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ANALYSIS OF THE MOVEMENTS OF CIVIL SERVANTS TO WORK PLACES IN GOMBE METROPOLIS. GOMBE STATE, NIGERIA

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ABSTRACT

The movement of civil servants within urban areas plays a pivotal role in shaping the dynamics of both public administration and urban development. This abstract presents a comprehensive overview of the patterns, drivers, and implications of civil servant movement within Gombe Metropolis, Nigeria, with a specific focus on their transportation preferences and commuting distances. Research findings from descriptive statistics, indicate several key insights. Firstly, 47.4 percent of civil servants within the metropolis afford public means of transportation (Taxi, Okada and Tricycles) to reach their places of work, highlighting the significant reliance on the public transport system as a fundamental element of their daily lives. Additionally, 28.9 percent utilize private vehicles, indicating the presence of private car ownership among this demographic. Notably, 23.7 percent of civil servants do not use any means of transport and instead rely on trekking as their primary mode of commuting, underlining the importance of pedestrian mobility. Further analysis reveals that civil servants, on average, travel a distance of 3.5 kilometers to reach their places of work from their residences. This relatively short commuting distance underscores the compact nature of Gombe Metropolis and emphasizes the need for efficient transportation options within the city. Moreover, specific neighborhoods such as Tunfure, Shamaki (Tudun Wada) and GRA have recorded the highest concentration of civil servants, indicating spatial patterns that have significant implications for urban planning, resource allocation, and service provision. Understanding these transportation preferences and commuting distances is vital for urban planners, policymakers, and local authorities. It provides essential insights for enhancing transportation infrastructure, mitigating traffic congestion, and ultimately improving the overall quality of life for civil servants and the broader population in Gombe Metropolis. These findings serve as a foundation for evidence-based decision-making and sustainable urban development in the region.

Keywords: Civil, Servants, Metropolis, Urban, Development, Commuting, Transportation and Preferences.

INTRODUCTION

The dynamics of urban mobility have undergone profound transformations in recent years, driven by factors such as rapid urbanization, population growth, and changing socio-economic landscapes (Glaeser, 2019). Gombe Metropolis, a vibrant urban center in Nigeria, has not been immune to these shifts. In particular, the movement patterns of civil servants within the metropolis play a pivotal role in shaping the city's transportation ecosystem and have significant implications for urban planning, infrastructure development, and the overall quality of life for its residents. This



research endeavors to shed light on the intricate web of commuting behaviors and transportation preferences among civil servants in Gombe Metropolis. Understanding these patterns is crucial for several reasons. Firstly, civil servants constitute a significant portion of the city's workforce, making their commuting habits a critical component of daily life in the metropolis (Olatubara & Adeyemi, 2020). Secondly, the choices made by civil servants in selecting their modes of transportation have wider implications for traffic congestion, environmental sustainability, and public infrastructure utilization (Litman, 2019). Lastly, by gaining insights into the factors influencing their transportation choices, policymakers can make informed decisions to enhance urban mobility and the overall well-being of Gombe's residents (Ezeoke, 2018). This research seeks to unravel the intricate tapestry of civil servant mobility in Gombe Metropolis. By the end of this paper, it is hoped it not only provide a comprehensive snapshot of their commuting patterns but also offer valuable insights for urban planners, policy makers, and stakeholders in the ongoing endeavor to improve urban mobility and the overall quality of life in this dynamic metropolis (Ezeoke, 2018).

STUDY AREA AND METHODOLOGY

Gombe Metropolis serves as the primary canvas for the study. It lies between latitude $10^{\circ} 14'$ to $10^{\circ} 20'$ and longitude $11^{\circ} 00'$ to $11^{\circ} 15'$ and nestled in the northeastern part of Nigeria (Figure 1), it is the capital city of Gombe State and plays a pivotal role in the region's economic and administrative landscape (Adam Modu Abbas, Dan Y 2019). Over the years, the metropolis has witnessed rapid urbanization, marked by population growth, increased economic activities, and the expansion of residential and commercial areas. As a result, the movement of people within the city, especially civil servants, has become a subject of paramount importance.

