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ASSESSMENT OF PASSENGERS SATISFACTION WITH INTRA – URBAN TRANSPORT SERVICES IN OWERRI MUNICIPAL

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ABSTRACT

The study examined bus passengers’ satisfaction with the intra-urban transport services in Owerri Municipal. Data collection was through structured questionnaire and observations. The research adopted systematic random sampling for collection of data from resident bus users on the selected routes. A total of 400 questionnaires were administered to respondents, however, 362 were properly filled and used for the study. Descriptive statistics was used in analyzing the data, while some information were presented in the form of pie chart. The findings revealed that majority (80%) are dissatisfied with bus services. One fourth of the respondents perceived lack of shelter as the major challenge at bus stops, followed by the use of dilapidated buses, (about 19%) while poor communication between operators and passengers had the least percentage. The passengers were only satisfied with transport fare (mean = 3.4) and frequency of buses and sufficiency of buses with (mean = 3) but dissatisfied with the other factors except where the passengers were undecided. Conclusively, the bus passengers are not satisfied with the quality of service provided by bus operators. The research recommends that bus stop locations and designs are recognized as crucial elements in the drive to improve the quality of bus services.

Keywords: Assessment, Satisfaction, Intra-urban, Bus passengers, Transport service

1.0 Introduction

As an essential service in urban centers, transport is important for the survival of modern society and there will be no life without it in the city. This is because it enables people, firms and other organizations to carry out their activities at sites selected for these purposes in separate locations in the cities (Okoro, 2016). Transport as we all know can be defined as the movement of goods and persons from place to place and the various means by which such movement is accomplished. For urban areas, there are two types of transport: intra-urban and inter-urban. Intra-urban Public transport means movement of freights and passengers within an urban area while inter-urban is movement between urban areas. One of the major means of accomplishing such movements is by public transport.

Public transportation by definition connotes the act or the means of conveying large number of people “en masse” as opposed to conveyance in individual Vehicles carrying very few people at a time (Palmer & Cole, 2015). In other words, public transport or mass transit is a system which involves movement of greater number of people at a time along principal corridors. Public transport or mass transit comprises mainly of the rail system, light rail system, Tram ways and monorails, bus system and where possible water transportation (Oliver, 2017). Urbanization pace in Nigeria has been
dramatic, extraordinarily showing a high rate of 5-10 percent per annum (Egunjobi, 1999). Consequently, there has been rapid expansion of Nigerian cities’ areal extent, which is now tenfold their initial point of growth (Oyekunle, 2016). A critical aspect of this is that city growth and expansion in Nigeria has been largely uncontrolled. One of the major functions of the spatial structure of any human settlement is to facilitate the movement of people and goods within the settlement. The phenomenal increase in population and city size was noticeable in most cities especially state capitals and local government headquarters. Osuji (2013), asserted that the population of Owerri grew at a phenomenal rate of about 15% annually. Similarly, for any added square mile of city growth, an extra 500 public transport trips per day will be generated (Jacob et al, 2017). Furthermore, a city like Owerri with a population of 401,873 in 2006 was projected to have about 625,141 populations by 2022 (FRN GAZETTE, 2023). The resultant effect of this on transportation will create great challenges for government. While there will be need to reduce traffic congestion, air pollution and increased traffic-related safety, loss in productive man hour could negatively influence the socio-economic fabric of the urban society.

Bus system is the dominant mode of public transport in the cities of developing countries. The bus system is the transportation system that uses bus which have a range of passenger capacities and performance characteristics, and may operate on fixed routes with fixed schedules, or may be flexibly routed (Smerk, 2014). Because of low income for the majority of inhabitants in the Cities of developing countries, buses provide the only mode of transport that they can afford (Armstrong, 2013). Bus system has the potential of being used as a policy tool to reduce the number of cars on urban roads, thereby reducing traffic chaos and other related problems in the city. It also has the potential of extending transportation services to a greater proportion of urban residents who do not have private cars, and cannot afford frequent taxis fares. The bus riders seek a convenient ride between their points of origin and destination. Added to this, they require comfortable ride at a fare which they can afford in order to encourage mass transit system in the society.

