

**ASSESSMENT OF THE QUALITY OF URBAN TRANSPORT SERVICES
(A case study of Benin City, Edo State).**

**BY
EKHABAFE PHILEMON
ENV/224200033**

**BEING A PROJECT WORK SUBMITTED TO THE DEPARTMENT OF
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CERTIFICATION

This is to certify that this project was carried out by EKHABAFE PHILEMON for the requirement of the award of Higher National Diploma (HND) in the department of Urban and Regional Planning, School of Environmental Studies, Federal Polytechnic, Auchi.

Dr. BADA AFOLABI. O
(PROJECT SUPERVISOR)

DATE

TPL. EDIGAN BATHLOMEW. I
(HEAD OF DEPARTMENT)

DATE

SURV. AWEH DAVID. S
(DEAN OF ENVIRONMENTAL STUDIES)

DATE

DEDICATION

This Project work is dedicated specially to the Almighty God for his sustenance and to my parents for the efforts so far, relatives, friends and well wishers.

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My deepest gratitude goes to the Almighty God who gave me the privilege to go through this academic pursuit successfully. I also appreciate the endless support of my parents and my loved ones to see that this pursuit was a success.

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ABSTRACT

The performance of a transport service is measured by its quality attribute, which is the most synthetic and comprehensive indicator. However, it is difficult to identify this service quality attribute because it involves the various customer perceptions and it may be influenced by the passengers' preferences or by the travel behavior corresponding to a certain social category. The modal split of passenger transport is also influenced by the quality of supplied services which establishes a market share for the transport mode analyzed, in this case the urban public transport. The present research aims to identify specific indicators for assessing the quality of urban public transport services, and to characterize the performance of the transport supply. It is well-known that a quality service guarantees the success of a public transport operator, with direct implications on user behavior. A case study was carried out, highlighting the compliance of the public transport operator in Bucharest with the traffic program. Conclusions are formulated in order to improve service quality and, in this way, to increase the attractiveness of urban public transport and the quality of life.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Transportation is inherently central to development of nations. It is not only a necessity to life but also have a resultant of nations. It is not only a necessity to life but also have a resultant effect on all aspect of human existence (Oyesiku, 2002). It provides access to goods, services and social activities to maintain a good quality life. It is fundamental in breaking isolation and thus strengthening individual capital base (World Bank Report, 2002; Odufuwa, 2006).

Benin City has one of the quality transport services in Nigeria which is located at ring road (Bobizua park) and third market (Osato park). Quality urban transport services in Benin City have been provided by public and private transport companies (Kantorovich, 2012). This has no doubt improved the socio-economic development of Benin City and Edo State large. This is evidence that transportation plays key role in the development of urban and rural areas. The role of transportation in economic development cannot be overemphasized. Transportation is the engine block of any society and hence provides room for effective socio-economic development and societal improvement (Ashenfelter and Card, 2015). According to Aweto (2015), transportation plays key role in urban development and nations building.

Research has shown that transportation alone account for about 46% of the total physical distribution cost for manufacturing companies and 28% for reseller companies. It is important to note that much such success can be accomplish in manufacturing, distribution of goods and services including the movement of people with transportation (Adeniji, 2010). It is as a result of the great importance attached to transportation that man has over the years developed various transportation modes in other to facilitate the movement of people and materials. The mode of transportation selected will greatly depend on price, time, delivery, condition and destination, passenger's patronage, and past purchase satisfaction. This poor transportation management can therefore jeopardize the source of procurement of materials; goods and services, movement or people and even course increase in prices and loss of lives (Adefolalu, 2007).

According to Kantorovich (2012) achieving quality urban transport services is the key objective of every company, that is, if total profit for a period is to be achieved. This cannot be achieved if the management of the transport activities in an establishment is faced with some problems such as; delay in delivery of goods, improper handling of materials resulting in damage of goods, lack of qualified personnel, inadequate transportation system in the organization, and improper maintenance of transporting system causing breakdown leading to late delivery. For the fact that many people invest in the transport industry, effective transportation management is lacking in most transport companies (Adeniji, 2010).

Road Transportation is a necessary end right from early history. The mobility of people and materials especially in the present days become one of the greatest needs that have to be adequately satisfied on our society and economy at large (Barke and Hare, 2014). Transportation is referred to as the engine of the economy. This means that without transportation management system, the entire economy will suffer stagnation (Adefolalu, 2007). Transportation helps to bridge the gap between producers, suppliers and industrial users as well as individual commuters. Transport has been likened to the human blood circulatory system whose healthy functioning is a necessary condition for the sustenance of human life (Adeniji, 2010). Transport systems provide a key to the understanding and operation of many other systems at any different scales (Bears, 2016). At one extreme, inter-continental transport provides essential communication between the advanced and developing worlds, while local transport to rural markets in many parts of the third world is a vital component in changing dynamic socio-economic structures (Barke and Hare, 2014).

The role of government in providing quality urban transport services in Nigeria has not been encouraging (Bears, 2016). Government tends to neglect transportation sectors and focus on other sectors of the economy without knowing that quality urban transport services provided in any modern society could enhance effective delivery in economic growth and societal development (Bears, 2016). As further observed by Bears (2016), the provision of urban transport services in most Nigerian cities has been seriously affected by lack of adequate fund

have resulted to poor road network, poor transportation facilities and lack of community and environmental facilities.

As noted by Ashenfelter and Card (2015), there is hardly any human society or human settlement system that can function efficiently and effectively without adequate, reliable, safe and affordable transport systems. They added that the most fundamental reason for this being the catalytic effect of transport development on socio-economic growth and development. They therefore concluded that poor transport system of inadequate provision of quality urban transport services often result to social, political, environmental and economic effects.

According to Clarke (2016), transportation is no doubt an indispensable catalyst for activating and stimulating the tempo of economic, social, political and strategic development in any society. Thus, effective and efficient functioning of urban centers depends on the provision of basic infrastructures one of the most important being transport.

Transport according to Hornby (2010) is conveying, or being conveyed or a means of conveyance from one place to another. It is the movement or displacement of persons, good and other movable possessions in time and space for a particular purpose. In human societies, this is not chaotically done because recognized paths marked out by individuals or the societies are usually followed (Sube, 2012). This could be by water, land or air. It is possible that since man from origin is a mobile being, the word transport must have entered his vocabulary as early as when he developed the act of speech (Richard and Ignatius, 2014).

In the same vein, Filani (2005) rightly observes that the socio-economic development of any society depends to a large extent on the nature and structure of the transportation networks of the society since it provides the arteries through which the economic life stream of society flows (the people, information, raw materials and finished products) which help to build and maintain the society.

According to John; Nisha, Neha, and Neenu, (2005), developing countries have several factors in common that contribute to the severity of their transport problems. Overall population growth and increasing urbanization have led, especially to the rapid growth of large cities, which have been overwhelmed by the sudden jump in travel demand. The supply of transport

infrastructure lagged far behind. Public sector finances in general are so limited that funding for transport improvement is woefully inadequate. Commenting on urban transport problems in Lagos state, Nigeria, Atubi (2007a) opines that some of the most serious problem facing development planner and of the most makers in the country reside in the transport sector.

Okpala (2011) noted that transportation has been a major contributor to the economy competitive force in business. It is activity that physical connects the business to its supply chain partners, such as suppliers and passengers, and it is a major influence on the passenger's satisfactions with the country. Transportation is required in the whole production procedures, from manufacturing to delivery to the final consumers and returns. Only a good co-ordination between each component would bring the benefits to a maximum.

In many Nigerian cities today, transportation situation has reached a crisis point. This is the consequence of several years of neglect by succeeding administrations. Therefore, it is not out of place to state transportation in Nigeria is grossly inadequate (Filani, 2002; Oyesiku, 2002; Odufuwa, 2003 and Atubi, 2009). The impact of this distressed sector on the economy or the ensuring crisis is severe, with the urban poor suffering more than any other group. The growing transport paucity has had a debilitating effect on the lives of the people and it has continued to trap and push its catchment towards poorer livelihoods (Atubi, 2012). The most devastating problem has been the lack of sustainable mobility and frequent deviant driving behaviours as an escape measure (Odufawa, Ademiluy, and Adedeji, 2008).

From all indications there is high level of poverty among urban households in the country. The transport infrastructure and services generally require a complete overhauling or repair in order to make them physically sound. Also, worth mentioning, are the land use mix factors that affect the intra-urban travel. The land use mix factor affects the intra-urban travel behavior and it has a profound influence on urban transport planning and management in general (Oyesiku, 2002). It is against this background that this study is conducted to carry-out an assessment of the quality of urban transport services in Benin City, Edo State.

1.2 Statement of the Problem

Transport can be viewed as a public utility which supplies essential goods and services, where essential means they cannot be cut off without danger of total or partial collapse of an economy (Dieter Bos, 2003). Along with power and communication, transport is one of the social overhead capitals which must be developed to a critical minimum level in order to facilitate investments in the other sectors globally.

However, poor road transportation management is one major problem that is affecting the growth of the economy most especially in developing nations. Ineffective road transportation management as lead to the ineffectiveness and collapse of many nations' economy most especially sub-Sahara Africa. Poor management of transportation system has caused breakdown of vehicles that has resulted in goods and movement of people not being able to reach their destination on time and exposed travelers to security challenges. This poor management of transportation systems and facilities has cost the nation a damaged image, loss of huge amount of money, loss of lives and properties and most customers are greatly dissatisfied with condition of road transportation in Nigeria. Also, poor technological development to monitor or regulate the speed of vehicles, lack of clean vehicles, high overloading of men and goods are great problems to road transportation.

Poor road transportation management is one major problem that is affecting the growth of the economy. Kootz and Donnel (2016) posit that poor road transportation management has led to the ineffectiveness and collapse of the Nigerian road system that supposes to carry bulky goods from one city to another and has made inflation to be high. This is in turn has bounced as the road transportation system characterized by heavy duty lorries overworking the road system and the resultant effect is damages of roads causing accidents and loss of lives and property. Poor management of road transportation systems has cost the nation a damaged image, loss of huge amount of money, loss of lives and properties and most road users are greatly dissatisfied with condition of road transportation in Nigeria (Kootz and Donnel, 2016).

Road transport is the principal mode of transportation in Nigeria accounting for the vast majority of freight and passenger travel. Over the years the road system has been subjected to

heavy freight which was beyond the carrying capacity of the roads. This made the condition of the roads deteriorate and the result is that much of the road system is barely usable (Nwakamma, 2006). Hence roads were built to carry freight that could conveniently be carried by railways.

Absence of technological development to monitor or regulate the speed of vehicles, lack of clean vehicles, high overloading of men and goods are great problems to road transportation (Koontz, 2009). In addition, the poor attitude of drivers towards their passengers is nothing to write home about. Today, road transportation accounts for over 95% of passengers and freight transport (Ojabo, 2007).

Ashenfelter and Card (2015) emphasized that traffic congestion in Nigeria has turned mobility by road to a nightmare. Today a lot of damage have been caused by this unhealthy phenomenon Ehrlich (2017). There is a marked increase in lateness to work, school and business. There are also cases of lowered productivity, chronic fatigue and bad stress. The cumulative effect is a crashing down of the country's Gross Domestic Product (GDP) (Loy, 2004). Atubi and Onokala (2005a), have asserted that, for any meaningful division of labor and specialization in production process to take place in any society, there must be an efficient and effective transport system.

In Nigeria the need for an effective transport system becomes more obvious if taken into consideration the large size of the country and the need to disperse development move (Ehrlich, 2017). The inability of Nigerians to device a better transportation system has been a detraction of the growth of the economic social and political life of the economy. Prominent among the problem, includes traveling difficulty lateness to work, movement of agricultural product, goods and services from area of production to area of utilization (Rachev, Svetlozar, and Ludger, 2008).