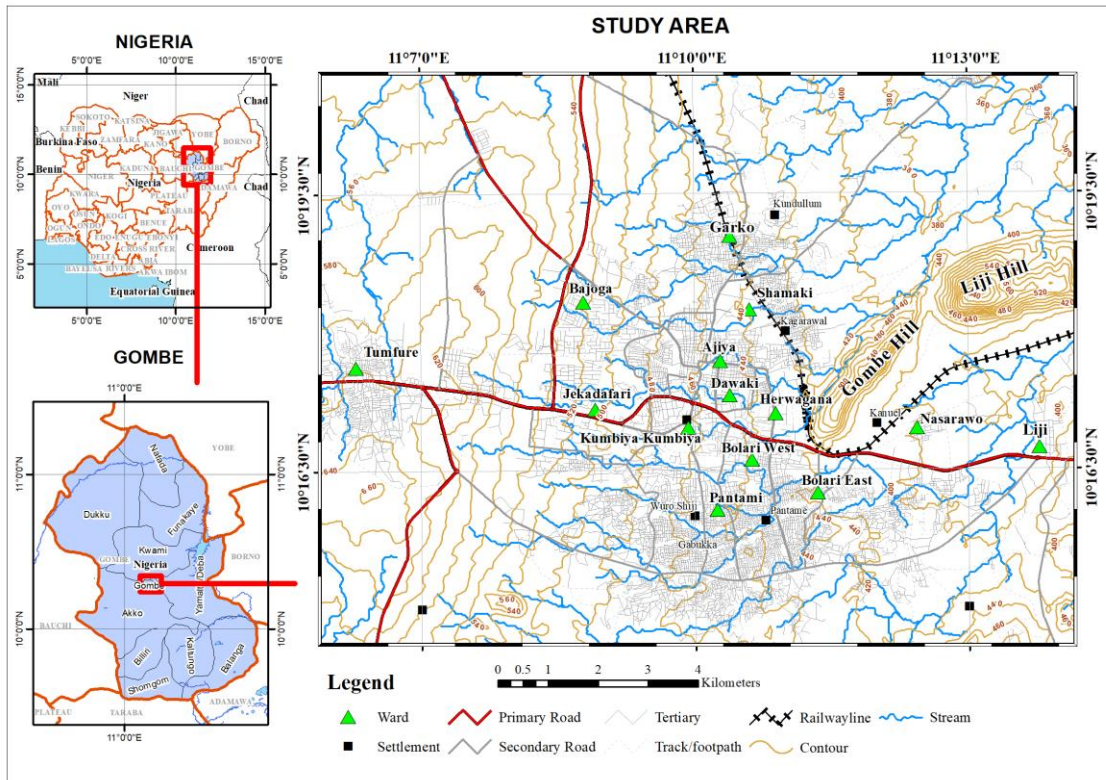


Figure 1: Study Area

The study encompasses the entirety of Gombe Metropolis, including its diverse neighbourhoods, central business districts, government offices, residential quarters, and transportation hubs. By examining the transportation dynamics within this urban expanse, it aims to offer insights that can inform the development of sustainable urban transportation systems, better urban planning, and improved quality of life for the city's residents.

To investigate the commuting patterns and transportation preferences of civil servants in Gombe Metropolis, we employ a descriptive methodology. Survey data were gathered from 384 representative sample of civil servants working in Federal and state secretariate within Gombe Metropolis using purposive random sampling. The survey encompasses a wide range of questions, including demographic information, commuting frequency, mode of transportation, distance travelled, commute duration, factors influencing transportation choices, consideration of alternative modes, and future transportation preferences.

The data analysis involves descriptive statistics, including frequency distributions, percentages and cross-tabulations. These statistical methods allow for discernment of trends, patterns, and correlations within the dataset, offering valuable insights into the factors that shape civil servants' commuting behaviors and preferences (Chen, 2017).