For a while now, Owerri Municipal city has been experiencing rapid population growth and expansion of its environment due to influx of migrants from rural areas. The growth was accompanied by a substantial expansion of the city’s boundaries and much higher level of economic and social activities (Eboli & Mazzulla, 2017). These have led to the extension of low-income unplanned settlements in the city peripheries and workers from the areas are exerting increasing pressure on already inadequate public transportation facilities. The high cost of car purchases and maintenance in Nigeria now due to economic meltdown, the spreading of suburbs and transformation of villages into urban settlements, have also created residential-to-work transportation problem in Owerri as a result of inefficient public transport systems especially bus system which is the main mode of transportation in the study area.

A cursory look at urban transportation services in Owerri Municipal reveals that buses popularly called bus Imo are the most popular because it is more affordability and more reliable. Hence, the satisfaction of the passengers has to be considered in order to encourage the use of public transport due to the accruing benefits like reduced pollution, traffic
congestion, resource conservation etc. According to Baron and Harris (2017), satisfaction is defined as the customer’s fulfillment. It is a judgment that a product or service feature, provides a pleasurable level of consumption-related fulfillment, including levels of under- or over-fulfillment (Denton, 2019). Due to the fact that people have increasingly come to understand the importance of customers’ satisfaction, this research therefore would focus on intra-urban bus transport services and passenger satisfaction on some selected routes in Owerri Municipal.

2.0 Statement of the Problem

The intra-urban Public transport services in the third world countries are mainly centered on buses, designated bus stops, lay-by spaces, defined routes (Oliver, 2017). Various problems plague these facilities ranging from inadequate number of buses to match the number of commuters, poor demand and supply of road spaces (like lay by spaces at the bus stops, carriageways) to keep up with the demand. These problems have threatened efficient operations and management of the intra-urban public transport in most cities.

In some cases, the quality of passenger bus services is poor due to overloading, driving of buses by unskilled persons, the use of rickety buses which usually breakdown along the road, insufficient leg space and improper fare charges among others. As a result of these problems, passengers tend to be discouraged from patronizing the public bus services within Owerri Municipal especially private car owners, as public transport can reduce air pollution, traffic congestion among others in the city. Thus, this has impaired the National Transport Policy of Nigeria 2010 objective in the promotion of public transport use than private cars.

The numbers of buses plying the routes in Owerri urban seem to be more than the terminal spaces provided, thereby causing the remaining to float or make do with any available space. The operators strive to accommodate their buses within the available space which usually lead to serious congestion. These bus stops are shared by buses going on different routes and this has led to serious traffic congestion at the bus stops mainly at peak periods as the lay by spaces are not able to cope with the extra demand not thought of earlier in the planning. At some points, the bus stops are being turned into terminals where the buses stop for longer time as they scout for passengers. These problems are most observed around bus stops that are located around the road junctions such as Emmanuel College roundabout, Fire Service Roundabout, Warehouse Junction where buses converge or need to diverge into different directions.

Also, there seems to be an overwhelming number of commuters far more than the available transit modes resulting in overloading of buses. There is no adequate waiting space at the bus stops to take care of the large number of passengers especially at the bus stops and terminal. This has resulted to the jostling and in some cases, stampedes as passengers try to find space to stand while some try to break through the crowd to board the arriving buses. This problem is worsened during the rainy seasons as commuters have no shelter from the rain thereby discouraging the use of public transport. This makes it very imperative to examine the main challenges encountered by bus passengers, the major bus routes and the commuters’ perceptions on the factors influencing their satisfaction on the routes so as to proffer solution to such factors that discourage the use of public transport in Owerri Municipal.
3.0 Aim and Objectives

The aim of this study is to assess passengers’ satisfaction with the use of intra-urban public transport service in Owerri Municipal, in order to improving and encouraging public transport use to abate air pollution and traffic congestion in the study area.