Public participation in transport delivery can be said to be profitable, otherwise none of them would continue to provide these services. On the other hand, it has not been so with government participation (Ehrlich, 2017). Evidences available from empirical studies carried out (Onakomaiya, 2002, Odeleye, 2004) showed that state urban transport services provided through

the mass transit was run at a loss. The reasons include nonchalant attitude to government work by the employees, embezzlement on the part of drivers and conductors, and inadequate response to taking immediate actions on repairs and services of vehicles by government parastatals established for such purposes (Clarke, 2016). The attitude of some professional drivers also scares private investment in the areas of transport service delivery. Majority of the transport companies composed by small sized vehicles owned and operated are low-skilled young men who migrated to cities from the countryside (Dimitriou, 2016). Over abundances of idle labour makes road transport an attractive employment opportunity. This condition leads to ignorance of passengers' safety and discipline in using road (Angenent, Haker. and Tannenbaum, 2013).

Most transport companies in Nigeria are delivery poor service quality, poor maintenance of fleet and unsafe service. Big share of the vehicle fleet consists of second hand vehicles purchased from industrialized countries, ages of the vehicles are quite old and there is a low maintenance budget (Dimitriou, 2016). Reliability, convenience and travel time are considered to have a great impact of passenger satisfaction in relation with the type of the trip, but most transport companies do not take it seriously. This research seeks to identify the problem and find out possible measures and solution to the problems.

1.3 Research Questions

The following research questions will be answered in due course;

- ✓ What are the socio-economic activities of the people, transport mode and their company's management location in Benin City?
- ✓ Do transport companies have adequate modern technology and infrastructure to satisfy passengers, and road users?
- ✓ What are the quality and quantity of urban transport service provided for public in Benin, Edo State?
- ✓ How efficient is this transport system in the movement of goods and services? and
- ✓ What are the associated problems of urban transport system?

1.4 Aim and Objectives of the Study

The main overall aim of this research is to carry-out an assessment on the quality of urban transport services in Benin City, Edo State. However, the specific objectives include to:

- ✓ Examine socio-economic activities of the people, transport mode, company's management and their location in Benin City;
- ✓ Evaluate the adequacy of modern technology and infrastructure to satisfy passengers, and road users;
- ✓ Appraise the quality and quantity of urban transport service provided for public and their patronage in Benin, city;
- ✓ Examine the efficiencies of the transport system in the movement of goods and services in the study area; and
- ✓ Evaluate the associated problems of urban transport system.

1.5 Research Hypotheses

From the above research questions, these null and alternative hypotheses are formulated:

Ho: There is no significant difference between mode of transport system and ownership in the area.

H₁: There is significant difference between mode of transport system and ownership in the area.

Ho: There is no positive relationship between the accessibility and adequacy of transport mode in the area.

H₁: There is positive relationship between the accessibility and adequacy of transport mode in the area.

Ho: There is no positive relationship between the methods of transportation management and its efficiency in area.

H₁: There is positive relationship between the methods of transportation management and its efficiency in area.

Ho: There is no significant correlation between trips generation and that choice of transport mode

H₁: There is significant correlation between trips generation and that choice of transport mode

1.6 Significance of the Study

Transportation is a necessary end right from early history. The mobility of people and materials especially in the present days become one of the greatest needs that have to be adequately satisfied on our society and economy at large. Transportation is referred to as the engine of the economy (Kunri 2005:79). It then means that without transportation management system, the entire economy will suffer stagnation. Also, transportation helps to bridge the gap between producers, suppliers and industrial users as well as individual commuters. Transportation unaccompanied account for about 46% of the total physical distribution costs for manufacturing companies and 28 % for reseller companies (Henry, 2014). Not much success can be accomplished in manufacturing, distribution of goods and services including the movement of people without transportation.

It is as a result of the great importance attached to transportation that man has over the years developed various transportation modes in order to facilitate the movement of people and materials. The mode of transportation selected will greatly depend on price, time, delivery, condition and destination, customer's patronage, and past purchase satisfaction. This poor transportation management jeopardizes the source of procurement of materials; goods and services, movement of people and even cause increase in prices and loss of lives most especially in developing nations.

In recent times, some of this urban could not be said to be very healthy, being plagued with lot of transportation problems. Although it is often said that public authorities in Nigeria claim to have risen to the task of inadequate provision of public transportation system, they often claim to have responded to this problem by attempting to improve the range and structure of

public transportation services. Transport problems since the last two decades in Nigeria have been serious especially in urban centers. These problems are been caused by the influx of population into the urban centers, growth in industries and the inability of transport facilities to cope with the demand. The problems manifest in terms of long waiting time for buses, traffic congestion, parking problems and accident.

There is a general shortage of public transport service in Nigeria relative to demand. The public owned transport operations in the few states where they exist are inefficient and the private sector operators of para-transit transport system are substandard and disorganized. In Nigeria, two distinct public transport systems can be identified. These are the municipal bus services provided by government owned transport corporations and the various para-transit services provided by the private operators. Public transportation in Nigeria has also been dominated by private operators. These private entrepreneurs operate in an uncontrolled manner and provide erratic and unreliable services (Adeniji, 1983). Usually no clearly defined routes are being plied by these private operators who are essentially demand responsive. A World Bank report (1992) revealed that in 1987, more than 98 percent of all urban public transport journeys in Nigerian urban centers were provided by private operators using taxis, minibuses (danfos) and buses (molues). This contrasts sharply with the situation in most cities of the advanced countries where public owned bus operators have the monopoly of public transport provision (Nash, 1997; Ludlow, 1980).

In the early 1980s, government owned public transport companies operating were in Lagos, Kaduna and Port Harcourt. Although, several other state-owned transport corporations in Kwara, Rivers, Oyo and Edo States operated urban services in the past; these companies either ceased urban operations or closed down (Barret, 1992). However, this study will be useful to many sectors of the economy, as little research has been done on this most especially in the area under study. Thus, road transport companies, ministry of works, transport, and academic will benefit immensely from this study. Also, the commuters, manufacturing companies and businessmen especially the middlemen will equally benefit from the study to solve the urban problem of Benin City.

Also, this research work has academic significance due to its relevance in the field of educational institution most specifically undergraduates in transportation, marketing and geography and regional planning which is among the educational unit that trains future managers, administrators and planners. Etc. its findings and suggestion(s) are likely to generate academic debate on the matter and interest among scholars.

The study could also help the ministry of transport to better understand the current situation in road transportation management. And accordingly makes changes to address the factors that consequently help to formulate policies aimed at solving the problems of road transportation management on road users and commuters. The study will be of great importance to private and public organization such as transport companies and individuals concerned with the business of transportation; it will serve as a guide on the area of implementing quality assessment of urban transport services, staff training on urban transport system, to address the obstacles hindering effect on road users and passengers.

Lastly, students and researchers would want to benefit from this study. Also, the study is to immense benefit in the area of recommendation that would help in improving the general performance of the company in question.

1.7 Scope of the Study

The study confines itself to the assessment of public transportation and available infrastructural facilities thus bringing about physical environment and convenience for people. It describes appropriate and effective approaches to develop transportation and urban transport infrastructure through the use of public participation in resources management and at the same time creating additional opportunities for residents in the area. It also examines various factors responsible for its accessibility, mode and quantity of the transportation facilities and management in the area under study.

The review is necessary to give policy makers and every sector involved in transportation provision and environmental management a better view of the state of demand and supply in Benin City and Nigeria in general. It intends to educate stake holders including: resident,

professionals and host of others, often participate in the demand and supply of transportation among others.

The scope of this research work was strictly based on the assessment of the quality of urban transport services in Benin City, Edo State. And to offer suggestion(s) on the problems associated with urban transport system. Examine transport mode, company's management and their location; evaluate the adequacy of modern technology and infrastructure to satisfy passengers, and road users; appraise the quality and quantity of urban transport service provided for public and their patronage; examine the efficiencies of the transport system in the movement of goods and services in the study area; and evaluate the associated problems of urban transport system.

The scope of the study was initially designed to cover all the streets and quarters in Benin City. However, because of time and financial constraints, the scope was scaled down. In this regard only selected major areas were covered in this study.

1.8 Delimitation and Limitation of the Study

In the course of the project, some of these problems were encountered.

Non availability of information materials in the library on this particular topic became another stumbling block on the way. But through the use of the researcher was able to gather information and ideas to make up this write up.

Next is time, with the work load of a final year student complete with the exams, one cannot say time was a friend.

The study is limited by a number of factors among which are:

- **Time factor:** The had to spent a lot of time in this research work and at the same time facing his normal academic activities which was very stressful since research writing requires a lot of time.
- **Financial constraints:** it is normal that every reliable research work requires a lot of finance to carryout and this was not an exceptional case as finance almost hindered the researcher from not completely this work.

- **Non-availability of materials:** non availability of information material in the library on this particular topic became another stumbling block on the way since secondary materials were not readily available as at when needed. But though the use of the internet and some prominent scholars really helped in achieving the success of this research work, also I was able to gather information and ideas to make up this write up.
- **Language/communication barrier:** It was almost impossible to communicate to some people during the oral interview with them as language was a major barrier and thus almost hindered the collection of data.

Despite all these constraints, this did not deprive the researcher from achieving dependable result. The researcher went on to use available information at his disposal to make the write up for this work.

1.9 Study Area

The study area (Benin City) is located in the Niger Delta Region of the South-South Geopolitical zone of Nigeria (Obi, 1994).

1.10 Location and Size

Benin City is the administrative headquarters of Edo State. It lies on latitude $06^{\circ} 02'$ and $06^{\circ} 16'$ North and longitude $05^{\circ} 05'$ and $05^{\circ} 45'$ East, the city is about 117.4km² inland from the mouth of Benin River which flow into Gulf of Benin (Obi, 1994).

It is a flat city at an altitude of about 80m above sea level, on the Benin River; it comprises three Local Government Area (L.G.As), Egor, Ikpoba-Okha and Oredo (Brinkhoff, 2010). The Centre of Benin is located on a depression which could be rightly described as a basin or a low lying peninsular and this is also surrounded by undulating hills (Brinkhoff, 2010). Benin City is a nodal town which occupies an area of about 68 square kilometers (26.3 square mile) (Brinkhoff, 2010).

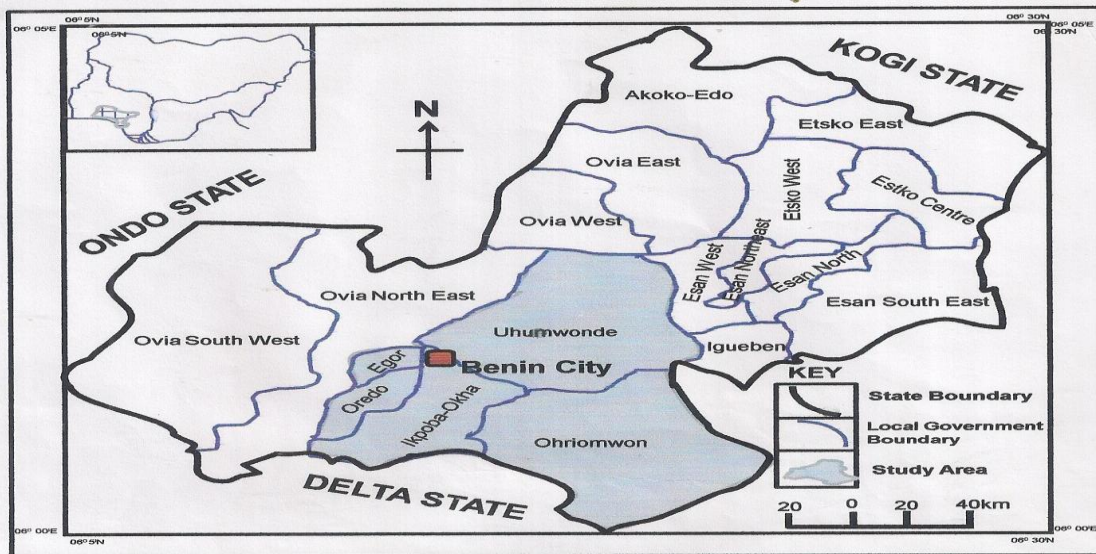


Fig.1: Edo State Map showing the Study Area
Source: extracted from www.edostate.gov.