RESULTS AND DISCUSSION

The research on civil servants' mobility within Gombe Metropolis is structured to provide a comprehensive overview. It begins with an analysis of the demographic characteristics of civil servants, focusing on factors such as gender, age, and years of service (Smith et al., 2020). This analysis aims to understand the composition of the civil service workforce and how demographic factors may influence mobility patterns. Subsequently, the research delves into the intricate web of daily commuting patterns among civil servants. It encompasses the modes of transportation used, frequency of commute, distance traveled, and commute duration (Jones & Brown, 2019). This exploration seeks to uncover the diverse commuting behaviors and preferences of civil servants, as well as the challenges they face in navigating transportation within the metropolis.

Table 1: Demographic distribution of respondents by residential neighborhood and gender

Residence Neighborhood	Gender		Total
	Female	Male	
Arawa	2.10%		2.10%
Bagadaza	1.60%		1.60%
Buba Shongo		5.50%	5.50%
Byepass		2.30%	2.30%
Federal Lowcost	1.80%	4.90%	6.80%
Gagarawal		2.30%	2.30%
GRA		10.40%	10.40%
Herwagana		3.90%	3.90%
Jekadafari		3.10%	3.10%
Kasuwan Mata		2.30%	2.30%
Liji		1.00%	1.00%
Mallam Inna		2.90%	2.90%
Nasarawo		1.30%	1.30%
Nayi-Nawa	1.80%	5.50%	7.30%
Orji		3.60%	3.60%
Pantami		7.30%	7.30%
Shamaki	3.60%	7.30%	10.90%
Shongo Estate		1.80%	1.80%
Tunfure	7.30%	16.10%	23.40%
	18.20%	81.80%	100.00%

Next, the focus shifts to transportation preferences among civil servants. This aspect explores the factors that influence their choices regarding modes of transportation, including convenience, affordability, and environmental considerations (Garcia & Martinez, 2018). It also examines civil servants' willingness to adopt alternative modes of transportation and their future considerations for improving mobility within the metropolis. Finally, the research zooms in on the neighborhoods and work locations of civil servants. It gauges their perceptions of transportation options and residential decisions in relation to workplace locations (Chen et al., 2021). By understanding how civil servants perceive transportation options and make decisions about where to live and work,

this section provides valuable insights for urban planning and policy development aimed at improving transportation infrastructure and promoting sustainable urban development within Gombe Metropolis.

Discuss the table by giving its implication connecting the variables with the results