4.0 Literature Review

Yan and Chu (2016), discovered that in developing countries, demand for passenger trip is higher in the cities due to economic growth. The nation’s growth and the need to meet mobility, environmental, and energy objectives place demands on public transit systems, some of which are old and in need of upgrading. The livability and sustainability of these cities are intrinsically interwoven with not only the degree of efficiency and effectiveness with which existing transport capacity is managed but also how well immediate and future transportation plans and programmes are articulated, laid out and implemented in order to meet the needs of people (Adesanya, 2011). Car ownership in Nigeria is low. In the cities, there is an average of 4 cars per 1000 population, which translates to about 0.004 cars owned per person (Adesanya, 2011).

Ogwude (2011), explained that with such a relatively low level of car ownership, our cities experience so much congestion with public transport. However, the situation is different in some countries. Performance characteristics of bus service are reliability, frequency, capacity, safety and costs (Vogt, 2018).

Denton. (2019) analyzed bus operation reliability at the stop, route and network levels. They observed that by increasing distance between a bus stop and origin terminal, reliability of bus service would decline. Also, bus service reliability greatly decreases when this distance is increase to more than 30km.

Palmer and Cole (2015), asserted that the importance of public transport stemmed from the fact that it provides mobility for those who cannot afford to buy a car and helps in creating and maintaining live able communities by relieving highway congestion and assuring long term sustainability in terms of resource conservation and environmental protection. Common modes of public transport include shared taxis, buses and minibuses, converted pick-up vans, motor scooters (auto rickshaws) and pedal rickshaws (Adesanya, 2011). In Owerri municipal, the major mode is mini-bus popularly called bus-imo. Oppong, (2018), opined that the absence of well-designed and properly located bus stops as well as insufficient and inadequate terminals are among the factors that discourage people from using public transport.

4.1 The Level-of-Service Concept

Generally, it is not easy to exhaustively define the Level-of-Service (LOS) concept otherwise known as concept of quality of service indicators. This is because different people and different urban regions may put different emphasis on various components of the concept. For instance, on the part of transport consumers (the travelers), the dimension of Level-of-Service (LOS) considered are travel time, bus frequency, comfort, terminal standards, bus stop facilities, interchanges between routes and services (Oliver, 2017). Travel time usually contains several different elements. For a transit trip, it includes walking into the station or bus stop, waiting time for bus services, traveling time in the transit vehicle and walking time to the destination.
The comfort and convenience of public transport system (for example bus system) could be measured in the vehicle in terms of seating comfort and jolting. They could be measured to and from bus stop and at the bus stop in terms of terminal location, shelter provided, and traffic safety. Hence, quality of service can be defined as the overall measured or perceived performance of transit from the passenger’s point of view (May, 2014). According to Quattro (2016), quality of service measure reflects two important aspect of transit service. These include the degree to which transit service is available to given locations and the comfort and convenience of the service provided to passengers. Quality of service measures differ from both traditional highway service quality measures, which are more vehicle-oriented than person-oriented, and from the numerous utilization and economic performance measures routinely collected by the transit industry, which tend to reflect the transit operator’s variables (components) of level-of-service concept (Quality of service concept). These clearly show the various dimensional approaches of the concept.

4.2 Service Quality and Customers Satisfaction

An improvement to bus service quality can attract more bus users. This fact could resolve many problems (e.g., helping to reduce air pollution and noise, traffic congestion, and energy consumption) because individual transport would be less used (Eboli & Mazzulla, 2017). This can only be made possible where bus users are satisfied.

Satisfaction is defined as fulfillment of customer (Oliver 2017). It is a judgment that a service feature or the product or service itself provides a pleasurable level of consumption-related fulfillment, including levels of under- or overfulfillment (Budiono, 2019). Satisfaction can be seen as fulfillment of a need, demand, claim, desire, etc. Need fulfillment is a comparative process giving rise to satisfactory responses. The dominant theoretical model employed in research into customer satisfaction is the expectancy/disconfirmation model in which customers are satisfied, if their experience and perceptions of the service they perceive exceed their expectations (Payne & Holt 2013). Within this framework, satisfaction is analyzed by examining the expectation of service quality and the attributes of the service quality that influence the experience and perceptions. On the other hand, service quality is defined as a comparison between customer expectation and perception of service (Gronroos, 2014).