1.10.1 Population of the Study Area

Benin is an urban agglomeration with a population of about 1.2million people (Brinkhoff, 2010). Benin City has a total population of about 1,147,188 as at 2006 census data. Edo state has a population of 4million people (NPC, 2006; 2006 Census Population); with an annual growth rate of 2.8% while according to the USAID reports in 2002. Edo State was estimated to have a population of 2.86million (in 1996, 2.1 million of which 50.13% were male) (FBS, 2007). The state is multi-religious and multi-ethnic with Christianity, Islam and African traditional religion as the most dominant.

1.11.1 Historical Background of the study Area

The historical kingdom of Benin was established in the forested region of West Africa in the 1200s C.E. According to history, the Edo people of southern Nigeria founded Benin. They no longer wanted to be ruled by their kings, known as the ogisos. They asked a prince from Ife, an important West African kingdom, to take control. The first oba, or king, in Benin was Eweka. He

was the son of the prince from Ife. The kingdom reached its greatest power and size under Oba Ewuare the Great. He expanded the kingdom and improved the capital, present-day Benin City; the city was defined by massive walls. The height of power for Benin's monarchs began during this period. To honor the powerful obas, the people of Benin participated in many rituals that expressed their devotion and loyalty, including human sacrifices.

Artists of the Benin Kingdom were well known for working in many materials, particularly brass, wood, and ivory. They were famous for their bas-relief sculptures, particularly plaques, and life-size head sculptures. The plaques typically portrayed historical events, and the heads were often naturalistic and life size. Artisans also carved many different ivory objects, including masks and, for their European trade partners, salt cellars. The success of Benin was fueled by its lively trade. Tradesmen and artisans from Benin developed relationships with the Portuguese, who sought after the kingdom's artwork, gold, ivory, and pepper. In the early modern era, Benin was also heavily involved in the West African slave trade. They would capture men, women, and children from rival peoples and sell them into slavery to European and American buyers. This trade provided a significant source of wealth for the kingdom. Benin began to lose power during the 1800s, as royal family members fought for power and control of the throne. Civil wars broke out, dealing a significant blow to both Benin's administration as well as its economy. In its weakened state, Benin struggled to resist foreign interference in its trading network, particularly by the British. A desire for control over West African trade and territory ultimately led to a British invasion of Benin in 1897. Benin City was burned by the British, who then made the kingdom part of British Nigeria (which became Nigeria after the country gained independence in 1960). After that time, the kingdom no longer played a governing role in West Africa. However, even today, the oba still serves in Benin City as a government advisor.

1.10.3 Climate, Vegetation and Soil

The climate of the area lies within the savanna belt and therefore has two distinct seasons a year. These seasons are wet and dry seasons. The wet season begins in late March with about 200mm

of rainfall. This is experienced towards the end of the rainy season. The rainy season affected by the south-west winds which brings about the maritime (MT) air mass that blows across the Atlantic oceans rainfall figures for Benin City are about 1175mm. The climate is tropical Savannah (Koppen Classification AW). Heavy flooding occurs during the rainy season (Kaka, Awharitoma, and Okonji, 2002).

The dry season which last from November to mid-March is usually a period of high temperature (35⁰C) and intense heat. By November, this area is so dry but there are some occasional shows of rain within this period which is less than 25mm, the water level is greatly reduced at this time, and farming activities are almost brought to a standstill. The Sahara affects the area especially between November and February (Kaka, *et al.*, 2002). This is the cold harmattan wind. During the period, the atmosphere is dry, dusty, hazy and cold. Temperature records here show an average of between 22⁰C and 30⁰C (Kaka, *et al.*, 2002).

In terms of vegetation, Edo State has a rain forest within the low land rain-forest belt of the south and forest savanna of the North. Thus, the state can be divided into two major vegetation belts. Benin City lies within the rain forest belt, with grasses often exceeding 1½ meters high punctuated with trees of crooked and granted stems of about ten to twelve meters, predominate all round, with the exception of the river valley where trees of about thirty to thirty-five meters are found. Trees found in and around Benin are food trees e.g., mango, bean seed, cashew, orange and palm trees etc. (Kaka, *et al.*, 2002).

The climate and soil condition favor the growth of plants, but the persistent annual bush fire has reduced the vegetation to that of secondary vegetation. It is pertinent to note that along valley of Ikpoba river, high forest free like obeche, Iroko, walnuts are found most of its vegetation are derived savanna as a result of agricultural practices that is been carried soil (Brinkhoff, 2010).

In terms of soil, the that are found in Benin city are mainly sand, and mud, which are loosed and unconsolidated which as result of its loose particles give rise to the high erosional process that is experienced in the area (Akpovi, 2005). The type of soil found in Benin City is a sandy loam soil and it is made up of Benin formation. Most of these soil types do not support the wide growth of agricultural crops; hence they can only be used for the building of some house

pattern found in the area (Akpovi, 1984). Most of the soil found in Benin do not contain the mineral constituent to that are need by plants, hence they do not support filling in the soil, since they are very porous and cannot check erosion (Akpovi, 1981).

This has also contributed to the high rate of flooding that is been experienced in this region. Most of the soil that are found in this area can only support fruit crops and very few food crops. In some parts of Benin lateritic soils tend to occur (Akpovi, 2005).

1.10.4 Geology and Relief

Benin City is underlined by the sedimentary rocks of Pre-Cambrian origin, which are formed as a result of accumulation of some various rocks. Benin City is found to have a very poor topography, which as a result have led to most of the erosional problems that are been encountered in the areas. Benin City is located on sides of hilly areas and as a result of this given rise to easy occurrence of flooding in the area.

1.10.5 Agricultural/Socio-Economic Activities

Benin City is an urban area with a wide range of economic activities some of which are agriculture, industries and transportation. The main crops are rubbers, oil palm, cocoa, yam, cassava, maize, rice and plantain, sugar cane, cashew, oil palm (and its derivative products), groundnuts, soya beans, tomatoes, cotton and tobacco are also produced fruit like pineapples, coconuts, oranges, avocados as well as green leafy vegetables, all grow abundantly in the area (Obi, 1994).

Edo State is blessed with such industrial mineral resources as quartzite, marble, clay, limestone, chalk, gypsum, gold, petroleum, kaolin and lignite (Omuta, 2006). Benin City is the site for numerous industrial outfits: soft drink factories two large breweries (including one of the largest breweries for Guinness stout outside of Dublin, Ireland) wood and timber processing industries, printing and publishing firms, textile mills, carpet manufacturing floor tile producer's animal feeds industries, pharmaceutical firms and so on. Industrial activities include rubber, timber and food processing (Obi, 1994). There is significant horticultural activity within the metropolitan area. A large proportion of the population lives in low-income settlements. A state-

owned Cement Company is located at Okpella (Etsako LGA) close to substantial limestone deposits (Obi, 1994).

In terms of transportation, Benin city as the state capital is a major center of traffic routes to Warri and Sapele (both in Delta state, they are major seaports and oil towns), to the Eastern cities of Onitsha, Enugu, Calabar and Port Harcourt and to the western city of Ibadan, Abeokuta and the former political capital of Lagos, are especially well traveled (Sah and Okojie, 2007).

A major federal trunk road runs east-to-west through Benin City, connecting Lagos and the western states and incorporating the Benin Shagamu express way. Buses and taxis operate on many routes in the main connecting services for all part of the state intro-town services are also provided by the Edo municipal transport services as well as by some private transportation companies in Benin City. Benin City has an airport that is serviced by Nigerian airways, ADC Airlines, EAS Airlines, Arik air, Kabo air, Aero contractor etc. (Sah and Okojie, 2007).

1.10.6 Definition of Terms

Transportation; Transportation is the movement of people, animals, goods and services from one location to another. It is also the action of movement from one point to another through various transportation modes. Also, Transportation in simple term, transportation could be defined as the movement of people, goods and services from one location to another.

Public Participation; it is the inclusion of the public in the activities of any organization or project, it is also any process that directly engages the public in decision making and gives full consideration of the public input in the making decision.

Public Transport System; it is a system of transport for passengers by group travel systems available for use by the general public. It is also a form of travel offered to enable people to travel together along designated routes. This transport system includes the use of passenger buses, trains, trams

Private Transport System; it is the personal or individual use of transportation which are not available to be used by the general public. In this system, the user can decide freely on the time and route of transit. It includes the use of cars, motorcycles, bicycles, uber and pedestrians walk.

Transport Facilities; it refers to any physical facilities that assist in the proper movement of people, goods and services. These facilities include; roads, vehicles, alleys, traffic control devices, curbs, gutters, sidewalks, and street services amongst many others.

Transportation Companies; these are companies or organization who provides its owned or leased vehicles in order to render transport services to the public in other to make profit.

Transport Routes; they are planned or developed path, roads by which all types of transport modes channel their goods and services, people to reach their destination.

Commuters: One who travels regularly from one place to another, as from suburb to city and back to its origin concurrently.

Commuting is periodically recurring travel between one's place of residence and place of work, or study, and in doing so exceed the boundary of their residential community. It sometimes refers to any regular or often repeated traveling between locations, even whe

Transport: Transport can be viewed as a public utility which supplies essential goods and services, where essential means they cannot be cut off without danger of total or partial collapse of an economy (Dieter Bos, 2003). n not work-related (Omijie, 2017).

Mode of Transportation: This is any form of vehicle or system used to transport people or goods. Various modes of transportation exist, they include land, sea, air and pipeline. These are further broken down to various means including; road, railway, freight movement, airplanes etc.

CHAPTER TWO

CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

This study adopts various concepts and theory suitable for this research work. It also presents the review of related literature on the assessment of the quality of urban transport services.

2.1 CONCEPTUAL FRAMEWORK

There is rarely a uniform theory or concept to explain the assessment of the quality of urban transport services in Benin City, Edo State. This study adopts the concept of urban transport system to explain the operations of transportation management in urban areas.

2.1.1 The Concept of Urban Transport System

The concept of urban transport system as postulated by Gbujie (2003) states that “transport infrastructure has to be rationally developed to ensure that movement of people and goods takes place speedily, economically, safely, comfortably and in an environmentally-friendly manner” (Sumaila, 2012). As compliments, there must also be strategic transport infrastructural development to enable all available transport modes to be properly harnessed, stream-lined and integrated for socio-economic and defense purposes (Ashenfelter and Card, 2015).

Atubi and Onakala (2003) and Atubi (2005, 2011) later developed this concept by explaining that “road transportation is a factor of land transport which involves the movement of people and goods by motor cars, truck, buses, motorcycles and bicycles”. They posit that it is the most popular means of transport (Atubi and Onokala, 2003; Atubi, 2005a). As a popular form of land transport, road transportation can contribute greatly to national development when made

efficient. However, road transportation in Nigeria is far from being efficient (Aweto, 2015). According to the Tyagi, *et al.*, (2006) poor maintenance and years of heavy freight traffic have made much of the road system in Nigeria barely usable.