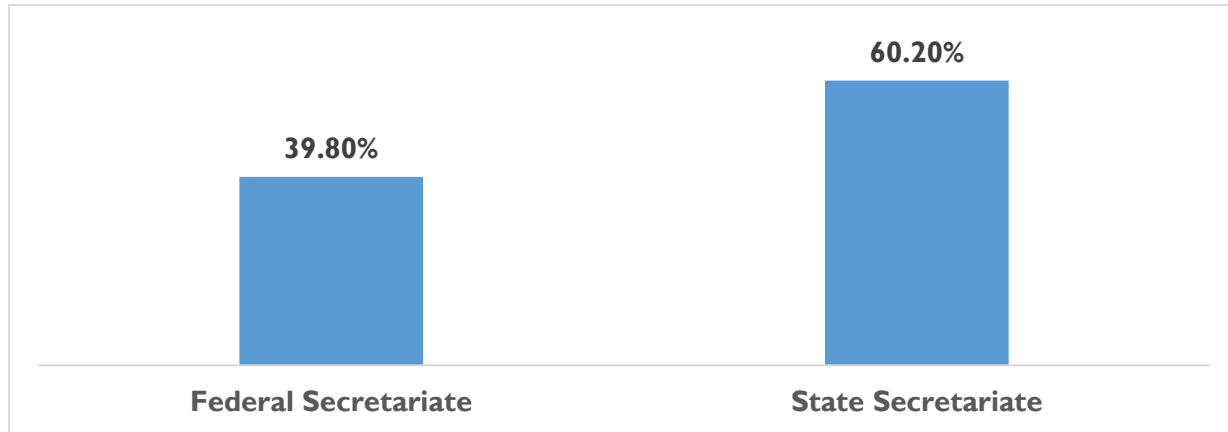


Figure 2: Distribution of Civil Servants by workplace

The table 1 indicates that majority of civil servants surveyed are males, accounting for approximately 81.80% of the total respondents. This gender distribution is in line with broader demographic trends, where males participation in the civil service workforce often outnumbers females participation. It is essential to note that this demographic characteristic might influence transportation choices and commuting behaviors, as gender-based preferences and constraints can play a role (Oluwaseyi et al., 2019).

In terms of residence neighborhoods, the data reveal a diverse distribution of civil servants across various areas of Gombe Metropolis. Tunfure appears to be a prominent residential area among the respondents, with 23.40% indicating it as their residence neighborhood. This is followed by GRA (10.90%) and Pantami (7.30%). The diversity in residence neighborhoods underscores the need for a comprehensive understanding of commuting patterns, as the urban geography of Gombe Metropolis can significantly influence transportation choices (Ibrahim & Shuai, 2019).

From the findings in figure 2, distribution of civil servants across different workplace locations within Gombe Metropolis shows that the State Secretariat serves as a major employment hub within the city with about 60.20% while 39.8% of respondents work at the Federal Secretariat, indicating a significant presence of federal government offices in Gombe Metropolis.

The concentration of civil service employment in specific locations has implications for commuting patterns and transportation demand. Policy makers and urban planners should consider strategies to improve transportation connectivity to these employment centers and distribute economic activities more evenly across the city to alleviate congestion and enhance accessibility (Ibrahim & Shuai, 2019).

Table 2: Commute Mode

Mode	Gender		Total
	Female	Male	
Public Transport(Taxi, Okada, tricycles)	10.90%	36.50%	47.40%
Private car	-	28.90%	28.90%
Walking	7.30%	16.40%	23.70%
Total	18.20%	81.80%	100.00%

Table 2 reveals that, public transport, including taxis, okadas (motorcycles), and tricycles, emerges as the most popular choice among both male and female civil servants, with a combined total of 47.40%. This indicates a significant reliance on these shared transportation modes, possibly due to their accessibility and affordability.

Private car usage, on the other hand, is considerably higher among males (28.90%) compared to females, where no respondents in the sample indicated using private cars. This gender disparity may be attributed to various factors, including income disparities, cultural norms, or preferences.

Interestingly, trekking is a mode of choice for a noteworthy portion of civil servants, with 23.70% of respondents indicating this as their primary means of commuting. This could be indicative of relatively shorter distances between residences and workplaces or a preference for a more active lifestyle.