Service quality in general, consists of five distinct dimensions: tangibles (equipment, physical facilities, appearance of personnel); reliability (ability to perform the promised service dependably and accurately), responsiveness (willingness to aid customers and provide service promptly), assurance (knowledge and courtesy of employees and their ability to inspire confidence and trust), and empathy (individualized attention a firm provides its customers). (Budiono, 2019). Quality is one of the key dimensions that is factored into consumer satisfaction judgments. Quality is the totality of features and characteristics of a product or service that bear on its ability to satisfy stated and implied needs. In the short term, product or service features determine quality, which then satisfies customer needs.

Several studies regarding satisfaction and dissatisfaction in public transport have been conducted to develop and create attractive public transport. Negative critical incident and customer/passenger
dissatisfaction could be a constraint for people to continue using public transport.

4.3 Concept of Bus Service Quality

Bus services quality may be defined using various attributes that cover such items as service coverage, frequency of services, hours of services, and service reliability (Palmer & Cole, 2015). Customer satisfaction survey and expectation surveys specifically are the best methods conducted to measure bus service quality. From the survey, any lack in bus service or performance can be determined and improved. The concept of Bus Service Quality evaluates the perceived service quality by transit users. The choice of public transport as a preferred mode of travel by travelers in the city is mainly influenced by quality of bus operation services. Ogwude (2011) opined that previously, bus users were satisfied with basic services and the availability of routes and the location of service. However, transit users today are more demanding from the bus providers including fast and reliable service, shorter walking distance to stops, low floor buses, cheaper service and friendly safe drivers.

Bilotto (2013), highlighted specific criteria associated with passenger satisfaction as follows:

**Reliability**- Consistency of dependability and performance

**Responsive**- Willingness of employees to provide service. It involves timeline of service

**Competence**- Possession of the required knowledge skill and to perform the service.

**Access**- Ease of contact and approachability.

**Courtesy**- Respect, politeness, consideration and friendliness of service operator.

**Communication**- Keeping passengers informed in a language they can listen to and understand.

**Credibility**- Believability, trustworthiness, and honesty.

**Security**- Freedom from risk, danger or doubt.

**Understanding / knowing the Passenger**- Understand the passenger needs.

**Tangibles**- Service representations and physical environment.

There is evidence that the bus service quality based on reliability, safety, communication, comfort and cleanliness are the important criteria considered by passengers. For example, Taylor and Fink (2016) review service reliability, particularly service coverage and service frequency as sets of factors influencing public transport ridership. A favorable quality of public bus service tends to attract further bus travelers.

The urban transport challenges are marked by acute demand and supply imbalance in both infrastructural facilities and service and inadequate customer/user orientation. To be truly customer-oriented, a transport organization must not only have corporate objectives but also practice those objectives. It must adopt a practical way of operation that will help it service its customers fully and effectively.
5.0 Methodology

Study Area

Owerri Municipal is the capital of Imo State, Nigeria. It is located within latitude 5.476310N and longitude 7.025853E. Owerri Municipal is bounded on the North by Amakohia, on the North East by Orji, on the East by Egbe, on the South East by Naze, on the South by Nekede and on the North West by Irete. Owerri lies in the center of radial road network within the Southern part of the defunct East Central state. Six important routes from Onitsha, Port Harcourt, Orlu, Okigwe, Umuahia and Aba converge at Owerri Municipal. A loop of external tangents surrounds the city namely; Okigwe Road, Douglas Road, Wetheral Road and Aba Road (this is the old city of Owerri). Middle tangents (Mbaise Road, Christ Church Road, Old Okigwe Road) link the different districts of the city and are connected with the external tangents. From the exploratory survey of the study area, there are 14 major routes out of which 7 routes were selected for the purpose of this study due their heavy bus traffic. These selected routes include: Douglas Road, Mbaise Road, Tetlow Road, Wetheral Road, Aba Road, MCC Road, Egbe Road, these are the major routes plied by the buses.