Studies over the years have shown that condition of urban transportation in Nigeria is in a deplorable state (Ogunsanya, 2003, Adeniji, 2010; Ademiluyi and Gbadamosi, 2004; Aweto, 2015). These scholars affirm that, more than 70% of Nigeria roads are substandard and hardly networked. Travelling on Nigerian roads is breathe taking and most un-pleasurable (Ehrlich, 2017). This stated condition emanates from combined effects of natural ageing of transport infrastructure, lack of maintenance, wrong use of available transport infrastructure, ineffective implementation and enforcement of traffic rules and regulations (Odufawa, 2003).

However, Atubi and Onokala (2003), in their study of road transportation and the socio-economic development in Warri metropolis, concluded that road transportation indeed contributes tremendously to the socio-economic development of that metropolis. But this some transport that builds a city, also in other ways if not properly managed causes some damage to the same city (Ogunsanya, 2002).

Plano (2017) noted that transportation is the life wire of any urban environment. It is central to the flow of knowledge, information and commercial goods. The type of available transport, and how they are used, tells great deal about a society and its values (Oni, 2000, 2002). A transportation system can enhance the productivity and quality of life of a community if properly planned and managed. It the same time, development stimulates demand for transport. The rapid urbanization around the world means that more people will be making more trips in urban areas, since transportation is the life wire of any urban society (Ehrlich, 2017). It could make or the environment depending on the interactive measures and degree of responsiveness to transport planning and management in urban development (Yavuz and Welch, 2016).

Ehrlich (2017) noted that the transport system in Nigeria is the driving force behind her socio-economic development. It serves as the major artery of the movement and distribution of people, goods and services between towns, villages and regions. The quality of life and economic wellbeing of urban dwellers in Nigeria are dictated by the quality and extent of urban

transport infrastructure and services (Plano, 2017). There is no gain-saying the fact that the live hood and wellbeing of many urban households in Nigeria, as in elsewhere, depend on unhindered and unfettered access by road to potable water, fuel wood, farm and other places of employment, health facilities, schools, market and purchase of manufactured products (Bears, 2016).

The successful execution of these economic activities and the attainment of the transport system have improved the transport system in most Nigerian cities (Aweto, 2015). Furthermore, the socio-economic transition of the rural dwellers from peasantry to material comfort is also tied to a good transport system. The role of transportation in general and urban transportation in particular, in the overall development of regions is incontrovertible. In Nigeria, urban transportation holds the key to the rapid development of both natural and human resources (Oni, 2000).

Atubi (1998) assert that “in human geography, one of the most fundamental increase is spatial interaction”. He stated that spatial interaction involves the movement of people, goods and services between various centers in space; he said that the most economical solution for one road link may not necessarily be the best solution for the network a whole.

Jack (2016) recently pointed out that every society requires a good transport system which is essential to support economic growth and development. He further opined that the attainment of independence in 1960, the problems of Nigerian transport system include bad roads, inadequate fleets of buses or trucks, increased crime rate, irregular, inadequate and overcrowded trains, and airplanes and congested ports (Aweto, 2015). These are common features of the developing world. In line with these are physical problems such as poor visibility, death of suitably-trained transport managers and planners, capital restructuring bottlenecks, serious issues of institutional reforms and ineffective traffic regulations (Jack, 2016).

This concept is relevant to this study since the quality urban services can only be attained if urban transport system is improved and properly managed. Urban transport system plays in key role in national development and the development of urban areas and contributes a greater percent to urban economy.

2.2 LITERATURE REVIEW

The review of related literature on the assessment of the quality of urban transport services will be done under the following sub-topic;

2.2.1 Transportation System in Nigeria

According to Plano (2017), transportation system is a very important part of any modern economy and core element of daily human life. Our society and economy are challenged with new defiance's like the concept of sustainable development (Tarnoff, *et al.*, 2009). These new challenges also require new planning and management strategies in the area of transportation planning (David and Makafui, 2014). There are experts needed who know how to design a road, a traffic light and create public transport network, etc., but they must be also familiar with the concepts of transportation demand management, integrated land use and traffic management, freight logistic concepts and intermodal traffic management (Aweto, 2015). Tasks like providing optimal transportation conditions for people and economy and enhance a living quality of urban areas can only be met successfully in long term if the transportation system is considered as a part of a complex system (Bears, 2016). Therefore, the interactions between transport, economy, land use and natural environment must be included into the transportation planning strategies (David and Makafui, 2014; Monahan, 2007; Tarnoff, *et al.*, 2009; Mohan, *et al.*, 2008; Tyagi, *et al.*, 2012; HC, 2009; Khalid *et al.*, 2008).

Transportation is the movement of people and goods from one location to the other (Clarke, 2016). It is a means by which goods (raw material, production equipment, operating inventories, semi-finished goods and finished goods) as well as people are able to get to or be made available where they are needed for commercials or non-commercial purposes, as at when desired (Ejiofor, 2010; 2015). The mobility (transportation of people and materials) is therefore one of the greatest needs that have to be adequately satisfied in any society if any meaningful level of social interaction, co-operation, production activities, economic and other types of development, and the enhancement of human welfare is to be achieved (Dimitrious, 2016). This is the reason why road transport is popularly referred to as the engine and wheel of the society (Olakunori, 2006), it helps the world to go around and function actively.

Ehrlich (2017) posit that the necessity of road transport in the society can easily be realized when we consider the daily activities of an average person. He takes road transport to his place of work or business. The goods he bought are brought to him by means of road transportation. He moves around to interact with others and goes to church activities with the aid of road transport (Ineighbenebor, 2005). The police that ensure his peace and security depend greatly on road transport for him to carry-out their duties effectively.

Freeman, Grogger, and Sonstelie (2016) said that road transportation provides the essential activities of time and place. They went further to say that utility of time entails making things available when they are needed. One of the industries where time utility is of a major essence is that of the daily newspapers (Olakunle, 2016). This industry greatly depends on road transport to ensure that its vendors and papers get to passengers early in the morning when the news they carry is still regarded as fresh. As day wear on, the news becomes stale and lose its values and prices (Kootz and Donnel, 2016).

Glaeser, Sacerdote, and Scheinkman (2016) emphasized that road transport helps to provide and add place to goods by making consumers where they are needed. Most goods would be of no use to consumers if they are not made available at the places where they are needed for sale, purchase and or consumption.

The history of road transport development in Nigeria dated back to the period before 1910 when the existing bush paths were developed into motorable routes. According to Herrmann (2017), the growth of road transport in Nigeria was a later development, which did not evolve through the state of animal-drawn carts. According to this institution, roads were not developed until the advent of motor vehicles to the 1920s and 1930s. The end of second world war (1945) actually marked the period when the country was served with adequate network of all-season roads for lorry and passenger car traffic (Ogunbodede, 2008).

According to Herrmann (2017), the road was designed to serve two major objectives. First, they were meant to extend the commercial hinterlands opened up by the government railway by linking up the nearest urban centers with the major railway stations. The second was to reduce the strains thrown on the inland provinces in the provision of porters for the British

colonial officers. The initial growth of road network was slowed down by the financial and labor constraints.

Jack (2016) noted that road is the major mode of transport system in Nigeria. Other means of intra-urban and inter-urban transport system are the use of inland waterways and rail transport which are of course limited to a very few urban centers with peculiar terrain (water) in Nigeria. Even in terms of haulage of goods, the advent of motor vehicles revolutionized transport and constituted a challenge to the railroads. According to Herrmann (2017), Road transport as at 1953 was carrying 50% of the total ten-miles increased to 62% while the total traffic carried by all forms of transport had more than doubled.

Studies in the area of urban transportation confirmed that more than 75% of population in cities depended on public transport while about 25% depended on private transport system (Herrmann, 2017). The federal government of Nigeria recognize that the development of road transport is essential to the growth of the economy and for this purpose, 13%, 15.8%, 19.0% and 12.7% of the total gross capital expenditure from 1955-1959 was devoted to road transport (Jack, 2016). Since then, the first, the second, third and fourth national development plans (1960-68; 1970-74; 1975-80) also had more than 25% of the total allocation to development plans devoted to transport sector while allocation to rail was declining. The preference of government to the provision of road transport infrastructures later influenced the provision of transport services not only in the urban centers but as well, as inter urban services (Jack, 2016).

Hence the need for producers and marketers or business entrepreneurs to put in place an effective and efficient transport system for timely delivery of goods and services to adequately deliver satisfaction to the society is a necessary evil that can never be overemphasized (Ineigbenebor, 2005).

2.2.2 Role of Road Transport in the Nigerian Society

The role of road transport cannot be over-emphasized or exhausted. As already observed, it is indispensable if any meaningful level of economic development, social integration and development and the enhancement of standard of living is to be achieve in any society (Glaeser,

et al., 2016). Below are some of the important roles played by road transport, which makes it very indispensable in the modern society (Robert, 2009);

Communication

Road transport is a major vehicle for communication. People have taken it for them to be able to make contact with others and disseminate information. Mails and other materials for information dissemination are also taken to their destination by road transport (Tony, 2000).

Aid to the Mobility of People and Freight

According to Jack (2016), road transport is synonymous with mobility. People rely on the means of it to move from place to place for economic, social, political, religious and other purpose. They also use it to move their goods from one location to another. Without an efficient road transport system, the tempo of economic, educational, political, medical, religious, social and other activities in our society would grind to a halt (Herrmann, 2017).

Road Maintenance

As observed by Jack (2016), no road is constructed to last forever, just like every other created by man. Roads get damaged with usage time. Changes in weather conditions overtime, floods usage and other factors have some damaging effect on roads right from the moment they are built. However, effect of these factors to a large extent depends on the quality of the material used for building specific roads, how well, they were constructed and the frequency of usage. Earth roads generally get damaged faster than their paved or tarred counterparts (Ejiofor, 2014). The types and culverts of vehicles that would use a road and the volume of traffic have to be put into consideration when constructing it in addition to the nature of the soil on which it is to be built. Otherwise, the road would get damaged quickly and fail to give the desired service (Newton, 2017). Every road needs to be maintained in order to repair the damages occurring to it with time and usage (Ejiofor, 2015).

Road in Nigeria and other parts of Africa are generally not well maintained. Ehrlich (2017), which carried out a study on maintenance of roads for the World Bank in Sub-Saharan

Africa observed that by 1990, nearly a third of \$150 billion invested on roads in the region had been eroded through lack of maintenance. It is common knowledge to all road users in Nigeria that poor, maintenance of roads is the bane of the roads transportation industry in the country. This problem affects all types of roads; federal, state and local death traps and have not received any maintenance attention for the past ten years, despite public outcry over the years (Jack, 2016).

Advantages of Road Transportation

As Newton (2017) notes, road transportation is carried out through the use of mini-buses, luxurious buses, pick up vans, saloon cars, stations wagon cars, tankers, truck trailers and motorcycles among others, the use of such a wide range of alternative vehicles for carrying passengers and cargoes gives the road mode of transportation many advantages when compared with others modes of transportation (Jack, 2016). The following are most important, among the advantages:

- Road transportation is the only mode that offers door to door services without any intermediate unloading of vehicles. Manufacturers and commuters' route as a service very high because of the secrecy and convenience, which it affords.
- Motor vehicles generally on public highways and this makes the required terminal and right of ways cost less than what is obtained in most of the other modes such as air, water and rail.
- The commercial services of road transportation are the cheapest to operate among all modes.
- Road transportation is the most adaptable of all the modes of transportation. It combines with other mode more easily than any of the others.
- Road transport is the most available. It services can be obtained at any time of the day and almost everywhere.
- The cost of transportation by roads is generally much lower than that of air mode.
- Road mode of transportation is the most accessible mode to both urban and rural dwellers all over the world. Everybody can easily make use of it.