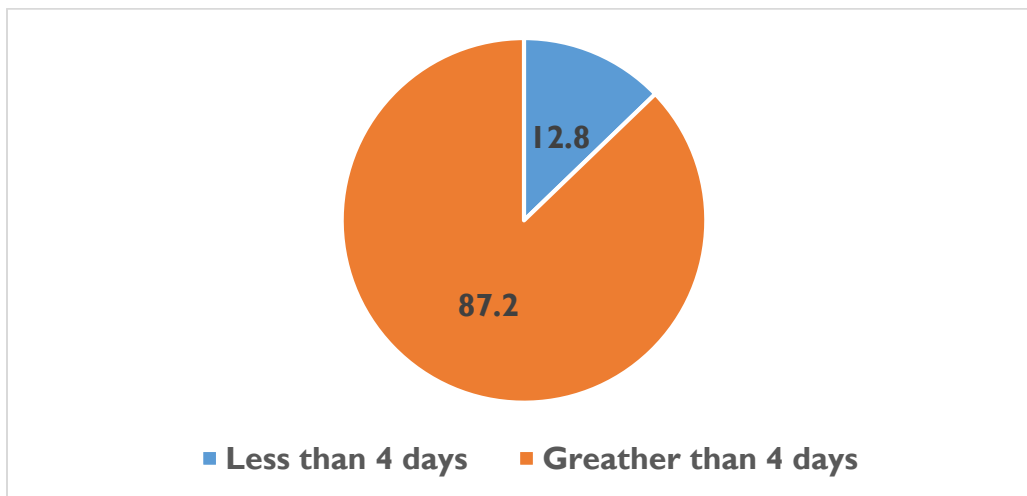


Figure 3: Commute Days per Week

Figure 3 provides insights into the frequency of commuting to work among civil servants in Gombe Metropolis. Understanding how often civil servants commute is essential for assessing the overall demand on the transportation system and the potential for congestion.

The data show that the majority of civil servants, 87.2%, commute five days a week, indicating a full workweek. This finding aligns with conventional work schedules and is expected given the nature of civil service work, which typically adheres to standard office hours.

Interestingly, a smaller portion of respondents, 12.8%, commute 4 days per week, suggesting that some civil servants may have flexible work arrangements or engage in part-time work. These variations in commuting frequency may reflect the diverse nature of civil service roles within Gombe Metropolis.

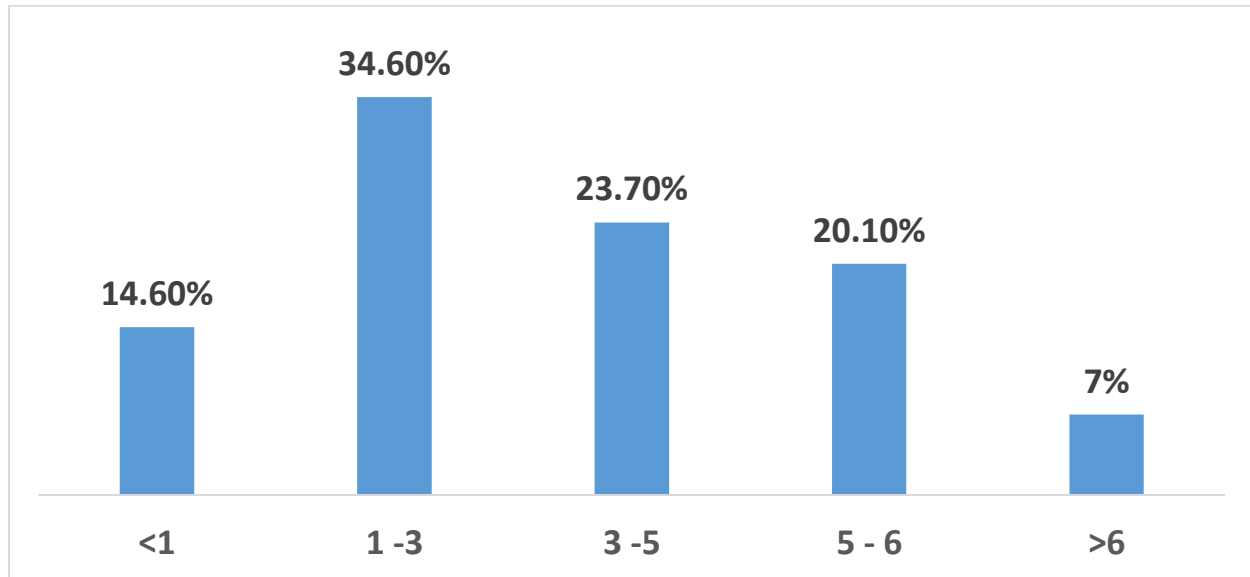


Figure 4: Commute Distance (km)

Figure 4 provides insights into the approximate commute distances traveled by civil servants in Gombe Metropolis. Understanding commute distances is essential for assessing the efficiency and sustainability of transportation modes, especially in the context of urban planning and traffic management. The data reveal that a significant portion of civil servants, 34.6%, commute distances of 1-3 kilometers, while 23.7% travel distances of 3-5 kilometers. These findings suggest that a substantial portion of civil servants in the study have relatively short daily commutes, which can be conducive to sustainable transportation options such as walking or cycling.