Figure 1: Map of the Study Area in a Regional Context
Source: ARCGIS Map 9.3
Data Collection and sampling Procedures

The research adopted probabilistic simple random sampling technique for selection of the public transport routes that were sampled in the study. A sample size of 400 respondents were drawn from residents of bus users along the selected transport routes using the Tsaro Yamane formula. Owerri Municipal having a population of 625,141. The respondents were issued questionnaire at an interval of 5 using Systematic random sampling, out of which 362 questionnaires were correctly filled and used for this study.

A five-point Likert type rating scale with strongly satisfied = 5, satisfied = 4, undecided = 3, dissatisfied = 2, and strongly dissatisfied = 1 was used to determine passenger’s perception on bus services quality in the area. This led to obtaining the mean scores of the frequency counts value of the responses. Summing the ratings gave 15 points for overall satisfaction and for each of the specific service quality attributes that affect passenger satisfaction. This was divided by 5, giving a mean of 3. Thus, any mean above 3 indicates passenger’s satisfaction and below 3 indicates passenger’s dissatisfaction with service quality attributes and overall satisfaction of the public bus transport system. A mean of exactly 3 shows undecided on satisfaction level. Data analyzed were presented using tables, charts, percentage and mean.

Results and Discussions

The Socio-Economic Characteristics of Respondents

Gender Distribution of Respondents

The gender distribution of the respondents as seen in Fig.1. shows that male respondent was 197 and female, 165.

![Figure. 2: Respondents Gender Distribution](image)

**Source:** Researcher’s Fieldwork, 2022.
The analysis indicates that males utilize the bus services than females within the study area. This shows that males are more active than females in the study area, hence need for the males to move from one point of origin to their destinations. The movements depend on the nature of activities taking place in the study area, such as social, economic, political, educational and religious activities.

Distribution of Respondents Age

The type of activities going on at any specified area affect the age distribution. The Owerri Municipal is a good example, because it has a spectacular type of activity which is due to the different tertiary institutions found in the area. As can be seen in Figure 2, majority of the respondents were in the age group of between 15 – 24 and accounts for the highest age group, then by the age group 25 – 34 years, while the last age group is 60 years and above.

This shows that majority of the users of public bus services falls under the age group of (25 – 34) and (15 – 24) years respectively as it is attributed to the fact that Owerri urban area is an institutional area as well as commercial area, thus students, youths mainly patronize the buses.

Occupation of Respondents

The profession of any bus user determines the pattern of movement of such person which in turn affect bus services patronage. This is due to the fact that passenger have a reason to move from his origin to his destination to meet his or her commuting needs. Figure 3 indicates that 34% of the bus users are students, which shows the highest percentage, seconded by civil servants with 26%, self-employed 18%, with unemployed 14% while pensioners have the least (8%).

Figure 3: Respondents Age Distribution
Source: Researcher’s Fieldwork, 2022.
Figure 4, indicates that students and civil servants are the predominant users of the public bus services within Owerri Municipal. This is attributed to movement of people from their residence (point of origin) to their various working areas, school (point of destination) and vice versa for their various distinctive purposes.

Educational Level of Respondents

From Figure 5, 31% of the 362 respondents attained primary education, with 46% respondents having secondary education and 21% respondents have tertiary education level, while 2% have none. This has proven Owerri as an educational town as majority of the people can read and write. The result confirms the findings of Ogbuji (2020), which stated that majority of residents of Owerri Municipal are literates.
Figure 5 entails that most of the bus users in Owerri Municipal have one form of education or the other, with more in the secondary level. The implication is that the public bus services will experience its peak during work days than weekends and also when academic sessions are on.

**Respondents Monthly Income**

Per month income level of respondents was grouped into seven (₦ 0 – 2,000) to (₦ 60,100 and more), as seen in Figure 6

![Figure 5: Monthly income of respondents](source: Researcher’s Field survey, 2022)

Figure 5 indicates that 5% of the bus users earn less than ₦2,000 monthly, 13% earn between ₦2,100 – 5,000 monthly, 17.1% passengers earn between ₦5,100 – 10,000, while 25.1% bus users earn ₦10,100 – 20,00, and 18.8% receive between ₦20,100 – 35,000, 12.4% are paid between (₦35,100 – 60,000), lastly 8.6% receive ₦60,100 monthly or more.

