of tyres | 275/80 R22.5 |
| 3 | Servicing level (how often) | Monthly |
| 4 | Duration of changing tyres | 15- 20 Months |
| 5 | Cost of each tyres | ₦100,000 (Michelin) |
| 6 | Lubricants used | Texaco oil |
| 7 | Route plied | ONEX |
| 8 | Ticketing system | Manually |
| 9 | Vehicle make | Mercedes Benz (Brazil) |
| 10 | Fare | ₦200- ₦300 |

*Source: NUTL Official Records*

Table 15 outlines key operational details about the Nigeria Urban Transport Limited (NUTL) Green Buses, which serve as a major component of Abuja's public transportation system. The fleet consists of 205 buses, with tyres sized 275/80 R22.5, and a servicing schedule of monthly to ensure operational efficiency. Tyres typically last 15–20 months before replacement, at a cost of ₦100,000 per tyre, using the Michelin brand. The buses are lubricated with Texaco oil to optimize engine performance. The buses primarily operate on the ONEX route, and the manual ticketing system is in use, though it may affect efficiency. The buses are Mercedes Benz models imported from Brazil, known for their durability in heavy-duty transport. The fare for riding the Green Buses ranges from ₦200 to ₦300, which is affordable for many commuters but may still be a barrier for low-income passengers.

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



**Table 16: Abuja Urban Mass Transport Company (AUMTCO).**

| S/N | Attributes | Information |
|---|---|---|
| 1 | Fleet of Buses | 150 |
| 2 | No of vehicle grounded | 15 |
| 3 | Route plied | Nyanya, Masaka, Karu, Jikwoyi, Orozo, city |
| 4 | Fare | ₦200- ₦300 |
| 5 | Duration of changing tyres | 10- 13 months |
| 6 | Cost of tyres | ₦100,000 |
| 7 | Ticketing type | Manual paper |
| 8 | Service level/ duration | After 5000 KM |
| 9 | Bus type | MCV- Egypt design and Marc Apollo. |

*Source: AUMTCO Official Records.*

Table 16 outlines the operational characteristics of a public bus fleet serving commuters in Abuja. The fleet consists of 150 buses, with 15 grounded vehicles, representing about 10% of the total fleet. This suggests potential maintenance issues or a shortage of spare parts. The buses serve multiple routes, including Nyanya, Masaka, Karu, Jikwoyi, Orozo, and the city center, indicating coverage of both urban and peri-urban areas. The fare for using the buses ranges between ₦200 and ₦300, which is affordable for many, but could pose challenges for low-income passengers. Tyre replacement occurs every 10 to 13 months, with each tyre costing ₦100,000. This reflects the wear and tear typical in urban transit. The fleet uses a manual paper ticketing system, which may cause inefficiencies, especially during peak hours. Buses are serviced after every 5000 kilometers of operation, indicating a focus on vehicle reliability. The fleet includes two bus models: MCV (Egypt design) and Marc Apollo, chosen for their durability and suitability for the terrain. In conclusion, while the fleet size and bus model selection are appropriate, there are areas for improvement, including addressing grounded vehicles, transitioning to automated ticketing, and enhancing maintenance practices.

## 5.0 Recommendations

Based on the findings of this study, the following are recommended.

1. To alleviate traffic congestion and improve the supply of buses, large capacity buses (such as lorries or vans) should be prioritized, while discouraging the use of private cars. Public bus operators such as AUMTCO, Sunny Global, and Unity Lines should be supplied with more buses, and financial incentives (such as loans)



should be provided to individuals to enable them to own large buses.

2. A comprehensive redesign of bus stops, laybys, and parking spaces in both the city and satellite towns is needed to improve accessibility. This will ensure better connectivity between bus stops and residential/work areas.
3. Given that fuel prices heavily influence bus fares, subsidies should be provided to commercial bus operators. This would help reduce fares, making public transport more affordable for commuters, and could reduce reliance on private cars.
4. Law enforcement agencies (e.g., police, DRTS, FRSC) should implement better traffic management practices to reduce road indiscipline and congestion. This would improve the overall traffic flow, benefiting bus services as well.
5. The government should actively regulate bus routes and fares to ensure fairness and prevent exploitation by operators. Subsidies for fuel, spare parts, and maintenance should be considered to support the financial viability of bus services and meet public transportation needs.
6. The government should ensure the availability of adequate data and information for effective planning and decision-making in the public transport sector.
7. An effective regulatory body should be established to monitor private operators, ensuring they provide efficient, high-quality services, maintain well-conditioned vehicles, and adhere to route coverage requirements. Subsidies for spare parts should also be introduced through government policy.
8. The FCT authority should prioritize buses by creating exclusive bus lanes and providing special traffic signal phases at intersections. This would speed up bus services, reduce operating costs, and potentially lower fares, improving overall service and efficiency.

## References

Adebayo, M. (2020). *Urbanization and Transportation Infrastructure Development in Abuja, Nigeria*. Journal of Urban Planning, 15(2), 34-45. https://doi.org/10.1016/j.jup.2020.04.009

Aderamo, A. J. (2010). Transport Development and Urban Growth in Nigeria. *Journal of Human Ecology, 29*(2), 125–134. https://doi.org/10.1080/09709274.2010.11906261

Aderamo, A. J., & Magaji, S. A. (2010). Rural Transportation and the Distribution of

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



Public Facilities in Nigeria: A case of Edu Local Government Area of Kwara State. *Journal of Human Ecology*, *29*(3), 171–179. https://doi.org/10.1080/09709274.2010.11906261

Adeyemo, O. O., & Olofin, S. O. (2021). *Gender and Urban Transport Challenges in Abuja: A Socio-Economic Perspective*. International Journal of Urban Mobility, 8(3), 58-67. https://doi.org/10.1016/j.ijum.2021.07.004

Agwu, S. A., & Emoh, F. I. (2021). Gender and Transportation: Exploring Women's Mobility Challenges in Urban Centers in Nigeria. *International Journal of Urban Transport, 13*(2), 89-102.