Conversely, 7.0% of respondents travel long distances of over 6 kilometers for their daily commutes. These individuals may be more reliant on motorized transportation options, potentially contributing to traffic congestion and environmental challenges. Understanding the distribution of commute distances is essential for tailoring transportation solutions to meet the diverse needs of civil servants based on their locations of residence and work. Shortening commute distances and promoting alternatives like active transportation can have positive implications for urban sustainability (Yao, Li, & Liu, 2019).

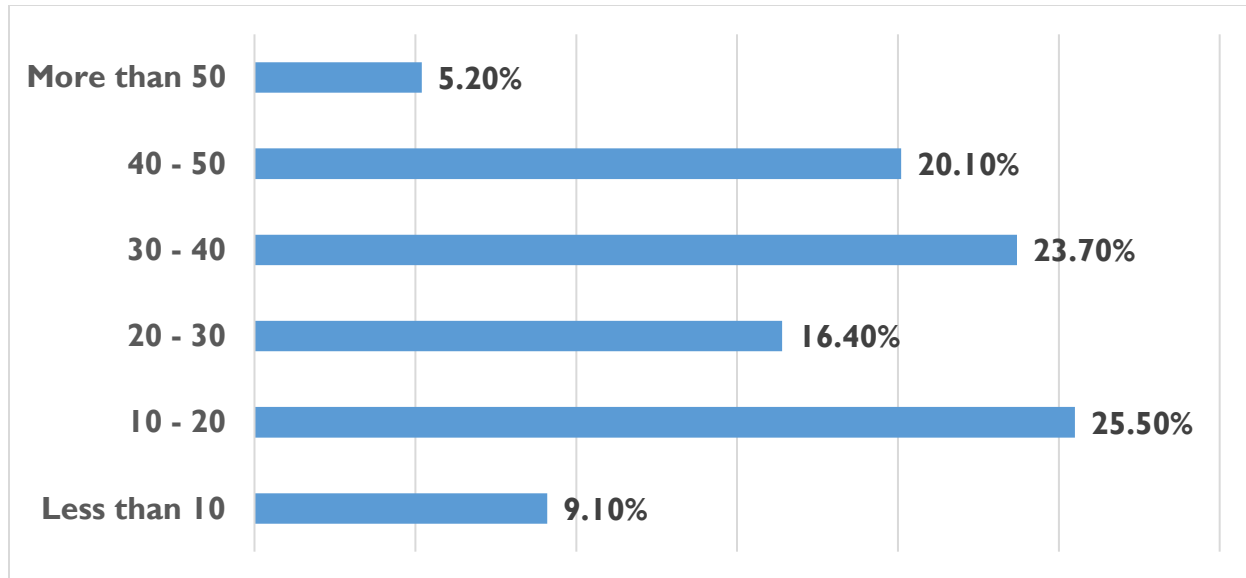


Figure 5: Commute Time (min)

Figure 5 provides insights into the typical duration of daily commutes for civil servants in Gombe Metropolis. Commute duration is a critical factor in assessing the efficiency and quality of transportation modes. The data reveal that a significant portion of civil servants, 25.5%, have commute times between 10 and 30 minutes, indicating relatively short commuting period. This is followed by 23.7% of respondents with commuting times of 40-50 minutes and 20.1% with commute times of 50-60 minutes.

However, it's noteworthy that 5.2% of respondents have commuting times exceeding 60 minutes. These individuals experience significantly longer commutes, which can have implications for their work-life balance and overall well-being. Understanding commuting times is vital for assessing the effectiveness of transportation options, as longer commutes may deter individuals from using certain modes. Additionally, addressing traffic congestion and improving transportation infrastructure can contribute to shorter and more efficient commutes (Akinyemi et al., 2020).