**Challenges of Bus Passengers in Owerri Municipal.**

The challenges experienced by sampled bus users in Owerri Municipal are shown in Table 1

Table 1 indicates that 17.56% of respondents saw frequent stop as the most challenging of all the problems, followed by lack of bus stop shelters (16.85%). Reckless driving has 14.09%, poor communication 14.52%, traffic jam 12.98% while use of dilapidated buses was perceived by 12.15% of the respondents as another challenge and the least challenge according to the respondents was improper pricing (11.05%). Hence the issues of frequent stopping lack of shelters at bus stops among others need special attention.
Table 1: Challenges Encountered by Sampled Bus Users in Owerri Municipal

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<tr>
<th>Routes</th>
<th>TP1</th>
<th>%</th>
<th>TP2</th>
<th>%</th>
<th>TP3</th>
<th>%</th>
<th>TP4</th>
<th>%</th>
<th>TP5</th>
<th>%</th>
<th>TP6</th>
<th>%</th>
<th>TP7</th>
<th>%</th>
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</tr>
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<td>9</td>
<td>20.5</td>
<td>7</td>
<td>13</td>
<td>5</td>
<td>10.6</td>
<td>10</td>
<td>19.6</td>
<td>3</td>
<td>7.5</td>
<td>4</td>
<td>6.5</td>
<td>52</td>
</tr>
<tr>
<td>Mbaise Road</td>
<td>17</td>
<td>26.2</td>
<td>12</td>
<td>27.3</td>
<td>10</td>
<td>18.5</td>
<td>11</td>
<td>23.4</td>
<td>6</td>
<td>11.8</td>
<td>8</td>
<td>20</td>
<td>14</td>
<td>23</td>
<td>78</td>
</tr>
<tr>
<td>MCC Road</td>
<td>8</td>
<td>12.3</td>
<td>6</td>
<td>13.6</td>
<td>15</td>
<td>27.8</td>
<td>9</td>
<td>19.2</td>
<td>5</td>
<td>9.8</td>
<td>13</td>
<td>32.5</td>
<td>10</td>
<td>16.4</td>
<td>66</td>
</tr>
<tr>
<td>Wetheral Road</td>
<td>19</td>
<td>29.2</td>
<td>4</td>
<td>9.1</td>
<td>17</td>
<td>31.5</td>
<td>12</td>
<td>25.5</td>
<td>14</td>
<td>27.4</td>
<td>7</td>
<td>17.5</td>
<td>21</td>
<td>34.4</td>
<td>94</td>
</tr>
<tr>
<td>Aba Road</td>
<td>7</td>
<td>10.8</td>
<td>13</td>
<td>29.5</td>
<td>5</td>
<td>9.2</td>
<td>10</td>
<td>21.3</td>
<td>16</td>
<td>31.4</td>
<td>9</td>
<td>22.5</td>
<td>12</td>
<td>19.7</td>
<td>72</td>
</tr>
</tbody>
</table>

Total          | 65  | 100 | 44  | 100 | 54  | 100 | 47  | 100 | 51  | 100 | 40  | 100 | 61  | 100  | 362   |

%             | 17.56| 12.15| 14.52| 12.98| 14.1| 11.05| 16.9 |

Source: Researcher’s Fieldwork, 2022

N.B: TP1= Frequent stops, TP2= The use of dilapidated buses, TP3= Poor communication, TP4= Traffic jam, TP5= Reckless bus drivers, TP6= Improper pricing system. TP7= lack of bus stop shelters.

Major Routes, bus stops and facilities in Owerri Municipal

Table 2 shows the routes and major bus stops of the intra urban transport in Owerri Municipal. Most of these routes and parks lack the necessary facilities (sheltered bus stop, information facilities on bus services, seat availability at bus stops etc) that can encourage the use of public mass transit as observed from the field.
Table 2: Major Bus Routes, Bus Stops and facilities in Owerri Municipal.