Disadvantages of Road Transportation

Despite many advantages associated with road mode of transportation. It has some disadvantages. The most prominent among the disadvantages are:

- The vehicles that are used for road are much unlimited in terms of their cargo capacity. Generally, ship, trains and aircraft carry higher volumes of cargoes than vehicles.
- Road transportation exerts more demand in limited urban space than other modes. It grabs for itself much of the limited urban space for the construction of streets highways ring roads, motor parks, parking spaces, garages, mechanic and other workshops and bus stops.
- Road vehicles are more prone to accident than other modes during transit activities. Many people who can afford to travel by other means but who are forced to travel by road because of its availability see it as a necessary evil. Accidents are common features on Nigerian roads because of inadequate maintenance of the vehicles on our roads. Lack of adequate parking space, carelessness and recklessness on the part of the drivers, and inadequate provision signs etc. are some of the causes of urban road accidents.
- Fuel a crisis which has remained intractable in the country for some years now makes transport service very unreliable.
- Because road is easily accessible, motor and passengers of transit are highly susceptible to attract by armed robbers in a country like Nigeria.
- For long journeys or trips, road transportation is very slow when compared with rail and air modes.

2.2.3 Problems of Road Transportation in Nigeria

A lot of problems are associated with operation of road transport service and road transportation in Nigeria (Newton, 2017). Most of these problems arose as a result of poor management of roads on the part of the government as well as poor attention to passengers on the part of the operators of road transportation service (Olakunle, 2006). Some of these problems are as follows:

- ✓ **Recklessness of motor vehicle drivers:** Many road transportation drivers are illiterate and do not attach much importance to value of their passengers. Because of this, they are very careless and reckless on the road. This often leads to unavoidable accidents and loss of lives and valuable as well as great damages to their vehicles (Robert, 2009).
- **Inadequate number of transit vehicles:** The number of road transit vehicles is too inadequate to cope with the demand for road transportation in the country. Because of this, most vehicles often carry excess passengers and cargo, leading to accidents, inconvenience of commuters and damage to vehicles.
- **Inadequate road network:** The number and length of roads in the country is too inadequate to cope with the need for road transportation.
- **Bad roads:** The state of most roads in Nigeria is very bad. Most of the roads are filled with potholes and sharp pavement edges. These often cause accidents and damages to vehicles and cargoes as well as great inconveniences to commuters. This is the need for government at all level to give more attention to road maintenance in the country.
- **Menace of highway robbery:** The presence of numerous police checkpoints has not been able to put a check on this problem. Many innocent commuters' losses their lives and property to highway robbers every day, despite the presence of police on the roads. This ugly situation has forced many road users to carry police escort, which increases the cost of road transportation.
- **Inadequate maintenance of transit vehicles:** Most of the transit vehicles on our roads are in poor state of maintenance. The prevailing adverse economic situation in the country. Poor maintenance culture and failure of the Ministry of Transport and Vehicle

Inspection Office to discharge their statutory responsibility have left commuters to depend on rickety “coffins-on-wheels” for their journeys.

- **Traffic Congestion:** Traffic congestion has become a permanent feature of urban roads and some highways in Nigeria. This is in spite of many attempts to reverse the situation. During rush when people are going to work valuable productive time is waste in traffic hold-ups. Hours that could have been utilized efficiently in work places such as companies, private organization, and government offices are spent on the urban roads and highways. There is also environmental pollution caused by traffic which affects the health of individuals and consequently their productivity. Though traffic congestion is a feature of urban centers throughout the world, the Nigerian situation is permanent due to the absence of an alternative means of transport such as railways.

2.2.4 Managing the Road Transportation

Management can be defined as the process of planning, organized, leading and controlling the work of organization members and of using all available organizational resources to reach organizational goals (Stoners, Freeman and Gilbert, 2016). According to Drucker (2000) management is the process of pulling together the effort of people in an organization towards the achievement of goals of that organization.

Whether a company operates its own fleet of vehicles or depends on the services of independents providers of carriers, it needs to transport department or unit and a capable manager or supervisor to take charge of it. In a typical manufacturing and marketing company, road transport is required for sourcing production input and distribution of finished goods. It is essential for organizational people to note that basically, the same transportation activities are required for the inbound movement of production materials and outbound movement of finished goods (Tony, 2000).

The most important among the functions or responsibilities of a transport manager in a typical manufacturing and marketing company include the following:

- **Routing:** for a company making use of outside transport services, routing involves the choice of the mode of transportation to use for moving goods and personnel and the selection of a carrier or carriers within the mode. To a large extent, transport managers make this decision in consideration of the nature of the goods, the speed required, transport cost, service expected organizational resources and objectives, also passenger expectations among others (Akpala, 2014).
- **Carrier selection:** This is essentially part of routing the decision here should be taken, based on the transport need of the company, its resources and the efficiency of the alternative carriers available in the community concerned. A company should stick to the selected carrier for a relatively long period of time so as to benefit from accrued experience.
- **Rate negotiation:** rate negotiation has to do with the determination of transport charges for specific units of traffic and distance. The managers should ensure that his company obtained as low rate as possible, subject to the satisfaction of its transport needs.
- **Transportation cost reduction:** It is essential to transport managers who makes efforts to reduce the transport cost of his company. This can be done by transporting goods in bulk, engaging in pool car or pool truck management with others in order to transport car load rather than less car load, packing goods in other to obtain rate reduction and effective rate negotiation among others (Koontz, 2009).
- **Re-consignment:** This involves changing the routing of consignment, its consignee and destination after it has been turned over to a carrier. Re-consignment is actually a type of diversion. When there is a need for diversion, the traffic manager needs to request the carrier to affect the necessary charges in routing and delivery on time before the consignment arrives at the original destination (Kootz and Donnel, 2016).
- **Minimizing risk and making claims:** Transportation involves risk. Claims are also necessary when damages or loses occur. The transport officer duty with respect to risk is essentially that of their minimization rather than complete elimination. One of the most effective means of minimizing transportation risk is by ensuring transport facilities and

the consignment in transit. It is the right of a manager to make claims when necessary and should be made on time and through the right formal channel (Newton, 2017).

- **Personnel management:** The personnel working in the transport department of organization include drivers, mechanics, electricians, drivers' mate, clerk and clearing and forwarding officials. The transport managers need to see that their duties are properly spelt out and that they are organized and motivated to achieve the departmental goals and corporate goals of the organization itself (Ejiofor, 2015).
- **Facilities maintenance:** The transportation facilities should be kept in a good working condition at all times. It is good for a big company to have its own vehicles maintenance workshop.

The above maintained is a good and essential duties of a good manager.

2.2.5 Justification of Road Transport Regulation

The transport industry is a highly regulated industry. Though some modes of transportation are more regulated than other, there is no mode that does not feel the impact of government control measures in the country. Nigeria's cases are not much different from that of any other country. However, the extent of government activities in the regulation and control of road transport in any place depends on the political and economic ideology by the government, the level of economic situation and the ability and maturity of the private and commercial providers of road transport services in the society concerned (Ejiofor, 2014). In the regulation of road transport, government hopes to ensure the safety of the general public and users of road transport services accelerate and appropriately channel the direction of the development of road transport operators and parties involve in transportation contractual relationship.

A number of reasons can be given to justify actions of government in regulating transport. The most popular among these reasons are as follows:

- a. **Safety of general public and users of road transport:** The vehicles used in the road transportation can sometimes pose great dangers to the member of the public and the users of their services. Some of these dangers (such as accidents) may be due to the use of faulty

vehicles or the carelessness of drivers. Accident resulting from these may lead to the loss of lives and valuables (Ejiofor, 2010). Government tries to regulate transport by determining which vehicles are fit to be used for transportation and qualifies to operate. Through these and other measures, the public and users of road transport services are protected.

- b. **Environmental protection:** Some road transports pollute and degrade the environment. Examples of these are the emission of dangerous gases from internal combustion engines, noisy and oil spillage from broken or vandalized pipelines.
- c. **Economic stability:** As we saw in chapter one growth of the economy of any nation depends heavily on road transport. Without a good road transport, no economy can develop or function properly (Ijewere, 2000). A malfunction in the transport system can greatly jeopardize the interests of any nation's economy. By controlling the excess of commercial, transport operators, government hopes on achieving and maintains economic stability (Donnel, 2011).

Several studies (such as Areola, 1999; Atubi and Onokala, 2003, 2004; Atubi, 2005a, 2006; Ejiofor, 2010, 2014, 2015; Donnel, 2011; Akapla, 2010, 2014; Bennett, 2008; Ijewere, 2000; Ineigbenebor, 2005; Koontz, 2009; Kootz and Donnel, 2016; Robert, 2009; Tony, 2000; Vewere, 2000; Okakunori, 2006; Olakunori, 2006; Olakunle, 2006; Newton, 2017; Herrmann, 2017;) have focused on road transportation and how it affects businesses, government, industries, and its management techniques, but none of this research work has looked at the assessment of the quality of urban transport services in Benin City, Edo State. This research work is therefore carried out to fill the research gap that exists in this study.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

This study is basically conducted to carry-out an assessment of the quality of urban transport services in Benin City, Edo State. This chapter will present the procedures adopted in gathering data/information needed in this study. This will be presented under the following sub-topics;

3.1 RESEARCH DESIGN

The research is essentially empirical. It is case study research and it involves field survey using questionnaires administered on resident, drivers and other road user in the study area. Also, due to the complex nature of transportation system; particularly the road transportation system, several investigative methods were adopted to gather the necessary information. The method includes the social sampling survey method used for selecting people and personal observation.

The study was carried out to examine the assessment of the quality of urban transport services in Benin City, Edo State. The research design adopted in this study is the descriptive survey research design. This is to enable the researcher have a true reflection on the assessment of the quality of urban transport services in Benin City, Edo State and truly point out the problems of urban transport system in the study area.

3.2 POPULATION OF THE STUDY

Total population of Benin metropolis (NPC, 1991) is 374,515; comprises of Egor, Ikpoba-Okha, and Oredo Local Government Areas. While the 2022 estimated population projected (NPC, 1991) using equation $N_t = P e^{rt}$ or $P_{tn} = p_0 (1+r)^n$ at 3.5% annual growth rate of the four Local Governments Area in Benin City will be; 1,087,978. In this equation N_t is the number of people at a future date. And p is equal to the present population. Nest $P (e)$, which is the natural logarithm base of 2,71828; (r) represents the rates of increase divided by 100 and (t) represent the time period.

Population Projection.

$$P_{tn} = p_0 (1+r)^n$$

Where: Ptn is the target population (2022)
Po is the present population (1991)
l is constant
r is the growth rate (3%) while
n is the difference in years between 1991-2022.

$$\begin{aligned} \therefore ptn &= po(1+r) \\ Ptn(2022) &= 374515(1+3.5/100)^{31} \\ &= 374515 (1+0.035)^{31} \\ &= 374515 (1.035)^{31} \\ &= 374515 (2.9050) \\ &= 1,087,978 \end{aligned}$$

However, at the time of conducting this research, the population of registered transporters, passengers, road users and commuters in Benin City is approximately 177,892 (Licensing Office Benin City, 2022; and Edo State Ministry of Transport, 2021). But the researcher observed that it was not possible to reach the entire population of Benin City as well as the transport managers of various public and private transportation companies in Benin City, a sample size of one hundred (150) was drawn from the given population. This forms the population of study.

3.3 SOURCES OF DATA

The data used for this research work were obtained from two main sources: the primary and secondary source.