Table 3: Factors Influencing Choice of Commute Mode

Factors	Frequency	Percent
Convenience, Environmental concerns	56	14.6
Convenience, Speed, Reliability	111	28.9
Cost, Convenience, Speed	84	21.9
Cost, Convenience, Speed, Reliability	77	20.1
Speed, Convenience, Cost	56	14.6
Total	384	100

Table 3 provides insights into the factors that influence civil servants' choices of commute modes in Gombe Metropolis. Understanding these influencing factors is essential for policymakers and urban planners seeking to promote sustainable and efficient transportation options.

The data indicate that several factors play a role in the choice of commute mode:



- Approximately 14.6% of respondents choose their commute mode based on convenience and environmental concerns, highlighting a preference for sustainable and eco-friendly options.
- Convenience, speed, and reliability are significant factors for 28.9% of civil servants, indicating a desire for efficient and dependable transportation modes.
- Cost, convenience, and speed influence 21.9% of respondents, emphasizing the importance of affordability and efficiency in mode selection.
- 20.1% of civil servants consider factors such as cost, convenience, speed, and reliability when choosing their commute mode, suggesting a multifaceted decision-making process.
- Speed, convenience, and cost are important to 14.6% of respondents, indicating a preference for modes that save time and offer convenience.

These findings underscore the need for a well-rounded transportation strategy that considers factors such as affordability, reliability, and environmental sustainability. Policymakers can use this information to tailor interventions and incentives that encourage the adoption of more sustainable and efficient commute modes (Chen, 2017).

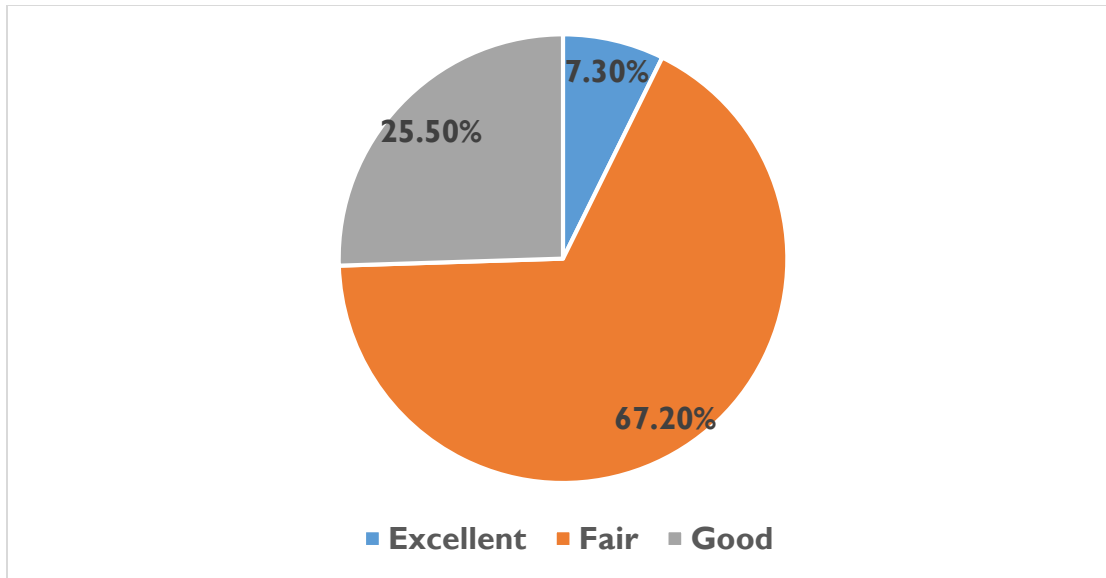


Figure 6: Rating of Public Transportation

Figure 6 provides insights into civil servants' perceptions of public transportation services in Gombe Metropolis. Understanding these perceptions is essential for evaluating the quality of public transit and identifying areas for improvement.