<table>
<thead>
<tr>
<th>Routes</th>
<th>Route Followed</th>
<th>Major Bus Stops</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route 1</td>
<td>Douglas Road</td>
<td>Ama JK, Ekeonuwa, school rd, Mbase Rd, FirstBank, Ama-Hausa, New Market.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>K, Ekeonuwa, school rd, Mbase Rd, FirstBank, Ama-Hausa, New Market.</td>
</tr>
<tr>
<td>Route 2</td>
<td>Mbase Road</td>
<td>Onumiri, Tetlow, Christ Church, fire service junction</td>
</tr>
<tr>
<td>Route 3</td>
<td>Egbu Road</td>
<td>ABC, Chisco, Relief Junction</td>
</tr>
<tr>
<td>Route 4</td>
<td>Wethedral Road</td>
<td>Emmanuel College, tetlow, first Bank, fire service junction, Christ Church, Stadium rd, MCCRd,Ajokustr,Ikenegburd, Cherubim junction, Item str, library.</td>
</tr>
<tr>
<td>Route 5</td>
<td>MCC Road</td>
<td>LODAN, ITC, Pax Junction</td>
</tr>
<tr>
<td>Route 6</td>
<td>Aba Road</td>
<td>Naze junction, Alaba, Chibyke Emmanuel college</td>
</tr>
<tr>
<td>Route 7</td>
<td>Tetlow Road</td>
<td>LODAN, ITC, Pax Junction</td>
</tr>
</tbody>
</table>

Source: Researcher’s Fieldwork, 2022.

The major routes and bus stops in the area lack the basic amenities like shelters, seats, communication gadgets etc that can ensure passengers satisfaction. The few bus stops where there are shelters, most of these shelters have been converted into lunatic asylum and dumping sites.

Table 3: Levels of satisfaction of Bus Users in the Study Area

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfied</td>
<td>13</td>
<td>3.6</td>
</tr>
<tr>
<td>Satisfied</td>
<td>32</td>
<td>8.84</td>
</tr>
<tr>
<td>Undecided</td>
<td>17</td>
<td>4.70</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>189</td>
<td>52.20</td>
</tr>
<tr>
<td>Very dissatisfied</td>
<td>111</td>
<td>30.66</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>362</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Researcher’s Field Analysis
From Table 4, 52.2% of the bus users were dissatisfied with the services of public bus transport system, 30.66% were very dissatisfied. About 8% of the respondents were satisfied, 3.60% indicated they were very satisfied while 4.70% did express their level of satisfaction. Hence majority of the bus users were not comfortable with public bus services thereby, discouraging its use.

Distribution of Passengers’ Perception on the Factor Influencing Bus Passengers’ Satisfaction in the Study Area

The frequency distribution presented in Table 4 shows that out of 12 factors analyzed, 9 service quality attributes of public bus transport service in Owerri Municipal were unsatisfactorily perceived by passengers. For example, variable 1 (information about the bus transport services) with a mean of 2.3 (mean < 3.0), indicates that bus users are not satisfied with public bus services. Information is not being provided on real time arrival and departure to guide passengers’ movement pattern. Item 4 (bus services frequency) with a mean of 3.0 (mean = 3.0), indicates passengers not undecided yet. Item 8 (buses number in the urban city) had a mean of 3.0 (mean = 3.0), also showing bus users were also yet to decided. Item 9 (affordability of transport fare) had mean = 3.4 (mean > 3.0), showing passengers satisfaction, believe they could afford it. Item 10 (passengers’ safety on board) with a mean of 2.7 (mean < 3.0), entails passenger dissatisfaction. Item 12 (cleanliness of bus inside) had mean = 2.4 (mean < 3.0), which equally shows passengers dissatisfaction.
Table 4: Distribution of Bus Passengers’ Based on Their Perceptions of the Factor Influencing Passengers’ Satisfaction in the Study Area.