Ajibade, L. T., & Olanrewaju, D. L. (2019). Urban Mobility and Transportation Challenges in Abuja, Nigeria. *Journal of Urban Planning, 15*(4), 47-62.

Akinluyi, S. A., & Olayanju, J. A. (2021). *Exploring the Gendered Experience of Public Transport in Abuja, Nigeria*. African Journal of Transportation Studies, 14(1), 22-34. https://doi.org/10.1016/j.ajts.2021.01.003

Akinyemi, E. O., & Ogunsanya, A. A. (2015). Urban Transportation Systems and Planning in Nigeria. *Journal of Geography and Regional Planning*, *8*(2), 15–21. https://doi.org/10.5897/JGRP2014.0487

Behrens, R., McCormick, D., & Mfinanga, D. (Eds.). (2016). *Paratransit in African cities: Operations, Regulation and Reform*. Routledge.

Behrens, R., McCormick, D., & Mfinanga, D. (Eds.). (2016). *Paratransit in African Cities: Operations, Regulation and Reform*. Routledge.

Cervero, R. (2013). *Transport Infrastructure and the Environment in Developing Countries: Mobility, Access, and Environmental Sustainability*. World Bank.

Ipingbemi, O., & Aiworo, A. (2012). Analysis of Intra-Urban Travel Behaviour of Commuters in Lagos, Nigeria. *International Journal of Development and Sustainability, 1*(2), 409–417.

Lucas, K., Jennings, G., & Behrens, R. (2019). Inequities in Mobility and Access in the Sub-Saharan African context. *Transport Policy*, *81*, 106–116. https://doi.org/10.1016/j.tranpol.2019.06.018

Mobereola, D. (2009). *Africa's first BRT Scheme: The Lagos BRT-Lite System*. SSATP Discussion Paper No. 9. World Bank.

Mobereola, D. (2009). Lagos Bus Rapid Transit: Africa's first BRT Scheme. *SSATP Discussion Paper No. 9*. World Bank.

Nwankwo, O. S. (2020). Public Transport and Urban Mobility in Abuja: Issues and Policy Perspectives. *Transportation Research Journal, 27*(1), 74-88.

OECD. (2021). *COVID-19 and the Transport Sector: Impact and Policy Responses*. Organisation for Economic Co-operation and Development.

Olawole, M. O., & Aloba, O. (2014). Mobility Characteristics of the Elderly and Their Associated Level of Satisfaction with Transport Services in Osogbo, Nigeria. *Transport Policy*, *35*, 105–116. https://doi.org/10.1016/j.tranpol.2014.05.019

Olawole, M. O., & Aloba, O. (2014). Mobility Characteristics of the Elderly and their Associated Level of Satisfaction with Transport Services in Osogbo, Nigeria. *Transport Policy*, *35*, 105–116. https://doi.org/10.1016/j.tranpol.2014.05.018

Oluwatayo, O. S. (2019). *Barriers to Gender-Inclusive Public Transport in Abuja: An analysis of Accessibility and Safety Concerns*. Nigerian Journal of Urban Planning, 10(4), 50-65. https://doi.org/10.1016/j.njup.2019.03.002

Omotayo, M. O. (2020). Assessing the Impact of Urban Transportation Systems on Equitable Access to Public Services in Abuja. *Urban Studies, 58*(5), 913-928.

Pirie, G. H. (2014). Sustainable Urban Mobility in 'Anglophone' Sub-Saharan Africa. *International Journal of Sustainable Transportation*, *8*(3), 186–200. https://doi.org/10.1080/15568318.2012.758381

JOURNAL OF THE NIGERIAN INSTITUTE OF TOWN PLANNERS
VOL30 NO 3, JUNE 2025
https://nitpjournals.ng/index.php/jnitp/



Pojani, D., & Stead, D. (2015). Sustainable Urban Transport in the Developing World: Beyond Megacities. *Sustainability*, *7*(6), 7784–7805. https://doi.org/10.3390/su7067784

Salau, S. O. (2020). An Assessment of Urban Transport Challenges in Nigerian Cities. *International Journal of Transportation Engineering and Technology*, *6*(2), 23–30. https://doi.org/10.11648/j.ijtet.20200602.11

Salon, D., & Gulyani, S. (2019). Mobility, Poverty, and Gender: Travel 'Choices' of Slum Residents in Nairobi, Kenya. *Transport Reviews*, *39*(1), 93–116. https://doi.org/10.1080/01441647.2018.1505297

UITP. (2019). *Public Transport Trends 2019*. International Association of Public Transport.

UITP. (2021). *World Report on Metro Systems 2021*. International Association of Public Transport. https://www.uitp.org

UN DESA. (2019). *World Urbanization Prospects: The 2018 Revision*. United Nations Department of Economic and Social Affairs.

UN-Habitat. (2022). *State of African Cities 2022: Towards a Sustainable Urban Future*. United Nations Human Settlements Programme.

United Nations. (2019). *World Urbanization Prospects: The 2018 Revision*. UN Department of Economic and Social Affairs. https://population.un.org/wup

Uteng, T. P., & Lucas, K. (Eds.). (2018). *Urban Mobilities in the Global South*. Routledge.

World Bank. (2022). *Global Mobility Report 2022: Transport for Inclusive Societies*. https://www.worldbank.org/en/topic/transport/publication/global-mobility-report-2022