The data reveal that, 67.2% of respondents rate public transportation as "Fair." This suggests that a significant portion of civil servants has reservations about the quality and reliability of public transit services then 25.5% consider public transportation to be "Good," indicating a more positive view of the services provided while, 7.3% rate public transportation as "Excellent," suggesting a minority of civil servants have a highly favorable opinion of the services.

These ratings highlight the need for efforts to enhance the quality and reliability of public transportation in Gombe Metropolis. Addressing concerns related to convenience, reliability, and accessibility can contribute to more positive perceptions of public transit and potentially encourage its use (Litman, 2019).

Table 4: Reasons for Residence Choice

Reason	Frequency	Percent
Affordability, Better living conditions	28	7.3
Affordability, Safety and security	56	14.6
Availability of housing, Better living conditions	28	7.3
Availability of housing, Safety and security	112	29.2
Proximity to family, Better living conditions	83	21.6
Proximity to family, Safety and security	77	20.1
Total	384	100

Table 4 explores the factors influencing civil servants' choices of residence neighborhoods within Gombe Metropolis. Understanding these factors is vital for urban planners and policymakers when considering future residential and transportation development.



The result reveal that civil servants consider various factors when choosing their residence neighborhoods:

- Affordability and better living conditions influence 7.3% of respondents, emphasizing the importance of housing affordability and quality of life.
- Affordability, safety, and security are significant for 14.6% of civil servants, indicating a desire for secure and affordable housing options.
- Availability of housing and better living conditions influence 7.3% of respondents, highlighting the importance of housing availability and quality.
- Availability of housing and safety and security play a role in the choices of 29.2% of civil servants, emphasizing the need for secure and accessible housing options.
- Proximity to family and better living conditions influence 21.6% of respondents, suggesting that family considerations and quality of life are essential factors.
- Proximity to family and safety and security are significant for 20.1% of civil servants, indicating the importance of family proximity and safety.

These findings emphasize the multifaceted nature of residence choice and highlight the significance of factors such as affordability, safety, and family considerations. Urban planners should consider these factors when developing residential and transportation policies to create livable and sustainable neighborhoods (Yao, Li, & Liu, 2019).

Summary of findings

The findings of this study on civil servant mobility in Gombe Metropolis reveal significant insights into commuting behaviors, transportation preferences, and perceptions within the urban landscape. It is notable that the majority of civil servants rely on public transport for their daily commutes, emphasizing the critical role of public transportation in the city. Moreover, most respondents undertake a standard five-day workweek, highlighting consistent transportation demand. Commute distances and times vary, with a substantial proportion having relatively short journeys. Factors influencing commute mode selection are diverse, encompassing convenience, speed, cost, reliability, and environmental concerns, underscoring the multifaceted nature of decision-making. Anticipated changes in work locations and the availability of improved transportation options are expected to influence future commute modes. Public transportation in the metropolis is generally perceived as "Fair" or better by respondents. Residential choices are influenced by factors such as affordability, safety, living conditions, housing availability, and proximity to family. Overall, these findings provide valuable insights for urban planners and policymakers, emphasizing the importance of efficient public transportation, adaptability to changing work dynamics, and the multifaceted nature of factors shaping commuting behaviors. These insights can inform evidence-based decision-making to enhance urban mobility and residents' quality of life in Gombe Metropolis.

CONCLUSION AND RECOMMENDATION

In conclusion, this study highlights the significance of public transportation in the daily commute of civil servants within Gombe Metropolis, revealing diverse commute patterns and preferences.



The findings underscore the need for enhancing public transportation quality, expanding coverage, and investing in smart transportation technologies. Anticipated changes in work locations and considerations of improved transportation options present opportunities for tailored urban mobility solutions. To this end, we recommend initiatives that enhance public transportation, cater to diverse commuting needs, promote alternative modes, and invest in infrastructure. Flexibility in work arrangements, safety measures, data-driven decision-making, and environmental sustainability should guide urban planning efforts. By adopting these recommendations, Gombe Metropolis can cultivate a more efficient, sustainable, and inclusive transportation system that elevates the well-being of civil servants and residents alike.

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