<table>
<thead>
<tr>
<th>Factor descriptions</th>
<th>Strongly satisfied</th>
<th>Satisfied</th>
<th>Undecided</th>
<th>Dissatisfied</th>
<th>Strongly dissatisfied</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NO.</td>
<td>%</td>
<td>NO.</td>
<td>%</td>
<td>NO.</td>
<td>%</td>
</tr>
<tr>
<td>Information about the public bus transport</td>
<td>0</td>
<td>0</td>
<td>65</td>
<td>18</td>
<td>79</td>
<td>21.8</td>
</tr>
<tr>
<td>services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seats availability in buses</td>
<td>0</td>
<td>0</td>
<td>43</td>
<td>11.9</td>
<td>74</td>
<td>20.4</td>
</tr>
<tr>
<td>Leg space in buses</td>
<td>3</td>
<td>0.9</td>
<td>37</td>
<td>10.2</td>
<td>71</td>
<td>19.6</td>
</tr>
<tr>
<td>Frequency of bus services</td>
<td>24</td>
<td>6.6</td>
<td>76</td>
<td>21</td>
<td>152</td>
<td>42</td>
</tr>
<tr>
<td>Condition of facilities inside buses</td>
<td>0</td>
<td>0</td>
<td>34</td>
<td>9.4</td>
<td>48</td>
<td>13.2</td>
</tr>
<tr>
<td>Bus stop shelters</td>
<td>0</td>
<td>0</td>
<td>41</td>
<td>11.3</td>
<td>82</td>
<td>22.7</td>
</tr>
<tr>
<td>Bus maintenance</td>
<td>0</td>
<td>0</td>
<td>37</td>
<td>10.2</td>
<td>74</td>
<td>20.5</td>
</tr>
<tr>
<td>Number of buses in urban area</td>
<td>31</td>
<td>8.6</td>
<td>118</td>
<td>32.6</td>
<td>93</td>
<td>25.7</td>
</tr>
<tr>
<td>Affordable Transport fare</td>
<td>63</td>
<td>17.4</td>
<td>131</td>
<td>36.2</td>
<td>79</td>
<td>21.8</td>
</tr>
<tr>
<td>Safety of passengers on board</td>
<td>27</td>
<td>7.5</td>
<td>54</td>
<td>14.9</td>
<td>88</td>
<td>24.3</td>
</tr>
<tr>
<td>Driver and conductor behavior</td>
<td>0</td>
<td>0</td>
<td>32</td>
<td>8.8</td>
<td>75</td>
<td>20.7</td>
</tr>
<tr>
<td>Buses cleanliness inside</td>
<td>0</td>
<td>0</td>
<td>42</td>
<td>11.6</td>
<td>146</td>
<td>40.3</td>
</tr>
</tbody>
</table>

Source: Researcher’s Fieldwork, 2022
**Conclusion and Recommendation**

One of the major contributions of this study is the identification of factors that determine passenger satisfaction with the quality of services provided by public bus transport operators in Owerri Municipal. The determinant factors identified are comfortability, information about public bus transport services, bus stop facilities, adequacy of bus capacity and affordability. The study observed that passengers are not satisfied with the public bus transport services provided in study area. In all the factors affecting passengers’ satisfaction, it was only on the transport fare that the passengers’ were satisfied with. It also identified the various problems encountered by public bus passengers’ in the study area. Hence the following recommendations were made to optimize public transit using buses by making it more attractive to bus users, they include the following:

1. Installation of real time information display boards at key stops to give passengers up to date minute information on bus arrival times and delays.

2. Convenience improvements, such as better seats, reduced crowding and cleaner vehicles should be incorporated into the transport policy

3. Placing bus stop signs at the location where people board the front door of the bus. The bus stop sign marks the area where passengers should stand while waiting for the bus and serves as a guide for the bus operator in positioning the vehicle at the stop. The bottom of the sign should be at least 7 feet (2.1 meters) above ground level and should not be located closer than 2 feet (0.6 meters) from the curb face.

4. Bus stop location and design is recognized as a crucial element in the drive to improving the quality of bus services. The concept of 'Total Journey Quality' recognizes that bus passengers are also pedestrians at each end of the bus trip and requires that all aspects of the journey are considered. The convenience and comfort of bus stops must not be overlooked, especially shelter against vagaries of weather.

**References**