3.3.1 Primary Source of Data

To obtain primary data from respondents, the researcher employed two basic methods, which are the use of personal interviews (oral). The researcher used personal interview to get factual data from the transporters, passengers, road users and commuters. The self-developed questionnaire will be used to ascertain the quality of urban transport services in the study area. The questions were simply worked to avoid obscure meaning and to encourage independent in making the response.

3.3.2 Secondary Sources of Data

Secondary sources were also made use of. They are magazine, newspapers and other researcher works that are related to the topic. Collection of secondary data is being done by collecting information from the transport related magazine and other documented reports.

3.4 DETERMINATION OF SAMPLE SIZE

The statistical formula applied to determine a sample from a definite population as formulated by Yamane (2008) is as follows:

$$S = \frac{n}{N} \times \frac{100\%}{1} \dots\dots\dots i$$

Source: (Ewhrudjakpor, Atubi and Odemerho, 2006)

Where;

S = Sample size

N = Size of the population (in this case it is 177,892 persons)

n = The desired sample size

Substituting the formula;

$$S = \frac{150}{177,892} \times \frac{100\%}{1} \dots\dots\dots ii$$

$$S = \frac{150,000}{177,892S}$$
$$= 0.84\%$$

This means that the researcher is making use of 0.84% out of the total population of registered transporters, road users, passengers and commuters who ply the urban roads on daily basis and those who have access to quality urban transport services in Benin City.

3.5 INSTRUMENT VALIDATION

The instrument used for data collection was protected by administering the instrument to a non-target population and was screen by the supervisor for the purpose of modification for clarify and easy comprehension before it was administered to the target population.

3.6 METHOD OF DATA COLLECTION

The method used for collecting relevant data for this study is questionnaire. The questionnaire is structured and fixed type of questionnaire. The researcher used table and simple percentage method.

Questionnaire Design, Distribution and Collection of Response

The researcher conducted oral interviews with some transport managers in public and private transportation companies. Oral Interview was also conducted for some of the respondents who could not read and write as relevant data were extracted from them. The researcher also carried out personal observation in areas where quality urban transport services are located. This formed the preliminary information used for this study. In the course of the interview, the following questions were asked.

- What is the quality of urban transport service provided by transport companies in Benin City, Edo State?
- Does urban road transportation management play an important role in the movement of goods and services?
- Does urban road transportation management have significant impact on the economy of Benin City, Edo State?
- Do transport companies have adequate modern technology and infrastructure to the satisfaction of passengers, and road users?
- What do you think are the possible solution to the problems associated with urban transport system?

3.7 METHOD OF DATA ANALYSIS

The data will be presented and analyzed with the use of tables and simple percentages method. Thereafter the Chi-Square (X^2) statistical technique will be employed to test the hypothesis formulated for this study. The Chi-Square method was adopted in this research work to test if truly there exist a significant difference in the quality of urban transport services

provided by public and private transport companies in Benin City, Edo State. The Chi-Square method is a set of procedures for testing the significant relationship among two dependent and independent means. This procedure determines the extent to which there is significant relationship between the means of two samples with a single level of significance. The Chi-Square formula method is;

$$X^2 = \frac{\sum(\text{of} - \text{ef})^2}{\text{ef}} \dots\dots\dots\text{iii}$$

Source: (Ewhrudjakpor, Atubi and Odemerho, 2006)

Where;

- X^2 = Chi-Square
- \sum = Summation of observed and expected Frequency
- of = Observed frequently
- ef = Expected frequency
- Degree of freedom = N-1

The expected frequency is derived by multiplying the column total by the row total and dividing it by the grand total.

i.e, Expected frequency (ef) = $\frac{\text{RT} \times \text{CT}}{\text{GT}} \dots\dots\dots\text{iv}$

Source: (Ewhrudjakpor, Atubi and Odemerho, 2006)

Where;

- RT = Row total
- CT = Column total
- GT = Grand total

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.0 Introduction

This chapter entails the presentation and analysis of relevant data obtained from the field with the aid of the research instrument which in this case is the self-structured and well-developed questionnaire. A total of 150 questionnaires were administered by hand to the respondents in the selected location of the study area. This is to acquire firsthand information on the assessment of the quality of urban transport services in Benin City, Edo State.

Major focus was on the management, staff and passengers in transport companies. Thereafter, the data obtained were presented using tables, percentages and bar charts. This formed the preliminary analysis for this study. The hypothesis formulated for this study were analyzed and tested with the Chi-Square (X^2) method and the results obtained from the research findings were also discussed in this chapter.

4.1 Data Presentation and Analysis

The information obtained from the field with the aid of research questionnaire is presented and analyzed below;

4.1.1 Personal Information of Respondents

Table 4.1: Sex of Respondents

Sex	Frequency	Percentage (%)
Male	96	64
Female	54	36
Total	150	100

Source: Researcher's Fieldwork, 2022

From the table 4.1, 64% of the respondents are male while 36% comprise of the female respondents. This implies that the population of the study area comprise more of male than female. It could be deduced that the assessment of the quality of urban transport services in Benin City, Edo State is more known by male than the female.

It was also observed from the above analysis that there are more male passengers than female meaning that the male folk use the various transport facilities provided more than female.

Table 4.2: Age of Respondents

	Frequency	Percentage (%)
18-25yrs	16	10
26-35yrs	51	34
36-45yrs	37	25
46-55yrs	24	16
56yrs above	22	15
Total	150	100

Source: Researcher's Fieldwork, 2022

The table 4.2 shows the age composition of the respondents in the study area. The table shows that 10% of the respondents are 18-25yrs of age, 34% are between the age of 26-35yrs, 25% are 36-45yrs of age, 16% are 46-55yrs of age and 15% are between the age of 56yrs and above.

This implies that majority of the respondents which comprise of adults who have knowledge about the assessment of the quality of urban transport services in Benin City, Edo State. It was also observed that the population of the study area comprise of active and productive labour force who are committed to duty and ready to promote the growth of the company.

Table 4.3: Marital Status

Marital Status	Frequency	Percentage (%)
Single	63	42
Married	52	35
Others	35	23
Total	150	100

Source: Researcher's Fieldwork, 2022

The table 4.3 clearly shows that majority of the respondents in the study area are still single. This is because those who affirm that they are single constitute 42% of the total respondents, married occupy 35% and other marital status such as those who are divorced, separated, widowed, clergy, etc make up the remaining 23% of the respondents who responded to this question.

Table 4.4: Academic Qualification

Qualification	Frequency	Percentage (%)
FSLC	13	9
WAEC	33	22
OND	12	8
NCE	18	12
HND	17	11
B.Sc	50	33
P.hD	5	3
Others	2	1
Total	150	100

Source: Fieldwork, 2022

The table 4.4 shows the academic qualification of the respondents in the study area. From the table, it could be deduced that, 9% have First School Leaving Certificate (primary education), 22% have WAEC (secondary education), 8% are OND holders, 12% are NCE graduates, 11% are HND graduates, 33% are B.Sc. graduates, 3% have attained PhD qualification (Doctoral Degree) and 1% have other qualification (such as NABTECH, Certificate of Competency, ICAN, Midwifery, School of Health, etc) which were not mentioned in the table.

This implies that the population comprises of educated graduates from various institutions meaning that transport companies have adequate and qualified personnel as well as experienced drivers to effectively promote the company's reputation through experienced and careful driving. This may be attributed to the reason why people use transport facilities provided in the study area.

Table 4.5: Occupational Status

Occupation	Frequency	Percentage (%)
Farmer	19	13
Traders	30	20
Student	36	24
Civil Servant	38	25
Others	27	18
Total	150	100

Source: Researcher's Fieldwork, 2022

From the table 4.5, majority of the respondents in the study area are civil servant (government workers). This is because civil servant occupies 25%, farmer occupy 13%, traders

occupy 20%, students occupy 24% and other occupations occupy the remaining 18% of the total population.

It was observed that some of the transport workers in the study area were working and schooling (students) simultaneously. They were also government workers (civil servants) since the company is owned by the State government. They also engage in farming and trading activities after work to sustain their family since the pay from the company could not be enough to sustain the family needs.

Table 4.6: Level of Income

Level of Income	Frequency	Percentage (%)
Below 18,000	16	11
19,000-35,000	50	33
36,000-45,000	40	27
46,000-65,000	30	20
65,000 above	14	9
Total	150	100

Source: Researcher's Fieldwork, 2022

The table 4.6 shows the income level of the respondents in the study area. It could be deduced that 11% of the respondents fall below 18,000, 33% earn 19,000-35,000, 27% earn 36,000-45,000, 20% earn 46,000-65,000 and 9% earn above 65,000. This implies that the population comprise of low- and middle-income earners than the high-income earners. This is an indication that their income rate which is on the low side may not be adequately enough to solve pressing needs. This is one of the major reasons why the respondents have to engage in other occupation.

4.1.2 Assessment of the Quality of Urban Transport Services in Benin City

Table 4.7: Working relationship between transport managers and passengers in transportation companies

Relationship	Frequency	Percentage (%)
Cordial	79	53
Not Cordial	71	47
Total	150	100

Source: Fieldwork, 2022

The table 4.7 shows the working relationship between transport managers and passengers in transportation companies. It could be deduced that a cordial relationship exists between transport managers and passengers in transportation companies. This is because the respondents who attest that there is cordial relationship occupy 53% of the total population while those who said there is no cordial relationship make up the remaining 47% of the total population. This implies that there is a good rapport between transport managers and passengers in transportation companies.

Table 4.8: Quality of urban transport services/facilities provided by public and private transport companies?

S/N	Options	Quality		
		Efficient	Inefficient	Bad
a.	Toilet facilities	98 (65%)	49 (33%)	3 (2%)
b.	Well-equipped buses	102 (68%)	22 (15%)	26 (17%)
c.	Vehicle maintenance	52 (35%)	48 (32%)	50 (33%)
d.	Speed limit/ maintenance	70 (47%)	39 (26%)	41 (27%)
e.	Fleet of buses	102 (68%)	22 (15%)	26 (17%)
f.	Trained/qualified personnel	52 (35%)	48 (32%)	50 (33%)
g.	Experienced	70 (47%)	39 (26%)	41 (27%)

Source: Fieldwork, 2022

Item (a) shows that about 65% of the respondents agreed that toilet facilities enhance quality urban transport services provided by public and private transport companies are efficient, 33% said it is inefficient while 2% said it is bad.

Item (b) shows that about 68% of the respondents agreed that well equipped buses which enhances quality urban transport services provided by public and private transport companies are efficient, 15% said it is inefficient while 17% said it is bad.

Item (c) shows that about 35% of the respondents agreed that vehicle maintenance facilities which enhances quality urban transport services provided by public and private transport companies are efficient, 32% said it is inefficient while 33% said it is bad.

Item (d) shows that about 47% of the respondents agreed that speed limit/maintenance enhances quality urban transport services provided by public and private transport companies are efficient, 26% said it is inefficient while 27% said it is bad.

Item (e) shows that about 68% of the respondents agreed that fleet of buses which enhances quality urban transport services provided by public and private transport companies are efficient, 15% said it is inefficient while 17% said it is bad.

Item (f) shows about 35% of the respondents agreed that trained/qualified personal which enhances quality urban transport services provided by public and private transport companies are efficient, 32% said it is inefficient while 33% said it is bad.

Item (g) shows that about 47% of the respondents agreed that experience (driver) enhances quality urban transport services provided by public and private transport companies are efficient, 26% said it is inefficient while 27% said it is bad. It could be deduced that their inadequate transport facilities provided in Benin City, Edo State.

Table 4.9: Assessment of driver's ability

S/N	Options	Very Good	Good	Satisfactory	Poor
a.	Driver's skills	98 (65%)	5 (3%)	32 (21%)	15 (10%)
b.	Driver's experience	44 (29%)	38 (25%)	35 (23%)	30 (22%)
c.	Driver's rapport with passengers	59 (39%)	33 (22%)	28 (19%)	33 (22%)
d.	Driver's speed limit	38 (25%)	36 (24%)	28 (19%)	48 (32%)
e.	Driver's concentration	15 (10%)	5 (3%)	98 (65%)	32 (21%)

f.	Driver's adherence to road signs and regulation	52 (35%)	25 (17%)	38 (25%)	35 (23%)
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Source: Fieldwork, 2022

Item (a) in table 4.9 above shows that 65% of the respondents agreed that driver's skill is very good, 3% said good, 21% said satisfactory, and 10% said poor. Item (b) shows that 29% of the respondents indicated that drivers experience is very good, 25% said good, 23% said satisfactory, and 22% said poor. Item (c) shows that 39% of the respondents indicated that driver's rapport with passengers is very good, 22% said good, 19% said satisfactory, and 22% said poor. Item (d) shows that 38% of the respondents indicated that drivers speed limit is very good, 24% said good, 65% said satisfactory, and 32% said poor. Item (e) shows that 15% of the respondents indicated that driver's concentration is very good, 3% said good, 25% said satisfactory, and 21% said poor. Item (f) shows that 35% of the respondents indicated that drivers' adherences to road signs and regulation is very good, 17% said good, 25% said satisfactory, and 23% poor.

Table 4.10: Objectives and main goal of urban transport system

Objectives/Goal	Frequency	Percentage (%)
To make the maximum profit possible	47	31
To provide transportation service not necessarily at profit	48	32
To assist the poor masses	55	37
Total	150	100

Source: Fieldwork, 2022

The table 4.10 reveals that the sole aim of establishing urban transport system is not to make profit but to assist the poor masses who find it difficult to access transportation services provided by the private sector. This is because those who were of the view that the main goal of the company is to assist the poor masses occupy a larger proportion (37%) of the total population while those who affirm that the main aim is to provide transportation services not necessarily at profit follows respectively. It is important to note here that about 31% of the respondents still hold the view that the company was set up to maximize profit.

Table 4.11: How does the relationship between transport managers and passengers affect the transportation industries?

Response	Frequency	Percentage (%)
It makes more productive	43	29
It has no effect	28	19
It makes less productive	42	28
Don't know	37	25
Total	150	100

Source: Researcher's Fieldwork, 2022

From the table 4.11, 29% of the respondents said the relationship between the transport managers and passengers has made the company more productive, 19% said it has no effect on the company, 28% said it makes the company less productive and 25% don't know about the effect of their relationship on the company's productivity. This means the relationship between the transport managers and passengers has been very positive and has made the company productive due to increased patronage.

Table 4.12: Extent to which respondents agree

S/N	Options	Yes	%	No	%
a.	Drivers travel with manifest	135	68	65	33
b.	Vehicles are properly checked before movement	142	71	58	29
c.	Quality urban transport services are provided in urban areas than rural areas	183	92	17	9
d.	Government/private individuals has played active role in transport management	173	87	27	14
e.	Road transport management has significant impact on urban economy	131	66	69	35
f.	Road transport management plays a key role in movement of goods and services	158	79	42	21
g.	Transport companies have adequate modern technology and infrastructure to the satisfaction of passengers, and road users.	135	68	65	33
h.	Quality urban transport services provided in the area serve as a source of employment	142	71	58	29
i.	Transport companies has well trained and efficient staff.	183	92	17	9
j.	Transportation has played a key role in urban development.	173	87	27	14

Source: Fieldwork, 2022

From the table 4.12 above, 68% of the respondents agreed that drivers travel with manifest while 33% do not. About 71% of the respondents agreed that vehicles are properly

checked before movement while 29% disagreed. About 92% of the respondents agreed that quality urban transport services are provided in urban areas than rural areas while 9% did not agree. About 87% agreed that government/private individuals have played active role in transport management while 14% did not agree. About 66% of the respondents agreed that road transport management has significant impact on urban economy while 34% disagreed. About 79% of the respondents agreed that road transport management plays a key role in movement of goods and services while 21% did not agree.

From the table 4.12 above, 68% of the respondents agreed that transport companies have adequate modern technology and infrastructure to the satisfaction of passengers, and road users while 33% do not. About 71% of the respondents agreed that quality urban transport services provided in the area serve as a source of employment while 29% disagreed. About 92% of the respondents agreed that food produce in Abraka are accessible after the Fulani herdsmen and farmers crisis while 9% did not agree. About 87% agreed that transport companies have well trained and efficient staff while 14% did not agree. About 92% of the respondents agreed that transportation has played a key role in urban development while 8% disagreed.

Table 4.13: Safety Measures the enterprise gives

Safety Measures	Frequency	Percentage (%)
Proper enlightenment to passenger	40	27
Advise passengers to always put on their seat belt	41	27
Sanction careless drivers	47	31
Report cases of accident to the police and FRSC	15	10
Others	7	5
Total	150	100

Source: Fieldwork, 2022

From the table 4.13, 27% of the respondents were of the view that the company enlighten the passengers on the need to always adhere to the slogan “safety first”. The company also educate the passengers on first aid measures before embarking on any journey. Though this is usually done once in a while, it has proven to be very effective to the company. About 27% of the respondents mentioned that the company advice passengers to always put on seat belt, 31% said the company sanction careless driver, 10% said the company management report cases of

accident to the Nigeria Police Force (NPF) and the Federal Road Safety Commission (FRSC) and only 5% mentioned other safety measures adopted by the company to promote the growth of the company. Urban transport services should be provided in the study area.

Table 4.14: Problems of transportation and quality urban transport services in the area

S/N	Options	Very Severe	Severe	Mild	Not affected
a.	Finance/lack of capital	38 (25%)	36 (24%)	28 (19%)	48 (32%)
b.	Mismanagement of fund	15 (10%)	5 (3%)	98 (65%)	32 (21%)
c.	Bad leadership	52 (35%)	25 (17%)	38 (25%)	35 (23%)
d.	Poor road network	5 (3%)	12 (8%)	98 (65%)	35 (23%)
e.	Poor communication	49 (33%)	25 (17%)	24 (16%)	52 (35%)
f.	Poor vehicle maintenance	87 (58%)	13 (8%)	23 (15%)	27 (18%)
		63 (42%)	10 (7%)	75 (50%)	2 (1%)

Source: Fieldwork, 2022

Item (a) shows that 38% of the respondents indicated that Finance/lack of capital as the major problems facing quality urban services is very severe, 24% said severe, 65% said mild, and 32% not affected.

Item (b) shows that 15% of the respondents indicated that mismanagement of fund as a major problem facing quality urban transport services is very severe way, 3% said severe, 25% said mild, and 21% not affected.

Item (c) shows that 35% of the respondents indicated that bad leadership as a major problem facing quality urban transport services is very severe, 17% said severe, 25% said mild, and 23% not affected.

Item (d) shows that 3% of the respondents indicated that poor road network as a major problem facing urban transport services is very severe, 8% said severe, 65% said mild, and 23% not affected.

Item (e) shows that 33% of the respondents indicated that poor communication as a major problem facing urban transport services is very severe, 17% said severe, 16% said mild, and 35% not affected.

Item (f) shows that 58% of the respondents indicated that poor vehicle maintenance as a major problem facing urban transport services is very severe, 8% said severe, 15% said mild, and 18% not affected.

From the above statistical analysis, it could be deduced that problems of urban transportation which pose serious constraints to quality urban transport delivery abound in Benin City, Edo State. The following remedies stated in the table below were suggested to address the aforementioned transport problems.

Table 4.15: Remedies to solve the problems facing the company

Remedies	Frequency	Percentage (%)
Employment of more qualified personnel	20	13
Training of personnel (especially managers)	15	10
Organizing leadership seminar for staff and management in various positions in the company	278	18
Provision of adequate fund/capital	21	14
Public enlightenment/awareness	52	35
Proper maintenance and repair of vehicles	12	8
Others	3	2
Total	150	100

Source: Fieldwork, 2022

From the table 4.15, 13% of the respondents suggested that the company should employ more qualified personnel to assist the already existing staff as the workload is too much for the company workers, 10% suggested that the company should train their staff for the future task ahead, 18% suggested that the company should organize leadership training to acquaint the management of the company with managerial skill, 14% suggested provision of adequate capital by the government, 35% suggested that the company should create awareness and enlighten the

customers on the need to patronize government owned transportation company, 8% suggested that proper maintenance and repair of the vehicle should be done regularly to keep the vehicles balance and fit for any journey and 2% mentioned other ways to solve the problems.

4.2 Hypothesis Testing/Discussion of Findings

TESTING HYPOTHESIS

The chi-square (χ^2) method was used in testing the hypothesis of this study. The choice is based on its appropriateness and efficiency. It is used to test the relationship between two variables. The decision rule states that if the calculated value is higher than the critical table value (χ^2), the Null (H_0) hypothesis should be rejected, and then the alternative (H_1) hypothesis should be accepted.

The following null research hypothesis stated below are tested with the Chi-Square (χ^2) statistical technique.

Hypothesis One

H_0 : There is no significant difference between mode of transport system and ownership in the area.

H_1 : There is significant difference between mode of transport system and ownership in the area.

There is no significant difference in the quality of urban transport service provided by public and private transport companies in Benin City, Edo State.

Table 4.16: Result for Chi-Square Analysis

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	4.773			
Final	.000	4.773	1	.096

Link function: Logit.

Source: Author's Research

From the table 4.26, the χ^2 calculated value (4.773) is greater than the critical table value (3.841) (see appendix for χ^2 critical table value). Therefore, the null hypothesis which states that

there is no significant difference in the quality of urban transport service provided by public and private transport companies in Benin City, Edo State is rejected and the alternative hypothesis which states that there is a significant difference in the quality of urban transport service provided by public and private transport companies in Benin City, Edo State is accepted. This means that there is a significant difference in the quality of urban transport service provided by public and private transport companies in Benin City, Edo State.

Hypothesis Two

Ho: There is no positive relationship between the accessibility and adequacy of transport mode in the area.

H₁: There is positive relationship between the accessibility and adequacy of transport mode in the area.

Road transportation does not play significant role in the movement of goods and services.

Table 4.17: Result for Chi-Square Analysis

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	12.773			
Final	.000	12.773	1	.096

Link function: Logit.

Source: Author's Research

From the table 4.27, the X^2 calculated value of 12.773 is less than the critical table value of 3.841 (see appendix for X^2 critical table value). Hence, the null hypothesis which states that road transportation does not play significant role in the movement of goods and services is rejected and the alternative hypothesis which states that road transportation play significant role in the movement of goods and services is accepted. This implies that road transportation plays significant role in the movement of goods and services.

Hypothesis Three

Ho: There is no positive relationship between the methods of transportation management and its efficiency on the economy of Benin City, Edo State.

H₁: There is positive relationship between the methods of transportation management and its efficiency on the economy of Benin City, Edo State.

Table 4.18: Result for Chi-Square Analysis

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	16.094			
Final	.000	16.094	4	.003

Source: Author's Research

From the table 4.28, the X^2 calculated value of 16.094 is greater than the critical table value of 9.448 (see appendix for X^2 critical table value). Therefore, the null hypothesis which states that road transportation management has a significant impact on the economy of Benin City, Edo State is rejected and the alternative hypothesis which states that road transportation management has a significant impact on the economy of Benin City, Edo State. This implies that road transportation management has a significant impact on the economy of Benin City, Edo State.

Hypothesis Four

Ho: There is no significant correlation between trips generation and that choice of transport mode

H₁: There is significant correlation between trips generation and that choice of transport mode

Table 4.19: Result for Chi-Square Analysis

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	2.214			
Final	.000	2.214	1	.006

Source: Author's Research

From the table 4.29, the X^2 calculated value of 2.214 is less than the critical table value of 3.841 (see appendix for X^2 critical table value). It could therefore be decided that the null hypothesis which states that public/private transport companies do not have adequate modern technology and infrastructure to the satisfaction of road users and passengers is accepted and the alternative hypothesis which states that public/private transport companies do not have adequate modern technology and infrastructure to the satisfaction of road users and passengers is rejected.

This implies that public/private transport companies do not have adequate modern technology and infrastructure to the satisfaction of road users and passengers.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 SUMMARY OF FINDINGS

The researcher arrived at the following findings which include:

Road transportation management plays important role in the movement of goods and services. In recognition of this, intangible data collected on the role of transportation movement on the movement of goods and services show that transportation in any economy is a sector that cannot be over emphasized. The researcher discovered that transportation management plays a vital or major role in the movement of goods and services. This means that the mobility of people and material especially in the present days, is one of the greatest needs that have to be adequately satisfied in our society and economy at large.

Secondly, commuters always express dissatisfaction when there is any major breakdown of vehicle when they are on business appointment.

Thirdly, most commuters are to some extent satisfied when they cannot reach their destination as required. This could be because they understand that the delay may not directly come from the driver and the company management. It could be due to traffic induced problems and vehicular obstruction. Though, some still express dissatisfaction of not meeting up with business or other relevant appointment.

Fourthly, commuters are always not comfortable and skeptical when drivers drive at very high speed. This is one of the major reasons of fatal accident on our highways.

Finally, most transportation companies lack modern infrastructure such road and road signs and facilities such control computer and air conditional in their organization to take good care of the customers, but this is not the case of Benin City. They have adequate and modern facilities need by any transportation.

Government did not upgrade the existing road infrastructure and construct more urban link (expansion of the road) roads so as to reduce the waiting time at the bus terminal to the barest minimum in Benin City. Enough Public enlightenment was not carried out on aspiring passengers on the tolerance while on the queue.

The local governments within the study area should join the state government in provision of buses for inter-urban transport services so as to increase bus service frequency, reduce passenger waiting time and walking distances in the city especially at the peripheries. Where governments cannot provide the facilities for inter-urban bus transit bus services themselves, then, the subsidized enterprises who have proved, beyond reasonable doubt that they can provide bus services. This will encourage private bus enterprise operators to ply more routes in the city as may be directed by the governments. Major areas of the study were not decongested by relocating some facilities such as markets, motor parks, government offices and the like to the city peripheries to increase economic and social activities there which will generate more demand for bus.

The. Local problems need local solutions and foreign practitioners are not best placed to understand local needs. A far better way of addressing these problems is to invest in the local research capacity needed to develop appropriate, innovative solutions required to solve local problems however, any investment in research must be matched by a local commitment to sustaining a research capability and must also include creating an environment that will attract and retain skilled professionals with an interest in research. Again, O'Neill, (2005), opined that governments in the developed world provide financial support to developing countries with the aim of helping them achieve the ultimate goal of economic self-sufficiency so that these nations can play a full part in world economic and trade activities rather than being perpetual recipients of aid. Development agencies support projects and programmes with the main goal of promoting and assisting the recipient country's development agenda. In the transport sector, this support is often aimed at increasing the accessibility and mobility of the urban and rural poor.

The World Bank is committed to improving the sustainability of the sector through increased efficiency and making the supply of transport services more responsive to the needs of users. Knowledge derived from research is an essential ingredient for sustainable development in that it provides the information needed for technological development and the social and economic benefits that accrue from it. In a related development, Pinard, (2005) proclaimed that, collaborative programmes between development agencies and local government and private

institutions are funded to support research initiatives, initiate knowledge transfer, increase awareness of appropriate technology and adopt new approaches proven through research that are expected to make a positive and lasting impact in solving a country's transport problems. The donor support phase for such programmes usually has a limited time frame with the expectation that the host nation will become aware of the potential long-term benefits of the initiative and will embed it into national policies and strategies. When this does happen, the initiatives can be said to be mainstreamed with high prospects of their continuance and resulting longlasting benefits. However, over 50 years after achieving independence, Nigeria like many developing nations still rely on developed nations to conduct the research required to solve their problems in the transport sector. The provision of the relatively small amount of funding needed for researching solutions would appear to be a sound investment for most developing countries. Research effort is needed in most of the areas related to transport for the provision of safe and sustainable access and improved mobility for poor communities in developing countries. Yet, despite the large benefits from research in the transport sector as in the examples given in this paper, investment in transport research is woefully small and even non-existent in many developing countries. The current situation in which foreign entities carry out transport research for developing countries, even if it is in partnership, is neither sustainable in the longer term nor is it in the recipient country's best interests (Parkash, 2008). It is in the light of these that the paper aims at evaluating the benefits from investment in research in the transport sector, describes programs designed to facilitate innovation and research in the sector in developing countries, identifies the research need and suggests ways in which donors and recipient country organizations can assist in establishing a framework for carrying out research. Similarly, all these will be assessed using empirical cases where appropriate, therein, conclusion will be drawn.

5.2 CONCLUSION

The researcher concluded as follows;

The research findings concluded that there is a significant difference in the quality of urban transport service provided by public and private transport companies in Benin City, Edo State.

The study establishes the fact that road transportation plays significant role in the movement of goods and services.

The research findings concluded that road transportation management has significant impact on the economy of Benin City, Edo State.

The study reveals that public/private transport companies do not have adequate modern technology and infrastructure to the satisfaction of road users and passengers.

Bodini et al. (2013) considered effects of road infrastructure (pedestrian crossing, culvert, roundabout etc.) on comfort level of standing passengers in public transportation. Their study provides an easy comparison of vehicles' comfort level and the ability to keep track of vehicles and roads' maintenance. George et al. (2013) investigated the effects of discomfort of standing passengers when the vehicle accelerates

The roles of transportation in the study area cannot be overemphasized, it has enhanced the total functionality of all the activities of man, thus, it has contributed to economic development of the study area and also create employment. However, myriads of problems are affecting road transportation in the area and this has resulted in various problems including congestion, accidents, among others. It is believed that if the above recommendations are put in place, it will help to enhance road circulation in the area.

5.3 RECOMMENDATIONS

Based on the research findings, the following recommendations/suggestions were made; Knowing that road transportation is referred to as the engine of the economy, the road transportation management should get in more modern facilities for easy road transportation services and also maintain the equipment available to them.

The management of road transportation companies should make sure that the transport vehicles go through routine maintenance to reduce the rate of breakdown of transportation vehicle on the highway.

The management should as well computerize the company as to monitor the speed limits on the driver. This will help to reduce the rate of road accidents and make the company to have goodwill.

Traffic control device such as traffic light roads signs marking etc. should be provided in Benin City, and most especially at strategic locations where the identified traffic problem are more severe. These will help to curb and bring these problems under control.

Rehabilitation of existing parking facilities: the existing parking facilities should be rehabilitated to withstand the present volume of vehicles that ply the study area and also more off-street parking spaces should be provided to allow for vehicular parking using billing method.

Road's rehabilitation is also method of the engineering approach. Traffic problems especially congestion can be minimized or eradicated in the study area of Benin City Road are through the rehabilitation method. The repair of roads especially in some part of Benin City roads with numerous pot holes will help to solve the problem of congestion.

Channelization of roads to enhance easy movement of vehicle, motorcycle and bicycle.

The management of road transportation companies should make sure that the transport vehicles go through routine maintenance to reduce the rate of breakdown of transportation vehicle on the highway. Also, the management as well computerizes the company as to monitor the speed limits on the driver. This will help to reduce the rate of road accidents and make the company to have goodwill.

Finally, the management should also provide modern infrastructure and facilities to take adequate care of the commuters.

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APPENDIX
RESEARCH QUESTIONNAIRE
DEPARTMENT OF URBAN AND REGIONAL PLANNING, SCHOOL OF
ENVIRONMENTAL STUDIES, FEDERAL POLYTECHNIC, AUCHI.

Dear Sir/Madam,

A REQUEST TO COMPLETE QUESTIONNAIRE

I am undertaking the Study of “assessment of the quality of urban transport services in Benin City, Edo State”. This question is a means of obtaining information from you concerning your present position and personal perceptions of the availability of these data. Answers to the question should be as much as possible reflect your individual opinion and situation.

In answering these questions, your name is not necessary required. I am interested only on the data. All information obtained will be treated in confidence and utilized purely for academic purpose.

Thanks for your anticipation co-operation.

Yours faithfully,

EKHABAFE PHILEMON

Researcher

Section A: Bio-Data (Personal Information of Respondent)

Instruction: Please tick [] as a response to any option best in your opinion.

1. Name of Residence.....
2. Sex: Male [] Female []
3. Age: 18-25 [] 26-35 [] 36-45 [] 46-55 [] 56 above []
4. Marital status: Single [] Married [] Others []
5. Academic qualification: FSLC [] WAEC [] OND [] NCE [] HND [] B.SC [] P.hD [] Others []
6. Occupational status: Farmer [] Trader [] Student [] Civil Servant [] Others (specify).....
7. Level of Income: Below 18,000 [] 19,000-35,000 [] 36,000-45,000 [] 46,000-65,000 [] 65,000 above []

Section B: Assessment of the quality of urban transport services in Benin City, Edo State.

8. What working relationship exists between transport managers and passengers in transportation companies? Cordial [] Not Cordial []
9. What is your assessment of the quality of urban transport services/facilities provided by public and private transport companies?

S/N	Options	Quality		
		Efficient	Inefficient	Bad
a.	Toilet facilities			
b.	Well equipped buses			
c.	Vehicle maintenance			
d.	Speed limit/ maintenance			
e.	Fleet of buses			
f.	Trained/qualified personnel			
g.	Experienced			

10. What is your assessment on the driver's ability?

S/N	Options	Quality			
		Very Good	Good	Satisfactory	Poor
a.	Driver's skills				

b.	Driver's experience				
c.	Driver's rapport with passengers				
d.	Driver's speed limit				
e.	Driver's concentration				
f.	Driver's adherence to road signs and regulation				

11. Which of these objectives do you consider to be main goal of the government/private individuals towards urban transport system? To make the maximum profit possible [] To provide transportation service not necessarily at profit [] To assist the poor masses []
12. How does the relationship between the transport managers and passengers of various transport companies affect urban transport services? It makes more productive [] It has no effect [] It makes less productive [] I don't know []
13. Please indicate if you agree to the following or not

S/N	Options	Response	
		Yes	No
a.	Drivers travel with manifest		
b.	Vehicles are properly checked before movement		
c.	Quality urban transport services are provided in urban areas than rural areas		
d.	Government/private individuals has played active role in transport management		
e.	Road transport management has significant impact on urban economy		
f.	Road transport management plays a key role in movement of goods and services		
g.	Transport companies have adequate modern technology and infrastructure to the satisfaction of passengers, and road users.		
h.	Quality urban transport services provided in the area		

	serve as a source of employment		
i.	Transport companies has well trained and efficient staff.		
j.	Transportation has played a key role in urban development.		

14. What safety measures do transport companies give to commuters, road users, passengers and commuters?.....

15. What effect does the following transportation problems has in providing quality urban transport services in your area?

		Effect			
S/N	Options	Very Severe	Severe	Mild	Not affected
a.	Finance/lack of capital				
b.	Mismanagement of fund				
c.	Bad leadership				
d.	Poor road network				
e.	Poor communication				
f.	Poor vehicle maintenance				

16. How will these problems be solved?

i.....

ii.....

iii.....

iv.....